

# PROBLEMS OF AMERICAN SMALL BUSINESS

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## HEARINGS

BEFORE THE

SPECIAL COMMITTEE TO STUDY AND SURVEY  
PROBLEMS OF SMALL BUSINESS ENTERPRISES

UNITED STATES SENATE

SEVENTY-EIGHTH CONGRESS

FIRST SESSION

PURSUANT TO

**S. Res. 66**

(78th Congress)

(Extending S. Res. 298—76th Congress)

A RESOLUTION TO APPOINT A SPECIAL COMMITTEE  
TO STUDY AND SURVEY PROBLEMS OF  
AMERICAN SMALL BUSINESS  
ENTERPRISES

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PART 16

SMALLER CONCERNS IN WAR PRODUCTION: IV

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MARCH 4, 1943

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Problems of Small Business Enterprises



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# CONTENTS

## STATEMENTS

	Page
Thursday, March 4, 1943:	
Johnson, Col. Robert W., Chairman, Smaller War Plants Corporation.....	2201
Wilson, Charles E., Executive Vice Chairman, War Production Board.....	2211

## SUBJECT INDEX

Statement of the chairman.....	2199
Acceptance of prime contracts by Smaller War Plants Corporation.....	2202
Empowering power of Smaller War Plants Corporation decentralized.....	2202
The role of small plants in essential civilian production.....	2203
Implementing smaller plants in the war effort.....	2205
Decentralization of the Smaller War Plants Corporation.....	2206
Problems of subcontracting.....	2207
Draft of proposed letter to all prime contractors and shipyards.....	2209
Services' procurement agencies submit their requirements to Smaller War Plants Corporation.....	2212
Production scheduling.....	2212
Readjusting use of facilities.....	2213
Problem of assisting small enterprise which does not come within provisions of Smaller War Plants Act.....	2216
Problem of supplying essential civilian requirements.....	2218
Awarding contracts in critical labor areas.....	2219
Production of critical minerals and metals.....	2221
Utilization of small woodworking and metalworking plants difficult.....	2223
Regional set-up for handling manpower problems.....	2224

## APPENDIXES

I. Material referred to in the chairman's opening statement.....	2226
Analysis of Prime Contracts Awarded to Small Business by the Seven Services of Supply of the War Department.....	2229
II. Correspondence between the Chairman and Under Secretary of War Patterson, Under Secretary of the Navy Forrestal, and War Production Board Chairman Nelson, with regard to subcontracting.....	2232
III. Supplementary material submitted by Charles E. Wilson in connection with his testimony.....	2241
IV. Supplementary material submitted by Colonel Johnson in connection with his testimony.....	2250

# PROBLEMS OF AMERICAN SMALL BUSINESS

THURSDAY, MARCH 4, 1943

UNITED STATES SENATE,  
SPECIAL COMMITTEE TO STUDY AND SURVEY  
PROBLEMS OF SMALL BUSINESS ENTERPRISES,  
Washington, D.C.

The committee met in room 357 of the Senate Office Building, at 10:30 a. m., Senator James E. Murray (chairman) presiding.

Present: Senators Murray (chairman), Maloney, Mead, Scrugham, Capper, and Buck.

The CHAIRMAN. The hearing will now come to order, gentlemen.

I wish to say that I have been called to a meeting of the Education and Labor Committee this morning and will have to leave. Senator Scrugham will conduct the proceedings this morning in my absence.

We have here this morning Col. Robert Wood Johnson, Chairman of the Smaller War Plants Corporation, and Mr. Charles E. Wilson, Executive Vice Chairman of the War Production Board.

Before calling the witnesses to the stand, Senator Scrugham will read a statement into the record for me.

(The chairman then left the hearing, and Senator Scrugham assumed the chair.)

Senator SCRUGHAM. This is the opening statement for the record, to which Senator Murray referred.

## STATEMENT OF THE CHAIRMAN

Senator SCRUGHAM (reading). "Before calling the witnesses scheduled to testify this morning, I wish to insert in the record certain figures, along with covering letters, submitted to the committee by the Office of Services of Supply of the War Department, which is under Lt. Gen. Brehon B. Somervell.

"These figures are purported to be a comparative study of the extent to which war contracts have been awarded to smaller war plants by the seven Supply Services of General Somervell's office during November and December of 1942, and January of 1943."

(The material referred to appears in appendix I, pp. 2226-2229.)

Senator SCRUGHAM (reading). "The committee directed that an impartial analysis of these figures be made by a statistician regularly assigned to it by the Department of Commerce. I now insert his analysis separately in the record."

(The analysis referred to appears in appendix I, pp. 2229-2231.)

Senator SCRUGHAM (reading). "Of course, this analysis will speak for itself. But it must be stated now that the situation which it discloses, drawn from the War Department's own figures, constitutes a most distressing commentary upon that Department's performance in respect to the use of smaller plants in war production.



"In December 1942, for example, according to the information furnished by the Services of Supply, the actual dollar value of contracts going to plants with 500 wage earners or less from the seven Services of Supply dropped 47 percent from what it was in November, and the total in January 1943 was still 49 percent below November. This leaves 76.4 percent of Services of Supply contracts in the hands of the large plants employing more than 500 wage earners, which comprise but 1 percent of the total number of plants throughout the Nation.

"I will repeat that for emphasis. From the statistical data we have at hand, which has been analyzed, we find that of the Services of Supply contracts, 76.4 percent are in the hands of large plants employing more than 500 wage earners, which are but 1 percent of the total number of plants throughout the Nation.

"Such a condition of affairs makes a mockery of the Smaller War Plants Act which Congress unanimously enacted under the sponsorship of this committee. This Act prescribes a clear and unmistakable policy for the utilization of smaller plants in war and essential civilian supply. That policy, I quote from the law, is:

\* \* \* to mobilize aggressively the productive capacity of all small business concerns and to determine the means by which such concerns can be most efficiently and effectively utilized to augment war production.

"The War Production Board, and more particularly the Smaller War Plants Corporation, have heretofore been severely criticized for inadequate enforcement of the Smaller War Plants Act. Some of that criticism may be justified. But the situation disclosed by these figures of the War Department, along with other evidence adduced before this committee on previous occasions, would indicate that a fair share—perhaps the major part—of the blame for this failure to carry out the declared will of the Congress of the United States, lies at the door of the procurement services themselves, and, in this instance, the War Department.

"Those in charge of the procurement services not only in the War Department but also in the Navy Department, the Maritime Commission, the Lease-Lend Administration, and others, are bound by this act of Congress, and they must obey it.

"And finally, it may be said that the performance of these procurement services raises grave question whether this crucial function of procurement upon which so much of our war effort depends, should not be reappraised in the light of proposals already being made by Members of both Houses of Congress for drastic changes in our entire procurement structure."

Now, immediately after the outbreak of the war it became apparent that under the pressure of war requirements, production of war goods would be concentrated almost entirely in the hands of a few large agencies, unless steps were taken by some agency to protect the interests of small business and insure them a participation in the war production program. There have followed successive attempts to set up agencies but they have all failed to a large degree; they have lacked the power or the authority to handle the job as was intended.

Some of these attempts have resulted in some better understanding of the problem but no actual appreciation of the number of contracts given to small war agencies and no actual increase in the utilization of these smaller agencies.

From the beginning, the Congress has watched with concern the steadily diminishing opportunity for small plants to stay in business. It became apparent that strong measures must be taken, and as a result the act creating the Smaller War Plants Corporation; with powers for utilizing the small plants in the war effort, was passed by the Congress. This act was passed after careful study, and with the full knowledge of the many and complex problems that faced the small business picture. It was especially conceived to grant whatever sweeping powers were necessary on the part of the war agencies, to cut red tape and complexities, and to maintain the integrity of the small business structure of this country.

We are determined that the preservation of small business shall be accomplished. It is the duty of Congress. We are confident that the necessary powers are contained within the present act to do this in an expeditious manner.

Unfortunately, the act has heretofore been administered with practically no exercise of the powers incorporated, and we are faced today with a situation that demands action if our program is to be successful.

Col. Robert Johnson, the new Chairman of the Smaller War Plants Corporation, has undertaken the task of making this Corporation fulfill the purposes intended by the Congress. I personally have the greatest confidence in the ability and the capacity of Colonel Johnson successfully to administer the act.

At no time have there been elaborate preparations. The situation demands prompt action today. By way of illustration, a report just received from the War Department indicates, as I said previously, that during the past three months the percentage of work that has gone to small concerns so classified has actually decreased instead of increased.

Now, another survey that has come to the attention of the committee indicates that in 38 selected metal-working industries, only 55 percent of the shipments were war material. Remember that the metal-working industry is one in which nonessential production has long since been frozen, with the thought that it ought to be converted 100 percent into war work.

We have called Colonel Johnson before the committee today to tell us his plans for the prosecution of his job; also Mr. Charles Wilson, who is vice chairman of the War Production Board. From them we expect to get a picture and understanding of how we can best cooperate to bring about the results which are intended under this Smaller War Plants Corporation Act.

#### STATEMENT OF COL. ROBERT W. JOHNSON, CHAIRMAN, SMALLER WAR PLANTS CORPORATION

Senator SCRUGHAM. Colonel, we are very happy to have you here. You have a big job on your hands but we are certain that you are going to fill it, and we want to assure you, at the commencement, of the full cooperation of the Members of the Senate here present.

Now, have you discussed with the War Production Board, and particularly with Mr. Wilson, a specific approach to the small business problem, and any plan of procedure as it pertains to the Smaller War Plants Corporation?

Colonel JOHNSON. Senator, I have discussed the principal phases of this job with Mr. Wilson in full, and I would like to say at the outset that Mr. Wilson and I see eye to eye on this program. I am completely confident that as a team we can give you some results—I hope adequate results. So I can say to you that we have a definition of the problem, and we have plans that we jointly approve, which we hope will meet it.

Senator SCRUGHAM. Mr. Johnson, the act creating the Smaller War Plants Corporation provides certain powers to be exercised by the Chairman of the Corporation, in this case yourself.

These powers include first, the acceptance of contracts; then you have certain financial powers; the certification of small plants; the power to require advance reports on the material to be purchased, and the progress of procurement; the power to enforce subcontracting; the power to provide essential raw materials; and the power to provide a place for small plants in essential civilian production.

Now, will you outline to the committee your plans for the prosecution of your job as Chairman of the Smaller War Plants Corporation, and explain to us how you expect to use the powers granted you by the act; and in so doing will you also briefly outline the cooperation you expect to obtain from the War Production Board?

#### ACCEPTANCE OF PRIME CONTRACTS BY SMALLER WAR PLANTS CORPORATION

Colonel JOHNSON. Well, starting with your first question: (a) The acceptance of prime contracts. We propose to increase materially the number of prime contracts as carried out by the Smaller War Plants Corporation. The degree of that development is a little hard to define and settle this morning. Our interpretation at the moment, Senator Scrugham, is that we will accept such prime contracts or claim and promote such prime contracts as may be necessary to carry out the will of Congress as expressed in the Smaller War Plants Act, and I would expect that situation to change from day to day, depending on the service involved.

(b) On the score of financial powers, I find, roughly, that the Board of Directors of the Smaller War Plants Corporation has approved about 48 percent of the requests that have been made of it. I have had little opportunity, but some, to make a review of the loans that have been made and the ones that have not been made, and the reasons for approval or disapproval; and it would seem to me that they have followed the course of sound judgment with the understanding that they are there to meet a war emergency and frequently will undertake loans which in normal times might not be so seriously considered.

#### LOANING POWER OF SMALLER WAR PLANTS CORPORATION DECENTRALIZED

We have recently decentralized the loaning power to the regional offices of the War Production Board, of which there are 12, with what we believe to be adequate protection, so that for loans up to \$25,000 a small businessman may get his final end result by calling on a regional office of the War Production Board.

(c) The power of certification of small plants. More of that is being done, and more of it will be done. There are many instances where it is unnecessary to go through the machinery of certification if we get the same results without it; but where it is necessary to certify, we will remove any reluctance on the part of anyone in the Smaller War Plants organization to certify.

(d) The power to require advance reports on material to be purchased and progress on present procurements. I will have to plead a certain amount of ignorance on that score. We are preparing a plan which I have not yet had an opportunity to discuss with Mr. Wilson, wherein we will work in very close harmony with the industrial divisions of the War Production Board, where we hope to get those results.

(e) The power to enforce subcontracting. Now, the power to enforce subcontracting is, in my opinion, a little obscure, and I am having a legal opinion created on that. It is probably the most important question before the house because a great deal of this business has been, and I think properly, let by the Government, we will say, for the year 1943, and some little into 1944. Therefore, if we are only going to talk about new business and ignore old business that has already been let to a large prime contractor but has not in turn been distributed to others, we are going to ignore one of the great opportunities in this picture. Where persuasion ends and power begins, I do not know; but we will have that clarified, and I would like an opportunity to report back to this committee on the findings.

(f) The power to provide the necessary raw materials falls back into this other question of advance reports on material to be purchased. I think that whatever the powers of the War Production Board are in that connection, the powers of the Smaller War Plants Corporation are equal or greater, and by close collaboration we should get the results we want.

#### THE ROLE OF SMALL PLANTS IN ESSENTIAL CIVILIAN PRODUCTION

(g) Finally, the power to provide a place for small plants in essential civilian production. Yesterday I had an opportunity to talk this over in full with Mr. Weiner, who is the head of that section of the War Production Board. Again, I am pleased to report that Mr. Weiner sees this in exactly the same light that we do. As I understand it, the War Production Board has set up and will develop an ever-increasing activity in the business of essential civilian production.

The Smaller War Plants section will have a representative on each of the divisions and functions of that organization to see to it that these civilian requirements are properly distributed to smaller plants, and there, it would seem to me, is a very great opportunity to do this job, or a large proportion of the job. However, let us accept a practical fact as of today—that most small businesses as they have come to me, across my desk, want war business.

Now, these men are not going to be too well satisfied with civilian business, because it is going to take some months, Senator, for them to believe that essential civilian products can ever have the priority of war business, and I have heard the word "brush-off" more lately

than I have ever heard it in my life. The one thing we must do for these smaller people is to correct their impression that all they ever get is the run-around, and I am afraid that if we try to solve their problem at this moment with civilian production, they will feel that they are getting some secondary portion of the war production. Later, as the War Production Board develops the importance of civilian production, I think that their attitude will change; and while we can do a lot in that direction, just at this time the appetite on the part of these smaller plants is for war work because they believe that only through such a channel can they get the necessary priorities or support to do their job.

Now, you asked me to explain our plans and how we expect to use the powers granted, and, in so doing, to outline briefly the cooperation we expect from the War Production Board.

I would like to take a minute off, with your permission, on this plan business. There are many, many ways of doing this job, and I find that everyone wants to have his own formula, and that formula has merit for a certain situation; but when you put together the situations as they exist throughout the United States, you have a set of complexities that simply will not operate under a group of rigid rules and regulations.

Let us see what will work. This is an approach to the answer: If you have a man who can produce something over here and you have another man who wants something over there, you can put those men together out on the local industrial front where they both know their business—and not here—and you can implement that merger with the Smaller War Plants representative who will, if it is money, supply the money, or whatever else is necessary. Then you have a practical situation.

Now, in line with that idea, here is what we are trying to do: First, let us define the problem. What is the problem? The problem is the distressed plants of the Nation.

What is a distressed plant? For the moment we have said that a distressed plant is any plant that has less than 66% percent of its normal production. That is subject to amendment.

What is the normal production? It is the average of the 5 years before the war, because we have all sorts of strange distress. We have the man who has four times more business than he had before, and he is distressed that he has not eight times as much. We have all kinds of situations. Every one seems to be new to me.

Now, with that we get the list of the distressed plants by territories. That is the division of the problem. When we get that, we are inviting in all of the services, not one at a time.

Let me emphasize "not one at a time." We are getting in a room, and we are asking the seven component parts of the Services of Supply, the Navy, the Maritime Commission, the Defense Plant Corporation, the Treasury Department, and so forth, to meet around a table in 12 sections of the United States, because we have to take this in big swaths if we are going to get anywhere.

They have before them the list of the distressed plants in the area, classified, and ultimately, I hope, with adequate information; the theory is that these men, who are very cooperative in their attitude, will take these assignments of plants.

When we get down toward the afternoon and there are a group of unusual and unique cases, those will be the ones which the Smaller War Plants Corporation will take unto itself. That is the scheme. We are convinced that until we take it out to the industrial front where we are talking to men who know their business and know the plant in question, we will not get very far.

And so, in general, that is one of our plans—the decentralization, and taking up this question in terms of distressed plants by areas.

We have other plans which we are developing, and we will try them out in what we will call pilot plants. In other words, we will try a scheme in New York and we will try another one in Chicago, and still another one in Atlanta; and if we can get a formula that works, we will spread it over the United States quickly.

Senator SCRUGHAM. Colonel, are the War Production Board organizations in complete accord with your plans, do you think? In other words, are you going to get teamwork?

Colonel JOHNSON. Well, Senator Scrugham, I have been brought up in organized business, and I have spent the last year or so working with these very large, rapidly developed war organizations. Now, let us lay our cards on the table. The top leadership of the War Production Board is not only in complete accord but it is enthusiastically in favor of this plan.

As we go down the line, there are all degrees of interest, and it is going to take a little time to get all of the operating executives of a large organization to see this in exactly the same light. That is a matter of management, and it is a common executive problem.

I am convinced that the collaboration between the War Production Board and the Smaller War Plants can be made complete; and my reason for that conviction is simply that if I find anyone in the War Production Board who is not on the beam, I will report it to Mr. Charles Wilson, and that, I think, will be adequate.

#### IMPLEMENTING SMALLER PLANTS IN THE WAR EFFORT

Senator SCRUGHAM. We have received reports from procurement agencies indicating that they are doing what they can to implement the smaller plants in the war effort, and, mind you, I am referring to the procurement agencies. Are you convinced that this is true or have you given any special study to this phase of the program?

Colonel JOHNSON. To a degree the answer is the same. I hesitate to take the committee's time to read detailed reports which I have here on each of the major procurement agencies and their divisions. If you request it, I can do so. They all follow a pattern fairly alike. My contacts with the Assistant Secretary of the Navy, the Under Secretary of War, Admiral Land and Mr. Lalley, of the Maritime Commission—

Senator SCRUGHAM (interposing). It might be well to insert those reports in the record unless some member would like to have them read.

They will be inserted in the record.

(The reports referred to appear in appendix IV.)

Colonel JOHNSON. They are very satisfactory.

I hope that I have a letter here from the Maritime Commission that I would like to read in respect to subcontracting. Here we have the same problem. There are just hundreds and thousands of

contracting officers. They are frequently faced with pressure to get a given war product, and it will require time to convey to those men the determination on the part of Congress to carry out this act.

Now, that situation is understood by the War, Navy, and Maritime Commission, and they are aware of it; they acknowledge it, and they are on the job. Of course, it is our business to follow through continuously.

Senator SCRUGHAM. What are your plans to decentralize the activities of the Smaller War Plants Corporation?

Colonel JOHNSON. May I have your permission, Senator Scrugham, to go back a minute to your other question? There was something that I would like to add to that.

The Army, Navy, and Maritime Commission have inaugurated or are on the way to inaugurating certain plans—some of them have been suggested by themselves, and some by us—to carry out educational procedures and meetings throughout the Nation with their own procurement officers to get over this thing and get it done.

Then, as to decentralization: May I analyze a little the Washington problem?

#### DECENTRALIZATION OF THE SMALLER WAR PLANTS CORPORATION

When you take a product, one of the millions or thousands or hundreds of thousands out of a great procurement service, and you try to fit that to some plant in a remote area that you know little or nothing about except that you have some report, you can spend weeks; and when you get through, somebody says in the conference: "Well, the report is inadequate." You send the report back by mail, and months go by.

Now, that means trying to solve the United States by taking little pieces at a time; and we will never do that. Therefore, we must decentralize; we must decentralize so that men stop spending money and time coming to Washington. We must make it possible for small business particularly, and any business for that matter, to get their answers within a reasonable distance from their headquarters in order to stop congestion in this city, to take the load off the men who are trying to operate bureaus, and to take the load off the Congress, because it is a tragedy that these men have to come to this town to spend time and money and to wander all over the place to get the results which we ought to be able to deliver in the field. And so we are going to try to decentralize to the greatest possible degree.

Now, there is another very important reason for that. Today it is almost impossible to get a businessman to come to Washington; and it is particularly difficult to get a medium-sized or a small businessman to come to Washington. He hasn't 47 directors; he usually is running his own business by himself, having lost most of his folks.

Now, we cannot load the administration with large businessmen, and we are up against a mighty tough situation, to get medium and small businessmen to help us. They can go into their own community or they can go to an adjacent regional office; but when they face the business of coming down here, we are just without the necessary administrative force, and I see no way to get it except to develop it

locally and to use it that way, and leave in Washington a policy-making and administrative staff.

Senator SCRUGHAM. In the hearings on December 15, Mr. Holland, the former Chairman of the Smaller War Plants Corporation, presented a letter which had been signed jointly by Mr. Nelson, Mr. Patterson, and Mr. Forrestal, calling for all prime contractors to engage more extensively in subcontracting.

Now, through our staff we have made careful inquiry, and we have found that, so far as we are able to learn, neither the War Department or the Navy Department has sent this letter to any prime contractor. Have you any information on the subject?

Colonel JOHNSON. In respect to that particular letter I have not, Senator Scrugham. I do not know. I assumed that that letter had been given wide distribution, but that is an assumption. I have no knowledge of it.

Senator SCRUGHAM. Well, now, you think that small plants have a very definite place in essential civilian production?

Colonel JOHNSON. Senator Scrugham, that seems to me to be one of the very great opportunities, when it is broadly recognized that essential civilian production is as important to this Nation as the production of weapons.

Now, that is not the case today. I can assure you that many, many thousands of small plants can do, and in many cases can better do, civilian production; but I can give you equal assurance that that will not satisfy small business management so long as they think that essential civilian products are put in some secondary category.

Senator SCRUGHAM. When you certify a plant to one of the procurement agencies, and that agency in turn places a contract with the plant—is that the procedure you customarily follow?

Colonel JOHNSON. Yes.

#### PROBLEMS OF SUBCONTRACTING

Senator SCRUGHAM. Now, this committee has received a letter from a procurement official which throws some light on the subject that we are just discussing. It states that it is vitally important to hold the prime contractor responsible for delivery of needed supplies of requisite quality at the time required.

In many cases it would impair that responsibility to introduce a contractual restriction on subcontracting, and, therefore, while effort is being made during the negotiations to secure a maximum amount of subcontracting, it has not generally been found practicable to make it the subject of a contractual agreement. Is that clear?

Colonel JOHNSON. I am afraid it is not.

Senator SCRUGHAM. The sentence is rather long. I will read it again; but it is an alibi for, or a reason why, the subcontracting has not been made a part of these contractual agreements:

It is vitally important to hold the prime contractor responsible for delivering needed supplies of requisite quality, and at the time required. Now, in many cases it would impair that responsibility to introduce contractual restrictions on subcontracting; and therefore, while effort is made during negotiations to assure a maximum of subcontracting, it has not been found practicable in general to make it the subject of a contractual agreement.



It is the feeling of this committee that it is the responsibility of the Government to see that the prime contractors not only deliver the needed supplies at the time required but that they also pay more attention to the intent of the directive on subcontracting.

Take, for instance, the one that I mentioned. Mr. Holland testified that a letter had been submitted the 15th of December stating that an order went out generally that such contracting should be done, and apparently it has had quite a little effect; subcontracting has actually dropped instead of increased.

Colonel JOHNSON. Senator SCRUGHAM, there are a great many figures. I have been getting figures in Washington for some time, and here is the way it works with me: I get the first set of figures, and I worry about them a little; then I get the second set of figures, and they contradict the first; then I get a third set of figures to check up on the first two, and they are wrong; then I make a good guess, or a bad guess—I don't know which.

Let us take the first question: Is it practicable to state a percentage—because that is what this amounts to—a percentage in dollar value of a prime contract that must be subcontracted, and make it a part of the contractual agreement?

Yes, in a lot of cases it most certainly is, and it will not change the responsibility on the part of the prime contractor one iota. It is entirely practicable.

Remember, it is more trouble, but there is a lot of trouble around.

Now, in other cases, it is not as clear; it depends very largely on the industry. There are some industries where subcontracting can be done to an extent of 90 percent, and there are others where it would be difficult to do 10 percent; some of the technological industries, range-finders, and things of that nature are very difficult. But in many, many products, it is very easy. That is a matter of common sense.

Now, let us take a look at that question. A good purchasing agent can do it if he wants to. That is the thing here, this is a state of mind. If a man does not want to do this job, he can bring up any number of reasons why it is difficult; when he has decided the job can be done, those things fly out the window and you go to work. This is not anything that started with the war; it has been going on with purchasing departments as long as they have been around.

The easy way is to buy everything from one fellow and to write the order "Same as last," and that has been going on in business as long as I have been in it.

Senator SCRUGHAM. This is a very interesting statement, Colonel, and I have one more question.

Do you contemplate assisting small plants producing raw materials, particularly minerals? Have you any special plan for loaning money to encourage strategic or critical mineral production?

Colonel JOHNSON. I have not had very much time in this job so far, Senator, to really go to work.

Senator SCRUGHAM. That might be included in the purview after examination?

Colonel JOHNSON. I certainly feel it should.

May I put in the record this letter of Mr. Lalley, on subcontracting?

Senator SCRUGHAM. That may go in.

(The letter follows:)

## DRAFT OF PROPOSED LETTER TO ALL PRIME CONTRACTORS AND SHIPYARDS

As you doubtless have read in the press, Col. Robert W. Johnson has been appointed Vice Chairman of the War Production Board and will have charge of spreading the work movement to smaller war plants.

In accepting this new assignment, Colonel Johnson, among his many objectives, made the following statements:

"We can't think in terms of business to come because many contracts already awarded run well into 1944. The job is to spread the present work. This job must be done on the industrial front, not here in Washington.

"We are going out and look for small plants that can be drawn into the war effort.

"We are going to use persuasion where necessary to convince any holders of prime contracts who are reluctant to subcontract that they must do so.

"Also, if necessary, we will use the powers given us by Congress under the smaller war plants legislation to compel those who still resist to subcontract."

Colonel Johnson's further remarks, summarized briefly, counsel prime contractors that the course of wisdom for large business under present conditions is to support its smaller competition. He conceded that this viewpoint has so far been difficult to put over because of the natural tendency of every businessman to get and hold as much business as possible.

"This isn't necessarily due to avarice on the part of the businessman," he said. "Set it down rather to a 'cultural lag.' By that I mean that the business executive trained for 10 years or more in the stiff competition of the depression era finds it hard to adjust himself to the great change that war brings in the rules of competition he knew during peacetime."

The plight of the smaller concerns is ever getting more acute, and it behooves us all not only to recognize this pertinent fact, but more to the point, do something about it.

It is with the prime object of utilizing efficiently and effectively all small business concerns qualified (even though at the outset some of them may need guidance) to assist and augment our collective war production efforts, and by so doing assist in preserving our general national economy.

It is much better for our prime contractors to approach this important subject voluntarily than to have Colonel Johnson use the powers as given the Smaller War Plants Corporation by Congress, which would permit him to compel those who do not volunteer their assistance to subcontract by official order.

While we are all aware that our primary effort is to win the war, which means in the final essence speedy production, nevertheless, if the proper efforts are made the present speed, in my opinion, can be augmented by the effective utilization of most of the smaller plants' productive capacities.

We all recognize that the job is a stupendous one. In order to put it over practically it is needless to remind you that it is too big for one man to do the entire job.

There should be a concerted all-out national effort on the part of all prime contractors to put their own shoulders to this job voluntarily.

They should immediately seek out new subcontractors and if their knowledge and facilities will fit in immediately with the delivery goals toward which the prime contractors are working, they should be given subcontracts at once.

If, on the other hand, prospective subcontractors' lack of "know how" prohibits their stepping in and effectively handling subcontracts, then they should be given small educational orders so that they may be available to assist on the next prime contract.

This is not a question of "letting George do it," but is a question of one and all cooperating. If we can get a real, sincere national effort functioning along these lines, preferably doing it voluntarily, the war economy will be greatly assisted.

It is, therefore, up to our prime contractors to approach the subject in a serious and sincere effort to survey smaller plants' capacities and facilities.

When the movement is properly started, we will doubtless find that in most instances the following assistance can be accomplished, because, first, similar machine tools in the smaller war plants will be working simultaneously with the same machine tools that are operating for the prime contractors, thus spelling augmentation of output.

Second. Many machine tools in prime contractors' places of business are operated by the same hands on an overtime basis, while similar machine tools in the smaller war plants are not only idle, but the hands that operate them are also idle.

We all know that while overtime is often necessary, nevertheless, there are many instances throughout the country where too much overtime makes for inefficiency.

Third, Machine tools in many of the prime contractors' places of business are idle from time to time due to absenteeism for good or bad reasons, and if similar machine tools were operating in the smaller war plants, there would be at least certain parts being made available for final assembly rather than none at all.

And so we could go on, but while the above comments simply refer to the desirability of getting the utmost out of our machine-tool capacity, the same arguments apply to all other manufacturing facilities. I am sure that no one realizes better than you yourselves the importance of this whole subject.

It must also be very apparent to you that the time has come when the all-out whole-hearted concerted national effort is needed to review present prime contracts enjoyed by you. This should be done without wasting a day and with the objective of tackling the subject, thereby contributing your part. If we can get a real Nation-wide "team play" back of this proposition, we will obtain results.

In closing I would like to state that I would much prefer to see this accomplished by the American way of doing things by voluntary cooperation rather than by instructions forced upon you.

Your whole-hearted cooperation on a complete review of this situation and 100 percent effort on your part is urgently requested, and I am sure we may count on this.

Senator BUCK. Do you have your staff organized yet?

I want to ask you, when you are organized, if you have sufficient room to house the organization that is going to be required for this?

Colonel JOHNSON. That is a very serious situation. Our headquarters is entirely inadequate, and the men we are getting cannot be given a desk in the hall or anywhere else. I can say this, that this thing cannot operate until we get a new headquarters which is adequate. It cannot possibly start operating now.

Senator BUCK. How much space will be required?

Colonel JOHNSON. Thirty thousand square feet. And that is absolutely essential to the operation of this organization. It is nothing that will come in the future; it is here now. It cannot be done.

Senator BUCK. Have you had any surveys made of any available space in town, in the city?

Colonel JOHNSON. Yes, sir; I have, and I expect to work this afternoon on the business of looking into what has been found. I may have to come to you for assistance on that, because we will have to do something about it immediately in keeping with the dignity of the job.

Senator SCRUGHAM. We thank you. You have a great task, and we want to assure you again of every possible cooperation on the part of the committee. I hope you will feel free to call on us at any time, any time you think that we can be of assistance.

(Witness excused.)

Senator SCRUGHAM. The most tremendous burden that has been thrown on any man in business life today has been placed on the shoulders of Mr. Charles Wilson. We have asked him to come up today and tell us something of his plans and problems, in which the legislative body, and particularly this legislative committee, is cooperating to obtain results.

Mr. Wilson, we are happy to have you here.

**STATEMENT OF CHARLES E. WILSON, EXECUTIVE VICE-CHAIRMAN, WAR PRODUCTION BOARD**

Senator SCRUGHAM. You have just heard the testimony of Col. Robert Johnson. Are you wholly in accord with his statements, and especially those dealing with the cooperation between the War Production Board and the Smaller War Plants Corporation?

Mr. WILSON. I am, Senator.

Senator SCRUGHAM. What activities in the Smaller War Plants field has the War Production Board concerned itself with, outside of the Smaller War Plants Corporation? In other words, what is the dividing line?

Mr. WILSON. Senator, I have a statement that I would like to read to you, that I think will answer some part of that, and in doing so may I call your attention to the fact that in testifying before you this morning I am going over ground in new areas of responsibility, very recent responsibilities, and therefore I may be able to give you only a tentative report at this time.

In response to the questions that were placed before me by Senator Murray in his letter of February 26, I have the following comments to make:

The fundamental job of all of us—civilian and military, big manufacturer and small businessman—is to win the war as surely and as rapidly as we can. Neither the small businessman nor the big manufacturer will have any future if we do not succeed in doing this.

Within this objective I believe there are a number of ways in which the resources of small business can help in winning the war. We have already found that in many cases small businesses can produce relatively simple articles that previously had been assigned to big corporations with more elaborate equipment and more trained engineering staffs. By the smaller corporations taking the burden of these simple things off the big concerns, it releases their resources for the tough items which are so badly needed in getting war production done. At the same time, there are many plants which, although relatively small as compared to other plants in their industry, are big businesses from the point of view of engineering skill and are quite capable of making the tough items themselves. A great many of the tough production jobs of the war effort are being satisfactorily carried out by smaller concerns that are taking one or two units or parts of a difficult job and doing them to the highest degree of accuracy. How far it is possible to go in this direction is shown by what one aircraft company has done, in cooperation with the procurement agencies involved. One single new airplane has been broken down into 34 major subassemblies, each one of which is being produced by a different concern all over the country. These concerns, in turn, have sub-contracted the parts that go into these subassemblies to hundreds of subcontractors, so that over 1,500 concerns will be working on the production of this one airplane.

**SERVICES' PROCUREMENT AGENCIES SUBMIT THEIR REQUIREMENTS TO  
SMALLER WAR PLANTS CORPORATION**

Smaller War Plants Corporation has recently worked out arrangements with the services' procurement agencies so that, as new things come along which they need, they submit their requirements to the Smaller War Plants Corporation so that it can see which of their requirements can be met by the smaller concerns listed with them. Through this close cooperation between the services and the Smaller War Plants Corporation, hundreds of millions of dollars worth of business has been placed in recent months. Over \$30,000,000 of work a week is being placed now through Smaller War Plants Corporation efforts. We expect that the amount of business placed with smaller concerns will run into billions by the end of the year.

We plan, in the War Production Board, to support the efforts of the Smaller War Plants Corporation in enabling the smaller businesses to make the maximum contribution they can to pushing forward the war effort, and I intend to see that that policy is carried out.

**PRODUCTION SCHEDULING**

Recent efforts to increase the production of critical common components illustrate that point. Production scheduling means finding out what is made, who is going to produce it, when it is going to be delivered, and how schedules of deliveries relate to schedules of requirements. When we started digging into critical components, oftentimes we found that no one was able to tell us just what the requirements really were for many things that were needed, such as valves, electric motors, components, and heat exchangers. When we went to the manufacturers who produced these things, we found that in many cases orders for things that were to be made this year had not yet been placed; so the first thing we did was to have orders for the equipment to be used this year placed as promptly as possible. That means that we can now go to the order books of the manufacturers and from the orders determine the total needs and when they are to be delivered. Requirements are then matched with productive capacity, and we can see that orders have been so distributed through industry as to make it possible to complete them on time. As far as we have looked into this problem, we find that, in general, productive capacity is able to meet the needs if the orders are properly distributed, but usually the one or two dominant concerns in industry have received an undue proportion of total orders. Everyone knows that Crane produces valves; Westinghouse, electrical equipment; Timken Co., roller bearings. When a purchasing agent is in a hurry to get stuff, his natural inclination is to send the order to the best-known concerns. In cases where we have dug into this we have found that sometimes the best-known concerns will have more orders than they can fill for a year and a half to 2 years ahead. At the same time, there are many other smaller concerns in the same industry which had orders on hand for only the next 2 or 3 months' production—in some cases, no orders at all.

The essential job in production scheduling is to redistribute these orders among concerns so as to have them distributed according to production capacity and make it possible to get all the stuff produced

by the time it is actually needed. Just last week, on February 26, we issued a general scheduling order on critical common components—M-293, a copy of which I am submitting for the record.<sup>1</sup> This order was thoroughly discussed with the services and the other procuring agencies first, and was drafted and issued with their consent and approval.

You will note that section E of this order provides that the Director General for Operations can readjust orders between manufacturers wherever necessary to insure the production or delivery of critical common components. It is expected that under this order the industry divisions of the Board dealing with all the major critical common components—the last part of the order gives a list of the specific things involved—will proceed to reschedule this production wherever it is found necessary. This will, I am sure, result in a considerable reduction in the orders placed with the larger concerns and in material increases in the orders placed with smaller concerns in each industry.

Wherever this study of the requirements and production of particular common components shows that even with redistribution of orders among members of the same industry there will not be sufficient capacity to meet the needs of the program, we will consult with the Smaller War Plants Corporation to see which plants with whom they are in touch have facilities which can be used to expand production of the components which are short.

Through this redistribution of order backlogs, I believe that many of the smaller plants which previously have not shared very fully in the war production program will receive a very much larger part of the job than they have heretofore, and at the same time the delivery of the things needed for the war effort will be speeded up.

#### READJUSTING USE OF FACILITIES

Another phase of our work which is of interest from the Smaller War Plants point of view is readjusting the use of facilities so as to spread out the new machine tools that are available to meet the maximum possible war production utilization of resources. This involves several phases. On the one hand, in some cases new plants and existing plants have been tooled up for the production of some war products, such as tanks and guns, only to find that ultimately we had more productive capacity than we needed and that something else, such as aircraft, was needed first. In those cases, the services have been most cooperative in working with the War Production Board to arrange to shift the existing plant capacity from one program to another. A number of ordnance plants have already been shifted from ordnance production to make aircraft or aircraft parts. Among these are several plants which were set up to make guns and are now making aircraft landing gears. A company that was tooled up to make tank parts is now making aircraft engine cylinders. Ammunition manufacturers are now making aircraft instruments and accessories. A whole division of the War Production Board is concerned with working out cases in which existing plants of this sort can be substituted for projected new plants. This division is in constant touch with both the procurement agencies and the Smaller War Plants Corporation. We have had good cooperation on both sides in

<sup>1</sup> The order referred to appears in appendix III.

using existing plants as far as possible instead of tooling up new ones, and expect that this cooperation will be intensified.

A somewhat similar step which has been taken recently to minimize the construction of new plants has been the working out, in cooperation with the services, of the problems of taking idle machine tools from plants where they are not needed or where they are not being used in some critical war work and moving them to other plants where they can help meet the war programs. While the method that I have just discussed is concerned with taking the work to the machine, this other method has to do with taking the machine to the work. Several weeks ago our Production Executive Committee, on which all the major services are represented, approved steps to move machines where necessary, and, with the approval of Secretaries Patterson and Forrestal, and the Defense Plant Corporation, a machine tool directive was issued (No. 13, which I am presenting for the record<sup>1</sup>), authorizing the removal and use of machine tools where they could serve more effectively elsewhere, regardless of whether the tool was privately owned or was owned by Government agencies. Under this directive, both the Machine Tool Division and the Facilities Division will move in tools to help small plants do the production job where they have some of the machines necessary to do the work but not all of them. Where the missing tools can be found in other plants where they were not needed, this directive can be used to move the tools from where they are not needed to be placed into production where they are needed. Where the arrangements for bringing the smaller plant into production are being worked out through the Smaller War Plants Corporation, it will participate in the undertaking.

I have already mentioned the use of production scheduling in the production of common components. For a number of weeks Mr. Cordiner has been conducting discussions with the services through the Scheduling Committee, of which he is chairman, looking forward to the services developing their own production scheduling arrangements so as to schedule out production of their products throughout the services in somewhat the same way that industry divisions are preparing to schedule out the production of common components. Much progress has been made, and we hope soon to develop common standards which all the services will follow. As the services get into fuller scheduling of their end products in accordance with these common standards, I am sure that they will find the same thing that we are finding in common components—that there are many cases where a comparatively few concerns have a large proportion of the total—where the necessary production can be done faster and more effectively by redistributing the orders so that the smaller and possibly less well-known concerns are carrying a larger part of the total load. By this method of scheduling, I believe a great deal can be accomplished to see that the smaller concerns all over the country have the opportunity to do their full part in carrying the load, and achieving the common end of winning the war as quickly as possible.

Senator SCRUGHAM. In rescheduling the program it was our understanding that the armed services were urged to place all of their requirements before March 1. Do you not think that in many

<sup>1</sup> The directive referred to appears in appendix III.

instances the shortage of time between the time the order was given and the March 1 dead line very much minimized the opportunity of small business to participate in the orders so placed?

Mr. WILSON. No, sir, I do not; because we only asked them to place their orders for certain components, 34 critical items as a matter of fact. The end items for which those components were required were well known as of the date on which we asked them to place these component orders for the entire year. In other words, they were concerned with such items as shipbuilding, the naval program, the aircraft program, the rubber program, the high octane gas program. The requirements in those particular lines for the entire year were thoroughly known on the dates that we asked them to have these orders in.

Furthermore, although they did not have the orders in by that deadline date, that does not preclude the opportunity of scheduling the late-comers later on, so I think it did more to help the wider distribution of that business to smaller business than otherwise, Senator.

Senator SCRUGHAM. Mr. Wilson, all of the vast industrial fabric of this country, with its tremendous production possibilities—you have proven yourself to be one of the great masters of production; from your full knowledge of the situation do you believe any great additional production can be obtained from small plants not now used?

Mr. WILSON. Yes; I do. I believe that small plants not now used can be used to produce a wider variety of small items.

Senator SCRUGHAM. In order to bring those smaller plants into the picture, is it not absolutely necessary that the Smaller War Plants Corporation have the full and complete cooperation of the War Production Board?

Mr. WILSON. Of the War Production Board and the services, sir.

Senator SCRUGHAM. And the War Production Board intends to give that full cooperation?

Mr. WILSON. One hundred percent cooperation.

Senator SCRUGHAM. But the report filed here this morning seems to indicate that the procurement services have not done a very good job during the last few months in the way of getting orders out to the smaller corporations or the smaller plants.

Mr. WILSON. I heard that statement, sir. I believe, and this is only a curbstone opinion because I have not any facts to back this statement up, but I believe you will find, if that is thoroughly investigated, that it probably is due to the nature of the business placed in those first few months.

There are certain kinds of business that the services place which are much more readily broken down to a wider variety of smaller plants than others, so much so that the services specify to the prime contractors that they must place a certain percentage of the requirements covered by the prime contract in subcontracts and take the responsibility for them. Where that kind of business is involved, obviously the percentage flowing to smaller manufacturers will be larger. When you get into certain other kinds of business, for instance, guns or a cannon, if you please, it is much harder to break it down to small concerns.

I think you will find that it all depends on the nature of the orders placed in a given period. It fluctuates very widely.



Senator SCRUGHAM. We had a pretty good illustration last fall of the possibilities of breaking down these orders that were going to the big concerns. In the case of one large concern in the New York procurement area, this concern was receiving additional orders which were filling up its backlog to such an extent that it would not be able to reach these new contracts at all for a long period of time.

Since that time we have a report indicating that as a result of our hearing this particular work is now being distributed to a group of 25, I believe, small concerns that heretofore were regarded as incapable of taking that kind of work. Now, I understand that they are in actual production, whereas, if they had continued the old system, we would not have had production for a year. As a matter of fact, at the time, one of the officers of that large corporation asked if they wanted this material for this war or the next war, and it created quite a little laughter at the hearing. Subsequently, as I say, that has been worked out very satisfactorily and very effectively, and I believe the same thing can be done with a great many other items that heretofore have been regarded as too technical for smaller plants. But with assistance and engineering advice and help small plants can take those contracts and divide them up among themselves and do a good job.

Mr. WILSON. I agree with that, sir.

Senator SCRUGHAM. You have illustrated that here this morning.

Mr. WILSON. Yes, sir.

Senator SCRUGHAM. In your airplane contracts, which can be split up into a great many—

Mr. WILSON. An airplane is one of the most difficult to do it with, I believe.

Senator SCRUGHAM. You are just getting started in that work of distributing those contracts out to the smaller concerns?

Mr. WILSON. We are intensifying the effort, sir; it has been done, and we are trying to do it on a larger scale than it has been done.

PROBLEM OF ASSISTING SMALL ENTERPRISE WHICH DOES NOT COME  
WITHIN PROVISIONS OF SMALLER WAR PLANTS ACT

Senator MEAD. During the course of our hearings we have listened to a great many witnesses representing small enterprise who have developed new machinery, new techniques, new materials, and new methods, but, being small, are up against the necessity of trying to get a contract. They have uniformly told us that there was no Government agency that would assist them in the pioneering work that they were doing.

Now, they are not looking primarily for a contract; they are not even looking for a subcontract. But they have a contribution to make to the war effort because of their pioneering work in a new field, because of their developing a substitute material or technique, and I was wondering if in your vast organization there was any assistance that could be made available for small enterprise in that pioneering field.

Mr. WILSON. Well, of course, we have an agency established in the War Production Board now under Dr. Davis that is looking at all kinds of suggestions for new methods and new materials; then if these involve new inventions and so on, there are other governmental agencies that have been established to look at them.

Of course, I think what you are particularly directing your thought to, sir, is possibly where a small concern has developed, as you said, a new material, or some new item or new method of making an item. I would think that its best opportunity was to go right to the procurement agencies, because the procurement agencies, from anything that I have been able to see, have just one objective—to get goods of the highest quality and in the shortest possible time to meet their schedules. I have seen no evidence that when anything good is submitted to them they are not interested in it. If it is really good, and will really provide something of as good or better quality in a shorter space of time, they are for it, and I have seen no evidence to the contrary.

Senator SCRUGHAM. The Smaller War Plants Corporation is able to take care of most of the smaller enterprises, provided they have something to contribute to the civilian need or the war effort, but in the case of the pioneer who has a new material or a new method or a new technique, there is not an agency set up with any funds to encourage him in his work. He can go to Mr. Davis, he can go to Colonel Johnson, and he can go to your office, but even though he may have a worth-while contribution, there is not anybody who will aid him in financing his venture, even though it is decided that it would be very helpful to the war effort.

Mr. WILSON. Well, wouldn't Colonel Johnson help him with that venture?

Senator SCRUGHAM. I do not believe that he would have authority to loan these enterprises money if they were not in the war effort or the civilian effort. I think that he could aid them after they established the fact that their contribution was of such a nature as would enable him to give them a contract, but I do not believe that he could aid them in completing a development, standing by itself, which would be neither a part of the civilian production nor the war production.

Mr. WILSON. You mean that it might well be something—or you may be thinking of something—that would be for completion after the war?

Senator SCRUGHAM. No; it might be a substitute for strategic material or it might be a machine that would take the place of existing slower moving machinery, and he might have the plans but might need a little money for materials to produce a machine for trials, in order to apply his method. He is not yet ready for a contract, but he has a contribution to make to the present war effort. He needs a little money, and he probably could get it or sell it out to a larger corporation.

Not very long ago we had a man before the committee who had a machine that had been approved in a number of instances—a machine that could contribute to the war effort—but he was unable to get any support for his machine because he had not a contract and he was not yet in that stage.

Mr. WILSON. Yes; I see the problem there.

Senator SCRUGHAM. He is just a little bit behind the requirements set up in the Smaller War Plants law.

Mr. WILSON. I see the problem there. I haven't the answer for that, at the moment. I frankly have not, but I will look into the matter.

Senator SCRUGHAM. If all of the experts and engineers in the War Production Board are available to the Smaller War Plants Corporation to aid in carrying out the program—I suppose that that is so?

Mr. WILSON. Yes; 100 percent, sir.

Senator SCRUGHAM. Any other questions?

Senator MALONEY. This committee started out, as I understand it, primarily to protect small business, to preserve small industry. Some months ago, before the committee, a representative of one of the departments downtown predicted, or told us to anticipate, 300,000 small business casualties. Do you see any ground for that fear?

Mr. WILSON. No; I do not think so. That is, certainly not so far as small manufacturing business casualties are concerned. I think the plight of the man who is in the distributing or servicing business is a very difficult one.

Senator MEAD. I think processors, the processors of meats and food.

Mr. WILSON. Yes; I think their plight is a very real one, but not as bad as that of the distributors of gasoline or automobiles or refrigerators.

Senator MALONEY. You think that with reasonably good luck we can utilize about all of the small industrial plants in the war effort?

Mr. WILSON. I would not say all of them, because that covers an awful lot of ground. I mean the very small ones, presumably some that are inefficiently or badly managed, just the same.

Senator MALONEY. That happens in normal times.

Mr. WILSON. Yes; but normally I think a very large percentage of them ought to be able to find, and we ought to be able to help them find, useful war munitions or parts or civilian requirements work to do.

#### PROBLEM OF SUPPLYING ESSENTIAL CIVILIAN REQUIREMENTS

Senator MALONEY. How much attention are you able to give to civilian requirements—civilian supply?

Mr. WILSON. I have only been in my present job for about 2 weeks, as you know, where that has been any part of my responsibility. I am giving some attention to it, and I hope to be able to give some more.

Senator MALONEY. I do not envy your position. I applaud what you have been doing.

Mr. WILSON. I do not think much of it myself.

Senator MALONEY. It seems to me that you and everybody else are greatly concerned with the question of civilian supply, because you, like other people, must have your electric stove fixed.

Mr. WILSON. It is a tremendous job.

Senator MALONEY. I think it has been too long neglected, and it is a part of the War Production Board problem.

Mr. WILSON. I feel that we have to take a very much more active interest in that end of our economy's requirements, a much more active interest, because it stands to reason that the war is going along, it has gone long enough so that new requirements in servicing lines, and so forth, are bound to arise.

Senator MALONEY. All along the line.

Mr. WILSON. Yes; that is right.

Senator MALONEY. If we are not going to make these civilian necessities, we must at least keep them in repair.

Mr. WILSON. Yes; I think that we have some real problems facing us there. I do not think that they are insurmountable; I think that we can lick them, and we are giving attention to them now.

Senator MEAD. In the servicing and repair of these essential civilian requirements, equipment, and so forth, do you not think it is better if our policy is such that all of this servicing and repair, or as much of it as possible, will be left to the smaller plants because of the greater possibilities of converting the larger plants to other war needs?

Mr. WILSON. I am 100 percent in favor of that, as far as it is practicable. You have to be practical about it. For example—I am just trying to think of an item that would be good to illustrate it by—let us take a piece of farm machinery. There is not much use in letting some smaller plant make some farm machinery part that is widely used and needed for the repair of a farm machine unless you also provide the widest distribution for that and the service facilities that are needed, and, as you know, that wide distribution and those service facilities are provided in that particular line by certain very large concerns that had excellent distribution all through the farm districts. I mean that there is another problem that comes in there and I think that would be true on many, many of the items used in the households of the Nation. You have that distribution and that servicing function to consider—how it can be done. Now, as a principle, yes; I would say, let us give the comparatively simple parts to the smaller concerns by all means, but let us do it by taking into consideration how we are going to get them out and how we are going to service them and so on, so that we can get them into household use or into farm use, and then keep them repaired for use.

#### AWARDING CONTRACTS IN CRITICAL LABOR AREAS

Senator MALONEY. In the more serious critical labor areas, critical labor area No. 1, you are not giving contracts as a general practice?

Mr. WILSON. That is right.

Senator MALONEY. What do you see as the ultimate result of that policy?

Mr. WILSON. Well, the ultimate result of it, I think, is going to be that we are going to have to shift our ideas considerably. For example, I have in mind one area that has been tight, but it happens that in that particular area some of the very large contracts are running out. The services may not need and will not need, I believe, additional quantities, and therefore we are going to have the problem of utilizing that labor that is given up when these contracts run out, by putting new parts in there, or you are going to have the shifting of that labor to some other plants—rather a difficult job.

Senator MALONEY. If the policy now in effect is followed very long, you are going to have a surplus of labor and the possibility of ghost towns.

Mr. WILSON. Well, there are not very many areas that are absolutely frozen and my judgment is that there will be changes in that freezing, because I think that there are some other things we can do.

For example, in one of the areas that I am thinking of, which comes in this category that you mentioned, while it is true that labor has been tight and that there has been a manpower shortage in that area,

we have been afraid to expand in it, and yet we already have contracts placed in that same area that require very large numbers of additional workmen.

Now, we are faced with two alternatives: One would be to wait until some of these other contracts in other plants run out, which we know is going to take place over a period of months, and then do our best to transfer the labor from those plants to the ones that needs additional people. Or, I think a better scheme is to see if we can subcontract a considerable part of the work that is required by the prime contractor who currently needs large additional numbers of people, and subcontract a part of the work to these concerns that are going to run out.

As a matter of fact, I have some experts out in one of the territories that you are speaking of today, looking into that situation, to see which would be the most orderly way of doing the job, which would speed up our schedules the best, which would cause the least shifting of manpower, and which would be the most practical way out of that most obvious and practical difficulty.

Senator MALONEY. Let me take a specific case, if I may. One of the cities in the State in which I live is a critical labor area No. 1; which means that you are denied, except under extenuating circumstances, the renewal of a contract.

Mr. WILSON. That is right.

Senator MALONEY. Plant A has 10,000 employees, and its contracts are nearing completion. You cannot give the plant another contract although it is geared to do that particular kind of work and to make that particular kind of product.

Where is the stopping place? One day the plant finishes the contracts; 10,000 men are out of work, manpower is being wasted, and your program is suffering. Where do you pick up?

Mr. WILSON. I do not think that we are going to wait—as far as I am concerned—to see where we will pick up; we are taking a look at those freeze orders that have been given, because I foresee the same difficulty with them that you have just outlined.

I question whether the freeze scheme as we have it now is the right way to handle it. In the first place, we have to look forward.

First, are we assured that we are not going to need the output of that particular plant after the existing contract runs out? That will influence it.

Senator MALONEY. It is more serious than that. In that particular locality there is not only 1 plant with 10,000 men, but there may be 10 or 15 such plants, and you may come right to the catastrophe all at once.

Mr. WILSON. You mean they are all on similar kinds of goods?

Senator MALONEY. No, different kinds; one makes guns and another makes shells.

Mr. WILSON. Fortunately, the chances of running out all at once are rather remote if there is diversified manufacture in the place.

Senator MALONEY. Followed to its logical conclusion, under Mr. McNutt's present policy, they could all run out at once. It is possible that a whole State, insofar as critical labor area No. 1 is concerned, could all run out at once, and by virtue of the fact that these contracts are running together the idea is not too farfetched. I am sure that you understand it, and I am glad that you are here, but I think, if I

may borrow a word you used awhile ago, that the effort to meet that situation ought to be intensified.

Mr. WILSON. Maybe I oversimplified in the case that I outlined to you. I think that we have a way out of that very bad one; that is a case that involves 50,000 new people in a territory where we know work is running out. I think that we can overcome that difficulty. I think that we can take care of that situation by the redistribution of work in the territory.

Senator MALONEY. I have spent some time on this problem, and this has been my experience in part, Mr. Wilson: The services, the officials of the Army and Navy and Maritime Commission and the Marine Corps, are acting under the letter of the directive of the Manpower Commission, but they are not in sympathy with it, and when there are specific cases referred to the services, they say, "We don't like it; we don't think it is a good policy, but so long as this directive remains we are not going to give you any business."

If that is true, and I think it is, and I might say that I am certain it is, it is pretty unfortunate, and I think it is extremely dangerous, and I hope that the delay will not be too long.

Mr. WILSON. It will not be. I assure you that we are giving it attention right now. I have taken it district by district; that is the best way I know of to get into it to see if we cannot get results in those places.

Senator BUCK. May I ask you, following up a thought of Senator Maloney, about the need for some civilian production on civilian needs? Do you know what is being done in connection with the manufacture of farm machinery?

Mr. WILSON. Yes; I know what has been done.

Senator BUCK. Is there something being done?

Mr. WILSON. Yes; I question if it is enough to meet the requirements.

Senator BUCK. We hardly expect it would be, but do you have a guess as to what percentage of the needs?

Mr. WILSON. I would not want to guess at that.

Senator MEAD. If I may, Mr. Wilson, I will say that the Truman committee appointed a subcommittee, and they went into that with the farm-machinery representatives of your organization and of the Department of Agriculture, and Mr. Nelson came before the committee and told us that the farm-machinery output, and I am trying to quote him approximately correctly, would reach the maximum recommended originally by the Department of Agriculture and the Farm Section of the War Production Board, that it had been reduced but after a survey of the needs it was restored to the maximum again.

Mr. WILSON. I thought the question, when I tried to answer it, was whether it would be enough, whether that would be enough in view of the intensified farm program.

Senator MEAD. It may not be enough but it is the maximum program agreed on by the various parties of interest.

Mr. WILSON. That will be carried out.

#### PRODUCTION OF CRITICAL MINERALS AND METALS

Senator SCRUGHAM. Do you feel that there is a necessity for an increased production of critical minerals and metals in order to keep up the war production program?

Mr. WILSON. Well, that is another subject that has been engaging some attention for the last 2 weeks, and we have established a group over there that I hope will be able very quickly to give me some facts rather than opinions on that subject, and I am going to get right into it because there has been a lot of attention given to it in the last 2 weeks. People have expressed the opinion that more can be done, and if it can, Heaven only knows we ought to do it.

Senator SCRUGHAM. I know personally that it can be done. It is a question of manpower. I know that we can produce more copper, for instance; I know one mine in Butte that has very high-grade copper in its lower levels, averaging 5 or 6 percent copper, and they have only 40 men working there, and they could have 140. That is an illustration right there where you can get increased production of copper.

Now, I understand that there is a shortage of essential chemicals in connection with the plastic materials. Is that true?

Mr. WILSON. Well, there has been. I thought some of these new plants coming in had taken care of it. I have not heard that recently. I will be glad to check on it. I built a couple of them just before I came down here.

Senator SCRUGHAM. There is a vast possibility in the United States of producing those essential chemicals for the plastic industry, if they are put to work. We have enormous deposits of lignite coal, for instance, in some of the western States, that have not been touched, and it would be a very prolific source of production of those essential chemicals that are needed in that production of plastics, so if that is true, it seems to me that something should be done immediately to get that production going.

Mr. WILSON. We ought to look at it in the light of whether it can possibly produce, if there is a shortage, in time for the war effort. We will take a look.

Senator SCRUGHAM. With reference to the lack of shipping space, of shipping materials, do you know about that?

Mr. WILSON. You know what is being done with bauxite and the wider use of our own material from Arkansas, and so on. Of course that is an important thing.

Senator SCRUGHAM. This committee is especially interested in the encouragement of production of strategic materials from domestic sources. We will be glad to give you every assistance possible on that program.

Now, do you believe that there are existing backlogs of orders on hand, such as valves, that could be redistributed, with the result that plants now idle might be put to work and delivery schedules stepped up?

Mr. WILSON. Yes, sir; we are in the process of doing that even with this particular item that you mentioned right now. We have a number of these critical items that we are in the process of redistributing now.

Senator SCRUGHAM. In what field are the most bottlenecks? Is it aircraft production or Signal Corps items or valves? Where are your chief bottlenecks, as a matter of academic interest?

Mr. WILSON. Bottlenecks for the large equipment, for the rubber program, and the component parts again, and those are very large items, let me hasten to say; for example, seven or eight thousand

horsepower motors and things of that kind are bottlenecks. That is, there is the rubber program and the high octane gas program. Getting down to the simpler things, valves are a bottleneck for some five large programs, including the Maritime Commission vessels, naval vessels, escort vessels, and similar products.

Senator SCRUGHAM. Have the readjustments in your production program resulted in the release of any plant facilities to any extent?

Mr. WILSON. Yes; the readjustment, for example, in the ordnance program has resulted in the release of quite a few plants, some of which we are turning over to other requirements, such as aircraft. To give you one illustration: We were able to help the aircraft people take a truck plant, and instead of building a large new airplane factory to turn out a new type, to take this truck factory and its personnel and begin the manufacture of an aircraft, of a type that is very badly needed. That is being carried out in lesser degree in many other lines.

Senator SCRUGHAM. Now a final word on the production of critical and strategic minerals. Have you any new organization set up to expedite the production of minerals, in the way of a coordinator?

Mr. WILSON. Not in the way of a coordinator yet Senator, but I have two groups that are making a complete study of this problem, and I hope to be able to proceed with it more vigorously very shortly. I find these last 2 weeks to have been slightly busy, and it has been difficult to get all of these reins in one's hands so quickly.

Senator MALONEY. You need have no fear, we understand that; most of us serve on more than 20 committees or subcommittees, so we do have some appreciation of that.

Mr. WILSON. Yes; I am sure you do. I just want you to understand that I do not know a lot of things, and I do not hesitate to tell you I do not.

Senator BUCK. May I ask at this period, is it still found necessary to increase plant facilities, in armament?

Mr. WILSON. Do you include airplane manufacture in that?

Senator BUCK. Yes.

Mr. WILSON. Well, it is a spotty thing. In airplane manufacture you could say quite generally "No," but with the experience gained in the various theaters of war comes a requirement for a new type of engine, and then it may well be that we will have to provide new facilities for that particular engine because you cannot stop the manufacture of the old type because it is needed for other planes.

Senator BUCK. It is more or less insignificant.

Mr. WILSON. Comparatively so; yes.

#### UTILIZATION OF SMALL WOODWORKING AND METALWORKING PLANTS DIFFICULT

Senator SCRUGHAM. There are a few classes of small plants that you find difficult to utilize in the war effort, such as the woodworking plants and sheet metal work.

Mr. WILSON. That is right.

Senator SCRUGHAM. What do you think can be done to bring them into war work or into civilian work or some activity to keep them alive during the war effort?

Mr. WILSON. It is a pretty big order, Senator, I admit.



Senator SCRUGHAM. I understand. Is there not an effort to have wood bodies for some of these trucks?

Mr. WILSON. That has been done. Now, whether it has been done widely enough I do not know. I had a meeting with representatives of the Services on that subject a few months ago and we went over the possibilities and the program then, and I believe it is being carried out, to distribute that business much more widely among the smaller woodworking manufacturers.

Senator SCRUGHAM. That is a practical thing?

Mr. WILSON. That is a perfectly practical thing to do, yes; and it has been done to a less degree with wooden airplane bodies, as you probably know. There it is a much more difficult job, maybe taking a little larger manufacturer, but some smaller ones can provide some of the wood parts.

Senator SCRUGHAM. But it is difficult to utilize the small metal-working plants?

Mr. WILSON. Yes, sir. If I could just go back and give you one experience, out of my own experience—this is not my Washington experience but my own business, where I took on some or many hundreds of subcontractors in my own business before I came down here.

You run into all sorts of things. I think of a concern that did a pretty good-sized yearly business but when you examined their plant and the type of engineering, let us say, that they had, you made the startling discovery that they really were only assemblers; they have not much of a machine plant, there were some few things that they could do, and yet in normal business they did a pretty good volume, but they were really assemblers. When you try to take that kind of a plant and find a job for it other than another assembly job, you have a pretty difficult task on your hands. I found that out myself because quite a few of those plants were good customers of mine for certain things and I regarded it as a responsibility to find business for them, and it was a very difficult job.

Senator SCRUGHAM. Those are the two main plants, the character of small plants that you have had difficulty with?

Mr. WILSON. Yes, sir; they are the hardest.

Senator SCRUGHAM. Most of the other small manufacturing plants are capable of utilization?

Mr. WILSON. Some of them can do very fine work. The size of the plant sometimes has nothing to do with its ability to do magnificent precision work, fine work. You find some of the best brains and the best mechanics in the country in some of these small plants.

#### REGIONAL SET-UP FOR HANDLING MANPOWER PROBLEMS

Senator MEAD. Referring again, Mr. Wilson, to the very serious problem presented by Senator Maloney, namely, that of guarding the tight labor areas from the day of reckoning when the contracts may run out, Colonel Johnson, discussing the matter with our committee some time ago, presented a very good idea that I think would be very helpful. That is to set up in the integrated zones, industrial zones of the country, an organization of the Smaller War Plants Corporation to bring together the large and small contractors, so that they might know their problem, and divide up their work; it was also suggested

at that time that in addition to a Director of the Smaller War Plants Corporation to sort of aid in dividing up the work, that they have an engineering service which would be available for small business in order to harness that more efficiently to the war program, and that they also have a loaning agent so that their funds might be made readily available in order that they might get into production.

Now, a Smaller War Plants representative in an integrated industrial area, bringing together in a conference the prime contractors and the subcontractors and sort of guiding them so that they will divide up their work, would prevent this serious situation that might result if all of the contracts in a given area run out at the same time.

Now, then, there is one other item that should be considered in connection with that problem, and that is that, because of the very serious manpower shortage, we need manpower representation throughout the country. Mr. McNutt has recommended that there be regional manpower directors and State directors, but I think that up to the present time Congress has held that up either by lack of confirmation or lack of appropriation, so that if we have these areas surveyed by a local manpower representative and if we have them coordinated by the Smaller War Plants local set-up, I think we would do much to increase the productivity, in the war service and civilian service, and to keep it evenly balanced.

Mr. WILSON. I would go along with that, and I would think it would be helpful. It can't help but be helpful.

Senator MEAD. We need a most adequate and most efficient manpower agency, and we probably are a little bit to blame for that ourselves.

Senator MALONEY. I do not think that we are to blame.

Senator MEAD. We have not appropriated a sufficient amount of money, and we have not confirmed the local directors.

Senator SCRUGHAM. In conclusion, Mr. Wilson, you feel that there is a strong likelihood that you are going to be able to preserve the small manufacturing plants of the country, substantially, during the war effort?

Mr. WILSON. Yes, I do, Senator; I do.

Senator SCRUGHAM. I am very glad to have you say that.

Mr. Wilson, to anyone who has heard your testimony and studied the situation, it is obvious that you have a greater responsibility on your shoulders than the generals of the Army and the admirals of the Navy, and I want to say to you that we wish you well in every step that you are going to take and we think that you are doing a splendid job.

Mr. WILSON. Thank you, sir.

Senator SCRUGHAM. The hearing will be adjourned.

(Whereupon the committee adjourned.)

## APPENDIX I

The material referred to in the chairman's opening statement is as follows:

WAR DEPARTMENT,  
HEADQUARTERS, SERVICES OF SUPPLY,  
Washington, D. C., January 15, 1943.

HON. JAMES E. MURRAY,  
*Chairman, Senate Small Business Committee, Washington, D. C.*

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE: During the month of December the trend toward a greater proportion of purchasing being done in small plants by the War Department continued.

December contracts placed with all contractors by the Services of Supply totalled 25,089 and represented an outlay of Government funds of \$1,226,051,000. In November 36,418 contracts were placed for a total outlay of \$2,317,324,000. While the December volume was lower the proportion of contracts and dollar volume directed to smaller war plants employing 500 persons or less showed a continued gain.

In plants with less than 100 employees 11,183 contracts were placed in December totaling \$98,133,000 or 8 percent of the over-all total as compared with 9 percent during November.

In plants from 100 to 500 employees, 5,681 contracts were placed during the month of December for a total dollar value of \$197,744,000. This represented 16.1 percent of the total dollar volume for the seven supply services. In November this classification of smaller concerns obtained 14.7 percent of the total.

The added gain in December over November for smaller war plants employing less than 500 persons was 0.4 percent, bringing the total percentage to small plants up to 24.1 percent. This gain was made despite the reduction in procurement activities.

The accompanying charts show the distribution of supply services. It should be noted that the Ordnance Department increased its percentage of dollar volume placed with plants employing less than 100 persons by approximately 60 percent.

The Signal Corps more than doubled the percentage of dollar volume placed with plants employing 100 persons or less and nearly doubled the percent of dollar volume acquired by plants employing from 100 to 500 persons.

A reduction of approximately 65 percent in the dollar volume of the Corps of Engineers' contracts is shown for plants employing less than 100 persons. This was principally due to the fact that the December figures include a large procurement of tractors, contracts for which could only be placed with a few large manufacturers of this item.

Normally, the Transportation Corps places the bulk of its contracts with plants employing less than 100 persons. In November when the Transportation Corps was placing contracts for small boat construction, nearly all went to smaller contractors. In December, however, the ratio was temporarily reversed with the inauguration of the Transportation Corps' locomotive procurement program, the contracts for which could be awarded only to comparatively large locomotive builders.

While the percentage of prime contracts placed to date by the Army Air Forces with smaller plants has been relatively low, you will note that it is increasing. Preliminary investigation indicates that the greatest use of small plants by this Service lies in the field of subcontracting.

Sincerely yours,

[Signed] ALVIN E. HEWITT,  
*Major, Air Corps, Acting Chief.*  
FRED C. FOY,  
*Colonel, Army of the United States,*  
*Chief, Small War Plants Branch,*  
*Purchases Division.*

*Number and dollar value of prime contracts awarded in November 1942—7 Supply Services of the War Department*

[Values expressed in thousands of dollars]

Service	Break-down of contracts by size of plants (number of wage earners)															
	Total				Over 500				100-500				Under 100			
	Number of contracts	Per-cent of contracts	Dollar value	Per-cent of dollar value	Number of contracts	Per-cent of contracts	Dollar value	Per-cent of dollar value	Number of contracts	Per-cent of contracts	Dollar value	Per-cent of dollar value	Number of contracts	Per-cent of contracts	Dollar value	Per-cent of dollar value
Chemical Warfare Service.....	474	100	21,685	100	106	41.4	10,092	46.6	167	35.2	9,468	43.7	111	23.4	2,125	9.7
Corps of Engineers.....	5,964	100	395,745	100	1,909	32.1	223,508	55.8	1,688	28.4	100,845	25.6	2,357	39.5	71,392	18.6
Medical Corps.....	2,459	100	67,026	100	103	4.2	27,240	40.6	310	12.6	21,026	31.4	2,046	83.2	18,760	28.0
Ordnance Department.....	3,292	100	767,386	100	1,304	39.6	674,883	88.0	549	16.7	61,761	8.0	1,439	43.7	30,741	4.0
Quartermaster Corps.....	15,065	100	320,881	100	3,331	21.3	188,492	58.8	3,613	23.1	85,974	26.8	8,721	58.6	46,415	14.4
Signal Corps.....	8,473	100	701,377	100	3,374	39.8	642,861	91.7	1,738	20.5	48,654	6.9	3,361	39.7	9,842	1.4
Transportation Corps.....	110	100	42,925	100					33	30.0	13,092	30.5	77	70.0	29,833	69.5
<b>Total.....</b>	<b>36,427</b>	<b>100</b>	<b>2,317,024</b>	<b>100</b>	<b>10,217</b>	<b>28.1</b>	<b>1,767,096</b>	<b>76.3</b>	<b>8,098</b>	<b>22.2</b>	<b>340,820</b>	<b>14.7</b>	<b>18,112</b>	<b>49.7</b>	<b>209,108</b>	<b>9.0</b>

Above figures represent supply contracts only.

*Number and dollar value of prime contracts awarded in December 1942—7 Supply Services of the War Department*

[Values expressed in thousands of dollars]

Service	Break-down of contracts by size of plants (number of wage earners)					
	Under 100		100-500		Over 500	
	Number of contracts	Dollar value	Number of contracts	Dollar value	Number of contracts	Dollar value
Chemical Warfare Service.....	121	2,311	184	10,461	290	12,321
Corps of Engineers.....	1,563	4,184	713	17,021	1,338	47,025
Medical Corps.....	131	8,002	129	13,834	142	17,530
Ordnance Department.....	1,728	37,820	460	42,033	1,033	501,981
Quartermaster Corps.....	5,782	40,263	2,708	90,114	2,686	207,305
Signal Corps.....	1,848	4,688	1,467	19,942	2,691	122,186
Transportation Corps.....	10	855	20	4,339	35	21,396
Total.....	11,183	98,133	5,681	197,744	8,225	930,174

Above figures represent supply contracts only.

WAR DEPARTMENT,  
HEADQUARTERS, SERVICES OF SUPPLY,  
Washington, D. C., February 16, 1943.

HON. JAMES E. MURRAY,  
*Senate Small Business Committee,*  
Washington, D. C.

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE: During the month of January the placement of contracts by the War Department with small plants employing less than 500 persons totaled \$327,139,000. This dollar volume was split up among 17,804 contracts.

January contracts awarded by the Seven Supply Services amounted to \$1,188,978,000. Of this total dollar volume, the Supply Services placed 23.6 percent with small plants employing 500 persons or less. This percentage represents a decrease of five-tenths of 1 percent, compared with December 1942. The underlying reason for this decrease was a concentration of purchasing of heavy items such as tractors, locomotives, and chemicals.

However, it is interesting to note that the Ordnance Department, which is responsible for a large majority of the dollar volume purchased by the Services of Supply, continues to place an increased proportion of its awards with smaller war plants.

In January the Ordnance Department increased the percentage of its dollar volume awards to small plants by approximately 30 percent compared with December.

The accompanying exhibits show the distribution of contracts and dollar volume by the Supply Services. Chart B shows the percentage of total dollar volume comparisons for the Supply Services and the Army Air Forces, Matériel Command, during the last 3 months.<sup>1</sup>

Of particular interest is the comment made by Mr. Frank M. Smith, Deputy Director of the Smaller War Plants Division, War Production Board, referring to an experimental trip organized by the War Department and participated in by Mr. Smith's division, the Army Air Forces, Matériel Command, and this branch, during which Air Forces prime contractors in the Buffalo area were visited to explore the possibility of extending subcontracting to an additional group of small plants in order to aid in the accomplishment of the 1943 airplane production program. Mr. Smith writes, " \* \* \* the missionary expedition to Buffalo in the interests of subcontracting turned out to be very gratifying and as a result subcontracts to the amount of several millions of dollars have already been allocated \* \* \*."

<sup>1</sup> The exhibits referred to have been filed with the committee.

Similar visits to the plants of other major prime contractors are now being organized by the War Department in conjunction with the Smaller War Plants Division, War Production Board.

Sincerely yours,

(Signed) ALVIN E. HEWITT,  
*Major, Air Corps,*  
*Chief, Small War Plants Branch, Purchases Division.*

#### ANALYSIS OF PRIME CONTRACTS AWARDED TO SMALL BUSINESS BY THE SEVEN SERVICES OF SUPPLY OF THE WAR DEPARTMENT

By WILLIAM E. FOLZ, Statistician, Research Staff, Senate Small Business Committee

Total prime contracts awarded by the seven Services of Supply of the War Department declined 47 percent in December from the November level. In plants employing under 500 wage earners the decline in dollar value of the contracts was from \$549,928,000 to \$295,877,000, a decline of approximately 46 percent.

The plants employing less than 100 wage earners showed the greatest decline of all size groups. For these plants, prime contracts awarded declined from \$209,108,000 to \$98,133,000, a decline of 53 percent. Decreases occurred in contracts by all services to these plants, with the exception of Chemical Warfare and Ordnance. The decreases varied from 97 percent in Transportation Corps orders to 13 percent in orders placed by the Quartermaster Corps. Increases in dollar value were recorded of 8.8 percent for Chemical Warfare and 23 percent in Ordnance.

Colonel Foy, in his letter of January 15 to Senator Murray, stated:

It should be noted the Ordnance Department increased its percentage of dollar volume placed with plants employing less than 100 persons by approximately 60 percent.

Although this represents an increase in the percentage of the total Ordnance contracts awarded to all size plants of about 60 percent, in actual dollar value it was only 23 percent.

In the same letter he stated:

A reduction of approximately 65 percent in the dollar volume of the Corps of Engineers contracts is shown for plants employing less than 100 persons.

This figure likewise represents a decline in the percentage of the total contracts awarded to all size plants.

The tables presented to the committee show the value of contracts awarded by the Corps of Engineers as \$71,392,000 in November and \$4,194,000 in December. This is a decline of 94 percent.

Two more statements from Colonel Foy's letter require attention. The statement that—

The added gain in December over November for smaller plants employing less than 500 persons was 0.4 percent, bringing the total percentage to small plants up to 24.1 percent

must be interpreted with care.

All size groups suffered large declines in dollar volume during December, but the group employing between 100 and 500 wage earners

showed slightly less decline than did the other two size groups. The decline in contracts for plants employing from 100 to 500 wage earners was from \$340,820,000 to \$197,774,000 or 42 percent. The percentage of the total contracts received by this size group increased from 14.7 percent to 16.1 percent, an increase of 1.4 points. Of this increase of 1.4 points, however, 1 point was gained at the expense of the plants employing less than 100 wage earners, and 0.4 of a point at the expense of plants employing over 500 wage earners.

The second statement that—

The Signal Corps more than doubled the percentage of dollar volume placed with plants employing 100 persons or less and nearly doubled the percent of dollar volume acquired by plants employing from 100 to 500 persons

presents the same type of illusion of gain.

For the plants employing less than 100 wage earners, Signal Corps contracts awarded declined from \$9,842,000 to \$4,688,000, or 52 percent, but the percentage of the total increased from 1.4 percent to 3.2 percent. In plants employing from 100 to 500 wage earners, Signal Corps contracts declined from \$48,654,000 to \$19,942,000, or 59 percent, but the percentage of the total Signal Corps contracts awarded to that group increased from 6.9 percent to 13.6 percent.

January contracts awarded by the 7 Services of Supply amounted to \$1,188,978,000. This represented a decline of 49 percent over November and a decline of 3 percent over December. Of this total, 76.4 percent went to plants employing more than 500 wage earners, which was an increase of 0.5 percent over December and 0.1 percent over November.

During this month the plants employing less than 100 wage earners again suffered most. The total value of their contracts declined 61 percent over November, compared with a decline of 53 percent in December. In percentage of total contracts these plants sustained a loss from 9.0 percent in November to 6.9 percent in January. Only in Ordnance and Signal Corps contracts did these plants show any percentage gain over November. The percentage of the total of Ordnance contracts placed with plants of this size group increased from 4.0 percent in November to 4.5 percent in January. But again this was accompanied by a decline of 36 percent in the total value of these contracts.

The only service which provided an actual increase in the value of contracts to plants employing less than 100 persons was Chemical Warfare. These contracts showed an increase of 15 percent over November, but the percentage of the total of these contracts declined from 9.8 percent to 8.5 percent.

Plants employing between 100 and 500 wage earners fared better than the plants employing less than 100. The total value of contracts awarded this group decreased 42 percent between November and January. The percentage of total contracts awarded increased from 14.7 percent to 16.7 percent. The only significant increase in percentages was in Ordnance and Quartermaster Corps where the percentage of contracts awarded these groups increased from 8.0 and 26.8 percent in November to 13.4 and 30.2 percent respectively in January. In dollar value of contracts awarded, Ordnance declined 5 percent and Quartermaster Corps contracts increased 9 percent.

**Conclusion:** The above analysis has brought out a number of points which are significant to the study of Army procurement policy.

1. That in the period in which the greatest effort was presumably made to spread contracts to small business, nothing was actually accomplished in that direction. The small plants (under 100 wage earners) were unable to maintain even the slight percentage of contracts that they held at the beginning of the period and in total value of contracts awarded they sustained a loss of about 61 percent.

The group employing between 100 and 500 wage earners sustained a loss of only 42 percent of dollar volume of contracts and received an increase in percentage of all contracts of about 2 points. It should be stressed, however, that only 8 percent of the manufacturers employed over 100 wage earners in 1939.

2. That by including plants employing between 100 and 500 wage earners in the class with little business the most favorable results possible have been shown for little business. It should be stressed that in 1939 businesses employing 500 wage earners or less produced 53 percent of the value of products. If War Department prime contracts were to be distributed in the same proportion as normal business, about 2.25 times as many prime contracts (in value) would have to be awarded as were awarded in November and January.

3. That it is not sufficient to point out that small plants are receiving the same percentage of prime contracts as they did in November. Even if significant increases in percentages were recorded, it would not answer the objections raised by the Senate committee. We have had a period of 2 years in which contracts were concentrated in the large concerns. The decline of contracts awarded during December and January reflect largely the fact that these large firms cannot take on any more orders and not that all is being produced that is necessary. What the figures should show is a high concentration of contracts in the small plants.

4. That although prime contracts awarded do not show the full extent to which small business is participating in the war effort through its subcontracting activities, nevertheless, it does show a high concentration of economic power in the hands of the larger plants.

No data whatever have been presented the committee on the value and distribution of subcontracts. Until such information is secured, no effective measure can be secured as to the extent to which the Nation's productive capacity is being effectively mobilized.



## APPENDIX II

The following correspondence between the Chairman and Under Secretary of War Patterson, Under Secretary of the Navy Forrestal, and War Production Board Chairman Nelson, with regard to subcontracting, is included for the record:

LETTER ADDRESSED TO ROBERT P. PATTERSON, UNDER SECRETARY OF WAR; JAMES FORRESTAL, UNDER SECRETARY OF THE NAVY; AND DONALD M. NELSON, CHAIRMAN OF THE WAR PRODUCTION BOARD; BY SENATOR JAMES E. MURRAY, CHAIRMAN, SPECIAL SENATE SMALL BUSINESS COMMITTEE

FEBRUARY 16, 1943.

Mr. DONALD M. NELSON,  
*Chairman, War Production Board, Washington, D. C.*

DEAR MR. NELSON: On December 15, 1942, you joined with Under Secretary of War Robert P. Patterson and Under Secretary of the Navy James V. Forrestal in signing a letter addressed to all prime contractors. This letter suggested the organization of a subcontracting department by each prime contractor under "an aggressive, open-minded official" and outlined certain functions to be undertaken by each subcontracting department. It also asked prime contractors to instruct their major subcontractors to follow the same procedure.

The committee was considerably pleased by this action on your part. We feel, as you do, that more extensive subcontracting is essential to the fuller use of small business and to the achievement of our production goals. It was because of our convictions on this matter that we inserted the following clause in the section of Public Law 603, Seventy-seventh Congress, that defined the power of the Chairman of the War Production Board: "to obtain information with respect to the extent and terms upon which prime contractors with the Government have let subcontracts, and to take such action as he may deem appropriate to bring about the letting by such prime contractors of subcontracts upon fair and equitable terms and in the greatest volume practicable."

Since almost 2 months have now elapsed since your December 15 letter to the prime contractors, the committee is extremely interested in learning what has happened in the interval. We should appreciate hearing from you on the following points:

- (1) How many prime contractors have received the December 15 letter?
- (2) How many prime contractors have replied?
- (3) How many have indicated that they already have subcontracting departments?
- (4) Of those that did not have subcontracting departments, how many indicated that they would set up such departments?
- (5) Of those that indicated that they have subcontracting departments, how many indicated that they would undertake certain improvements in the work of such departments? What improvements have been made?
- (6) How many prime contractors have issued instructions to their major subcontractors in accordance with your request?
- (7) What is your present program for supervising or controlling the procurement activities of your prime contractors? (Please give type and extent of subcontracting clauses inserted in contracts, procedure for checking on procurement activities of prime contractors, etc.)

The committee is looking forward to close cooperation with your organization during the coming year in the solution of the many problems bearing on the future of small business in America and the successful prosecution of the war program.

Sincerely,

JAMES E. MURRAY,  
*Chairman.*

## REPLIES RECEIVED FROM UNDER SECRETARY OF WAR PATTERSON, UNDER SECRETARY OF NAVY FORRESTAL, AND WAR PRODUCTION BOARD CHAIRMAN NELSON

WAR DEPARTMENT,  
OFFICE OF THE UNDER SECRETARY,  
Washington, D. C., February 27, 1943.

Hon. JAMES E. MURRAY,  
*United States Senate, Washington, D. C.*

DEAR SENATOR MURRAY: I have your letter of February 16, in which you ask several questions concerning a letter dated December 15, 1942, signed by Mr. Nelson, Mr. Forrestal, and myself, addressed to prime contractors generally, in which we urged upon them the necessity for a greater degree of subcontracting.

This letter, which I believe was developed by Mr. Lou E. Holland, then Deputy Chairman of the War Production Board, was transmitted to me by Mr. Holland for signature, with a request that it be returned to him. It was our understanding that distribution of the letter would be made by the War Production Board, through its regional offices; and the War Department concurred in this arrangement as the best means of avoiding duplication of coverage. I am informed, however, that the letter was read and discussed at the joint meetings of our procurement officers and War Production Board field representatives which were held throughout the country during December to explain and implement our relationship with the Smaller War Plants Corporation.

More recently, the letter was reproduced in a memorandum on subcontracting sent to the Chiefs of the Supply Services with instructions that they bring it to the attention of their procurement representatives in the field. I enclose herewith a copy of this recent memorandum.

As you will note, the December 15 letter was an expression of general principles which we were urging prime contractors to follow. It was, however, couched in such language as not to require a reply, and I am informed that none have been received by this Department. This circumstance, together with the method of distribution which I have described, makes it impossible for me to answer questions 1 through 6 asked by your letter of February 16. Information on some of these points could, of course, be obtained by circularizing our prime contractors; but I am doubtful whether it would be advisable to burden them with a separate questionnaire on this subject at this time.

The War Department program for supervising the extent and kind of subcontracting by prime contractors has been, particularly recently, the subject of intensive consideration.

As you are aware, paragraph 205-A.6 of the Procurement Regulations requires all supply services to examine existing prime contracts in cooperation with representatives of the War Production Board with a view to further subcontracting. This process, which began some months ago, is still going on. We believe that it is likely to achieve the greatest results in the case of the Army Air Forces, because of the multiplicity of items involved in airplane manufacture which can be made the subject of subcontracting. The same thing would ordinarily be true of the Ordnance Department; but the recent revision of ordnance requirements in the Army supply program has made it, temporarily at least, less practicable to expand the subcontracting of the prime contractors with this Department. Other supply services, like the Surgeon General's Department and the Quartermaster Corps, are already dealing largely with small business on a direct basis; and the products purchased by some of them, like the Quartermaster Corps and the Chemical Warfare Service, do not so readily lend themselves to subcontracting.

Accordingly, we are concentrating particularly in this respect on aircraft manufacturers. In December a joint investigation, extending over a period of several days, was made in the Buffalo area by personnel from the Small War Plants Branch of the Purchases Division, from the Smaller War Plants Division of War Production Board, and from the Army Air Forces, which included calling at a number of the plants to explore the possibility of further subcontracting. As the direct result, substantial additional subcontracting was arranged; and the success of this experiment has led to plans for similar joint conferences with all the principal manufacturers of aircraft matériel, which are now on the point of beginning.

With respect to new prime contracts being let currently, paragraph 205-A.7 of the Procurement Regulations directs the services to facilitate discussion as to subcontracting with representatives of the War Production Board. In addition, the procedure followed generally includes discussion by our procurement officers

with prospective prime contractors as to the extent of the subcontracting planned in the particular case. This discussion has several purposes, including the development of the fullest possible load for small plants and the determination of the capacity and reliability of the proposed subcontractors, as well as ascertaining their location from the standpoint of labor supply and transportation, and the adequacy of the prime contractor's over-all plan for subcontracting. It is believed that by this means a considerable degree of control of the subcontracting activities of prime contractors is being brought about.

In certain cases, we have gone further and required that the prime contractor agree to subcontract either a designated part of the procurement or to designated subcontractors, or both. The Signal Corps, for example, is securing such agreements in a substantial percentage of all its contracts. While such an arrangement is feasible in particular situations, as where the field of subcontractors is limited and the possible subcontractors are well known to the supply service, we have not thought it wise to impose any such requirement generally. The War Department believes that it is vitally important to hold the prime contractor responsible for delivering the needed supplies of the requisite quality at the time required. In many cases it would impair that responsibility to introduce contractual restrictions on subcontracting; and therefore, while every effort is made during the negotiations to assure a maximum amount of subcontracting, it has not been found generally practicable to make it the subject of a contractual agreement.

Sincerely yours,

ROBERT P. PATTERSON,  
*Under Secretary of War.*

WAR DEPARTMENT

SERVICES OF SUPPLY, OFFICE OF THE ADJUTANT GENERAL

Washington

Memorandum, No. S5-36-43

FEBRUARY 12, 1943.

INTENSIFICATION OF SUBCONTRACTING

1. Reference is made to the following joint letter of December 15, 1942, signed by the Under Secretary of War, Under Secretary of Navy, and Chairman, War Production Board, addressed to all prime contractors and calling for greatly intensified subcontracting:

To: Prime Contractors.

GENTLEMEN: As manufacturers you know the fundamental value of complete plant utilization. Deliveries are speeded, costs are reduced. This same rule holds for our composite national capacity. No usable tool dare be idle in your plant or elsewhere, if we have the material to feed it. Operators must be provided.

Records in hand fully establish three important points:

1. Thousands of usable tools in America are but fractionally employed.
2. They can produce satisfactory work.
3. They must be put to work to speed the job by filling the gap for which many new tools have been ordered.

While this will, in some part, be accomplished by transfer and purchase of existing tools, it must be done in the main through greatly intensified subcontracting all down the line.

Those of you who do not have an aggressive open-minded official especially subcontracting should make such assignments immediately. It is a major job.

These subcontracting departments must—

1. Reexamine your commitments.
2. Comb out every part that warrants subcontracting consideration (reserving the tough ones for your own manufacture).
3. Clearly define the shop elements of each part or assembly.
4. Promptly supply the War Production Board area office nearest the originating plant sufficient job data for their needs in mobilizing the required facilities.

These field offices are clearing houses. They can function only if you and others submit your work for clearance. To such degree as you deem essential your other procedures for subcontracting may be continued. But this coordination, as set forth, is now essential.

Please instruct your major subcontractor to follow the same procedure. Cooperating, we shall win.

ROBERT P. PATTERSON,  
*Under Secretary of War.*  
JAMES V. FORRESTAL,  
*Under Secretary of Navy.*  
DONALD M. NELSON,  
*Chairman, War Production Board.*

DECEMBER 15, 1942.

2. Ordinarily, production can be increased more rapidly through subcontracting than through waiting for new machine tools and equipment, because of the difficulty in obtaining prompt delivery on such equipment. At the present time, because of cut-backs in the Army supply program, there is a large available industrial capacity on critical machine tools and other critical types of equipment. This has affected not only prime contractors but many manufacturers supplying these prime contractors.

3. Although some of the services are cooperating fully in aiding and encouraging prime contractors to carry subcontracting into effect, there is evidence that some of the local or regional offices appear to be reluctant to push this to the fullest extent possible by bringing in additional subcontracting facilities.

4. In order to carry out the purpose of this memorandum, it is requested that the Commanding General, Army Air Forces Matériel Command, and the chiefs of the supply services bring the joint letter of December 15, 1942, and this memorandum to the attention of all branches and regional and local offices of their respective services and issue definite instructions to contracting officers at all levels to do their utmost to see that all usable capacity is brought into the war effort, wherever doing so will increase the volume or the speed of production or will aid in clearing present or prospective shortages or bottlenecks.

5. It is essential that these instructions be issued without delay to all echelons; with emphasis placed upon the extreme importance of working this out direct with prime contractors wherever the results will justify subcontracting.

(SPX 160 (2-8-43) SPUPE-MP-FH.)

For the Commanding General:

J. A. ULIO,  
*Major General,*  
*Adjutant General.*

Distribution:

E.  
Commanding General, Army Air Forces Matériel Command.  
Chiefs of supply services.

THE UNDER SECRETARY OF THE NAVY,  
*Washington, March 1, 1943.*

The Honorable JAMES E. MURRAY,  
*Chairman, Special Committee to Study Problems of American Small Business,*  
*The Senate Office Building, Washington, D. C.*

DEAR SENATOR MURRAY: I thank you for your communication of February 16 and your comments on the three signature letter addressed to prime contractors, which was signed by Mr. Nelson, Mr. Patterson, and myself.

That letter originated with Mr. Lou Holland, former head of the War Production Board Smaller War Plants Division, who agreed, when it was signed by me early in December, to have his organization distribute it to all prime contractors.

For this reason the Navy is unable to fully answer your questions 1 to 6, inclusive.

I have asked the various bureaus of the Navy to provide the information requested in your seventh question and hope to have that data for transmittal to you shortly.

In addition to the above, the Navy directed on December 8, 1942, its field agencies to give "all possible aid to prime contractors in carrying out the purposes" of the letter in question.

The Navy also has held meetings in each Naval District, presided over by the various District Commandants, at which this letter was read and its purposes explained. Approximately 400 officers attended these meetings.

Assuring you of the Navy's desire to continue to aid in every way possible the spreading of subcontracts to smaller firms, I am

Sincerely yours,

JAMES FORRESTAL

WAR PRODUCTION BOARD,  
Washington, D. C., March 9, 1943.

The Honorable JAMES E. MURRAY,  
United States Senate.

DEAR SENATOR MURRAY: I cannot as yet reply in full to your inquiry of February 16 concerning the results obtained from the joint letter by Under Secretaries Patterson and Forrestal, and myself, to prime contractors.

That letter was distributed in various ways and at various times by the procurement offices of the War and Navy Departments, the Maritime Commission, and the Smaller War Plants Corporation. The distributions were carried out by the several regional offices, and no collection of data bearing on your questions has as yet been made.

However, it is my understanding that Col. Robert W. Johnson, as Chairman of the Smaller War Plants Corporation, is currently undertaking to arrange for the periodic collection of comprehensive data which should serve your purposes.

Very sincerely yours,

DONALD M. NELSON, *Chairman.*

SUPPLEMENTARY INFORMATION SUPPLIED BY UNDER SECRETARY OF THE NAVY  
FORRESTAL

THE UNDER SECRETARY OF THE NAVY,  
Washington, April 23, 1943.

HON. JAMES E. MURRAY,  
*Chairman, Special Committee to Study Problems of American Small Business,  
The Senate Office Building, Washington, D. C.*

DEAR SENATOR MURRAY: In order to answer more fully your letter of February 16, and specifically to give you the answer to question 7 in that letter, a rather exhaustive survey has been conducted in the various bureaus of the Navy Department.

Each bureau has a definite program calculated to achieve the maximum amount of subcontracting of each contract consistent with military necessity. It is felt that better results are obtained by this flexible method than by having a rigid percentage requirement written into each contract.

All bureaus are instructed to be constantly on the alert for developments which offer opportunities to increase subcontracting. An example of their efforts to comply is the joint pilot letter dated January 25, 1943, addressed to supervisors of shipbuilding and inspectors in the field and signed by the Chiefs of the Bureaus of Ships, Ordnance, and Aeronautics, respectively. (See enclosure A.)

This letter points out that the cut-back in the Army Ground Force program will release facilities which may be utilized by the Navy's prime contractors for subcontracting. Inspectors are instructed that " \* \* \* immediate pressure be brought to bear on the contractor to subcontract, to let out such parts of his work as can be done with an advantage to the total program."

The directive further states: "It is not to be taken that this further subcontracting is permissive; it is mandatory, and steps as may be necessary should be taken through the prime contractor or through the Navy Department to accomplish the desired result, \* \* \*"

Following is a summary of subcontracting practices in the major bureaus of the Navy Department:

BUREAU OF AERONAUTICS

The Bureau of Aeronautics has a clause in cost-plus-fixed-fee contracts, which states in part as follows: "At least ten (10) days before entering into any subcontract on a cost-plus-a-fixed-fee basis or entering into any other subcontract or issuing any purchase order exceeding \$—— (usually \$100,000), the contractor shall notify the Inspector of Naval Aircraft in writing giving the name and location of the subcontractor or vendor, the parts or materials to be purchased, the proposed delivery schedule, if known, and the fixed price or estimated cost and fixed fee to be paid: *Provided, however,* That the Inspector of Naval Aircraft may at any time waive, generally or specifically, the requirement of giving any such notice."

The Bureau of Aeronautics feels that through this procedure it is regulating subcontracting by its prime contractors.

Through the inspectors of naval aircraft the Bureau at all times is kept informed and periodically receives lists from prime aircraft contractors of subcontractors and vendors.

## BUREAU OF ORDNANCE

The Bureau of Ordnance inserts, in the case of cost-plus contracts, the following clause: "At least ten days before entering into any subcontract on a cost-plus-a-fixed-fee basis or entering into any other subcontract or issuing any purchase order exceeding \$——, the contractor shall notify the Contracting Officer in writing giving the name and location of the subcontractor or vendor, the parts or materials to be purchased, the proposed delivery schedule if known and the fixed price or estimated cost and fixed fee to be paid: *Provided, however,* That the Contracting Officer may at any time waive, generally or specifically, the requirement of giving any such notice."

Prior to awarding of contracts to potential contractors, thorough investigations are made by qualified personnel to determine the suitability of the facilities, the ability of the contractors to produce the items under consideration and the subcontracting and/or additional facilities required.

In those instances where prime contractors require new facilities, an exhaustive search to locate existing manufacturing facilities for subcontract work is required. The Bureau of Ordnance assists in this procedure, working in close cooperation with the War Production Board and other governmental agencies, including the Smaller War Plants Corporation which has a representative assigned to the Bureau of Ordnance. No new facilities are approved for the prime contractor until it is determined by these agencies that it is impossible to find additional existing facilities, capable of producing the required items under subcontracts, at a rate, of proper quality, and in sufficient quantity to meet the requirements of the fighting forces.

## BUREAU OF SHIPS

Subcontracting is obtained in three ways by the Bureau of Ships.

When the contract is first negotiated, the subject of subcontracts is discussed thoroughly, emphasis being placed on the necessity of subcontracting wherever possible.

When the delivery date is set, the subject of subcontracts again is investigated thoroughly. Under the present schedule, deliveries are called for in such a hurry, that it is vital to subcontract every part that can be made elsewhere.

Finally, the Supervisor of Shipbuilding keeps the subject of subcontracting constantly open, through follow-up letters and other means of pointing to the necessity for farming out work as hereafter illustrated.

In the case of the Mare Island Navy Yard, Vallejo, Calif., this effort started in late 1940, and was expanded to cover all navy yards in March 1941 by the promulgation of a broad program of farming out machine shop and other work.

The navy yards act in the capacity of prime contractors and contract with shops throughout the country for the prefabrication of portions of hulls, fittings, and fixtures and the machining of parts, assemblies, etc., which can be performed outside the navy yards under proper supervision.

A survey just completed at Mare Island reveals that more than 500 companies—three-fourths of which employ less than 100 persons—are now engaged in the fabrication of portions of vessels under construction and perform job work on ships brought to the Pacific coast for repair.

The 500 subcontractors at Mare Island above referred to employ in the neighborhood of 30,000 persons who thus are performing work for that yard that, under normal conditions, it would do itself. They are spread from Colorado to Arizona, Wyoming, Washington, Oregon, and southern California, in addition to the areas centering around the San Francisco-Sacramento districts.

The commandant of the Mare Island yard states: "This yard could not have built destroyer escort vessels without this 'farming-out' program."

In Denver, Colo., the output of prefabrication work for D-E hulls represents 46 percent of the structural capacity of the Mare Island yard available for new construction.

Officials of Mare Island yard further state: "The workmanship on the foundations for the first 24 vessels which have been delivered to date is excellent, and all agree that the work could not have been done better in the Mare Island shops."

In addition, on the question of cost, the report further states, "The actual cost to the Navy, in most cases, was less than the cost of doing the work at Mare Island."

In the list of subcontractors cited above are included five pools organized by the Smaller War Plants Corporation's San Francisco office which consisted of 137 plants, all of which at the present time are working on either repair or the building of new ships.

An example of the extent to which some of the private shipbuilding organizations have been able to take advantage of this farming-out principle is had from a letter dated April 15, 1943, from the Bethlehem-Hingham Shipyard, Inc., at Hingham, Mass., signed by Mr. E. R. Sinclair, district purchasing agent.

Mr. Sinclair states: "From the time construction of naval vessels started at the Hingham yard to the present time subcontracting orders have been placed with a total of 101 small New England concerns to a total value of \$13,858,320.

"Outside of the New England territory orders have been issued to 45 concerns for a total of \$3,197,000.

"To the best of our knowledge and belief none of these concerns exceeds 500 employees and at least 90 percent having less than 100 employees. The work involved is of a type which would normally be performed entirely by a fully equipped shipyard.

"With the exception of the structural steel and relatively small amount of controlled materials ordered as such, i. e., steel and brass pipe, sheets, etc., the material cost of a vessel is actually subcontracted. Much of this material is purchased from small concerns and the figures given above represent only a small percentage of the total volume of business placed with small concerns. With respect to auxiliary machinery and specialty items, our suppliers have subcontracted with smaller concerns to supply items normally manufactured in their own works. Actual check with a number of these suppliers shows they have subcontracted a large portion of their work, in some cases handling only assembly and testing and production of intricate pieces and in a few instances subcontracting complete units, supplying only engineering guidance and inspection."

The Navy Department is now taking further steps to furnish all navy yards and private shipyards with the methods used and results obtained through the Mare Island and Bethlehem-Hingham examples. A great number of these yards already are carrying on a similar type of activity.

The Bureau of Ships feels that it obtains better results and more subcontracting through the method outlined above, than by requiring a certain arbitrary portion of every contract to be subcontracted.

#### BUREAU OF YARDS AND DOCKS

The Bureau has followed the policy of requiring subcontracting under cost-plus-fixed-fee contracts in the interest of speed, economy, and of spreading the work. The extent to which subcontracting is contemplated is determined prior to award of the contract. As a general rule heating, ventilating, plumbing, electrical work, roofing, etc., are sublet. Other work such as clearing, grading, and excavation are commonly sublet.

It has also been the practice to make awards to local contractors wherever practicable. Endeavor also is made to maintain a proper balance between the size of the project and the capacity of the contractor selected, and in this way distribute the smaller jobs to the smaller operators, with the further effect of spreading work.

Procurement to be made through prime contractors is determined by the Bureau, and is under the direction of the officers in charge of contracts in the field. Local markets and sources are utilized to the fullest possible extent, in the interest of speed, economy, and distributing business.

Procurement by the Bureau for its own program or by the Bureau for other bureaus, is cleared through the procurement representative of War Production Board to the War Production Board Smaller Business Division so that orders can be placed in regions and with firms that are in need of business.

#### BUREAU OF SUPPLIES AND ACCOUNTS

Since October 1941, prospective contractors have been required to furnish information as to the extent of the subcontracting anticipated in the performance of the contract. The data furnished on this questionnaire is reviewed in evaluating the bid.

A check is made by the naval inspector on the extent of the subcontracts let by the prime contractor. Subcontracting is urged in all cases where it is apparent that production might be stepped up without undue costs. Provisions are made for the modification of contracts to pay the increased cost resulting from subcontracting when found to be in the interest of the war effort.

On April 3 instructions were issued to all inspectors of naval material throughout the United States to supply monthly a list of all subcontractors in their respective districts grouped according to size, as follows (see enclosure B):

Group A: Subcontractors having less than 100 employees.

Group B: Subcontractors having more than 100 and less than 500 employees.

Group C: Subcontractors having 500 employees or more.

You may be assured that the Navy Department will continue to exert its best efforts to spread subcontracting to the greatest possible number of small plants consistent with the urgency of its whole procurement program.

Cordially yours,

JAMES FORRESTAL

BuShips File No. FS/A1-3(100) EN28/A2-11

(Buair File No. LA-3(8))

BUORD FILE NO. AI-3

JOINT PILOT LETTER

25 JANUARY 1943.

From: The Chief of the Bureau of Ships,  
The Chief of the Bureau of Ordnance, and  
The Chief of the Bureau of Aeronautics.

To: All Supervisors of Shipbuilding.  
All Inspectors of Naval Material.  
All Resident Inspectors of Naval Material.  
All Inspectors of Machinery.  
All Naval Inspectors of Ordnance.  
All General Inspectors of Naval Aircraft.  
All Inspectors of Naval Aircraft.

Subject: Expediting Programs—Subcontracting.

1. With the cut-back in the Army Ground Force program and with the release of capacity of contractors formerly working on facilities or nonmilitary work, there have become available in industry a number of competent firms for additional subcontracting work on Navy contracts. It is essential that all Inspectors keep this situation closely in mind and that where a prediction of delay in the accomplishment of any contract or subcontract within the Inspector's purview can be made immediate pressure be brought to bear on the contractor to subcontract and let out such parts of his work as can be done with an advantage to the total program.

2. It is not to be taken that this further subcontracting is permissive; it is mandatory, and steps as may be necessary should be taken through the prime contractor or through the Navy Department to accomplish the desired result, i. e., a balancing of work among competent firms to assure the required delivery of end products.

3. The Naval Advisors to the Regional Directors of the War Production Board have information on firms which may be suitable for subcontracting work. It is to be noted, however, that any such information furnished is advisory only and that the responsibility for subcontracting depends upon the holder of the original contract, who retains his responsibility also for the products obtained.

4. Inspectors are enjoined to advise the cognizant Bureau promptly of prospective delays and of steps which appear possible for breaking them.

RALPH DAVISON,  
*Rear Admiral, United States Navy,*  
*Acting Chief of Bureau.*

W. H. P. BLANDY,  
T. D. RUDDOCK,  
*Acting.*

E. L. COCHRANE,  
*Chief of Bureau.*



2240

PROBLEMS OF AMERICAN SMALL BUSINESS

PM136 JRS:fw

NAVY DEPARTMENT,  
*Washington, D. C., April 3, 1943.*

**From:** Office of Procurement and Material (Inspection Administration).

**To:** All Inspectors of Naval Material.

**Subject:** Navy Subcontractors, Report Listing the Number of.

1. In accordance with the request made by the Chief of Procurement and Material, it is requested that the Inspector furnish this office (Inspection Administration) with the number of SUBCONTRACTORS in each Inspection District falling within the following groups:

Group A: Subcontractors having less than 100 employees.

Group B: Subcontractors having more than 100 and less than 500 employees.

Group C: Subcontractors having 500 employees or more.

2. In most cases, estimates of which group subcontractors fall within can be made by cognizant inspectors. It is not the intention of this order to load additional heavy paper work on inspectors. Compliance should employ the simplest effective procedure.

3. The report requested in paragraph 1 is to be submitted as of the first of each month and is to be continued monthly until further notice. It is requested that this report be submitted so as to arrive in this office by the 15th of each month.

A. J. WELLINGS,  
(By direction).

## APPENDIX III

The following supplementary material was submitted by Charles E. Wilson in connection with his testimony:

DIR. 13  
Feb. 6, 1943

### WAR PRODUCTION BOARD

#### PART 906—MACHINE TOOL TRANSFERS

##### [Directive 13]

§ 906.1 *Directive 13*—(a) *Utilization of machine tools.* (1) As a result of changes in program schedules, increasingly efficient operation, and development of new production techniques, many machine tools heretofore delivered have been rendered idle, or are in use on purposes less essential to the war effort than others for which they are urgently needed.

(2) To release all possible materials for other purposes and to bring about the production of articles of war in accordance with strategic military determinations, maximum utilization of existing machine tools must be secured.

(3) Machine tools recently purchased have been largely Government financed; when in conflict with the attainment of maximum utilization, the right to present or future ownership and the right to possession or use of any particular machine tool by any person, including any governmental agency, department or corporation, are deemed subordinate.

(4) The War Production Board is the agency responsible for developing information regarding existing machine tools not required in their present location, and is responsible for exercising over-all supervision of the distribution of machine tools.

(b) *Policies.* Accordingly, the following policies have been established by the War Production Board in consultation with the War and Navy Departments, and the Defense Plant Corporation:

(1) The War Production Board may direct the transfer of any machine tool not in use or from use on any contract, purchase order, program, or other work regardless of ownership or contractual rights relating to the possession or use of such machine tool, to use on any other contract, purchase order, program, or other work in the same plant or any other plant. The direction of the War Production Board will be addressed to the departments or agencies primarily affected and a copy shall be furnished to the holder of such machine tool.

(2) The Tools Division of the War Production Board shall issue such a direction only after consultation with the War Department, the Navy Department, or any other Government agency or department the performance of whose contracts may be affected by such action. Consideration shall be given to the effect which such transfer will have on respective production programs, under the general policies directed by the Production Executive Committee.

(3) The guiding principle shall be that upon the issuance of such a direction the transfer of the machine tool in question shall be made promptly. Accordingly, every effort must be exerted by the Governmental agency concerned to obtain the consent of the holder of the machine tool to its immediate transfer. Adjustments between Governmental agencies necessitated by the transfer and likewise negotiations between such agencies and the machine tool holder with respect to the modification of any contract under which the machine tool is used or of any contract for the production of material with such machine tool shall, insofar as possible, be conducted after the transfer.

(4) If the consent of any private interest deemed necessary to the transfer of the machine tool cannot be obtained, or if the transfer is not accomplished with reasonable dispatch, the War Production Board will issue such orders as may be necessary to effectuate the transfer. When necessary, the machine tool shall be requisitioned pursuant to the Act of October 16, 1941, as amended.

(5) Reserves of machine tools retained by contractors against the possibility of future need for tools shall not be permitted if such tools are needed for other contractors. The execution of the policies herein established should obtain sufficient fluidity and flexibility in the distribution of machine tools to make such reserves wholly unnecessary.

(c) *Review of orders for machine tools.* The War Production Board, Tools Division, will request all Departments and Agencies participating in this directive to review all lists of machine tools on order so that those not urgently needed may be cancelled. The Tools Division will keep itself posted as to all urgent and special demands for machine tools so that immediate action may be taken in filling such orders.

(d) *Reports on available machine tools.* All departments and agencies of the Government participating in this directive shall determine the location of machine tools within their cognizance which are available for transfer to fill other more urgent needs, and shall promptly advise the War Production Board of such tools.

(e) *Effectuation of directive.* The War Production Board, the Army and Navy Departments, and the Defense Plant Corporation, shall take such other immediate steps as are necessary to effectuate this directive.

Issued this 6th day of February 1943.

DONALD M. NELSON,  
Chairman.

WAR AND NAVY DEPARTMENTS

Approved:

JAMES V. FORRESTAL

ROBERT P. PATTERSON

DEFENSE PLANT CORPORATION

Approved:

HANS A. KLAGSBRUNN

M-293

FEB. 26, 1943 (Corrected Copy)

WAR PRODUCTION BOARD

(Corrected copy)

PART 3208—CRITICAL COMMON COMPONENTS

[General Scheduling Order M-293]

The fulfillment of requirements for the defense of the United States has created a shortage in the production of certain critical common components for defense, for private account and for export; and the following order is deemed necessary and appropriate in the public interest and to promote the national defense:

§ 3208.1 *General Scheduling Order M-293*—(a) *Definitions.* For the purpose of this order:

(1) "Critical common components" means any new equipment or apparatus of the types, descriptions and classifications set forth on the schedule hereto annexed. Class X and Class Y critical common components are those components which are so designated on such schedule.

(2) "Manufacturer" means any person who constructs or manufactures a critical common component to the extent that he is engaged in such construction or manufacture and shall include sales and distribution outlets and agencies controlled by such manufacturer.

(b) *Operation reports.* Each manufacturer of a critical common component shall file the applicable form designated in Column 1 of the annexed schedule on the dates prescribed by such form. Such form as filed shall where called for show production capacity and orders unfilled, received, shipped, cancelled and scheduled for the period specified in the form.

(c) *Deliveries of Class X critical common components.* (1) Each manufacturer of Class X critical common components shall file the applicable form as specified in Column 2 of the annexed schedule on the dates prescribed by such form. Such form as filed shall show the manufacturer's delivery schedule for Class X critical common components for the period therein specified.

(2) On and after April 1, 1943 (or such later date as may be specified in the applicable form), notwithstanding any preference rating which other orders may bear or any directive, rule or regulation of the War Production Board,

each manufacturer shall deliver Class X critical common components only in accordance with the schedule filed pursuant to paragraph (c) (1), as the same may be changed by the Director General for Operations.

(d) *Placing and acceptance of orders for Class Y critical common components.*

(1) Except as otherwise provided in the annexed schedule, on and after April 1, 1943 no person shall place an order with a manufacturer, and no manufacturer shall accept an order, for any Class Y critical common component unless accompanied by a specific authorization of the Director General for Operations. Such authorization may specify the manufacturer with whom the order may be placed. Application for such authorization may be made to the War Production Board by the person seeking to place an order on the applicable form designated in Column 3 of the annexed schedule.

(2) Any order so authorized shall be accepted by the manufacturer with whom it is placed, provided it meets his regularly established prices and terms. Delivery shall be made in accordance with the terms of such order as authorized, notwithstanding any preference rating which other orders may bear or any directive, rule or regulation of the War Production Board.

(e) *Other allocation and scheduling action.* With respect to any critical common component, the Director General for Operations may, notwithstanding any other order, preference rating, directive, rule or regulation of the War Production Board:

(1) Direct the return or cancellation of any order on the books of a manufacturer

(2) Direct changes in the delivery or production schedule of a manufacturer

(3) Allocate orders placed with one manufacturer to another manufacturer

(4) Revoke any authorization to place an order granted by him pursuant to this order, or

(5) Take such other action, as he deems necessary, with respect to the placing of orders for, or the production or delivery of critical common components.

(f) *Application of other orders and regulations.* The listing of any product as a critical common component under this order does not relieve any person from complying with the provisions of any other order, directive, rule or regulation of the War Production Board, except as specifically provided in this order.

(g) *Violations.* Any person who wilfully violates any provision of this order, or who, in connection with this order, wilfully conceals a material fact or furnishes false information to any department or agency of the United States is guilty of a crime, and upon conviction may be punished by fine or imprisonment. In addition, any such person may be prohibited from making or obtaining further deliveries of, or from processing or using, material under priority control and may be deprived of priorities assistance.

Issued this 26th day of February 1943.

CURTIS E. CALDER,  
*Director General for Operations.*

#### SCHEDULE ANNEXED TO GENERAL SCHEDULING ORDER M-293

1. *Designations.* Only those critical common components designated as Class X or Class Y are subject to the provisions of paragraphs (c) and (d) of this order. A critical common component may be both a Class X and Class Y component and thus be subject to all the provisions of the order.

2. *Applicable forms.* If no form is listed in any of the columns opposite a specific item, no form is to be filed as to that item. If a form is listed opposite a general class of product, but not opposite a subclassification, the form shall be filed only for the class as a whole (or for such part of a class as the manufacturer produces). If a form is listed opposite a general class of product and also opposite a specific subclassification, the form is to be filed both for the class as a whole (or for such part of a class as the manufacturer produces) and the specified subclassification, but if the manufacturer produces only a specified subclassification the form need be filed only for that item.

Subject to the provisions of the foregoing paragraph:

The applicable form shown in Column 1 is to be used in making the report required of manufacturers of all critical common components by paragraph (b) of this order.

The applicable form shown in Column 2 is to be used in making the report required of manufacturers of Class X critical common components pursuant to paragraph (c) of this order.

The applicable form shown in Column 3 is that on which a purchaser of the Class Y critical common component may apply to the War Production Board for authorization to place an order with a manufacturer pursuant to paragraph (d) of this order.

Where the same form number is specified in more than one column, the form should only be filed once. Where the form specified is filed pursuant to any other "E", "I", "M" or "P" order, the form should only be filed once.

3. *Reports and communications.* The list of critical common components is arranged so that the name of the Industry Division appears in parenthesis above the type of critical common components for which it is primarily responsible.

All reports and forms required by the order and all communications with respect to any critical common component should be addressed to the War Production Board, Washington, D. C., attention of the appropriate Industry Division as so listed.

Type of critical common components	Designations	Applicable forms columns		
		1	2	3
(AIRCRAFT PRODUCTION BOARD RESOURCES CONTROL OFFICE)				
<b>1. Parker type fittings</b> Tube, hose and pipe fittings specially designed for use in aircraft plumbing by virtue of their inherent low weight, compact dimensions and other design characteristics: Adapters. Manifolds. Bushings. Nipples. Caps. Nuts (Special). Cells. Parker Flanges. Collars. Reducers. Connectors. Rings. Couplings. Sleeves. Crosses. Snubbers. Elbows. Supports. Hose Assembly. Tees. Inserts. Unions. Liners.		PD-900		
<b>2. Gears, aircraft engine</b> Those gears directly incorporated in the assembly of aircraft engines. a. Timing..... Bevel. Spur. b. Accessory..... Bevel. Spur. Spur (Helical). Zerol. c. Propeller reduction..... Bevel. Spur. Herringbone. d. Supercharger..... Spur.		PD-900		
<b>3. Engine accessories (aircraft):</b> Those auxiliary devices used as a component part of an aircraft engine as listed below: a. Pumps..... Fuel pumps, engine driven. Hand fuel pumps. Hydraulic pumps, engine driven. b. Spark plugs..... Ceramic: Long reach shielded type. Short reach shielded type. Short reach unshielded type. Mica: Long reach shielded type. Short reach shielded type. Short reach unshielded type. c. Starters..... Electric inertia type. Hand inertia. Direct crank type. Cartridge type. d. Carburetors..... Pressure injection type. Large float type (over 1,000 h. p.) Small float type (up to 1,000 h. p.)		PD-900		
		PD-900		
		PD-900		
		PD-900		
		PD-900		

Type of critical common components		Designations	Applicable forms columns																										
			1	2	3																								
<b>(AIRCRAFT PRODUCTION BOARD RESOURCES CONTROL OFFICE)—CON.</b>																													
3. Engine accessories (aircraft)—Continued. Those auxiliary devices used as a component part of an aircraft engine as listed below—Continued.																													
e. Magnets																													
4 Cylinder—SF.																													
5 Cylinder—SF.																													
6 Cylinder—SF and SB.																													
7 Cylinder—SF, VMN and DF, MJT.																													
9 Cylinder—SF, DFN and VAG, SB and MJT.																													
12 Cylinder—DFLN and DFN. Single 12 Cylinder SF.																													
14 Cylinder—SF.																													
18 Cylinder—DF and low tension.																													
24 Cylinder—DFN.		PD-900																											
f. Generators																													
"E" type—12 volt, 50 amp.																													
"L" type—24 volt, 25 amp.																													
"M" type—24 volt, 50 amp.																													
"O" type—24 volt, 100 amp.																													
"P" type—24 volt, 200 amp.																													
"R" type—30 volt, 300 amp.		PD-900																											
4. Hydraulic parts—Actuating cylinders. A cylindrical chamber in which a piston is impelled by the pressure of a working fluid to provide the motive force required for the operation or control of some contiguous device.																													
<table border="1"> <thead> <tr> <th>Classification</th> <th>Bore</th> <th>Stroke</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1 1/4" and under</td> <td>Any.</td> </tr> <tr> <td>2</td> <td>1 1/4" to 2"</td> <td>Up to 10"</td> </tr> <tr> <td>3</td> <td>1 1/4" to 2"</td> <td>Over 10"</td> </tr> <tr> <td>4</td> <td>2" to 3"</td> <td>Up to 10"</td> </tr> <tr> <td>5</td> <td>2" to 3"</td> <td>Over 10"</td> </tr> <tr> <td>6</td> <td>Over 3"</td> <td>Up to 15"</td> </tr> <tr> <td>7</td> <td>Over 3"</td> <td>Over 15"</td> </tr> </tbody> </table>		Classification	Bore	Stroke	1	1 1/4" and under	Any.	2	1 1/4" to 2"	Up to 10"	3	1 1/4" to 2"	Over 10"	4	2" to 3"	Up to 10"	5	2" to 3"	Over 10"	6	Over 3"	Up to 15"	7	Over 3"	Over 15"				
Classification	Bore	Stroke																											
1	1 1/4" and under	Any.																											
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4	2" to 3"	Up to 10"																											
5	2" to 3"	Over 10"																											
6	Over 3"	Up to 15"																											
7	Over 3"	Over 15"																											
<b>(ALUMINUM AND MAGNESIUM DIVISION)</b>																													
1. Forgings (Aluminum)		X	WPB-63 CMP-12	WPB-2251																									
a. Propellers.																													
b. Crank cases.																													
c. Pistons.																													
d. Large Hammer Forgings (10,000 lbs. and over).																													
e. Small Hammer Forgings (less than 10,000 lbs.).																													
f. Press Forgings.																													
<b>(AUTOMOTIVE DIVISION)</b>																													
1. Crankshafts (finished):																													
a. Drop forged		X																											
b. Cast		X																											
2. Diesel engines (non-marine only):																													
a. Over 750 r. p. m.		X	WPB 878	WPB 878																									
3. Gasoline engines (except aircraft):																													
a. Air-cooled		X	WPB 878	WPB 878																									
b. Liquid-cooled		X	WPB 878	WPB 878																									
4. Engine mounted accessories:																													
a. Magnets (other than aircraft types)		X																											
b. Fuel injection equipment		X																											
One-cylinder pumps		X																											
Multi-cylinder pumps		X																											
Nozzles and holders		X																											
<b>(BUILDING MATERIALS DIVISION)</b>																													
1. Hand tools:																													
a. Heavy forged tools			PD-900																										
1. Picks																													
2. Mattocks																													
3. Hammers, Mails and Sledges (4 lbs. and over)																													
4. Blacksmith Anvil Tools																													
5. Bars																													
6. Tongs																													
b. Woodworking tools:																													
1. Machetes		Y	PD-900		PD-556																								
2. Axes, Hatchets & Hammers			PD-900																										

Type of critical common components	Designations	Applicable forms columns		
		1	2	3
<b>* (GENERAL INDUSTRIAL EQUIPMENT DIVISION)</b>				
1. Fans, blowers and exhausters as defined under Limitation Order L-280.....	X	<sup>1</sup> PD-796	<sup>1</sup> PD-796	
2. Compressors and dry vacuum pumps, reciprocating air and gas as defined in L-100 (excluding compressors for air conditioning, ice making, food and beverage cooling, processing and preservation and cold storage systems)..... All others having piston displacement of over 1 cubic foot per minute (excluding compressors for air conditioning, ice making, food and beverage cooling, processing and preservation and cold storage systems).....	XY	PD-900	<sup>2</sup> PD-416	<sup>3</sup> PD-416
3. Conveying machinery and mechanical power transmission equipment as defined in Limitation Order L-193..... a. Speed changers: 1. Enclosed units (excluding ship propulsion): Worm gear speed reducers..... Helical and/or herringbone speed reducers..... 2. Industrial gears (unmounted): Worm and worm wheels.....	XY	PD-900	PD-416	PD-416
4. Flexible couplings.....		PD-900		
5. Heat exchangers as defined in General Limitation Order L-172.....	XY	PD-900	<sup>4</sup> PD-615b	<sup>4</sup> PD-615
6. Pumps, industrial (except measuring and dispensing, and reciprocating compressors and dry vacuum pumps): a. Pumps, reciprocating (except compressors and dry vacuum pumps)..... b. Pumps, centrifugal..... c. Pumps, rotary (including vane, screw, lobe and gear)..... d. Fluid power systems (hydraulic).....	X	PD-900	PD-901	
7. Turbo-blowers and turbo-exhausters for pressure differential of 1½ or above: a. Centrifugal type—20 H. P. and above..... Single Stage..... Multi-Stage..... Axial..... Blast furnace..... b. Rotary—20 H. P. and above..... Lobe..... Sliding Vane..... Liquid Piston..... c. Rotary and centrifugal—below 20 H. P.....	XY	PD-900	<sup>4</sup> PD-616B	<sup>4</sup> PD-616
8. Welding rods and electrodes: a. Welding rods for gas welding Bronze welding rods..... b. Electrodes for arc welding Carbon steel electrodes (Flux coated)..... c. Stainless steel electrodes for armor plate welding..... d. Stainless steel electrodes for corrosion and heat resisting.....	X	PD-900	PD-901	
9. Motors and generators, electric: a. Fractional horse power (except internal combustion engine mounted accessories) including amplidyne, dynamotors, and selsyn motors.....		PD-738		
10. Electric motor control equipment—all sizes and types (except for internal combustion engine) mounted accessories: a. Navy shipboard type..... b. Maritime shipboard type..... c. Industrial type.....	X X	PD-900		
11. Small air circuit breakers Types AB, ET or similar.....		PD-900		
12. Pressure vessels. Any sealed metallic vessel or shell subjected to internal or external pressure designed for the purpose of retaining one or more fluids (liquids, gases, or vapors), excluding: (a) Direct-fired vessels, such as locomotives or boilers; (b) Vessels for containing only water under pressure for domestic supply, or those containing air, the compression of which serves only as a cushion as in air-lift pumping systems; (c) Vessels for storage or transportation designed for pressure below 30 lbs. per square inch and for vessels of less than 30 cubic feet in volume regardless of pressure; (d) Vessels designed as heat exchangers of the surface type, or enclosures therefor; (e) Vessels designed for cooking foodstuffs or used directly in preparing foodstuffs for packaging.....	X	PD-900	PD-901	
<b>(MISCELLANEOUS MINERALS DIVISION)</b>				
Jewel bearings: a. Vee jewels..... b. Large instrument ring jewels.....		( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> )	( <sup>5</sup> ) ( <sup>5</sup> )

<sup>1</sup> As required under L-280.  
<sup>2</sup> As required under L-100.  
<sup>3</sup> As required under L-163.  
<sup>4</sup> As required under Jewel Bearing Order M-50.

Type of critical common components	Designations	Applicable forms columns		
		1	2	3
<b>(POWER DIVISION)</b>				
1. Turbines (except for ship propulsion):				
a. Steam turbines for generator drive.....	X	(1)	(2)	
b. Steam turbines for mechanical drive.....	X	(1)	(1)	
c. Hydraulic turbines.....	X	(1)	(1)	
2. Circuit breakers:	X	(2)	(2)	
a. Oil breakers, 2200 volts and above.				
b. Air breakers except types AB, ET or similar.				
3. Power boilers—All land boilers 100 lbs. design pressure and above, including water tube and fire tube.....	XY	(2)	(2)	
4. Diesel and natural gas engines (non-marine only):				
a. 750 RPM and less.....	X	WPB878	WPB878	
5. Crankshafts (finished):				
a. Hammer and press forged.....	X			
6. Transformers—radio, radar and nonpower electronic application only.....		- PD-900		
a. Filament transformer.				
b. Output and coupling.				
c. Power supply transformer.				
d. Reactors.				
e. Chokes.				
<b>(RADIO &amp; RADAR DIVISION)</b>				
1. Capacitors (fixed).....		PD-900		
a. Ceramic condensers.				
b. Electrolytic.				
c. Mica condensers.				
d. Paper condensers.				
2. Coaxial cable for RF transmission lines excluding gas or air filled lines.....		PD-900		
3. Industrial type instruments (as classified L-234).....		PD-750		
4. Combat measuring instruments:				
a. As classified L-203 except Classifications 1.11, 1.21, 1.31, 2.111, 2.112.....		PD-676		
b. Classifications 1.11, 1.21, 1.31, 2.111, 2.112.....		PD-676	(1)	(2)
5. Plugs and connectors:				
a. AN type, specification AN-9534a.....		PD-900		
b. Coaxial line connectors and harness used with 3 above.....		PD-900		
6. Resistors, fixed and variable.....				
7. Test equipment—Production.....	XY	PD-900	PD-901	PD-556
a. Generators of audio and radio frequency signals except rotary type.				
b. Frequency measuring equipment, including standards.				
c. Waveform measuring equipment.				
d. Power supplies (electronic) and voltage regulations.				
e. Impedance, inductance, capacitance, voltage, amperage, and resistance measurement equipment AC and DC, excepting basic meter movements applicable for such purposes.				
f. Precision standards of items in e.				
g. Electronic speed regulating measuring equipment.				
h. Electronic recording devices, graphical and visual.				
i. DC and AC voltage amplifiers (test purposes only).				
j. Electronic chemical analysis equipment.				
k. Vibration and sound measurement and analysis equipment.				
8. Tubes, vacuum (electronic, radio and radar applications only).....		{ WPB1093, 1642 }		
<b>(SAFETY AND TECHNICAL EQUIPMENT DIVISION)</b>				
1. Extinguishers, carbon dioxide.....	X	PD-900	PD-901	
These fire extinguishers are classified on the basis of the weight of carbon dioxide that is contained in the pressed steel cylinders used.				
a. 2 pound hand portable.				
b. 4 pound hand portable.				
c. 7½ pound hand portable.				
d. 10 pound hand portable;				
e. 15 pound hand portable.				
f. 20 pound hand portable.				
g. 50 pound wheel type.				
h. 75 pound wheel type.				
i. 100 pound wheel type.				
Any special order sizes.				
Permanently piped systems (50, 75 and 100 pound cylinders used in these systems).				
Cardax low pressure system. (No cylinders but does require refrigerated tanks.)				

1 As required under Order M-76.  
 2 As required under Order L-117.  
 3 As required under Order L-203.



Type of critical common components	Designations	Applicable forms columns		
		1	2	3
(SHIPBUILDING)				
1. Valves, including all valves such as industrial, marine, hydrant, sluice gate, drilling, flow line, cocks, etc., except refrigeration, aircraft, automotive, instrument, regulating and control valves:				
a. Steel valves:				
Safety and relief		PD-900		
Turbine (including strainers, throttle or overspeed, cross-over, maneuvering and manifold)		PD-950		
Compressed gas and cylinder		PD-900		
All other steel valves		PD-900		
b. Iron valves:				
Safety and relief		PD-900		
Compressed gas and cylinder		PD-900		
All other iron body		PD-900		
c. Bronze valves:				
Safety and relief		PD-900		
Compressed gas and cylinder		PD-900		
All other bronze valves 100# W. S. P. and over		PD-900		
2. Pipe fittings:				
All steel fittings		PD-900		
3. Turbines, main marine propulsion	X	WPB1826	WPB1826	
		1828	1828	
4. Diesel engines (marine only):	X	WPB878	WPB878	
Marine propulsion				
Auxiliary drive				
Emergency generator drive				
5. Gears (marine only):				
Maine reduction	X	WPB1827	WPB1827	
		1829	1829	
Auxiliary reduction	X	PD-900	PD-901	
(TOOLS DIVISION)				
1. Bearings, ball and roller		WPB 1314		
		WPB 2389		
2. Hand tools:				
a. Mechanics' hand service tools		WPB 2057		
Adjustable wrenches (crescent type)				
Socket wrenches, midjet size				
Monkey wrenches				
Pliers, side cutting				
b. Metal cutting tools		WPB 30		
Machine broaches, flat and spline				
Threading chasers, die heads, and collapsible taps				
High speed taper shank drills, 1" diameter and larger				
Ground gear hobs, 48 pitch and finer				
Ground multiple thread milling cutters or hobs				
c. Precision measuring tools		WPB 2009		
Micrometers				
Internal micrometers				
Calipers, pocket slide				
Planer gages				
Thickness gages				
Telescope gages				
Precision levels				
Parallels				
Protractors				
Solid squares				
Steel rules				
Vernier, calipers				
Vernier, gear tooth				
V blocks				
3. Machine tools		(*)	(*)	(*)
a. Hammers and presses.				
b. Forging machines.				
c. Surface broaching machines (5 to 15 tons).				
d. Planers, double housing 48" and up.				
e. Thread milling machines.				
f. Thread grinding machines (8" and up).				
g. Cylindrical grinding machines (4" to 10" capacity).				
h. Cylindrical grinding machines (20" diameter and over).				
i. Precision boring machines.				
j. Special and way drilling machines.				
k. Spur & helical gear shaping machines.				
l. Special machines (various types).				

\*As required under Order E1B.

LETTER ADDRESSED TO SENATOR MURRAY BY C. E. WILSON

MARCH 17, 1943.

SENATOR JAMES E. MURRAY,  
*United States Senate.*

DEAR SENATOR MURRAY: You will recall that when I testified before your committee 2 weeks ago the question was raised as to whether there is any Government organization that has adequate machinery to help businessmen get worthy new products or methods into production.

I have taken up this subject with Dr. Harvey N. Davis, head of Research and Development, and he has written me as indicated by the attached letter.

You will note that while he feels that his legal powers are adequate for this purpose, all of his funds available to handle this type of project are exhausted, and he does not feel that the staff is adequate to deal with the problems which have been placed before them. This seems to be one of those cases where the desire for economy and the desire to have Government serve to develop to the fullest new ideas or programs get into conflict with one another.

Sincerely yours,

C. E. WILSON.

WAR PRODUCTION BOARD,  
OFFICE OF PRODUCTION RESEARCH AND DEVELOPMENT,  
*Washington, D. C., March 16, 1943.*

Memorandum.

To: Mr. C. E. Wilson.

From: Harvey N. Davis (initialed H. N. D.).

Referring to your memorandum of March 6, which reached us late Saturday afternoon, the 13th, according to my experience effective machinery already exists to help businessmen who have worthy new products, methods, or processes to perfect these ideas and get them into production.

We are empowered by our directive to make research or development contracts for the perfecting of such ideas whenever it seems wise to us to do so. We are even empowered to contract for the construction of prototypes or for the construction and operation of pilot plants where necessary.

When such an idea reaches the production stage the Smaller War Plants Corporation is in a position to aid in the financing. Projects of this sort are often brought to them direct without passing through our office at all, in which case they sometimes ask us for a technical opinion before proceeding.

I, therefore, see no need for establishing a new Government agency to deal with such matters.

Please remember, however, that at the moment our office has no free funds available with which to continue to perform services of this kind, and that our staff is not yet fully manned because of the "freeze." Both of these difficulties must be overcome before we can function effectively in this or any other way.

## APPENDIX IV

(The following material is the report referred to by Colonel Johnson on page 2205 and consists of a record from the members of his staff on the cooperation given the Smaller War Plants Corporation by the various procurement agencies, and a letter from James Forrestal, Under Secretary of the Navy, to the Honorable Wright Patman, chairman of the Committee on Small Business of the House of Representatives.)

FEBRUARY 24, 1943.

Subject: Ordnance Department.

1. *Ammunition Branch.*—To the best of our knowledge the Ammunition Branch is allowing us to review all proposed procurements. Col. O. F. German and our representatives have classified all items procured by the Ammunition Branch so that we know the exact type of facilities necessary for the procurement of all items. The Officers of the Ammunition Branch seem to be showing a spirit of whole-hearted cooperation.

2. *Artillery Branch.*—Our Artillery Branch representative reports that we are receiving splendid cooperation and that all procurements are submitted to us for consideration.

3. *Small Arms Branch.*—Our Small Arms Representative reports that the Small Arms Branch is cooperating with us satisfactorily.

4. *Tank-Automotive Center, Detroit, Michigan.*—We are getting fairly good cooperation from the Tank-Automotive Center, although there is a question as to whether we are allowed to see all proposed procurements.

We believe the Ordnance Department, as a whole, is cooperating quite satisfactorily, although there have been many changes in procedure and personnel and this may have caused some unintentional bypassing which will be rectified eventually.

As far as I am able to ascertain I have as of today received excellent cooperation from all procurement divisions of Quartermaster General's Office. I believe you are aware of the many courtesies extended to me there and of all the information that they have made available to us from their highly specialized procurement officers.

To my knowledge nothing is or has by-passed Smaller War Plants Division and in every instance where we could furnish facilities we have had an allocation for items to be manufactured emanating from this source.

As you know, our liaison, Major Holmes, has in many instances given us two and three opportunities to reenter the picture for redesignation of facilities.

---

FEBRUARY 26, 1943.

Subject: Cooperation—Corps of Engineers and Chemical Warfare.

I can report that we are getting splendid cooperation from both of the above mentioned services. In both cases a copy of the requisition is sent to the S. W. P. D. officer at the same time it goes forward to the various sectional officers here in Washington, so that we have an opportunity to examine and discuss with the local officers the contemplated procurements before they are sent out to the various procurement districts.

I have made it a point to sell the S. W. P. D. to the Chiefs of these services, and I find General Fowler and General English anxious to help us do a good job. I can say that this goes for everybody down the line.

At the moment, I am working on procurements amounting to in excess of fifty million dollars which these services have assigned over to S. W. P. D. I believe that this speaks for itself as to the extent of cooperation we are receiving.

FEBRUARY 26, 1943.

**Subject: Signal Corps.**

We are receiving very good cooperation from this Service. They are very anxious to assist us in some large procurements in the future whereby we can get in some of our smaller war plants to do some large work for this Service.

---

FEBRUARY 26, 1943.

**Subject: Transportation Corps.**

We have an order receiving 100% cooperation from this Corps. Every possible item that we have for procurement that could advisably fit in to Smaller War Plants Division is being given a 100% allocation by them.

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FEBRUARY 23, 1943.

**Subject: Relationship With the Surgeon General's Office.**

At the present time, we are receiving complete cooperation from the Surgeon General's Office. I am reviewing all procurement requisitions with the Liaison Officer and all amounts we feel capable of handling are allocated to S. W. P. D.

The attached Plan of Procedure dated January 3, 1943, is being followed at the present time, until new procedure can be worked out that will be applicable to the recent change in procedure by S. W. P. D. Also the Surgeon General's Office is in the throes of reorganization, and most of the top ranking officers have been given other assignments.

**PLAN OF PROCEDURE—LIAISON OFFICE, SMALLER WAR PLANTS DIVISION; OFFICE OF THE SURGEON GENERAL, WAR DEPARTMENT; AND SMALLER WAR PLANTS DIVISION, WAR PRODUCTION BOARD**

1. Requisitions for procurement are approved by the Surgeon General's Office and mailed to Procurement Office for negotiation and placement of contracts. Procurement offices are located in New York and St. Louis.

2. Copies of each requisition are made available on date mailed to procurement offices for Captain Short, Chief, Smaller War Plants Branch, Surgeon General's Office, and Mr. Morris W. Bush, Smaller War Plants Division, Procurement Specialist, Medical Corps. for their review.

3. Each requisition is reviewed and allocations made of that portion to be referred to Smaller War Plants Division for the purpose of their furnishing recommended facilities to handle. When allocations are approved by Liaison Office, notification to this effect, together with copy of requisition and specifications will be referred to Smaller War Plants Division of War Production Board through Liaison Office. Copy of notification will be simultaneously mailed to procurement office.

4. To insure preferred recognition being given facilities designated by Smaller War Plants Division in preparing their bids for Medical Department purchases, the normal time to be allowed for the return of bids to the Procurement Offices, will be extended to three weeks (except on emergency purchases). On difficult or complicated items, more time will be allowed if available.

5. To effect the above outlined policy, certain mechanics for handling requisitions by Smaller War Plants Division are necessary. Therefore, a maximum time limit will be established (7 days from date of notification received)—this time for the purpose of each requisition being cleared through proper channels by Smaller War Plants Division to determine available facilities, and mailing notification to Surgeon General's Office designating qualified firms recommended as bidders for each allocated procurement. It is, of course, understood prompt clearance of notification will expedite placement of designated firm's bid on record. (If delayed longer than 7 days by Smaller War Plants Division Office causing actual placement of contract to be unnecessarily delayed, then Medical Department Procurement Office will not be bound to recognize firms as recommended by Smaller War Plants Division.)

6. Promptly on receipt of list of qualified bidders from Smaller War Plants Division, the Surgeon General's Office will issue directive to the Procurement Office, requesting that these firms be mailed requests for bids together with specifications on the designated procurement. This will then give these firms equal opportunity with other suppliers, in fact, preference on final placement of contract

as designated by Smaller War Plants Division—unless placement with these firms could not be substantiated in accordance with the Medical Department Procurement policies.

7. Certification of price differential to be furnished by Smaller War Plants Division if requested by procurement office to substantiate placement of contract with recommended firm.

8. The above "Plan of Procedure" represents mutual working arrangements agreed upon by representatives of both offices. It is believed that this procedure will permit of definite handling of all procurements allocated to Smaller War Plants Division, resulting in 100% cooperation by the Office of The Surgeon General in giving aid to Small and/or Distressed plants as recommended by Smaller War Plants Division.

For the Surgeon General:

(Signed) K. A. SHORT,  
K. A. Short,  
Captain, A. U. S.,  
Chief, Smaller War Plants Branch.

For Smaller War Plants Division of War Production Board:

(Signed) M. W. BUSH,  
Morris W. Bush,  
Procurement Specialist,  
Medical Corps.

FEBRUARY 24TH, 1943.

Subject: Navy Cooperation.

My letter of February 18th, 1943, covered in general our set-up with the Navy. The following points were analyzed:

1. Number of Bureaus covered.
2. Time during which we have been set-up to operate in them.
3. Results obtained from work in Bureau of Supplies and Accounts.

Regarding cooperation, I feel that we are receiving good cooperation from the following:

Bureau of Supplies and Accounts.  
Bureau of Ships.  
Bureau of Ordnance.  
Bureau of Yards and Docks.  
Bureau of Medicine and Surgery.  
The Coast Guard.  
The Marine Corps.

We have not been able to obtain personnel to organize the Bureau of Aeronautics, so have little to report. On such contacts as we have had, they have been cooperative.

As to topside cooperation, I am unable to report, as these contacts have always been handled by Mr. Holland.

Our direct contact between topside and the Bureau is through the Secretary's office—Office of Procurement and Materials; Industry cooperation Division. The personnel of this division is in general cooperative, and our contacts are satisfactory. I told you verbally how much of the cooperation of this division is lip-service. At any rate, with the exception of their present interference with our shipbuilding program under Mr. Cotton, this division has not been detrimental to our efforts.

This division has for its purpose the locating of materials and manufacturing facilities for the Navy and, thus, parallels our purpose. They answer telephone calls as "Smaller War Plants." No one calling from outside would know they were not talking with Smaller War Plants Division, War Production Board.

FEBRUARY 23RD, 1943.

Subject: Navy Bureau of Ships.

Although it seems apparent that the Bureau understands the intent of Congress with reference to small business, and that many in the Bureau are doing their utmost, by direction, to carry out that intent, it also appears that others do not seem to understand all of the means which the Bureau might use to carry out

the program in the awarding of contracts to small firms. Some of the chiefs of many technical sections of the Bureau are not as cooperative as they should be.

The Navy Office of Procurement and Matériel seems to feel that it is established to operate a separate staff on a smaller plant problem and that theirs is the responsibility to direct any efforts involving smaller plants, rather than that they are established for the benefit of the S. W. P. D. and are supposed to expedite its work.

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FEBRUARY 23, 1943.

Subject: Medicine and Surgery—Navy Department.

The procurement officers in Brooklyn, New York, where 90% of all procurement for Naval Medical items are made, have been contacted and they have indicated every willingness to cooperate. As soon as we are making proper contact with that office, I believe that S. W. P. D. will receive its proportionate share of business.

We have been promised the opportunity of reviewing planned requirements from 30 days to 6 months in advance, and we will also be given a copy of all procurement requisitions when they are written.

The review of requisitions and requirements will have to be made by a Liaison Specialist in New York who in turn will refer applicable items to this Department.

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FEBRUARY 26, 1943.

Subject: Maritime Assistance to S. W. P. D.

So far as the buyers and Administrative Officers of Maritime can place orders with S. W. P. D., it is my belief that they are doing so. The buyers cooperate with us in every certification made to them and when our vendors bid at or near the low price, they are favored. It is my honest belief that until the entire procedure of handling requisitions at Maritime is completely changed, S. W. P. D. will not receive a substantial amount of business in excess of that now being given them.

The reason for this statement is that, at the present time, the S. W. P. D. is not obtaining a satisfactory amount of procurements from Maritime, for the reason that it is not afforded the opportunity to sit down with the buyer of each procurement and make an effort to secure a proper allocation of that procurement for the S. W. P. D. and its clientele.

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FEBRUARY 23, 1943.

Subject: Lend-Lease, Treasury Procurement—Foreign Purchasing Commissions.

Of the above, Treasury Procurement is the only procurement agency.

The entire personnel of Treasury Procurement from Clifton Mack, the Director of Procurement, to each of the purchasing officers are cooperative and anxious to help us in directing procurements to the small companies we recommend.

Our procedure and working agreement is incorporated in our report of January 6th, 1943.

We are established in Lend-Lease and the Foreign Purchasing Commissions in order to gain advanced information of the planned procurements which ultimately result in the actual requisitions. The assignment of ours is relatively of recent date, however, it is very effective.

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FEBRUARY 23, 1943.

Subject: Civilian Agencies.

The cooperation of the civilian agencies is rather passive in that it is only received so long as it does not affect their work. In fairness, it should be said that lack of time and personnel make it impossible for them to give the assistance to small plants which might be desired, for the reason that they do not possess field set-ups. It does appear that they are giving small plants work up to 50% of their purchases, which is a good percentage based on our efforts. Part of the failure, however, is due to lack of personnel in their own organization, to keep track of competent facilities. They are setting up a new method of procedure for some of their standard items and to see that these firms are left working on their current orders.

FEBRUARY 27, 1943.

Subject: Department of Agriculture.

In general, the cooperation we are beginning to get from the Department of Agriculture seems very satisfactory. Mr. Wickard's office has approved a positive and strong directive that I drafted. This directive will be sent to all the Procurement and Administrative offices in the entire Department.

Although Farm Security Administration raised an objection to our assisting them in the placing of contracts, this situation appears to be on the way to correction. Even so, it is thought that we shall have to keep a check on this agency.

FEBRUARY 27TH, 1943.

Subject: Federal Public Housing Authority.

In November 1942, we received copies of Directives issued by the Commissioner of Federal Public Housing Authority to the effect that we would receive full cooperation on their Purchase Program. However, after a period of 3 months, this agency has failed to follow through on their expressions of cooperation and contracts have been let on items in value up to a quarter of a million dollars without S. W. P. D. even being advised of the purchases and all of these items were of such a nature as to be of vital importance to S. W. P. D.

FEBRUARY 23, 1943.

Subject: Navy Bureau of Ordnance.

In compliance with the request that we confirm our individual reports covering our respective assigned bureaus, the writer can cover the Bureau of Ordnance situation with the statement that cooperation seems full and uniform throughout the Bureau.

Captain Hussey himself offered us a prime contract for 3,000 Mark 4-20-mm antiaircraft guns less mounts; and other officers have offered detail parts totaling 25,050,000 parts, die castings, screw-machine products and wood turnings; during the past 10 days.

The writer at present is receiving advance information on selected parts (from which are screened obviously inapplicable items such as armor over 2", heavy guns, and classified, or secret, restricted and confidential items).

The Bureau of Ordnance items include very few of shelf goods or regular civilian use, and the various programs of special items are mostly under way.

23 FEBRUARY 1943.

DEAR MR. PATMAN: The Navy is happy to comply with your request for a summary of what it has done to facilitate participation in its procurement program by smaller business enterprises.

In placing orders for matériel the Navy has tried to distribute business to smaller companies to the greatest possible degree—strategic urgency of its needs being considered.

This program started in January 1941 and has continued at an accelerated rate.

Passage of the Murray-Patman Act, Public Law No. 603, has further stimulated this principle of contract placement which has resulted in a broad reconsideration of our procurement policy with the end in view of awarding greater numbers of contracts to smaller firms and urging larger prime contractors to farm out more of their jobs with smaller subcontractors.

The primary objective of the Navy Department has been and must continue to be to obtain as quickly as possible the material and equipment required for the fleet. All other considerations affecting procurement must, under conditions of grave necessity, fit into, yet not dominate our thinking in carrying out that policy.

Urgent necessity has made it mandatory that the maximum possible production be secured. Circumstances have not permitted production for future requirements alone.

While that urgency still exists, increased production now has made possible more careful scrutiny of procurement planning and of the facilities made more readily available by Public Law 603.

Passage of that Act in June 1942 found the Navy with an integrated organization already in existence in most of the War Production Board offices throughout the country, manned with officers capable of aiding in administration of this statute from a Navy point of view.

The Navy has felt that seeking out and developing new sources of production among the smaller plants throughout the United States achieved two objectives:

(a) Facilities thus added increased the volume and speed of production.

(b) Flexibility of the Navy's procurement program improved, since smaller plants can be adapted more readily to rapidly changing war requirements than can an organization comprised only of large facilities built for single-purpose production.

By direction of the Under Secretary, the Navy Smaller War Plants Section was established in the Industry Cooperation Division—a Navy unit previously dedicated to spreading prime and subcontracts to smaller business.

Almost daily, conferences were held by Mr. Holland and cognizant Navy officers both at W. P. B. Headquarters and in the Navy Department to develop a workable program.

Liaison officers were then appointed in each bureau of the Navy, the Marine Corps, and Coast Guard to work with the Smaller War Plants Section of the Navy and to act as contact officers in matters of interest to the Smaller War Plants Division, W. P. B. This system of liaison officers has proven quite satisfactory. The W. P. B. Smaller War Plants Division, however, advised that in some instances it did not receive information regarding proposed procurement in time to locate companies and give them an opportunity to study specifications and have their bids submitted by the closing date.

It was decided, therefore, to reorganize and strengthen the system. On January 18, 1943, at the direction of the Under Secretary of the Navy, the Chief of each important procurement bureau designated an officer of adequate rank as procurement coordinator, whose duties are to examine the needs of the bureau in order to select simple items on which the Smaller War Plants Division of W. P. B. can take prime contracts.

These officers and their assistants also are directed to study more complicated items to determine in turn the parts which can be subcontracted. Such information is then turned over to W. P. B. Smaller War Plants Division for distribution to the field.

The Smaller War Plants Division of W. P. B. has been invited to place representatives in each of the procurement bureaus of the Navy Department and has done so in the Bureaus of Ships, Supplies and Accounts, Ordnance, Medicine and Surgery, and Yards and Docks. Free access has been given by the various bureaus to these representatives on future requirements. The Bureau of Supplies and Accounts has submitted \$67,000,000 worth of simple stock items to W. P. B. Smaller War Plants Division. From this list, S. W. P. D. is to select products it considers suitable for taking as a prime contractor. It is being asked to distribute the remainder to manufacturers selected by its regional and field offices. It is anticipated the S. W. P. D. can thus place at least 20% of this procurement.

To spread work to smaller plants, Navy procurement bureaus assist prime contractors to locate companies as subcontractors. Pressure is exerted upon prime contractors to encourage subcontracting to the greatest possible degree.

At the direction of the Under Secretary, educational conferences have been held in every Naval District in the country for the purpose of reexamining Navy procurement practices in conformance with Public Law No. 603. These were attended by the chiefs of each field agency and presided over by district Commandants.

Regional and district executives of W. P. B. Smaller War Plants Division have participated in the sessions as have representatives of the War Production Board, Washington office. Mr. Lou Holland, Director of Smaller War Plants Division, attended the 5th Naval District meeting at Norfolk.

Approximately 400 Naval officers, including one Vice Admiral, 17 Rear Admirals, 64 Captains, 51 Commanders, and 98 Lieutenant Commanders took part in these field sessions.

In most instances W. P. B. field agencies have been asked to appoint liaison engineers to assist Naval officers in this effort. Where practical, Navy field agencies have invited Smaller War Plants Field Divisions to assign men to these Navy area agencies in an effort to expedite carrying out the agreements reached at these meetings. Already there is flowing from this cooperation, distribution of jobs to companies specified by the Smaller War Plants Division.

It is believed that these meetings have produced a practical working arrangement between the Navy and W. P. B. Smaller War Plants Division field agencies best suited to meet the varying needs of the different regions of the country.

The Industry Cooperation Division's Naval Advisors, located in W. P. B. field offices, are particularly valuable in continuing this liaison work with the W. P. B. Smaller War Plants district and regional representatives.



They regularly visit prime contractor's plants. Through discussions with Inspectors of Naval Material and managers of these plants, they learn of available subcontract items, enabling them to suggest new business possibilities to small manufacturers.

A check of daily reports indicates that over one thousand manufacturers were interviewed in Washington by the Industry Cooperation Division from March to September 1942. In order to make a check of contracts and subcontracts obtained by the companies interviewed, a sample of 220 companies was selected at random. These manufacturers were located in 34 cities throughout the country, ranging from Portland, Maine, to Los Angeles and Minneapolis to Dallas. Naval Advisors telephoned each of the 220 companies and found that 162 companies or 73% had obtained either prime contracts or subcontracts for war work since the date of the interview, while 60% of the companies had received prime or subcontracts for Navy work since the date of the interview. The results of the survey plainly indicated that many relatively small manufacturers can assist naval production if they are properly advised as to the most effective procedure in seeking subcontract or prime contract work.

A typical operation of a Regional Office is exemplified in the case of the Sperry Gyroscope Company. In September 1942, representatives of this company came to the Navy and requested aid in locating 75,000 tooling hours. The New York Naval Advisor furnished the Sperry Company with a list of 27 nearby companies that had tooling facilities, and within one week the Sperry Company was making use of these plants in the manufacture of jigs, fixtures, and tools.

On December 8, 1942, the Under Secretary of the Navy issued a directive to the Commandants of U. S. Marine Corps and U. S. Coast Guard and all Bureaus of the Navy, Inspectors, Supervisors of Shipbuilding, and Naval Advisors directing that all possible aid be given to prime contractors to stimulate subcontracting.

Attached to this directive was a letter prepared by Mr. Lou M. Holland, then head of the W. P. B. Smaller War Plants Division, and signed by Donald M. Nelson, Chairman of the War Production Board; Robert P. Patterson, Under Secretary of War; and James V. Forrestal, Under Secretary of the Navy.

In that communication intensified subcontracting was urged and specific instructions were issued to these officers to assist prime contractors—

- (a) Reexamine their commitments.
- (b) Comb out every part that warrants subcontracting consideration (reserving the tough ones for their own manufacture).
- (c) Clearly define the Ship elements of each part or assembly.
- (d) Promptly supply the W. P. B. area office nearest the originating plant sufficient job data for their needs in mobilizing the required facilities.

#### NAVY INDUSTRIAL COOPERATION PLAN

In September 1942, the Navy Department began an experiment to assist small business in obtaining Navy contracts for simple stock items. Since December it has been in operation in W. P. B. Districts 1 to 5. Early in February it was extended to cover all W. P. B. regions except 8, 9, and 10, which areas will be covered in the near future.

Briefly, the plan has two purposes: (1) To assure an adequate number of qualified bidders for Navy negotiations through the medium of the W. P. B.'s facilities and the assistance of the Naval Advisors; (2) to provide for spreading contracts over more of the smaller plants.

Under the plan, the Bureau of Supplies and Accounts daily sends copies of all invitations for competitive quotations on simple stock items to Naval Advisors in W. P. B. field offices. Necessary drawings and specifications are available to interested bidders. Prospective bidders are qualified by W. P. B. Smaller War Plants engineers and approved by Naval Advisors as to their ability and willingness to submit a bid and produce the equipment or materials required on schedule. The Naval Advisors assist small plants in the preparation of bids and interpretation of specifications, drawings and general requirements.

Bids received from small plants through the Navy Industrial Cooperation Plan are carefully considered and continued effort is being made to award contracts to qualified small manufacturers even if it is necessary to pay a higher price.

The Bureau of Supplies and Accounts has decided to award most of this procurement to firms approved and suggested by Smaller War Plants field agencies.

Through operations of this plan, the Navy is developing reserve facilities for supplies and helping to preserve small plants as an essential part of American industry.

After contracts have been placed, the Smaller War Plants Division of W. P. B. agrees to provide industrial engineering and arrange financial aid to contracting firms where needed.

#### DIESEL ENGINE PARTS

Scarcity of parts for Diesel engines presents one of the Navy's most difficult problems today in the procurement field. Because of the complexities of the engineering and machine skill necessary, this portion of Navy procurement normally would not be considered suitable for Smaller War Plants.

However, in December the Navy called in Mr. Holland and asked his assistance in locating additional facilities. Conferences were held by Admiral Cochrane, Chief of the Bureau of Ships, and his assistants with the result that Mr. Holland and his Smaller War Plants engineers already have found several likely sources to aid in this program.

#### VALVES

Location of facilities for making valves also is a serious Navy problem today. W. P. B. Smaller War Plants Division, working with the Bureau of Ships, is currently searching for additional sources and has suggested facilities which may be of great aid in this effort.

#### SUBCONTRACTING NAVAL SHIPBUILDING ITEMS THROUGH THE SMALLER WAR PLANTS DIVISION OF W. P. B.

In addition to the general plan to screen procurement, the Bureau of Ships has inaugurated a new program whereby the W. P. B. Smaller War Plants Division has set up a shipbuilding section in its Production Service Branch.

For the time being this unit operates from the W. P. B. Regional Office in Boston and confines its activities to the New England and Metropolitan New York areas. The program is to be extended to other Naval Districts agreed upon by the Bureau and the Division. Under this plan the Chief Engineer will study plans, specifications, and schedules in order to select specific items which are suitable for manufacture in smaller plants.

The Division recommends subcontracting facilities to prime contractors employed by the Bureau of Ships. The prime contractor then makes his own inspection and negotiates contracts with these recommended companies which he approves. If recommended companies are not approved by the prime contractor, the Smaller War Plants Division Chief Engineer offers alternate facilities until all parties are in agreement.

#### BUREAU OF ORDNANCE SUBCONTRACTING

In the Bureau of Ordnance the picture has changed radically \* \* \* and in favor of smaller manufacturers. For every dollar spent with large manufacturers (companies rated over \$1,000,000) in the last six months of 1939 on supply contracts \* \* \* \$20 were spent during the last period for which figures are available—1 July 1942 to 31 October 1942. Yet \* \* \* for every dollar spent with smaller manufacturers (companies rated less than \$500,000) in the last six months of 1939 \$220 were spent from 1 July 1942 to 31 October 1942—and this represents a *four-months'* spending in 1942 as against a *six-months'* spending in 1939.

Admiral Blandy, in a report prepared for the Under Secretary, has estimated that as of 1 January, the Bureau of Ordnance is utilizing approximately 24,000 companies, both small and large, for subcontracting for the Bureau's needs. Most of these companies are of the type that require assistance from W. P. B. Smaller War Plants organization.

#### SUBCONTRACTING IN NAVAL AVIATION PRODUCTION

Here is a specific example of broad contract distribution in naval aviation construction. The Consolidated Aircraft Corporation had on 14 August 1942, 1,677 different vendors and subcontractors, and among these was the Parker Appliance Company, which in turn had subcontracted to 307 vendors and 59 subcontractors. In addition to these sub-subs, Parker was investigating 203 additional subcontractors, and had rejected 108 of whom 81 could not do the work due to inadequate equipment or inability to work in close tolerances; 54 companies had declined to subcontract with Parker due to no capacity being available. This illustration shows that naval aircraft contract distribution goes down into thousands of plants and benefits millions of workers.

## CRITICAL TOOLS SERVICE

The Under Secretary, on 29 October 1942, directed that existing prime and subcontracts be examined with Smaller War Plants Division of W. P. B. to determine the possible extent of additional subcontracting thereunder of products suitable for placement with plants recommended by W. P. B. Addition of machine tools was not to be authorized where corresponding operations could be handled by subcontracting.

Inspectors of Naval Material and Naval Advisors, under this system, have refused to endorse many applications for new machine tools. This has correspondingly effected an increase in subcontracting to smaller plants.

A plan is in preparation whereby all pending orders for new machine tools will be reexamined, and if machine tool capacity is already available in the area, the order for the new machine tools will be denied.

Mr. Walter Wheeler, Director, W. P. B. Region No. 1, at the Boston meeting, 29 December 1942, stated that an extended and tight reexamination of pending machine tool orders would, in 60 to 70% of the cases, reveal machine tool capacity to be available within a reasonable area.

The Navy is constantly intensifying its efforts to secure additional work for small plants in cooperation with the Smaller War Plants Division—W. P. B. In addition to working directly with the procurement Bureaus in Washington, it is working through the Naval Advisors who are stationed in War Production Board Regional and District Offices.

The enactment of Public Law 603 has aided the Navy Department in liberalizing its procurement policy toward greater decentralizing the placement of its contracts.

There is appended hereto a report of the Bureau of Ordnance, dated 4 February 1943, which should serve as an example of the trend toward greater utilization of the productive capacity of smaller manufacturing enterprises.

JAMES FORRESTAL.

HON. WRIGHT PATMAN,  
Chairman, the Committee on Small Business  
of the House of Representatives, Washington, D. C.

NAVY DEPARTMENT,  
BUREAU OF ORDNANCE,  
Washington, February 4, 1943.

## MEMORANDUM

To: Lt. (jg) J. W. Davis, Jr., Room 1210.

Subject: Recapitulation of contracts.

1. The following is a recapitulation of contracts entered into during the periods indicated:

	Manufacturers whose assets are more than \$1,000,000	Manufacturers whose assets are between \$1,000,000 and \$500,000	Manufacturers whose assets are less than \$500,000
<b>SUPPLY CONTRACTS</b>			
July 1, 1939, to Jan. 1, 1940.....	\$51,902,867.82	\$1,807,432.44	\$370,926.37
Jan. 1, 1942, to July 1, 1942.....	1,244,513,671.64	251,929,640.52	56,780,570.92
July 1, 1942, to Oct. 31, 1942.....	1,034,017,115.37	77,239,252.38	81,531,722.91
<b>FACILITIES CONTRACTS</b>			
July 1, 1939, to Jan. 1, 1940.....	60,858,884.50	365,174.66	No contracts
Jan. 1, 1942, to July 1, 1942.....	115,868,350.14	19,445,041.27	2,313,205.94
July 1, 1942, to Oct. 31, 1942.....	11,786,432.86	3,406,021.67	29,854.00

R. DAHL,  
Lieutenant, United States Naval Reserve.

# PROBLEMS OF AMERICAN SMALL BUSINESS

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## HEARINGS

BEFORE THE

### SPECIAL COMMITTEE TO STUDY AND SURVEY PROBLEMS OF SMALL BUSINESS ENTERPRISES

UNITED STATES SENATE  
SEVENTY-EIGHTH CONGRESS

FIRST SESSION

PURSUANT TO

### S. Res. 66

(Extending S. Res. 298—76th Congress)

A RESOLUTION TO APPOINT A SPECIAL COMMITTEE  
TO STUDY AND SURVEY PROBLEMS OF  
AMERICAN SMALL BUSINESS  
ENTERPRISES

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#### PART 17

EFFECT OF EXCHANGE SERVICES  
ON RETAIL TRADE

---

MARCH 16 AND 17, 1943

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Printed for the use of the Special Committee to Study and Survey  
Problems of Small Business Enterprises



UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1943

**SPECIAL COMMITTEE TO STUDY PROBLEMS OF AMERICAN  
SMALL BUSINESS**

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**GEORGE A. WILSON, Iowa**

**KENNETH S. WHERRY, Nebraska**

**C. DOUGLASS BUCK, Delaware**

**CHARLES A. MURRAY, *Executive Secretary***

# CONTENTS

## STATEMENTS

	Page
<b>Tuesday, March 16, 1943:</b>	
Michaels, C. J., president, American National Retail Jewelers Association.....	2259
Rothschild, Louis, Washington counsel, National Association of Retail Clothiers and Furnishers.....	2272
Jones, Rowland, Washington representative, National Association of Retail Druggists.....	2275
Thompson, Morris, representing National Retail Dry Goods Association.....	2277
<b>Wednesday, March 17, 1943:</b>	
Kerr, Col. Francis R., Infantry Reserve, United States Army, Acting Chief of Army Exchange Service.....	2282
Sterling, Commander P. R., United States Navy, retired, Bureau of Naval Personnel, Navy Ship's Service Departments.....	2299
O'Toole, Maj. Robert M., Marine Post Exchange, United States Marine Corps.....	2304
Carroll, Lt. Comdr. William H., United States Coast Guard.....	2315

## SUBJECT INDEX

Complaint not against post exchanges as such, but competition and improper use of priorities.....	2260
Diversion to retailers and other improper practices in sales of watches.....	2261
Posts and canteens have sold women's watches and other items unrelated to needs of services.....	2261
Abuses corrected in Army exchanges, but still exist in other branches.....	2262
Types of abuses later corrected by Army.....	2262
Place of middleman in distribution of watches.....	2263
Priority rights of exchanges.....	2264
Priority orders used to secure watches for illegal diversion to retail trade.....	2265
Army has discontinued priority orders; other services should do likewise.....	2267
Black markets in watches.....	2268
Action taken by Army to correct priority abuses.....	2270
Witness reports progress on previous complaints from clothing association.....	2272
Army Exchange Service has eliminated all competitive priorities and restricted sales to civilians.....	2273
Other services should adopt same policy as Army.....	2274
Army Exchange conference with druggists resulted in limitations of priorities and sales to civilians.....	2275
Possible threat of post-war use of accumulated stocks as loss-leader items.....	2275
Situation as to illegal use of priorities has been improved.....	2276
No complaints as to Navy or Marine exchanges.....	2277
Services of naval stores should not be extended to civilian employees if retail facilities are available.....	2277
Overhead write-up of exchanges justified.....	2278
Post-war planning to avoid use of surplus stocks in cut-rate competition.....	2279
Statement by the chairman.....	2281
Purpose and operation of Army Exchange Service.....	2282
Complaints on sales to civilians.....	2283
Very few unauthorized sales to civilians.....	2284
Stock of women's goods needed for WAAC'S, nurses, and for gifts.....	2285
Army exchange shopping service for goods not carried at post exchanges.....	2285
Priorities restricted to repairs, equipment, and small items.....	2286
Supplies curtailed to get things to soldiers overseas.....	2286

## IV

## CONTENTS

	<b>Page</b>
Post-exchange profits go to canteen fund for enlisted men.....	2287
Presentation concerning complaints involving the operation of Army exchanges under the Army Exchange Service.....	2288
Army Exchange Bulletin No. 10.....	2296
Operation of Navy Ship's Service Departments.....	2299
Use of priority ratings by Ship's Service Departments.....	2300
Comparison of Army and Navy handling of priorities.....	2301
Navy restrictions on sales to civilians.....	2302
Practices concerning inventories and profits.....	2303
Operation of Marine Post Exchange system.....	2304
Use of priorities by Marine exchanges.....	2305
Sales to civilians only on specific directive.....	2305
Authorization for higher priorities must come from the War Production Board.....	2306
Request for definition of "other persons" mentioned in S. 853, a bill permitting sales of naval stores to civilian employees.....	2307
Marine Corps regulations on priorities and lists of items given priority ratings.....	2308
Operation of Ship's Service Stores in Coast Guard.....	2315
Directive discontinuing sale of jewelry, clothing, and other items by Ship's Service Stores in Coast Guard.....	2316

# PROBLEMS OF AMERICAN SMALL BUSINESS

TUESDAY, MARCH 16, 1943

UNITED STATES SENATE,  
SPECIAL COMMITTEE TO STUDY AND SURVEY  
PROBLEMS OF SMALL BUSINESS ENTERPRISES,  
*Washington, D. C.*

The committee met at 10:30 a. m., in room 357, Senate Office Building, Senator Kenneth S. Wherry, presiding.

Present: Senators Wherry (presiding), Wilson, Buck, Ellender, and Scrugham.

Senator WHERRY. This is a hearing conducted by the duly appointed subcommittee of the Committee on Small Business to investigate many complaints which have been made by retailers throughout the country that post exchanges have been and are retailing merchandise that comes in direct competition with them. It has become so serious that it has been brought to the attention of the Congress, and the Small Business Committee feeling a hearing should be held, we will therefore have a hearing this morning at 10:30 at which we have five or six witnesses who will testify.

The hearing will be continued tomorrow morning at 10:30, and then we will see whether more time is needed to complete the taking of testimony.

I would like to call first Mr. C. J. Michaels of the American National Retail Jewelers Association.

Mr. Michaels, will you please give your name to the clerk, with your address, and whom you represent?

## STATEMENT OF C. J. MICHAELS, PRESIDENT, AMERICAN NATIONAL RETAIL JEWELERS ASSOCIATION

Mr. MICHAELS. My name is C. J. Michaels, and I am president of the American National Retail Jewelers Association. My home is in Hartford, Conn.

Senator WHERRY. All right, proceed.

Mr. MICHAELS. On January 20 it was my privilege to appear before this committee, and to submit a statement on the subject of the troubles of the retail jewelry business during the present emergency.

As compared to certain other types of business, I said then, and I repeat now, that the retail jewelers required less help than most businesses, and no financial assistance whatever—provided that comparatively few adjustments could be made in existing conditions. I am sure that none of these suggested corrections are unreasonable, and I feel that not one of them would interfere in any way with the



war effort. One of the most important items on which I spoke dealt with the subject of post exchange competition, and the fact that you are evidently aware of what has been taking place is a matter of much comfort to our members.

A few weeks ago I presented to General Byron, who is in charge of post exchange operations, concrete evidence of abuses of this service, and am glad to report that he has given the subject immediate attention. Results have been more than we had believed possible, and we are now hopeful that the improvement noted will be continued, not only in the Army but also in the same type of services as they apply to the Navy, Coast Guard, Marines, and Merchant Marine.

The retail jewelry business is, on the whole, a small business, and is dependent very largely on metals. We understand the need for metals during wartime and are prepared to go through without their use, except as regards precious metals, of which there is no shortage whatever. We ask only for the privilege of subsistence operation for the duration and, as a group, have already gone far in restaffing our stores so that able-bodied help could accept essential war work.

#### COMPLAINT NOT AGAINST POST EXCHANGES AS SUCH, BUT COMPETITION AND IMPROPER USE OF PRIORITIES

We recognize the importance of post exchanges, canteens, and other similar services of supply. We, too, have our sons and families in the services, and we want them to have every possible comfort. When and if they come back, however, we ask that our businesses be existent, to be rebuilt for themselves and their families.

The purpose of these post exchanges and canteen services is clearly stated by the War Department to be the supplying of such goods as are required to provide for the comfort and well-being of our armed forces. No one could deny the necessity of keeping their morale at the highest possible point. When, however, this is extended to the place where these posts and canteens become retail stores, in direct competition with us, on merchandise in no way connected with the intended purpose—when, because of the profiteering middlemen who have no place in the picture, and when diversion of goods back to civilians and to retail black markets takes place, we feel justified in asking for relief.

General Byron of the post exchange service has already helped by correcting abuses brought to his attention, and has indicated his interest in this problem. Concrete proof of these abuses is not easy to obtain, and a case for the other branches of the armed services is difficult to prepare. In the meantime, as an indication of the effects of what has already occurred, I was notified yesterday that the president of one of our affiliated State associations—an average retail jeweler—had been forced to retire from business. He could not buy merchandise to continue, while a short distance from his store post exchanges in Army camps were selling these products. They secured them on priority orders through middlemen.

From the standpoint of the soldier or sailor, even he does not get a fair deal, because some of the things he buys often cost more than if purchased in a retail store, and that store pays 10 percent of the purchase price to the Government in excise taxes as well.

## DIVERSION TO RETAILERS AND OTHER IMPROPER PRACTICES IN SALES OF WATCHES

The best illustration of diversion and improper practices refers to watches, which comprise fully 30 percent of a jeweler's business.

American watch manufacturers have gone all-out into war production, so that the supply is about gone. Practically all watches now obtainable are Swiss. Certain types of Swiss watches are considered necessary items in the supply services, and every importer is willing to furnish whatever quantities are properly needed in proportion to his total imports.

These importers have an association, the members of which handle more than 90 percent of all the watches sold other than American-made goods. It is through them that these watches should be made available to posts and canteens so that they in turn could fairly distribute what is left to their retail customers.

This would insure against any possible diversion to retailers either through middlemen or because of faulty operation of posts and canteens.

It would eliminate the overcharging of men in the service by taking away the excess profits collected somewhere between the importer and the consumer. I may say here that the middlemen as a rule are not wholesale jewelers, but instead are opportunists, who are taking advantage of the present emergency.

Jewelers whose places of business are close to posts and canteens have another problem connected with this strange condition. The watches sold at these Army and Navy stores often need considerable service. They require adjustments, are at times faulty, sometimes due to mishandling, occasionally to defective parts, and for other reasons. They must come to the jeweler, as no one at the canteen can do this work. And, because more often than not the soldier or sailor has already paid too much for his watch, jewelers devote considerable time to this work without remuneration. In other words, they feel the soldier has paid all the watch is worth and do not like to charge him for the small service. They are willing to do this, but see no reason why it should be done for the benefit of those who have collected undeserved profits.

## POSTS AND CANTEENS HAVE SOLD WOMEN'S WATCHES AND OTHER ITEMS UNRELATED TO NEEDS OF SERVICE

It would be bad enough if the watches sold were all men's watches, but posts and canteens have extended their trading to all types of ladies' watches as well. I would like to qualify that and say that it no longer applies to the Army service. It has been corrected since my visit with General Byron.

We jewelers do not understand how ladies' watches are required for the comfort and well-being of our soldiers and sailors, and why our suppliers are forced to take them away from us because of priority orders forced upon them by illegitimate so-called wholesalers.

These priority orders are not placed with importers on any proportionate basis. One importer may get orders for all the watches he has in stock—another for a very small quantity—and no attempt what-

ever is made to allow these importers to take care of orders previously placed by their retail customers. Definite demands for immediate delivery are made, and few retailers may plan on any assured supply.

As a result, a retailer who has counted on his watch requirements from any particular wholesaler or importer—and this wholesaler has been forced to give his goods to the middleman by reason of priority orders—is forced either to go out of the watch business, or to pay excessive prices in a perfectly set up black market.

**ABUSES CORRECTED IN ARMY EXCHANGES BUT STILL EXIST IN OTHER BRANCHES**

I have spoken of only one item, watches. While these are the largest single item sold by the Services of Supply, I have seen many orders for other items not in any way related to the service intended. General Byron has already corrected this in the Army posts, but it still goes on in the other branches of the service.

The American National Retail Jewelers Association and its members are willing to cooperate as fully as possible, and in any manner you may suggest, in bringing about an adjustment of this serious problem. We would appreciate a continuance of the interest you have already shown in making it possible to avoid unnecessary and additional hardship for the balance of the emergency.

Thank you.

Senator WHERRY. Do you wish to make any further statement?

**TYPES OF ABUSES LATER CORRECTED BY ARMY**

Mr. MICHAELS. I understand you want concrete examples of what has taken place.

One example is a lieutenant in charge of a military police detachment which has a small canteen operation in connection with its post. He came to me with four watches, that was yesterday, in my home store, and laid four watches in front of me and said that they were discontinuing carrying that kind of watch. They were not military watches or anything like it, and he said some of his men said the price they had to pay was \$21.80. We sell that watch in our store for \$19.75, out of which we pay the Government \$1.80-odd for taxes.

The watches we sell are exactly the same movement. There are syndicates in Switzerland which supply these movements. These were not properly fitted in the case, and yet the soldiers pay \$21.80.

Senator ELLENDER. Where is your place of business?

Mr. MICHAELS. Hartford.

Senator ELLENDER. How far is the nearest post exchange?

Mr. MICHAELS. About 6 miles.

Senator ELLENDER. From your place of business?

Mr. MICHAELS. From my place of business.

Senator ELLENDER. Do you know of any post exchange located nearer the center of business than the one to which you are now referring?

Mr. MICHAELS. That is about the closest one there.

Senator ELLENDER. The post exchange is usually established to facilitate the soldier boy who lives away from town?

Mr. MICHAELS. That is right, sir.

Senator ELLENDER. Do you know of many articles other than the ones you specify that they handle at the post exchange which should not be sold or disposed of at the post exchange?

Mr. MICHAELS. Yes. I presented to General Byron a copy of an order and the number of the check with which this order was paid for 100 ladies' watches. The items were ordered by an intermediary.

Senator ELLENDER. Can you think of anything else?

Mr. MICHAELS. Other items?

Senator ELLENDER. Yes. I believe that would be very important to the committee. If you do not have it available today, obtain from such sources a list of the articles that you think should not be handled in post exchanges.

I have heard a lot about this, and I have been interested in it, and with the consent of the chairman we will get General Byron here if necessary, and anybody else connected with post exchanges.

Mr. MICHAELS. Senator Ellender, I think a lot of it has been exaggerated. I do not think articles of the business which I represent are concerned to any great extent. I do not think there has been a serious shortage of distribution of other merchandise. There have been instances of ladies' wear, of gold and diamonds. I have seen orders for diamond watches.

Senator ELLENDER. I understand at some post exchanges they handle a lot of ladies' stockings and underwear.

Mr. MICHAELS. I have heard of that, but I want to know whether these stories are true, because I do believe there is a lot of exaggeration which goes on among our members, and I would not even come down to see General Byron until I had concrete examples. The moment we had those, they were corrected.

Senator ELLENDER. Any complaints you made—

Mr. MICHAELS (interposing). Which needed immediate attention. To cite an example, a boy who happened to be a native of Hartford came in to our store. He is in training at the Great Lakes Naval Training Station on the Great Lakes. He brought in 5 individual sets of pens and pencils of a standard make which he had bought at the camp for \$8.40. We sell them for \$14. He had 5 in his hand. He was buying wholesale. I could not take them away to bring them down as concrete evidence that he had the pens and pencils with him and was bringing them home to dispose of them. That is perfectly all right to get a fine pen and pencil. I have no complaint about that, but I think that the quantity should be limited to horse-sense proportions.

#### PLACE OF MIDDLEMAN IN DISTRIBUTION OF WATCHES

Senator WHERRY. Any other questions?

Would you give us some more enlightenment about this middleman? What place does he fill in the distribution of these articles?

Mr. MICHAELS. When the post exchange service first became really active at the outbreak of the war, these post exchanges found it hard to find places to get watches. The importers did not want to give

all the watches to the post exchanges if they could avoid it. They would like to distribute a portion to their regular customers; but what they got in from the old country, because of lack of coordination of these efforts—there are four or five concerns, Kline & Mueller, at 15 Maiden Lane, and Orville & Co., and another, established by the post exchange service, called the Army Exchange Service—they got word to all the posts. These watches which were being sold for \$21.80 are exactly the same watches we retail for \$19.75, and the post exchange is not making any money.

Senator ELLENDER. Do you know whether the post exchange pays more to the importer than you do?

Mr. MICHAELS. No, when it is legitimately handled, they pay practically the same. In some cases they pay very, very much more.

Senator ELLENDER. What do you mean by legitimately handled? Do you mean to state that there is some rascality between the importer and the post exchange?

Mr. MICHAELS. I would not want to make a direct statement where the rascality is.

Senator ELLENDER. What would you term it?

Mr. MICHAELS. I do not want to point the finger at any individual.

Senator ELLENDER. We do not care where the chips fall. We want the facts, and if there is such a situation, we want to correct it.

Mr. MICHAELS. If I knew that, I would be only too happy to bring that before you.

Senator ELLENDER. Can you give us the names of any importers who cater to the post exchange trade?

Mr. MICHAELS. No, sir; I do not know who particularly caters to them. They must do business with them. There must be some of them who are turning goods over at exorbitant prices, or they may turn them over at legitimate prices and the jobber takes that profit.

What I mean by that, Senator, is that the watches as a rule leave the importers at the proper price. In between the importer and that wholesaler, who has just come in for the emergency period, and the post exchange there may be more than one handler. Sometimes the watches do not go to the post exchange. They find their way back to the retail dealers.

Senator ELLENDER. In normal times where does the importer do business?

Mr. MICHAELS. With the retailer.

Senator ELLENDER. How does the wholesaler come in?

Mr. MICHAELS. He is an importer and wholesaler at the same time.

Senator ELLENDER. I see.

#### PRIORITY RIGHTS OF EXCHANGES

Senator WHERRY. What priority rights do the exchanges have that the retailers do not have?

Mr. MICHAELS. Up to the time priorities were discontinued in the Army service they got A-10 priority. The retailer has no priority.

Senator WHERRY. You have none now?

Mr. MICHAELS. No, sir.

Senator WHERRY. And you have a supply of watches on hand?

Mr. MICHAELS. Very, very few. The point of the whole thing is that these importers for some reason or other may have watches on

hand, but they have so many priorities of orders they simply cannot fill other orders. I may say importer No. 1 would perhaps supply 50 distributors of watches around the country with his brand, and all of a sudden that a man gets an order for 500 or 1,000 watches, an ungodly quantity, on priorities. There have been instances where importers have had their stocks frozen completely because they could not fill these orders before the retail orders.

Senator ELLENDER. The question I want to ask is: How do they obtain these priorities?

Mr. MICHAELS. The post exchange order has automatic priority.

Senator WHERRY. Is that the priority order that obtains for these watches? When you say, "Here comes an order for a thousand," do they go to the post exchange?

Mr. MICHAELS. They do not tell you where they are going.

Senator WHERRY. I am asking you.

Mr. MICHAELS. They merely present the importer with a priority order.

Senator WHERRY. Who are the middlemen?

Mr. MICHAELS. Orville, Kline & Mueller, 15 Maiden Lane, New York, and May Malon, Chicago.

Senator WHERRY. Those priority orders are filled by these wholesalers or importers?

Mr. MICHAELS. Yes, sir.

Senator WHERRY. That is what I am asking you.

Mr. MICHAELS. Yes, sir.

Senator WHERRY. What does the middleman do with the watches?

Mr. MICHAELS. Supposedly he gives them to the post exchange; which post exchange he does not tell.

Senator WHERRY. How do they get the priority order?

#### PRIORITY ORDERS USED TO SECURE WATCHES FOR ILLEGAL DIVERSION TO RETAIL TRADE

Mr. MICHAELS. They are supposed to be backed up by a post exchange or canteen order. This one—and this happens to be one on which General Byron gave such immediate service—this is one for 100 ladies' watches. They never found their way to the post exchange at all. They went right back to the retailer who used them and to whom this very importer had refused to sell. They went back to the retail dealer, and he sold them on mail orders to soldiers abroad at prices which are absolutely out of all proportion to the worth of the merchandise.

Senator ELLENDER. As to these 100 ladies' watches, was there any priority given by the post exchange?

Mr. MICHAELS. It is right on here.

Senator ELLENDER. May I see that?

Mr. MICHAELS. Yes, sir.

Senator ELLENDER. That may be where the rascality comes in.

Mr. MICHAELS. We got quick action from General Byron, I assure you.

Senator ELLENDER. I know that, but what I am talking about is the method of getting around and getting these priorities, and then not using them.

Mr. MICHAELS. That is right, Senator.

Senator ELLENDER. Not letting those who give the priorities have the watches.

Mr. MICHAELS. That is right.

Senator ELLENDER. In other words, a roundabout way.

Mr. MICHAELS. With this thought I expressed before—of one association handling more than 90 percent of all watches brought into the country. These importers have all indicated to me that they are perfectly willing to give up whatever percentage of watches is required, provided they can prorate them, and the watches left over can be distributed equally among the retailers.

Senator WHERRY. Your testimony is that the retailer has no priority rating today?

Mr. MICHAELS. None whatever, sir.

Senator WHERRY. And the distribution is through the middleman, who gets the priority orders primarily from the post exchange?

Mr. MICHAELS. Yes.

Senator WHERRY. To whom does the post exchange retail these watches? Only to those in the military service, or do they go outside that service and retail the watches?

Mr. MICHAELS. I think 95 percent of them go right to the men in the service.

Senator WHERRY. Where they are entitled to go?

Mr. MICHAELS. Yes, and I think every care is taken within reason to see to it that civilians do not make purchases.

Senator WHERRY. Are you making the statement that 95 percent of the watches retailed at post exchanges move in proper channels?

Mr. MICHAELS. Yes.

Senator WHERRY. How about the other 5 percent?

Mr. MICHAELS. There is leakage in everything. I do not think there is any wrong done. I think if a soldier wants to get a friend of his a watch, probably he does.

Senator WHERRY. What are you complaining about?

Mr. MICHAELS. We are complaining about the fact that the watches are taken from importers, not required by post exchange use, and diverted to retail channels; and in the second place we are complaining about the fact that the watches are taken all from one house instead of being prorated over the industry.

Senator ELLENDER. Are you against the post exchange handling watches?

Mr. MICHAELS. No, sir.

Senator ELLENDER. You say that 95 percent of the watches ordered by the post exchanges are delivered to the post exchanges?

Mr. MICHAELS. No, sir; I did not say that. I said 95 percent of the watches which the post exchange gets find their way to the soldier, where they properly belong.

Senator ELLENDER. Let me ask you this: Here is purchase order No. 36097, dated December 14, 1942, shipped to Army Exchange Service, purchasing division, 25 West Forty-third Street, New York City.

Mr. MICHAELS. Yes.

Senator ELLENDER. And the vendor was L. Adels Co.?

Mr. MICHAELS. That is right.

Senator ELLENDER. For so many watches?

Mr. MICHAELS. Yes, sir.

Senator ELLENDER. In order for the Adels Co. to obtain this order, it had to go to that post exchange.

Mr. MICHAELS. No, sir; the post exchange comes to it.

Senator ELLENDER. All right.

Mr. MICHAELS. Still it makes a lot of difference.

Senator ELLENDER. Now it has to get a priority from the post exchange in order to file this order?

Mr. MICHAELS. The Adels Co., no. That is the priority order.

Senator ELLENDER. The only way the Adels Co. could dispose of these watches to the post exchange is for the post exchange to come to it and say, "We want so many watches."

Mr. MICHAELS. Yes.

Senator ELLENDER. "And you will obtain them for us."

Mr. MICHAELS. Yes.

Senator ELLENDER. And because it comes from the post exchange, the company has an A-10 rating?

Mr. MICHAELS. Yes, sir.

Senator ELLENDER. And that is how the watches came into being?

Mr. MICHAELS. Yes.

Senator ELLENDER. If you as an exporter would try—

Mr. MICHAELS. As a retailer.

Senator ELLENDER. You could not have done that?

Mr. MICHAELS. I cannot get one.

ARMY HAS DISCONTINUED PRIORITY ORDERS; OTHER SERVICES SHOULD DO  
LIKEWISE

Senator ELLENDER. And when you made a complaint to General Byron about this, did he investigate it?

Mr. MICHAELS. Yes, sir.

Senator ELLENDER. Did he object to the Army post exchange giving an order for something the Army post exchange should not have?

Mr. MICHAELS. Certainly. We got immediate action: No more priority orders in the Army.

Senator WHERRY. What about the Navy?

Mr. MICHAELS. That still goes on.

Senator WHERRY. That is the one you want discontinued?

Mr. MICHAELS. The Marine Corps and the Coast Guard, and any other branch of the service which has canteens or post exchanges.

Senator ELLENDER. To boil it down to brass tacks, let us get down to business. As I understand it, the jewelers do not mind the post exchanges handling watches.

Mr. MICHAELS. No, sir.

Senator ELLENDER. They can have all they want.

Mr. MICHAELS. That is putting it pretty broadly. We do not object to any of them having the proper amount.

Senator ELLENDER. We want to find out if they should be curtailed in any manner in which they interfere with your business.

Mr. MICHAELS. Yes, but we do not think it should be curtailed any substantial amount. If a man in the Army wants a watch, it does not make any difference if we never get one.



Senator ELLENDER. Your objection comes from this situation: So long as those watches are used at post exchanges to be sold to soldiers you have no objection—

Mr. MICHAELS. No objection to anything sold to soldiers.

Senator ELLENDER. It is where they are diverted.

Mr. MICHAELS. Yes, diverted.

Senator ELLENDER. You have not made the charge, but it sounds like a charge that you have in your mind, that a good many of these priorities are obtained and the watches do not find their way to the post exchanges.

Mr. MICHAELS. Yes, sir.

Senator ELLENDER. Do you have anything specific to give us on that point?

Mr. MICHAELS. That one I handed you.

Senator ELLENDER. Aside from that. This is ladies' watches.

Mr. MICHAELS. I am sure you understand that it is mighty hard to get those people.

Senator ELLENDER. If you do not know who could give us that information—again it is a thing that ought to be corrected. If a lot of jewelers around the country use post exchanges to get priorities, and after they get priorities, these goods do not find their way to the post exchanges, but the retailer gets them, the retail trade, there is something rotten somewhere, and it ought to be corrected. You agree with that?

Mr. MICHAELS. I say let them buy a certain number in the service of the post exchange.

Senator BUCK. Did you not say a moment ago only 5 percent?

#### BLACK MARKETS IN WATCHES

Mr. MICHAELS. Five percent of those which reach the post. A lot never reach the post.

I do not like to make these statements unless I can come to you with definite proof. I can get it in time.

I have been down on the Bowery where a certain amount of watches have been sold 10 times over in 1 hour, when these watches are intended for post exchanges. Who gave the order, and who it was intended for, I have not been able to find out.

Senator ELLENDER. Did you make a record of the 10 times transfer you spoke of?

Mr. MICHAELS. Anybody can see it any day he cares to. It is just a madhouse down there. New York is full of jewelers trying to get watches to keep them in existence. When they cannot get watches from legitimate channels, and when they go to the importer, he says, "I am sorry, I can't promise you anything." These are fellows having a small business. Watches are 30 percent of their business, and gold and silver have been cut down. They go down to these black markets which are located down on the Bowery around Canal Street, and they have a great big room with hundreds of booths, and everybody in that room has a watch to sell when legitimate channels cannot get them. They pay double the price they would pay to a legitimate importer, and those watches eventually find themselves on the market at just exactly double the ordinary retail figure. That is going on all the time. Any jeweler in America will tell you that.

Senator WHERRY. But it really does not have anything to do with what is under consideration here this morning—the post exchange merchandise in direct competition with the retailers.

Let me ask you this question: What percentage of the retail sales of watches is made by these middlemen who obtain these priorities, apparently from the post exchanges, and finally distribute them through the retailers? How much does that affect your business?

Mr. MICHAELS. That affects us very seriously.

Senator WHERRY. That is what I am asking. How much business do they do?

Mr. MICHAELS. That is very hard to estimate, except when you see priority orders given to these importers, and there are 75 or 100 watches, but you see orders for 500 watches, 800 watches, and 1,000 watches.

Senator WHERRY. Where do they get that priority?

Mr. MICHAELS. As to this Orville Co., I would like to know. The importer has no right to demand where the priority orders come from. He accepts them, and the responsibility is with the holder of the priority.

Senator ELLENDER. Would it not be an easy matter to trace where the particular order comes from, or where the watch comes from when it is imported? Does it not have a serial number?

Mr. MICHAELS. No, sir.

Senator ELLENDER. It does not?

Mr. MICHAELS. As a general rule, no number.

Senator ELLENDER. If I understand you—and if I am wrong, let me know.

Mr. MICHAELS. Yes.

Senator ELLENDER. It is your idea that someone obtained illegal priorities.

Mr. MICHAELS. Yes.

Senator ELLENDER. Through the post exchange.

Mr. MICHAELS. Yes.

Senator ELLENDER. And obtained a lot of these watches.

Mr. MICHAELS. Yes, sir.

Senator ELLENDER. And the watches are not distributed among those for whose accounts they are ordered. Am I right?

Mr. MICHAELS. That is right; yes, sir.

Senator ELLENDER. And then instead of these watches being handled by the post exchange, they find their way into various retail establishments throughout the country?

Mr. MICHAELS. That is right.

Senator ELLENDER. In what you term a black market?

Mr. MICHAELS. That is right.

Senator ELLENDER. That is a mighty serious situation in my mind, and I believe this committee ought to go a little further into that. If you have any evidence at all showing that such a condition exists and is being practiced by anybody, give us the names.

Mr. MICHAELS. I will certainly do so.

Senator ELLENDER. So we can take it up with the War Production Board.

Mr. MICHAELS. The only reason I cannot come with definite proof, except about an individual instance, is that I had but 1 day. I was down to see the General, and then I had 1 more day.

As far as the watch situation is concerned, I think the thing to do is to have the priorities from the post exchanges go directly to the watch importers. They will allot them properly, and the post exchanges will get service.

Senator BUCK. Is that the way it can be solved?

Mr. MICHAELS. Yes, sir, as far as the watch situation is concerned; and I have assurances from a large percentage of these importers that they would be willing to cooperate.

Senator WHERRY. In that line you seem to feel that the Army has corrected the situation.

Mr. MICHAELS. They have gone a great way toward correcting it.

#### ACTION TAKEN BY ARMY TO CORRECT PRIORITY ABUSES

Senator WHERRY. What action did the General take when he corrected this thing?

Mr. MICHAELS. Within a week priorities to Army post exchanges were stopped completely. Orders were given, as I understand it—I did not get this from the War Department—but as I understand it, strict orders were issued as to the sale of watches to civilians and as to what type of merchandise they could handle. They were told they could not handle ladies' watches or civilian watches. They were cut down to handling military watches.

Senator WHERRY. Well, that takes care of 5 percent.

Mr. MICHAELS. Yes.

Senator WHERRY. What action did the General take about the middlemen getting priorities they should not have and delivering them out to the retailers and not to the post exchanges? Anything?

Mr. MICHAELS. Not that I know of yet, sir.

Senator WHERRY. Five percent?

Mr. MICHAELS. It is not 5 percent. It is 5 percent of those which reach the post.

Senator WHERRY. Wait a moment. 5 percent of the jewelry that finally reaches the post, only 5 percent, is distributed illegally!

Mr. MICHAELS. Illegally.

Senator WHERRY. So 95 percent is handled properly. Is that true of the Army only?

Mr. MICHAELS. I do not know anything about the Navy.

Senator WHERRY. That is the Army?

Mr. MICHAELS. Yes, sir.

Senator WHERRY. What percentage do you say is being distributed by the Navy, Marine Corps, or any other branch of the military service?

Mr. MICHAELS. I presume it would not be much different from the Army. I think the intention to properly distribute those things is there.

Senator WHERRY. Outside of that 5 percent, your complaint is that the priorities obtained illegally provide distribution of watches through the retail trade, and that they have been obtained illegally. Therefore, it has not been a fair distribution or allocation of the watches.

Mr. MICHAELS. That is right, sir, and I also feel that a great many of these watches have found their way to the middleman instead of

going to the post in the other direction—and that is very much more than 5 percent.

Senator WHERRY. You do not want to venture an opinion on that?

Mr. MICHAELS. I venture an opinion that it is running as high as 50 percent, because no Army post in the world could use the quantities ordered. No Army post has use for two or three thousand watches. Ninety percent of the men already own watches.

Senator BUCK. Does not the officer who signs a priority know where they are going?

Mr. MICHAELS. I do not know. I would have an opinion, but certainly I do not know anything about it.

Senator WHERRY. Your opinion is that 50 percent of the jewelry that is distributed through these retailers has been obtained illegally?

Mr. MICHAELS. Oh, no, sir.

Senator WHERRY. But you did not wait until I asked my question. I mean 50 percent of the watches that are retailed through this illegitimate channel have been obtained through illegal priorities that apparently came from the post exchanges. Is that right?

Mr. MICHAELS. Yes, sir. The U. S. S. *Arcturus*—where she is located or where she is traveling I do not know—sent an order to a firm in New York for 18 assorted men's and women's karat gold watches. They are 14-karat gold watches. They are expensive. They are not military. They are not marine. They are not anything supported by a preference-rating certificate.

This is the letter in answer to this order which was received from the U. S. S. *Arcturus*:

We are in receipt of your letter of February 28 enclosing order for 18 assorted men's and women's karat gold watches, supported by preference-rating certificate.

Will you be good enough to advise us as to the conditions under which an A-1-a rating is assigned to this order in view of the provisions of Priorities Regulation 17 of the War Production Board, as amended December 8, 1942, and corollary ANMD Priority-Allocation Instructions No. 12, issued by the Army and Navy Munitions Board, December 12, 1942.

You are undoubtedly aware of the difficulties which today confront an importer of Swiss watches. For some time past, we have consistently refused all orders from new customers and have been compelled, by increasing demands, to institute a voluntary rationing system with our old customers. To supply you with the watches you desire means that we must withhold shipping that amount of goods on pending orders. Nevertheless, on receipt of the advices above requested, we will be glad to give this matter further consideration.

Senator ELLENDER. A while ago you mentioned an instance of a soldier who got some pencils and pens and tried to dispose of them on the outside.

Mr. MICHAELS. Yes, sir.

Senator ELLENDER. Do you know whether much of the goods including watches and so forth is sold on the outside?

Mr. MICHAELS. Yes.

Senator ELLENDER. That had been sold by the post exchange and afterward found its way to the black market?

Mr. MICHAELS. I think very, very little.

Senator ELLENDER. Thank you.

Senator WHERRY. One more question. Perhaps I did not hear you correctly, but when you made the statement with reference to the lieutenant who had four watches—

Mr. MICHAELS. I did not say anything about watches.

Senator WHERRY. What was it?

Mr. MICHAELS. Fountain pens.

Senator WHERRY. I thought it was watches.

Mr. MICHAELS. No, sir.

Senator WHERRY. Did you not say he wanted so much, which was a little higher price than the retail price, which was operating cost?

Mr. MICHAELS. No, sir.

Senator WHERRY. You did not say that?

Mr. MICHAELS. No, sir; I said there was a small operating cost to cover the cost of maintenance of the post exchange. The difference at which the post exchange sells to a soldier, and the price at which we sell to a soldier is almost the normal retail profit. The only difference is a slight cost of operating.

Senator ELLENDER. I think you further added that these importers catered to the post exchanges because they seemed to be able to get a better price for their goods than from the retailers.

Mr. MICHAELS. There are some few. That is an exception, however, rather than the rule.

Senator WHERRY. Did that soldier make the statement that there was a small operating cost?

Mr. MICHAELS. No, sir; I merely make that statement because, suppose a watch cost us \$10 and we sell it for \$18, whatever it is with tax added, they sell it for \$18 and probably add 25 cents for overhead.

Senator WHERRY. Did the soldier make that statement?

Mr. MICHAELS. No, sir; I made that statement.

Senator WHERRY. Do you know whether that is true or not?

Mr. MICHAELS. Yes; I think the post exchange service will confirm that.

Senator WHERRY. Any further questions? (No response.)

I will call the next witness, Mr. Louis Rothschild.

#### STATEMENT OF LOUIS ROTHSCHILD, WASHINGTON COUNSEL, NATIONAL ASSOCIATION OF RETAIL CLOTHIERS AND FURNISHERS

Senator WHERRY. Please state your name and whom you represent.

Mr. ROTHSCHILD. My name is Louis Rothschild. I am an attorney. My office is 917 Fifteenth Street, NW., Washington, D. C., and I am Washington counsel for the National Association of Retail Clothiers and Furnishers, which is the recognized national association of men's clothing and haberdashery stores.

Our membership is delighted, of course, that your committee is indicating this keen interest in the problems of the small business firms, and particularly the problems affecting this particular business.

#### WITNESS REPORTS PROGRESS ON PREVIOUS COMPLAINTS FROM CLOTHING ASSOCIATION

I had the privilege of appearing here, gentlemen, with a complaint, I think the 20th of January, at your previous hearing. At the present time I am appearing not with a complaint but with a report of progress on the complaint that we previously filed. At that time

I called to the attention of your committee the fact that post exchanges were not strictly complying—

Senator WHERRY. Just a moment, Mr. Rothschild. This is a subcommittee here on one thing, post exchange and the retail trade.

Mr. ROTHSCHILD. That is correct.

Senator WHERRY. That is what you are giving us?

Mr. ROTHSCHILD. That is what I am talking about now. I will be delighted to be interrupted whenever you wish.

Senator WHERRY. All right.

Mr. ROTHSCHILD. At that time I called attention to the fact that the statute governing post exchanges restricts them from selling articles other than articles of small personal need; that is the Army and Navy appropriation bill.

At that time I called attention primarily to the complaint that the post exchanges were enjoying an A-10 priority rating, while retailers selling the same commodities to soldiers and civilians and officers included did not have such a priority rating, so that as a practical matter the retail store was being hindered, whereas the post exchange was getting preference unfairly to the detriment of the retail stores.

Senator WHERRY. What kind of goods were those?

Mr. ROTHSCHILD. That was on all goods. The previous position of the War Department was that a post exchange was entitled to a priority of A-10 on any order, and the retailer had no priority rating.

Senator ELLENDER. Are we to understand that these post exchanges handle clothing other than what the soldiers wear?

Mr. ROTHSCHILD. No; that is not correct. The post exchange did handle primarily—

Senator ELLENDER (interposing). I am saying now. What do they handle now? I know there have been a lot of charges made in the past, and I think quite a few of the complaints have been taken care of. I am just wondering if you can tell this committee if you have any evidence to indicate to us whether these post exchanges handle clothing other than what the soldiers wear.

Mr. ROTHSCHILD. In the men's clothing and furnishing line they do not.

Senator ELLENDER. What is the complaint now?

Mr. ROTHSCHILD. I told you, Senator, I have no complaint today except to report progress on the complaint previously made.

Senator ELLENDER. In other words, the complaints previously made have in a measure been corrected.

Mr. ROTHSCHILD. Tremendous steps have been taken toward correction, and no small credit is due to this committee.

Senator WHERRY. Does that refer also then to the Navy and Marine Corps. or just the Army?

Mr. ROTHSCHILD. May I come to that in just a second?

Senator WHERRY. Yes.

**ARMY EXCHANGE SERVICE HAS ELIMINATED ALL COMPETITIVE PRIORITIES  
AND RESTRICTED SALES TO CIVILIANS**

Mr. ROTHSCHILD. First I want to call the attention of the committee to the order issued February 2, 1943, by the Army Exchange Service, which order eliminated priority ratings of A-10 except on

certain specific items of small personal needs, such as cigarettes, and items of that kind. It removes priority rating on all clothing and furnishing items with one general exception to which we have no objection, that post exchanges abroad have priority ratings on everything. No one can object to that.

This order came out on February 22. Shortly before that an order was issued restricting the operations of post exchanges in sales to civilians, which is a splendid step.

All of this happened after January 20. Since the January 20 meeting General Byron met with the Retailers National Council, which is a group of some 10 national retail trade associations, and we all let our hair down together, so to speak, and discussed our problems, and these orders shortly thereafter came out.

I think tremendous steps and progress have been made.

Senator ELLENDER. Now, Mr. Rothschild, on January 20, as you just indicated, we heard, as I recall, all of the complaints or most of them.

Mr. ROTHSCHILD. That is correct.

Senator ELLENDER. And you are now coming in here to report that most of the complaints made then have now been corrected or rectified.

Mr. ROTHSCHILD. Or are on the way to quick rectification.

#### OTHER SERVICES SHOULD ADOPT SAME POLICY AS ARMY

Senator ELLENDER. Have you any additional charges to make with respect to this whole situation?

Mr. ROTHSCHILD. I have one additional thing to urge.

Senator ELLENDER. All right.

Mr. ROTHSCHILD. And that is that the Navy Department, Marine Corps, and Coast Guard give consideration to adopting the same policy that has been adopted by the War Department.

Senator WHERRY. In other words, they have not made an attempt to correct the situation as the Army has done.

Mr. ROTHSCHILD. I am confident they are giving it study.

Senator WHERRY. Do you know anything about a bill introduced in the Senate, Senate 853? You are attorney for this group.

Mr. ROTHSCHILD. Yes; but I hate to display my ignorance in public. I do not know anything about it, Senator.

Senator WHERRY. This bill—I think you had better acquaint yourself with the bill. I scanned over it rather hurriedly. I guess it applies to goods sold only on ships.

Mr. ROTHSCHILD. I will look up the bill, Senator.

Senator WHERRY. It possibly does not involve the retail trade here.

Mr. ROTHSCHILD. Thank you very much.

Senator WHERRY. But your idea now is that the only way this committee can be of any further service is to say that the Navy, Marine Corps, and all branches of the military service other than the Army take the same steps as those taken by the Army to correct the unfair competition between post exchange and retail trade.

Mr. ROTHSCHILD. If I may make one amendment in agreement with your statement.

Senator WHERRY. All right.

Mr. ROTHSCHILD. But that is the prime reason.

Senator WHERRY. Would you offer any further suggestions?

Mr. ROTHSCHILD. Not at the present time. I think it is only proper, when the officers of the Army, Navy, and Marine Corps are extending the hand of cooperation to the retail trade, to state that it is somewhat unfair for us to complain when we are getting along together and making real progress.

Senator WHERRY. You are speaking for the clothing association of retail dealers throughout the United States?

Mr. ROTHSCHILD. That is correct.

Senator WHERRY. Unless you have something further, we want to get a few more witnesses.

Mr. ROTHSCHILD. That is all I had, Senator.

Senator WHERRY. Thank you very much.

#### STATEMENT OF ROWLAND JONES, WASHINGTON REPRESENTATIVE, NATIONAL ASSOCIATION OF RETAIL DRUGGISTS

Senator WHERRY. Give your name and whom you represent, please.

Mr. JONES. My name is Rowland Jones. I am an attorney and representative of the National Association of Retail Druggists, an organization of 27,000 retail druggists.

Early in November a large volume of complaints began to come in from our membership in regard to abuses in the post exchanges.

At that time we had a conference with General Byron and officials in his office, and I want to say we were received with the greatest courtesy and surprising understanding of what the problem was.

#### ARMY EXCHANGE CONFERENCE WITH DRUGGISTS RESULTED IN LIMITATIONS OF PRIORITIES AND SALES TO CIVILIANS

We are very gratified with the orders that have now come out limiting priorities, and we are gratified with the limitations which were placed in effect upon sales to civilians in Army post stores.

The sales to civilians were previously the source of the greatest complaint we had, and while we still get a few complaints, we feel at this time that General Byron and his staff are conscientiously at work to eliminate the evils that have been complained about, and at this time we have no further formal complaint to register.

Senator WHERRY. That covers the Army.

Mr. JONES. That covers the Army. We have had no complaints in our office here and in Chicago in regard to abuses from the Navy and Marine Corps and Maritime Commission. I think probably the reason for that is that fewer people are involved, and these stations are not so close to our people.

Senator BUCK. You do not have anything to complain about at this time, have you?

#### POSSIBLE THREAT OF POST-WAR USE OF ACCUMULATED STOCKS AS LOSS- LEADER ITEMS

Mr. JONES. The only thing I have to complain about is that in the trade we hear rumors of numerous purchases of many categories of goods by these Army post exchange services, such as semiperishable commodities, like candy and gum. We do know that candy and



gum have practically disappeared from the civilian market, and we are wondering if in an excess of zeal these Army purchasing agents are not purchasing more goods than they need for the reasonably current requirements, thus building up large inventories of these goods to the detriment not only of the private retailers, but also to the detriment of the civilian population as well.

We remember very well after the last war when perfectly enormous stocks of many of these things were thrown on the auction market. That was a very serious thing, because they were bought by the loss-leader type of dealer who used those goods. The only suggestion is that we think the committee might make some inquiry in regard to these inventories.

Senator BUCK. Those goods you refer to are goods that might be classed as perishable.

Mr. JONES. Or semiperishable, and also consumer goods which are not perishable, such as razor blades. After the war billions and billions of standard razor blades were thrown on the market and gobbled up by people who used them as loss-leader articles. That is the reason we bring it before the committee.

Senator BUCK. It should be very easy for this committee to ascertain what these inventories may be.

Mr. JONES. That is right. We wonder where all the candy and gum are going, because they are not going through the retail stores.

#### SITUATION AS TO ILLEGAL USE OF PRIORITIES HAS BEEN IMPROVED

Senator WHERRY. Do you mean to state that in the distribution of gum these men obtain their priorities illegally, and it is finding its way through retail channels?

Mr. JONES. As the previous witness has stated, the trade is full of rumors of that kind. We know many soldiers are buying candy and gum in post exchanges and taking them downtown and peddling them at a small profit to retailers. I do not know how that can be stopped.

Senator WHERRY. Have you any suggestions?

Mr. JONES. Unless they go back to the old method of having a soldier sign a slip that the goods are for his own personal use. I realize that is a tremendous handicap considering the number of men involved.

Senator ELLENDER. It might be a way to correct it, and if it is the only way, I would like to see it done.

Mr. JONES. We would like to see something done.

Senator WHERRY. Do you know the name of any person who is getting these priorities illegally?

Mr. JONES. No, sir.

Senator WHERRY. You do not know of any?

Mr. JONES. That is very hard to get unless we hire private detectives, and we do not want to take that step and have not seen fit to do it. We think that by and large the situation has been enormously improved.

Senator WHERRY. And practically none of your merchandise is distributed through the Navy or Marines?

Mr. JONES. Oh, yes.

## NO COMPLAINTS AS TO NAVY OR MARINE CORPS EXCHANGES

Senator WHERRY. I understood that you have had no complaints.

Mr. JONES. They sell all our merchandise, but we have had no complaint of that type about them.

Senator WHERRY. Not any?

Mr. JONES. Not any.

Senator BUCK. What do you attribute that to?

Mr. JONES. I think one reason is the difference in the number of men involved; and the second reason is that most of those Navy stations are farther removed from the retail trade centers.

Senator WHERRY. Are there any other questions anybody would like to ask Mr. Jones?

If not, we will call our last witness for this morning, Mr. Morris Thompson, representing the National Retail Dry Goods Association.

STATEMENT OF MORRIS THOMPSON, REPRESENTING THE  
NATIONAL RETAIL DRY GOODS ASSOCIATION

Senator WHERRY. Give your name and whom you represent.

Mr. THOMPSON. Morris Thompson, director of the division of small trade goods, National Retail Dry Goods Association.

This is a national association, and my particular division represents the small trade goods, apparel shops, specialty goods, and small department stores.

Senator ELLENDER. What is your position?

Mr. THOMPSON. I am director.

Senator ELLENDER. In Washington?

Mr. THOMPSON. No, sir; the New York office, at 101 West Thirty-first Street.

Our story is very similar to those of the two preceding witnesses.

When we appeared here in January, and in subsequent correspondence with the committee, we had some complaint about the operation of the post exchange service.

In subsequent weeks a good many of those complaints have been met and corrected to our complete satisfaction by General Byron and his staff.

Since we have made the complaint, we have felt constrained to make a report of progress, and I think that is true of the other trade association representatives.

Senator ELLENDER. This report of progress could very well have been done by mail and obtained the same results.

SERVICES OF NAVAL STORES SHOULD NOT BE EXTENDED TO CIVILIAN  
EMPLOYEES IF RETAIL FACILITIES ARE AVAILABLE

Mr. THOMPSON. Correct. There is one remark that I would like to make about Senate bill 853, which I think does apply to sales other than on ships. It applies to sales in any naval station, and as I understand the bill and the wording, I might say it could be clarified by an addition by your committee to make it explicit that when retail facilities are available to civilian employees of naval posts, that

the services of the naval stores be not extended. In other words, there are some instances where civilian employees work at naval posts and live quite some distance from the post, and yet retail facilities are available to them at the place they live.

Senator WHERRY. Let me ask this question.

Mr. THOMPSON. Yes.

Senator WHERRY. Is progress being made by your association of the retailers you represent with the Navy and the Marine Corps and the military services the same as is being made with the Army?

Mr. THOMPSON. Again I am sorry to say we have no report.

Senator WHERRY. No complaints at all!

Mr. THOMPSON. No reports other than from the Army.

Senator WHERRY. Is that due to the fact that there are a fewer number in the Navy, and the centers of trade are away from retail centers?

Mr. THOMPSON. That is largely true.

Senator WHERRY. And the only thing you want to say is that satisfactory progress has been made since last January.

Mr. THOMPSON. And that S. 853 might be clarified.

Senator WHERRY. Do you want to offer an amendment to that as to how it should be corrected?

Mr. THOMPSON. I think the language should be made specific. When the majority of civilian employees of naval stations live within access of retail facilities, regardless of their distance from the station itself, the service of the ship's stores should not be extended as contemplated in the bill. Otherwise we have no objection to it.

#### OVERHEAD WRITE-UP OF EXCHANGES JUSTIFIED

Senator WHERRY. There is one thing that came from the first witness, I think. I have it in the back of my head. I cannot understand why there should be any overhead write-up on articles sold out of the post exchanges.

Mr. THOMPSON. They are charged rent in the post.

Senator WHERRY. Rent!

Mr. THOMPSON. They have certain expenses. They have civilian employees, I understand, in the post, whose salaries must be charged against something, and so overhead must be charged to take care of it.

Senator WHERRY. Does that charge exactly cover expenses, or to your knowledge is any profit made out of that?

Mr. THOMPSON. They are allowed only limited profit.

Senator WHERRY. That is to take care of the overhead, and they are not allowed to charge anything in addition!

Mr. THOMPSON. That is correct.

Senator WHERRY. You think there has been no abuse of that?

Mr. THOMPSON. They have to kind of struggle to get by, and I understand they have had difficulty in making a profit.

Senator WHERRY. In other words, you think there are some post exchanges that lost money, or rather more post exchanges that lose money than who make money.

Mr. THOMPSON. I have no knowledge.

Senator WHERRY. It is something I was interested in.

Mr. THOMPSON. I think they do a pretty good job breaking even.

Senator WHERRY. You have no complaint about that?

POST-WAR PLANNING TO AVOID USE OF SURPLUS STOCKS IN CUT-RATE  
COMPETITION

Mr. THOMPSON. No, sir; and with your leave I would like to develop a question raised by Mr. Jones, and that is disposing of post exchange inventories and old Army and Navy supplies. I think we can indulge in a little post-war planning for small business, as the history of the last war was grievous to the small businessman who found himself, after having struggled through the war, in a condition where he was faced with a cut-rate competitor in a cheap location selling all types of surplus Army and Navy articles at prices which he could demand because he bought them at auction at ridiculous prices. I offer the services of my association in any plan the committee may see fit to discuss now or at any future time in regard to this problem.

Senator WHERRY. Any questions?

Thank you, Mr. Thompson.

That will conclude the testimony for this morning. We have an important session of the Senate, and we should all be there at noon. One witness did not come because he was ill, and he was the last one. We will stand in recess until tomorrow morning at 10:30.

(At 11:40 a. m., a recess was taken until Wednesday, March 17, 1943, at 10:30 a. m.)

# PROBLEMS OF AMERICAN SMALL BUSINESS

WEDNESDAY, MARCH 17, 1943

UNITED STATES SENATE,  
SPECIAL COMMITTEE TO STUDY AND SURVEY  
PROBLEMS OF SMALL BUSINESS ENTERPRISES,  
*Washington, D. C.*

The committee met at 10:30 a. m., in Room 357, Senate Office Building, Senator Kenneth S. Wherry, presiding.

Present: Senators Wherry (presiding), Buck, Wilson, Capper, and Ellender.

## STATEMENT BY THE CHAIRMAN

Senator WHERRY. At yesterday's hearing the committee heard testimony on post exchanges and ship's service stores from the representatives of four important retail trade associations, the American National Retail Jewelers Association, the National Association of Retail Clothiers and Furnishers, the National Association of Retail Drug-gists, and the National Retail Dry Goods Association.

This testimony was exceedingly encouraging, because it indicated that the Army has effectuated a number of improvements in its post exchange policies. Moreover, it was brought out that these improvements have all taken place since the January hearing of the Small Business Committee, when a number of witnesses brought up post exchange abuses in a general discussion of retailers' problems. I am glad the record shows that the situation is better today. Too often the complaints brought to congressional committees are fully aired, but the constructive results that are obtained are never brought to public attention.

There are still improvements that may have to be made. First of all, some of yesterday's witnesses want to know why the Navy, Marine, and Coast Guard services cannot adopt the same policies that have recently been enunciated by the Army. Why cannot the other services, like the Army, limit the use of priorities to a limited number of items? Why can they not, like the Army, control post exchange sales to civilians by issuing special cards to those civilian employees entitled to purchase at the exchanges?

Second, a number of questions have been raised about additional improvements in Army post exchange practices. One of the witnesses yesterday claimed that a considerable proportion of watches ordered on post exchange priorities found their way into the black market. Could this be stopped by the Army's having priority orders called in for that portion of an order not actually delivered to the post exchanges?

Other witnesses have expressed their desire to know how large are the inventories kept by the post exchanges, and what plans there are for the disposal of post exchange merchandise when the war is over.

Another question that deserves discussion is the extent to which our boys in the services might be provided with shopping services. I am informed that the Army exchange in Oklahoma City, together with the Oklahoma City Retailers' Association, has hired a young woman to shop in town for the soldiers, buying merchandise not available at the post from local merchants. How has this worked out! Should it be extended!

Today we have with us representatives of the Army Exchange Service, the Navy Ship's Service Stores, the Marine Post Exchanges, and the United States Coast Guard stores, and I am looking forward to a constructive discussion of the questions that have been raised.

I will ask for our first witness, from the Army, Col. Francis R. Kerr.

**STATEMENT OF COL. FRANCIS R. KERR, INFANTRY RESERVE,  
UNITED STATES ARMY, ACTING CHIEF OF ARMY EXCHANGE  
SERVICE**

Senator **WHERRY**. Will you please give your name, Colonel, and all the data necessary!

Colonel **KERR**. My name is Francis R. Kerr. I am Colonel, Infantry Reserve, and I am Acting Chief of the Army Exchange Service in the absence of the Chief, General Byron, who is on an extended inspection trip overseas.

In the hearing yesterday it seemed apparent to us that possibly the mission and the operation of exchanges might not be thoroughly understood, and if the committee will permit, I would like very briefly to discuss this particular phase.

**PURPOSE AND OPERATION OF ARMY EXCHANGE SERVICE**

Prior to July of 1941, exchanges were operated as individual stores in the various posts. There was no relationship between the policies of one exchange and the policies of its neighboring exchange, either as to procedure or as to their business methods.

With the idea of securing uniformity and establishing a more effective system, in July of 1941 there was published Army Regulations 201-65, the basic regulation upon which exchanges now operate, and there was established the Army Exchange Service.

The Army Exchange Service is a staff agency of the War Department under the Chief of Administrative Services, who in turn is under the Commanding General of the Services of Supply. It is charged with the function of determining the plans, policies, and procedure under which exchanges will operate. It carries on this administration over the nine service commands through the agency of the exchange branch officer, who exercises supervision over the independent exchanges at the various posts, camps, and stations. These exchanges are autonomous units. They do their own purchasing and their own stores' operation.

We have no statute setting us up. We are under strict War Department regulations. We do not operate under appropriated funds, nor do we have any public moneys.

Our headquarters organization, that is, the Army Exchange Service, is located in Washington, and its procurement and finance divisions in New York City are maintained through a small contribution, one-half of 1 percent of the gross sales contributed by the individual exchanges. I will refer to that later in discussing their profits.

The profits of the exchange are limited to  $7\frac{1}{2}$  percent of the direct sales. Now, that profit is broken up into the one-half of 1 percent to which I referred, to a contribution, usually based at 50 cents per man per organization per month, that money not going to the man himself, but going entirely to his organization, to be used for such things as additional books for his day room, musical instruments, or to augment his mess on certain special occasions, to a contribution to the chaplain's fund, and to the post athletic fund, the balance going into a surplus to be used for expansion of the exchange.

As the committee appreciates, no part of that profit accrues to any officer. It is entirely the enlisted man's provision.

The Army Exchange Service controls the inventories under a basic policy limiting the inventories of any exchange to 50 percent of his sales volume per month. In other words, we expect and do attain what seems to retail merchandisers to be impossible. We get two turnovers in a month, and at the present moment, if the war were to cease and we were to stop all purchases, the inventories in our exchanges would not last 3 weeks.

This is based on the figures for the month of January, so that I do not think that we have a problem as to post-war liquidation.

During our operation and because of our expansion, we have over 591 main exchanges in the United States, with numerous branches, and we have exchanges wherever soldiers are found overseas. It has been inevitable that there would be complaints coming in to us.

These complaints have three rather significant facts that should be brought out. In the first place our impact on the retail trade is small. Our sales volume shows that we have less than three-quarters of 1 percent of the total retail volume, and as to complaints themselves, and the merchandise affected, the complaints are directed toward less than 2 percent of our total sales.

Another characteristic is that there is no complaint as to overseas operation. It is merely in the instances where the exchange is adjacent to a community where a retail store is existing.

#### COMPLAINTS ON SALES TO CIVILIANS

Our classes of complaints break down into four or five main categories. The first is the sales to civilians. A remedy for that was to make a very strict rule as to the persons who could buy at exchanges.

The persons who may buy at the exchange are officers or enlisted men and civilians permanently employed by the Army who by virtue of the fact that it is impractical for them to purchase in retail stores must be afforded these privileges. These privileges are extended by written order of the commanding officer of the post, camp, or station.

Then there is one small group of civilians, those employed regularly by the Army, who are not entitled to exchange privileges, but who are entitled to purchase articles of food, tobacco products, or candy which they will consume on the post right in the exchange.

For example, a workman right on a construction project might need to buy cigarettes during the day. He is allowed to come in and purchase them, something he may consume there, or he may buy a sandwich in our restaurant, but he is not accorded full exchange privileges.

Another class of complaint—

Senator ELLENDER (interposing). How about the wives of soldiers and the officers? They are given the privilege also, are they not?

Colonel KERR. As to the first class, yes; the dependents are permitted to have full exchange privileges, but not the dependents of the latter group, the people who are domiciled off the post and who are not accorded full privileges by the commanding officer.

Senator WHERRY. This written order is given to civilians, and I imagine it is in the form of a card.

Colonel KERR. Yes; it is in the form of a card signed by the commanding officer or his adjutant, authorizing the purchase.

Senator WHERRY. How is this program of issuing cards to civilians working out?

Colonel KERR. It is working out very satisfactorily. In fact, we have had letters from chambers of commerce commenting on the fact that we were not infringing on sales.

Senator WHERRY. Were you here yesterday morning, and did you hear the testimony of Mr. Michaels, the first witness?

Colonel KERR. Yes.

Senator WHERRY. He made the statement that he thought 95 percent of the sales to civilians had been eliminated, that is, 95 percent of the post exchange sales were made in proper channels. Would you say that is about correct, or would you want to add more to that, or less?

Colonel KERR. I would like to raise that percentage, sir.

Senator WHERRY. That is what I would like to have you state.

#### VERY FEW UNAUTHORIZED SALES TO CIVILIANS

Colonel KERR. Yes, sir. I think there are very few sales to civilians, unauthorized sales. Wherever a sale is made of that character, we are more than anxious to get knowledge of it, because the man is subject almost immediately to punishment. It is an abuse which we want to stamp out. We are very anxious to get the complaints, and we will act upon them immediately.

Senator ELLENDER. I may be in error as to Mr. Michaels' testimony, but as I recall, he had in mind the sale of watches.

As I remember, he said that 95 percent of the watches that were ordered by post-exchanges and distributed by the post exchanges were sold there, and just about 5 percent of the watches were sold to civilians.

Colonel KERR. If I might, sir, I would like to touch that case as a separate case, and I think I can cover that whole problem.

Senator ELLENDER. There is one more question I would like to ask with respect to securing goods for the dependents of soldiers and officers.



As I understand, the post caters to soldiers and to the officers, and does not try to obtain goods except those which would ordinarily be used by officers and soldiers.

Colonel KERR. That is right, sir.

Senator ELLENDER. Has any effort been made to obtain goods for the use of the wives of officers and their dependents?

Colonel KERR. There previously was permission through the use of the special order, where the commander issued a special order and procured the merchandise, charging a small fee for that service.

We now have restricted the use of the special order so that special orders may be employed only for the personal interests of the officer or the enlisted man. That excludes that type of operation.

Senator ELLENDER. You do not carry a stock of goods at all for the dependents?

#### STOCK OF WOMEN'S GOODS NEEDED FOR WAAC'S, NURSES, AND FOR GIFTS

Colonel KERR. No, sir; but then we do carry—and I would like to be clear on this. There are posts where we have WAAC organizations or nurses. Yesterday a statement was made that we carried lingerie and hosiery. That is true; we do. We also carry compacts and lipstick. Now we carry them for the people whom we are serving, the WAAC's and nurses who are members of our organization, and also we carry them as gift items. We find that men like to send gifts home to their parents. We limit the amount of this material that we carry, and also limit the price. Our price is low. We do not go in for expensive articles of this character.

#### ARMY EXCHANGE SHOPPING SERVICE FOR GOODS NOT CARRIED AT POST EXCHANGES

Now, as to the type of merchandise the Senator referred to in his opening remarks, as to the shopping service. We find that has been very helpful in allowing us to carry out the policy strictly and still satisfy the enlisted man who wants to give a present to some member of his family.

The plan is this: There is a young lady employed by the exchange who is constantly available for enlisted men or officers who want a purchase made. She takes their orders and their money, goes downtown to a local merchant, procures the merchandise at his price without any discount or exchange, and sees to it that the merchandise is delivered to the officer or enlisted man.

The merchants in Oklahoma City and the Chamber of Commerce have said it was a splendid thing for them, and that they have benefited by thousands of dollars. We have recommended in our exchange force for the Eighth Service Command, which comprises most of the West and the middle South, that this type of operation be extended, and that other exchanges take advantage of it.

I think the exchange service—I think I speak very definitely for General Byron—would be interested in knowing what the committee's attitude to that type of operation would be.

We ourselves feel that it is definitely helpful to the merchants.

## PRIORITIES RESTRICTED TO REPAIRS, EQUIPMENT, AND SMALL ITEMS

Under War Production Board authority we were permitted to issue priorities on certain types of exchange merchandise. I think the date is correct, on January 18 we were restricted, so that now we may issue priorities only on articles used in repairs of machinery or equipment in the exchange, such as plumbing supplies, soda fountain equipment, on candy, chewing gum, ice cream, and on certain essential toilet articles and cleaning materials. I think I have given the list completely.

Senator BUCK. Who issues the other priority orders?

Colonel KERR. We are not permitted to issue any other priority orders, and that is the order of the War Department, so the instance that was cited yesterday cannot happen again in the future. We have no authority for any domestic exchange to issue such a priority. That is not true of the overseas exchanges, and there is no objection to that. We feel the soldier overseas should get everything he needs.

Senator BUCK. I understand from what you say that if anybody wants to buy a watch, there will not be any in the exchange.

Colonel KERR. Ultimately there will not. When the present stocks are out, we will not be able to get them.

That brings up another point.

Yesterday there was worry as to the disappearance of candy and chewing gum. I believe the production has been curtailed for one thing. At the present time we are permitted to get it, and I know from my own experience that it is a very important thing for a soldier to be able to get a few little things that bring home life to him, and give him comfort. If he is in the desert training or the isolated stations along the coast line, or the Northwest, far removed from civilization, the little civilian comfort we can contribute does a great deal for him.

Now, by this order, there are disappearing from our merchandise stocks some things which can be classified as really soldier essentials. We are losing, for example, our opportunity to procure flashlights, sun glasses, and the little aprons that the soldier who has to do his washing in a river or creek uses to put his toilet articles in. We have no priority on those. We cannot procure them, but they can be found in the local stores, and if the soldier is in a remote station, he cannot go to that store to get his material. So there is always that danger in taking away priorities, that you do make it impossible to perform our mission completely.

Senator BUCK. Why were these voluntarily taken away?

## SUPPLIES CURTAILED TO GET THINGS TO SOLDIERS OVERSEAS

Colonel KERR. I think our basic thought was first of all that it was necessary to curtail in order to get things to the soldier overseas. We were perfectly willing that such curtailment be had. Our main thought was that the soldier overseas was essential, and then I believe the complaints naturally had a bearing on that, too.

Now, as to this previous condition, as to the watch situation, the order could possibly have been given by the exchange officer, and the priority properly placed. If the vendor chose to fill only part

of that, procure the merchandise and divert it to some other channel, he could have done that perfectly well, and then notified the exchange officer that he could not procure all of his purchases for him. We would have had no control over it. The exchange officer should follow up his order, naturally, and if he does not get delivery on his order, he should cancel it, but there is always the possibility of abuse there, or there was a possibility of abuse by someone who wanted to take advantage of the War Production Board's priority rating. However, that has been stopped.

Senator ELLENDER. Have any actual abuses come to your attention, Colonel?

Colonel KERR. This is the only instance I have heard of it, sir. We would be more than pleased to get any indication of abuses in this operation, and any evidence that we can. We pick our personnel very carefully, but we do not intend to have things going on in our organization that are not as they should be. We will stop any abuses that we get knowledge of.

Senator WHERRY. How would you attempt to make a tighter control?

Colonel KERR. We do not have the problem. The priority is gone.

Senator ELLENDER. You mean on watches?

Colonel KERR. Priority on everything, except a few things like candy, chewing gum, ice cream, and cleaning materials—toilet articles.

Senator WHERRY. Is that true of the Navy?

Colonel KERR. I do not know about that.

Senator WHERRY. All right.

Colonel KERR. General Byron had prepared a rather complete statement of the complaints, breaking them down into characteristics and classes, and outlining in more detail than I have this whole problem. If the committee would care to have this, I shall be glad to leave it.

Senator WHERRY. We would like to have it filed for the record.

(The report of General Byron is inserted in the record on p. 2288, following Colonel Kerr's statement.)

Senator BUCK. That seems to be a very good report, Colonel. It answers one or two questions brought up at yesterday's meeting.

Senator WHERRY. Would you restate for Senator Ellender's benefit, he was not here—

Senator ELLENDER. It is in the record.

#### POST EXCHANGE PROFITS GO TO CANTEEN FUND FOR ENLISTED MEN

Senator WHERRY. I would like to ask a question about it now, about the money that is charged in the post exchange.

You explained there was a small charge made, and the money goes into a canteen fund for the benefit of the men. Is that right, books and reading material?

Colonel KERR. Yes; it goes to the organization fund for the use of the enlisted men.

Senator WHERRY. About what charge is made for that?

Colonel KERR. You mean what is our contribution from the exchange?

Senator WHERRY. Yes.

Colonel KERR. Fifty cents per man, and if you have a 100-man organization, that organization would receive \$50 per month.

Senator WHERRY. And that is used for the benefit of the men and not the officers?

Colonel KERR. For the men only. The officers have no share.

Senator WHERRY. Do you know of any case where it has been abused?

Colonel KERR. No, sir; I do not. It is given to a commissioned officer whose funds are audited by the Inspector General, so the record is very clear there, sir.

Senator WHERRY. Do you have the order, No. 18, I believe it is, of February 22, that sets out in detail these procedures, and so forth, and so on?

Colonel KERR. I believe we have.

Senator WHERRY. Would you mind filing a copy for the record, giving the information of what is on your priority list and what not?

Colonel KERR. Yes.

(Army Exchange Bulletin No. 10, referred to, is inserted in the record on p. 2296, following Colonel Kerr's statement.)

PRESENTATION CONCERNING COMPLAINTS INVOLVING THE OPERATION OF ARMY EXCHANGES UNDER THE ARMY EXCHANGE SERVICE

CONTENTS

- |   |   |
|---|---|
| <p>I. History.</p> <p>II. Organization of Services of Supply with Respect to the Army Exchange Service.</p> <p>III. Army Regulation AR 210-65.</p> <p>IV. Establishment of Exchanges.</p> | <p>V. Purposes of Exchanges.</p> <p>VI. General Accusations.</p> <p>VII. Discussion.</p> <p>VIII. Specific Accusations.</p> <p>IX. General Comment.</p> |
|---|---|

*I. History of Army Exchange Service.*

The Army Exchange Service is new, having been activated June 6, 1941. However, exchanges and their predecessors are as old in history as the armies they were designed to serve. In Caesar's time articles and supplies for soldiers, other than those issued, were warehoused in the "Via Quintana," the Fifth Avenue of Ancient Rome, and the name "canteen" which is often used generically to cover all post exchange functions derives from that ancient street. The soldier's natural craving for diversion and variety always has, and always will, create a need for such extra military activities.

It was the usual custom to permit sutlers, camp followers, contractors, and others who sought to supply soldiers with those articles not issued to them, to accompany the armies for trading purposes. The exorbitant prices, usurious credit, and frequently immoral practices of camp followers and suppliers of one commodity or another were conducive to many unpleasant incidents. In order to improve trading conditions and at the same time maintain control over the activities of these traders, the office of "sutler" was created which granted the holders of such office the privilege of accompanying the Army for the purpose of trading with the military personnel. These sutlers were under the control and protection of the Army. This did not, however, improve the conditions that existed prior to the establishment of such office. In fact the unscrupulous and corrupt practices of these sutlers necessitated corrective action. On July 28, 1866, the office of sutler was abolished.

In order to make available for the military personnel the services rendered by the sutlers, the Commanding General of the Army was authorized to permit a trading establishment, under the control and protection of the Army, to be maintained at a military post. Such post-trader was permitted to sell to the military personnel those essential items not issued by the commissary depart-

ment. In 1870 this authority was taken from the Commanding General of the Army and vested in the Secretary of War. On January 28, 1893, post-traderships were abolished.

The abolishment of the post-traderships was followed by the promulgation by the War Department of Post Exchange Regulations, published by General Order 46, Headquarters of the Army, July 25, 1895. The provisions of this order required the establishment of post exchanges at every post and the commanders of such posts were charged with instituting the same; setting apart, renting, or constructing suitable buildings or rooms for such post exchanges and to detail an officer to be designated as "officer in charge," to manage the business and affairs of such exchanges under the superintendence of a council consisting of three officers.

Exchanges established after 1895, pursuant to Army Regulations pertaining thereto, were usually company exchanges. At larger posts several companies might combine, each company making an exchange. As a result, many exchanges were organized at the same military post. Each exchange was under the immediate supervision of the "officer in charge," appointed by the post commander. They operated independently of each other. They formulated their own operating and merchandising procedures and installed their own accounting systems. No uniformity of procedure existed among the different exchanges and there was no centralized staff supervision over all exchanges. Officers detailed as exchange officers were usually unfamiliar with business methods and procedures. The result was that exchanges were operated inefficiently and failed to perform the mission for which they had been established.

In 1941 the Chief of Staff requested that a study be made of the post exchange system for the purpose of determining how best to organize the post exchanges for the war effort. An advisory committee of outstanding businessmen was appointed to make a study of this problem. On April 4, 1941, the advisory committee submitted a report of their study.

To attempt to remedy the deficiencies existing in the operation of post exchanges, to bring all exchanges under a single staff supervision, and to install tried, proved, and efficient retail operating practices and procedures and uniform system of accounting into exchanges, plans were formulated for the activation within the War Department of an Army Exchange Service.

On June 6, 1941, there was established the Army Exchange Service for the purpose of developing, administering, and supervising throughout Service and other local commands a system of uniform and coordinated operations for Army exchanges, in accordance with sound business principles (WD Circular 124, June 28, 1941.) AR 210-65 (tentative), dated July 1, 1941, provided for the establishment within the War Department of a central agency to be known as the Army Exchange Service, with the necessary officers, enlisted and civilian personnel to perform the functions assigned to it.

## *II. Organization of Services of Supply with respect to the Army Exchange Service.*

The Commanding General of the Services of Supply is Lt. Gen. Brehon Somervell. Directly under him are his staff divisions, among which is the Chief of Administrative Services, Maj. Gen. George Grunert.

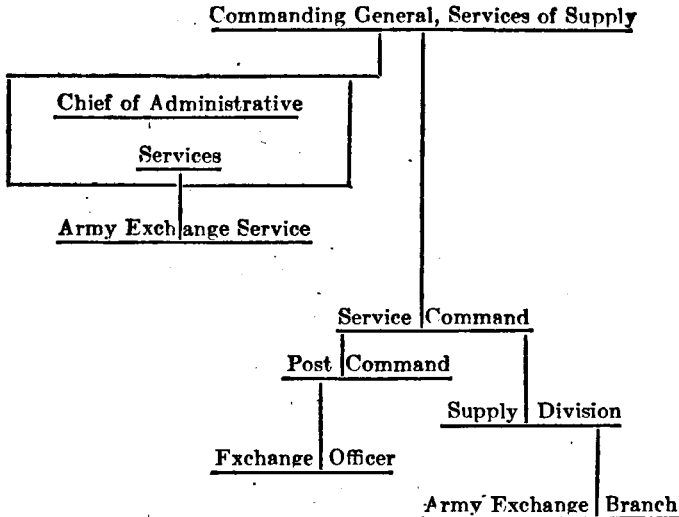
One of the administrative services is the Army Exchange Service which performs certain operations directly, and also certain staff functions; both are under the supervision of the chief of administrative services.

Also directly under the Commanding General of the Services of Supply are the commanding generals of the nine service commands, which are the field agencies within the United States. Service commanders are direct subordinates of the Commanding General, Services of Supply, and are his field representatives for the performance of the administrative, housing, housekeeping, hospitalization, and supply functions assigned to them.

Service commanders have certain staff officers as an integral part of their headquarters and under their complete jurisdiction. They are not field officers or agencies of the administrative services. One of the service commands' staff officers is an Army Exchange Branch Officer.

Directly under the service commander comes the post commanding officer who in turn has on his staff an exchange officer who actively conducts the exchange. Graphically the line of command, in respect to the Army Exchange Service and the operation of exchanges, is as set forth below, with direct staff supervision

under direction of the chief of administrative services between the Army Exchange Service and service command branch officer.



It should be stated that a change is being studied which would enlarge the Army Exchange Service staff functions.

### III. Army Regulation AR 210-65.

The Secretary of War issues Army Regulations. The one governing the operation of Exchanges is AR 210-65.

### IV. Establishment of Exchanges.

Section 2a of AR 210-65 provides: Whenever conditions make it desirable and practicable, the commanding officer of a post, camp, or station will establish and maintain an exchange to include such number of branches, departments and subordinate activities thereof as may be necessary to serve the military personnel.

The establishment of an exchange is authorized only at posts, camps, or stations, where enlisted men are on duty.

### V. Purposes of exchange.

Section 1a provides the purposes for which exchanges are established, namely—

(1) To supply the persons to whom sales are authorized, at the lowest possible prices, with articles of ordinary use, wear, and consumption not supplied by the Government.

(2) To afford to military personnel facilities for comfort, recreation, and amusement to include, as may be desirable, the financial support and maintenance of recreational athletics, entertainments, service clubs, libraries, and community cooperation.

(3) To provide, when necessary, the means for improving organization's messes.

(4) To be of real assistance and convenience to enlisted men and not as large profit-making institutions.

### VI. General accusations.

It is admitted that in some specific instances a few of the accusations are true and that things were done that should not have been done. But it should be stated, with equal emphasis, that all possible steps have been taken, or will be taken, to obviate a recurrence. The following are types of accusations made concerning the exchanges:

- (1) Sales made to civilians unauthorized to purchase.
- (2) Articles other than those of ordinary use, wear, and consumption have been sold.
- (3) Misuse of priority rating privileges.
- (4) Abnormal sales to individuals.

(5) Discrimination in awarding certificate authorizing sale of officers' uniforms.

(6) Misuse of special orders.

(7) Pirating of employees of retail stores.

(8) Threat to retail stores in post-war days.

(9) Purchases by overseas exchanges are not being made overseas where practical.

#### VII. Discussion.

*General Accusation No. 1—Sales made to civilians unauthorized to purchase.*—The possibility of such sales has been cut to a minimum by the issuance of Change 4 to AR 210-65. This change is as follows:

*"Sales: To Whom Made.*—a. Exchanges are authorized to sell to the following-named persons and organizations only. Purchases by individuals will be limited as hereinafter set forth:

"(1) Personnel and organizations now or hereafter authorized by law and regulation to purchase subsistence stores or other quartermaster supplies as defined in paragraphs 2 and 6 of AR 30-2290 may purchase at exchanges. Dependent members of the families of persons so authorized may act as agents for such persons upon proper identification.

"(2) Civilians other than those above defined and who are regularly employed or serving at military posts, camps, or stations may purchase for their own consumption on the post, upon proper identification, items of food, drink, and tobacco products and no other merchandise of any kind."

This means that civilians regularly employed on posts where civilian stores are not available may purchase what the exchange has to sell only if they have written authority from the commanding officer of the post. Civilians who are regularly employed on posts where civilian stores are available may purchase only articles of food, drink, and tobacco products for their own consumption on the post and then only if properly identified. No other civilian sales are permitted.

With strict enforcement of the above, and it will be strictly enforced, the type of sale complained of will be brought to the rare instance which is bound to happen due to the frailty of human nature evidenced by the laxity of a few clerks.

*General Accusation No. 2—Sales of articles other than those of ordinary use, wear, and consumption.*—Admittedly expensive articles of luxury such as jewelry, radios, etc., have been sold. It is granted that they should not be. At present the sale of such articles is becoming a thing of the past.

As a general consequence of the ever-growing scarcity of what may be termed "luxury" articles, the sales of these items by exchanges will even further decrease. Encouraging of a further decrease is the fact that exchanges use no sales-promotion tactics and deal on a cash basis, all credit having been eliminated. The main objective of exchanges is service to the soldier.

The issuance of a list limiting the articles to be sold at exchanges has, and is, being given consideration. The desirability and practicability of issuing such a list is not simple of solution. What may be necessary articles at one place may not be at another. As for instance sun glasses are necessary in the desert and Florida and may not be at other places. Looking at it from another angle, it has been found that one of the articles most in demand is an embroidered pillowcase with the American flag or other patriotic design. This article is not one ordinarily considered necessary, but the soldier wants to buy it to send to his folks at home, and his folks at home treasure it and display it with great pride as having come from their son, husband, or sweetheart in the Army.

The following is an excerpt from a letter of a soldier's mother:

"I have received the watch my son had you send to me. It is a beautiful watch and I thank you for taking care of it, for Lester is my youngest son; his older brother is missing in action in the Philippines, so you understand how much it means to me. Thanking you."

From a certain newspaper article it would appear that the sale of dolls at Christmastime was objected to by some avaricious person. Dolls were sold both overseas and here, and many a father who otherwise could not have done so was enabled to bring joy to the heart of his little daughter, as well as to himself, by having sent to her a doll of his own selection. Should the sale of this item be prohibited? And thus it is with numerous articles, including perfume, lipstick, compacts, pins, watches, bracelets, etc. Should the soldier, who of necessity spends all but a few hours of his time in camp, be denied the

privilege of purchasing these articles at his exchange as a gift for his wife, mother, sister, or sweetheart?

If articles of women's apparel are found in some exchanges, one should not lose sight of the tremendous part women are playing in this war and the nurse, the family of the soldier on the post, the female civilian employee who may be working on one wing of an airplane with a man in uniform beside her, the members of the WAAC.

As set forth in the next paragraph, the restricted use of priorities and the sharing on an equal footing with civilians will undoubtedly reduce any unwarranted sales to an inconsequential minimum.

*General Accusation No. 3—Misuse of priority rating privilege.*—It has been charged that exchanges have misused their priority privilege (A-10) in the purchase of jewelry and other nonessential articles subject to priority procurement, and thus have curtailed sales to civilians and enabled soldiers to purchase things that were denied the nonmilitary. Regardless of the merit of this charge, instructions have been issued limiting the use of the exchange priority rating to soft drinks, candy, chewing gum, tobacco, essential toilet articles, and essential cleaning material. As to all other articles, the exchanges will share with the civilian.

*General Accusation No. 4—Abnormal sales to individuals.*—Under this heading come complaints that exchanges have sold to purchasers at the low exchange price large quantities of articles, such as cigarettes and chewing gum, which the purchaser sells on the outside at a profit, or gives to his friends at the price he paid for them. In the past, this form of "chiseling," although it existed only in a small degree, if at all, was possible because of the availability of the merchandise in question. That is, it was not hard for the exchange to get the merchandise. Now because of the proportionally small quantity of the articles available, as compared to the number of soldiers served by exchanges, some exchanges have found it necessary to limit the number of units of each item that may be sold to an individual so as to have sufficient stock to service all customers. Through the service commands and conferences, this policy of limiting individual purchases is being promulgated. Even though the resale of items should persist, it is submitted that the amount of such sales would be infinitesimal and of no appreciable effect upon the retail business, either in a specific community or as a whole.

*General Accusation No. 5—Discrimination in awarding certificates authorizing sale of regulation Army officers' uniforms.*—War Production Board Order P-131, as amended September 22, 1942, made it necessary for the Army Exchange Service to issue the certificate of authority. Speaking in general terms, this order prohibited any manufacturer to sell any retailer any officers' uniforms manufactured under the order unless he held a certificate issued by the Army Exchange Service.

It should be understood that the Army Exchange Service did not seek out particular stores to handle uniforms. It requested all stores to apply for certificates and after submission of request, applied the following five principles in issuing certificates:

(1) The military need or demand of the town or city in which the store was located.

(2) The type and quality of the store.

(3) The credit standing of the store.

(4) Experience in the uniform business.

(5) Facilities for making alterations.

These principles were fairly and honestly applied. In many localities only a small number of stores, if any, applied when it was learned that the profit on uniforms was limited to 20 percent. Later some of these stores made application and because certificates already had been issued to sufficient stores to supply the military need of the community, the late applicant was refused. Others made a late application thinking they would use the uniform as "bait" to lure the young officer and then sell him other articles at a high price with attenuating big profit. These too were denied. Many things have come to light which must be considered in awarding certificates, such as the case where one store bought up a number of rejected uniforms and sold them as their own make at a price higher than that set by the Army Exchange Service on the regulation uniform. Another case where the unsuspecting young officer is sold, at a high price, a uniform purportedly tailor made, when in reality it is a ready made garment of the same or poorer material than that of the regulation uniform. The young



officer just out of his training school must be protected from the unprincipled retailer and we have done it most effectively. The Army Exchange Service will be glad to consider any specific complaint of discrimination and prove its falsity.

*General Accusation No. 6—Misuse of special orders.*—To have a better understanding of the character of this complaint, it should be pointed out that at some exchanges agreements have been entered into between the exchange and certain retail stores in the vicinity of the exchange, whereby men in uniform and their dependents could purchase from the retail store, at an agreed discount, articles not carried in stock by the exchange. For example, a soldier or his wife could go to a retail store and, upon proper identification, purchase an article at an agreed discount and have the article sent to the exchange, where it was either paid for by the exchange or the exchange acted as a delivery and collection agency and collected the amount of the purchase and remitted to the retail store. This practice is claimed by some as depriving the retailers of their legitimate profit or of directing customers to preferred stores. Whatever the arguments pro and can may be, there has been forwarded from the Army Exchange Service for approval, a change in regulations restricting special orders to military personnel for only military needs.

*General Accusation No. 7—Pirating of employees of retail stores.*—As a general proposition there has been no such practice by the exchanges and no specific incidences have come to light. The location of a majority of the exchanges makes it clear that it would be most difficult to induce an employee to leave her or his regular employer. In fact, exchanges have such an acute employment problem that instructions were issued to exchange officers that the United States Employment Service would aid in securing qualified employees. The usage of soldiers, particularly those of limited service, and their wives, and the proposed usage of members of the WAAC will, it is hoped, help to solve the problem of employees in exchanges.

*General Accusation No. 8—Threat to retail stores in post-war days.*—One of the reasons for this expressed complaint and fear has been characterized as centralization of power in Washington in the form of the Army Exchange Service. This fear is groundless. There is no centralization of power in Washington or the desire for such. In fact the opposite is true. Decentralization of power is in effect. The proof of this statement is seen in the actual operation of the exchange itself under the post commander, subject in some instances to the order of the service commander in the nine service commands. Each exchange acts as a separate unit under the exchange officer who is on the staff of the post commander.

As troops are demobilized, exchanges will be liquidated. Exchanges may only be maintained where there are enlisted men and only then when, in the opinion of the commanding officer of the post, camp, or station, it is desirable and practicable. No one should dare to suggest that because of a fear of what might happen to retail stores after the war, exchanges should be abolished. Abolishment is the only answer to such a complaint.

*General Accusation No. 9—Purchases by overseas exchanges are not being made overseas where practical.*—This is emphatically denied. Only those things which the overseas soldier demands and wants, and cannot be purchased overseas, are purchased here. The soldier away from home wants home-made articles. He wants the cigarettes he is accustomed to, the kind of tobacco he smokes in his pipe when at home, the kind of chewing gum he has been accustomed to chewing, the kind of candy he especially likes. Patriotic thinking people will say he is entitled to it. The matter of overseas and domestic purchases has been carefully considered from the standpoint of economic problems of this country, as well as the economic problems of the foreign countries where our troops are, and the plan most beneficial to all is being followed.

#### VIII. *Specific accusations.*

Before enumerating a few of the specific complaints received and what investigation revealed, a statement is made that the Army Exchange Service will appreciate the reference to it of any complaint and will promptly cause an investigation. If the purpose of exchanges is being violated, corrective action will be taken.

*Specific accusation No. 1.*—The United Grocery Co. of Lexington, Tenn., complained that the exchange at Camp Tyson was discriminating against it because the exchange was not giving it any of its orders for cigarettes. An investigation revealed that a competitor had offered a better price.

*Specific accusation No. 2.*—Telegrams were received by Members of Congress from Miami, Fla., stating that exchanges were driving retail stores out of business. An investigation, which included an open conference presided over by the major, revealed:

That one of the signers of a telegram admitted that members of his association were, almost without exception, doing more business than they did last year at that time. He also admitted that before the opening of exchanges, some of the merchants were charging soldiers higher prices, as for instance, 25 cents for sandwiches and ice cream sodas, both of which could be sold at a reasonable profit for 15 cents.

Another represented he was in the fruit business. What he was really complaining about was that he had recently stocked some military books and novelties, and found that a book for which he wanted to charge \$2 was being sold for \$1.95 by the exchange and for a less amount by some of his competitors. He just hadn't considered competition when he decided to enlarge his business and take advantage of the presence of the soldier.

An interview with representative merchants brought forth the statements that the exchanges did not hurt their business and that there was plenty of business for all. Stores are thronged with soldiers. The president of the chamber of commerce, president of the Rotary Club, and publisher of a local newspaper corroborated these views.

*Specific accusation No. 3.*—Lewis Candy & Tobacco Co. of Orlando, Fla., complained that they were not getting their share of business from an exchange. An investigation revealed that the Candy & Tobacco Co. did not carry a large stock on hand and that it had not given satisfactory service when it had been given orders. It should be remembered that Army exchanges are operated as separate business establishments in posts, camps, or stations. According to the decentralized plan of operation, the exchange officer, together with the commanding officer of the post, selects the assortment and quality of merchandise and arranges with the supplier for delivery of wanted stock. When an exchange obtains first quality merchandise at the correct price from a vendor the exchange will naturally wish to continue business relations with that vendor.

*Specific accusation No. 4.*—Particularly apropos is the complaint recently made on the floor of Congress by Representative Samuel A. Weiss, of Pennsylvania. It was reported that Mr. Weiss stated on the floor that soldiers at Fort Meade were being charged twice as much for cleaning and pressing there as in Washington. An investigation revealed the following prices at Fort Meade, Washington, and nearby towns:

## FORT GEORGE MEADE

	Cleaning and pressing	Pressing
<b>Pants</b>		
Khaki	\$0.20	\$0.10
Olive drab	.25	.10
<b>Shirts</b>		
Khaki	.20	.15
Olive drab, officers	.25	.15
Olive drab	.15	.10
Blouse	.25	.15
Overcoat	.50	.25
Mackinaw	.35	.20
Ties	.10	.05

## ODENTON

<b>Pants</b>		
Khaki	\$0.25	\$0.15
Olive drab	.35	.15
<b>Shirts</b>		
Khaki	.25	.15
Olive drab	.25	.15
Blouse	.40	.25
Overcoat	.75	.35
Mackinaw	.50	.25
Ties	.10	

LAUREL

Pants		
Khaki.....	\$0.29	\$0.19
Olive drab.....	.29	.19
Shirts		
Khaki.....	.29	.19
Olive drab.....	.29	.19
Blouse.....	.29	.19
Overcoat.....	.69	.59
Mackinaw.....	.69	.59
Ties.....	.15	

WASHINGTON

[Prices obtainable on winter uniforms only and do not include pick-up and delivery at Fort Meade—Spot check]

	Palace		Aristo		Howard's		Kent	
	Cleaning and pressing	Pressing	Cleaning and pressing	Pressing	Cleaning and pressing	Pressing	Cleaning and pressing	Pressing
Pants, olive drab.....	\$0.41	\$0.16	\$0.29	\$0.19	\$0.25	\$0.19	\$0.29	
Shirts, olive drab.....	.26		.29		.25		.29	
Blouse.....	.50	.20	.29	.19	.25	.19	.39	
Overcoats.....	.76	.40	.79	.39	.50	.25	.69	
Mackinaw.....			.79	.39	.50	.25	.59	
Ties.....	.10		.10		.10		4 for .29	

These few complaints are set forth herein, not for the purpose of "white-washing" exchange operations, but for the purpose of showing the necessity of analyzing complaints and the error of arriving at hasty conclusions. Investigations of other complaints have revealed similar results.

IX. General comments.

Exchanges are not a money-making scheme for any central body or office. Profits, which are presently limited to 7½ percent, go back to the soldier in the form of dividends to his organization. The amount of cash and liquid assets in excess of current liabilities is the amount available for distribution and appropriation. Cash reserves may be set up in specific amounts for specific purposes, upon recommendation of the exchange council and the approval of the post commander. Appropriations are made to the post recreation fund, the chaplain's fund, the post band. Remaining funds are distributed to the participating organizations upon the basis of their average morning report of enlisted men or the average ration strength. Distribution of profits are made at the end of each quarter, or oftener, as deemed advisable by the exchange council and post commander. The fund distributed to the participating companies or an organization is used to improve the company mess, to provide athletic equipment, forms of recreation comfort and amusement, as determined by the company or organization commander. Expressed in a few words, not to be technically construed, the exchanges belong to the soldiers.

An analysis of the complaints received leads to the conclusion that a majority of the complaints were made by people who were more avaricious than patriotic, or incited by the paid executives, or more properly called lobbyists, of organizations. In order to work with these organizations, and not against them, the Army Exchange Service has formed a civilian advisory committee and has asked retailers and their organizations to recommend members.

Considering the over-all picture of exchanges and the retail business, the latest figures available reveal that even with the increased sales of exchanges the sales by retailers have increased. That as of December 1942 the impact of exchange sales on retail sales is only seventy-six one-hundredths of 1 percent. This figure will be further reduced by the restriction placed upon sales to civilians. One exchange indicates that by reason thereof its sales have fallen off approximately 13 percent.

The value of exchanges in building a soldier's morale is regarded by officers of the Army as second only to his mess. It is the purpose and intent of the Army Exchange Service to supervise the operation of exchanges so that the

morale of the men shall not suffer either in the training camps in this country or overseas. If in so doing there is some slight repercussion upon the retail business, no truly patriotic citizen, be he retailer or not, will object. Assurance is given that, commensurate with their mission, exchanges will be operated so as to reduce to a minimum competition with civilian retail stores, and that careful and constant attention will be given to the problem.

ARMY EXCHANGE BULLETIN No. 10

WAR DEPARTMENT,  
SERVICES OF SUPPLY,  
OFFICE OF THE CHIEF OF ARMY EXCHANGE SERVICE,  
Washington, D. C., February 22, 1943.

Subject: Conservation—Exchange procurement and resale policies.

To: Commanding Generals, all Service Commands, Departments (except Philippine Islands), Alaskan Defense Command, Eastern Defense Command, Caribbean Defense Command, United States Military Academy, and Military District of Washington.

1. Attention is invited to the attached excerpt from directive dated January 18, 1943, from the Commanding General, Services of Supply, subject: "Post Exchanges," which revises War Department policy concerning exchange procurement of merchandise for resale.

2. The purpose of the directive referred to is to accomplish exchange participation in conservation of all critical materials, of manpower, and of transportation. In addition to the expressed terms of the directive, this office suggests that every effort be made by exchange installations to conserve even in connection with those items of merchandise as to which exchanges are assured of preferential treatment. The initiative of the service commands and of the individual exchanges is desired in setting up limitations upon procurement and restrictions on sales which will maintain the spirit outlined in the attached directive, as well as comply with its letter. In matters tending toward conservation, it is the view of this office that the Army must take the lead.

3. All previous instructions regarding assistance by preference ratings and special arrangements on rationed items in procurement for resale by exchanges are superseded by this bulletin, except as noted herein.

4. Where an A-10 preference rating is required by the supplier, all purchase orders covering items of the following list (paragraph 13) will contain the following endorsement:

"All the items on this purchase order are listed in Priorities Allocation Instructions 12, with amendments. Therefore, pursuant to terms of Priorities Regulation 17, this order carries a preference rating A-10 without the issuance of a preference rating certificate."

(a) The endorsement either must be signed separately by the Exchange Officer, or so placed on the purchase order, signed by him that his signature clearly has reference to the endorsement.

(b) The endorsement cannot be used on a purchase order which specifies items not on the following list. Where items, for which the endorsement is authorized, are purchased at the same time as items for which the endorsement is not authorized, separate purchase orders will be issued.

(c) If exchange purchase orders have the old automatic A-10 rating printed thereon, be sure to strike out this rating before issuing order.

5. By paragraph 11 hereof, exchanges are separated into two categories, each of which has different rights in the use of A-10 priority ratings as explained herein. The application for use of such rating by the endorsement set forth in paragraph 4 hereof, for items other than those permitted to each category, as set forth in paragraph 11, will be made only by Army Exchange Service, 25 West Forty-third Street, New York City.

6. In every case where these instructions do not serve to bring delivery of essential items for resale which are available to the exchange concerned under the limitations of the following list, higher preference ratings may be obtained only by making application direct to the War Department, Services of Supply, Army Exchange Service, 25 West Forty-third Street, New York, N. Y. In making such applications to obtain a higher preference rating, the following information will be furnished:

(a) A written statement to the exchange from the supplier giving rating needed for each item and reason the supplier needs the rating to fulfill the specific order, namely:

- (1) To obtain raw materials.
- (2) To fabricate present inventory.
- (3) To obtain needed essential parts from other suppliers.
- (4) To get delivery on date needed when other orders now in suppliers' hands necessitate higher ratings to get delivery.
- (5) Or any other reason which might be set forth by the supplier or manufacturer requiring the rating.

(b) Forward this statement with purchase order complete with cost valuation of each item needing rating to the Army Exchange Service for processing.

7. The endorsement mentioned in War Production Board Regulation 17, paragraph c. (1) Pertaining to exemptions of restrictive orders covering receipt, sale or processing of items or materials may not be applied by exchange officers. Exchange officers will forward all requests for such exemptions to Army Exchange Service, 25 West Forty-third Street, New York, N. Y.

8. All requests for procurement of office equipment, business machines and automotive equipment will be processed according to specific instructions heretofore issued in Army Exchange bulletins, except that such requests are to be mailed to War Department, Services of Supply, Army Exchange Service, Washington, D. C.

9. No exchange officer may issue a priority rating higher than A-10. An A-10 rating may be issued by exchange officers only as outlined above in paragraphs 4 and 5 hereof, and in such cases, only with respect to those items authorized for the specific category as indicated below in which such exchange falls.

10. The use of symbol and numerical allocation classification numbers on exchange orders will be discontinued.

11. Exchanges fall within one of the following two categories:

a. Exchanges within the continental limits of the United States (excepting those located in official staging areas): Such exchanges may apply an A-10 priority rating only to such items in the following list as are preceded by an asterisk (\*).

b. Exchanges in officially designated staging areas and exchanges located outside the continental limits of the United States: Exchanges in this category may use the A-10 priority rating for purchases of all items contained in the following list. Where further assistance is required, application therefor will be made in conformity with the procedure set forth in paragraphs 6 and 7 above.

12. The following list and its conditions and restrictions as above outlined may be changed from time to time.

13. The list referred to above is as follows:

**Confections:**

- \*Candies (other than boxed).
- \*Chewing gum.
- Cough drops.
- \*Peanuts (salted, packages, and cannisters).

**Ice cream:**

- \*Bulk service.
- \*Ice-cream cones.
- \*Ice cream "Dixie cup" type service.

**Soft drinks:**

- \*Beer (not exceeding 3.2 alcoholic content) (refer par. 9, b. (7) AR 210-65), draft and bottle.
- \*Soft drinks.

**Toiletries:**

- \*Antiseptics, mouthwash.
- \*Cleansing tissues.
- \*Containers (soap or toothbrush), plastic.
- \*Dental creams and powders.
- \*Deodorants.

**Toiletries—Continued.**

- Drugs, medicines, and emollients as approved by medical department of post, camp, or station.
- \*Petroleum jelly.
- \*Powder, talcum and foot.
- \*Prophylactic kits.
- \*Razors and razor blades.
- \*Tooth brushes.
- \*Shaving brushes.
- \*Shaving creams and soaps.
- \*Soap and soap flakes.
- \*Styptic pencils.

**Tobacco products:**

- \*Cigarettes.
- \*Cigarette papers, pipe cleaners, pipe filters.
- \*Cigars.
- \*Flints, wicks, and lighter fluid.
- \*Pipes.
- \*Snuff.
- \*Tobacco, chewing, cigarette, and pipe.
- \*Tobacco pouches.

**Clothing and accessories:**

Athletic supports.  
 Bathing trunks.  
 Belts (web) containing no brass  
 or copper.  
 Braid (gold or nylon).  
 Cap covers, khaki.  
 Cap covers, rain.  
 Field jackets.  
 Garters.  
 Gloves, officers.  
 Handkerchiefs.  
 \*Insignia, officers' plated—washed  
 except regimental (must be pro-  
 cured through A. E. S. New York  
 procurement division).  
 Raincoats, uniform.  
 Shirts, regulation, except cotton  
 twill and tropical worsted, kha-  
 ki; supplied by Army Exchange  
 Service Uniform Branch.  
 Socks (cotton, wool, or rayon, or  
 combination thereof).  
 Stockings, uniform (cotton, wool,  
 or rayon).  
 Sweatshirts.  
 Ties (cotton and mohair).  
 Trench coats (cotton or wool).  
 Underwear.  
 Uniforms.  
 Leggings.  
 Money belts.  
 Mufflers.  
 Overshoes.

**Luggage:**

Foot lockers.  
 Hand luggage.

**Stationery:**

Envelopes.  
 Erasers.  
 Ink.  
 Note books.  
 Pencils.  
 Pens, pen points.  
 Post and greeting cards.  
 Writing paper.

**Miscellaneous:**

Books, military (text books and  
 manuals).  
 \*Brushes, scrub, hair, and hand.  
 Buttons, blouse, coat, shirt, under-  
 wear, O. D. khaki.  
 \*Button boards.  
 Coat hangers (cardboard or wood  
 only).  
 Checkers, dominoes, chess, and  
 playing cards.  
 \*Combs.  
 Flashlights and batteries.  
 Key containers, except chains.  
 Knives, pocket, sheath or folding.  
 Locks.  
 \*Mirrors not exceeding 10 inches  
 in any dimensions.  
 \*Nail files, nail clips, nail scissors,  
 and tweezers.  
 \*Needles, assorted sizes.  
 \*Oil, light lubricating and gun oil.  
 \*Pins, plain, common, safety.  
 \*Metal polishing materials.  
 Religious goods (layman only).  
 \*Saddle soap.  
 \*Sanitary belts.  
 \*Sanitary napkins.  
 \*Shoe brushes, cloth, daubers, kits.  
 \*Shoe laces.  
 \*Shoe polish.  
 Sun glasses.  
 Identification tag holders.  
 \*Thread, khaki mercerized, white,  
 blue, black, and olive drab.  
 \*Towels.  
 Wallets, without metal.  
 Watches (men's service type only,  
 order through Army Exchange  
 Service, Procurement Division).  
 Watch straps.  
 \*Wash cloths.  
 \*Whisk brooms.

JOSEPH W. BYRON,  
 Brigadier General, A. U. S.,  
 Chief of Army Exchange Service.

WAR DEPARTMENT,  
 HEADQUARTERS, SERVICES OF SUPPLY,  
 Washington, D. C., January 18, 1943.

**MEMORANDUM FOR THE CHIEF OF ARMY EXCHANGE SERVICE**

Subject: Post Exchanges.

1. The increasing use of limitation orders to restrict the supply of nonessen-  
 tial items to the civilian population and the extension of rationing, particularly  
 for food items, necessitate a clarification of the policies governing the purchases  
 of post exchanges.

\*Maintenance, repairs, and operating supplies required by the exchange and not for resale,  
 including paper and paperboard products.

2. In the future, sales through post exchanges within the continental limits of the United States of all articles limited by War Production Board orders or rationed under the Office of Price Administration shall be governed by the same limitations or rationing imposed on the civilian population except for soft drinks, ice cream, candy, chewing gum, tobacco, essential toilet articles, and essential equipment cleaning materials. These items are deemed essential to maintain the morale of the soldier in the absence of mass recreational opportunities and should be provided to meet the demand.

3. Previous instructions with reference to the purchases of food which may be made by the Quartermaster General for Post Exchanges remain unchanged. Such arrangements with reference to the purchases of uniforms, insignia, and articles of clothing, pertaining to the military uniform and which are not under ration to the civilian population which may have been made by the Quartermaster General for Army Exchanges also remain unchanged.

4. Sales in Post Exchanges outside the continental limits of the United States should not be restricted by limitation orders or by rationing regulations as such sales are essential to the morale of the forces in overseas bases and theaters. Requisitions for such items should be screened with care to determine that the quantities involved are essential to our own forces. Moreover, the items to be carried by such Post Exchanges should be limited to those deemed necessary to the personal well-being and morale of the soldier to include not only the items mentioned above but also such items as pens, pencils, knives, wrist watches, etc. Post Exchanges at specified staging areas where troops are held prior to their departure from the United States should be considered as in an overseas category for these items furnished overseas exchanges.

W. D. STYER,

*Major General, United States Army,  
Commanding.*

Senator WHERRY. Now we will hear from Commander P. R. Sterling.

**STATEMENT OF COMMANDER P. R. STERLING, UNITED STATES  
NAVY, RETIRED, BUREAU OF NAVAL PERSONNEL, NAVY SHIP'S  
SERVICE DEPARTMENTS**

Commander STERLING. My name is P. R. Sterling, Commander, United States Navy, retired, on duty with the Bureau of Naval Personnel.

**OPERATION OF NAVY SHIP'S SERVICE DEPARTMENTS**

Navy ship's service departments are community enterprises operated on naval vessels and naval shore stations by authority of United States Navy regulations. No Government funds are used in their establishment or operation, their initial capital being provided by subscription among the officers and enlisted men of the naval activity concerned, or by borrowings from other sources. Their purpose is to provide a convenient and reliable source from which naval personnel may obtain articles and services essential to their well-being, through their profits, to supplement the welfare and recreation funds appropriated by Congress under the subheading "Welfare and Recreation, Navy," and to provide such articles and services at a reasonable cost.

Ship's service departments fall into two categories. Those operated on board naval vessels are known as Ship's Service Afloat. Those activities are governed in their routine administration by regulations promulgated by the commanders of forces afloat. Since Ship's Service Afloat in no way competes with commercial enterprise, it is not believed that those activities are of interest to the committee.

Ship's service departments ashore are operated under regulations promulgated by the Bureau of Naval Personnel, which regulations prescribe to whom sales may be made, the percentage to which average annual net profit must be limited—which is 15 percent—and the other details of their routine administration.

These regulations provide that the amount of sales and services furnished patrons will be carefully watched to insure that purchases are not made for others who are not entitled to the ship's service privileges, and that the privileges will be withdrawn from anyone who is found to have made purchases or secured services for the benefit of another who is not entitled to the privileges in his own right. The Navy Department would consider abuse of the privileges of ship's service as cause for disciplinary action, on the basis that such abuse would constitute conduct to the prejudice of good order and discipline.

#### USE OF PRIORITY RATING BY SHIP'S SERVICE DEPARTMENTS

Priority ratings are used by the ship's service departments in accordance with War Production Board Priorities Regulation 17 and Army and Navy Munitions Board Priority Allocation Instructions No. 12, issued pursuant thereto. The maximum rating which may be applied by any ship's service officer is A-10, with an exception in the case of military insignia, and the A-10 rating may be applied only to the selected list of articles specified by the Army and Navy Munitions Board as a part of the Priority Allocation Instructions No. 12. A higher rating, AA-5, has been authorized for military insignia.

In the course of the session of this hearing held March 16, the use of priorities in connection with the purchase of watches was discussed. While no specific complaint against ship's service departments was made, it is desired to state that to the best knowledge of the Bureau of Naval Personnel, such ratings have been applied to service-type watches only, shockproof and waterproof, as authorized by the Army and Navy Munitions Board.

No instance has come to the attention of the Bureau in which priority ratings have been applied by ship's service officers to the purchase of ladies' watches or men's watches, other than of military type. To the best knowledge and belief of the Bureau, ship's service departments generally are able to provide these very necessary articles—military type watches—to naval personnel at a price substantially lower than that at which the same could be purchased through retail channels, assuming that retail facilities were available, which, in certainly the majority of instances, is not the case.

On the general subject of the use of priority ratings by ship's service departments, it should be stated that in November 1942 the Bureau of Naval Personnel, having had its attention called to one instance in which a priority rating was used in the purchase of a nonessential article, issued instructions to the entire naval service to the effect that the use of priority ratings in the purchase by ship's service departments of any luxury items not available to the public generally would not be tolerated.

After the issuance of the specific list of authorized articles by the Army and Navy Munitions Board, of course, the use of any ratings



by ship's service officers has been confined, insofar as is known to the Bureau, to items on the authorized list. In the course of the March 16 session of this hearing, the statement was also made that it was hoped that the Navy ship's service departments would see fit to relinquish the use of priority ratings in connection with articles of clothing. Because of the isolated geographic position of the great majority of ship's service departments ashore, and the consequent inaccessibility to naval personnel of regular civilian sources of supply, and the further fact that the only clothing articles in the procurement of which priority ratings may be used are items considered essential, the Bureau of Naval Personnel believes that the right to exercise priority-rating privileges as now strictly limited is reasonable and equitable.

It is hoped that the committee will be assured that every effort is being exerted to prevent undue competition by ship's service departments with small businessmen. It is the intention of the Bureau of Naval Personnel that the regulations for ship's service activities should be strictly observed, and every effort made to prevent misunderstandings and unfair criticisms.

Senator WHERRY. Any further statement?

Commander STERLING. Well, Senator, would it be appropriate for me to say one word off the record?

Senator WHERRY. Certainly, go ahead.

Senator ELLENDER. Were you here yesterday?

Commander STERLING. Yes, sir.

Senator ELLENDER. Did you hear the complaints made against the War Department?

Commander STERLING. Yes, sir.

Senator ELLENDER. Are there similar complaints against the Navy?

Commander STERLING. We have not had any brought to our immediate attention down there.

Senator ELLENDER. I see. You do not handle as much business as the Army, of course.

Commander STERLING. No, sir. We are on a much smaller scale.

Senator BUCK. You do not restrict the priorities, and the Army does?

#### COMPARISON OF ARMY AND NAVY HANDLING OF PRIORITIES

Commander STERLING. As I understand, the Army has relinquished the right to use its priority. On the strictly limited list we are now governed by, we have not issued any directive to the service denying the ship's officers all those already limited privileges.

Senator WHERRY. You have no new orders assigning priority limitations?

Commander STERLING. No, sir.

Senator WHERRY. You have a lot of priority set up that the Army does not. You have, for example, haberdashery, athletic goods, belts, field jackets, garters, gloves, handkerchiefs, leggings, money belts, raincoats, shirts, and a lot of other articles on which the Army has released all priorities.

Have you ever considered adopting the Army's system of limiting the use of priorities to a very restricted list of goods? Why should there be any difference between you and the Army?

Commander STERLING. It has not come to our attention that there is any necessity for restricting the limitation any more than now applicable.

Senator WHERRY. There have been no complaints made, and therefore you are operating under the order?

Commander STERLING. Yes.

Senator WHERRY. Would you give it your attention and investigate it for your own satisfaction?

Commander STERLING. I will give it immediate attention.

Senator WHERRY. It seems to me that the priority should run quite close for both branches of the service, does it not to you?

Commander STERLING. Yes, sir.

Senator WHERRY. It is true you have a smaller personnel in the Navy. On the other hand, the Army goes out in remote places just like the Navy. Is that not right?

Commander STERLING. Yes.

Senator WHERRY. I would suggest you go over the list that the Army has made available and see if you cannot harmonize this.

Commander STERLING. We would no doubt do that as a matter of routine.

#### NAVY RESTRICTIONS ON SALES CIVILIANS

Senator WHERRY. Do you have the same restrictions that the Army has on sales to civilians? Take the civilians who work, are they allowed to buy because of the time element?

Commander STERLING. We have authorized the commanding officer to permit civilians, when it is a military necessity, to buy their lunches or a bottle of Coca-Cola from the ship's service. The ship's service privilege stops right there.

Senator WHERRY. Take the testimony just given by Colonel Kerr, in which he stated that civilians desire to buy different things at the post exchange. You heard him state that they did that under special written order in the form of a card. Have you such a program practice in the Navy?

Commander STERLING. We have an amendment to our regulations which will permit a commanding officer, where there is a specific necessity, to extend that privilege. We do not stipulate that it should be by card or by any other particular item of identification.

Senator WHERRY. You have a regulation in force similar to that of the Army?

Commander STERLING. Yes, sir.

Senator WHERRY. Is that what you are telling me about now?

Commander STERLING. Yes, sir.

Senator WHERRY. Who is the commanding officer—the commanding officer of that particular station?

Commander STERLING. Yes, sir.

Senator WHERRY. He commands the station?

Commander STERLING. That is the part of the regulations that cover all commanding officers.

Senator WHERRY. You think you are accomplishing the same thing as is being accomplished by the Army under its card system?

Commander STERLING. Yes, sir.

Senator WHERRY. Did you know about that card system of the Army?

Commander STERLING. No, sir; only what I heard this morning.

Senator ELLENDER. How many ship's service departments are there in the continental United States, if you have that information available.

Commander STERLING. Our record as of March 15 indicates 234 ship's service departments.

Senator BUCK. Commander, you say you do furnish lunches to civilian employees?

Commander STERLING. Only in special cases, sir. The authority is not general.

Senator BUCK. It is as general as you want to have it. There has been no recent restriction on that, has there?

Commander STERLING. On the contrary, there has been a liberalization. Previously there was no privilege extended.

#### PRACTICES CONCERNING INVENTORIES AND PROFITS

Senator WHERRY. Commander, I want to ask you about the inventories you have on hand. How much are your inventories compared to your monthly sales?

Commander STERLING. I do not believe I can answer that directly, but I can answer it by saying that the inventory is restricted by the capital investment which the commanding officer is required to maintain. He is required to restrict his capital investment, which would in turn restrict his inventory, and he would probably not be able to operate more than a few weeks on any inventory.

Senator WHERRY. Would you say that inventory would not exceed 50 percent of your monthly sales at any one time? Do you want to go on record as saying that, or do you care to express an opinion on that?

Commander STERLING. Well, I think that would approximate the condition.

Senator WHERRY. I see. Do you charge any profit on the things you sell?

Commander STERLING. Yes, sir.

Senator WHERRY. How much profit? What is your mark-up?

Commander STERLING. The profit is low. It cannot exceed 15 percent. That 15 percent is not, however, expected to be maintained. We expect—and the spirit of the regulation is such—we expect the commanding officer to keep it much lower.

Senator WHERRY. What do you do with that money you make?

Commander STERLING. The profit is taken from the ship's service fund and transferred to the welfare fund of the station. That is for accounting purposes when it is spent for recreation and welfare purposes.

Senator WHERRY. That is similar to the canteen fund mentioned here by Colonel Kerr.

Commander STERLING. Yes, sir.

Senator ELLENDER. To what extent, if any, in either services rendered or goods or money does the Government participate?

Commander STERLING. There are no Government funds involved.

Senator ELLENDER. How about services? Does the Government pay any of the employees? For instance, any officers?

Commander STERLING. No. Where there is—

Senator ELLENDER (interposing). Your title is Navy Ship's Service Stores.

Commander STERLING. Yes.

Senator ELLENDER. Who are you paid by? Who is your salary paid by?

Commander STERLING. The officers connected with the ship's service activities are paid out of the regular appropriation, the same as any other officer.

Senator ELLENDER. I see.

Commander STERLING. The civilian employees employed by the ship's service are paid out of operating funds of the ship's Marine Corps.

#### STATEMENT OF MAJ. ROBERT M. O'TOOLE, MARINE POST EXCHANGE, UNITED STATES MARINE CORPS

Major O'TOOLE. My name is Robert M. O'Toole, United States Marine Corps.

The United States Marine Corps post exchange system was organized prior to the last world war.

##### OPERATION OF MARINE POST EXCHANGE SYSTEM

In 1920 we devised a new accounting system, which is in effect today for post exchanges in the Marine Corps, using the present accounting system. That calls for a monthly inventory and audit by a council of officers appointed by the commanding officer. Once a year the books are audited by men from headquarters, Marine Corps.

When the Marine Corps started expanding in 1940, realizing it was going to take more capital, we put an assessment on all post exchanges of 5 percent of their gross sales. That ran for approximately 1 year, and it was stopped. The money derived from that source was used to finance new post exchanges, set up recreation funds for new organizations, and pay for all claims against the Marine Corps Exchanges that were taken over by the Japs at the outbreak of the war.

We also used that fund to pay off claims from enemy actions. We do not require the exchanges outside the continental limits of the United States to pay war risk insurance. We pay the claims.

In February of this year that percentage was about 2 percent.

In Midway on June 4 there was direct bomb hit on the post exchange for which we paid \$8,700.

Since then we have paid off \$40,000 or \$50,000 in the Solomons, where the ship is destroyed or damaged through enemy action.

Prior to the expansion we had 42 exchanges in the Marine Corps. At the present time we have approximately 120, of which 45 are now in the Pacific.

The post exchange officer does his own purchasing. The Pacific officer puts all orders through the depot quartermaster in San Fran-

cisco. There are certain items he buys and ships on Government funds, any item on his list which includes tobacco, toilet articles, and so forth, and the invoices are handled through our office.

#### USE OF PRIORITIES BY MARINE EXCHANGE

The use of priorities by the Marine Corps is subject entirely to the regulations put out by the War Production Board. If they say use A-10 or A-1-j, we use it until the regulations are discontinued. At the present time we are authorized to use the A-10, and I doubt if you can buy much on that.

However, the quartermaster uses the priority on necessary items for overseas units. We have many times refused to issue high priorities on articles that we thought were more essential for war defense industry than for post exchanges.

In handling priorities, on the annual audit of the books, the priority forms are in blocks of 20 with serial numbers. Every number must be accounted for, and when an order is issued, we want to see the order and see the invoices covering that order, and I think the same procedure is followed in the Army service in auditing the accounts. How anybody could kick out a priority certificate and let the goods get into other channels is beyond me, because they must have a duplicate in that file, and they must have the order form with the invoice showing the goods being received.

Our sales are limited to the personnel, as outlined in the acts of Congress, with the exception that the Commandant of the Marine Corps has the authority to extend those sales.

#### SALES TO CIVILIANS ONLY ON SPECIFIC DIRECTIVE

There is no post exchange in the Marine Corps authorized to make sales to civilians unless it has a specific directive from the Commandant of the Marine Corps. He must write in and ask for that authority.

We have had a number of exchanges ask for the privilege of selling to civilians at isolated posts, and we have granted some.

However, as soon as the O. P. A. put out the bank rationing proposition, several exchanges wrote in asking for increases.

Senator BUCK. May I interrupt you to ask whether or not you provide lunches for civilian employees.

Major O'TOOLE. We did until 3 days ago. Two days ago we issued a directive, effective immediately, that the sale to civilians would be discontinued except at stations at Parris Island, where they operate a post in the hostess house. They are authorized to serve the transient visitors in the cafeteria, people who come there to see their sons. Other than that, all sales have been stopped to civilians.

Senator BUCK. Is that not quite a hardship?

Major O'TOOLE. Yes; they do not realize what it is going to mean. The Navy Department has had a lot of trouble trying to maintain personnel in isolated posts. Take Burns City, Ind. It is 20 miles from the town of Bedford. If you do not let people buy soft drinks, cigarettes, and so forth, they will say, "Well, I will go to work in the defense plant."

Senator WHERRY. How did you happen to issue those?

Major O'TOOLE. The order came out. When they put out the bank rationing several of the posts wrote in saying they needed higher rationing to take care of their needs for coffee and processed foods, due to the number of Navy employees having meals in the restaurant or being served drinks. The quartermaster immediately took it up with the Commandant, who said to stop it, and we put out the directive to stop it.

Senator BUCK. That is true of every post exchange?

Major O'TOOLE. Everything is controlled by the Commandant.

Senator ELLENDER. Do you not think some exception should be made in instances where the post exchange is located so far from a town or city?

Major O'TOOLE. Yes; except the quartermaster was in doubt whether or not the O. P. A. would grant an increase in the bank rationing to take care of civilians on the reservation.

Senator ELLENDER. It strikes me that he ought to look into that. Something certainly ought to be done to alleviate that condition. I can well understand where a post exchange is located near a town that people could buy through regular channels, but here where you have it on a desert, and miles away, there certainly should be an exception.

Major O'TOOLE. We have 10 or 12 exchanges more or less isolated, Hawthorne, Camp Pendleton, New River, Parris Island. Their employees have to drive 9 miles to Gilford to get their lunch.

Senator WHERRY. Would you have some post exchanges that would have priority lists that would be different than the others?

Major O'TOOLE. No, sir.

Senator WHERRY. They would all be the same?

Major O'TOOLE. We put out exactly what comes from the War Production Board.

Senator WHERRY. Do you have them with you?

Major O'TOOLE. No, sir.

Senator WHERRY. Would you be willing to file that?

Major O'TOOLE. Yes, sir.

(The lists referred to are inserted in the record on p. 2309, following Major O'Toole's statement.)

Senator WHERRY. Go ahead.

Major O'TOOLE. On this charge of Mr. Michaels about handling watches on priorities, the only thing I know is that the Marine Corps exchanges to my knowledge in the last 4 or 5 months have not been able to buy a watch. I do not know where they get them, but we cannot get them. You cannot buy a clock, an alarm clock, no matter what priority you use. In fact, it is my understanding that the War Production Board has frozen all Swiss movements in New York. I think there are several thousand that cannot be touched until they clear the case up, the same as a lot of other critical items, no matter what priority.

**AUTHORIZATION FOR HIGHER PRIORITIES MUST COME FROM THE  
WAR PRODUCTION BOARD**

We have a priorities officer at headquarters, and he does not issue the priority. He has to apply to the War Production Board for a higher priority than they authorize us to use.

We have a case of the units in San Diego where they are asking for a higher priority to use pressing machines. The War Production Board declined to give it on the ground it would take away local pressing business. We contacted General Smith, who called a meeting of all exchange officers, and if they come to the conclusion that the San Diego area can take care of it, that is what will be done. The War Production Board says if they cannot take care of it, they will issue the priority. We do not issue priorities for everything the post exchanges ask for. We figure out whether or not they need it. If they do not need it, we tell them "No."

Every directive put out by the Commandant is law.

Senator WHERRY. Have you had any complaints?

Major O'TOOLE. No, sir; no complaints of any kind. None of the gentlemen who are here have come anywhere near the Marine Corps with any complaints.

Senator WHERRY. Maybe they were afraid of you.

Major O'TOOLE. Sir?

Senator WHERRY. Maybe they were afraid of you. [Laughter.]

Major O'TOOLE. Well, maybe so.

Senator WHERRY. Any other questions to ask the major?

Commander Sterling, would you come up again? I want to ask you a question.

Commander STERLING. Yes, sir.

Senator WHERRY. How many post exchanges does the Navy operate? I beg your pardon. It is already in the record, but are you familiar with Senate bill 853?

Commander STERLING. No, sir.

REQUEST FOR DEFINITION OF "OTHER PERSONS" MENTIONED IN S. 853, A BILL PERMITTING SALE OF NAVAL STORES TO CIVILIAN EMPLOYEES

Senator WHERRY. It is a bill seeking to amend the present act of March 30, 1909, and amended by the act of January 23, 1942, providing for the sale of naval stores, in order to authorize the Secretary of the Navy to permit the sale of naval stores in the continental United States during the war and 6 months thereafter to civilian officers and employees of the United States, and to other persons at stations where purchase from private agencies is found to be impracticable.

What I would like to have you do, if you do not know the contents of the bill, is to study it, because in section 2 on page 2, it refers to employees and other persons, and I should like to have a letter from you stating what you mean by "other persons," because that bill is coming up for consideration very soon.

Commander STERLING. I would not be competent to comment on that. That would be a matter under the jurisdiction of the Bureau of Supplies and Accounts. That applies to commissary stores.

Senator WHERRY. Will you refer it to them, and have them write me a letter? I think that it squarely applies on this point, and it may be that if they want it passed, they ought to have "other persons" defined.

Commander STERLING. Yes, sir; I shall be glad to do that.

**MARINE CORPS REGULATIONS ON PRIORITIES AND LISTS OF ITEMS GIVEN  
PRIORITY RATINGS**

HEADQUARTERS UNITED STATES MARINE CORPS,  
Washington, July 6, 1942.

**From:** The Commandant, United States Marine Corps.  
**To:** The Commanding Officer.  
**Subject:** Authority to assign Preference Rating A-1-j.

**References:** (a) ANMB, letter No. 18-d-24c SG.wr, dated June 22, 1942. (b) ANMB, priorities instruction dated February 18, 1942; amendment No. 1 voided; amendment No. 2 revision attached; amendment No. 3 not applicable to Post Exchanges.

**Enclosures:** (1) Reference (b); (2) List of articles approved for rating; (3) Blank PD-3A forms.

1. Under authority of reference (a), Marine Corps Exchanges, subject to limitations, restrictions, or regulations by the Agencies Section of the Priorities Division of Army and Navy Munitions Board, are given privilege of assigning rating A-1-j on certain articles.

2. The articles for which rating A-1-j is initially approved are indicated on list A attached. This list may be modified from time to time by the Agencies Section of the Priorities Division of Army and Navy Munitions Board.

3. The authorized rating shall be applied by certificate PD-3A, in accordance with reference (b).

4. Use of the rating is subject to the following restrictions:

(a) The rating may be applied only where A-10 will not provide delivery.

(b) For each Post Exchange only one official may be empowered to issue forms PD-3A. It is suggested that each commanding officer appoint an official who, solely, will assume this responsibility.

(c) A record must be kept at all times of orders on which the authorized rating has been applied. Normally this will be the quadruplicate of form PD-3A, which is retained by the officer. Any other appropriate system, however, may be used.

(d) In case of doubt as to whether an article is described on list A, request for interpretation must be sent to Army and Navy Munitions Board, Priorities Division, Agencies Section, Washington, D. C.

5. Since from time to time there will be amendments to list A, and since changes may be expected in the instructions, it is suggested that each Post Exchange start a separate file for all memoranda and bulletins regarding this rating.

6. Post Exchange countersigning officer will distribute copies of certificates as follows:

Original: To be issued to and retained by contractor.

Duplicate: To be forwarded to inspecting officer (if there is no inspecting officer, copy may be retained as spare).

Triplicate: To be forwarded to Priorities Division, Army-Navy Munitions Board, Washington, D. C.

Quadruplicate: To be retained by issuing United States Government official.

Quintuplicate: To be forwarded to the Quartermaster, Headquarters, Marine Corps, Washington, D. C.

7. Allocation classification symbol must appear on all purchase orders, in accordance with Priorities Regulations No. 10. These symbols must be typed immediately below the words "urgency standing number (if any)" in paragraph 7 on the face of each PD-3A certificate. Post Exchange Officer should consult with Post Quartermaster for information concerning symbols.

E. A. OSTERMANN,  
By direction.



## NECESSARY AND ESSENTIAL ITEMS FOR RESALE AND FOR SUPPLY

JUNE 11, 1942.

## LIST A. ITEMS FOR WHICH USE OF A-1-j IS AUTHORIZED

## Notions:

- Buttons (composition, plastic, metal).
- Identification chains, bands (metal, plastic).
- Sewing kits.
- Cases, soap and toothbrush (plastic).

## Clothing and haberdashery:

- Handkerchiefs.
- Gloves.
- Athletic supports.
- Belts, web.
- Caps, service or overseas.
- Leggings.
- Shirts, regulation, Chino 8.2, poplin, cotton or wool.
- Shoes, strap, oxford, dress and work.
- Ties, cotton and mohair, wool and mohair.
- Uniforms, cotton or wool.
- Overcoats, Kersey short coats.
- Raincoats.
- Jackets, leather.
- Women's raincoats (WAAC and nurses).
- Women's uniforms (WAAC and nurses).
- Women's shoes (regulation for WAAC and nurses).

## Drug sundries:

- Prophylactics and prophylactic kits.

## Jewelry:

- Insignia, officers', all ranks, branches (metal).
- Belt buckles (metal).

## Sporting goods, luggage:

- Lockers, foot, for officers only.

## Small wares, electrical and hardware:

- Locks.
- Buckets.
- Pocket knives.
- Sheath knives.

## General:

- Nails.
- Wire.
- Steel strapping.

HEADQUARTERS, UNITED STATES MARINE CORPS,  
Washington, August 6, 1942.

From: The Commandant, United States Marine Corps.

To: The Commanding Officer.

Subject: Authority to assign preference rating A-1-j.

Reference: (a) Letter Cmdt, USMC, 2100-50-30, AM-dwt-dek to CO, July 6, 1942.

1. Errors in the preparation of Preference Rating Certificates, Form PD-3A, by Post Exchange Officers have been noted by the Priorities Section, this headquarters. It is requested that officers authorized to countersign these certificates be instructed to again review reference (a), in connection with which the following comments are made:

(a) Purchase order number and date must be shown in section 3.

(b) Allocation classification symbol—see paragraph 7 for location of these symbols on the certificate. They must appear on all certificates.

(c) Code, in section 7, the ANMB code number shall be the following: "ANMB Ltr 6/16/42 SG/wr."

(d) The date of countersigning should be shown in the proper space in section 7.

(e) The duplicate copy of the certificate will be forwarded to the Quartermaster USMC, instead of the quintuplicate copy, as noted in (6) of reference (a). The quintuplicate copy will be retained in countersigning officer's file. (Note—Consideration is being given to a discontinuance of the fifth copy.)

(f) Approved list: Enclosure (2) of reference (a) clearly listed the only items for which the assignment of A-1-j rating by countersigning officers was authorized. Paragraphs 4 (d) and 5 of reference (a) indicate the method by which authorization for items other than listed in enclosure (2) might be obtained. A total of 11 certificates have been received to date in this headquarters, and of these, 7 have assigned the rating to unauthorized items, such as towels, safes, electrical fittings, multimixer, and in 1 instance, an enormous quantity of "carts, marking kits." Such action is an abuse of the authority granted. It invites censure upon this headquarters by the Review and Compliance Division of the Army and Navy Munitions Board, and the possibility of more restrictive supervision. In addition, certificates incorrectly written may be subject to cancellation.

2. It is directed that in the preparation of future certificates, that countersigning officers do not exceed the authority granted to them.

E. A. OSTERMANN.

*By direction.*

HEADQUARTERS UNITED STATES MARINE CORPS,  
Washington, August 14, 1942.

From: The Commandant, United States Marine Corps.

To: The Commanding Officer.

Subject: Quintuplicate copy of PD-3a certificate, elimination of, and raincoats for enlisted men.

Reference: (a) Letter OPM No. PM 430 EHA/yeh, dated August 7, 1942.

(b) Recommendation of Uniform Board, dated May 13, 1942, approved by the Commandant, USMC.

1. The following is quoted from reference (a):

"1. Effective immediately the quintuplicate copy of PD-3a certificates, normally forwarded to the cognizant bureau, will be discontinued.

"2. Pending consumption of the existing supply and reprint in quadruplicate form, issuing officers should remove and destroy the quintuplicate copy."

2. The Commandant, United States Marine Corps, has approved of a raincoat for enlisted men for wear when on liberty. Post Exchanges are authorized to stock these raincoats. They may be purchased from Plattel Bros., 270 West Thirty-eighth Street, New York, N. Y., and the cost would be approximately \$7 each, if purchased in quantities.

R. M. O'TOOLE.

*By direction.*

HEADQUARTERS UNITED STATES MARINE CORPS,  
Washington, December 9, 1942.

From: The Commandant, United States Marine Corps.

To: The Post Exchange Officer.

Via: The Commanding Officer.

Subject: Authority to assign preference rating AA-5.

References: (a) Cmdt., USMC, letter 2100-50-30 AM-dwt-dek to CO July 6, 1942, with list A dated June 11, 1942.

(b) ANMB letter to HQ, Marine Exchanges, dated December 3, 1942.

Enclosure: (A) List "A" amended, dated December 3, 1942.

1. Under authority of reference (b), Marine Corps Exchanges are now authorized to assign an AA-5 rating to purchases of items, and those items only, which are listed on enclosure (A).

2. Authorized rating will be assigned by the Post Exchange Officer, on form PD-3A certificates, and will be subject to the following regulations:

(a) The Post Exchange Officer shall keep segregated copies of all certificates issued under this authority.

(b) Within 24 hours of the issuance of any certificate, the triplicate copy shall be mailed in an envelope addressed to Army and Navy Munitions Board,

Priorities and Allocation Branch, Military Rating Section, Washington, D. C.  
Attention: Lt. (Jr. Gr.) Seymour Graham.

(c) Duplicate copy shall be forwarded to the Quartermaster, Headquarters Marine Corps, Washington, D. C.

(d) ANMB code No. (section 7) will be left blank.

(e) Allocation classification symbols will be shown in the proper place on certificates where the items being purchased include copper, copper-base alloy products, and brass, and will be omitted from all other certificates.

(f) Certificates must be prepared completely, showing all required information.

3. In the case of purchases of items not on list A amended, and where a rating of A-10 will not secure delivery, the Post Exchange Officer should forward full information to the Quartermaster including copy of purchase order showing date, description, quantity, and value of each item, name, and address of supplier, and statement as to the lowest rating which will assure delivery. The Quartermaster's office will then prepare certificate and forward to the Army and Navy Munitions Board, where, if approved, rating will be assigned and certificate countersigned. The better the information supplied by the Post Exchange Officer as to intended use and need for the equipment, the stronger can be endorsement supplied to the ANMB by the Quartermaster's office. For the information of Post Exchange Officers, it is not the policy of the ANMB to assign ratings above AA-5 to Post Exchange purchases as such ratings are reserved exclusively for military use.

S. C. CUMMING,  
*By direction.*

DECEMBER 3, 1942.

LIST "A" AMENDED. ITEMS FOR WHICH AUTHORITY AS GIVEN AA-5 RATING

Notions:

Buttons (composition, plastic, metal).

Identification chains (plastic).

Sewing kits.

Nail files, clips, scissors, tweezers.

Cases, soap, and toothbrush (plastic).

Shoe shine kits.

Shoe polish.

Shoe brushes.

Blitz cloths.

Clothing and haberdashery:

Handkerchiefs.

Gloves.

Athletic supports.

Belts, web.

Cap, service or overseas.

Cap covers, blue, khaki, white.

Leggings.

Mufflers.

Socks (cotton, wool).

Shirts, regulation, Chino 8.2, poplin, cotton or wool.

Shoes, strap, bal and blucher oxford.

Ties (cotton and mohair, wool and mohair).

Undershirts.

Undershorts.

Uniforms (cotton or wool).

Overcoats, field, long, trench.

Women's raincoats, (WAAC, WAVE, and Nurses).

Women's uniforms, (WAAC, WAVE, and Nurses).

Field jackets.

Women's shoes (regulation for WAAC, WAVE, and nurses).

Drug sundries:

Prophylactics and prophylactic kits.

- Jewelry:**  
 Insignia, officers', all ranks, branches (metal).  
 Belt buckles (ferrous metal or plastic).  
 Watch straps, leather, cloth.
- Luggage:**  
 Lockers, foot, for officer only.  
 Overnight bag.  
 2-suiter suitcases.
- Small wares:**  
 Locks.  
 Buckets.
- General:**  
 Sun glasses.  
 Zippers, for use on money belts, toilet kits, coat linings, pants, etc. May be made from existing semifabricated or fabricated materials inventories only.

HEADQUARTERS UNITED STATES MARINE CORPS,  
 Washington, December 16, 1942.

**From:** The Commandant, United States Marine Corps.  
**To:** The Post Exchange Officer.  
**Via:** The Commanding Officer.  
**Subject:** Preference rating, Post Exchange Orders.  
**References:** (a) ANMB Priority-allocation instructions No. 12.  
 (b) Commandant letter No. 2100-50-30 dated December 9, 1942.

**Enclosure:** 1. (A).

1. Enclosure is forwarded for guidance and necessary action.
2. The assignment of AA-5 ratings by means of PD-3A certificates to items on list A, amended, attached to reference (b) is not affected by these instructions.
3. Requests for exemption endorsement, or out-of-line ratings as noted in paragraphs 7 and 8 of enclosure, should be forwarded to the Priorities Officer, Quartermaster Department, Headquarters, United States Marine Corps.

PRIORITY-ALLOCATION INSTRUCTIONS No 12, DECEMBER 9, 1942

MILITARY EXCHANGES AND SHIP'S SERVICE DEPARTMENTS

**A. General.**

1. Priorities Regulation No. 17 provides for, and imposes limits on, the application of a preference rating of A-10 by Post Exchanges and Ship's Service Departments (hereinafter called Military Exchanges), and for the qualification of Military Exchange orders as Army and Navy Orders under "Army and Navy exception clauses" in L and M orders issued by the War Production Board.

2. Every order hereafter placed by a Military Exchange is governed by Priorities Regulation No. 17 and this instruction.

**B. Use of rating A-10.**

3. Hereafter no order by or for a military exchange will be rated A-10 unless the following endorsement appears on the order:

"All the items on this purchase order are listed in Priority-Allocation Instructions No. 12, with amendments. Therefore, pursuant to terms of Priorities Regulation No. 17, this order carries a preference rating of A-10 without the issuance of a preference rating certificate."

(a) The endorsement must either be signed separately by the Military Exchange Officer, or so placed on a purchase order signed by him, that his signature clearly has reference to the endorsement.

4. Army Exchange Officers, Maritime Exchange Officers, and Ship's Service Officers are hereby authorized to apply the endorsement in paragraph (3) to orders by Military Exchanges under their supervision for the items appearing on the list in appendix I. This endorsement will not be used on any purchase order which specifies an item not on the list except on specific authority from the Army and Navy Munitions Board. Where items for which endorsement is authorized are purchased at the same time as items for which endorsement is not authorized, separate purchase orders will be issued.

5. The application of a preference rating of A-10 by the endorsement shown in paragraph (3) to items other than those included on appendix I can be made only with the specific approval of the Army and Navy Munitions Board. Such approval shall be obtained by application consisting of a memorandum justifying the request together with a copy of the purchase order in question.

**C. Exemption from restrictions.**

6. Priorities Regulation No. 17 provides that where any rule, regulation, or order of the War Production Board restricts receipt, sale, or processing of any item or material, but contains an exception or exemption for Army or Navy orders, an order for a Military Exchange does not qualify for such exemption unless it bears one of the following endorsements:

(1) In the case of United States Army Post Exchanges:

"Authorized as an Army purchase pursuant to Priority-Allocation Instructions.

By \_\_\_\_\_  
*Army Exchange Service, War Department."*

(2) In the case of United States Navy Ship's Service Departments:

"Authorized as a Navy purchase pursuant to Priority-Allocation Instructions.

By \_\_\_\_\_  
*Bureau of Naval Personnel."*

(3) In the case of United States Marine Corps post exchanges:

"Authorized as a Marine Corps purchase within Army or Navy exception clause pursuant to Priority-Allocation Instructions.

By \_\_\_\_\_  
*Headquarters, United States Marine Corps."*

7. The endorsement in paragraph 6 may not be applied by any Exchange officers. It may only be applied by the Army Exchange Service, Bureau of Navy Personnel, or headquarters, Marine Corps, to specific items in specified quantities and under conditions authorized by the Army and Navy Munitions Board. Military Exchange officers should forward requests for exemption from the terms of L and M orders through channels to Military Exchange Service. Such requests should consist of a memorandum of justification together with the original purchase order in question.

8. Nothing in this instruction affects procedures presently followed by Military Exchanges in requesting out-of-line ratings. Requests for such ratings will continue to be filed as in the past for essential items.

**APPENDIX I. PRIORITY-ALLOCATION INSTRUCTIONS No. 12**

**Confections:**

- Candies (other than boxed).
- Chewing gum.
- Cough drops.

**Drug sundries and toiletries:**

- Antiseptics, mouthwash.
- Cleansing tissues.
- Containers (soap or toothbrush) plastic.
- Dental creams and powders.
- Deodorants.
- Drugs, medicines and emollients as approved by Medical Department of post, camp or station.
- Petroleum jelly.
- Powder, talcum and foot.
- Prophylactic kits.
- Razors and razor blades.
- Shaving brushes.
- Shaving creams and soaps.
- Soap and soap flakes.
- Styptic pencils.
- Tooth brushes.

**Haberdashery and clothing:**

- Athletic supports.
- Bathing trunks.
- Belts (web) containing no brass or copper.
- Boots.
- Braid (gold or nylon).
- Cap covers, white, blue, khaki.
- Cap covers, rain.
- Collar buttons.
- Collars, stiff white.
- Cuff links, officers.
- Devices, officers' for cap or collar.
- Field jackets.
- Garters.
- Gloves, officers.
- Handkerchiefs.
- Insignia, officers' plated-washed except regimental.
- Leggings.
- Money belts.
- Mufflers.
- Overshoes.

- Haberdashery and clothing—Continued.**
- Raincoats, uniform.
  - Shirts.
  - Shoes, uniform and athletic.
  - Socks (cotton, rayon, or combination thereof).
  - Stockings, uniform (cotton or rayon).
  - Sweatshirts.
  - Ties.
  - Trench coats (cotton or wool).
  - Underwear.
  - Uniforms.
- Ice Cream:**
- Bulk service.
  - Ice cream cones.
  - Ice cream "Dixie Cup" type service.
- Luggage:**
- Foot lockers.
  - Hand luggage.
- Miscellaneous:**
- Alarm clocks (spring).
  - Bibles.
  - Books, military (textbooks and manuals).
  - Brushes, scrub, hair, and hand.
  - Buttons, blouse, coat, shirt, underwear, O. D. khaki.
  - Button boards.
  - Checkers, dominoes, chess, and playing cards.
  - Combs.
  - Flashlights and batteries.
  - Key containers, except chains.
  - Knives, pocket, sheath, or folding.
  - Mirrors not exceeding 10 inches in any dimensions.
  - Nail files, nail clips, nail scissors, and tweezers.
  - Needles, assorted sizes.
  - Pins, plain, common, safety.
  - Polishing cloths.
  - Religious goods (layman only).
  - Saddle soap.
  - Sanitary belts.
  - Sanitary napkins.
  - Shoe brushes, cloth, daubers, kits.
- Miscellaneous—Continued.**
- Shoe laces.
  - Shoe polish, brown, black or white.
  - Sun glasses.
  - Tag holder, plastic.
  - Thread, khaki mercerized, white, blue, black, and olive drab.
  - Towels.
  - Wallets, without metal.
  - Watches (service type only, shock-proof, waterproof).
  - Watch straps.
  - Wash cloths.
  - Whisk brooms.
- Soft drinks—fountain:**
- Beer (not exceeding 3.2 alcoholic content) draft and bottle.
  - Peanuts (salted, packages and canisters).
  - Sandwiches (pre-wrapped).
  - Soft drinks.
- Small wares:**
- Coat hangers (cardboard or wood only).
  - Locks.
  - Oil, light lubricating and gun oil.
- Stationery:**
- Envelopes.
  - Erasers.
  - Ink.
  - Note books.
  - Pencils.
  - Pens, pen points.
  - Post cards.
  - Writing paper.
- Tobacco products:**
- Cigarettes.
  - Cigarette papers, pipe cleaners, pipe filters.
  - Cigars.
  - Flints, wicks, and lighter fluid.
  - Pipes.
  - Snuff.
  - Tobacco, chewing, cigarette, and pipe.
  - Tobacco pouches.

*Maintenance, repairs, and operation supplies required by the Exchange are not for resale.*

HEADQUARTERS U. S. MARINE CORPS,  
Washington, March 16, 1943.

From: The Commandant, United States Marine Corps.  
To: The Post Exchange Officer.  
Via: The Commanding Officer.  
Subject: Authority to assign Preference Rating AA-5.  
References:

- (a) CMC ltr 2100-50-30 over AM-123-mit to PEO of Dec. 9, 1942, with amended List "A" dated Dec. 3, 1942.
- (b) CMC ltr 2100-50-30 over AM-123-mit of Dec. 16, 1942, with copy Priority-Allocation Instructions No. 12, dated Dec. 9, 1942.

1. The authority granted by reference (a) for assignment of Preference Rating AA-5 by Post Exchange Officers is hereby rescinded, in compliance with Priorities Regulations No. 17 and Priority-Allocation Instructions No. 12.

2. The only rating which the Post Exchange Officer is now authorized to assign is A-10, and this is done by certification on the original purchase order as explained in Priority-Allocation Instructions No. 12. An A-10 rating may be assigned to items on the authorized list included with reference (a) of reference (b) and to no other items.

3. In cases where an A-10 rating will not secure delivery of an item on the authorized list, the Post Exchange Officer should forward full information, as outlined in paragraph 3 of reference (a), to The Quartermaster, Headquarters, United States Marine Corps. Application by the Priorities Officer will then be made to the Army and Navy Munitions Board for assignment (if approved) of an AA-5 rating, the highest under present regulations which is applicable to Post Exchange purchases.

4. Assignment of preference ratings to items not on authorized list referred to in paragraph (2) above, can be accomplished only by the ANMB as outlined in paragraph 5 of Priority-Allocation Instructions No. 12. Full particulars should be forwarded to the Quartermaster by the Post Exchange Officer. Statement must be included as to the lowest rating on which the supplier can make shipment.

W. T. H. GALLIFORD,  
(By direction.)

Senator WHERRY. The last witness is Lt. Comdr. William H. Carroll, United States Coast Guard Stores.

#### STATEMENT OF LT. COMDR. WILLIAM H. CARROLL, UNITED STATES COAST GUARD

Lieutenant Commander CARROLL. My name is William H. Carroll, Lieutenant Commander, United States Coast Guard, Finance Officer, Personnel Division.

#### OPERATION OF SHIP'S SERVICE STORES IN COAST GUARD

The Ship's Service Stores in the Coast Guard came under by jurisdiction just about a week ago.

We have no legal authority, and the stores that we operate are not comparable with the Post Exchanges or Ship's Service Stores in the Navy.

Senator WHERRY. How many have you?

Lieutenant Commander CARROLL. That I could not say, because, as I will explain further, and you may get some idea, under our regulations which are issued by the Secretary of the Treasury and now are being rewritten for the signature of Secretary Knox of the Navy, any unit where there are two or more commissioned officers may open what we call a ship's service store, which man handle cigarettes, candy, and little items, toilet articles, to keep up the men's and officers' appearance.

They are prohibited from selling jewelery, clothing, or any item which may be handled by the general mess, that is, foodstuffs.

When we took this over recently, I found out in several places that they were ignoring the regulations. They were handling jewelry and certain items of clothing and other articles set forth, and we issued a directive to discontinue that.

Senator WHERRY. Have you a copy of that directive?

Lieutenant Commander CARROLL. Yes, sir; but I shall have to send it to the committee.

Senator WHERRY. That is all right.

(The directive referred to is inserted in the record on p. 2317, following Lieutenant Commander Carroll's statement.)

Lieutenant Commander CARROLL. That is coming out in the new regulations. We are listing the items they may sell.

There are no Government funds involved, and there is no force outside of myself at headquarters which has any supervision.

The money they get from profit is used for welfare purposes. One striking example was when the *Wakefield* was burned and all her officers and men came ashore without funds, and we used this money to give them funds.

We watch the profits made, and that money, and if it get excessive we cut it down or else put it into the welfare fund.

Senator WHERRY. What do you mean, cut it down?

Lieutenant Commander CARROLL. We draw from their funds, and we will not let them accumulate an excessive amount of money. They may use it to augment the money appropriated by Congress for the welfare, health, and contentment of the personnel, and when it reaches proportions too large, we demand they transfer a proportionate amount to headquarters, and the money is used for the families of enlisted men of the Coast Guard personnel.

As to priorities, I do not know of any that are being issued at the present time outside of what are necessary to secure candy and items like that.

We were issued one priority the other day to get locks for seabags at one of our training stations, but all other requests for priorities have been denied.

We found one case where they were issuing priorities for jewelry which the War Production Board called attention to, and that was discontinued forthwith, so it is a very minor situation.

At New London, where we have the academy, we have a little store, and up on the Oregon coast, where we have patrols from Maine to Alaska. They are far removed from civilization. We have no local purchasing unit, and we carry no stock. We will not let them carry more than can be disposed of in 60 days, and they have to send in their bills and file statements every month, so we are cognizant of what they are doing.

Senator WHERRY. Are you selling any merchandise to civilians?

Lieutenant Commander CARROLL. We sell to no civilians, sir.

Senator WHERRY. Are there any questions?

Lieutenant Commander CARROLL. If a civilian is working on a construction project on one of our units he has to eat on the general mess and pay his money in on cost of rations. We have no facilities to feed civilians through any of our stores.

Senator WHERRY. Any questions, Senators?

Senator BUCK. No, sir.

Senator ELLENDER. No, sir.

Senator WHERRY. Thank you very much.

If there is any further testimony anyone should like to offer here, either complaints or new complaints, voluntary or otherwise, opportunity is now given.

If not, we will conclude the hearings.



**DIRECTIVE DISCONTINUING SALE OF JEWELRY, CLOTHING, AND OTHER ITEMS IN SHIP'S SERVICE STORES IN COAST GUARD**

UNITED STATES COAST GUARD OFFICIAL DISPATCH

18 MARCH, 1943.

*To all D. C. G. O. S., C. O. C. G. T. S. Groton, Manhattan Beach, Curtis Bay, St. Augustine, Port Townsend, Alameda, and Atlantic City*

Information received indicates that jewelry and other items are being stocked and sold in ship's service stores contrary to provisions of article 1583, Regulations X. Provisions of this Article will be strictly complied with.

Article 1583, Coast Guard Regulations: "He (the ship's service store officer) shall stock the store with only such articles necessary or desirable for the health, comfort, or appearance of the personnel while on duty. He shall not carry in stock articles of food usually carried in the general mess, articles of clothing, or jewelry."

PERSONNEL

(The committee adjourned at 11:45 a. m.)

# PROBLEMS OF AMERICAN SMALL BUSINESS

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## HEARINGS

BEFORE THE

SUBCOMMITTEE ON MINING AND MINERALS INDUSTRY

OF THE

SPECIAL COMMITTEE TO STUDY AND SURVEY  
PROBLEMS OF SMALL BUSINESS ENTERPRISES

UNITED STATES SENATE

SEVENTY-EIGHTH CONGRESS

FIRST SESSION

PURSUANT TO

**S. Res. 66**

(78th Congress)

(Extending S. Res. 298—76th Congress)

A RESOLUTION TO APPOINT A SPECIAL COMMITTEE  
TO STUDY AND SURVEY PROBLEMS OF  
AMERICAN SMALL BUSINESS  
ENTERPRISES

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### PART 18

CRITICAL, STRATEGIC, AND ESSENTIAL MATERIALS: II

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MARCH 30, 31, AND APRIL 1, 1943

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Printed for the use of the Special Committee to Study and Survey  
Problems of Small Business Enterprises



UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1943

**SPECIAL COMMITTEE TO STUDY PROBLEMS OF AMERICAN SMALL  
BUSINESS**

**JAMES E. MURRAY, Montana, *Chairman***

**FRANCIS MALONEY, Connecticut,**

**ALLEN J. ELLENBER, Louisiana**

**JAMES M. MEAD, New York**

**TOM STEWART, Tennessee**

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**GEORGE A. WILSON, Iowa**

**KENNETH S. WHERRY, Nebraska**

**C. DOUGLASS BUCK, Delaware**

**CHARLES A. MURRAY, *Executive Secretary***

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**SUBCOMMITTEE ON MINING AND MINERALS INDUSTRY**

**JAMES G. SCRUGHAM, Nevada, *Chairman***

**C. DOUGLASS BUCK, Delaware**

**WM. C. BROADGATE, *Technical Consultant***

# CONTENTS

## STATEMENTS

	Page
<b>Tuesday, March 30, 1943:</b>	
Podell, David, Chief of Complaints Section, Antitrust Division, Department of Justice.....	2324
Ayer, Frank A., Chief, Primary Production Branch, Copper Division, War Production Board.....	2314
King, Harry O., Director, Copper Division, War Production Board.....	2357
<b>Wednesday, March 31, 1943:</b>	
Lund, Richard J., Director, Miscellaneous Minerals Division, War Production Board.....	2361
Leith, Andrew, Chief, Ferro-Alloys Branch, War Production Board.....	2378
Smith, Miles K., Assistant Chief, Steel Division, in charge of Ferro-Alloys Division, War Production Board.....	2388
Hatch, E. Franklin, Assistant Chief, Ferro-Alloys Branch, War Production Board.....	2391
<b>Thursday, April 1, 1943:</b>	
Ickes, Hon. Harold L., Secretary of the Interior.....	2397
Young, Howard I., Director of the Mineral Resources Coordinating Division, War Production Board.....	2415
Nelson, Donald M., Chairman, War Production Board.....	2438

## SUBJECT INDEX

Statement by the chairman of the subcommittee.....	2319
Lack of coordinated over-all policy for strategic minerals.....	2319
Creation of Subcommittee on Mining and Minerals Industry.....	2320
Subcommittee's tentative declaration of policy.....	2320
Letter from Senator Murray to Attorney General Francis Biddle.....	2325
Letter from Attorney General Biddle to Senator Murray.....	2325
Letter from Senator Scrugham to David Podell.....	2326
Monopolies and cartels charged with efforts to curtail independent production of strategic minerals.....	2326
The tin cartel.....	2327
The current supply of tin.....	2328
Acute shortage of copper is well known.....	2329
Independent copper mines blocked in efforts to secure Government help.....	2330
Experience of Sunset Copper Mine.....	2330
Copper one of most highly concentrated industries.....	2331
Failure to use copper properties at Kennecott, Alaska.....	2331
Eighty-five percent of present copper supply produced by three interests.....	2332
Copper producers compete with independent fabricators who are their customers.....	2333
Alunite and aluminum.....	2334
General comments on other minerals and metals.....	2335
"Deadly parallel" between degree of concentration and degree of shortage.....	2336
Advantages to be gained from opening up small mines even if Government aid is needed.....	2337
Letter from Senator Murray to Prentiss Brown.....	2339
Letter from Prentiss Brown to Senator Murray.....	2339
Statement of Charles F. Willis, Secretary, Arizona Small Mine Operators Association.....	2342
Sources of information consulted as to increasing copper production.....	2345
Survey of Primary Production Branch has included many small producers.....	2345
Copper projects set up in all cases where substantial increases indicated.....	2346
War Production Board projects now in production or under construction.....	2347

	Page
Premium Price Plan for aid to high-cost producers.....	2347
Types of aid necessary for copper producers.....	2348
Questions asked by chairman of the subcommittee.....	2349
Factors retarding domestic production of copper.....	2349
Additional questions of the committee.....	2350
Questions on the Premium Price Plan.....	2352
Question of increased production on part of bigger corporations.....	2353
Questions on aid in securing financial assistance, necessary supplies, and labor.....	2354
Effect of closing down of gold mines on labor shortage in copper mining.....	2355
Serious problems created by drafting copper miners into Army.....	2356
Chief problem in copper production is manpower.....	2357
Increased demand for quartz crystals.....	2362
Program formulated to correct expected deficiency in supply of quartz.....	2362
Wartime uses for industrial diamonds.....	2363
South Africa chief source of diamonds.....	2364
Efforts to develop domestic production of diamonds.....	2365
Prices controlled by diamond syndicate.....	2367
Development of Hot Springs diamond field rejected on basis that expenditure of necessary materials unwarranted.....	2368
Question of membership of Facilities Committee.....	2369
Demand for diamonds has increased since decision of Facilities Committee.....	2370
Increased price has enabled production of mercury to keep pace with increased demand.....	2371
Further encouragement now necessary to develop domestic mercury reserves.....	2371
Supply picture for platinum metals.....	2372
Silver supply adequate for war and essential civilian needs.....	2373
Corundum supply chiefly imported, but shipping difficulties necessitate development of domestic sources.....	2375
Chief strategic use of talc is in manufacture of steatite.....	2375
Projects for increasing production of spodumene.....	2376
Foreign sources of kyanite have held up, domestic production increased.....	2377
Danger of acute shortage of manganese, due to necessity for relying on imports.....	2378
Increase in domestic production must be largely of low-grade ores.....	2379
Would increased price result in rapid increase in production?.....	2379
Basis of present prices paid for manganese.....	2381
Need both domestic and foreign production.....	2381
"Price is not the only factor".....	2383
Increase in price did not result in increased production.....	2383
Over-all plan for developing domestic production of manganese.....	2384
Question on progress made in development of Artillery Peak deposit.....	2385
Comparative record of manganese production for last war and for this war.....	2386
Supplementary statement on chromium ores.....	2387
Results of efforts to stimulate existing production of molybdenum.....	2388
Efforts on the part of the War Production Board to stimulate new production.....	2389
Comparison of imports with domestic production.....	2390
Questions on production of tungsten.....	2390
Lead vanadate program in southwestern United States.....	2392
Metallurgical extraction of vanadium found in iron ores.....	2392
Recovery of vanadium from vanadium-bearing oils.....	2393
Recovery of vanadium from eastern Utah and western Colorado.....	2393
Recovery of vanadium from Wyoming and Idaho shales.....	2394
Total program has resulted in 85 percent production increase in 1942 over 1941.....	2394
Substantial amount still imported.....	2394
Encouragement of smaller producers of vanadium.....	2395
Anomaly between need for raw materials and difficulties of small miners in entering war production.....	2397
Problems of small operators in metals and minerals field.....	2398
Exploratory program of Bureau of Mines and Geological Survey.....	2399

CONTENTS

Y

	Page
"Expansionist" policy of Department of the Interior.....	2400
Steps suggested to help small mines.....	2400
Production of strategic minerals has improved, but much still remains to be done.....	2402
Mineral Resources Operating Committee "a step in the right direction".....	2402
Problem of raw material for aluminum production.....	2403
An attack on the integrity of the Bureau of Mines.....	2405
Press release from the Department of the Interior, February 16, 1943.....	2406
The Production of Alumina from Low-Grade Domestic Materials, an address by Dr. R. S. Dean, Assistant Director of the Bureau of Mines, before American Institute of Mining and Metallurgical Engineers.....	2407
Letter from A. H. Bunker, Director, Aluminum & Magnesium Division, War Production Board, to C. H. Mathewson, president, American Institute of Mining and Metallurgical Engineers.....	2411
Policy of Interior Department with respect to domestic production of manganese.....	2412
Government should increase efforts to aid small mines.....	2413
Interior Department fights for establishment of small, competitive enterprise.....	2414
Functions and scope of Mineral Resources Coordinating Division.....	2415
Functions of Minerals and Metals Advisory Committee.....	2416
Functions of Mineral Resources Operating Committee.....	2416
Members of Minerals and Metals Advisory Committee.....	2417
Members of Mineral Resources Operating Committee.....	2417
Administrative Order No. 20, establishing the Mineral Resources Coordinating Division.....	2418
Recommendations of Operating Committee.....	2420
Committees in Coordinating Division serve in an advisory capacity.....	2422
Principal work of Operating Committee to date.....	2422
Decision of Operating Committee not final.....	2423
Role of Facilities Bureau in relation to Operating Committee.....	2423
Copper projects before the Facilities Bureau.....	2424
Members of Facilities Bureau, Facilities Review Committee, and Facilities Clearance Board.....	2424
Committee has not found attitude of Facilities Bureau sympathetic in case of copper projects.....	2425
Reasons for creating Mineral Resources Coordinating Committee.....	2427
Difficulties created for small miners by number of boards he must contact.....	2427
Steps necessary to obtain approval of a copper project.....	2428
Why must each mineral be handled by separate group?.....	2430
Do division heads have enough authority?.....	2431
Extent of duplication among boards affected by Coordinating Division.....	2432
Assistance given small miners by Reconstruction Finance Corporation.....	2432
Policy on Premium Price Plan changes.....	2437
To win the war, productive capacity must be used to the maximum.....	2438
Balance between maximum finished product and maximum raw materials production.....	2438
Now possible to give more weight to longer-run expansion production.....	2439
Program for opening up new mines.....	2439
Small quantities of raw materials are important.....	2440
Foreign supply to be brought in by incoming shipping.....	2440
Answers to subcommittee's questions on strategic minerals policy.....	2441
Post-war minerals policy.....	2442
Obtaining minerals requirements as much a production task as actual production of weapons.....	2443
Necessity for adequate stockpiles.....	2444
Must depend upon domestic resources in time of war.....	2444
Manpower problem in increasing domestic production.....	2445
Must also guard against draining country of its resources.....	2446
Was shutdown of gold mines justified?.....	2446
Necessity for development of replacements for depleted minerals.....	2449
Attitude of aluminum monopoly to development of new resources.....	2450
Has further production of magnesium been hampered by present producers?.....	2451

**VI****CONTENTS**

	<b>Page</b>
Expansion of domestic production of manganese.....	2453
Price factor in production of manganese.....	2453
Manpower problem in manganese production.....	2454
Change of policy on strategic minerals requested.....	2456
Wide use of new types of materials in war production.....	2456
Use of new metals and materials must be encouraged not only for war but for peacetime uses.....	2458

**TABLES**

Statement of development loans approved January 1942 through Feb- ruary 28, 1943, segregated by principal metals.....	2434
Statement of "\$5,000" loans through February 28, 1943, segregated by principal metals.....	2436

# MINING AND MINERALS INDUSTRY

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TUESDAY, MARCH 30, 1943

UNITED STATES SENATE,  
SUBCOMMITTEE ON MINING AND MINERALS INDUSTRY  
OF THE SPECIAL COMMITTEE TO STUDY  
PROBLEMS OF AMERICAN SMALL BUSINESS,  
*Washington, D. C.*

The subcommittee met in room 357 of the Senate Office Building at 10:30 a. m., Senator James G. Scrugham, presiding.

Present: Senators Murray (chairman), Scrugham (chairman of the subcommittee, presiding), and Buck.

Senator SCRUGHAM. The hearing will come to order, please.

This morning we have three witnesses to be heard, Mr. David Podell, Chief of Complaints Section, Antitrust Division, Department of Justice; Mr. Frank A. Ayer, Chief, Primary Production Branch, Copper Division, War Production Board; and Mr. H. O. King, Director, Copper Division, War Production Board.

## STATEMENT BY THE CHAIRMAN OF THE SUBCOMMITTEE

I have a short preliminary statement that is of interest, I think, and encompasses the principal matters under discussion.

We are in the midst of a war in which we must utilize every resource available in order to conquer our enemy in the shortest possible time and thereby save lives and property and reestablish our economy on a sustaining and enduring basis for the peace that will follow.

With that clearly in mind as the objective, we will have no difficulty, I think, in confining the testimony to pertinent subjects and pertinent questions.

It is generally believed and it is evident that all of our resources have not yet been brought into use. This is not due to the unwillingness of the American people to help to the best of their ability.

Our small business enterprises, especially small mining and minerals operations, are daily urging the Government to give them an opportunity to make their contributions. Individually their potential offerings are small, but in the aggregate they can give considerable impetus to the war program. We feel that it is up to the Government to bring together in a single program these scattered efforts, and to consolidate the widely distributed resources into a single, large, material reservoir.

## LACK OF COORDINATED OVER-ALL POLICY FOR STRATEGIC MINERALS

Now it appears from the investigations made by the committee's staff and from the analysis of the complaints received from operators



of small and marginal domestic mines that there is lack of a coordinated, over-all policy.

In Denver alone we had nearly 1,000 operators, and those, almost each and every one, had some plan whereby they hoped to aid the Government effort, provided cooperation could be secured.

Now, I am not going to read this statement in full, but simply the parts of it I want to bring out—a few of the high spots.<sup>1</sup>

The impression that needed mineral production can be improved is not new. Hearings before this committee and other committees have tended to confirm the widespread dissatisfaction of small operators. No properly integrated series of hearings has been held previously with the view of obtaining an expression of an over-all coordinated policy with respect to domestic essential mineral production, which includes especially the small and marginal mine picture.

#### CREATION OF SUBCOMMITTEE ON MINING AND MINERALS INDUSTRY

The Subcommittee on Mining and Minerals Industry was created for the purpose of determining the difficulties and, so far as practicable, recommending the remedy, which may possibly be in the form of legislation leading to the appointment of a War Minerals Director with adequate authority.

The domestic nonferrous mining picture is complex. It is much bound up with the expediencies of importing, which in turn is tied to the shipping situation. It also is related to the manpower situation. Only as sufficient men are available can domestic small and marginal mines operate. It is tied to the problems of Government financing where private capital cannot or will not venture. It is proposed that such points be developed at these hearings and at later hearings.

All the mineral problems might properly be resolved about a declaration of policy, flexible, to be sure, but one which will let the people of the United States know how we stand on domestic essential mineral production; whether adequate provisions are being made for supplies which will suffice for small as well as large war manufacturing enterprises, and for our essential civilian economy.

If the executive agencies do not evolve such a policy, the Congress will have to declare itself.

#### SUBCOMMITTEE'S TENTATIVE DECLARATION OF POLICY

As a tentative declaration of policy, this subcommittee suggests the following, the merits of which it will investigate through the medium of these present hearings, and a series of field hearings now scheduled:

1. The obtaining of the required amounts of metals and minerals is a production task that calls for the same type of production planning and scheduling as that which is necessary to the production of the weapons of war themselves.

2. In the computation of wartime requirements for essential metals and minerals, full provision must be made for the possibility of a

<sup>1</sup> Senator Scrugham's statement is printed in full on pp. 2321 to 2324, following his oral statement.

long war, and for the necessity of building up adequate stockpiles. A definite plan should be devised for the continuation of such stockpiles in the hands of the Government after the war as insurance against dumping and against future emergencies.

3. To conserve shipping, and to guard against interference with the Nation's metals and minerals supply through the shipping losses that are inevitable in time of war, the wartime production of essential metals and minerals must be planned and conducted with a view toward the fullest utilization of domestic sources of production.

4. In the wartime production of essential minerals and metals, the fullest possible use should be made of small and marginal ore deposits.

5. The computation of wartime requirements for essential minerals and metals and the production of such minerals and metals must be fully integrated with the Nation's program of expanding manufacturing facilities.

6. The planning and formulation of a program for the wartime production of essential minerals and metals must include the determination of the proper prices to be established on all metals and minerals to encourage maximum output.

7. The planning and formulation of a program for the wartime production of essential minerals and metals must include the provision of the manpower needed to operate the mines and fabricating plants. There is a driving need for such an administrative policy.

STATEMENT OF SENATOR JAMES G. SCRUGHAM, CHAIRMAN, SUBCOMMITTEE ON MINING AND MINERAL INDUSTRY, SENATE SPECIAL COMMITTEE ON SMALL BUSINESS, AT OPENING OF HEARINGS, WASHINGTON, D. C., TUESDAY, 10:30 A. M., MARCH 30, 1943

We are in the midst of a war in which we must utilize every resource available in order to conquer the enemy within the shortest possible time and re-establish our economy on a sustaining and enduring basis for the peace that will follow. Yet it is evident that all our resources are not being brought into use. This is not due to the unwillingness of the American people to help to the best of their ability. It is due to the lack of, or failure to adopt, a coordinated program. Our small business enterprises, especially small mining and minerals operations, are daily urging the Government to give them an opportunity to make their contributions. Individually their potential offerings are small, but in the aggregate they can give considerable impetus to the war program. It is up to the Government to bring together in a single program these scattered efforts and to consolidate the widely distributed resources into a single large material reservoir.

That there is lack of a coordinated, over-all policy is apparent from the investigations made by the committee staff and from the analysis of the complaints received from operators of small and marginal domestic mines. Small operators are shunted from office to office in the War Production Board, in the Office of Price Administration, in the Metals Reserve Company and in other agencies of the Government dealing with metals and minerals. The little opportunity which the small mine operators have to bring their production into use for the manufacture of materials for tanks, ships, planes, and other war weapons is further handicapped by the restrictions placed upon them in the way of ability to purchase equipment and supplies and to obtain or retain labor.

This impression of helter-skelter activity and lack of policy is not that alone of this subcommittee but apparently is shared by officials of executive departments whose background and experience in public administration qualify them to speak with authority. On January 13, 1943, Secretary of the Interior Ickes appeared before this committee and stated that our need for domestic production of strategic minerals should become obvious even to the blind and that there has been far too much of a tendency to resolve all our problems of

minerals shortages in favor of importation. The Secretary made the following statement:

"I see no cause for alarm in any projected rate of depletion of our mineral resources, provided the necessary steps are taken to insure that as a given mineral resource is depleted, other mineral resources are developed which will take its place."

Other statements and questions on this occasion brought out the fact that although some officials of the War Production Board might have the right idea on domestic mineral production, the War Production Board officials as a whole had opposed a coordinated program. This committee was told that it would be very helpful if the whole War Production Board organization saw more clearly the need for increased domestic production of minerals and metals.

Such opinions, combined with the committee's own observations, indicate that all has not been well and that there is cause for alarm in the conduct of some of the operations in the important field of raw materials.

The impression is not new. Hearings before this committee and other committees have tended to confirm the widespread dissatisfaction. No properly integrated series of hearings has been held previously with the view to obtaining an expression of an over-all coordinated policy with respect to domestic essential mineral production which includes especially the small and marginal mine picture.

This Subcommittee on Mining and Minerals Industry was created for the purpose of determining the difficulties and, insofar as practicable, recommending the cure. A cure may possibly be in the form of legislation leading to the appointment of an over-all coordinator or "War Minerals Director."

The domestic nonferrous mining picture is complex. It is much bound up with the expediences of importing, which in turn is tied to the shipping situation. It also is related to the manpower situation. Only as sufficient men are available can domestic small and marginal mines operate. It is tied to the problems of Government financing where private capital cannot or will not venture. It is proposed that these points be developed at these hearings and at later hearings.

All the mineral problems should be resolved about a declaration of policy—flexible, to be sure, but one which will let the people of the United States know how we stand on domestic essential mineral production; whether adequate provisions are being made for supplies which will suffice for small as well as large war-manufacturing enterprises and for our essential civilian economy.

If the executive agencies do not evolve such a policy the Congress may have to declare itself.

As a tentative declaration of policy this committee suggests the following, the merits of which it will investigate through the medium of these present hearings and a series of field hearings now scheduled:

- (1) The obtaining of the required amounts of metals and minerals is a production task that calls for the same type of production planning and scheduling as that which is necessary to the production of the weapons of war themselves.
- (2) In the computation of wartime requirements for essential metals and miners full provisions must be made for the possibility of a long war and for the necessity of building up adequate stockpiles. A definite plan should be devised for the continuation of such stockpiles in the hands of the Government after the war as insurance against dumping and against future emergencies.
- (3) To conserve shipping and to guard against interference with the Nation's metals and minerals supply through the shipping losses that are inevitable in time of war, the wartime production of essential metals and minerals must be planned and conducted with a view toward the fullest utilization of domestic sources of production.
- (4) In the wartime production of essential minerals and metals the fullest possible use must be made of small and marginal ore deposits.
- (5) The computation of wartime requirements for essential minerals and metals and the production of such minerals and metals must be fully integrated with the Nation's program of expanding manufacturing facilities.
- (6) The planning and formulation of a program for the wartime production of essential minerals and metals must include the determination of the proper prices to be established on all metals and minerals to encourage maximum output.

- (7) The planning and formulation of a program for the wartime production of essential minerals and metals must include the provision of the manpower needed to operate the mines and fabricating plants. There is a driving need for such an administrative policy.)

The committee hopes that Mr. Donald Nelson, who is scheduled to appear on April 1, will have some pertinent comments to make about this proposed policy and the possibility of its adoption by the War Production Board. Within such a framework the practical operations of the War Production Board divisions and branches can be judged. Where decisions of the War Production Board do not appear to fit such a policy framework they should be questioned. We believe that the War Production Board itself will be greatly benefited by the over-all guidance of such a "charter." But something definite is needed, whether the policy proposal of this committee or some other is adopted.

Study by the committee of the actions of the War Production Board for the past 6 months or more indicates extreme reluctance to allow expansion of present mines and approval of new operations, especially in the small and marginal field. The reasons given in disapproving individual cases frequently do not seem adequate.

An over-all study of the situation resulted in the following letter from Chairman Murray to the President of the United States, dated February 19, 1943:

"DEAR MR. PRESIDENT: There is now going on a general readjustment of production programs for finished materials and, very properly, cancellation of facilities where there has been overexpansion. This seems to be part of a logical policy to bring manufacturing programs into line with raw material supplies.

"Unfortunately, it appears to me as though the policy of disapproving expansions has extended vertically downward into the domestic strategic mineral mining program. I have noticed, for example, that for some months no new or expanded copper programs have been approved by the War Production Board despite the fact that some 133,000 tons per year could be obtained additionally from domestic sources with very small outlays of men and critical materials. Part of this production could be obtained in a few months. Had approval been granted for certain projects presented last year, some mines at present idle would now be productive.

"While our industries obviously must be curtailed to fit the raw material supply, at the same time the domestic raw material supply should be increased. This will conserve shipping space and help to maintain our war and essential civilian manufacturing programs on as large a scale as possible.

"It occurred to me that the domestic strategic and critical minerals program might have been caught in the general policy of contraction and cancellation. There would be nothing incompatible between policies of rational expansion of domestic mining and the contraction of manufacturing facilities. Increased raw material supplies may avoid the necessity for excessive cancellation of facilities.

"The tendency to withhold facilities for domestic strategic and critical mining expansion may not have been brought to your attention. I think a change in policy should be instituted.

"Respectfully yours,

"JAMES E. MURRAY, *Chairman.*"

The President replied under date of March 11, 1943, as follows:

"DEAR SENATOR MURRAY: Your inquiry of February 19 concerning the place of minerals mining expansions in the total war production program is one which merits full consideration.

"Such consideration will be given as promptly as possible, and I shall communicate with you again on this subject.

"Sincerely,

"FRANKLIN D. ROOSEVELT."

The committee awaits with interest the further comment from the President on this important matter.

In Report No. 12 on American Small Business it is stated that at a hearing on January 13, 1943, at which the Honorable Harold L. Ickes, Secretary of the Interior, appeared, the chairman raised the question as to whether or not a War Minerals Director should be established and given full statutory power to coordinate the activities of the many Federal agencies engaged in the discovery, development, production, importing, and financing of metals and minerals.

Because the policy thread running through the actions of the War Production Board has not been clear, the extraordinary hue and cry about the actual facts has resulted in demands on Congress to create an over-all coordinator to direct the dozen or so governmental agencies active independently in the essential mineral program—a War Minerals Director. These demands came to a head at the mining industry's Western War Council meeting in Denver during January of this year. Simultaneously with this meeting came a notice from the War Production Board of the creation of a Mineral Resources Coordinating Division within War Production Board, with two new committees added to the plethora of committees already operating within that organization. Mr. Howard I. Young, an able industry executive, was appointed Chairman and Director. Before long the suspicion arose in the industry and in the Congress that this might have been a placating gesture and that the new "Coordinator" has little or no authority and is by no means a substitute for a "War Minerals Director" who would operate under a mandate and a policy established by the Congress.

It is a little early to judge the possibilities of the new set-up, but an examination of the directive under which the Mineral Resources Coordinating Division operates adds to the suspicion that its functions are largely advisory, even within War Production Board itself, let alone having any real authority over other agencies so that essential mineral production, stockpiling, and importation may be integrated. Mr. Howard I. Young has been invited to testify as to the functions of his committees and division and to inform this committee what has been accomplished to date and what he expects to be able to accomplish. This testimony may reveal whether or not remedial legislation is necessary.

The subject of stockpiling has long been a burning issue. Are stockpile requirements adequate? Are the requirements being met? Are domestic sources being fully utilized? What disposition will be made of stockpiles after the war? Are we to dissipate them—dump them on the market to compete with post-war mining? Are we to be caught again with no supplies of material and with shut-down and ruined mines as we were after the last war?

All these questions need resolving in a specific fashion, and the committee hopes that after its hearings are complete it will be able to report a well-considered plan for solving these important problems, which will remove the suspicion raised by many persons that there is a resistance in the War Production Board to long-range planning and accumulation of adequate stockpiles for fear of post-war consequences.

In considering the larger question of policy, this Subcommittee on Mining and Minerals Industry of the Senate Small Business Committee does not intend to overlook special cases where individual abuses have been brought to its attention. Such cases have a definite bearing on the over-all policy picture and will be particularly emphasized during field hearings.

This committee feels that direct and prompt action pointing to an announced policy by the Government regarding domestic mining and stockpiling is essential to winning the war and preserving a basic essential civilian economy. Either the executive branch of the Government must declare itself or Congress must act.

**Senator SCRUGHAM.** Before opening the hearing, I would like to call on Senator Murray, the chairman of our Special Committee to Study Problems of American Small Business, whose forethought has resulted in the very constructive work done.

Senator Murray, do you desire to make any remarks at this time?

Senator MURRAY. No, thank you, sir.

**Senator SCRUGHAM.** The other member of the subcommittee present this morning is Senator C. Douglass Buck, of Delaware.

The first witness this morning is Mr. David Podell, Chief of Complaints Section, Antitrust Division, Department of Justice.

#### STATEMENT OF DAVID PODELL, CHIEF OF COMPLAINTS SECTION, ANTITRUST DIVISION, DEPARTMENT OF JUSTICE

**Senator SCRUGHAM.** Mr. Podell, will you state your connection with the Department of Justice?

Mr. PODELL, Special Assistant to the Attorney General in charge of complaints and small business in the Antitrust Division.

Senator SCRUGHAM. Will you please offer for the record the letter requesting your testimony and the exchange of correspondence between Senator Murray and Attorney General Biddle?

Mr. PODELL. I have copies of the correspondence you refer to, and the original of your letter referred.

Senator SCRUGHAM. It will be included in the record.

(The correspondence referred to is as follows:)

LETTER FROM SENATOR MURRAY TO ATTORNEY GENERAL FRANCIS BIDDLE

UNITED STATES SENATE,  
SPECIAL COMMITTEE TO STUDY PROBLEMS OF AMERICAN SMALL BUSINESS,  
November 9, 1942.

HON. FRANCIS BIDDLE,  
*The Attorney General,*  
*Washington, D. C.*

MY DEAR MR. ATTORNEY GENERAL: In the conduct of the hearings by the Senate Small Business Committee there have been numerous indications of monopoly restraints which have been detrimental both to small business and to the war effort. As to a number of the industries involved, your Department has been conducting investigations under the antitrust acts and has accumulated material thereon which would be of aid to us in the preparation of our final reports, as well as any recommendations we may make to the Congress. It may well be also that the material accumulated by our committee may prove of value to your office in its efforts to aid small business as well as in the conduct of various prosecutions for violations of the antitrust laws which have proved detrimental to small business.

Under the circumstances, I am writing to inquire whether it would be possible to secure the cooperation of the Antitrust Division both in the digest of the material accumulated by the committee and the study of various phases thereof. If that is agreeable, we would suggest that the Antitrust Division delegate one or more representatives to make a study of the material accumulated and to be gathered by the committee and that the Antitrust Division cooperate further to such extent as may prove feasible so that we may have a thorough and competent study of available material as a real aid to the committee in the preparation of its report and recommendations to the Congress.

Sincerely yours,

(Signed) JAMES E. MURRAY,  
*Chairman.*

LETTER FROM ATTORNEY GENERAL BIDDLE TO SENATOR MURRAY

NOVEMBER 30, 1942.

HON. JAMES E. MURRAY,  
*Chairman, Senate Committee on Small Business,*  
*Washington, D. C.*

MY DEAR SENATOR: This will acknowledge receipt of your letter of the 9th, wherein you inquire whether it will be possible to secure the cooperation of the Antitrust Division of this Department, both in the digest of the material accumulated by the committee and the study of various phases thereof, and suggest that the Division delegate one or more representatives for the purpose of making such study.

I have transmitted your suggestion to the Antitrust Division with the request that they extend to you and your committee their cooperation along the lines suggested in your letter and furnish to your committee full aid and assistance in the effort your committee is making to help small business.

With kind personal regards,  
Sincerely yours,

(Signed) FRANCIS BIDDLE,  
*Attorney General.*

## LETTER FROM SENATOR SCRUGHAM TO DAVID PODELL

MARCH 10, 1943.

Mr. DAVID PODELL, ( )  
 Chief, Complaints Section, Antitrust Division, Department of Justice,  
 Washington, D. C.

DEAR MR. PODELL: This committee invites you to appear before it on March 23 at a hearing to be held in room 357, Senate Office Building, at 10:30 a. m.

We would appreciate very much having you make a statement informing the committee about the policies that you have found being applied by the War Production Board to small mining operations as you define such operations. The committee would like to know why it appears to be difficult to bring the domestic mining operations into full production. Specific cases should be cited, if possible, to illustrate your points.

We are especially interested in evidence of any resistance to acquiring and maintaining adequate strategic and critical mineral stockpiles, and in any evidence pointing to the necessity for legislation which would contemplate continuing stockpiling after the war. There has been considerable interest in a post-war project to set up permanent stockpiles calculated to contain sufficient materials as insurance against a future emergency. Such stockpiles, it would seem, should contain at least a 3-year supply, and arrangements should be made to acquire the minerals for this 3-year supply over a 10-year period from domestic sources at prices which will permit our mines to operate. Any testimony you could give on this point will also be appreciated.

W. C. Broadgate, of the committee staff, will be pleased to work with you closely with regard to your statement and the preparation of such questions as may highlight points it is particularly desired to develop. Mr. Broadgate may be reached at National 3120, extension 1291.

Sincerely yours,

JAMES G. SCRUGHAM,  
 Chairman, Mining and Minerals Industry Subcommittee.

Senator SCRUGHAM. Have you received any complaints in relation to these matters or have you prepared any data on the subject of metals and minerals?

Mr. PODELL. Senator, we have compiled a tabulation of stockpiles and other data with relation to these critical metals and minerals which is drawn very largely, if not entirely, from confidential sources. I think the committee might find it of use in the inquiry, and I am certain that arrangements can be made to have it put at the disposal of the committee for confidential use. I am sure that the committee would not want the data publicized under the circumstances.

MONOPOLIES AND CARTELS CHARGED WITH EFFORTS TO CURTAIL INDEPENDENT  
 PRODUCTION OF STRATEGIC MINERALS

Now, several complaints have been filed, Senator, with the Antitrust Division and the Small Business Section concerning the inability of independent units to secure approval of priorities and loans for the development of an increased supply in the production of critical raw materials. In connection with some of these complaints the charge has been made that dominating groups of industry and foreign cartels have used their influence directly or indirectly to curtail and prevent the development of various properties.

It is pursuant to the various requests of your committee and the exchange of correspondence between Senator Murray and the Attorney General that we made a study of certain of these materials. Certain of these complaints—a great many of them—we found wholly

without substance, and discarded them. Others are still in the process of investigation.

We have complaints relating to the subject of industrial diamonds. As your committee well knows, industrial diamonds are basic to any war production program. If any of the warring parties were deprived of their supply of industrial diamonds, it would cripple the war effort. Being the hardest metal known to man, it is used in connection with almost every essential war product. Unfortunately, we have been unable to complete the report in time to make an appropriate presentation of it to this committee today, and I am going to ask you, Senator, to reserve that subject to some future date.

Senator SCRUGHAM. It is a needed mineral?

Mr. PODELL. An urgently needed mineral—basic.

Senator SCRUGHAM. You will make some provision for furnishing the information later?

Mr. PODELL. Yes, indeed.

Senator SCRUGHAM. Very well; proceed, if you will.

Mr. PODELL. Now, we are prepared to present to you such material as we have gathered with respect to tin, copper, and aluminum, and a brief review of some of the other metals and minerals.

Scarcities of raw materials, especially in the metal and mineral field, go much farther back than the present war. Take aluminum, for instance. Probably it is first on the list of scarce metals. The Aluminum Co. of America and foreign cartels have had the world's supply of bauxite cornered for at least two generations before this war, and the development of other raw materials for the production of aluminum has been stifled or at least has been permitted to lie dormant while the cartels have produced just so much and no more for the world markets. This is true of almost every other scarce and critical material.

We find a deadly parallel between the degree of control either by way of the cartel or through the medium of monopoly and the degree of scarcity of the product.

Of course you appreciate that we approach this matter from an antitrust viewpoint.

Now, I have referred to the aluminum situation. Let me say a word about the tin cartel.

#### THE TIN CARTEL

The International Tin Committee is a cartel which has controlled the distribution of tin for many years. It allocates the shares among the various producing countries, and fixes the prices at which the product shall be sold.

The cartel, on September 7, 1942, with Japan in control of the bulk of the world's tin supply, solemnly allocated the joint supply to give Malaya and the Netherlands East Indies 150,000 tons out of the total allocation of 233,000 tons. In fact the cartel increased the shares for the occupied areas from about 116,000 tons up to 150,000 tons, with practically no increase for Bolivia, the best source of supply for the United States under war conditions.

Senator SCRUGHAM. That is a rather astonishing statement. You mean to say this international cartel is allocating tin to Japan?



Mr. PODELL. No; I did not mean to imply it was supplying any tin to our enemies. I did mean to say, as you will gather very shortly, that the cartel is regulated by a distribution of votes, and the governments in exile of these occupied countries hold certain votes, and the allocation followed those votes.

I will give you that a little more in detail after I give you the figures.

Malaya under the old agreement was to get 77,000 tons. Under the new agreement it is receiving 95,000 tons.

Nigeria, which is one of the five or six producing areas, was allocated for production a total of 10,000 tons, and under the new agreement it will receive 15,000.

The Netherlands East Indies was allotted a production of 39,000 tons, but under the new agreement, 55,000 tons.

Bolivia under the old agreement got 46,000 tons, 46,027 to be exact, and under the new agreement, 46,763.

The Belgian Congo under the old agreement got 15,000 tons, and under the new agreement, 20,000.

I am not giving you the exact figures but figures in round numbers, or rather, in thousands of tons.

Now, the total allotment under the old agreement was 183,000 tons, and under the new agreement the allotment is increased to 232,900 tons, but you will observe that the increases go substantially to the countries that are now occupied.

The voting power of the International Tin Committee technically still gives the occupied countries the controlling vote. Malaya has 5 votes; the Netherlands East Indies, 4 votes; Bolivia, 4 votes; Nigeria, 2 votes; and the Belgian Congo, 2 votes. Therefore 9 of the 17 votes represent the Far Eastern interests, whose mines are now in the hands of Japan. The tin cartel is sponsored by the governments of the producing countries, and the foreign ministers, I believe, sign the agreements. It is understood that the cartel has asked this country to appoint 2 nonvoting members to the committee to attend the meetings purely as observers.

#### THE CURRENT SUPPLY OF TIN

The supply of tin is not discouraging for the short run, because of the low rate of consumption and the considerable stocks on hand. This means that instead of consuming around 90,000 tons of tin annually, we shall cut consumption by about 50 percent, down to 45,000 or 50,000 tons.

Offsetting the reduced supply is the introduction of the electrolytic process of tin plating, which for some purposes takes the place of the old hot-dipping practice. As now practiced, the electrolytic process uses only about 35 to 40 percent of the amount of tin per box as compared with the old dipping method.

According to present information, electrolytic tin plating as now practiced in the United States does not give as safe a product for all purposes as the old method of dipping. The electrolytic tin is said to be satisfactory for many civilian food uses; but for some acid fruits, for which the electrolytic tin cannot be used, and for vege-

tables, and for the armed forces, where safety in the tropics is at a premium, the old dipping method is much preferred for preserving canned foods.

The net conclusion to be drawn from current statistics is that we are in a better position for the short run for tin than is generally believed publicly, but that the civilians will have to be content with short rations for the duration of the war, and that this shortage will affect the food program both on account of the quantity and the quality of tin cans available.

There is considerable additional material with respect to tin which we have gathered which is entirely at the disposal of the committee, but, of course, we always have to be cautious not to disclose confidential information; and if we can arrange for it to be presented, we will be very glad to have our files available to the committee for its confidential use.

Senator BUCK. May I ask Mr. Podell a question?

Senator SCRUGHAM. Yes, sir.

Senator BUCK. Mr. Podell, we understand from what you have told us that the country has a 2-year supply of tin on hand.

Mr. PODELL. Senator, if you would pardon me, I prefer not to give you the data. I have carefully worded my language. I should be very pleased to give you the confidential information for confidential purposes.

Senator BUCK. Thank you.

#### ACUTE SHORTAGE OF COPPER IS WELL KNOWN

Mr. PODELL. Now, on the subject of copper, the acute shortage of copper is a matter of common knowledge.

Mr. Eberstadt, when he was in office, in a memorandum to Senator Murray, which he authorized for publication and public use, made the following statement:

To determine the extent of material shortage on an assumption of full demand, we would have to add to the maximum military procurement program a normal peacetime year of nonmilitary consumption. The latter includes the minimum essential maintenance, repairs, supply, and expansion for utilities to sustain the expanding war effort. On this basis, we would have a demand for copper consisting of the 801,000 short tons consumed in a pre-war year (1939), plus the 3,448,000 short tons in the military procurement program as set out in February 1942, for the year 1943, or a total of 4,249,000 short tons as compared with an estimated supply of 2,234,000 short tons.

Senator SCRUGHAM. Who was the authority for this statement?

Mr. PODELL. Mr. Eberstadt. He undoubtedly gathered his figures carefully from sources he deemed reliable.

The deficit amounted to more than 2,000,000 short tons. Supply was only 53 percent of demand.

In other words, it is apparent from his statement that, eliminating any civilian use at all, there is a substantial shortage for strictly military use. Our military services have the problem of dividing a substantial deficit. No doubt this has been one of the principal causes of friction and controversy between the various services.

**INDEPENDENT COPPER MINES BLOCKED IN EFFORTS TO SECURE GOVERNMENT HELP**

There are several copper mines held by independent commercial owners, some of which could even go into immediate production. Others could go into production within a period of several months. Yet these mines are not in production. In some of them the owners have made efforts to secure some help from the Government, and have been blocked in such efforts.

Among these are the following: The Silver Bell mine in the State of Arizona; the Glacier Peak mine in the State of Washington; the White Pine mine in the State of Michigan; the Christmas Copper Co. mine in Arizona; the Walker mine in California; and the Sunset copper mine in the State of Washington.

I am advised that your committee has in its files data in respect to certain other small mines.

**EXPERIENCE OF SUNSET COPPER MINE**

The experience of the owners of the last-named mine, in an effort to get into production, may be illustrative.

On receipt of a complaint from W. D. Batcheller, consulting engineer, Arctic Building, Seattle, Wash., our office contacted the War Production Board to determine the facts as they appeared on their records.

An examination of those records disclosed the following: There was on file a memorandum dated September 29, 1942, which in substance stated that the Copper Division of the War Production Board had recommended to the Facilities Bureau that Sunset mine be approved so that the Metals Reserve Corporation could be free to make the necessary financial arrangements. This request for clearance was denied, according to the office memorandum of the War Production Board, dated October 14, 1942, from the Facilities Bureau of the Copper Division.

The memorandum stated in substance that a mine was already operating nearby and that a more ready supply at less cost could be obtained.

This office was further advised, that is, our office, that the Copper Division renewed its request for clearance after this and that the second request was likewise denied, about the 12th of November. There seems to be no record of any further action by the War Production Board in respect to this matter.

A member of the Copper Division who seems to be entirely familiar with this picture stated that a very thorough study of this mine had been made and a report submitted by an engineering company. On the basis of this report, the mine could go into practically immediate production and needed very little repairs to be put in full operation, since most of the machinery is already available at the mine. The cost figures submitted with this report were estimated from 14.2 cents to 17 cents per pound.

No doubt some of the above-mentioned mines might well fall within the category of marginal producers, that is to say, in normal times the cost of production would be higher than the prevailing current

market. But, in view of the shortage as certified to by Mr. Eberstadt, and in view of the urgent demand for the commodity and the lack of adequate substitutes, is the item of cost to be considered as the determining factor?

The present capacity of the foregoing mines we believe are matters of record with the War Production Board. It is quite likely that some of them offer potentialities for expansion of production.

In this connection, too, the problem of manpower is a factor. But it must be borne in mind that copper is something that is at the top of the list of the highly critical materials. The wide uses of copper are quite generally known.

#### COPPER ONE OF MOST HIGHLY CONCENTRATED INDUSTRIES

Let me pause here for a moment to say to your committee that our investigation disclosed that the production of copper is one of the most highly concentrated industries in the matter of control. Some 20 or 25 years ago the three major companies produced an aggregate of about 20 to 25 percent of the copper consumed. In the comparatively short period since then this percentage has increased so that today they are producing more nearly 85 percent of the total production. We approach these situations from the point of view of the desirability of opening these small enterprises so as to open the field to urgently needed competition.

These mines altogether probably will not produce in excess of 75,000 to 100,000 tons, and of course that is an item in the war effort, but from a long-range viewpoint all of these large interests today were small at the beginning. These are small mines, and they may become large. This is the ideal period for them to begin, when they can get the help of the Government in their war effort, and if opportunities present themselves for expansion, we may see these companies grow, and therefore you will have a competitive field, and you will be ready to deal with the scarcity which seems to be the whole theme of cartels and highly concentrated industries. They believe in the theory of scarcity. They believe in keeping the supply just below the demand so they can control prices.

#### FAILURE TO USE COPPER PROPERTIES AT KENNECOTT, ALASKA

In addition to the foregoing list of unoperated and undeveloped copper mines, our Department has received a complaint relative to the failure to use the rich copper properties at Kennecott, Alaska.

The Department has not had the facilities for verifying the data concerning these properties, but our information is that the mine was recognized at one time as the richest copper mine that was ever discovered. Originally the copper ore ran as high as 76 percent copper.

The Kennecott Mines Co. obtained the property about 1907. Construction of a railroad was begun in 1908 and completed in 1911. By that time a large tonnage of very rich ore had been blocked out farther off, an aerial tramway was built to connect the mine with the railroad terminal, and a concentrator was erected at the latter point.

In 1911 the Kennecott take of copper was more than 20,000,000 pounds. From 1918 through 1934 this mine produced roughly 1,160,000 tons of ore and 258,000,000 pounds of copper. The mine was closed during the depression years of 1933 and 1934.

Of course the 150 miles of railroad would have to be repaired. The answer from the War Production Board to the complainant, dated August 4, 1942, states that the War Production Board is—

interested only in copper properties which have developed ore reserves so that the production can be made available in time to help win the war.

We are not in position to question and do not mean or intend to question the judgment of the War Production Board in that regard, but a copper-mine expert of the Bureau of Mines who had visited these properties was interviewed. He stated that he considered there is copper ore at Kennecott, Alaska, but that the railroad has been allowed to run down and would have to be repaired.

We have information which seems to indicate very clearly that in addition to copper there are other deposits of scarce minerals capable of development in Alaska.

The judgment of the War Production Board is that it will take too long to develop it to be of any value in this war effort.

If we assume that to be a fact, we would submit to your committee the wisdom of a study of the possibilities and potentialities of Alaska from the point of view of the subject you are particularly interested in, Senator, and that is the matter of peacetime development of stockpiles.

Senator BUCK. This mine you spoke of, Mr. Podell, at Kennecott, Alaska, was closed in 1933?

Mr. PODELL. Yes, sir; 1933 or 1934. Our information is that it would be quite a job to repair that railway, and naturally Alaska has certain handicaps. You cannot work there throughout the year, and communication and labor are problems. The Bureau of Mines has made exhaustive studies of the subject, and has found that there are potentialities for the development and production of nickel in Yakobi, Alaska. Unquestionably other desirable and scarce metals and minerals may be available and capable of development, taking the long-range viewpoint.

The Department is also in possession of information to the effect that there are substantial tonnages of potential capacity, the operation of which is being held up in South America.

#### EIGHTY-FIVE PERCENT OF PRESENT COPPER SUPPLY PRODUCED BY THREE INTERESTS

Now, as I have had occasion to say, the copper industry today is virtually in control of three interests whose combined production aggregates about 85 percent of the present supply. Those are the Anaconda Copper Co., the Kennecott Co., and the Phelps-Dodge Co.

The extent to which those interests are capable of expanding their production and whether they have actually gone to the full extent of expansion and have actually developed their richer veins is a matter which is now being studied.

The Small Business Section of our Division has had many complaints about the supply of copper and the necessity of preempting

it for the larger manufacturers who are engaged in urgent war work.

As in the case of aluminum, the copper problem is much older than the war. In the past 25 years concentration of the production of copper in the United States has increased from 25 percent by three companies in the early 1920's up to about 85 percent by the three companies in 1942.

Four companies produce most of the copper produced in the country, and two of the four control about 95 percent of the Chilean supply of copper, the chief source of the Nation's imports.

I do not know, Senator, whether your committee would be interested in the difficulties that this concentration of production of raw material, copper, has occasioned in the matter of fabrication of that copper.

#### COPPER PRODUCERS COMPETE WITH INDEPENDENT FABRICATORS WHO ARE THEIR CUSTOMERS

We have had several complaints in that regard, the substance of the complaints being that the fabricators of copper are competitors of these very operators who themselves have fabricating subsidiaries.

In other words, the producers are in a position where they are competing with their own customers. There are about 50 or 60 independent fabricators of varying size, making copper cable and copper wire, scattered throughout the country. They all have to buy their copper from some one of these three or four producers. They have to pay the 12-cent price which is now the selling price for bars and some \$13.30 or \$13.40 for copper rods, and they draw these rods into copper cable, which is so much in demand.

Now, as you know, the civilian uses have been discontinued. I have in mind particularly three independent fabricators who found themselves in a position where they had to virtually discontinue their business, unless they could get into some war production or war contracts. They were prohibited from selling to utilities. They were prohibited from selling to power companies. They were prohibited from selling to communications companies.

When the Government requested bids for copper cable, these very producers, and I should say their subsidiaries, were in a position to put in bids which were below the cost of the commodity to these three independent fabricators. In other words, these operators in these competitive bid situations would bid \$13.50 or \$14, and it would cost the fabricator that or pretty near that for the rod before he began any operations.

We called this to the attention of the Army, and I think it should be made a matter of public record that Colonel Snow of the Signal Corps and Major Kleinhite of the same division immediately saw the situation and recognized it, and almost overnight the competitive bids were canceled. Those gentlemen arranged for private negotiations with this one company that we were speaking for at the time and paid him a somewhat higher price under the authority of the Smaller War Plants Corporation Act, in order to keep that business alive. The Army has cooperated fully in connection with that situation, and has it in mind so that when contracts come in they realize the picture with respect to these independent fabricators.

Senator BUCK. Senator Murray, is not this just the same complaint we have had before from meat packers and people who make automobile tires?

The CHAIRMAN. Yes; along the same line.

Mr. PODELL. There is an identical situation in the meat picture, but I assumed this committee would concern itself with the mineral situation.

#### ALUNITE AND ALUMINUM

Now, as to aluminum and alunite, the wide use of aluminum as strategic war material and the acute shortage are well known. The bauxite fields which constitute the basis of production today are extremely limited in this country. The only substantial deposit, in the State of Arkansas, is being very heavily drawn on.

On August 15, 1941, Mr. C. F. A. Gallagher of C. F. Gallagher & Co., industrial engineers for 26 years, submitted to Secretary Ickes a proposition to make available to the Government 40,000 tons of metallic aluminum. Mr. Gallagher's organization proposed to mine the alunite, convert it to alumina, and then to aluminum.

This was immediately referred to the Bureau of Mines. There were furnished with such proposal in duplicate detailed scientific, geological, and chemical data concerning the area, and its specific location described by metes and bounds, together with all necessary maps and other pertinent data.

The Bureau of Mines doubted the extent of the deposit of alunite from which the aluminum was to be processed. That Bureau made test borings and analyses, and verified the extent of the deposit, and on November 14 the Bureau of Mines declared—

There appears to be sufficient tonnage of high-grade alunite available to operate a plant of the size which you contemplate.

The Bureau of Mines suggested at the time the matter was referred to them that, since the Office of Production Management then had to recommend the Government financing of industrial plants designed to produce defense material, a copy of the voluminous and detailed report on the subject be furnished to that agency. This report was thereupon immediately supplied to O. P. M.

The proposal submitted to O. P. M. was turned over to their advisory committee on metals and minerals of the National Academy of Science.

On December 16, 1941, less than a month after its reference, Mr. Gallagher was told by Mr. P. D. Wilson, then engineer of the Bauxite and Alumina Unit of O. P. M., that this advisory committee had made a recommendation adverse to the proposal.

The reasons given by Mr. Wilson were that:

1. The proposal assumes existence of great quantities of very high-grade alunite, which assumption is unwarranted.

Complainant claims that proven deposits sufficient to produce 20,000,000 pounds of alunite per year for at least 5 years have been verified by the Bureau of Mines.

2. The Bayer process (used in conversion of alunite to alumina) cannot be used to economic advantage.

The complainant claims that the Bayer process had never been proposed. An improved Bayer process was advocated which had been successfully used in Europe and elsewhere throughout the world for many years and which had had the approval of recognized chemists and

metallurgists for many years. This modified Bayer process, we are advised, was approved and guaranteed by the Dorr Co., Inc., headed by John Van Nostrand Dorr, an eminent metallurgical chemical engineer, who has been intimately connected with the aluminum industry since 1913 and honored by national chemical metallurgical and mining organizations.

3. The tests made on Utah alunite show that it cannot be economically processed.

The complainant asserts that the test here applied of economical operation is the pre-war test of a commercially profitable company, the same test which he says seems to have been applied to other marginal mines where there are acute shortages of production and critical lack of the material in the war effort.

Mr. Gallagher then tried unsuccessfully to get a copy of the academy committee's report. He was refused by both the academy and O. P. M. He tried to get the names of the men on the committee from both sources. This was refused. He finally succeeded in getting it from other sources, and claimed that at least 12 of the 16 members of the committee had never seen the copy of the material furnished to O. P. M. with the original proposal, which they would have had to study to make even a superficial report.

Mr. Gallagher made subsequent application to the War Production Board, and, probably by reason of the previous denial, it was likewise denied.

Now I think in fairness I should apprise this committee that these matters relating to metals and minerals, together with other matters relating to other subjects that the Murray committee has been interested in, were submitted personally to Mr. Wilson of the War Production Board. He has assured us, and of course he has been in office but a short time, he has scarcely had an opportunity to get coordinated, but he has listened to these matters very carefully and has given us every assurance that they will be thoroughly reexamined and reconsidered by him, and I have not the slightest doubt that will happen.

#### GENERAL COMMENTS ON OTHER MINERALS AND METALS

Now I have a few general comments, if the committee would care to have me make them. They are not very informative. They are more or less of a general nature relating to a few of the other minerals and metals.

Senator SCRUGHAM. Proceed.

Mr. PODELL. *Cobalt*: Cobalt is controlled by a cartel, including the Canadian mines around Cobalt. The Small Business Section has had several complaints of Canadian nationals who have attempted to produce cobalt independently of the cartel, but so far apparently they have not been successful in their development or in their efforts to secure aid.

*Lead*: As to lead for war purposes, the situation is not serious, because the domestic production is comparatively large, and imports from Mexico and Canada are the principal foreign sources at the present time.

*Manganese*: Manganese has received the special attention of the Metals Reserve Corporation for many months. This metal has been the center of controversy in domestic economy for a generation.



Before the war, the great sources of supply of manganese, in the importance of the areas named, were Soviet Russia, Gold Coast of Africa, Cuba, Brazil, and British India.

All of these except Cuba are either cut off or exposed to the hazards of the sea. Cuban production and shipment to the United States have increased in response to the war pressure, and domestic production has reached a sizeable amount.

Here, too, production is highly concentrated in the hands of a few.

*Molybdenum:* The supply of molybdenum comes from domestic sources with negligible imports. Most of the domestic supply is produced by one company in Colorado, the Climax Molybdenum Co. That mine constitutes the largest deposit of molybdenum to be found anywhere in the world.

In normal times that mine produced 85 percent of the world production, and in normal times the owners of the mine cooperated very closely with the international cartel as to the quantity and prices in various countries.

*Nickel:* The production of primary nickel in the United States is negligible. Most of the imports come from Canada and are made by the International Nickel Co. Nickel has been controlled for a generation by cartels and monopoly organizations. The International Nickel Co. is dominant in this field.

There is a development under way for production of nickel in Cuba. The supply has been restricted for a generation, and we have a scarcity problem perhaps even worse than that in aluminum because of the monopolistic control of the metal.

I have already mentioned tin:

Senator SCRUGHAM. At this point, there is an erection of a tin smelter in Texas, with the aid of the Reconstruction Finance Corporation. Has that been of any material assistance in solving the tin problem?

Mr. PODEL. The R. F. C. and Metals Reserve Corporation have erected a tin smelter in Texas City, Tex.—one of the most modern and best-equipped smelters of its kind in the world. It has a sizable capacity, ample for our requirements.

There is a good deal which concerns the relation of this tin smelter and the interests operating it on the one hand and the tin cartel on the other. I think on that subject your committee can get much more reliable information from the Metals Reserve Corporation or the Reconstruction Finance Corporation than I am in any position to give. I do not know, frankly, how much what I may have would be regarded by them as of a confidential character, and I would suggest that to the committee.

“DEADLY PARALLEL” BETWEEN DEGREE OF CONCENTRATION AND DEGREE  
OF SHORTAGE

Now, in conclusion, if we look back over this picture, we can see that the peacetime neglect of a safe supply of some of the war materials is deplorable, to say the least; and also that there is a deadly parallel between the degree of concentration, through monopoly or cartel control, and the degree of acute shortage.

As to bauxite, we ought either to have had a far greater supply, or have opened by Government pressure other sources of raw materials for aluminum.

I think by now, under pressure of the war, it has been recognized that you may have different sources for the making of aluminum besides bauxite, such as clay, dolomite, and other base materials.

Manganese has been critical from the beginning of the war. The situation has improved in that product in the past 25 years as compared with World War I.

Nickel is notoriously short as a steel alloy, due to the control of the International Nickel cartel. The situation must be remedied by some force superior to the monopoly rule of the cartel—the rule of scarcity.

We have been on notice of the restricted supply of tungsten. For 5 or 6 years, with Japan gradually encroaching on the Chinese supply, we ought to have many times as much as we now have.

The three important metals, copper, lead, and zinc, are in somewhat different categories from the point of view of reserve stocks. Both consumption and supply of these three metals are so large in the United States that a stockpile against an emergency is probably not the only solution. The remedy probably lies in breaking up the monopoly control and developing additional resources both within the United States and the adjoining areas by several independents.

With three or four companies dominating each of the fields of copper, lead and zinc, the theory of scarcity, or at least restricted supply to support the price structure, is the rule in these industries in peacetime. We need competition in addition to stockpiling for the development of additional supplies. That is why it is so extremely important to encourage the independent small producers. The large ones today were small at the beginning.

The picture presented shows a mixture of physical scarcity of some of the important metals and economic scarcity brought on by a control of the market.

There are several bright spots in the record from the point of view of the war supply, but the picture is almost uniformly dark for civilian and small business operations. To put the matter bluntly, the war and the hundred or more institutions which have the bulk of the war contracts require approximately the whole supply, so you will find civilian needs and industry practically shut out as to each of them, and that means that small business is shut out.

Senator SCRUGHAM. Thank you, Mr. Podell.

Any questions?

ADVANTAGES TO BE GAINED FROM OPENING UP SMALL MINES EVEN IF  
GOVERNMENT AID IS NEEDED

Senator BUCK. I would like to ask a question in connection with these small mines being opened up.

Is it your idea that they would have to be subsidized to compete with large companies?

Mr. PODELL. The present price of copper, as I understand it, goes as high as 17 cents. Some of them may well come within that price.

Any arrangements with them, of course, are subject to renegotiations. We are interested in this picture not alone from the small-business angle, but from the monopoly viewpoint. We believe that this is an ideal time to develop these small mines, even though it should prove a little costlier at the beginning, because they have their chief struggle in getting a decent start, and the Government needs their product more urgently than it ever needed it before and can afford to help them to a decent start.

The tremendous long-range advantage is that you have opened a restricted field to wider competition.

Now I do not suppose that anyone would recommend that we run riot on the subject of costs, but it does seem to me that the advantages to be gained to our national economy and the fact that we do need their additional supply—there are two of these mines which together will produce at the beginning, not immediately, 50,000 tons. One of them was sought to be developed by Mr. Henry Kaiser. The Government has been extending substantial aid to the large institutions, and it can well afford to devote a fraction of that to develop the smaller ones.

Mr. Broadgate has gathered full data in regard to each of these mines.

Senator BUCK. What did you say was the annual production in this country?

Mr. PODELL. I have given Mr. Eberstadt's figures. He said our total prospective supply would be about 2,240,000 odd tons, import and secondary copper included.

Senator SCRUGHAM. Mr. Podell, I understood you to say that industrial diamonds were of great importance in the production picture today. I understood you to say there was only one source for industrial diamonds, one company that could supply them, one organization.

Mr. PODELL. Senator, will you forgive me if I ask you to present that to me at some future date? I intend to present a full statement when I feel safe in my facts.

Senator SCRUGHAM. Any other questions?

Senator MURRAY. Following the outbreak of the war, was there any real effort on the part of these larger corporations who control the copper industry to increase production?

Mr. PODELL. I believe, Senator, there have been various expansion programs, and the records will show that they have expanded. The only doubt that has arisen in the minds of certain people, and I am not at all sure it is so—I am hesitant to state it even to the committee—is whether those corporations are now developing their richer veins or whether they are attempting to develop the poorer veins and reserving the better ones for a later period. That I am not qualified to discuss.

Senator MURRAY. There has been a feeling that there is a way to greatly expand production in these copper mines that are already in operation. That is, they are not working their higher-grade ores, and therefore the production is greatly held down. I know in my State of Montana there is that impression, and I would like to have some accurate information on it.

Mr. PODELL. I am sorry I am not in a position to give it to you, but on your request we shall be very happy to do what we can to investigate that angle.

Senator MURRAY. The records of the big companies, which are the Anaconda—

Mr. PODELL. Mr. Comer says Kennecott, Anaconda, and Phelps-Dodge.

Senator MURRAY. Anaconda has properties not only in Montana but elsewhere.

Mr. PODELL. Yes, sir; Chile and Mexico.

Senator MURRAY. Reports of the Anaconda Copper Co., show that they only increased production 1 percent in 1941 over 1940, which of course is a very insignificant increase at the time when the demand for copper was very obvious.

Mr. PODELL. Mr. Comer, who is our economist, and who has studied the subject at length, advises that he can supply the committee the exact figures by mines, but for confidential use.

Senator MURRAY. We will be glad to have that for the record.

Mr. COMER. Not for the public record.

Senator MURRAY. For confidential use.

Senator SCRUGHAM. If there are no other questions, that will be all. Your testimony has been very interesting.

Senator MURRAY. Mr. Chairman, before calling the next witness, I would like to have inserted in the record at this point a letter I addressed to Price Administrator Brown on February 26, 1943, and his reply, dated March 11, 1943. This correspondence deals with the methods and procedures followed to arrive at nonferrous metals and mineral prices.

I have also a statement of opinion on the operation of the premium price plan by Charles F. Willis, secretary, Arizona Small Mine Operators Association.

(The material referred to is as follows:)

LETTER FROM SENATOR MURRAY TO PRENTISS BROWN

FEBRUARY 26, 1943.

HON. PRENTISS BROWN,  
Office of Price Administration,  
Washington, D. C.

DEAR MR. BROWN: Please inform this committee at your earliest convenience the methods used to arrive at nonferrous metals and mineral prices: (a) Establishing quotas and premiums for copper, lead, and zinc; (b) establishing maximum prices for other nonferrous and nonmetallic minerals.

We would also like to know why, when additional premiums were arranged for lead (which is stated to be noncritical), and zinc, no additional premiums were allowed for copper which might bring out much needed production from small and marginal mines.

Sincerely yours,

(Signed) JAMES E. MURRAY, *Chairman.*

LETTER FROM PRENTISS BROWN TO SENATOR MURRAY

OFFICE OF PRICE ADMINISTRATION,  
Washington, D. C., March 11, 1943.

HON. JAMES E. MURRAY,  
United States Senate.

DEAR SENATOR MURRAY: In reply to your letter of February 26, which I received on March 1, I should like first to review briefly for your committee the background of the policies adopted by the Office of Price Administration

and its predecessor agencies in establishing maximum prices for nonferrous metals and nonmetallic minerals.

In the development of price controls for these materials, which as you know are of vital importance to the war program, it became increasingly apparent that certain factors peculiar to mining operations should, in large measure, govern our specific price policies. These factors include the tendency in many mining operations for unit costs to rise as output is expanded and the wide existing variations in unit costs between mines for reasons largely connected with the grade and situation of ores. From the beginning, it was evident that a substantial proportion of our war needs for critical nonferrous metals and minerals must be met by the smaller-scale independent operators, whose production in total constitutes a sizable proportion of our national output and whose production of certain nonmetallic minerals comprises the bulk of such output.

In considering alternative courses of price policy, it seemed clear that further general price increases would serve only to maintain the relative positions of all producers and would not necessarily provide the degree and type of financial assistance required in individual cases in order to permit maximum output. In addition, such general price increases would produce serious inflationary consequences in the form of excessively high profits for certain low-cost producers and in price increases which would become necessary in succeeding stages of production. Since under war conditions the Government is directly or indirectly the purchaser of a very large proportion of such production, it was clearly desirable to avoid any unnecessary price increases which would result in increased expenditures of public funds.

To provide a form of price action suited to these circumstances, the Premium Price Plan for copper, lead and zinc was undertaken jointly by the Office of Price Administration, the War Production Board, and the Metals Reserve Company in January 1942. Under this program the Metals Reserve Company pays stated premiums to mine operators for production in excess of established quotas. Such quotas are established by the Office of Price Administration and the War Production Board, after recommendation by the Quota Committee, composed of representatives of the War Production Board and the Office of Price Administration, and approved by an official of each of the three agencies concerned. The premiums provided by the plan are intended to compensate mine operators for the additional costs incurred in working submarginal ores and to enable them to carry on development work on a sufficiently broad scale to maintain and, wherever possible, to expand their output. It is intended that the entire benefit of the premium payments for over-quota production shall accrue directly to the mine operator, and not to the custom mill or smelter which merely processes mine output. To provide a direct incentive to those operators whose properties were not worked during 1941 and to those smaller operators whose 1941 output was less than 200 tons of metal, initial quotas in these cases were set at zero, which meant that all subsequent production from those mines would be entitled to the full range of premiums provided by the plan.

With the decline in ore grade and the increases in operating costs which many operators have since experienced, it has been necessary from time to time for the Quota Committee to undertake revision of previously established quotas. In such action the committee gives full consideration to the scale of output which can reasonably be expected at ceiling prices, the operating and financial records of the property, probable costs and grades of ore, and other relevant information. In the case of the smaller mines, whose operations and records are not such as to permit precise determination of quotas, the committee endeavors to provide a sound financial basis for the maintenance and expansion of production.

For the Office of Price Administration, the analysis of requests for quota revision and the preparation of memoranda of recommended action by the Quota Committee is under the supervision of the Chief Premium Price Analyst, Mr. Jesse L. Maury, of this Office. Under his direction, the geological basis of each operation is appraised, monthly operating and financial reports from various sources are analyzed, and control records and reports summarizing the operations of the plan are prepared. The current volume of work in this connection includes the analysis of new proposals at the rate of six per day, new recommendations for the establishment and revision of quotas at the rate of approximately 100 per month, the compilation and analysis of premium payments under

some 4,500 existing quotas, and the analysis of financial and operating results of more than 160 larger mines now reporting their results under lowered quotas.

In meeting the financial problems of mine operators, the Premium Price Plan has proven itself a flexible device which can be readily adapted to the circumstances of individual cases. For example, in the case of certain mines whose current operations and proposed development have been handicapped by a lack of working capital or by a need for relatively minor additions of new equipment, it has been possible to provide financial assistance, either in the form of lowered quotas which would yield additional premiums or through the medium of advance payments of premiums by the Metals Reserve Company. With the approval of the agencies concerned, the Quota Committee has undertaken to compensate mine operators for wage increases approved by the War Labor Board and the Office of Economic Stabilization, where it appears that such wage increases cannot be absorbed by the mining company without jeopardizing production.

You will be interested to know that the Quota Committee has undertaken a positive program to simplify and to facilitate quota revision for those operators who were granted initial zero quotas, where such assistance is necessary to maintain or to expand production. Almost without exception, these properties are smaller-scale operations.

Some measure of the scope of the plan may be obtained from the record of premium payments applicable to production for November 1942, the latest month for which data are available. As premium payments for over-quota production in that month, a total of \$2,900,000 was paid, of which \$1,300,000 was applicable to copper, \$1,200,000 to zinc, and \$400,000 to lead. Such over-quota production represented about 13 percent of total copper production, 39 percent of zinc production, and 22 percent of lead production. The current rate of premium payments is estimated as approximately \$4,000,000 per month, which may be expected to increase somewhat as lower grades of ore and other cost increases are encountered.

You will realize, of course, that many of the problems of the smaller operators arise from sources which lie beyond the scope of the Premium Price Plan. Among these are the current shortage of manpower and, in some cases, the difficulty of obtaining equipment and supplies. In such cases, however, the Quota Committee undertakes wherever possible to refer these operators to agencies which may be able to provide assistance along the lines required.

You ask concerning the recent provision of increased premiums for zinc and lead under the Premium Price Plan and the reason for failing to provide an additional premium for copper. In this matter, this Office and the Metals Reserve Company have accepted the recommendations of the appropriate industry divisions of the War Production Board of the relative degree of essentiality of each metal to the war program. As you know, zinc generally occurs in the form of a zinc-lead ore, which may also contain varying amounts of other metals, and the increased premium for lead which may now be granted in certain cases is intended to encourage the working of combination zinc-lead ores rather than to increase the production of lead as such. It was further recognized that while lead is not currently in critically short supply, it might well so become as military operations expand. The increased premium provided for zinc represents twice the increased allowance provided for lead alone.

In the case of copper, for which no increase in premium was provided, the experience of the Quota Committee during 1942 indicated that more than 80 percent of our domestic production was forthcoming at a price of 12 cents, and that somewhat less than 10 percent of total domestic output required the full available premium of 5 cents per pound. While there are a few exceptional cases in which costs of production exceed 17 cents, it was felt that in the interests of administrative simplicity such cases should be handled by special agreement between the Metals Reserve Company and the operators concerned. My understanding is that several such agreements, involving higher-cost copper production from the Upper Michigan Peninsula, are currently being negotiated at prices somewhat higher than those provided by the Premium Price Plan. A further important factor in this decision was the desire to avoid any possible disruption in the present market price for copper imported from foreign sources, a situation which I believe you will agree might become active in the event of further increases in the general premium price of domestic copper.

In the establishment of maximum prices for other nonferrous metals and for nonmetallic minerals, this Office has likewise shaped its price policies to secure the maximum possible output of these critical materials under conditions which

would prevent unnecessary price increases and resultant increases in the cost of conducting the war.

In the case of fluorspar, used as a flux in the production of steel and as a material in the manufacture of hydrofluoric acid, the price regulation provides that the maximum prices permitted any producer may be adjusted upward by an amount necessary to insure the maintenance or expansion of his production with a reasonable operating margin. In the production of nonmetallic minerals, such as vermiculite, feldspar, kaolin, celestite, and kyanite, the bulk of production is provided by small-scale independent mine operators whose financial circumstances vary widely and the assurance of whose production frequently requires the establishment of individual price ceilings. The maximum price regulation governing these minerals provides for the granting of price relief to those producers who are unable to maintain or expand production under existing maximum prices, whenever there is an essential need for the output in question or when the loss of a seller's production would result in higher prices to consumers.

It has further been the policy of this Office to grant exemption from maximum price ceilings to small producers where such action would result in substantial relief to these producers without imperiling the price stabilization program. To encourage the domestic production and fabrication of strategic forms of mica, this Office has, upon the recommendation of the War Production Board, exempted this material from price control. A further example of this, which indirectly involves primary forms of the nonferrous metals, is contained in the price regulation covering nonferrous foundry products, which exempts from price control those foundries which do less than \$12,500 business in a quarter. Such foundries constitute more than half of the foundries in the industry, although their production in total amounts to only 3 percent of the production of nonferrous castings.

As you know, in recognition of the importance of assuring the maximum necessary production of any commodity, the Congress provided in section 2-e of the Emergency Price Control Act of 1942 that strategic and critical materials, among which are currently included many of the nonferrous metals and nonmetallic minerals, may be bought or sold, or stored or used, by the Federal Loan Administrator with the approval of the President, pursuant to section 5d of the Reconstruction Finance Corporation Act, as amended. Supplementary Order No. 35 of this Office provides that sales or deliveries of any domestically produced strategic or critical materials to the Metals Reserve Company or any agent thereof shall be exempt from price control. Under these provisions, the Metals Reserve Company is currently purchasing tungsten and certain ferroalloys.

These illustrations will, I believe, indicate to your committee the type of problems encountered by this Office in the case of nonferrous metals and nonmetallic minerals and the methods we have adopted to meet the particular situations prevailing in these areas. You will realize that in all cases we have been confronted with two basic considerations which at times have been seemingly opposed: the vital importance of providing a price structure which would permit the maximum possible output of critical war materials and the statutory responsibility with which we have been charged by the Congress to prevent speculative and unwarranted increases in price and to assure that defense appropriations are not dissipated by excessive prices. To assure the attainment of these objectives in the most effective fashion, our policies in these fields are under continual review and are modified from time to time as new circumstances arise.

I shall be glad to furnish you any further information your committee may require in this connection. I attach various press releases descriptive of the Premium Price Plan.

Sincerely yours,

PRENTISS M. BROWN, *Administrator.*

Attachments.

STATEMENT OF CHARLES F. WILLIS, SECRETARY, ARIZONA SMALL MINE OPERATORS ASSOCIATION

We have come to be in thorough agreement with the Office of Price Administration policy of setting basic prices on the various metals and minerals and using the idea of premiums and bonuses for excess production. We did not agree with it in the beginning but we can now see how it is advantageous in the whole picture

in that there are so many things involved in the use of the metals that a fluctuating price would bring about a tremendous amount of difficulties in application.

For instance, copper enters into thousands of products for which the Government has made contracts. If all of those products can be fixed on a fair basic price, that is the same for everyone, it does simplify Government contracting. If there is any necessity for paying higher prices to stimulate additional production, it is a direct Government cost in which the manufacturer of the material made of copper does not participate.

We believe, however, that in many cases the base prices are too low and were set without rhyme or reason. Copper, for instance, was fixed about 2 years ago at 12 cents simply because that happened to be the price the day it was frozen. On the base prices no consideration is given to the fact that costs and particularly wages have increased tremendously since the base price was set and the delays and confusions of doing business for future increased costs.

Under this system the Office of Price Administration has the theory that the fluctuation in costs can be taken care of under the bonus either by increasing the bonus, augmenting the number of them, or decreasing the quotas and this is where the trouble is. Any system which is not defined and which is a matter of individual adjustment for the particular property is all wrong as it does not treat everyone alike even under the same circumstances.

Furthermore, any system which requires the individual operator to present himself and his problems personally in Washington in order to get equitable treatment is likewise wrong. It is admitted that there are wide varieties in costs between different properties, but to try to equalize them by individual consideration of every little producer is an impossibility to be conducted fairly and is holding back production.

The system right now is that in order to get certain of the bonuses you have to produce, first, at a loss; second, establish that loss before a board of critics; third, prove to that board of critics that you were operating efficiently; spend thousands of dollars on reports and auditor; after you have done all of it you may or may not get relief. Your relief does not apply to previous production on which you already have sustained a loss. It applies only to production from then on, and during the months that all of this is going on your costs have increased further to a point where the experience of the previous months which the quota committee is considering is entirely out of date. When and if the relief asked for is granted, the amount needed is in excess of that which is allowed.

It is impossible to imagine a tungsten-mine operator starting into production on a new property, or a new ore body, knowing that he must first sustain a financial loss to establish his need for higher bonuses or prices and then he may or may not get that relief. Those who do have the nerve to start under such conditions have found a way to beat the game which is detrimental to the war effort. They start out on their lowest-grade ore on which they will sustain the greatest loss and hold their higher grade ores until such time as they have a quota established and a premium price granted. In the meantime, however, these mines are not producing as much as they can or should.

The price policies are likewise detrimental to production from the large mines because the Office of Price Administration price policies do not recognize increased costs of a portion of the operations just as long as there is a sufficient profit coming from another portion to take care of the loss sustained by that which was higher costs. Without some such recognition the larger producers simply will not expand their production to include high cost material and consume their own profits from other operations to carry it.

There is another angle on the large producers, and that is that the situation is so precarious, insofar as price and profits are concerned, that the larger producer has to lean over backward and take less chances than usual, which tends to make greater allowance for the rate of increase of his costs, and the result is that he shows more highly profitable operations than he did under an unrestrained system.

It is not so much the system of base prices, quotas, and premiums that is wrong and restraining production as much as it is the administration of them and the fact that they make it as hard as possible to meet the increased prices. They are trying to see to it that we get the production without profits and the fellow who has something to produce has to have a profit incentive before he will even start to hurdle the obstacles to meet it.

While it probably is true that patriotic motives should prevail in getting out the production of metals that we need so badly we know that that cannot be the



case just as long as the situation prevails whereby no material profits can be gained to offset the losses where things fail to work as planned.

We could still retain the basic policy of the Office of Price Administration with ceiling prices, quotas, and bonuses and greatly increase production by eliminating the idea of individual consideration and creating a set of conditions under which the prospective producer would know just what he was going to be entitled to. Even under the best of conditions he has to take chances and when he takes chances which might result in a loss he is entitled to a profit commensurate with the risk. A simplification of the system might result in a few people making a little money but the taxes would take that away.

About 2 years ago in discussing copper prices with Leon Henderson's staff, I was asked the direct question as to what I would do in their place with two fundamental considerations: First, a knowledge that greatly increased copper production was necessary; and, second, a determination that the large producers, who at that time were producing about 95 percent of the copper, should not get over 12 cents per pound for their basic production. I replied that, while I did not agree with the principle, there was a simple way to handle it and that was by contracting individually with the small number of large producers for an amount of copper equivalent to their entire output at that time at the basic price of 12 cents and then let the law of supply and demand regulate the price for excess production with certain top limitations and with the Government to subsidize for the excess over base.

Six months later this was almost exactly what was worked out in principle in the quota and premium system, but it has become so complicated now that it is a restraint on production rather than a help.

The theories of the Office of Price Administration are basically O. K., but the manner in which they have been carried out has served no other purpose than to increase the number of statisticians in Washington and plant a lot of people on jobs which they have made permanent by the very fact that no one else can understand what they are doing. They have a tremendously complicated thing out of something that could be simpler, and it is holding back production because nobody wants to start out from a place without some reasonable idea as to where he is going.

Senator SCRUGHAM. The next witness will be Mr. F. A. Ayer, Chief, Production Section, Copper Division, War Production Board.

Senator BUCK, will you conduct the hearing?

Is Mr. Ayer here?

#### STATEMENT OF FRANK A. AYER, CHIEF, PRIMARY PRODUCTION BRANCH, COPPER DIVISION, WAR PRODUCTION BOARD

Senator BUCK. Mr. Ayer, will you be kind enough to give your name?

Mr. AYER. Frank A. Ayer, Chief, Primary Production Branch, Copper Division, War Production Board.

Senator BUCK. Do you have a prepared statement?

Mr. AYER. Yes, sir.

Senator SCRUGHAM. You may proceed.

Mr. AYER. From the organization of the Primary Production Branch of the Copper Division in July 1941, until the present time, constant progress has been made in increasing primary copper production. The domestic production of primary copper was  $x$  tons or  $x$  more than in 1940. The total primary production available to the United States in 1942 was  $x$  tons more than in 1940.

All of the large producers and many small producers were requested to increase their output by taking any or all of the following steps: Work all mines and plants the maximum number of hours per day; expand existing operating plants; rehabilitate idle plants; construct facilities at new mines; open up marginal ores; re-treat old

tailings dumps; force the maximum tonnages through existing facilities.

#### SOURCES OF INFORMATION CONSULTED AS TO INCREASING COPPER PRODUCTION

*Mine examination files.*—Realizing that nearly every large mining company has for the past 30 or 40 years had an exploration department, and that their files actually contained hundreds of thousands of reports of mining properties, the Production Branch wrote to 16 of the large companies requesting that they open this information to the Copper Division. The response was 100 percent, and representatives of the War Production Board were permitted to inspect not only the files of possible copper producers, but also those of all of the other strategic materials. As a result of the above steps, thousands of copper properties have been reviewed and several hundred of them have been selected for more careful study and investigation.

*Bureau of Mines and United States Geological Survey.*—Consultations have been held with representatives of the United States Bureau of Mines and the United States Geological Survey. The prompt responses of both of these organizations to our requests for data, field examinations, diamond drilling, sampling and development of small mines have been most gratifying and helpful in the program to obtain maximum copper production.

*State mining departments.*—Advice, information, and publications have been requested and furnished by the different State bureaus of mines, geological surveys, and bureaus of mineral resources.

*State mine inspectors.*—The State mine inspectors of the various mining States who are in close touch with small operating properties have been asked to give to the Primary Production Branch their advice and recommendations regarding the best possibilities of increasing production within their respective States.

*Consulting engineers.*—Consulting engineers and operators throughout the United States have also been asked for their ideas regarding the best possible methods for increasing production.

*Past producers.*—Surveys have been made of past production records of hundreds of former producers. You may be interested in knowing, for example, that in one State alone the production records of over 400 primary copper producers were studied.

#### SURVEY OF PRIMARY PRODUCTION BRANCH HAS INCLUDED MANY SMALL PRODUCERS

The survey made by the Primary Production Branch of possible additional copper production of both large and small producers has been a very comprehensive one and has included many past and present small producers. No mine has been too small to be considered as a possible source of additional copper providing it had ore reserves sufficient for the duration of the war and commensurate with the amount of critical materials, equipment, and manpower necessary to bring it into production.

Each property has been analyzed from the standpoint of whether bringing it into production would actually help or militate against the winning of the war.

In general, the policy has been not to encourage the use of manpower and critical materials in developing prospects so long as properties with developed ore reserves remain idle.

The mining engineers in the Primary Production Branch have constantly given technical advice and information to the owners of small properties in connection with their mining and metallurgical methods, their estimated ore reserves, capital required, and operating costs.

Small mines have been helped in obtaining financial aid through Reconstruction Finance Corporation or Metals Reserve Company.

Access roads into small mining areas have been built on the recommendation of the Primary Production Branch.

In framing the rules and regulations of the Premium Price Plan, the Copper Division recommended that all mines producing less than 200 tons and also those mines which had no production in 1941 receive the highest premium price, namely, 17 cents per pound for their entire production.

#### COPPER PROJECTS SET UP IN ALL CASES WHERE SUBSTANTIAL INCREASES INDICATED

Any commitment which any company has given us for substantial increases in copper production has been set up as a formal copper project. The capital for some of the projects has been furnished by the companies concerned. In others, Government financing has been required through furnishing capital or through payment of additional price. Each project involving Government financing is carefully studied by the mining engineers and metallurgists in the Copper Division. This involves the detailed study of ore reserves, proposed mining and metallurgical methods, total capital expenditures with special attention being given to the amount of critical materials involved, the estimated operating costs, and the availability of labor, power, and water. A study is made of the time required before the project can be brought into production. In order to provide efficient management, the Copper Division has requested outside management to take over the operation of some projects.

When final agreement has been reached on all estimates, plans, and terms under which a company will bring its project into production, the Copper Division then presents all pertinent data for the approval of the War Production Board. The War Production Board then makes formal recommendation that the project be given the necessary governmental aid to bring the property into production on the required date. In cases where financial aid is required, the projects go to either Reconstruction Finance Corporation, Metals Reserve Company, or Defense Plant Corporation for negotiation. These Federal loan agencies have given the War Production Board the most wholehearted cooperation in connection with granting these loans.

To date, 42 formal projects have been recommended, 31 of which have been approved by the War Production Board, 6 disapproved, and 5 are now pending.

## WAR PRODUCTION BOARD PROJECTS NOW IN PRODUCTION OR UNDER CONSTRUCTION

There are now in production 11 domestic projects\* which will increase production during 1943, and thereafter by \_\_\_\_\_ tons per year. Three foreign projects will increase foreign production available to the United States by more than \_\_\_\_\_ tons per year. The total increase from projects now in production will amount to approximately \_\_\_\_\_ tons.

There are under construction at the present time 12 domestic projects which will yield approximately \_\_\_\_\_ tons per year of new production in 1943, and \_\_\_\_\_ tons per year from 1944 on.

In addition five foreign projects under construction will, if estimates are equaled, make available \_\_\_\_\_ tons of new production in 1943, \_\_\_\_\_ tons in 1944, and \_\_\_\_\_ tons in 1945.

You will be interested in knowing that some of the projects previously recommended by this branch are about to come into production. This month Bagdad Copper Corporation, Hillside, Ariz., will start producing \_\_\_\_\_ tons of additional copper per year, and \_\_\_\_\_ pounds of molybdenum per year.

The Gray Eagle Copper Co. at Happy Camp, Calif., made its first concentrates last week. This company will produce \_\_\_\_\_ tons of new production per year.

In early May 1943, Castle Dome Co., a new open-pit operation at Miami, Ariz., will start operating at the rate of \_\_\_\_\_ tons per year.

The Van Dyke Copper Co., a small producer of flux ore at Miami, Ariz., will also commence production within the next 2 months.

In the East, the Vermont Copper Co., another small producer at Chelsea, Vt., will commence production within the next 3 months at the rate of \_\_\_\_\_ tons per year.

In June the Quincy Sands project at Hancock, Mich., estimated to recover \_\_\_\_\_ tons of additional copper per year from old tailings, will come into production.

During the last quarter of this year the big addition to the Phelps Dodge Corporation's open-pit operations and plant at Morenci, Ariz., will come into production at the rate of \_\_\_\_\_ tons per year.

Had not arrangements been made many months ago to bring into production during 1943 the above projects, over \_\_\_\_\_ tons of future domestic production would be lost every year of the war.

Summing up the above, the Copper Division projects now in production, plus those already approved and under construction, will result in a total production of \_\_\_\_\_ tons per year of which \_\_\_\_\_ tons will be domestic production.

## PREMIUM PRICE PLAN FOR AID TO HIGH-COST PRODUCERS

Where necessary to meet constantly increasing costs of production, the Primary Production Branch has repeatedly made recommendations to Metals Reserve Company which have been approved that higher prices be paid in order that producers affected might avoid shut-downs and also to make possible further increases in production.

Higher prices have also been recommended for the mining of low-grade, high-cost marginal ores.

Prior to the inauguration of the Premium Price Plan, aid to high-cost producers could be given only through special contracts made with the Procurement Division of the Treasury or with Metals Reserve Company. At the start the maximum subsidy price allowed under special contracts was 14 cents per pound, which later was increased to 16 cents. The preliminary negotiations and the drawing up of these special contracts would be impracticable for hundreds of small producers. For this reason the Premium Price Plan for copper, lead, and zinc was recommended and agreed upon at the end of 1941 and placed in effect in February 1942.

Officials of the Copper, Lead, and Zinc Division of the War Production Board and the Office of Price Administration and Metals Reserve Company drew up the Premium Price Plan, which provided that producers who could not operate at ceiling prices could, by approval of a quota committee, receive more than the respective ceiling prices for copper, lead, and zinc.

This plan had a special clause whereby all of the small producers making less than 200 tons of copper per year would automatically, without any reference to the quota committee except filing affidavits regarding 1941 production and their names and addresses, receive the premium price of 17 cents per pound. Larger producers were given quotas based principally on 1941 production. Any production over and above this quota would receive 5 cents per pound premium or a total of 17 cents per pound.

By this plan hundreds of little producers have automatically received a price of 5 cents above the ceiling. This plan avoids the necessity of separate subsidies being negotiated for all small mines, and under it several hundred small producers were enabled automatically to continue production or to bring their properties into production. At the present time over 1,100 large and small copper, lead, and zinc mines are being aided through the Premium Price Plan.

#### TYPES OF AID NECESSARY FOR COPPER PRODUCERS

*Labor supply.*—On July 16, 1942, before the labor situation became acute, I made the following statement in a report entitled "Copper Production, First 5 Months in 1942":

The one factor which can turn the production tide at any moment is shortage of labor. We should not wait until we have our backs to the wall.

I cannot too strongly recommend that steps be taken to assure the copper mines of a supply of labor. This matter will be covered later on.

*Housing facilities.*—We have actually recommended and followed up a comprehensive program for providing additional housing where most needed in copper-mining districts. This program has been necessary because married men have filled the jobs of single men who have joined the armed forces.

Through the excellent cooperation of officials of the War Production Board, the Army, and the National Housing Authority, over 1,800 houses and trailers have been promptly made available to different mining camps. This program has had a marked effect on the stabilization of employment and maintenance of production.

*Materials and supplies.*—Assistance has constantly been given copper mines in obtaining priorities on supplies and equipment. In this connection I wish to record the excellent support given the copper production program by the Mining Equipment Division of the War Production Board in making supplies available through its administration of order No. P-56. A representative of the Copper Division attends meetings at which applications for supplies under P-56 are considered and recommends approval where mines have any reasonable chance of producing copper.

*Field examinations.*—The mining engineers of the Primary Production Branch have made field trips to most of the larger mines and several small mines to observe operations and ascertain possibilities of expansion of plant capacities and production.

*Flux program.*—At the present time some 60,000 tons per month of non-copper-bearing siliceous fluxes are being used by the domestic smelters. A program is under way for replacing these non-copper-bearing fluxes with copper-bearing siliceous fluxes containing from 2 to 6 percent copper. This additional copper production will be obtained principally from small mines without any expansion of concentrating or smelting facilities. The success of this program is dependent entirely upon the plan involving a price higher than 17 cents per pound, which has been recommended.

#### QUESTIONS ASKED BY CHAIRMAN OF SUBCOMMITTEE

In a letter dated March 10, 1943, from Senator J. G. Scrugham, chairman of the Mining and Minerals Subcommittee, to Mr. Charles Wilson, Executive Vice Chairman of the War Production Board, a request was made that I give testimony on the following questions:

1. What steps have been taken to insure full domestic production of copper for the war effort?
2. What steps are being taken to increase domestic production of copper?

The primary production program which I have just described answers the above two questions.

3. Have any new domestic copper projects either for opening new mines or expansion of present facilities been approved by the War Production Board in the past 6 months, and please discuss this situation?

In May 1942 all copper projects which had previously been approved were frozen by order of the President. This applied to projects which were under construction as well as to projects which had not been started. At the end of 2 weeks all projects were resubmitted for approval, and those which could come into production before July 1, 1943, were unfrozen and allowed to go ahead. Since then various projects have been resubmitted, and one foreign project has been approved. In addition, projects requiring less than \$50,000 have been given a blanket approval. This has resulted in the opening of many small mines.

#### FACTORS RETARDING DOMESTIC PRODUCTION OF COPPER

4. What is Mr. Ayer's opinion in retarding domestic production? What should be done to improve this situation? If the proper measures are taken, can domestic copper production be materially increased, especially from small and marginal mines?

The principal factors retarding domestic production are shortage of labor, price, and competition of other war industries for equipment.

*Shortage of labor.*—Last July, when copper production began to be seriously affected by shortage of men, the Army came to our rescue and turned the tide of production by furloughing back to the copper mines some 2,900 soldiers who had previously had experience in mining. Since that time the Army has also dropped the age limit of soldiers required from 45 to 38 years and have agreed to send back to the mines soldiers over 38 years old who are assured of jobs in the mines. The closing down of the gold mines, the obtaining of men from large Government projects, and the substitution of women for men have helped the labor situation.

The present shortage of labor at the different copper mines amounts to a total of only approximately 2,100 men. Out of a total of 43,000 men engaged by the copper-production industry, this is only a handful compared with the enormous number of men working at jobs which are nonessential to the success of this war or which can be done by women.

The labor supply can be conserved also by working maximum hours per week and by campaigns to decrease absenteeism and turn-over.

Unless steps are taken whereby the copper mines can obtain the small number of men required, it will be impossible to continue expanding copper production; in fact, production will soon start falling off.

*Insufficient prices.*—The problem of price has made considerable progress and is on the way to a solution. A number of quotas have been substantially reduced, and recommendations have been made so that small producers can soon receive over 17 cents per pound for production which can be made with a reasonable consumption of materials and manpower.

#### ADDITIONAL QUESTIONS OF THE COMMITTEE

Question: Is over-all domestic production from large domestic mines decreasing or increasing?

Answer: Regardless of shortage of labor and diminution of ore reserves, there has been a constant increase month by month in copper production from large mines. During 1942, 19 out of the 23 largest domestic producers made increases over their 1941 production, and 4 produced less than in 1941. These 4 were all underground mines, and 3 of them were among the smallest producers in the large-producer class. In all cases the decrease in production was due to a falling off of the ore reserves.

The ratio of open-pit mines to underground mines has increased to a point where in 1942 over 50 percent of the domestic copper came from open-pit operations. During 1943 this ratio will be further increased through the new expansions in open-pit mines and plants.

Question: Is the production from particularly large domestic mines decreasing?

Answer: No. On the contrary, the particularly large domestic mines, in fact all the copper mines, have strained every effort and most of them have constantly increased production, in certain cases beyond expectations.

Question: Would increased premiums increase or decrease the production from large mines?

Answer: I believe that quotas should be so set as to make available the maximum production. At some large underground mines the increased premium would definitely result in the mining of lower-grade ores and more production. At open-pit mines where plant facilities are already overtaxed increased premiums would have less effect.

Question: Does the premium encourage "low grading"?

Answer: No. The premium price system does not encourage "low grading." We have had several cases where accusations have been made, especially in the case of large companies, that they were mining their low-grade ores and conserving high-grade ores until after the war. In no cases have these been found to be founded on fact.

Question: Would closing down small domestic producers effect an increase in production from large producers?

Answer: No. We believe that men working at small mines should remain there, and that every effort should be made to secure ample labor to operate both the large and small mines at full capacity.

Question: Would increasing the number of small domestic producers cause a drop in the production at large domestic mines or would this additional production from small mines increase the total production?

Answer: Generally, labor is available in small-mine areas. Furthermore, older men and men who cannot pass physical examinations can work on small mines. Assuming that labor can be obtained, increasing the number of small domestic producers would definitely increase the total production.

Question: What should be the premium to small producers to stimulate maximum production?

Answer: In our production program we have thought in terms of manpower and critical material rather than in terms of cost. In this emergency a sufficient price should be paid to get any copper which can be produced quickly or with low amounts of critical materials and labor.

Question: Could the premium system be adjusted on a step basis to anticipate the necessity of higher prices to meet the operating expenses of small high-cost producers?

Answer: Yes. We have made recommendations for such a plan. This concludes my remarks on our program for increasing primary copper production. If you have any questions you wish to ask, I shall be glad to answer them. We have concentrated on bringing the best and quickest production first. Hence further projects for increasing production cannot be as attractive in terms of manpower and materials as the one already brought in and now under construction.

The copper production program is by no means completed. You may be assured that we shall not be complacent or satisfied so long as there continues to exist any shortage of copper for the war program. We have prepared plans for very substantial further increases in the production of copper which can be made available if the necessary labor, equipment, and water are provided.

I wish to record the splendid cooperation and help which have been given by both the large and small copper producers and their entire organizations in carrying out this program of producing the maximum possible tonnage of copper.

I would have preferred to give you the actual figures. It is most difficult to describe the program without supplying you the knowledge of the exact tonnages and progress which have actually been made.



Senator BUCK. We would like to have that.

Mr. AYER. I shall be glad to present these for the committee's confidential use after this meeting.

#### QUESTIONS ON THE PREMIUM PRICE PLAN

Senator BUCK. All right. Thank you.

Did your department inaugurate the Premium Price Plan?

Mr. AYER. Representatives of the War Production Board, Office of Price Administration, and Metals Reserve jointly built up and agreed on the plan.

Senator BUCK. Was it originated to assist the small producer?

Mr. AYER. Principally due to the fact that it was difficult to make individual contracts for all of the small producers who could not come to Washington, some plan had to be worked out which would automatically provide the necessary price to hundreds of small producers without their having to enter into special contracts.

Senator BUCK. Do you think it resulted in getting as much copper production for small producers as you hoped it would?

Mr. AYER. Not as much as we had hoped, sir. It has, however, been of very material benefit in bringing many small producers into production and also maintaining in production other small producers.

Senator BUCK. Can you tell us why it has not brought forth the results which you hoped it would?

Mr. AYER. There are different reasons why the small producers have not made the increases in production which we had hoped, the principal ones of which are competition with the larger companies and other war industries for labor supply; increased cost of labor and supplies; difficulties in getting equipment; and less attractive living conditions than big producers. The very small producers' operating costs increased as time went on until the 17-cent price became insufficient for several of the small producers to come into production or to continue their operations.

Senator BUCK. Is it not true that in the case of lead and zinc the maximum price has been raised?

Mr. AYER. That is very true, and there is a recommendation, which gives every promise of going through, whereby the small copper producer can receive a price above 17 cents a pound.

Senator BUCK. The maximum price has not been raised for copper?

Mr. AYER. Not to date, but recommendations have been made to that effect.

Senator BUCK. How much do you think it should be raised?

Mr. AYER. Well, in our whole program we have not talked or thought in terms of price. We have used as determining factors the amounts of critical materials and labor supply rather than worrying about the price. We believe that so long as the Nation needs copper price should not stand in the way of copper production.

Senator BUCK. In the case of lead and zinc some are worried about the price. How much is it, do you recall?

Mr. AYER. Yes; there was a special plan for lead and zinc whereby lead and zinc can receive one or two additional increments, respectively, besides the original increment of  $2\frac{3}{4}$  cents per pound. We are hoping for a similar plan for copper in the very near future.

Senator MURRAY. Your increased price program was intended to bring about the expansion of production rather than merely aid to small corporations, was it not?

Mr. AYER. Absolutely.

Senator MURRAY. So it benefits big corporations as well as little ones. That is, a large corporation, if it went through new development and produced ore, would have the advantage of that price program also.

Mr. AYER. That is true. The large companies were given quotas based in general on their respective rates of production in 1941. That would, except in the case of certain large companies, constitute the basic quota. Any production made over and above that quota would receive 5 cents per pound premium, or a total of 17 cents a pound.

#### QUESTION OF INCREASED PRODUCTION ON PART OF BIGGER CORPORATIONS

Senator MURRAY. Prior to the time of this price program, there was no evidence on the part of the bigger corporations of their going into new development or anything.

Mr. AYER. Oh, yes; lots and lots of evidence. I can say very frankly that from the commencement of our Production Section there was no month when there was not evidence of increasing production.

Senator MURRAY. How do you account for the fact that the Anaconda Copper Co. in 1941 showed only an increase of 1 percent over 1940?

Mr. AYER. The Anaconda Copper Co. is a pretty old company that has worked a great many years. It has very small veins, and they have had a very severe labor shortage up there.

Senator MURRAY. Yes; but they did not have that labor shortage in 1940 and 1941.

Mr. AYER. No. I think one of the things that obstructed production at that time was the fact that they were working a 5-day week only, and they had difficulties in getting an agreement to work more than 5 days a week.

Senator MURRAY. You feel there is plenty of opportunity of greatly expanding production in the Anaconda area?

Mr. AYER. The Anaconda Co. has expanded its production very considerably since that time.

Senator MURRAY. How do you account for the fact that there is a large amount of copper in the mines there in Butte that is not being gotten out? Take for instance the North Butte Copper Co.: It has very valuable deposits of copper, and with increased production there could be vast increases in production in that mine alone.

Mr. AYER. We have been very interested in the North Butte property. In fact, the North Butte property was the very first property that got a quota under the new quota plan, and we feel the North Butte property has possibilities of additional production just as also the different mines of the Anaconda Copper Co. I believe the whole district has possibilities, providing they can obtain sufficient labor and sufficient prices to carry on their work.

Senator MURRAY. So there is every need then that efforts should be made to get those properties operating or expanding their operations to get out that ore, which would greatly increase the production.

Mr. AYER. That is true, and steps along that line have been taken. I cannot emphasize too strongly the necessity for some program which will provide both those properties with ample labor because they are short several hundred men at the present time.

QUESTIONS ON AID IN SECURING FINANCIAL ASSISTANCE, NECESSARY SUPPLIES, AND LABOR

Senator BUCK. Mr. Ayer, has the Government assisted many mines financially?

Mr. AYER. Yes; the Government has given financial assistance to a great number of mines, especially small mines, through special contracts with the Metals Reserve Company, when they cannot operate at the 17-cent price, and through the Premium Price Plan, when they can operate at 17 cents.

Senator MURRAY. I was going to inquire if the smaller producers were affected by inability to secure materials used in the operation of their mines through the priorities?

Mr. AYER. The Copper Division has strongly supported every copper mine that had any chance of coming into production in getting approval under P-56 order, which enables them possibly to get their necessary supplies, and under that order companies have had good success getting the necessary materials. The very small producers and leasers have had more difficulties than the large ones.

I think the Mine Equipment Division of the War Production Board has done a very fine job in getting materials to the mines.

Sometimes you will find cases where there is a pinch in getting supplies, but, on the whole, operating supplies have been available to mines in most cases.

Construction equipment has been more difficult, due to the fact that there is such competition with the other critical war industries for the same equipment.

Senator BUCK. Returning to the matter of financing, do I understand you to say that the Government has assisted small mines with capital loans?

Mr. AYER. Yes; that is true. We just had a case very recently where we needed to receive very prompt assistance for three of the smaller Michigan copper mines. That assistance was given through the special contracts with Metals Reserve Company on the recommendation of the War Production Board.

Senator BUCK. They do make capital loans?

Mr. AYER. This was an arrangement on price.

Senator BUCK. That is not a capital loan?

Mr. AYER. No; capital loans are made principally through the Reconstruction Finance Corporation and Defense Plant Corporation.

Senator BUCK. Do they get any help from the Reconstruction Finance Corporation?

Mr. AYER. Yes.

Senator BUCK. What steps have been taken to obtain the necessary labor?

Mr. AYER. We have constantly worked through the War Manpower Commission, and they have in many cases diverted men to certain areas where the shortage of men was acute.

They also diverted men from large construction projects which are being closed down, and women have been substituted for men.

Senator BUCK. Would you tell us how much copper has been gotten from scrap, percentage-wise?

Mr. AYER. The matter of scrap copper is a subject which I am not in charge of, but that figure could be furnished to you.

Senator BUCK. Would you tell the committee why the project Mr. Podell mentioned up in Alaska has not been put in operation?

Mr. AYER. Mr. Podell could probably find about 15 or 20 copper projects which would rank ahead of the Alaska project in terms of critical materials and labor.

Our general program has been to take the best possibilities of copper production first, and, as time goes on and conditions change and we get more materials and more manpower, we bring in other projects in order of their merit from the standpoint of time, total production, labor, and critical materials.

Mr. BUCK. Does that apply to these domestic projects which Mr. Podell referred to?

Mr. AYER. That would apply to the domestic projects, as we consider them good projects and are right now resubmitting those very domestic projects which he mentioned with a view to obtaining their approval.

Senator BUCK. Do any members of the committee have any questions they would like to ask Mr. Ayer?

I have been asked to ask you this question: Do you think if small mines were closed down, there would be any increase in production from the larger mines?

Mr. AYER. In general small mines have a labor supply in their different localities, and I cannot believe that shutting the small mines down would have a bit of effect on the large mines. In fact both the large and the small copper mines should operate at the highest possible rates.

Senator MURRAY. The smaller mines employ more older men, men who would not go into deep mines.

Mr. AYER. That is very true.

Senator MURRAY. In scattered sections.

#### EFFECT OF CLOSING DOWN OF GOLD MINES ON LABOR SHORTAGE IN COPPER MINING

Senator SCRUGHAM. Have you any information as to whether the closing down of gold mines has aided the labor situation in the copper mines?

Mr. AYER. Yes; we know it has.

Senator SCRUGHAM. In what proportion?

Mr. AYER. I would say the recovery of men from gold mines would not be in direct proportion, but you might divert 30 percent to copper mines. Undoubtedly the rest of them who do leave their jobs in the gold mines will go to some other kind of mine or some other critical industry. We do feel that shutting down the gold mines is a move which was very much justified.

Senator MURRAY. I understood that the amount of labor you got from that was insignificant, and it is admitted in all circles that the

injury that it has already done to the gold mines was not justified. It was a small amount of labor you were able to get.

Mr. AYER. It should be borne in mind that every one of these mines is consuming materials and labor. Materials and labor are scarce, and even if they were small gold mines we would much rather have the same men work on small copper mines.

Senator MURRAY. I understand that by shutting all the gold mines in the country down, you were only able to secure about 400 men.

Mr. AYER. Four hundred men is something we consider a great assistance. I do not have the exact figure.

Senator MURRAY. But you could have gotten 400 men by negotiating with the gold-mine operators. They were perfectly willing to turn over any employee that would fit into the operation of the copper mines, and the whole thing could have been negotiated and settled without creating such a very serious economic dislocation.

Senator SCRUGHAM. I presume the British and Canadian mines were shut down at the same time. Is that correct?

Mr. AYER. I understand the Canadian gold mines have transferred, as Senator Murray suggested, very large numbers of men to large companies like the International Nickel Co.

In South Africa, for rather delicate political reasons, the gold mines have not been shut down.

Senator SCRUGHAM. In other words, the African gold mines are run at more or less full capacity, and our gold mines are all shut down, or substantially all?

Mr. AYER. We feel that no matter what anybody else does we ought to do the right thing to help us win the war.

Senator MURRAY. And you determine yourself what the right thing is?

Mr. AYER. This is just my personal opinion, Senator Murray. I believe that so long as there exists a shortage of men in these critical industries, men should be furnished to them first.

#### SERIOUS PROBLEMS CREATED BY DRAFTING COPPER MINERS INTO ARMY

Senator MURRAY. Do you not think the more serious problem was the drafting of these miners out of the mines and allowing them to go into the armed services and into other activities?

Mr. AYER. Yes; we think that is very serious, and the Army has corrected that situation somewhat by sending back to us about 2,900 men to the copper industry.

Senator MURRAY. They were mostly coal miners that they sent back. They took the deep metal miners, and undertook to turn over to the mining corporations inexperienced men, men who have worked in coal mines.

Mr. AYER. I have employed men for many years, and I never failed to hire a coal miner any time I could. They are good miners and acquainted with the ground.

Senator MURRAY. In deep metal mines?

Mr. AYER. In all kinds of metal mines.

Senator MURRAY. In open-pit mines. You take a man operating at great depth, three or four or five thousand feet, and the operations are entirely different in a copper mine than in a coal mine.

These men would be totally unfit, and they would endanger their own lives and the lives of others.

Mr. AYER. I consider the coal miner is fully as capable of handling himself in a metal mine as any metal miner. He might not be quite so good as a real hard rock miner, but on all timbering jobs and handling ground, the coal miner is a good miner. We have always been glad to get them.

Senator MURRAY. That does not appear to be the judgment of the mining operators of the country.

Mr. AYER. Different mine operators have different opinions.

Senator MURRAY. But you think your ideas are satisfactory in accepting these coal miners, and you find they could operate your mines just as satisfactorily?

Mr. AYER. I would say a coal miner is a very good asset compared with the man who has had no underground experience, and at a very early date after going underground would adjust himself to conditions.

Senator SCRUGHAM. We are very much obliged to you. If there are no further questions, the next witness is Mr. Harry O. King, Director, Copper Division, War Production Board.

#### STATEMENT OF HARRY O. KING, DIRECTOR, COPPER DIVISION, WAR PRODUCTION BOARD

Senator SCRUGHAM. You have heard the previous witness?

Mr. KING. Yes, sir.

I have no formal statement, Senator, but I would like to make a few remarks on some of the facts Mr. Podell gave you.

I do not know where Mr. Eberstadt obtained the figures on supply and requirements, but I would like to send to you our latest figures on that, which are quite a little different from the figures Mr. Podell gave to you, which are apparently figures of some months ago.

Requirements are very difficult to obtain. The Army is continuously revising programs. We are never able at any one time to get an accurate figure with respect to requirements.

#### CHIEF PROBLEM IN COPPER PRODUCTION IS MANPOWER

I would like to make a few remarks on the drop in production from 1940, in small mines. In 1940 the production was 94,036 tons. In 1941 the production was 87,539 tons and in 1942, 73,517. In 1942 we paid 17 cents for the small miners' mine production, and in 1940 and 1941 we only paid 12 cents.

When we inaugurated the Premium Price Plan, we estimated the production from small mines would increase some 25,000 tons per year, and this drop in production has been a matter of real concern. We have sent men into the field to determine the difficulties, and it gets down largely to the manpower problem. A man who works a small operation at 17 cents, makes \$5 to \$10 for a day's work, and he can get a construction job for \$12 or \$14 a day.

He has difficulty getting gasoline for his trucks; he has difficulty getting tires, and all the difficulties that come in an economy built around the war effort.

We are following up every single small producer that produced in 1940 and 1941, not waiting for them to come to us, but going out to help them. We are not limited to the 17-cent price. We will pay them any reasonable price if they will bring in a few extra tons of copper.

I would like to refer also to Mr. Podell's statement that 25 years ago 25 percent of the copper was produced by the three large producers and now 90 percent is produced by the three largest producers.

I think that can be clarified by stating that 25 years ago the Phelps-Dodge Co. operated certain mines. Since that time they have purchased other mines. One large one was the Calumet & Arizona property, another the United Verde mine.

The Kennecott Co. purchased the Utah property and also the Chino & Ray property, so those increases in production have been centralized in the three companies, but it has been because other producing mines were purchased by those companies.

As an actual fact, approximately 85 percent is produced by the 3 large producers in large mines, and 10 other companies produce about 10 percent.

Senator SCRUGHAM. Do you expect much production in the way of scrap?

Mr. KING. The average intake of old scrap over the last 10 years has been about 300,000 tons per year, and last year we collected 700,000 tons.

Senator SCRUGHAM. What is the relative cost of new production compared to scrap?

Mr. KING. Scrap flows into the market and is sold at the 12-cent price. Scrap prices are set by O. P. A. for different grades of scrap.

Senator SCRUGHAM. Do you think the addition of the premium would help scrap production?

Mr. KING. Additional premiums will help as far as primary production is concerned. We are hunting out the little producers. If it takes 22 cents, we will pay 22 cents. If it takes 27 cents, we will pay 27 cents. In the case of the higher-cost producers in Michigan and one in the West, we have paid as much as 27 cents.

Senator SCRUGHAM. That is the policy of your Division, keeping these people in production.

Mr. KING. Yes; we are looking for them to see if we cannot help bring them into production.

With respect to the Kennecott situation in Alaska, mentioned by Mr. Podell, that property is owned by one of the big copper companies. We have checked into that thoroughly, and the Kennecott Corporation stated categorically and unequivocally that there is not any ore left there, that they have mined that property out, and I just cannot imagine a company of that size abandoning a good ore property or body.

With respect to the Anaconda Co., having heard reports that they were mining low-grade ore and not high-grade ore, we together with the O. P. A. asked Mr. Beorgi, who was manager of the Home State Mining Co., to make a complete study of all of their operations at Butte. He took three of his men with him. While the report is confidential, I think it would be of benefit to the committee.

Senator SCRUGHAM. We are interested. There was a list of the mines mentioned by Mr. Podell of copper possibilities. Did you take those down?

Mr. KING. He mentioned the Sunset Copper mine, which we recommended on September 29. That was turned down by the Facilities Clearance Committee or Facility Review Board. I do not remember all the exact names of our various committees.

And we again submitted it.

The difficulty there is that it is close to another property, and there was a shortage of men. We have been holding it waiting until we could overcome the manpower shortage.

I would like to close by making this very definite statement: We are short about 3,000 miners in the copper-mining industry today—that is, to operate at full capacity all existing properties.

We were responsible for having miners furloughed from the Army. We have sent men out into the mining districts, and instead of building a few hundred houses we have built over 2,500 houses and trailers in these mining communities, and we have brought 250 Indians in with their tepees. That is our big problem, and it is the big problem of the small mine operators. It is the inability to get men that is holding back production.

If the committee can help us with the Manpower Commission by putting priority on labor, I think it will make a splendid contribution.

Senator SCRUGHAM. It is the desire of the committee to assist in every possible way.

Mr. KING. I do not want to appear as an advocate of the large producers—and I am certainly not—but I do think, in fairness to the Anaconda, Phelps-Dodge, and Kennecott Cos., that we have driven them to increase production. We have worked with them and analyzed every suggestion made, and we have had their wholehearted support. All of those companies are depleting their ore reserves, and all are subject to the excess-profits tax, and, to my definite knowledge, I do not think any of them are holding back one bit in their effort to get out more copper. We have battled with them, and I am not particularly friendly with them, but I do think it is fair to make that statement.

Senator BUCK. You are speaking of the three big companies.

Mr. KING. Yes. We set a quota for the Kennecott Co. at Utah, at what we thought was beyond their capacity, and they are turning out 4,000 tons a month in excess of that.

Anaconda's difficulties have been largely labor difficulties. They are short 900 men at the present time. We are rustling men for them. We work with the United States Employment Service. It is really a serious problem. It is a deep mine and a complicated mine, and it is not the most pleasant place to work.

Senator SCRUGHAM. Mr. King, you have mentioned the scrap. How is that price figured?

Mr. KING. The way it works out, Senator, is that the O. P. A. sets a price of, say, 10½ cents for No. 1 copper scrap, and after you refine it the copper sells for 12 cents. For instance, an automobile radiator sells for 8½ cents per pound. That, when sweated and the copper recovered, the copper comes to 12 cents.



Senator SCRUGHAM. The hour is quite late. Are there any further questions, Senators?

Senator BUCK. No; I have none.

Senator SCREGHAM. We thank you, Mr. King, and also Mr. Ayer, for your assistance in the matter.

The hearing on Thursday will be taken up with Secretary of the Interior Harold Ickes at 10:30, and at 2:30 we will hear Mr. Donald Nelson.

(Whereupon, at 12:45 p. m., the subcommittee adjourned until 10:30 a. m. Wednesday, March 31, 1943.)

# MINING AND MINERALS INDUSTRY

WEDNESDAY, MARCH 31, 1943

UNITED STATES SENATE,  
SUBCOMMITTEE ON MINING AND MINERAL INDUSTRY  
OF THE SPECIAL COMMITTEE TO STUDY  
PROBLEMS OF AMERICAN SMALL BUSINESS,  
*Washington, D. C.*

The subcommittee met in room 357 of the Senate Office Building at 10:30 a. m., Senator James G. Scrugham, presiding.

Present: Senators Murray (chairman), Stewart, Scrugham (chairman of the subcommittee, presiding), and Buck.

Also present: Representatives Murdock and White.

Senator SCRUGHAM. The first witness this morning is Mr. Richard J. Lund, director, Miscellaneous Minerals Division, War Production Board.

## STATEMENT OF RICHARD J. LUND, DIRECTOR, MISCELLANEOUS MINERALS DIVISION, WAR PRODUCTION BOARD

Senator SCRUGHAM. Is Mr. Lund present?

Mr. LUND. Yes, sir.

Senator SCRUGHAM. Take the stand, Mr. Lund.

We are glad to have you with us, Mr. Lund. Please give your name to the reporter.

Mr. LUND. Richard J. Lund, Director of the Miscellaneous Minerals Division, War Production Board.

Mr. Chairman, I have prepared a brief summary on some of the minerals that we are handling in the Miscellaneous Minerals Division, which I would like to present.

Senator SCRUGHAM. It would be very interesting.

Mr. LUND. Thank you.

The Miscellaneous Minerals Division has assigned to it the responsibility for providing adequate supplies of some 50 materials in the war effort. A large number of these materials might be termed specialties, in view of the fact that their uses are relatively restricted, and hence are not generally known to the layman.

I greatly appreciate the opportunity of appearing before this committee to present a brief picture of the work of the Miscellaneous Minerals Division, particularly as it relates to efforts that have been made to maintain or increase the output of minerals falling within its jurisdiction. In this discussion I shall confine my remarks to those minerals which have required considerable attention in providing

for increased supplies to meet requirements in the war effort. These will include quartz crystals, diamonds, mercury, platinum metals, silver, corundum, talc, spodumene, and kyanite.

Senator SCRUGHAM. What is spodumene? That is a new one on me.

Mr. LUND. Spodumene, Senator, is a mineral used as a source of lithium.

With respect to each of these, I shall summarize information on war and essential uses, the general supply-demand position, adequacy of stockpiles, and efforts made to increase domestic production.

#### INCREASED DEMAND FOR QUARTZ CRYSTALS

Although the mineral quartz is one of the most abundant present in the earth's crust, with widespread uses, there is a special application for quartz crystal of suitable grade which has been very little known in the past. I refer to its use in the manufacture of radio oscillators in controlling frequencies in sending and receiving sets, a use which depends upon the peculiar piezo-electric property inherent in the mineral quartz. The most important peacetime use of this type of quartz was in the manufacture of resonators for use in long-distance telephony, permitting the transmission of many conversations over the same wire. Since the communications system of our armed forces has largely been built around the use of quartz in radio equipment, the demand for this material has increased tremendously within the past few years. In fact, in the period from 1940 to 1943, requirements have increased some fiftyfold.

Brazil is and has been the only source of substantial quantities of radio-grade quartz crystals. Since 1941 virtually the entire output has been going to the United States and the United Kingdom, and, by and large, supplies have been sufficient to meet the expanding requirement program. When, in mid-1942, it became apparent that the requirements in 1943 would be increased far beyond previous estimates, a careful check was made on Brazilian production, which was found to be far below that needed. Late in the year it became evident that there would be a serious deficiency by the spring or summer of 1943 unless corrective measures were taken at once.

#### PROGRAM FORMULATED TO CORRECT EXPECTED DEFICIENCY IN SUPPLY OF QUARTZ

A program was formulated to correct the situation by—

(1) Expanding Brazilian output by mechanizing many of their quartz mining operations; (2) initiating and pushing a vigorous exploration and development program for quartz production in the United States; and (3) prompt effectuation of rigid conservation measures through improvement in fabricating techniques, use of lower quality and smaller material previously rejected, changes in oscillator specifications, and judicious placement of contracts. All Government agencies concerned with carrying out this program have cooperated closely, with the result that adequate supplies to meet the needs are now quite definitely assured.

Large shipments of mining machinery and supplies left this country some time ago. The B. E. W. has set up a large organization in Brazil

to see that the machinery and equipment is put into effective service promptly.

With the very active help of the Geological Survey and Metals Reserve Company, a vigorous exploration and development program has been under way for several months looking toward development of quartz production in the United States. Two localities in Arkansas and one in California offer the most promise, but development work has not yet progressed sufficiently to judge the general order of magnitude to which domestic production can be relied upon in the quartz supply program. Additional localities in Virginia and North Carolina previously explored by the Geological Survey are now being further explored and developed by the Bureau of Mines. A publicity program pointing out the need of developing domestic production has been vigorously pushed, and newspapers and trade publications have been highly cooperative in this work, as exemplified by a large mining publication devoting its most recent front cover to effective publicity on this point, picturing quartz crystals as "America's No. 1 critical material."

A stock-piling program was initiated in 1940 by the Procurement Division of the Treasury Department and greatly expanded in 1941 by Metals Reserve Company. In order to obtain material meeting rigid specifications, the Government found it advisable to purchase vast quantities of quartz, a large percentage of which, upon testing at the National Bureau of Standards, proved to be below grade. These large shipments were made in 1941 and early in 1942 while shipping was still relatively easy.

The largest factor in easing the supply situation in quartz crystal has resulted from efforts made since late in 1942 to utilize lower grade and smaller material. Extensive experiments finally indicated that quartz containing so-called "blue needles" can be used in manufacturing certain oscillators, and Signal Corps specifications have just recently been changed to permit the use of this type of material in making oscillators for delivery to them. Large stocks of material, meeting specifications except for their blue-needle content, have been accumulated in Government stocks. Also, preliminary results from tests now being made on the use of other material rejected largely because of optical twinning by the Bureau of Standards indicate that surprisingly good yields of acceptable oscillators may be expected from vast stocks (almost a year's supply) now held by the Government and previously considered useless. Adoption of new fabricating techniques to permit the utilization of smaller crystals has also contributed to an easier supply picture.

#### WARTIME USES FOR INDUSTRIAL DIAMONDS

Diamonds, although usually associated with engagement rings and expensive jewelry, are serving a great variety of vitally important uses in war industries. These uses are largely of an indirect military nature, since almost no diamonds are included in any actual equipment used by the armed services, but production of war goods would virtually stop if diamonds were not available in factories throughout the country. Being by far the hardest substance known, the uses are largely served through this property, and include crushed grain and powder incorporated in wheels for grinding hard tool steels,

tungsten carbide, and so forth; individual or small groups of stones set in bits for trueing grinding wheels, extensively employed in war industry operations; small diamonds set in bits for rock drilling in mining and construction operations; individual shaped stones for finished boring and turning of metals, plastics, and so forth; stones through which minute holes are drilled to draw fine wire; and grain and powder used extensively as an abrasive in sawing, grinding, lapping, and polishing hard materials such as special steels, glass, quartz and sapphire.

Requirements for diamonds in industrial uses have mounted by leaps and bounds in the past 2 years, and will show a further astonishing increase this year, the most spectacular increase having been for the cheapest quality material that is crushed up and used in the manufacture of diamond wheels and saws. To date there has been no shortage of supplies, which was largely the result of relatively heavy stocks held by industry in the United States. Further increases in requirements for crushing bort can be fully met only by expansion of mine production.

#### SOUTH AFRICA, CHIEF SOURCE OF DIAMONDS

With the exception of relatively small production of generally high quality material in South America, mainly Brazil, the world supply of diamonds comes from South Africa. All of this production now comes from placer operations, as contrasted with the earlier "pipe" mines in the Union of South Africa that have been closed down for some time.

Senator SCRUGHAM. Just a moment. Let me get this clear. I understood you to say the mines were shut down.

Mr. LUND. That is the pipe mines, Mr. Chairman, in South Africa, that have gone to very considerable depths, and most of the production now comes from placer operations in the Belgian Congo, Sierra Leone, Angola, and Union of South Africa.

Senator SCRUGHAM. Is it believed that an ample supply can be furnished by placer operations?

Mr. LUND. Yes, sir.

Senator SCRUGHAM. If we have such an abundance of diamonds, there will be a decrease in price.

Mr. LUND. As a matter of fact, the demand has stayed right up with the supply for industrial purposes, practically.

Senator SCRUGHAM. I do not understand why they are closing down the mines when the need is increasing.

Mr. LUND. Those mines were closed down over a period of years, mainly due to increasing costs, as I understand it, resulting from the great depths to which such mines as the Kimberley Premier and other mines have been sunk.

Senator SCRUGHAM. What would the average industrial diamond sell per carat? Can you give me a rough approximation?

Mr. LUND. Rather than average the total of industrial diamonds, I think it would be well to consider crushing bort separately. This type of material sells for from about 55 cents to \$1 or \$1.25.

Senator SCRUGHAM. Per carat?

Mr. LUND. Per carat.

Senator SCRUGHAM. For crushing into diamond powder.

Mr. LUND. The crushing bort is used mainly in the manufacture of diamond wheels.

Senator SCRUGHAM. What about the price of diamonds used for points in diamond drills?

Mr. LUND. Those fall under the category of industrial stones, and probably as a general average—I have not figured it out, Senator—but the prices on industrial stones will vary from about \$2 or \$3 per carat all the way up to \$30 to \$40 per carat.

Senator SCRUGHAM. The highest would be the hardest?

Mr. LUND. And the purest, for making diamond dies—

Senator SCRUGHAM (interposing). How many carats to the pound?

Mr. LUND. You have me there, Senator. I think it is about 2,200 carats. I would have to verify it, but I think that is about right.

Senator SCRUGHAM. At \$30 a carat, the price would be 30 times 2,200 for the best industrial diamonds.

Mr. LUND. Something of that nature; yes, sir. I would have to check on that conversion factor.

Senator SCRUGHAM. That would be about \$66,000 a pound for industrial diamonds, 30 times 2,200.

Mr. LUND. \$30 is for your best quality industrial stones, and probably an average for the better types of industrial stones would be more in the neighborhood of \$8 or \$10 a carat.

Senator SCRUGHAM. Thank you. I understand.

#### EFFORTS TO DEVELOP DOMESTIC PRODUCTION OF DIAMONDS

Mr. LUND. The only known occurrence of diamonds on the North American continent in possible commercial quantities is near Hot Springs, Ark. This deposit is geologically similar to the "pipes" in South Africa, and has had a small and rather spasmodic production record. The stones that have been recovered vary in quality from high-grade gem material to material usable for nothing but crushing and powder, but generally speaking are reported to have been of very good quality. Production in the past has come largely from the residual material accumulated on the surface through weathering, although the underlying periodotite has also been exploited to a minor extent.

A company known as the North American Diamond Corporation was organized over a year ago to develop this property. The War Production Board recommended the expenditure of about \$50,000 in the exploration of this property in order to determine the extent to which it could be relied upon as a source of diamonds. This procedure was not agreed to by the owners, because it was felt that such a small-scale operation would not recover all the diamonds and therefore would not comprise a fair test. Plans for a privately financed project were submitted by the owners, and our Division pushed it to the limit of its ability before the Facilities Committee of the War Production Board, but the Committee felt that the allocation of scarce equipment and supplies for more than a modest exploration program was not warranted.

Senator SCRUGHAM. What is that, the Facilities Committee?

Mr. LUND. The Facilities Committee.

Senator SCRUGHAM. The Facilities Committee of the War Production Board has turned down this enterprise on the ground it was too large an expenditure of money?

Mr. LUND. Not of money, but of materials. Considering the record, it is not too clear just how much we might expect out of this project.

Senator SCRUGHAM. Have you any idea how many carats or pounds, carats is probably the best word to use, are in use per month or per year at the present time? Give us an approximate idea. In other words, is it 1,000 carats or 10,000 carats?

Mr. LUND. Used industrially, Senator?

Senator SCRUGHAM. Yes.

Mr. LUND. I wonder if we should mention that for the record? It is in the general neighborhood of ——— carats per month.

Senator SCRUGHAM. That is very interesting; and these are chiefly obtained from placer operations and the Belgian Congo.

Mr. LUND. Yes, sir.

Senator SCRUGHAM. What do those African diamonds run in average cost per carat?

Mr. LUND. Considering the fact that crushing bort comprises probably 80 percent of the sales with this bort selling at 55, 60, or 70 cents per carat, I think the average would be more like—I am just guessing now—around \$3 or \$4.

Senator SCRUGHAM. Have you any figure? You investigated that, I assume, as to the estimated number of carats that can be obtained from American production?

Mr. LUND. The report submitted by the owners used a figure of about a fifth of a carat per yard of material. There is not too much in the way of records to substantiate that figure, but even assuming that figure, they first proposed a plant of some 750 yards per day, at a fifth of a carat per yard, 300 days a year, that would figure to a little less than 50,000 carats. That plant would cost in the general neighborhood of close to \$1,000,000.

Senator BUCK. Is that the only deposit that has been discovered?

Mr. LUND. There have been other discoveries in that same general vicinity in Arkansas, but that is the only discovery on the continent of North America, with the exception of a few diamonds found in glacial drift.

Senator SCRUGHAM. I have seen in the Smithsonian Institution a small number of diamonds from the Sierra Nevada. Would that come in the glacial drift?

Mr. LUND. I am not familiar with that.

Senator SCRUGHAM. They are on exhibit at the Smithsonian Institution. I looked at them recently.

Mr. LUND. I know there have been a number of times in the past when diamonds were reported throughout the West. As a matter of fact, I think they mined for them in some instances.

Senator SCRUGHAM. All right, proceed.

Mr. LUND. Actual Government stocks of diamonds which have been accumulated during the past 2 years will cover requirements for less than a year under the greatly expanded needs in 1943. However, large stocks are known to exist in the United Kingdom, with additional stocks in the producing countries in Africa. Arrangements have recently been concluded by B. E. W. to transfer large reserve

stocks to Canada which can be drawn upon to meet extraordinary demands of the United Nations.

Senator SCRUGHAM. Has the Board of Economic Warfare been purchasing these diamonds to prevent the Axis nations from getting them?

Mr. LUND. I do not know the details of that program, Senator, but I think that is a phase of their work, particularly in South America.

#### PRICES CONTROLLED BY DIAMOND SYNDICATE

Senator SCRUGHAM. Who sets the price for these diamonds? Does the War Production Board set them, or the syndicate?

Mr. LUND. Since the great majority of diamonds are obtained through London, from South African sources, I think the prices are controlled and largely determined by the Diamond Trading Corporation.

Senator SCRUGHAM. What I am getting at is, is this a competitive business, or monopolized business? If you do not like the price one company sets for diamonds, can you go to some other agency and buy diamonds?

Mr. LUND. Only in Brazil and Venezuela, where the production is relatively small, a very small percentage of the world supply. As I say, virtually all South African production is marketed through the United Kingdom and a large part through the Diamond Trading Corporation, so there is not any other place you can go for the great bulk of your diamond requirements.

Senator SCRUGHAM. The price they set is the price you pay. Is that correct?

Mr. LUND. That is correct.

Senator MURRAY. Does this syndicate hold down the production of diamonds in order to provide a scarcity and in that way hold up the prices?

Mr. LUND. I do not think that is true generally, particularly with respect to industrial diamonds. There have been sizable stocks built up, particularly of these industrial stones.

I have said nothing about gem stones, and as far as production of diamonds is concerned, the principal value, I think, lies in marketing gem quality stones. We have run into a situation of a greatly increased demand for industrial stones, with a sizable stock having been accumulated over a period of years, so that the prices have not risen to any considerable extent.

There are reports, at least, that the quality of some of the industrial series is not what it has been; but there again, it is a question of whether stocks of the best quality material have been depleted, thus necessitating using slightly lower qualities in making tools.

Senator SCRUGHAM. Senator, Mr. Lund has said the pipe mines have been shut down due to the fact that they can procure diamonds cheaper from placer mines.

Is that true, Mr. Lund?

Mr. LUND. These mines have been shut down for a varying number of years, up to 15 or 20 years. I think the most recent shut-down was in about 1939.



Senator STEWART. You mean to say that the full supply of diamonds this country is receiving now is from Africa, from the British Government?

Mr. LUND. Our supply comes now from stocks that have accumulated in the hands of the producers or in London together with new production that has come from the placer operations.

Senator STEWART. In Africa?

Mr. LUND. Yes, sir.

Senator STEWART. Is there a shortage of supply?

Mr. LUND. Not yet. In order to meet the greatly expanding requirements for crushing bort, it will be necessary to increase the amount of production.

Senator STEWART. You described somewhat the use of diamonds in the manufacture of war materials. Is the demand for the use of diamonds increasing commercially?

Mr. LUND. Yes, sir.

Senator STEWART. Is it apprehended there will be a shortage in the near future?

Mr. LUND. There will be a shortage unless we are able to increase the production. Not in the immediate future.

Senator STEWART. You spoke of increasing the production in this country, the development of the Hot Springs deposits.

Mr. LUND. In order to provide the crushing bort—and that is where the main increase is occurring—we will have to go elsewhere.

Senator STEWART. What is that?

Mr. LUND. Crushing bort. That is the cheapest quality required.

Senator STEWART. Who owns the Hot Springs deposit?

Mr. LUND. The North American Diamond Corporation. I think Mr. Wilkinson is principal owner, and a Mr. Blick.

Senator STEWART. Mr. Wilkinson lives where?

Mr. LUND. I think in Logansport, Ind.

Senator STEWART. Is there any connection between that ownership and the ownership in Africa and Brazil?

Mr. LUND. I know of none.

#### DEVELOPMENT OF HOT SPRINGS DIAMOND FIELD REJECTED ON BASIS THAT EXPENDITURE OF NECESSARY MATERIALS UNWARRANTED

Senator STEWART. Why have not efforts been made to develop the Hot Springs, Ark., field?

Mr. LUND. We recommended the expenditure of a sum of money to explore that—

Senator STEWART. Who recommended it?

Mr. LUND. The War Production Board.

Senator SCRUGHAM. Why was it not done?

Mr. LUND. Because for this particular exploration we were suggesting sinking test pits 40 feet deep, 6 feet square, some thirty or forty of them over this property, and running the peridotite "green ground" through a mill, a mill to recover the diamonds. The owners did not agree to that under the belief that a small mill might not recover all the diamonds, and therefore it would not comprise a fair test.

They then decided to finance it themselves, submitting a project running to some nine hundred thousand dollars.

Senator SCRUGHAM. Which was submitted to you?

Mr. LUND. Which was submitted to the War Production Board. We trimmed it down as far as we could, on the basis of tight equipment and supplies that could be screened out, we submitted it to the committee which reviewed this project, and as I say, it was decided that the supply picture at that time did not warrant the expenditure of the material.

Senator STEWART. What committee was that you spoke of?

QUESTION OF MEMBERSHIP OF FACILITIES COMMITTEE

Mr. LUND. The Facilities Committee of the War Production Board.

Senator STEWART. That is not the full name of the committee, is it?

Senator SCRUGHAM. It is the Facilities Review Committee, is it not?

Mr. LUND. I have known it as the Facilities Committee.

Senator STEWART. How many members are there on that committee?

Mr. LUND. I cannot tell you.

Senator STEWART. Are you a member?

Mr. LUND. No, sir.

Senator STEWART. Who are the members?

Mr. LUND. I do not know their names.

Senator STEWART. It is not a secret committee?

Mr. LUND. No, sir; it is not.

Senator STEWART. Do you know any of them? Is it within the War Production Board?

Mr. LUND. Yes; it is in the Facilities Bureau. I am sorry, but I do not know the names of any members of that committee.

Senator STEWART. This committee refused to recommend the expenditure of this money, because the demand did not justify the expenditure and use of critical materials and erecting necessary equipment at the mine?

Mr. LUND. Yes.

Senator STEWART. Has the situation changed any since the Board passed on that?

Mr. LUND. I do want to make it clear that it is mainly the expenditure of materials. Was that not understood? They were agreeing to the financing of it themselves.

Senator STEWART. You spoke of having to trim the cost as though that was an important item.

Mr. LUND. That was done, as all projects are, sir—screened out to cover just the bare necessities on materials and equipment. Those are the bottleneck items.

Senator STEWART. The picture has changed since that determination was made by the committee?

Mr. LUND. The committee at first suggested that a smaller, modest project should be given consideration if they were to present it.

Senator STEWART. That was purely on the basis of demand?

Mr. LUND. That is right.

Then I say the owners trimmed it down, I think it was from the original 750-yard plant, to somewhere near 250 yards per day, and that, too, was not approved.

DEMAND FOR DIAMONDS HAS INCREASED SINCE DECISION OF  
FACILITIES COMMITTEE

Senator STEWART. Has the picture changed any since then? Has the demand for diamonds increased and is the supply diminishing? Is that the situation now, or, as you said a moment ago, do you foresee that there will be a shortage of diamonds?

Mr. LUND. The demand has increased since then.

Senator STEWART. Can you foresee a shortage?

Mr. LUND. Possibly a couple of years from now, but no immediate shortage.

Senator STEWART. How long will it take you to develop this proposed project in Arkansas?

Mr. LUND. It might take in the general neighborhood, depending on how large it is, of 9 months to a year.

Senator STEWART. Do you think it would be evidence of foresight to decide now that we need this development and provide for it?

Mr. LUND. As I said before, I would like to see a fair test made on that property. Also, as I said before, we do not know, the record is not too well known, as to just what we can expect from that underlying material in Arkansas. The recorded data in the past, ever since 1906, when diamonds were discovered down there, show a total output of something in the nature of 50,000 stones at about an average of a fifth of a carat per stone. Probably 10 percent of those have been gem stones. The remainder were industrials, good quality ones generally, about 1 percent of which was classified as bort.

Senator STEWART. Classified as what?

Mr. LUND. Bort.

Senator STEWART. That is a technical name?

Mr. LUND. Crushing bort. It is the cheapest quality, used only for crushing up, and that is where our great increase in demand lies at the present.

Senator STEWART. In regard to the quality of the Hot Springs diamonds, is it satisfactory for commercial purposes?

Mr. LUND. Very good quality, Senator; yes.

Senator STEWART. So far as you know, this committee just simply refused, not because of lack of quality of the stone, but because they think there is an adequate supply?

Mr. LUND. For the time being.

Senator STEWART. For the time being?

Mr. LUND. Yes, sir.

Senator STEWART. You have always heard of this committee as the Facilities Committee.

Mr. LUND. It used to be the Facilities Clearance Committee, and I think it is now known as the Facilities Committee.

Senator STEWART. Is that the same committee we know up on the Hill as the "bottleneck committee"?

Mr. LUND. Perhaps.

Senator STEWART. We have never been able to find out who the members of the committee are. It is not a secret organization?

Mr. LUND. No.

Senator STEWART. Do you know any of the names?

Mr. LUND. No. I have only been before it once or twice.

Senator STEWART. They are strange faces.

Mr. LUND. Strange faces; yes, sir. They are people with whom I have not had any contact. I have not met them at any other time.

Senator SCRUGHAM. All right; proceed, Mr. Lund.

Mr. LUND. I am almost through as far as diamonds are concerned; just a few sentences more.

At the same time the United Kingdom has agreed to bend every effort to supply current requirements from present production in order that these reserves may be maintained. This Canadian reserve, plus stocks held by industry and by Government, will amount to a supply of more than 2 years under the greatly expanded 1943 requirements.

However, as previously indicated, if our expanded needs are to be met from current production, the mine output will have to be greatly increased without delay, and plans are being made to effectuate this.

INCREASED PRICE HAS ENABLED PRODUCTION OF MERCURY TO KEEP PACE  
WITH INCREASED DEMAND

*Mercury:* A great variety of uses, including direct and indirect war uses and essential civilian uses, are served by mercury, either in the form of metal or a variety of chemical compounds. To mention only a few, they include its use in tracer bullets, detonators, medicines, anti-fouling paint for ships, paravanes, electrical apparatus, industrial instruments, seed disinfectants, and as a catalyst in the production of important chemicals.

During the period of greatly expanded consumption since 1939, domestic production has increased almost threefold in comparison with an average for the 10 years preceding. Domestic output is now at the highest rate since the early bonanza days. This increase has virtually balanced our own domestic consumption, and was made possible largely by the increase in price, which also approximately trebled. This heavy drain on very limited proven reserves has necessitated an energetic exploration and development program to uncover new deposits as fast as reserves are depleted. This program must be continued at an accelerated rate since mercury, or quicksilver, as it is better known to the mining profession, generally occurs in erratic, discontinuous, and shallow deposits, which as a result cannot be blocked out far in advance in mining operations. As a result, the known reserve picture is always a serious question mark beyond a relatively short period of time.

The price incentive alone was sufficient until relatively recently to provide the increased output needed to meet expanded requirements. However, it was necessary for Government agencies interested in the supply program to maintain a united front in opposing threatened Government action to reduce prices which, it was felt, would seriously curtail domestic output.

FURTHER ENCOURAGEMENT NOW NECESSARY TO DEVELOP  
DOMESTIC MERCURY RESERVE

Since the middle of 1942, however, it has been felt advisable and necessary to offer further encouragement and incentive to develop additional domestic reserves. Several means of accomplishing this were resorted to, including—

(1) A program by Metals Reserve Company to purchase surplus newly mined domestic output.

(2) A program carried out by Metals Reserve Company to guarantee a market at prices slightly below the ceiling to new and eligible mercury producers for their output through 1943, with consideration now being given to the extension of this through 1944.

(3) Continuation of a vigorous exploration program by the Geological Survey.

(4) A drilling program recommended to the Bureau of Mines.

(5) Financial assistance to the following companies has been recommended by the Division: Cinnabar Mines, Inc., Prineville, Oreg.; Humphreys Gold Corporation, Amity, Ark.; Reward mine, Pacific Placer Co., Mina, Nev.; and Helm mine, Anglo American Co., Middletown, Calif.

(6) Project priority assistance for major reduction plant installations at the Hermes mine, Yellow Pine, Idaho; Lucky Strike mine, Medford, Oreg.; Ozark Quicksilver Co., Amity, Ark.; and the Victoria Gravel Co., Terlingua, Tex.; and for expansion of facilities other than reduction plants at the Klau mine and New Idria mine in California, and the Cordero mine in Nevada.

(7) An access road program has been carried out. In all, \$124,000 is being expended in nine different road projects.

Accompanying the greatly expanded production during the past 3 years, during which prices have been far above previous levels, there has been a very noticeable decrease in the average grade of ore mined. This has dropped from approximately 7.4 pounds per ton in 1939 to 5.1 pounds per ton in 1942. It is next to impossible to estimate with any degree of accuracy the long-term domestic production picture, but it is felt that even with continued exertion of best efforts to bring in new production it is decidedly unlikely that present levels can be increased. It is more probable that there will be a gradual tapering off beginning even in 1943 or 1944 as compared with 1942 production levels.

Mercury is one of a very few metals of which sizable stockpiles have been accumulated by the Government during the war period. This has resulted in the main from the spectacular expansion in production from Mexican and Canadian mines, and it has also been possible to accumulate sizable stocks which originated in Spain to be held in the United Kingdom as a reserve against lend-lease requirements of the United Nations.

#### SUPPLY PICTURE FOR PLATINUM METALS

The so-called platinum metals group comprises a number of metals, the majority of which are very little known by the public or by industry generally. They include platinum, palladium, iridium, ruthenium, rhodium, and osmium. Normal peacetime uses revolve largely around jewelry and the decorative arts, with electrical, chemical, dental, and other miscellaneous uses, such as laboratory ware, fountain-pen points, and phonograph needles, comprising the remainder. War uses have greatly expanded the requirements for these metals in such applications as electrical contacts, wire for radios, catalyst in nitric acid manufacture, fuse wire, searchlight reflectors, and temperature-control instruments. As a result it has been necessary to prohibit the use of some of these metals for nonessential purposes such as jewelry manufacture.

The situation in platinum has changed radically since World War I, mainly as a result of the development of the largest world source of platinum metals in the Sudbury nickel deposits of Canada. Russia, South Africa, and Colombia continue to supply substantial amounts, but minor in comparison with the Canadian output. As a result there has been no shortage of platinum metals as a group, but there has been and will continue to be a need for a certain amount of substitution between metals in the group to meet requirements for particular uses.

There is very little primary domestic production in the United States proper, with the exception of small amounts of byproduct metal obtained from dredging operations in certain localities and in the refining of common base metals. However, there is one large producer of platinum in Alaska which contributes substantial amounts of platinum and a relatively large proportion of iridium to our new supplies. Consideration was given to the advisability of stepping up the output from this source, but it was found that limited reserves did not warrant installation of additional heavy equipment at that operation. However, much special attention has had to be directed toward keeping this operation going at capacity because of the difficult transportation involved.

Senator SCRUGHAM. Where is that—in Alaska?

Mr. LUND. Yes. There has been one additional substantial change in the platinum supply picture since 1941. Previous to that time, residues and concentrates from Canadian operations were shipped to England for refining, the refined metals then being returned to the United States. In order to remove the dependency on such refining arrangements, also involving the dangerous double-ocean haul, refining facilities were provided in the United States to take care of our own needs. As a result, concentrates and residues are now sent directly to this country from Canada for refining and marketing.

Sizable stocks of platinum and iridium have been accumulated by the Government, largely from Colombian and Russian sources, and additional quantities will continue to come in.

#### SILVER SUPPLY ADEQUATE FOR WAR AND ESSENTIAL CIVILIAN NEEDS

Industrial uses of silver in peacetime involve mainly its use in silverware, jewelry, other decorative arts, and in photography. Numerous wartime uses have been greatly expanded and are still on the increase, including both old industrial uses of an essential nature and new uses that have sprung up largely during the war. These war and essential civilian applications comprise bearings, electrical contacts, photographic goods, brazing alloys, solder, and miscellaneous chemical products. Large quantities are also required for foreign coinage, particularly in those areas to which large numbers of troops are being sent.

North American mines account for the great majority of the world silver output, with Mexico and the United States leading the field. Mexican production has been holding up well, but there has been quite a reduction in output from Canada and the United States. Even so, available supplies have been adequate to meet essential needs, although it has been necessary to curtail nonessential consumption in order to effectuate this balance.

Senator SCRUGHAM. There has been no shortage for essential civilian needs.

Mr. LUND. That is right. With the exception of a short period back in August and early September of 1942, when there was a little delay in imports, there has been no actual shortage of silver to meet essential civilian needs.

Senator SCRUGHAM. Do you anticipate any increased demand for coinage from places where troops have been sent?

Mr. LUND. There have been substantial demands. It is hard to make any estimate of what those demands will be in the future.

Senator SCRUGHAM. Is there demand from Great Britain for coinage for India as there was during the World War?

Mr. LUND. No, sir; not for India.

Senator BUCK. Does not the country possess a great stockpile of silver?

Mr. LUND. There are large stocks held by the Treasury.

Senator BUCK. How could there be any shortage?

Mr. LUND. At present those stocks are not available for consumption.

Senator BUCK. The production is about equal?

Mr. LUND. Up to the present the new supplies have been adequate to meet the essential uses.

Senator SCRUGHAM. Just a moment. I think it is well to interject at this point the fact that most of the silver held by the Treasury is pledged for paper money, the paper dollars. Anyone is entitled to get a silver dollar on demand.

Mr. LUND. That is correct.

Senator SCRUGHAM. A large portion of this storage is a necessity in order to have a currency on which payment can be made in silver.

Mr. LUND. Yes, sir.

Senator SCRUGHAM. I would like to have that as a matter of record.

Mr. LUND. A modest stock-piling program has been initiated through Metals Reserve Company in order to provide a cushion against contingencies and to be assured that any temporary excess supplies of foreign silver would not be channeled into the Treasury Department where silver would not be immediately available for industrial use.

A summary statement on the part played by silver in the war effort would be very incomplete without a reference to the program for loaning Treasury Department "free" silver for use in such nonconsumptive applications as bus bars and transformer windings, under which arrangement the silver will be returned to the Treasury after the war. This program is being handled by the Conservation Division of the War Production Board and by Defense Plant Corporation, and I am advised that some 25,000 tons have been earmarked for use in specified war plants, with plans quite well advanced for the allocation of a large proportion of the remaining amount to other projects, possibly including overhead transmission lines. Use of silver on this tremendous scale is possible only through the loaning arrangement, since its cost for these applications, in which it substitutes for copper and aluminum, would be definitely prohibitive, with foreign silver now costing over \$6 per pound as compared with copper at 12 cents and aluminum at 15 cents per pound.

**CORUNDUM SUPPLY CHIEFLY IMPORTED, BUT SHIPPING DIFFICULTIES  
NECESSITATE DEVELOPMENT OF DOMESTIC SOURCES**

Virtually all of the corundum requirements are indirect war and essential civilian in nature, the principal uses being as an abrasive in the manufacture of grinding wheels and in the optical trade. It is a form of aluminum oxide that occurs in nature, and in the great expansion of the abrasive industry in the past few decades the natural material has been supplemented to a very large extent by manufactured aluminum oxide derived from bauxite and other aluminous minerals. There are certain applications, however, in which the ground-up corundum abrasive is definitely superior and preferred to the manufactured material.

The United States and Canada formerly were producers of corundum, but since 1920 our entire domestic supply has been imported from richer sources in South Africa. Faced with heavy increases in requirements in 1942, arrangements were made to expand the output in South Africa and to contract for all such supplies through Metals Reserve Company. Shipping difficulties, however, resulted in periods of serious shortages during which strict allocation to the most essential users was necessary. During the past year, as a result, we have pushed for a careful resurvey of localities in the United States and Canada where corundum is known to occur, and arrangements are finally being made for the purchase by Metals Reserve Company of a substantial sample that has been produced in the Carolinas in order to have it thoroughly tested for various use applications.

It appears that even under the most favorable results from the prospects under investigation, domestic deposits will not be able to supply more than about 10 percent of our requirements. A Government stockpile amounting to approximately a year's requirements has been recommended, but owing to shipping difficulties it has been possible to acquire only a relatively small part of this amount.

**CHIEF STRATEGIC USE OF TALC IS IN MANUFACTURE OF STEATITE.**

The mineral talc is used for a great variety of applications, only one or two of which have resulted in any real supply problem in connection with war demands. The most strategic use of this mineral for war purposes is in the manufacture of electrical high-frequency insulators known as steatite.

Senator SCRUGHAM. You spoke of that as steatite?

Mr. LUND. Yes, sir.

Senator SCRUGHAM. That is soapstone.

Mr. LUND. There is a varying terminology there. In many cases it is used to refer to the fabricated product resulting.

Senator SCRUGHAM. What is steatite?

Mr. LUND. I know that for steatite you must have a very pure form of talc. The iron must be very low, and it must possess certain physical characteristics.

Senator SCRUGHAM. Anyway, there is no shortage?

Mr. LUND. No shortage.



For this purpose a talc of special purity and physical characteristics must be used. Domestic production of a grade suitable for steatite is centered mainly in a relatively small area near Death Valley in California, with another sizable potential producer in Montana. There is also large potential production in Alabama, but this would require beneficiation and plant construction.

Supplies are adequate for all steatite requirements.

Although it appeared necessary late in 1942 to prohibit the use of this type of talc for certain nonessential purposes, the reduced steatite schedules will now permit some of this being diverted back to such uses as talcum powder.

As an insurance measure against contingencies which might affect the small concentrated production in California and its transportation to the large consuming centers in the East, we recommend, with the concurrence of the Signal Corps, the construction of facilities to beneficiate the Alabama talc, which would give us a large producer in the East. However, this project was deemed unnecessary to the war effort and was turned down by the Facilities Committee.

We have now initiated a program to build up stocks of steatite grade talc in the East which will amount to at least a year's supply for steatite manufacture. Such stocks will be accumulated in small measure from imports already contracted for by the Government, by stocks held by the steatite manufacturers themselves, and by stocks of domestic talc to be purchased by the Government and stored in the East.

Talc of other grades is employed extensively as a filler in paint, and it appears as though financial assistance may have to be given to increase production of this type of talc at certain properties in order to meet expanded requirements for paint for naval and military uses. This is under active study at the present time.

#### PROJECTS FOR INCREASING PRODUCTION OF SPODUMENE

Spodumene, amblygonite, and byproduct lithium phosphate are the raw materials from which lithium and lithium salts are obtained. All of these materials have been produced domestically, principally from the Black Hills of South Dakota, southern California, and the southern Appalachians. The greatly expanded increase in military requirements for lithium salts in 1942 necessitated the active promotion of new sources of spodumene. A Reconstruction Finance Corporation loan was authorized to increase the capacity of the mining and milling facilities of the Black Hills Tin Co., and an additional loan was authorized early this year when the completed plant was destroyed by fire.

In addition project priorities were granted to the Solvay Process Co. for development with private capital of a mine and plant at Kings Mountain, N. C., where the largest spodumene occurrence in the United States is reported. This project is now getting into production, and when running at full capacity should make available more than enough spodumene concentrates to meet all essential needs.

Meanwhile every effort has been made to expand output from other domestic mines, but possibilities of obtaining any substantial relief

by such measures without installation of milling equipment are slight. Efforts have also been made by means of Government purchases to bring in supplies promptly from Australia and Brazil, but these, too, have been helpful to only a minor extent.

A modest stock-piling program, including both foreign and domestic concentrates, has been undertaken to provide a cushion against either unforeseen drops in future domestic production or against possibility of further increases in requirements.

#### FOREIGN SOURCES OF KYANITE HAVE HELD UP, DOMESTIC PRODUCTION INCREASED

Large scale use of the mineral kyanite, an aluminum silicate, in the manufacture of refractories has been a relatively recent development. After it is calcined, ground up, and mixed with a suitable binder, it is used to manufacture refractory bricks, shapes, and cements that give especially long service under severe firing conditions. It finds particularly broad applications in refractories for lining electrical furnaces in steel and nonferrous smelters and foundries and in lining parts subject to severe service in equipment handling molten glass in glass plants.

Virtually all United States supplies of the coarse crystalline mineral have come from India, while the United States itself produces a more finely ground product which is utilized in the manufacture of super-duty refractory cements and as an ingredient in glass which is to be subjected to high temperatures in service.

In 1941 when shipping began to show signs of tightening, investigations were pushed to determine what material of domestic origin would serve as the best substitute. After extensive tests by the Bureau of Mines, with the cooperation of the Bureau of Standards, the Tennessee Valley Authority, and industry, it was found that massive topaz found in South Carolina would form the best calcined substitute for mullite obtained from Indian kyanite. Further difficulties in plant design either to recover or to kill the volume of fluorine gas obtained in the calcining of topaz were finally surmounted, and detailed plans were submitted for a mill to calcine the topaz on a scale which would make us independent of the Indian product.

Meanwhile, the recommendation was made for stockpiling the Indian material to provide a suitable cushion for use while the proposed plant was under construction. Shipping continued to bring in quantities from India sufficient to meet requirements under a strict allocation system. Industry stocks amounted, late in 1942, to almost a year's supply.

Under these conditions the Facilities Committee felt that the equipment and materials needed for the plant could be utilized better for other current purposes and tabled the project for later consideration, if and when serious shipping restrictions made movement of this material too difficult.

Demand for the domestic product has also increased greatly, requiring enlarged operations at one property and the granting of financial assistance to permit the reopening of another property, both in

the East. Production from these two companies will meet the estimated needs for essential uses.

Senator SCRUGHAM. What is the difference between domestic kyanite and Indian kyanite?

Mr. LUND. The Indian kyanite apparently produces a better product for making shapes and bricks. We do produce some domestic kyanite, but it is fine grain.

Senator SCRUGHAM. Is there any shortage of these minerals?

Mr. LUND. We have approximately a year's stock at the present time, and we plan to increase it beyond that in the Government stock pile.

Senator SCRUGHAM. Proceed.

Mr. LUND. That completes my statement.

Senator SCRUGHAM. It is quite a contribution to the record, and we appreciate your courtesy.

Mr. LUND. Thank you.

Senator SCRUGHAM. The next witness will be Mr. Andrew Leith, Chief, Ferro-Alloys Branch of the War Production Board.

#### STATEMENT OF ANDREW LEITH, CHIEF, FERRO-ALLOYS BRANCH, WAR PRODUCTION BOARD

Senator SCRUGHAM. This inquiry will be conducted by Senator Buck.

Mr. Leith, if you will give your name to the reporter?

Mr. LEITH. Andrew Leith, Chief, Ferro-Alloys Branch, War Production Board.

Senator BUCK. Will you proceed?

#### DANGER OF ACUTE SHORTAGE OF MANGANESE, DUE TO NECESSITY FOR RELYING ON IMPORTS

Mr. LEITH. The United States does not have any large high-grade deposits of manganese ore, and we have always had to rely upon imports for upwards of 95 percent of our total requirements. During the last World War, due largely to lack of prewar planning, an acute shortage of manganese ore developed, with the result that the steel industry learned its lesson on this phase of preparedness and has never forgotten it. For 20 years following the First World War great efforts were made to persuade the Government to stockpile manganese ore, but they came to no good end. However, the steel industry itself built up very large reserves, equivalent perhaps to 2 years' supply at their normal rate of consumption.

When the National Defense Advisory Commission was formed in 1940, manganese was the first mineral to receive active attention. At that time a plan was laid to prevent a recurrence of the shortage which occurred in 1918, and in its broad outlines that plan has been followed consistently by the successors to the Defense Commission, O. P. M., and W. P. B. It has not been possible to carry through some phases of the plan, but without going into too many details I will herewith outline what it is.

It has been, and still is, the plan to continue to import as much manganese ore as possible wherever shipping space can be made available without interfering with military or naval plans or without taking shipping space away from more urgently needed imports, such as copper, bauxite, or rubber. Thus, our imports have almost exclusively been return cargoes on vessels sent to various parts of the world for other reasons. The global nature of this war and the great volume of outgoing cargoes have been responsible for the fact that since June 1940 we have been able to meet a steadily growing demand by the steel industry and have at the same time been able to increase the stocks in the country by about half a million tons of manganese ore. Furthermore, I believe it can safely be stated that in no case has a ship been diverted or sent out in ballast for a return cargo of manganese ore.

**INCREASE IN DOMESTIC PRODUCTION MUST BE LARGELY OF LOW-GRADE ORES**

Experience during the 20 years preceding this war amply demonstrated that the potential production of natural high-grade ore in this country is not, and never can be, large. Even greatly increased prices could not materially affect production of natural ores, and each price increase brings diminishingly smaller returns.

There are, however, a few well-known large deposits of low-grade manganese ore in this country which could add materially to our supply if they could be beneficiated. In this respect it is perhaps wise to qualify the term "large." I believe it is safe to say that our entire probable reserve of 10 percent manganese ore is less than about 40,000,000 tons, which means that even our so-called large deposits are by no means inexhaustible if we should proceed to exploit them on a large scale.

Senator MURRAY. Why do you have that policy of importing as much manganese as possible?

Mr. LEITH. We could not exist without it.

Senator MURRAY. You could not exist without it?

Mr. LEITH. No.

Senator MURRAY. How much of a stockpile have you?

Mr. LEITH. I do not know whether to put this in months or figures. Those figures are confidential.

Senator MURRAY. Cannot the domestic production be greatly expanded?

Mr. LEITH. Not enough to make as much steel as we are making. You would have to shut down three-quarters of the industry.

**WOULD INCREASED PRICE RESULT IN RAPID INCREASE IN PRODUCTION?**

Senator MURRAY. With an increased price for lower grade of manganese, would that not bring up production tremendously?

Mr. LEITH. Not enough.

Senator MURRAY. Not enough? My understanding is that there are a great many States that have manganese deposits.

Mr. LEITH. In my judgment, sir, that is not correct.

Senator MURRAY. I know that in Montana there could be a great increase in production, and the War Production Board was pretty slow in encouraging that development. It is only recently that you O. K.'d the mill to be built there.

Mr. LEITH. I call your attention, sir, that it was in July 1940 that we started the biggest mine in Montana.

Senator MURRAY. But that was an area that was already developed.

Mr. LEITH. Yes, sir.

Senator MURRAY. I am talking about developing new deposits of manganese.

Mr. LEITH. Yes.

Senator MURRAY. There could have been a much more rapid development of new deposits of ore if there had been a policy to support that.

Mr. LEITH. I am not sure in what way our policy has not supported it.

Senator MURRAY. What?

Mr. LEITH. I am not sure in what way our policy has not supported it.

Senator MURRAY. You fooled around with the construction of that mill out in Montana. That was the one place where you will continue the production of domestic manganese; is that not true?

Mr. LEITH. Yes; but I do not believe we have fooled around, sir.

Senator MURRAY. You do not believe it?

Mr. LEITH. No, sir.

Senator MURRAY. You have approved that mill now, have you not?

Mr. LEITH. Yes, sir.

Senator MURRAY. Why could it not have been approved some time ago? They had to bring tremendous pressure in order to get it, did they not?

Mr. LEITH. No, sir; not a bit. We approved that mill the day we got the Geological Survey to agree there were adequate reserves of ore in sight. Up until that date neither the producers nor the Geological Survey would admit there was adequate ore to run that mill.

Senator MURRAY. You agree that there exist domestic deposits of manganese that should be developed?

Mr. LEITH. Yes, sir.

Senator MURRAY. As rapidly as possible?

Mr. LEITH. Yes, sir.

Senator MURRAY. In preference to importing?

Mr. LEITH. Entirely.

Senator BUCK. Is it true that after 3 or 4 years of Government aid, you are still producing less than you did in 1918?

Mr. LEITH. We are still producing less than 1918.

Senator BUCK. How do you account for that?

Mr. LEITH. In my estimation the cream of the crop was taken in 1918.

Senator MURRAY. I have been interested in the subject of the development of manganese ever since I came here. We have constantly been taking it up with the Government to make it possible to develop manganese in Montana long before the war came on. Statements were made repeatedly by people who purported to know that there was no manganese in this country, that we could not produce it, yet people came from Montana stating years before the war broke out in Europe that we could develop a tremendous amount of manganese if we could get the excise tax on manganese to justify the development. Of course, it would be more costly to produce in this country than in the foreign market, when we had to pay the heavy transportation charges from

these Western States to the East. But with any encouragement the States could develop a tremendous amount of manganese.

Mr. LEITH. It depends entirely on how much assistance. For 16 years we had a tariff of 22 cents a unit.

Senator BUCK. Do you consider present prices sufficient to enable small producers to enter production?

Mr. LEITH. I think they are, sir.

Senator BUCK. Is the Government aiding where it can?

#### BASIS OF PRESENT PRICES PAID FOR MANGANESE

Mr. LEITH. It is. We are paying a very high price for manganese, higher than we paid in 1918, so the price alone is not the distinction between the 1918 production and the 1942 production.

Senator MURRAY. What is the price?

Mr. LEITH. \$1 a unit for 48 percent or better, and down to 65 cents with all the impurities.

Senator MURRAY. If you placed a price of \$1 a unit on the lower grade manganese, would that not bring out a tremendous amount of manganese?

Mr. LEITH. I do not think it would.

Senator BUCK. Are there any deposits in the eastern section of the country?

Mr. LEITH. Yes, sir; in Virginia—

Senator BUCK. Have they been developed yet?

Mr. LEITH. Yes, sir; in Virginia, West Virginia, Tennessee, Georgia, and Alabama. They are small and fairly constant producers.

Senator BUCK. You may proceed.

Mr. WHITE. Mr. Chairman, may I ask a question?

Senator BUCK. Congressman White.

Mr. WHITE. In your opening statement, you said this country had to depend on imports for 95 percent of its requirements.

Mr. LEITH. Yes, sir.

Mr. WHITE. You are cognizant of the fact that in the World War they did open up mines in Washington and Montana.

Mr. LEITH. Yes, sir, they furnished about 300,000—

Mr. WHITE (interposing). As a matter of fact, in the first tariff agreement made with Brazil one of the main advantages was manganese.

Mr. LEITH. Yes, sir.

Mr. WHITE. And if it were not for those disadvantages, the domestic production could have been improved, and it would be better and not under the handicap of meeting and competing with Brazilian wages, labor, and transportation.

#### NEED BOTH DOMESTIC AND FOREIGN PRODUCTION

Mr. LEITH. I think I had better make it clear, sir, that we need all the domestic production and all the foreign production. We need everything.

Mr. WHITE. Does the War Production Board encourage production of manganese in the States of Washington and Montana?

Mr. LEITH. Yes.

Mr. WHITE. Were you as liberal with them as you were for foreign production?

Mr. LEITH. We are paying far more. I think we are more liberal by a very large margin.

Mr. WHITE. How do you account for the fact that after opening up these mines in Washington and Montana in the World War, production ceased, and they went out of operation?

Mr. LEITH. There are several reasons. Some because they ran out of ore, and some because they are too submarginal.

Mr. WHITE. You say they ran out of ore in the World War?

Mr. LEITH. Some have run out since.

Mr. WHITE. Do you know anything about the amount of ore in Washington?

Mr. LEITH. Yes, sir.

Mr. WHITE. How much are they producing?

Mr. LEITH. A little over 9,000 tons from one mine.

Mr. WHITE. Would you call that exhausted?

Mr. LEITH. That property wasn't known in 1918.

Mr. WHITE. The very fact that assistance was given the industry automatically bears out the fact that by giving assistance to the industry we can open up new mines in the country.

Mr. LEITH. If they can be discovered, sir. This mine was discovered in 1925.

Mr. WHITE. Does the same condition apply in Montana? Are they new or old mines?

Mr. LEITH. They are old mines.

Senator MURRAY. They are developing new projects in Montana?

Mr. LEITH. Yes, sir.

Senator MURRAY. I see.

Mr. WHITE. The chief difficulty in Montana is financial.

Mr. LEITH. Prices.

Senator BUCK. You may proceed.

Mr. LEITH. The over-all plan for increasing domestic manganese ore production has four principal phases, which are herewith outlined.

Senator BUCK. The 48-percent ore brings \$48 to the miner.

Mr. LEITH. Yes, sir.

Senator BUCK. What does 47-percent ore bring? About 10 percent less?

Mr. LEITH. It is a difference between \$1 and 80 cents.

Senator BUCK. Why is that?

Mr. LEITH. The price of manganese ore is determined by units, the amount of iron and silica. The Metals Reserve Company chose to adopt a fairly simple system. We had a dollar unit for 48 percent and better with a few restrictions on iron and silica, and a 44 percent ore for the next step with a little more lax restrictions on silica, iron, and phosphorus, and a 40 percent ore with no restrictions on silica and iron and very lax on phosphorus.

O. P. A. has another specification. Which is the better, I do not know. There is this point, that when a man cannot make 48 percent he can make 47, and that gives him an opportunity to grade downward to 44 percent.

Senator BUCK. He gets the same price for 44 percent as he does for 47 percent?

Mr. LEITH. Yes, per unit. I am not prepared to say that this is the best price system, but I think it is a good one.

Senator BUCK. Suppose you paid \$1 for 40 percent up, would you get more manganese?

Mr. LEITH. I do not believe we would, materially. I might point out that in several States made up of small producers production dropped considerably in spite of the raised price.

Senator MURRAY. Why would that occur?

"PRICE IS NOT THE ONLY FACTOR"

Mr. LEITH. I cannot say that it is the actual cause. It is amply demonstrated that price is not the only factor.

Senator MURRAY. Why should price have an effect on production?

Mr. LEITH. They have quite a lot of other reasons, but the price obviously has not been enough to keep some of them in business.

Senator MURRAY. When did you establish the dollar price?

Mr. LEITH. I am not sure. I think May 4, 1942, as I recall the date, but I am not too sure of the exact date.

Senator MURRAY. Prior to that time you paid 55 cents per unit?

Mr. LEITH. I think it was 75.

Senator MURRAY. That would be for 48 percent?

Mr. LEITH. Yes, sir.

Senator MURRAY. And 55 for lower percentage?

Mr. LEITH. Yes; and prior to that time they were all negotiated prices varying between producers.

Senator MURRAY. Of course, at that time you were still expecting to import a lot of manganese, and you had a good supply of manganese on hand?

Mr. LEITH. Yes, we tried from June 1940 to import all we could, and still are.

Senator MURRAY. So there was no incentive at that time to encourage the development of domestic ores—I mean to say to increase the price to any extent?

INCREASE IN PRICE DID NOT RESULT IN INCREASED PRODUCTION

Mr. LEITH. Yes; there was all the incentive to increase production. There was considerable difference of opinion as to how much that could be done by raising the price. When we did raise the price, nearly doubling it, it did not result in any increase from most small mines.

Senator MURRAY. The producers all claimed that the increase of price would increase production. The men that had the mines claimed that if they had better prices they would develop more manganese.

Mr. LEITH. I know they claimed that.

Senator MURRAY. They are doing that now?

Mr. LEITH. No, sir.

Senator MURRAY. I go out to Butte and see them in the hills digging their shafts, and carrying on exploration work, little piles of manganese coming out all over the district.

Mr. LEITH. The actual results do not bear this out.

Senator MURRAY. Why did you complete this mill?

Mr. LEITH. Price is not the controlling factor.



Senator MURRAY. If you are going to build a mill, you are building it on the theory that you are going to get production of manganese.

Mr. LEITH. Yes, sir.

Senator MURRAY. And my point is that if you put a better price on a lower grade you would get more lower grade.

Mr. LEITH. I do not—

Senator MURRAY (interposing). You do not agree with me?

Mr. LEITH. I do not agree with you; no, sir.

Senator BUCK. Proceed.

#### OVER-ALL PLAN FOR DEVELOPING DOMESTIC PRODUCTION OF MANGANESE

Mr. LEITH. (a) In small mines—mostly natural ore or requiring only simple, relatively inexpensive concentration—including profitable and submarginal properties, 40,000 tons were produced in 1940 at a low price compared to the present price. The methods in general are: Increased price; equalized price subsidy throughout the country; easy marketing conditions; long-term contracts as needed. Big increase not anticipated nor achieved.

(b) Large mines—requiring costly beneficiation plants. These constitute the principal opportunity for significant increase in domestic production. The districts where such plants were possible were well known before the war with one exception—Aroostook County, Maine. They are as follows: Butte, Mont.; Las Vegas, Nev.; Cuyuna Range, Minn.; Artillery Peak, Ariz.; and Aroostook County, Maine.

Only one of these had the metallurgy worked out by 1940, and this operation (at Butte) also would have been commercially profitable at prices considerably lower than at present. The Government, however, assured immediate development in the summer of 1940 by guaranteeing a 3-year market. It took longer to develop metallurgical processes for the others. The Las Vegas plant was finally authorized in late 1941, and the Minnesota project in early 1942. The Artillery Peak project has been held in reserve for the future to supply crude ore to the Las Vegas mill when the Las Vegas ores are depleted. The Cuyuna project was frozen in May 1942. The Maine project was never authorized because it was not ready for recommendation until after the Cuyuna project had been frozen.

(c) Intermediate-sized properties—where concentrating plants appeared possible. We have sought to erect concentrating plants in such districts as Batesville, Ark.; Shady Valley, Tenn.; Deming, N. Mex.; Delta, Utah; Battle Mountain, Nev.; Philipsburg and Butte, Mont. In only one of these areas are we now prepared to build a mill—Butte. In another, Battle Mountain, Nev., private concerns are now operating their own mills. In the other areas we have instituted buying of low-grade milling ores but have not yet started to construct mills because of either uncertainty as to available crude ore or as to metallurgical process.

(d) Very long-range program. The only low-grade deposit in the country of sufficient size even to approach filling domestic requirements is at Chamberlain, S. Dak. This ore contains about 1 percent manganese. To produce only 100,000 tons per year of ferro-grade concentrate would require the mining of approximately 8,000,000 tons

per year of crude ore. However, as a long-range hedge against complete isolation of the United States, it seemed wise to find out how the ore could be handled. We therefore financed the successful development of a mining and preliminary concentrating method which will produce 16 percent nodules from the shales. The second step of turning the nodules into a usable product is not yet fully developed, although we believe we know the metallurgical principles which will have to be followed. In our judgment, immediate expenditure of any large amount in proving the second step is not yet warranted.

Senator BUCK. Do you have any questions, Senator Murray?

Senator MURRAY. How is the chrome property in Montana?

Mr. LEITH. Very well. It is not as desperately needed as rubber. It is coming along well.

Senator MURRAY. You have no problem with reference to chromium?

Mr. LEITH. We have the problem, but nothing serious.

Senator MURRAY. You do not anticipate that there is going to be any shortage of chromium?

Mr. LEITH. I hope not. I do not anticipate it.

Senator MURRAY. How about tungsten?

Mr. LEITH. Mr. Chairman, that is out of my field.

Mr. MURDOCK. Mr. Chairman, may I ask the witness a question?

Senator SCRUGHAM. Yes, sir.

#### QUESTION ON PROGRESS MADE IN DEVELOPMENT OF ARTILLERY PEAK DEPOSIT

Mr. MURDOCK. Would you give us a little more detail on the Artillery Peak deposit?

Mr. LEITH. Yes, sir.

Mr. MURDOCK. What is being done?

Mr. LEITH. At present, I do not know. We have carried on a great many tests. It is the opinion of the owners of the property that the wisest move, if and when we have to use the ores, is to put in a preliminary concentration plant, a flotation plant which will raise the ore from 5 to 10 percent to 20 percent, and ship those concentrates to the Las Vegas mill.

Mr. MURDOCK. Is it a large deposit?

Mr. LEITH. As far as the United States is concerned, it is large.

Mr. MURDOCK. Is it a considerable distance from Las Vegas?

Mr. LEITH. It is.

Mr. MURDOCK. Is it in reach of power?

Mr. LEITH. No, sir; it would take \$2,000,000 to put a road in there, and it would take \$12,000,000 to develop it.

Mr. WHITE. You seemed to stress the point that there was considerable production under the old price and a falling off under increased prices.

Mr. LEITH. I perhaps misspoke myself. The statement has been made many times that increased prices will result in increased production. There are many other factors. For example, the greatest production after the World War in Virginia was in 1933, and the greatest production Arkansas had was in 1934.

Another illustration is Tennessee, which was going along very well up until this year.

## COMPARATIVE RECORD OF MANGANESE PRODUCTION FOR LAST WAR AND FOR THIS WAR

Senator SCRUGHAM. Will you put into the record the comparative record of the last war and this war? Can you do that offhand?

Mr. LEITH. I have the exact figures. It is not easy to make an exact comparison, because the prices were based on different factors, but I can give you an approximation based upon two or three average ores.

I have drawn up a table with certain assumptions in it. I have assumed two typical grades of ore. One is 48 percent manganese, 10 percent silica, and 4 percent moisture. Another, 35 percent ore, 15 percent silica, and 4 percent moisture.

I have both here, and they are conservative figures in that the grade, the average grade, shipped is probably worse than that, and I have actual freight rates in 1918 within a range; I know the low and the high during the year.

I have had to estimate the sampling and analysis charges because that depends on how big the shipment is. Made by the carload it is very costly, by the trainload not so costly. I have estimated 50 cents a ton sampling and analysis charge for a producer in California in 1918, and on the low-grade ore he would receive \$10 to \$13.30 per ton of ore after deducting the cost of shipping to South Chicago and sampling and analyzing the load.

Mr. WHITE. Are you talking about crude ore?

Mr. LEITH. Crude ore. The actual producers receive \$10 to \$13.30.

Senator MURRAY. His operating costs were not included.

Mr. LEITH. I do not know whether a dollar is worth as much now as it was in 1918. In some respects there was inflation in 1918. For that same ton of ore, for which he got \$10 to \$13 in 1918, he would now get \$19.50, and for the higher grade for which he got \$39 to \$42.34, he now gets \$48. That is for California.

As you go eastward, the situation changes, but for 88 percent of production they are receiving a considerably higher price than in 1918. In Arkansas and Virginia they are getting close to the price, but less than 1918. We have established the system whereby producers get paid the same amount f. o. b. In 1918 they paid heavy penalties by paying freight, and due to the fact that 90 percent of the production comes from west of Arkansas, I believe we are being fair to 90 percent of the industry, at least.

Mr. WHITE. I would like to ask you a question.

Would you think the establishment of a stockpile after the war of strategic materials from domestic sources would be advisable?

Mr. LEITH. That is post-war planning. Personally, I think it is fine.

Mr. WHITE. Did I understand you to say that it is cheaper to ship ore by the trainload rather than carload?

Mr. LEITH. No; the sampling charge per ton is smaller.

Senator BUCK. Mr. Leith, we are running behind schedule.

Mr. LEITH. That completes my statement.

Senator BUCK. The next witness is Mr. Miles K. Smith.

Did you cover chromium?

Mr. LEITH. I am prepared to.

Senator BUCK. Will you put it in the record?

Mr. LEITH. Yes, sir.

(The material referred to is as follows:)

#### SUPPLEMENTARY STATEMENT ON CHROMIUM ORES

##### THE PROBLEM

The chrome ore problem differs from that of manganese in that there are fewer large world sources, more different types of ores and different uses, and, most important, we have lost access to a larger proportion of world sources. Of the total world production in 1937, 1938, and 1939 considerably less than half came from countries which could in any sense be considered safely accessible now. The Axis either occupies or can very greatly restrict exports from those areas that formerly supplied over half of the world's chromite (the Philippines, Greece, Yugoslavia, Russia, and Turkey). In addition, at least as late as last June, there was no certainty whatever but that the Axis might control the principal remaining sources, Southern Rhodesia and Transvaal, by bottling up exports through Portuguese East Africa. The British occupation of Madagascar largely relieved this danger, but at the time when our chromite program was being most strenuously pushed it was a very real factor.

In addition to facing the loss of foreign sources, we faced a demand for war purposes in this country which has increased to the point that the United States alone is now consuming more chromite per year than the entire world produced in any year prior to 1936. This explains why the civilian use of chromium was restricted earlier than almost any other metal, in spite of the fact that stocks were fairly large. The over-all plan to meet this emergency has not essentially changed since the early days of the Defense Commission and has on the whole been far more successful than we even hoped it could be. A brief outline of the principal phases follows:

##### FOREIGN SUPPLY

The foreign problem was two-fold: First, to bring in all the chromite that could be purchased, particularly from such sources as the Philippines and New Caledonia as well as from less exposed areas; second, to increase production in certain foreign areas in order to replace world production lost to the Axis. For example, we had formerly acquired most of our refractory chromite from the Philippines, and the only other known source was Cuba. This meant a very great increase of Cuban production, which fortunately has been met.

Speaking of the program as a whole, its success so far may be judged by the fact that total stocks in the country have increased by about 500,000 tons since June 1940, in spite of the fact that consumption has increased by about 80 per cent during the same period. In the last few months, due partly to having built up adequate stocks of certain grades and partly to the very great growth in domestic production, we have actually been able to stop all movement of low-grade chrome into the country.

##### DOMESTIC ORES

As in manganese, the problem had two principal phases: First, to stimulate as much production as practicable from the many small and submarginal deposits in California and Oregon; second, to build concentrating plants to use the very low-grade but large deposits in Montana and on the Oregon coast. Production from the small mines has been encouraged principally by the payment of a high price and by accepting small truckloads at local buying depots. As in manganese, the Government is absorbing all freight and handling charges.

To develop the large mines, the Government first undertook to develop the low-grade deposits in Montana. After some negotiation with the owners, we leased the largest properties and, through a management agent, have been developing the mines and have built large concentrating plants. In recent months, this work has not proceeded as rapidly as we would like for the reason that equipment, materials and manpower are very much more urgently needed for other programs which are not in as comfortable a position as chromite. However, we are in the position where, if necessary, we could produce one-half million tons of chromite concentrates per year from our Montana plants which would make this, so far as tonnage is concerned, the largest chromite-producing

district in the world by far. What we will actually produce will depend upon our needs and probably will be considerably less than the maximum.

In Oregon, we are now developing production from low-grade beach sands containing in the neighborhood of 5 to 10 percent chromite. The Government is building a custom separating plant which will treat crude concentrates produced by private operators in the area. This production could, if necessary, be expanded but, as in the case of the Montana operations, it probably will not be expanded unless the chrome ore situation greatly depreciates.

Because our program was designed to provide insurance against the very worst that could happen, we now need have no worry over being able to supply ourselves with all of the crude chromite we will need for many years. There is, however, a difficult side to the picture. We will have to import all of our refractory chromite requirements from Cuba, and the life of those deposits beyond the next few years is not proved, although we are not too pessimistic. Second, it must be remembered that the vast bulk of American production is of low-grade concentrates not suitable for use in steel-making in their present form. We have considered this type of material as insurance against a dire emergency rather than as a complete replacement of the higher grades of ore which we normally import for steel-making. There are, however, several processes known and tested for the beneficiation of these low-grade concentrates into a desirable product. We are prepared at any time to recommend the construction of a beneficiation plant, but it is not an easy question to decide just when such a start should be made. If we had started early, we would have unwarrantedly interfered with other more urgent construction programs and would have created increased requirements for such vital materials as sulfuric acid, power and fuel, all of which are needed to beneficiate the chromite. If we start too late, we may be embarrassed by a shortage of high-grade ore which would temporarily result in some reduction in chromium-smelting capacity. The present metallurgical chrome supply, supplemented by even a greatly-reduced rate of imports of high-grade ore, can be made to carry us well through 1944 and into 1945.

**STATEMENT OF MILES K. SMITH, ASSISTANT CHIEF, STEEL DIVISION, IN CHARGE OF FERRO-ALLOYS DIVISION, WAR PRODUCTION BOARD**

Senator BUCK. Mr. Smith, will you give your name to the reporter?

Mr. SMITH. Miles K. Smith, Assistant Director, Steel Division, War Production Board.

Senator BUCK. Before you start, I would like to say that we will carry on this session until 12:30, and adjourn until 2 o'clock if we do not finish before 12:30.

Mr. SMITH. Approximately a year ago it was my privilege to come to Washington as Chief of the Tungsten Branch of the War Production Board to assist their efforts in the production and distribution of several metals, including molybdenum.

At that time the rate of consumption of molybdenum was increasing. Due to expanded steel production, the indications were that at some time in the future requirements of this commodity would exceed the rate of supply and consume such stocks as were then available. Under these conditions, it became imperative to develop new properties wherever possible and to assist all producers then engaged in the production of molybdenum.

**RESULTS OF EFFORTS TO STIMULATE EXISTING PRODUCTION OF MOLYBDENUM**

Domestic production of molybdenum in 1941 had been increased 17 percent over the pre-war level of 1940. As a result of the program developed in 1942, production was stepped up 42 percent over 1941.

A further increase from the peak level of 1942 is anticipated in 1943. However, the amount of this increase depends upon many factors beyond the control of the War Production Board. These are labor, technically skilled men, and delays in receiving maintenance and repair for emergency requirements due to other critical war needs.

#### EFFORTS ON THE PART OF THE WAR PRODUCTION BOARD TO STIMULATE NEW PRODUCTION

A careful survey was made to determine the known deposits of molybdenum, and information was obtained by a review of the information available from United States Bureau of Mines, the United States Geological Survey, and also personal interviews with men in these Departments most familiar with this subject. In addition to information available from Government sources, through the cooperation of private industry its files were made available to the War Production Board. War Production Board engineers were sent to the offices of the Climax Molybdenum Co., Molybdenum Corporation of America, Anaconda Copper Mining Co., and others to review and discuss all information on the subject.

All of these efforts proved successful in developing a program which was undertaken through Government agencies to examine and sample all properties that showed merit.

This search for deposits of molybdenum that could be worked with or without profit has continued unceasingly, and several properties not included in the original list have been called to our attention and have been examined, or are being examined at the present time. A summary of the efforts to obtain molybdenum may be listed as follows:

A total of 64 potential producing properties of molybdenum have already been investigated or are now under investigation, located in 30 counties of 11 States, including Alaska. Of this total, 48 properties have been examined. Sixteen properties are held in abeyance until weather conditions permit careful sampling and investigation.

Senator BUCK. Is it not a fair question to ask if the War Production Board has not been slow in getting new production?

Mr. SMITH. New production in the operations on molybdenum?

Senator BUCK. Yes.

Mr. SMITH. There are not many properties which show much promise of molybdenum production in the United States. As far as W. P. B. being slow in developing, I took over the job about a year ago, and that was one of my first jobs, to get the information relating to the molybdenum correlated, which I started in June of 1942. Molybdenum at that time was plentiful. We had a stockpile, and it was only in anticipation of potential shortages that we undertook this survey.

Senator BUCK. Has the stockpile been exhausted?

Mr. SMITH. No, sir; we have a stockpile.

The 11 States in which the 48 properties have been investigated include Washington, Maine, Arizona, Colorado, Idaho, New Mexico, California, Nevada, North Carolina, Montana, and Alaska. Of the properties examined, 11 have been approved in three States—1 in Washington, 6 in Arizona, 4 in Colorado. The authorized expenditure of Government money totals approximately one and a quarter million dollars.

These projects, which are being actively followed by the War Production Board, when completed, will produce an addition of approximately 5 percent over that available in 1942. The increase of production from properties other than those that have actually been made into projects cannot be evaluated at this time.

#### COMPARISON OF IMPORTS WITH DOMESTIC PRODUCTION

The percentage of imports of molybdenum as compared to domestic production is relatively small. The bulk of the production outside of the United States is a byproduct of copper mining. Imports of this material during 1942 amounted to approximately 5 percent of the total quantity available to the United States.

Mr. MURDOCK. May I ask a questions there?

Senator SCRUGHAM. Yes, sir.

Mr. MURDOCK. Do you know whether you have developed or explored the project near Prescott, Ariz.?

Mr. SMITH. I have a list of the properties. I will ask Mr. Hatch to tell you.

Mr. HATCH. The Copper Basin is at the present time under investigation. The indications from preliminary reports are favorable, but the work has not been completed.

Mr. SMITH. That completes my statement.

Senator BUCK. Any questions you would like to ask the witness?

#### QUESTIONS ON PRODUCTION OF TUNGSTEN

Mr. WHITE. What is the production of tungsten in the State of Idaho at this time?

Mr. SMITH. I do not believe I am prepared to discuss tungsten. I am sorry.

Mr. WHITE. There has been a phenomenal increase in the State of Idaho.

Mr. SMITH. There has?

Mr. HATCH. I can give you a very rough figure. I think approximately 30 percent of our total domestic production comes from Idaho.

Mr. WHITE. That has been stepped up definitely.

Mr. HATCH. Since April of last year it has been almost exactly doubled, and we are anticipating an increase of an equivalent amount next year.

Mr. WHITE. That represents new mines?

Mr. HATCH. Idaho production is almost entirely from new sources which have been developed within the past 2 years.

Mr. WHITE. Mostly in public lands or forests?

Mr. HATCH. I am sorry, I cannot break that down.

Senator MURRAY. There are extensive deposits of low-grade manganese, are there not?

Mr. HATCH. I am sorry. Mr. Leith just discussed that.

Senator MURRAY. I mean tungsten.

Mr. HATCH. Yes; there are.

Senator MURRAY. So if it became necessary, there would be no difficulty in developing a very considerable amount of tungsten?

Mr. HATCH. No; there is a very active program on the part of the War Production Board to stimulate and develop many marginal properties.

I believe you are familiar with the price change made recently, about November 16, 1942, which has, we think, stimulated production, and we anticipate increased production during the summer of 1943.

Senator MURRAY. You do not anticipate any difficulty with the supply of tungsten?

Mr. HATCH. No; I do not think so. We have a very sizable stockpile, which has been increased over 1942, and I am sure, from the program indicated to us, that we will have adequate supplies.

Mr. WHITE. Before the war we drew a large part of our tungsten from China.

Mr. HATCH. That is right.

Mr. WHITE. It comes to about \$2 a pound.

Mr. SMITH. I do not know on the pound basis. Speaking of the unit basis, it is \$21, which is approximately 16-pound weight.

Mr. HATCH. Approximately \$21. A unit of tungsten acid contains 79.3 percent tungsten metal. That price of \$21 a unit compares with \$30, which is top domestic.

Mr. WHITE. \$2 a pound is not far off.

Mr. HATCH. Well, it is 16 pounds at \$21; it would be approximately \$1.40 for foreign tungsten and near \$2 a pound for domestic.

Mr. WHITE. Where do you buy that, that foreign tungsten?

Mr. HATCH. There is no uniformity in that price. The Metals Reserve Company and the Bureau of Economic Warfare have the jurisdiction over the foreign purchases. I am not sure there is any uniformity.

Mr. WHITE. You are quoting the committee the price on foreign tungsten. Is that f. o. b. the foreign country or delivered?

Mr. HATCH. I think that price in China is f. o. b. China, I would not want to be quoted, because I cannot say.

Mr. WHITE. We have not obtained any from China since Pearl Harbor?

Mr. HATCH. Yes; we have gotten a considerable amount.

Senator BUCK. Mr. Smith, are there any monopolies in ferro-alloys metals?

Mr. SMITH. Not to my knowledge.

Senator BUCK. Is the Climax Co. up to the full rate of production?

Mr. SMITH. Yes; it is.

Senator BUCK. Have you completed your statement?

Mr. SMITH. Yes, sir.

Senator BUCK. Thank you very much.

Mr. Hatch will be the next witness.

#### STATEMENT OF E. FRANKLIN HATCH, ASSISTANT CHIEF, FERRO-ALLOYS BRANCH, WAR PRODUCTION BOARD

Senator BUCK. Please give your name to the reporter.

Mr. HATCH. My name is E. F. Hatch, Assistant Chief, Ferro-Alloys Branch, War Production Board.

This statement is made for Mr. Smith.

A year ago it was my privilege to come to Washington as Chief of the Tungsten Branch of the War Production Board, to assist in their efforts in the production and distribution of several metals, including vanadium. At that time, the available supply of vanadium was inadequate to fill the requirements for the war program. It was



obvious that existing production should be expedited, and that investigations for additional new projects should be started.

In this connection, four programs were started within a short period of time, and a fifth was introduced at a later date. I propose to discuss each of them separately. Before proceeding with this discussion, however, it is gratifying to record that the shortage of vanadium has now been corrected and that stockpiles are being accumulated.

#### LEAD VANADATE PROGRAM IN SOUTHWESTERN UNITED STATES

A review of the correspondence revealed that on February 7, 1942, the War Production Board requested the Metals Reserve Company to enter into contract with a representative agency to determine the possibilities of a program for the recovery of vanadium from lead vanadate ores found in Southwestern United States. This program was based on the representation that large tonnages of ores containing 1 percent  $V_2O_5$  were available in this area.

The agency immediately set upon the task of examining and sampling many deposits of lead vanadates. As a result of over 250 examinations of different mines the average assay indicated the ore to be nearer 0.1 percent  $V_2O_5$  instead of the 1 percent. These determinations were obtained by a systematic sampling of workable widths of ores.

In order to eliminate any appreciable error in sampling or analysis, the War Production Board asked the United States Bureau of Mines to resample and check the assays on a number of these properties. The Bureau of Mines proceeded to carry out the instructions of the War Production Board and reported a series of analyses closely checking the determinations of the Metals Reserve Agency.

As a result of these findings, it became evident that no large program could be initiated in this area. However, in order to encourage the production of ore in the area, the Metals Reserve Company immediately set up a buying station for the purchase of such ores as could be mined, on the basis of prices currently being paid in other western areas similarly engaged. At the present time this stockpile amounts to about 2,500 tons of lead vanadate ores.

#### METALLURGICAL EXTRACTION OF VANADIUM FOUND IN IRON ORES

Many articles have been written on the occurrence of small percentages of vanadium in certain iron ores. These articles are supplemented by extensive studies of the United States Geological Survey. Successful extraction of vanadium from Chilean iron ore has been made in this country for some time. As a result of these efforts a substantial quantity of vanadium was made available to the war program. Owing to shipping difficulties, movements of iron ore from Chile has been discontinued.

The high titanium content of most domestic iron ores containing recoverable quantities of vanadium has been a complicating factor in the recovery of vanadium from this source. This is true of the Adirondack magnetite concentrates concerning which so much publicity has been given.

This problem has been under extensive study and the subject of considerable research and test work. Because of its complex nature, it was early submitted to the National Academy of Sciences for investigation and recommendation. Their report has only just been received. It is hoped that this source of vanadium may in some way be utilized to assist the war effort.

#### RECOVERY OF VANADIUM FROM VANADIUM-BEARING OILS

Simultaneously with the two previously described programs, the War Production Board initiated a program looking toward increased recovery of vanadium from petroleum sources. Analyses of flue dust accumulating in the boilers of certain oil-burning ships indicated appreciable quantities of vanadium. The facilities for the recovery of vanadium from this source were available in this country, and every effort was made to accumulate the flue ash resulting from the cleaning of these boilers where vanadium-bearing oil had been used as a source fuel.

A fund was set up by War Production Board through the Metals Reserve Company to investigate and assist in facilitating the accumulation and delivery of this material, as well as developing new sources of this hitherto unused material. As a result of these efforts, vanadium from fuel oil is being recovered from ash as far north as Halifax and as far south as Aruba, South America. A careful survey by the War Production Board revealed that facilities were available for accumulating the vanadium-bearing flue ash in certain stationary installations on the east coast. It might be pointed out that additional quantities of vanadium could be recovered from that source if added shipping facilities were available to move quantities of vanadium-bearing oils to the east coast of the United States for use in these facilities.

#### RECOVERY OF VANADIUM FROM EASTERN UTAH AND WESTERN COLORADO

The most productive areas in the United States at this time are the sandstone areas in eastern Utah, western Colorado, and northeastern Arizona. These deposits have been worked for many years.

To stimulate added production from this area, an active development program was initiated by the War Production Board through Metals Reserve Company. The War Production Board recommended the building of two new plants and rebuilt a third that was destroyed by fire. These plants are now in operation at the present time.

In order to furnish the supply of ore necessary for the new plants, an active program was initiated to stimulate production from marginal ores by increased prices. A sliding scale was set up whereby the Metals Reserve Company agency could purchase for the account of Metals Reserve Company quantities of vanadium ore and/or absorb hauling charges as conditions warranted. This program also included further assistance to the marginal procedure in the form of advances against production, engineering advice, assistance in procurement of equipment, and assays.

With this arrangement, we have been able to obtain increased production of substantial quantities of vanadium-bearing ores. Stockpiles in the area have increased as a result of their activities.

In order to assure adequate reserves for future production, the United States Geological Survey has recently completed a detailed study of the ore reserves in this area, and the War Production Board has asked the United States Geological Survey to cooperate in a drilling program.

Also, in order to facilitate the movement of ore from the mines to the recovery plants, it was necessary to improve and construct roads. This program has resulted in the building of 644 miles of access roads in the States of Arizona, New Mexico, Colorado, and Utah at a cost of approximately one and one-quarter million dollars.

#### RECOVERY OF VANADIUM FROM WYOMING AND IDAHO SHALES

After a careful study by the United States Geological Survey, certain occurrences of vanadium were found in the Wyoming district which showed promise of large deposits of vanadium-bearing ore. These reports were carefully gone over by the War Production Board and Metals Reserve Company, and the latter agency was requested to undertake a program to determine the possibilities of producing vanadium from these deposits. An active program of exploration and metallurgical research work in this connection has been under way for some months.

#### TOTAL PROGRAM HAS RESULTED IN 85 PERCENT PRODUCTION INCREASE IN 1942 OVER 1941

The cumulative efforts of these programs have resulted in about 85 percent increase in production of 1942 over 1941.

The present estimates are for further increase in 1943 over 1942 of about 50 percent.

Senator BUCK. You mentioned that you have stockpiles now.

Mr. HATCH. Yes, sir.

Senator BUCK. Does it follow that we are not importing any?

#### SUBSTANTIAL AMOUNT STILL IMPORTED

Mr. HATCH. We are importing a substantial amount. In 1942 approximately 42 percent of our total new supply of vanadium came from foreign sources.

Senator BUCK. If you did not import it, your stockpile would become depleted.

Mr. HATCH. I do not think it would be possible except at exorbitant prices to satisfy the demand from domestic sources, but there are indications that it may be done in the future.

Senator MURRAY. Have you gotten much production from low-grade vanadium in this country?

Mr. HATCH. That is a difficult question to answer, sir. Low-grade vanadium in practical quantities is almost nonexistent. The grade of mineable ore has been going down.

## ENCOURAGEMENT OF SMALLER PRODUCERS OF VANADIUM

Senator MURRAY. How about the smaller producers of vanadium?

Mr. HATCH. The smaller producers who produce less than 1,000 tons of ore per year account for approximately 30 percent of the total domestic production last year, and we anticipate that will be about 50 percent in 1943.

Senator MURRAY. You are encouraging the production among the smaller producers.

Mr. HATCH. Very definitely. The price program and various types of aid referred to in the statement have been calculated to aid the smaller producer.

About 15 years ago about 90 percent came from one mine in Peru. Unfortunately there was practically no vanadium in this country, and in 1942 we produced 42 percent. Now there are around 250 vanadium mines in this country.

Senator SCRUGHAM. Mr. Hatch, several years ago it was stated that vanadium was extracted from asphalt.

Mr. HATCH. Not entirely, but that has been the basis of this flue-dust program which was initiated by the War Production Board in the early part of 1942, and we are having production from that source. It is not a large source.

Senator SCRUGHAM. There is some vanadium at Good Springs, Nev.

Mr. HATCH. Some of that is now being mined and stock-piled.

Senator BUCK. Have you completed your testimony?

Mr. HATCH. Yes, sir.

Senator BUCK. We do not have anything on tungsten.

Mr. HATCH. I did not understand tungsten was before you.

Mr. WHITE. You mentioned ore of 1 percent. One-tenth of 1 percent is low-grade ore.

Mr. HATCH. That is so low-grade that it is pretty difficult to use it.

Mr. WHITE. You mentioned that there has been production in Colorado and Utah.

Mr. HATCH. Practically all domestic production is from Colorado and Utah, and a small amount from New Mexico.

Mr. WHITE. Under this program two new plants are going in.

Mr. HATCH. Two new vanadium mills were completed in 1942, and the third mill, a private plant which was destroyed by fire in June 1942, was immediately rebuilt and put in operation recently.

Mr. WHITE. I understood from your report that there had been considerable production prior to this. In other words there had been production quite sometime in this area. How did they treat their ores prior to this time?

Mr. HATCH. Prior to 1937 there was very little production of vanadium in the United States.

Mr. WHITE. And while there was no—

Mr. HATCH (interposing). The vanadium extraction was really a byproduct of uranium and radium recovery.

Mr. WHITE. Vanadium is a byproduct rather than a product.

Mr. HATCH. It is definitely a product now.

Mr. WHITE. Do you mine uranium ore?

Mr. HATCH. A very small amount of uranium.

Senator SCRUGHAM. The cobalt supply comes from Canada, largely. Is that correct?

Mr. HATCH. Part of the cobalt comes from Canada and part from Africa, and an increasing quantity from the United States.

Senator SCRUGHAM. There is some cobalt at Good Springs.

Mr. HATCH. Yes; as recently as 3 months ago we had a survey made by the Bureau of Mines.

Senator SCRUGHAM. Thank you very much. The next hearing will be tomorrow at 10:30, and the Hon. Harold L. Ickes, Secretary of the Interior, will be the first witness, followed by Mr. Howard L. Young, Director, Mineral Resources, Coordinating Division, War Production Board, followed by Mr. Donald M. Nelson, Chairman, War Production Board, at 2:30 p. m.

After the hearing adjourns today, if representatives of the War Production Board are here, I would like to see them a moment.

(Whereupon at 12:30 p. m., the subcommittee adjourned until 10:30 a. m., tomorrow, Thursday, April 1, 1943.)

# MINING AND MINERALS INDUSTRY

THURSDAY, APRIL 1, 1943

UNITED STATES SENATE,  
SUBCOMMITTEE OF MINING AND MINERALS INDUSTRY  
OF THE SPECIAL COMMITTEE TO STUDY  
PROBLEMS OF AMERICAN SMALL BUSINESS,  
*Washington, D. C.*

The subcommittee met in room 357 of the Senate Office Building at 10:30 a. m., Senator James G. Scrugham, presiding.

Present: Senators Murray (chairman), Ellender, Stewart, Scrugham (chairman of the subcommittee, presiding), and Buck.

Also present: Representative Murdock.

Senator SCRUGHAM. The hearing will come to order, please.

Mr. Secretary, it is a pleasure to have you with us.

Secretary ICKES. Thank you.

Senator SCRUGHAM. Have you any formal statement to make beforehand? Later I have several questions I would like to ask you, and Senator Murray also has questions.

Secretary ICKES. All right, thank you.

Senator SCRUGHAM. Proceed with your statement.

## STATEMENT OF HON. HAROLD L. ICKES, SECRETARY OF THE INTERIOR

Secretary ICKES. When I appeared before the full Committee on the Problems of Small Business Enterprises last January, I called attention to the critical need of the United States for many metals and minerals for war purposes. At the same time, I pointed out that we must do all that can be done to assist our small operators to produce, not only that they may help to bring our materials reservoir to the proper levels, but also to make certain that we will maintain a free competitive economy, in which everyone, large and small, may have adequate opportunity in the post-war America.

### ANOMALY BETWEEN NEED FOR RAW MATERIALS AND DIFFICULTIES OF SMALL MINERS IN ENTERING WAR PRODUCTION

We still have here, 15 months after Pearl Harbor, an anomalous situation, in which, on the one hand, there is a serious need for raw materials to feed our war plants, and, on the other hand, there are large numbers of small entrepreneurs—owners and operators of small mining and milling properties—begging for an opportunity to produce for war. In the early stages of the defense and the war programs it

appeared reasonable that the large enterprises, which had proven their capacity and ability to produce, should have been called on first. They had the materials, the resources, the know-how, and they were given large contracts to enable them to get under way with a minimum of delay. Today, however, and as long as our need continues, which will be as long as we are fighting this bitter and hard war, it is paramount that we call into play every facility and enterprise that is available.

In the early stages of our preparedness, the Government was willing to assume financial risks in order to insure an increased output of raw materials and fighting weapons. We will continue to assume such risks, if we are to succeed in our task as quickly as possible. But we must take a chance on the little fellow also. In fact, we will be committing a folly if we fail to resort to and accept each and every contribution that will lead to an aggregation of the materials we need. We are furthermore under a moral obligation to sustain small enterprise if we wish to rebuild and retain the America that we have known, with its concepts of individual freedom and opportunity.

#### PROBLEMS OF SMALL OPERATORS IN METALS AND MINERALS FIELD

The problems of the small business enterprise in the field of metals and minerals are largely inherited from pre-war days. The small operators have had to depend to a great extent on large-scale industrial enterprises for their markets, and have had to compete with large operators with relatively low-unit costs in the sale of their products. They were handicapped by a shortage of capital in extending their development and exploitation work, and have encountered difficulties in obtaining loans from commercial bankers. They have had to face not only domestic competition but foreign competition. They have been too small to enjoy all of the advantages of mechanization and technical processes available to the large enterprises, and could engage profitably in their business only as long as they worked rich ores.

Now that the demand for their products is such that ostensibly a ready market prevails, they are further handicapped by manpower shortages, difficulties in obtaining equipment, and by the absence of the facilities and means that would enable them to sell and ship the small quantities of ore that they are capable of producing. Without the assurance that mill products would be purchased for utilization in war production, small concentrating plants and custom mills capable of handling the output of a number of mining operations cannot be built, and in other instances old plants are left standing idle.

One problem, at least, the small businessman shares in common with the large industrial enterprise. Both are haunted by shades of the glorious past, where deposits of minerals were extensive, rich, and easy to get at. Difficulties are now encountered in realizing that the bonanza days are over, that the cream has literally been skimmed off the earth's crust in America, and that pay dirt can be reached only by hard work, skillful enterprise, and technologic skill.

For a while all this didn't matter. If we could not dig up the rich bauxite, the large flake graphite, the high-grade tungsten ore, the good cinnabar, and many other high-grade minerals here at home, why, we simply purchased them abroad where plentiful supplies and cheap

labor gave us at low cost all and even more than we needed for domestic consumption.

We knew we had low-grade and complex ores, but in general we did not know exactly where or exactly how much, and we did not much care.

#### EXPLORATORY PROGRAM OF BUREAU OF MINES AND GEOLOGICAL SURVEY

Conservationists in America for a long time have foreseen this situation and have concerned themselves with the problem. The Department of the Interior has long advocated a program of intelligent and wise development and use of our mineral resources, including the charting and delineation of our known reserves, as well as attempting to discover new deposits of ores. The Bureau of Mines and the Geological Survey have been studying our mineral resources with a view to the wise development and effective utilization of our domestic mineral deposits. The Bureau of Mines has been assiduously studying ways and means of treating our low-grade and complex ores to recover the useful and necessary metals and minerals from them.

The Congress was farsighted when it passed the Strategic Materials Act in August 1939—a year and a half before Pearl Harbor—that enabled the Bureau of Mines and the Geological Survey to embark on the largest exploration program in recent history. Under the same act the Bureau of Mines was authorized to intensify and extend its investigative work and laboratory and pilot-plant research to test and find new ways of treating our minerals.

The work carried out under this act and other legislation passed by the Congress has resulted in the addition of more than 90,000,000 tons of tungsten, manganese, mercury, antimony, chromite, iron, western coal, bauxite, and other ores to our known reserves. Research by the Department has substantiated laboratory processes or yielded new methods for treating diversified ores of manganese, cobalt, vanadium, low-grade bauxite, alunite, and clays, coking coals, chromium, and other minerals.

In my testimony before the full committee, I mentioned that much of this metallurgical work in fact constituted a technical service to small companies and individuals not in a position to maintain the necessary technical facilities and personnel that the large corporations obtain from the extensive research laboratories and institutions which they own or can employ. The Bureau of Mines in the past 5 years has made extensive metallurgical investigations of samples from more than 400 deposits and has advised the owners of the best and most economical methods for producing commercial metals and mineral products. Partly as a result of these efforts, I stated, small operators now run manganese properties in Arizona, California, Colorado, Montana, Nevada, New Mexico, and Utah; tungsten mines in Colorado, California, Idaho, Nevada, Utah, and Wyoming; antimony mines in Alaska and Idaho; chromium mines in Alaska, California, Idaho, Montana, and Oregon; mercury mines in California, Idaho, Nevada, and Oregon; zinc mines in Missouri, Nevada, and Idaho; lead mines in Nevada and Idaho; and alumina and potash in Utah.

While the Bureau of Mines and the Geological Survey undertake projects, wherever they may be, if they seem to show promise that the



results will make a definite contribution to the war metals and minerals program, the widespread exploration work and intensive laboratory and pilot plant research are by no means helter-skelter, purposeless undertakings. Whenever possible, all these activities, as they develop, are integrated in patterns, in over-all programs—are drawn into a single plan which can be evaluated as such, or be examined for the particular merits of each of its constituent parts. Thus, for example, the Department has already proposed a broad, over-all plan of obtaining from many individual properties and treatment plants a flow of manganese sufficient to meet the needs for an annual production of 87,000,000 tons of steel, and thus relieve the United States, in the event of a long war, from dependency upon imports of this strategic metal. Another illustration is the alumina program, which is designed, by a full-scale utilization of domestic low-grade bauxite, clays, halloysites, and alunites, to free the country from the need for high-grade bauxites from abroad.

I must point out that none of the plans is static. Each is subject to change and is constantly being modified and altered in the light of changing conditions.

#### "EXPANSIONIST" POLICY OF DEPARTMENT OF THE INTERIOR

The Department of the Interior has been criticized at times for its advocacy of long-range plans designed to meet the needs of a long war. But the Department prefers to err on the side of "more than enough" than on "too little, too late." We are clearly an expansionist agency with respect to our attitude for meeting the material needs for this war. We want to bring in all sources and to utilize all endeavors to win, and to this end we must and will have the small companies and individuals.

We are nevertheless also concerned with the role of the small enterprise in the post-war world. By means of that great reservoir of electric power at Bonneville, we have helped to establish new industries in the Pacific Northwest—aluminum, magnesium, iron and steel, chemicals, ferroalloys, and others. We are anxious that these industries be maintained after the war, for we believe firmly in the post-war probabilities of a continuing, sound industrial development of this country. It is essential, for the sake of our whole national economy, that fabricating plants be located and sustained close to raw materials, and in proximity to natural markets.

#### STEPS SUGGESTED TO HELP SMALL MINES

Because the small miner symbolizes the small entrepreneur everywhere, the Department has tried diligently to be as helpful as possible. The Department suggests various steps, in addition to those now being taken, that should be adopted to help the small mines.

First, in the national interest, we must continue, and even intensify, our exploratory work in every area where the prospect of immediately usable minerals is favorable, so that we can know what ore, what grades of ore, and how much of each grade lies in the ground. The small owner or operator, incapable financially of undertaking geophysical prospecting, and surface or subsurface exploration on his own, would stand to benefit by any trenching, shaft sinking, ore

sampling or other work undertaken on his property, as the results would be, as they are now, made known to him. Where the small owner or operator desires to undertake subsurface exploration on his own for the purpose of getting metals needed by this Nation at war, it seems reasonable that financial assistance should be made available to him. It is a suggestion which the committee may care to consider.

Of course, the small owner and operator should be enabled to learn as promptly as possible of any existing methods or processes, or methods and processes which have been developed for treating his ore so that it may have a better opportunity for existing markets. Toward that end continued and intensified laboratory and pilot plant investigation of ore dressing and metallurgical processes must be carried on by the Bureau. Adequate appropriations and some assurance that work may be undertaken on a continuing basis is all that would be necessary.

Second, the small owner or operator must be assured of an outlet for his product. It has been the unfortunate experience of small companies and individuals recently to undertake operations in anticipation of markets, and when the product was ready, the market was withdrawn. A small producer, for example, invested considerable capital in a venture in New Mexico, and was helped by the exploratory work of the Bureau of Mines. The plan was to sell the product to the local stockpile of the Metals Reserve Company. By the time he was ready to produce, the manganese situation had "eased," and the stockpile was discontinued. It is possible that this man's manganese may be critically needed before the war is over; but it is unlikely that this man will mine his ore deposit because of his unfortunate experience with short-range procurement policies. Such incidents have happened many times. It is my opinion that stockpiling should be put on a long-range consistent basis, not subject to sudden reduction reflecting short-range easements of critical situations.

Next, encouragement and assistance should be given toward the establishment of mills in districts where known reserves would seem to warrant them. In some districts, of course, there are small, irregular deposits that cannot be blocked out in advance of mining. Left in the ground, there may never be sufficient reserves indicated to warrant building a mill. In such localities, small lots of ore should be bought, paid for promptly, and stockpiled. The reserve could thus be proved by actual mining. When the accumulation becomes of sufficient size, a mill could then be built to treat the ore.

Finally, it seems logical that the small and marginal producer can contribute to the raw materials reservoir, in many cases, only if bonus prices are guaranteed for a longer period of time than at present; and if additional products are brought under the bonus-price plan as warranted.

The Department still feels, as it has felt for a long time, that the greatest help to the small businessman in the field of metals and minerals, as well as the greatest help to the whole war metals program, would be a closer coordination of policy and actions in this field. Some steps in this direction have been taken, but more must be done—and soon—if this Nation is to make the fullest and quickest use of its resources, and at the same time preserve its economic structure.

Senator SCRUGHAM. Thank you very much, Mr. Secretary.

I take it you agree with the policy of stockpiling on strategic materials even after the emergency has ended.

Secretary **ICKES**. Yes, until we can foresee the end, which we cannot now.

Senator **SCRUGHAM**. And the policy of promptly shutting down of operations, particularly small operations, in strategic materials and minerals should not be carried out as in the past.

Secretary **ICKES**. I agree.

**PRODUCTION OF STRATEGIC MINERALS HAS IMPROVED, BUT MUCH STILL  
REMAINS TO BE DONE**

Senator **SCRUGHAM**. This committee would establish a policy whereby these minerals would be accumulated in at least adequate supplies in the emergency.

Mr. Secretary, you have spoken of the exploratory work of the Bureau of Mines and the Geological Survey, and of the Department's technologic and research work in the field of metals and minerals. Has this work resulted in any actual production of strategic or other minerals, and has it had an actual contribution to the war effort?

Secretary **ICKES**. It has in many instances, Mr. Chairman, but not enough to give us encouragement. For instance, a manganese mill for the Butte, Mont., area has recently been approved; quartz is being mined in Arkansas; copper in Vermont; zinc in Colorado; and tungsten in Nevada; ventures due at least in part to the Department's program.

Senator **SCRUGHAM**. You admit that there are still many small mines which have not been able to start production?

Secretary **ICKES**. That is correct.

Senator **SCRUGHAM**. Production of some substantial quantity could be obtained if given the proper encouragement?

Secretary **ICKES**. Yes; that is correct.

Senator **SCRUGHAM**. Mr. Secretary, do you feel there is any confusion in the passing around from agency to agency as many as five or six times in some cases? This seems particularly true of the small miner who is struggling to get along. Have you had such observations brought to your attention?

Secretary **ICKES**. Yes; but I do not want to criticize any other agency of the Government. The organizations concerned in the war minerals program have had a terrific task. They have been under constant and intense pressure to get the job going. Considering the program as a whole, I know that a marvelous lot of work has been accomplished. But I am by no means satisfied; I do not believe anyone should be satisfied. I am sure the agencies concerned are not fully satisfied. I am still firm in my belief that we must go still further and do still better. We must seize every opportunity and every possibility for the benefit of winning the war.

**MINERAL RESOURCES OPERATING COMMITTEE "A STEP IN THE RIGHT  
DIRECTION"**

Senator **SCRUGHAM**. Mr. Secretary, the Mineral Resources Operating Committee was created recently under the leadership of a very able mining engineer in the War Production Board. Do you think

this may help the long-range planning of mineral production, and more especially the small miner?

Secretary ICKES. I certainly think it has the opportunity. I hope it will. The establishment of this committee is a step in the right direction. The Department of the Interior suggested and strongly advocated the formation of such a committee. It should enable the Government to take advantage of its own broad experience and knowledge in the minerals field, for the Government should by all means not neglect its own resources. We hope to give it the benefit of the technologic and economic information possessed and being developed in our Bureau of Mines.

The Department is represented on this committee, and we want to cooperate fully. If it is unhampered and given sufficient scope, the committee should be capable of aiding greatly the small miner as well as the large operator in the production of war metals.

#### PROBLEM OF RAW MATERIAL FOR ALUMINUM PRODUCTION

Senator SCRUGHAM. Mr. Secretary, I believe you have taken a special interest in the problem of raw material for aluminum production.

Secretary ICKES. I have, Senator. I have been interested in the whole problem for a long time. Even before the war, as you may recall, I came to the Capitol and expressed my dissatisfaction with the aluminum program that was advocated then. I objected to the program as being short-sighted and entirely inadequate. I was pleased, of course, when it was revised and later revised again. However, I believe our present program still does not go far enough in taking into account all possible contingencies. I believe we must look even farther ahead than we are looking now. We must envisage the time when we will no longer be able to rely on high-grade domestic bauxites, of which we have limited reserves.

I also have urged that the production of the intermediate products, or alumina, be carried on in the West, near the aluminum plants. It is important that such projects be expedited because aluminum pot lines of the Northwest must be enabled to produce at capacity, and not be limited because of the lack of alumina. I feel, however, that gradually we will have to resort to lower and lower grades of bauxite and eventually may have to depend upon our clays.

Senator SCRUGHAM. Mr. Secretary, has the Department of the Interior any aluminum program which it has presented to the War Production Board?

Secretary ICKES. The Department offered a program to the War Production Board last August; but when representatives of the Department called to discuss it with Mr. William L. Batt, they found that the program of converting the Bayer plants of the country, so that they may use a lower grade bauxite than they are using now, had already been approved.

Since the Department of the Interior program, as presented, was inconsistent with the approved conversion plan, it was naturally withdrawn.

Senator SCRUGHAM. You mean the Department plan was rejected?

Secretary ICKES. No, sir; it was withdrawn. Since then the Department has concerned itself with the development of plans supplementary to the Bayer conversion program of the War Production

Board, which will make this country self-sustaining with regard to aluminum. The field, laboratory, and pilot plant work to support the Department's revised plans have, however, been completed, and fully documented recommendations will be ready in about 3 weeks.

Senator SCRUGHAM. Does that cover treatment of clay?

Secretary ICKES. Yes; they will.

Senator ELLENDER. Mr. Chairman, may I ask the Secretary a question?

Senator SCRUGHAM. Yes, sir.

Senator ELLENDER. What interference, if any, do you get in this program from Alcoa—that is, Aluminum Co. of America? Was there any interference of any kind at any time?

Secretary ICKES. I thought there was. I thought at first you were being facetious.

Senator ELLENDER. No; I would like to have you tell us for the record what interference, if any, was in evidence.

Secretary ICKES. I could not say today that there is actual interference, but there has been. There was development of the policy of Alcoa, and that was dominated from the beginning to monopolize that field. I think it is probably as complete a monopoly as exists anywhere in the world today.

Senator ELLENDER. Would you have any figures—

Secretary ICKES (interposing). And when you speak of monopoly, necessarily that implies an interference with plans we contemplated for the making of aluminum by any corporation other than Alcoa.

Senator ELLENDER. If your plan had been followed from its inception, how much greater do you think the production of aluminum would have been than it now is, Mr. Secretary?

Secretary ICKES. From the very beginning we dissented strongly from the scheme of Alcoa. I think its first scheme was that it could produce on its then program enough aluminum for war purposes, that is, before we were in the war, and still have a quantity left for domestic supply.

Well, of course, the events have proven how utterly absurd that promise was. It was a reckless suggestion. It was trifling with the national interests. It could not come anywhere near this. It has maintained that position, but public opinion drove it from that position, following which it enlarged its program over and over again.

There would have been a larger supply of aluminum at an earlier date if our advice had been taken.

Senator ELLENDER. Now, Mr. Secretary, have you any figures to give us to show the difference, if any, between the cost to the Government of aluminum produced here and that which is imported?

Secretary ICKES. That which is imported?

Senator ELLENDER. Yes.

Secretary ICKES. You mean from Canada?

Senator ELLENDER. Yes; from foreign countries.

Secretary ICKES. I have never seen those contracts. All the information I have on it is from the prices I have had from the newspapers.

Senator ELLENDER. Is it your opinion that if we had developed the American aluminum, that is alumina, and so forth, and had gone through that process, that the aluminum may have cost more than the price which we are now paying for imported aluminum?

Secretary ICKES. It is primarily a question of being sure of getting the aluminum. Today we cannot be sure of shipping and imports from overseas, regardless of price. My own opinion, subject to correction, is that especially if we had sought to make aluminum, whether out of bauxite or out of some other raw materials than bauxite and had developed our own water power, we could have made aluminum and could have encouraged competition. If you take these and other factors into account, I think it would be fair to say, subject to correction, that we could have produced it cheaper here.

Dr. DEAN. That is a fair assumption.

Secretary ICKES. Dr. Dean says it is a fair assumption.

Senator ELLENDER. Thank you very much.

#### AN ATTACK ON THE INTEGRITY OF THE BUREAU OF MINES

Senator SCRUGHAM. Mr. Secretary, I recently had sent me an editorial published in the Engineering and Mining Journal. This editorial attacks the integrity of the Bureau of Mines, and specifically accuses the Bureau of issuing a press release purporting to give a résumé of a paper on the Production of Alumina from Low Grade Materials, by the Assistant Director of the Bureau, R. S. Dean, which Dr. Dean actually did not give.

In other words, it is alleged that the news release bore no relationship to the paper. This editorial further charges the Bureau with attempting to discredit other governmental agencies in the eyes of the public.

These are extremely serious charges. This committee would like to have the facts, Mr. Secretary.

Secretary ICKES. The facts are very simple, Senator.

I have here the text of Dr. Dean's paper, which, in accordance with the usual practice of the Department, was approved by the Director of the Bureau and by my own office.

This paper, since Dr. Dean's talk was actually delivered, has been submitted to the A. I. M. E. I have here also a copy of the news release which was prepared by the Bureau of Mines from Dr. Dean's paper and which was, of course, released through the Office of War Information.

I ask that these be made a part of the record. They clearly show there was no deception or effort at deception.

Senator SCRUGHAM. Mr. Secretary, the committee will be glad to have them. Why do you suppose a reputable journal such as the Engineering and Mining Journal, which is one of the leading papers in the field, should have run this kind of editorial? This is a serious matter, I want to repeat.

Secretary ICKES. A good guess would be that it was asked for by somebody who did not like the Bureau of Mines and the Department of the Interior to advocate new domestic sources of aluminum.

Senator SCRUGHAM. Who do you think asked for it?

Secretary ICKES. Mr. A. H. Bunker, Director of the Aluminum and Magnesium Division of the War Production Board.

Senator SCRUGHAM. What do you mean?

Secretary ICKES. I have here a copy of a letter written by Mr. Bunker. This copy was sent to Dr. R. R. Sayers, Director of the

Bureau of Mines. It requests that an editorial be written condemning the Bureau of Mines.

Senator SCRUGHAM. Let us put it in the record, if you have it there.

Secretary ICKES. I am very glad to put all three matters in.

Senator SCRUGHAM. Who is the letter addressed to?

Secretary ICKES. The letter is addressed to the president of the American Institute of Mining and Metallurgical Engineers, and refers to the Mining and Metallurgy Journal.

Senator SCRUGHAM. That is an entirely separate paper. This was published in the Engineering and Mining Journal.

Secretary ICKES. Yes; but I think it must be apparent from this why such an editorial was printed.

Senator STEWART. What is Mr. Bunker's official connection with the War Production Board?

Secretary ICKES. Director of the Aluminum and Magnesium Division of the War Production Board.

Senator STEWART. Do you know his background?

Secretary ICKES. I have known of it. He has been associated, as I understand it, with a banking firm in New York. I do not know just exactly his background. Do you know, Mike?

Mr. STRAUSS. I do not know the name of the firm.

Senator STEWART. You do not know the name of the banking firm?

Mr. STRAUSS. No, sir.

Senator SCRUGHAM. I presume the simplest way is for the committee to call Mr. Bunker and ask for the reasons for writing such a letter and asking for such an editorial.

(The documents submitted by Secretary Ickes are as follows:)

PRESS RELEASE FROM THE DEPARTMENT OF THE INTERIOR, FEBRUARY 16, 1943

Advance release for afternoon papers, Monday, February 16, 1943, Sherman—Interior—3529

OFFICE OF WAR INFORMATION

DEPARTMENT OF THE INTERIOR—OWI—1269

Pointing out that the supply of native high-grade bauxite for aluminum in the United States is limited, Dr. R. S. Dean, Assistant Director of the Bureau of Mines, today reported to the annual meeting of the American Institute of Mining and Metallurgical Engineers at New York City that the Bureau has formulated a master plan whereby sufficient amounts of this vital war metal can be obtained through utilization of domestic clays, alunite, second-grade bauxite, and other alumina-bearing materials.

Speaking before the nonferrous metallurgy group of the American Institute of Mining and Metallurgical Engineers, Dr. Dean explained that the Bureau's program resulted from pilot plant and laboratory research by its chemists and engineers and from the finding of additional millions of tons of available raw materials by mining engineers of the Bureau. The plan, he said, involves questions of major policy with respect to allocation of construction materials, priorities, and logistics which are within the jurisdiction of other war agencies.

The Bureau of Mines program, he stated, has six principle phases:

1. Further exploration of domestic bauxite to find increased reserves of Bayer-grade (first grade) bauxite needed for existing plants now capable of using only Bayer-grade bauxite in producing alumina, to supply Bayer-grade bauxite for Canadian plants, and to provide more high-grade bauxite for use in abrasives in America's war plants.

2. A fourfold increase in the Bureau's exploration for second-grade bauxite for use in Bayer plants now being converted to use this second-grade material. This should keep reserves virtually constant.

3. Construction of a plant to mill several millions of tons of high-silica bauxite and produce 1,800 tons of first-grade bauxite concentrate daily to supply existing Bayer plants until they can be converted. Such a milling plant could be constructed in 3 months, would be located in an area which has abundant reserves of high-silica bauxite, and would utilize idle milling equipment.

4. Construction of commercial plants for the production of alumina from domestic clays.

5. Erection of commercial plants for extracting alumina from alunite.

6. Continued research in metallurgical and milling problems to assist the entire aluminum industry.

Explaining that high-grade bauxite, much of which is imported, is the principal source of alumina (for aluminum) in the United States, Dr. Dean asserted "Our supply of high-grade bauxite in the United States is limited. How limited, I am not permitted to say, but there is a very definite limit to the length of time our high-grade bauxite resources will last at the present rate of exploitation unless supplemented, even though exploration projects of the Bureau of Mines have considerably increased the figure on reserves."

"It is worse than precarious to depend on water-borne imports (of high-grade bauxite)," Dr. Dean continued. "So we turn to our low-grade bauxite which is high in silica or iron, to alunites, to limitless resources of clays, halloysite, and the like."

The Bureau of Mines has reported to Secretary of the Interior Harold L. Ickes that the conversion of Bayer plants may take a year, whereas if the Bureau's milling plan were adopted, dependence upon imports would be lessened within 3 months time, the United States would have a continuing source of high-grade bauxite concentrates for abrasives, chemicals, and for shipments to Canada, and this Nation's aluminum-producing plants would be able to reach capacity production much sooner.

In urging the utilization of alunite and clays, the Bureau has pointed out that even with intensive exploratory work for new bauxite, a milling program, and the conversion of Bayer plants, the United States still cannot produce sufficient alumina "to place us in a secure position for a long war." The War Production Board recently received a detailed proposal based in part on Bureau research suggesting the construction of a plant to produce alumina from the Hobart Butte clay deposits in Oregon. The Bureau has urged that the ammonium sulfate process be used in treating the Hobart Butte ore. Meanwhile, the Bureau is continuing its studies of clay deposits of the Nation and is ascertaining their availability and suitability for the production of alumina by various processes. Suggestions for other plants and other processes for known clay deposits are being formulated.

Exploratory work of the Bureau revealed the availability of millions of tons of alunite in the vicinity of Marysvale, Utah. The Bureau of Mines supported the proposal for the construction of a plant to produce alumina from these reserves by using the Kalunite process and such a plant now is nearing completion. The W. P. B. now has under consideration a proposal that another plant at Marysvale, Utah, be revamped to recover alumina from alunite by another process which also has been tested thoroughly in the Bureau's laboratories.

In his address to the American Institute of Mining and Metallurgical Engineers, Dr. Dean stated that "notable results" have been obtained in beneficiating low-grade domestic ores to obtain alumina. However, he said, since no single process is suited to all domestic sources "the various processes and variations are being investigated simultaneously by the Bureau of Mines in its pilot plants."

#### THE PRODUCTION OF ALUMINA FROM LOW-GRADE DOMESTIC MATERIALS

An address by Dr. R. S. Dean, Assistant Director of the Bureau of Mines, before American Institute of Mining and Metallurgical Engineers

Just as the mineralogical name bauxite has come to include several minerals: not known at the time the name was first applied, so the concept of bauxite as the one source of alumina must during the period of the national emergency be enlarged to include the production of alumina from other low-grade sources. Speaking in a narrow sense, there is no such thing as bauxite. Just so, there has now to be no one source of alumina, and no one process for its extraction.



In 1821, a French chemist named P. Berthier analyzed a hard, reddish material found near the village of Les Baux in Provence, France. When he analyzed this material he thought to be clay and found it contained 52 percent alumina, 27.6 percent iron oxide, and 20.4 percent chemically combined water, he gave it the name "Bauxite," the word being derived from the name of the village and naturally pronounced in the French manner. In 1883, a material somewhat similar to the French Bauxite was found near Rome in Floyd County, Ga., and was called bauxite (pronounced in the American manner) although there were significant chemical and mineralogical differences between it and the European ore of the same name, then considered a dihydrate of alumina. The only definition of bauxite at present is "a mineral raw material which is used as the ore of aluminum, consisting mainly of hydrated aluminum oxides." American bauxite's essential mineral is gibbsite, the trihydrate of alumina. Diaspore, the monohydrate of alumina, is much less plentiful, although it occurs in some bauxites. There is no proof of the existence of a dihydrate of alumina as a mineral. There are, in fact, indications that it does not exist. Consequently, bauxite has become in the United States merely a trade name for the gibbsite aluminum ore.

The Bayer process, which has been the one method of producing alumina, makes use only of high-grade bauxite. In 1888, a patent was issued in Germany to Karl Josef Bayer on a process for extracting aluminum hydrate from bauxite. A United States patent was issued to Dr. Bayer in 1894, and the first American Bayer plant was built at Woburn, Mass., in that year. The Bayer process, although modified and improved, has remained the universally used process for making aluminum hydrate, which, when calcined, yields the oxide used in the Hall-Heroult for producing aluminum from alumina.

In the Bayer process, the major portion of the aluminum oxide in bauxite dissolves when it is treated with hot sodium hydroxide (caustic soda) under pressure and forms soluble sodium aluminate, to which is ascribed the formula  $\text{NaAlO}_2$ . The iron oxide content of the bauxite is insoluble in caustic soda and, aside from increasing the bulk of the insoluble residue which must be filtered and thrown away, presents no problem. However, the silica presents an entirely different picture, as it is the cause of serious losses of both soda and alumina. During the digestion of bauxite by caustic soda there is apparently formed an insoluble sodium aluminum silicate which carries both soda and alumina into the "red mud," as the residue is called. This compound, according to Dr. Bayer, has the composition  $\text{Al}_2\text{O}_3 \cdot \text{Na}_2\text{O} \cdot 3\text{SiO}_2 \cdot 9\text{H}_2\text{O}$ . Whether it actually has this formula has never been ascertained, but it is certain that soda and alumina losses increase with increasing silica content in the bauxite. For every pound of silica, 1.1 to 2 pounds of alumina and 1 to 3 pounds of soda (calculated as sodium carbonate) are lost. The ore for the Bayer process has until recently carried only as high as 7 percent silica, but slightly higher silica content is being tolerated at present. The objection to using high-silica bauxite in the Bayer process is purely economic. The higher the silica content, the more expensive the alumina, but the purity of the alumina is not affected by the silica content of the bauxite used, as the action of the hot caustic on the bauxite is highly selective and only the aluminum hydrate in the bauxite is dissolved and reprecipitated. Titanium oxide, which with iron oxide and silica are the most common impurities associated with bauxite, is said to combine the soda to form insoluble sodium titanates and further increase the soda losses. However, in view of the refractory nature of most titanium minerals, there is some question as to the extent of such a reaction. The sodium aluminate solution is filtered off, and the residue containing the iron, silicon, and titanium is thrown away. Aluminum hydrate can be precipitated from the aluminate solution by neutralizing with carbon dioxide. This method was originally used in the commercial process, but at making aluminum hydrate, which, when calcined, yields the oxide used in the presence of a "seed" charge of aluminum hydrate, whereupon about two-thirds of the dissolved hydrate slowly crystallizes out. The hydrate is filtered, washed, and calcined to form alumina.

Aluminum is the most abundant metal in the solid part of the earth's crust, and it occurs in substantial percentages in all clays and shales and in all the igneous and metamorphic rocks. However, the chemical affinity of aluminum is so great that it generally occurs in the form of aluminum silicates in the common rocks just mentioned. If it were not for the chemical affinity of aluminum for other elements, notably oxygen, it would be the cheapest of all elements, but it is costly to break down aluminous compounds into their component elements to yield alumina of acceptable purity, and the bond between aluminum and oxygen is so strong that large amounts of electrical energy are required to break it and separate metallic aluminum from oxygen.

In the Hall-Heroult process for reducing aluminum electrically from its oxide, any impurities present in the oxide would greatly decrease the effectiveness of the process, so that this process requires alumina relatively pure from contamination. While many other processes have been proposed, the Bayer process has been the one method used commercially in the United States to obtain alumina for the Hall-Heroult reduction, depending entirely on high-grade bauxite ores from Arkansas and Surinam (Dutch Guiana in South America) in the proportions of 25 percent from Arkansas to 75 percent from Surinam.

Thus we have the picture: A plentiful element which is active chemically, so that the cost of extraction pushes it up on the price scale to a place with elements which are less plentiful but easier to extract; a single-ore high-grade bauxite, the only source of aluminum being made use of in the Bayer process. This is a satisfactory picture complete—from the raw material to the finished product.

Except for one very significant and pertinent fact, I would not be here today talking about alumina. And that is that our supply of high-grade bauxite in the United States is limited. Just how limited I am not prepared to say, but there is a very definite limit to the length of time our high-grade bauxite resources will last at the present rate of exploitation, supplemented by extensive, even though exploratory projects which are being pushed by the Bureau of Mines. It is worse than precarious to depend on water-borne imports; it is endangering the lives of men in our merchant marine and Navy convoys. So we turn to our lower-grade domestic sources of alumina as the answer, and we find low-grade bauxite, high in silica or iron, alunites, limitless resources of clays, halloysite, and the like.

In the effort to make available the aluminum content of these lower grade domestic resources, notable results have been obtained in the beneficiating of low-grade bauxite; the soda-lime-sinter, or the lime-sinter soda-extraction, method for low-grade bauxites and clays, not concentratable, but convenient to limestone deposits and cheap fuel; the ammonium-sulfate-exchange process, which has certain definite advantages; a sulfuric acid process for clay or bauxitic clay; processes for producing alumina from the alunites, and an electric furnace smelting process for certain high-iron, high-silica bauxites. As no one process is suited to all the possible domestic sources, these named processes and variations, and others, are being investigated simultaneously by the Bureau of Mines in its pilot plants. They will be described in turn and as fully as regulations permit.

*Beneficiation of high-silica bauxite.*—Large amounts of metallurgical grade bauxite (which, unless steps are taken in this country, will have to be imported) and an increased supply of bauxite containing less than 15 percent silica can be provided by utilizing the bauxite beneficiation procedure developed by the Bureau of Mines. I use 15 percent silica tolerance as a classification division, since I understand that the Bayer plants will be modified to permit the use of bauxites containing up to 15 percent silica. The problem of beneficiation is largely one of rejecting silica. Iron and titanium, when present in abnormal amounts, must also be rejected to obtain a product of the desired alumina content. With many ores, iron and titanium can be removed by magnetic separation or gravity concentration, but these methods are ineffective for rejection of the silica, and other methods, such as flotation, must be employed. A choice of a method or a combination of methods depends on the physical characteristics and mineralogical composition of the bauxite. Flotation, or a combination of flotation and gravity concentration, would make available to the Bayer process additional quantities of high-grade bauxite concentrate from ores not at present utilized.

*The lime-soda-sinter process.*—High-silica bauxites (up to 25 percent) which contain reasonably high percentages of alumina are known to occur in appreciable tonnages in Arkansas, Georgia, and Mississippi, and in important amounts in other southern States. These deposits justify serious consideration as sources of aluminum ore.

The lime-soda sintering process, sometimes called the Deville process, was early investigated in France and is being adapted by the Bureau of Mines at one of its experimental stations to these high silica materials.

In this method of treatment there are four major steps involved:

- (1) Calcination of the bauxite with admixtures of limestone and soda ash;
- (2) Leaching of the sintered bauxite mixture for extraction of the soluble alumina;

(3) Pressure treatment of the sodium aluminate solution for partial removal of silica; and

(4) Precipitation of the alumina of the desired physical and chemical properties.

In addition to these four operations, the final waste solutions, essentially barren of alumina but relatively high in soda, must be treated to recover the sodium carbonate.

The lime-soda sintering of these bauxites high in silica renders their alumina soluble in water and dilute alkalis in the form of sodium aluminate, but fixes virtually all of the silica in the insoluble dicalcium silicate. Separation of high-purity alumina from these solutions by carbonating under controlled conditions that hold up the small amount of soluble silica unavoidably present in the sodium aluminate solution can be done.

Combination Bayer-lime-soda-sinter plants are being designed and built to use bauxite averaging between 13 and 15 percent silica. These plants are entirely operable on bauxite carrying even higher percentages of silica, but there is a break-even point above which the straight sinter process is indicated rather than the combination Bayer-sinter.

The logical extension of the lime-soda-sinter method of producing alumina is to apply it to high-alumina clay and other aluminous material. The preliminary sintering step would be a sintering treatment with lime followed by extraction with a soda solution to produce a sodium aluminate extract liquor that can be handled exactly the same as in the lime-soda sintering process for siliceous bauxites.

*Ammonium sulfate exchange process.*—This process has been studied in pilot plants by the Bureau of Mines and interested industrial concerns. The process is practical, and all industrial processing steps involved are common to the chemical engineering industries. The finished alumina is at least equal in specifications to that produced by the Bayer process. While the process is adaptable to practically any aluminum ore, it is presently being considered for application to clays.

The essential steps in the ammonium sulfate exchange process are the reaction of a mixture of the pulverized clay and ammonium sulfate at temperatures of 373°–400° C. in a rotary kiln, whereupon the clay reacts to form ammonium aluminum sulfate (alum) with the evolution of ammonia or by reaction with products of combustion ammonium carbonate. The reacted mass is then heated to 95°–100° C. by sparging with steam with a small addition of sulfuric acid, and the pregnant liquor is separated from the insoluble residue, or sands, which are treated to remove any retained ammonium aluminum sulfate. The hot solution is crystallized in two stages, and the alum crystals are refined by an additional recrystallization step, then dissolved to provide make-up solution for the aluminous hydroxide precipitators. The alum solution is treated with ammonia or ammonium carbonate formed in the first step to precipitate aluminum hydroxide. The aluminum hydroxide is filtered off and ignited to yield anhydrous alumina, while the ammonium sulfate produced in the mother liquor is recovered by evaporation and recycled for treating a fresh batch of clay in the rotary kiln and extraction agitator.

*Sulfuric acid process.*—Our one almost unlimited source of alumina—the clays—can also be treated by several acid processes—one of which was originated and developed in the laboratories of the Bureau of Mines. In this process the clay or bauxitic clay is leached with strong sulfuric acid, and an impure concentrated solution of aluminum sulfate is obtained by filtering and washing the insoluble residue of silica. Dilute alcohol precipitates from the solution relatively pure aluminum sulfate, which is filtered or centrifuged off, dried, and calcined to produce alumina. Both the alcohol and the sulfuric acid are recovered.

A pilot plant at one of the experiment stations of the Bureau of Mines is based on this process. It has been found that cost is minimized by operating with solutions as concentrated, and alcohol as dilute as possible.

*The alunite processes.*—Alunite must be considered an important domestic source of alumina. The more important domestic deposits of alunite in the United States are in the vicinity of Marysville, Utah. Other deposits have been reported in Nevada, California, Arizona, and Texas, but none has been as thoroughly explored as the Marysville deposits.

There have been proposed a number of processes to recover alumina and potash from alunites; among the more important of these are the Kalunite and the Moffat processes. On request the Bureau of Mines submitted a favorable report on the Kalunite process in April 1941 to the Office of Production Manage-

ment. A plant to use the Kalunite process has been built and will soon be into operation at Salt Lake City by the Kalunite Corporation. The process is described briefly as follows:

The crude ore is crushed and given a dehydrating roast at 550° C. to render it soluble in dilute sulfuric acid. The hot calcine is cooled to 230° C. and given a countercurrent agitation and leach in a solution of potassium sulfate and 10-percent sulfuric acid. The countercurrent leach is operated to maintain an excess of roasted alunite in the first agitator so that the pregnant solution contains no free acid. This is an important step in eliminating impurities. The pregnant solution is filtered out and then cooled, crystallizing out normal potassium alum. The alum crystals are washed, dissolved with dilute potassium sulfate solution, and treated in a continuous autoclave at a temperature of 200° C. The potassium alum is broken down into a basic alum plus sulfuric acid and potassium sulfate. The acid and potassium sulfate are recycled for the original leach, and the basic alum is calcined to decompose it into alumina and potassium sulfate. This calcine is then leached with hot water to remove the soluble potassium sulfate leaving behind the alumina. The leach solution is then evaporated to crystallize out potassium sulfate.

The essential difference between the Moffat process and the Kalunite process is the substitution of spray drying of the alum for treatment in an autoclave.

The Bureau of Mines has studied this process for recovering alumina from alunites and has found it to produce a satisfactory product. The plant equipment is all of standard type, so that no specially designed equipment is required. The process with minor modifications is also applicable to clays, shales, and other aluminiferous materials.

*Electric furnace treatment and leaching of high-iron bauxites.*—The electric furnace treatment of high-iron bauxite has been practiced successfully on a commercial scale in Norway. A pilot plant erected by the Bureau of Mines to confirm the Norwegian experience and to test various modifications of the process has proved that the only practical method of making calcium aluminate from high-silica bauxite is by two stages. Silica and iron oxide are first reduced and removed as ferrosilicon in a primary furnace operation. Then the molten slag, containing 95 to 93 percent of alumina, is transferred to a second furnace where, with the addition of lime, monocalcium aluminate is produced. This compound is readily decomposed by sodium carbonate solution, producing a solution of sodium aluminate. The recovery of alumina from a sodium aluminate solution is a process of many years' standing, but details of the precipitation of alumina by a combined treatment with carbon dioxide and a "seed" charge of alumina are now being worked out at the Bureau's pilot plant.

The Bureau has definitely proved that iron and silica in the primary alumina slag can be reduced to make the slag suitable for conversion into calcium aluminate and that the process as a whole is technically sound. The furnacing processes are being developed to determine optimum furnace sizes and types. Whether this process will prove commercially successful depends on the development of metallurgical uses for the ferrosilicon byproduct. Such development seems certain to be made.

LETTER FROM A. H. BUNKEE TO C. H. MATHEWSON

FEBRUARY 23, 1943.

Mr. C. H. MATHEWSON,  
President, American Institute of Mining and Metallurgical Engineers,  
New York City.

DEAR MR. MATHEWSON: It was my privilege to attend the Monday afternoon session of the Nonferrous Metallurgy Division of the Institute and to listen to the talk of Dr. R. S. Dean on the subject of Production of Alumina from Domestic Low Grade Materials. I was much impressed with Dr. Dean's discussion of the subject matter and felt that the material presented was very informative and noncontentious.

I read the newspaper accounts of his address, which accounts bore no reference whatsoever to the subject matter discussed at the meeting. I consequently obtained an official press release to see whether the newspaper accounts had been accurate and I am attaching a copy herewith. This release describes and quotes an address which has no reference whatever to the address which

was made. The press release contains many and sundry statements which, in my opinion, are highly contentious and would have been challenged by many of those present. The discussion would have produced, I believe, a very informative symposium on the pros and cons of the entire aluminum raw-material problem.

I am naturally very much interested in anything bearing upon the aluminum question. It seems to me that such a distinguished body as the American Institute of Mining and Metallurgical Engineers should not be used as a cloak behind which to issue press releases which have no reference whatever to the proceedings which took place at your Institute meetings. I feel sure that this matter is of such a serious order that you would like to give it editorial comment in your next issue of Mining and Metallurgy.

I have understood that the object of these meetings is to throw all new subject matter open to free discussion. It seems to me that in this instance the entire purpose of the meeting on aluminum and alumina has been frustrated.

Sincerely yours,

A. H. BUNKER.

*Director, Aluminum and Magnesium Division.*

Cc: Dr. Clyde Williams, Dr. C. K. Leith, Howard Young, Arthur A. Center, Dr. Ray Jeffries, Dr. R. R. Sayers, Wilbur Judson, Dr. Harvey Davis, Dr. R. S. Dean, A. B. Parsons.

Senator SCRUGHAM. Are there any further questions?

POLICY OF INTERIOR DEPARTMENT WITH RESPECT TO DOMESTIC PRODUCTION OF MANGANESE

Senator MURRAY. I understood that demand for the use of manganese in this country now in connection with the war effort amounts to something like a million and a half tons a year, and that the domestic production is 166,000 tons, including the portion that the A. C. M. is producing, which is the largest part.

I am very much interested in your statement that you favor the encouragement of the small producers.

Then I am also assuming that you would favor paying the small producers a little premium in order to encourage the production because of the necessity of keeping up production in this country, because in case of loss of shipping we would be unable to get any more manganese from abroad.

That would be your policy, to give better prices to the small producers to enable them to make a profit on the operation of small properties?

Secretary ICKES. Yes, sir; it would.

Senator MURRAY. We had a witness on the stand yesterday who seemed to be opposed to paying a dollar a unit for manganese that went as low as 40 percent. He contended that an increased price would not have any effect whatever on increased production, that on the contrary it would drop off, the production would drop off under such a policy.

I cannot quite understand the logic of his argument, because it seems to me that if the small producers got that at a better price they would naturally expand their production.

Secretary ICKES. Well, one would think so. Another factor there is that he would want some assurance of a continuing market.

Senator MURRAY. Do you also advocate the establishment of treatment plants close to the source of production?

Secretary ICKES. Oh, yes; I have been advocating that for some time.

Senator MURRAY. And the establishment of this mill in Butte, in the Butte district, where there is a possibility of expanding production considerably, is a very wise act.

I know the Butte district myself, and I have been over it. You can walk over the areas around the Butte district, and you can see manganese yourself on the ground all over the district. Of course it is low-grade, but it could, through the benefacting system, be brought up and utilized in connection with the war effort, so that there is a real necessity for encouraging that development in the Butte area, and in the other States where they have manganese.

There are a number of places where it can be produced, and I think every effort should be made to produce it by giving a satisfactory price to the producer in the neighborhood to make a profit.

That is all.

#### GOVERNMENT SHOULD INCREASE EFFORTS TO AID SMALL MINES

Senator SCRUGHAM. Mr. Secretary, do you think the Government should increase its effort to assist the small miner in concentrating his efforts for increased production to bring into operation these properties which were mentioned earlier in your presentation?

Secretary ICKES. You mean by regional offices?

Senator SCRUGHAM. Yes, sir.

Secretary ICKES. Nearly all of the Government agencies already have regional offices, I believe. More decentralization of this sort, with Government representatives going right into the different mining districts, could, I imagine, be done.

Many small mining districts need a specific, carefully worked out ore-buying program, coupled with custom treatment plants. Such cooperative efforts need constant engineering help and advice. The Bureau of Mines is best suited to give this and to cooperate with the Government financial agencies in working out such programs.

For example, the Department of the Interior would like to work out such plans for chromite in northern California, lead and zinc in the Good Springs district, Nevada, and pedmatite minerals in South Dakota.

Senator SCRUGHAM. I have particularly in mind cooperation with the Mineral Resources Coordinating Division in order to help the small miner. You have mentioned some. Will you give us a few other illustrations?

Secretary ICKES. As an illustration, we have been importing a good deal of our celestite, a strontium mineral that is used in tracer bullets, signals, flares, and similar devices. It is quite a valuable war mineral. We have a number of celestite deposits in the United States. The Bureau of Mines has explored a deposit of fine quality celestite in Texas; a reserve of some 160,000 tons has been shown. It seems logical that a fabricating plant should be established in Texas close to these easily mined deposits where it could utilize the raw material readily and still have ready access to railroad and water-traffic facilities.

In the East, also, I can also mention a good example of potential use of ores on a regional basis.

In the Virgilina district of Halifax County, Va., and Person and Granville Counties, N. C., the copper deposits have been known for

many years before the nineteen hundreds. This ore is a siliceous ore, high in silica and therefore helpful in forming a slag in copper converters.

Up in New York and New Jersey there are smelters which use barren gravels as a flux. If the Virgilina ore were used, the smelters would be using a valuable ore instead of a barren material. Thus, the Virgilina ore could find a market, and the smelter, by treating the same quantity of material, would get a higher output of copper.

Incidentally, the waste material from the mine would make a desirable aggregate for concrete for airfields nearby and for railroad ballast.

Senator SCRUGHAM. Mr. Secretary, you understand that this committee was authorized by the Senate to specially make an inquiry into the needs of the small producers, and this subcommittee is particularly interested in the mining and mineral industry?

Have you any other specific suggestions as to how we can act together to increase production by a more unified effort?

A general statement will be appreciated.

#### INTERIOR DEPARTMENT FIGHTS FOR ESTABLISHMENT OF SMALL, COMPETITIVE ENTERPRISE

Secretary ICKES. We have tried hard to assist the small man wherever possible. The Department has done exploratory work, it has sampled and tested ore, it has tested and devised methods of treating the ores from small mines, and has given the individual owners and operators the benefits of its knowledge and its recommendations. But the Department has had no established channels within the Government to carry out such projects to successful conclusion. Projects have depended almost entirely for their adoption on the ingenuity, resourcefulness, and push of their own backers. Until recently the Department has had no assurance that its proposals would even receive a hearing.

As you know, the Department has consistently fought against monopoly and monopolistic practices. We are not opposed to big business, as such. The larger corporations, on the whole, have done a wonderful job in producing the weapons of this war. But this Department has fought for the establishment of competitive enterprise for the small man attempting to enter a field dominated by the larger corporations.

The development in the Pacific Northwest, where the Department operates a "Powerhouse of Democracy," is an illustration of what I mean. We have supported, despite violent criticism, the establishment of aluminum plants in the area by the Reynolds Metals Co., which entered the field to compete on a smaller scale with the sole producer in the United States of this light metal. We have sought by judicious allocation of power from the Bonneville Dam to foster the establishment of new enterprises in the fields of chemicals, ferro-alloys, and other products, and particularly in the field of the light metals, in which we hope small, local enterprise can be established on a permanent basis.

That permanency will be vitally affected if this Government presents more Shipshaws outside this country to the Aluminum Co.

Senator SCRUGHAM. What do you mean by "Shipshaws"?

Secretary ICKES. A big dam recently built in Quebec by the Aluminum Corporation of Canada, Inc., I think is the name.

As I have said before, the Department of the Interior would like to see the establishment and the preservation of small local enterprise throughout the Nation, plants and factories located close to raw materials, and serving their natural markets, so as to eliminate expensive and needless transportation, so that our competitive free economy may be maintained and so that each industry may make its fair contribution to the community that sustains it.

To achieve this goal to the fullest degree, we must do all we possibly can to help develop and support the small business enterprise.

Senator BUCK. Mr. Secretary, referring to your remarks about bauxite, is the Government making any concentrated effort at this time to locate new deposits?

Secretary ICKES. Yes; we have been engaged in that for some time.

Senator BUCK. With any success?

Secretary ICKES. Yes, sir.

Senator SCRUGHAM. Senator Stewart, do you have any questions?

Senator STEWART. No, sir.

Senator SCRUGHAM. Senator Murray?

Senator MURRAY. No, sir.

Senator SCRUGHAM. Senator Ellender?

Senator ELLENDER. No questions.

Senator SCRUGHAM. Thank you very much, Mr. Secretary. I will now call on Mr. Howard I. Young, Director of the Mineral Resources Coordinating Division, and this inquiry will be conducted by Senator Buck.

#### STATEMENT OF HOWARD I. YOUNG, DIRECTOR OF THE MINERAL RESOURCES COORDINATING DIVISION, WAR PRODUCTION BOARD

Senator BUCK. Mr. Young, would you give your name and your connection?

Mr. YOUNG. Mr. Chairman, my name is Howard I. Young, Director of the Mineral Resources Coordinating Division of the War Production Board.

Senator BUCK. Will you kindly proceed with your testimony?

#### FUNCTIONS AND SCOPE OF MINERAL RESOURCES COORDINATING DIVISION

Mr. YOUNG. Your chairman has requested that I appear before your committee to explain the functions and scope of the Mineral Resources Coordinating Division, stating what has been accomplished by it to date and what it is planning to do in order to set up reasonable policies for encouraging increases in the domestic production of strategic and critical minerals and metals.

The Mineral Resources Coordinating Division was created by a directive of the War Production Board known as Administrative Order No. 20 of the office of the program vice chairman which became effective January 30, 1943. A copy of the order is attached hereto.

The administrative order provides that the Division will generally be responsible for coordinating plans, programs, and procedures within



the War Production Board and with other governmental agencies for increasing the supply of essential minerals and metals for war production.

#### FUNCTION OF MINERALS AND METALS ADVISORY COMMITTEE

The Minerals and Metals Advisory Committee which is provided for in section 4 and of which the Director is chairman, is composed of a representative and alternate from the War Department, Navy Department, Board of Economic Warfare, Bureau of Mines, United States Geological Survey, Reconstruction Finance Corporation, Bureau of Foreign and Domestic Commerce, Office of Civilian Supply (W. P. B.), Office for Production Research and Development (W. P. B.), Facilities Division (W. P. B.), Labor Production Division (W. P. B.), Stockpiling and Transportation Division (W. P. B.).

This Committee meets weekly and reviews production requirements and stockpiles of the critical war materials and metals. It has been the Committee's policy to review those metals in order of their apparent critical status under the present war program, and it has thus far reviewed seven of the eight metals and minerals classified by our consultants as most tight. The status as to production and requirements, together with past policies and future recommended policies are presented by the Division Chief or his assistant of the W. P. B. Division having charge of the particular mineral or metal under consideration. This Committee serves in an advisory capacity to the Operating Committee.

#### FUNCTIONS OF MINERAL RESOURCES OPERATING COMMITTEE

There was created under this administrative order the Mineral Resources Operating Committee. The membership of this Committee is composed of a representative to be designated by the Secretary of the Interior together with a representative of the Board of Economic Warfare, Reconstruction Finance Corporation, and the Office of Production Research and Development of W. P. B. The Director of the Mineral Resources Coordinating Division is Chairman of the Mineral Resources Operating Committee and may exercise any of the powers and functions vested in the Committee.

The Operating Committee coordinates and correlates the broad programs and plans of the governmental agencies for increasing the supply of essential minerals and metals. The various governmental agencies are to supply to it such information as is requested from time to time to be used as a guide in assisting the Committee to determine the policies having to do with the production of the various minerals and metals under consideration. This Committee also makes definite recommendations on such projects having to do with minerals and metals as may be submitted to it for consideration by the various W. P. B. divisions and other governmental agencies.

The Operating Committee obtains advice from the Minerals and Metals Advisory Committee with respect to these programs.

The administrative order provides that no proposal or program for investigating and exploring ore bodies or for testing, developing, or utilizing new processes for production for minerals and metals will be approved or recommended to any other agency of the Gov-

ernment for execution by any of the divisions of W. P. B. or by any of the governmental agencies designated in the directive until the proposal has been submitted to the Operating Committee for review and recommendation.

The effectiveness and success of these committees depend to a great extent on the active, sincere cooperation received not only from the governmental agencies outside the W. P. B., but also from the various divisions created within the W. P. B. All these governmental agencies are cooperating fully with the committees in their work and offering very constructive suggestions in the coordination of our domestic and foreign mineral policy.

As soon as possible following the issuance of Administrative Order No. 20, the various governmental agencies represented on the committee made their appointments.

The members are as follows:

**MEMBERS OF MINERALS AND METALS ADVISORY COMMITTEE**

Howard I. Young, Chairman  
J. Reed Lane, Acting Secretary

**Agency:**

War Department: Lt. Col. H. G. Moulton, representative; Lt. Col. J. P. Woodlock, alternate.  
Navy Department: Lt. Comdr. E. H. Augustus, representative; Lt. Comdr. C. W. Hoffer, alternate.  
Board of Economic Warfare: Dr. Alan Bateman, representative; W. E. Wrather, alternate.  
Interior Department (Bureau of Mines): Dr. R. S. Dean, representative; Lowell Moon, alternate.  
Reconstruction Finance Corporation (Metals Reserve Company): H. Dewitt Smith, representative.  
Geological Survey: Donnel F. Hewett, representative; T. B. Nolan, alternate.  
Bureau of Foreign and Domestic Commerce: Walter Janssen, representative.  
Office of Civilian Supply, War Production Board: Stanley Adams, representative; Donald Sham, alternate.  
Office of Production Research and Development, War Production Board: Dr. C. K. Leith, representative; Dr. Harvey N. Davis, alternate.  
Facilities Bureau, War Production Board: Platt C. Benedict, representative; Elsworth Bennett, alternate.  
Labor Production Division, War Production Board: Wendell Lund, representative; Allen Buchanan, alternate.  
Stockpiling and Transportation Division, War Production Board: Dr. W. Y. Elliott, representative; Raymond T. Bowman, alternate.

**Staff:**

Wilburn Nelson, Deputy Director.  
Wilber Judson, Consultant.  
Sydney Ball, Consultant.

Mr. Young. The operating committee personnel is as follows:

**MEMBERS OF MINERAL RESOURCES OPERATING COMMITTEE**

Howard I. Young, Chairman  
J. Reed Lane, Acting Secretary

**Agency:**

Board of Economic Warfare: Dr. Alan Bateman, representative; W. E. Wrather, alternate.  
Interior Department (Bureau of Mines): Dr. R. S. Dean, representative; Lowell Moon, alternate.

**Agency—Continued.**

Reconstruction Finance Corporation (Metals Reserve Company): H. DeWitt Smith, representative.

Office of Production Research and Development: Dr. Harvey N. Davis, representative; Dr. C. K. Leith, alternate.

**Staff:**

Dr. Wilbur Nelson, Deputy Director.

Wilber Judson, Consultant.

Sydney Ball, Consultant.

(Administrative Order No. 20 is as follows:)

Form GA-1d (3-2)

United States of America, War Production Board. Manual of Policy and Procedures. Administrative Order No. 20, Office of the Program Vice Chairman, page 1 of 4. Superseded on \_\_\_\_\_, By \_\_\_\_\_, Effective date, January 30, 1943.

Subject: Establishment of the Mineral Resources Coordinating Division.

I certify that the original of this order duly approved and signed by the competent executive was filed with me on the 30th day of January 1943.

(Signed) FRANCIS R. CAWLEY,  
Chief of Management Service.

By Order of—

J. EBERSTADT,  
Program Vice Chairman.

**Section 1. Purpose.**

.01 The purpose of this order is to establish the Mineral Resources Coordinating Division (Staff) within the Office of the Program Vice Chairman and to define its functions.

**Section 2. Establishments.**

.01 There is hereby established within the Office of the Program Vice Chairman the Mineral Resources Coordinating Division (Staff) which will be headed by a Director who will report to the Director of the Resources Bureau. The Director will have one or more Deputy Directors and such other assistants and consultants as he may deem necessary.

**Section 3. Functions.**

.01 The Mineral Resources Coordinating Division (Staff) will generally be responsible for coordinating plans, programs and procedures within the War Production Board and with other governmental agencies for increasing the supply of essential minerals and metals for war production. Specifically, it will—

1. Act in advisory capacity to the Program Vice Chairman and the Director General for Operations, with respect to plans, programs and procedures for increasing the production of essential minerals and metals;

2. Formulate, assemble and review policies, procedures, plans and programs with respect to increasing the production of essential minerals and metals, which, after approval by the Program Vice Chairman and the Director General for Operations, are to be performed through the Industry Bureaus and Divisions. The Divisions may adopt procedures for excluding minor projects or programs involving small expenditures;

3. Act in an advisory capacity and render service to the Industry Divisions with respect to increasing the production of essential minerals and metals;

4. Coordinate such plans, procedures and programs and examine the same with the appropriate Industry Divisions of the War Production Board to the end that recommendations may be submitted to the Program Vice Chairman and the Director General for Operations with respect thereto;

5. Follow up on the functions assigned to the Industry Divisions pursuant hereto in order to assure proper understanding, coordination and execution.

**Section 4. Minerals and Metals Advisory Committee.**

.01 The Director of the Mineral Resources Coordinating Division (Staff) or his designee will serve as chairman of the Minerals and Metals Advisory Committee which will be composed of a representative of the—

- 1 War Department.
- 2 Navy Department.
- 3 Board of Economic Warfare.
- 4 Bureau of Mines.
- 5 Reconstruction Finance Corporation.
- 6 Geological Survey.
- 7 Bureau of Foreign and Domestic Commerce.
- 8 Office of Civilian Supply, War Production Board
- 9 Office of Production Research and Development, War Production Board.
- 10 Facilities Bureau, War Production Board.
- 11 Labor Production Division, War Production Board.
- 12 Stockpiling and Transportation Division, War Production Board.

and such others as the Director of the Mineral Resources Coordinating Division (Staff) and/or the Director of the Office of Production Research and Development may find desirable.

**Section 5. Mineral Resources Operating Committee.**

.01 The Director of the Mineral Resources Coordinating Division (Staff) and a representative to be designated by the Secretary of the Interior, together with a representative of the Board of Economic Warfare, the Reconstruction Finance Corporation, and the Office of Production Research and Development, War Production Board, shall constitute the Mineral Resources Operating Committee. The Director of the Mineral Resources Coordinating Division (Staff) will be chairman of the Mineral Resources Operating Committee and may exercise any of the powers and functions hereinafter vested in the Committee.

.02 The powers and functions vested in the Committee will be as follows:

1. The Operating Committee will coordinate and correlate the broad programs and plans of all governmental agencies for increasing the supply of essential minerals and metals;

2. The various offices, bureaus and divisions of the War Production Board exercising jurisdiction with respect to minerals and metals development and production will furnish to the Operating Committee full information as to their respective programs, operations under such programs, and data and plans with respect to future activities, as well as such further and additional information relating thereto as the Operating Committee may from time to time request;

3. The Operating Committee will request other agencies of the Government which are performing functions with respect to the development or production of minerals or metals to furnish such information as may be deemed to further the production of the necessary minerals or metals;

4. The Operating Committee will obtain the advice of the Mineral Resources Advisory Committee with respect to programs and plans for increasing the supply of essential minerals and metals;

5. No proposal or program for investigating or exploring ore bodies or for testing, developing or utilizing new processes for production of minerals or metals will be approved, or recommended to any other agency of the Government for execution, by any of the divisions of the War Production Board or by any of the governmental agencies designated in Section 4.01 until the proposal has been submitted to the Operating Committee for review and recommendation as provided in paragraph 6 hereof;

6. The Director of the Mineral Resources Coordinating Division (Staff) will submit to the Director General for Operations the recommendations of the Operating Committee with respect to any phases of the minerals and metals program within its jurisdiction. If the Director General approves, he shall forward such recommendations to the Program Vice Chairman for final approval, thence to the appropriate office, bureau, or division for execution.

**Section 6. Relationships.**

.01 The appropriate divisions of the War Production Board shall be responsible for the execution of the decisions of the Program Vice Chairman with respect to the above matters in the field of industry operations;

.02 The several divisions of the War Production Board shall participate in the deliberations of the Mineral Resources Coordinating Division and of the Operating Committee concerned with the field of their respective responsibilities and shall be entitled to file with the Program Vice Chairman their dissent with respect to any recommendations forwarded as above stated;

.03 Nothing contained herein is intended to limit or abridge the jurisdiction of the Industry Division in connection with the regular production operations of the several industries with which they are concerned.

*Section 7. Authority.*

.01 Nothing contained herein is intended to operate in derogation of, or as a surrender of, any of the existing jurisdiction of the War Production Board with respect to the matters referred to herein.

*Section 8. Effective Date.*

.01 This order shall be effective January 30, 1943.

RECOMMENDATIONS OF OPERATING COMMITTEE

Mr. Young (continuing). The first meeting was held on February 11, and we have thus far had seven meetings of each committee.

A careful review has been made of the following metals: Cadmium, molybdenum, quartz crystals, tantalum, fluorspar, nickel, copper, and zinc. In addition to this we have received special reports from Dr. W. Y. Elliott covering shipping problems, and from Dr. Harvey Davis and Dr. C. K. Leith covering the activities of the Office of Production Research and Development of W. P. B., and a brief report from Mr. Janssen covering the work of the Bureau of Foreign and Domestic Commerce in metals.

The Office of Production Research and Development, W. P. B., which is represented on our committee, has thus far reviewed over 1,000 processes and projects having to do with the production, beneficiation, conservation, substitution, conversion into use, and development of improved materials and apparatus. Some 350 to 300 have been approved and are now being used or will shortly be used by industry.

We have made definite recommendations on molybdenum, fluorspar, and zinc properties.

The Operating Committee has also reviewed the Oakland, Calif., electrolytic manganese project and made definite recommendations relative to it.

The chairman of the committee has joined with the Ferro-Alloys Division in recommending additional production facilities for high-grade manganese in Montana.

The Copper and Zinc Divisions, who have presented their reports to the advisory committee, will within the next few weeks present specific copper and zinc projects on which they think development should be started.

In addition to the above, this division cooperates with the various divisions having to do with metals and minerals in connection with other problems such as labor, food, manpower, transportation, equipment, and so forth.

As you fully appreciate, the work of our committee has been in progress for less than 2 months, but we are rapidly formulating definite ideas with respect to the programs that should be adopted to secure continuous supplies of critical minerals and metals required for the war program.

Under present conditions, where production of all metals and minerals is being crowded at maximum capacity of the various properties, it is recognized by our committee that ore bodies are being much more rapidly depleted than at any time since World War I. Our committees are fully cognizant of this condition and are, therefore, giving first consideration to the importance of bringing in new production at such a rate as will continue to make available the requirements of the war program for these essential metals. They are, moreover, fully aware of the requirements of large expenditures for development and prospecting, which are essential to our metals and minerals program.

The committees appreciate that it will be necessary at all times to import substantial tonnages of certain critical metals and minerals to take care of the deficiency between the domestic production and the actual requirements. They will work closely with all agencies responsible for foreign production and with the divisions responsible for supplying the necessary equipment for these mines so that we will to the fullest extent of our ability keep a balanced production of critical materials and metals in line with such war and civilian programs as are adopted by the W. P. B. and the other agencies responsible for the conduct of the war and civilian economy.

In addition to the above, I also serve as Director of the Minerals Bureau. In this capacity I am charged with the operation of five divisions, namely: Mining Equipment Division, of which Arthur Knoizen is Director; Tin-Lead Division, of which Erwin Vogelsang is Director; Zinc Division, of which George Heikes is Director; Miscellaneous Minerals Division, of which R. J. Lund is Director; Mica-Graphite Division, of which H. M. Billings is Acting Director.

These divisions have full charge of the operations in connection with the mining equipment of all types of mining, including coal; also production, requirements, and allocations of the various metals coming under these divisions.

This division represents all of the metals excepting those under the control of C. M. P., namely, aluminum, magnesium, copper, iron, and the alloy minerals required in the making of steel.

Senator BUCK. At this point I would like to ask if you would be kind enough to answer some questions which Mr. Broadgate, the committee consultant, would like to ask you.

Mr. YOUNG. Yes, sir.

Mr. BROADGATE. Mr. Young, as far as the Mineral Resources Coordinating Division is concerned, the directive states that the division is to formulate policies.

Can you tell the committee whether the division has to date formulated any major policy which the War Production Board has adopted?

Mr. YOUNG. The chairman of the committee has made definite recommendations to Chairman Nelson relative to the mineral policy which we think should be adopted.

Mr. BROADGATE. They have not yet been adopted?

Mr. YOUNG. They have not yet been adopted. Chairman Nelson will no doubt talk to you about those this afternoon.

## COMMITTEES IN COORDINATING DIVISION SERVE IN AN ADVISORY CAPACITY

Mr. BROADGATE. As Director of the Mineral Resources Coordinating Division, you are also Chairman of the Minerals and Metals Advisory Committee on which 12 agencies are represented.

Does the Coordinating Division have any actual authority over any of these agencies outside the War Production Board?

Mr. YOUNG. The Coordinating Committee, or the Advisory Committee, serves in an advisory capacity the division that is charged with the responsibility of the production and allocation of the particular metal or material under review, presents all the facts concerning the past and present production, the requirements, the substitutes that are being made for the particular material, and the outlook for future production, together with a full discussion as to the policies they wish to employ covering the production beyond 1943.

Mr. BROADGATE. However, the recommendations, if they are accepted, are accepted purely in a voluntary fashion, and there is no actual authority in the Division to compel coordination of the program.

Mr. YOUNG. We have never found that necessary. I think if we wished to recommend a policy that was different from that recommended by the division in charge of the particular commodity, that we could make those recommendations to our Chief.

Mr. BROADGATE. And make them stick?

Mr. YOUNG. I do not know.

Mr. BROADGATE. I was wondering if there was any control, for example, over the Board of Economic Warfare on importing materials to coordinate that with domestic minerals programs of the War Production Board?

Mr. YOUNG. I might say, Mr. Broadgate, on that, that you gentlemen fully appreciate that the Board of Economic Warfare operates under a directive that was issued by the President, and our authority is not over that, but we have had the finest type of cooperation from the Board of Economic Warfare representatives and there has been no indication at any time but that they want to fit their program into our program.

You see, in dealing with all mining equipment for these foreign projects, the majority of which comes from our country, it is necessary to have the closest type of cooperation with those dealing with the foreign problems as well as those dealing with our domestic problems.

## PRINCIPAL WORK OF OPERATING COMMITTEE TO DATE

Mr. BROADGATE. To this date, what has the principal work of the Operating Committee been?

Mr. YOUNG. The Operating Committee has reviewed and recommended stockpiling on some of the metals that it has considered. It has recommended certain projects that were to be undertaken. It has turned down some projects which have been submitted to it. It has carefully reviewed everything that has come before it.

Mr. BROADGATE. You have been largely engaged in reviewing projects rejected by other branches of the War Production Board.

Mr. YOUNG. No, we have reviewed the metals I have listed. I might tell you briefly, for instance, about the cadmium situation. We met and reviewed the cadmium situation, and we are trying to bring into production the only sources we know of where this cadmium is available.

Engineering studies are now under way, and when those studies have been completed, we will then determine whether we can get that production.

On fluorspar: We have made definite recommendations on fluorspar. We are working with the Bureau of Mines.

On zinc, there is a combined proposition for drilling and exploration of a large area in the old Webb City-Cartersville district that was brought jointly by the Bureau of Mines and the Division.

We have turned down the electrolytic manganese.

We have ready for review, starting the 16th of next month, the question of the recovery of alumina from clays and alunite. It involves a very large program that will come before us.

You want the things that have come before us in the past?

#### DECISION OF OPERATING COMMITTEE NOT FINAL

Mr. BROADGATE. I am particularly interested in knowing, and the committee is particularly interested in knowing, whether the decision of the Operating Committee is final.

Mr. YOUNG. No, the decision of no committee is final. It is passed up to the vice chairman you serve under. The final decision is made at the top.

Mr. BROADGATE. One other question regarding the War Production Board itself: You do not have any control over the copper, aluminum, steel, or ferro-alloys branches. Does that not make a rather disconnected organization picture in the War Production Board, not to have all the minerals under a single division?

Mr. YOUNG. I am not familiar with the history back of the reasons for that, Mr. Broadgate, but I think the establishment of the C. M. P. policy had quite a lot to do with it.

There is no reason why our committee cannot operate just as effectively with the divisions as of today, providing those in charge of the particular division cooperate with our committee as if we had direct charge of the operation.

#### ROLE OF FACILITIES BUREAU IN RELATION TO OPERATING COMMITTEE

Mr. BROADGATE. You have a man from the Facilities Bureau sitting on the committee.

Mr. YOUNG. That is right.

Mr. BROADGATE. And if I am not mistaken, there is a Facilities Bureau, a Facilities Clearance Board, and a Facilities Review Committee.

Mr. YOUNG. I think that is correct.

Mr. BROADGATE. Do you review the projects before they go to the Facilities Bureau?

Mr. YOUNG. The projects that we will review have already been to the Facilities Bureau. Some of them have been approved by the Facilities Bureau before coming to us, and others have been rejected.



Mr. BROADGATE. Do you find your recommendations usually get through the Facilities Bureau?

Mr. YOUNG. The only recommendation that we have made on a substantial amount of equipment was favorably passed upon by the vice chairman in review of a presentation made by the representative of the Facilities Bureau and by the Steel Branch and Alloy Division and chairman of the Coordinating Committee.

#### COPPER PROJECTS BEFORE THE FACILITIES BUREAU

Mr. BROADGATE. You were here day before yesterday, I think it was, when Mr. Podell listed a series of copper properties which had been before the War Production Board for many months and which had not cleared yet from the Facilities Clearance Board.

The committee has an additional list of properties which were obtained through Mr. Donald Nelson's office, entitled, "Tabulation of Copper Projects Before Facilities Bureau."

I do not think it is proper to put them in the record, but it is summed up in a letter Senator Murray sent to the President, when he said:

I have noticed, for example, that for some months no new or expanded copper programs have been approved by the War Production Board despite the fact that some 133,000 tons per year could be obtained additionally from domestic sources with very small outlays of men and critical materials. Part of this production could be obtained in a few months. Had approval been granted for certain projects presented last year some mines at present idle would now be productive.

I understand that those projects are being resubmitted. Are you familiar with the fact that the Facilities Clearance Board has not cleared a copper project in over 6 months?

Mr. YOUNG. I have been told that. We have had no experience on copper projects at all as yet. As soon as any copper project comes before the Operating Committee for consideration and we approve it, we will go with the Copper Division if it wishes to make the presentation to the Facilities Bureau.

Senator BUCK. Who is vice chairman?

Mr. YOUNG. Colonel Textor is the chairman, I believe, at present. I want to say this in behalf of the Facilities Bureau, we have had some small—

May I correct that? I find the Facilities Review Committee chairman is Capt. W. H. Smith, and the vice chairman is Donald N. Uthus, and Col. H. B. Boynton—

Senator SCRUGHAM (interposing). It seems to me there are quite a number of boards. This is the Facilities Bureau?

Mr. YOUNG. I will be very glad to give you the names of the committee, if you wish.

Senator BUCK. Let us have it for the record.  
(The names requested are as follows:)

#### MEMBERS OF FACILITIES BUREAU, FACILITIES REVIEW COMMITTEE, AND FACILITIES CLEARANCE BOARD

##### FACILITIES BUREAU

Col. Gordon Textor, acting head (regularly Deputy Director). No one has been appointed to replace Mr. Searls.

## FACILITIES REVIEW COMMITTEE

Capt. W. H. Smith, War Department, chairman.  
 Donald N. Uthus, Facilities Bureau, War Production Board, vice chairman.  
 Lt. Col. H. B. Boynton, War Department.  
 E. R. Bennett, Facilities Bureau, War Production Board.  
 E. D. Line, Office of Civilian Supply.  
 J. N. Franklin, Maritime Commission.

## FACILITIES CLEARANCE BOARD

Col. Gordon Textor, Deputy Director, Facilities Bureau, chairman.  
 Howard Bruce, War Department, Army Service Forces.  
 Brig. Gen. Bennett Myers, Army Air Force.  
 Joseph W. Powell, Navy Department, Office of Procurement and Material.  
 Rear Admiral E. M. Pace, Navy Department, Bureau of Aeronautics.  
 Rear Admiral Howard Vickery, Vice Chairman of Maritime Commission.  
 James W. Angell, Office of Civilian Supply (acting for regular representative, Maurice Wertheim).

Also the following part-time members who attend whenever there is a project being considered which concerns their agencies:

F. E. Shoup, Office of Defense Transportation.  
 Col. Bradley Dewey, Office of Rubber Director.  
 E. E. Robbins, Office of Petroleum Administrator for War.  
 Frank R. Wooley, Department of Agriculture.

## OBSERVERS

Jacob Crane, National Housing Agency.  
 John H. Martin, Program Implementation Branch, War Production Board.

There are also a number of other observers who attend quite regularly, but whose attendance is more or less informal, and no list is kept of them.

## FACILITIES DIVISION

Beverly Murphy, Director.

Senator ELLENDER. We would not expect you to remember them. There are so many.

Mr. YOUNG. I started to say this in regard to the Facilities Bureau. I know you gentlemen are thoroughly familiar with the program under which it has been necessary to crowd the things that seem first in the war program. The Facilities Bureau, according to the experience I have had with it, is very sympathetic to the problems that are presented providing that those projects are actually needed and can be brought into production without interfering with other must programs.

Senator BUCK. Does that committee get the first crack at projects that are presented?

Mr. YOUNG. You mean at present?

Senator BUCK. Yes.

Mr. YOUNG. That has been the policy, Senator.

Senator BUCK. They approve a project or turn it down?

Mr. YOUNG. But we are hopeful that it will come before our committee, and then we can join with the Division in going to the Facilities Bureau.

COMMITTEE HAS NOT FOUND ATTITUDE OF FACILITIES BUREAU SYMPATHETIC  
 IN CASE OF COPPER PROJECTS

Mr. BROADGATE. You state that the Facilities Bureau has been sympathetic. That has not been the experience of this committee in

analyzing cases before the Facilities Bureau. For example, on December 16 a gentleman appeared before this committee and told some of his troubles.

I have here a copy of the hearing. He made the statement that for the want of some 30 tons of steel he was unable to expand his copper mine from a production of 1,500,000 pounds of copper a year to 10,000,000.

In other words, the Facilities Bureau balanced 30 tons of steel against 8,500,000 pounds of copper, and turned the project down.

That does not look like a very sympathetic attitude.

This project was turned down last November 10, and has been kicking around the War Production Board since, and prior to that time.

I understand from a report we have from the War Production Board that this project has been presented several times and will be presented with another group of these projects of similar type.

This committee has not found that Facilities is particularly sympathetic to these small projects. Furthermore the study of the committee indicates that the amount of critical materials which would go into the domestic mining projects is almost infinitesimal compared with what would come out.

Here is a case of 30 tons of steel against 8,500,000 pounds of copper. I think the total amount of copper that would have been produced by the pending projects was about 133,000 tons per year.

Now, this study by the committee indicates that of the critical materials going into these projects, the copper that would have been consumed by the projects would be equal to 144 parts of the copper that would have been produced in a year.

In other words, it does not look as if there was a proper analysis, and it is known that the mining business produces many times more critical materials than it consumes.

Has that been taken up with the Facilities Bureau on this basis? Do you know, Mr. Young?

Mr. YOUNG. There have been no copper projects taken up with the Facilities Bureau to date.

Mr. BROADGATE. None at all?

Mr. YOUNG. As soon as copper projects come before our operations committee, we will be happy to join with them in going before the Facilities Bureau.

I want to make this plain, Mr. Broadgate. I am referring to my experience since I have been here in connection with the Facilities Bureau. I know nothing of the reasons why projects were turned down before that.

Mr. BROADGATE. I understand that the atmosphere is changing quite a bit in the Facilities Bureau, and I will say that the committee's contact with the industry indicates that the industry has the greatest confidence in you and also indicates that you will aid materially in pulling these small mine projects out of the hole.

Senator ELLENDER. Mr. Young, how long have you been the Coordinator of the Mineral Resources Division of the War Production Board?

Mr. YOUNG. Since January 30, 1943.

Senator ELLENDER. What is your background?

Mr. YOUNG. I have been connected with operating mining properties for 38 years.

Senator ELLENDER. For whom?

Mr. YOUNG. Thirty-five years of that has been primarily with one company, the American Zinc, Lead & Smelting Co.

Senator ELLENDER. How does this business compare with others in production of that property?

Mr. YOUNG. At this time we are the fourth largest producer of slab zinc in the United States, and you might be interested in knowing that our production has been increased 300 percent since 1939.

Senator ELLENDER. Who invited you to become a member of the Board?

Mr. YOUNG. Mr. Will Dodge and Chairman Nelson.

Senator ELLENDER. Who is Will Dodge?

Mr. YOUNG. Will Dodge was connected with the War Production Board in various capacities for about a year and a half, I think it was. He is sales manager, I believe, vice president and sales manager of the Texas Co.

#### REASONS FOR CREATING MINERAL RESOURCES COORDINATING COMMITTEE

Senator ELLENDER. Have you any idea why it was necessary to create this Mineral Resources Coordinating Division of the War Production Board?

Mr. YOUNG. I have an idea.

Senator ELLENDER. Will you kindly tell us?

Mr. YOUNG. The securing of minerals and metals for the war involves dealing with all agencies that have to do with domestic and foreign production. We had, on the one hand, the War Production Board and, on the other, the Bureau of Economic Warfare and the Reconstruction Finance Corporation and the Bureau of Mines and the United States Geological Survey who were all active in the program of metals and assisting in developing and looking for new deposits.

It was thought that by creating a coordinating committee or coordinating division all of those divisions could be represented and the program consolidated so that we would have a picture that would probably be more efficient than the way it had been handled before.

Senator ELLENDER. Are we to understand that these divisions and others you have not mentioned were engaged in obtaining materials, and so forth?

Mr. YOUNG. No; the War Production Board, the Bureau of Economic Warfare, and the Reconstruction Finance Corporation were. The others, the Bureau of Mines and the United States Geological Survey, were assisting the producers.

Senator ELLENDER. And the idea of establishing this Board was to coordinate the efforts of all these various branches of the Government?

Mr. YOUNG. It makes it much more efficient, Senator.

#### DIFFICULTIES CREATED FOR SMALL MINE BY NUMBER OF BOARDS HE MUST CONTACT

Senator ELLENDER. That is what I was trying to determine, whether it made it more efficient.

It strikes me that you have added a few more cooks to the kitchen, which has made it a little worse, probably a little harder for the miner to obtain help.

I think I am somewhat familiar with the case suggested here by Mr. Broadgate. If not, it is a similar one, and this poor devil came

to me. I did not know him from Adam's house cat; he was a stranger to me, and probably because I was a member of this committee he asked me for help.

From his story he was simply buried knee deep in going from one board to another and then from another to another until he did not know where he stood, and I am just wondering why it is not possible to get quick action.

In other words, to my way of thinking, there should be no reason for a man to have to spend 6 months getting a yes or no answer as to whether or not he should proceed with a certain proposition, and yet I am positive that in this case probably even more time has been idly spent in getting that answer, Yes or No.

Would you agree to that?

Mr. YOUNG. When you take into account the set-up we have in the Government, it is necessary to go to a number of divisions.

Senator ELLENDER. Of course, that is what—

Mr. YOUNG (interposing). You find out whether the project is needed, and they have to find out whether they can get the money and what kind of arrangements can be made.

#### STEPS NECESSARY TO OBTAIN APPROVAL OF A COPPER PROJECT

Senator ELLENDER. That is what I am complaining about.

Would you be able to tell us, and if you are, I would be surprised, but suppose I am a copper miner and I have been producing say 2,000,000 pounds of copper per month. I want to increase my capacity to treble that amount. What would I have to do to obtain the material, and so forth? Where would I start?

Mr. YOUNG. You would start with the Copper Division, talk with the Production Department, and give all the engineering data.

If the Copper Division decided your project had merit, and you could produce what you thought, and the material was needed, and you had the manpower you thought you could get, it would approve.

Senator ELLENDER. Would it decide on the manpower?

Mr. YOUNG. It would review the manpower picture to find out what the situation is. It would not want to say right off the bat, if you started your mine, if it was going—

Senator ELLENDER (interposing). How would the Copper Division find that out?

Mr. YOUNG. From you.

Senator ELLENDER. Would the Division take my word for it?

Mr. YOUNG. And make an investigation through the U. S. E. S.— I think that is the United States Employment Service.

Senator ELLENDER. Who would do that, this original board I went to?

Mr. YOUNG. The Copper Division would do that.

Senator ELLENDER. It would have to consult whom?

Mr. YOUNG. I will be perfectly frank with you, I cannot say what personnel.

Senator ELLENDER. I do not mean persons; I mean what boards?

Mr. YOUNG. No boards that I know of. They could pick up a telephone and find out what the picture was in those various places.

Senator ELLENDER. Then after I got clearance from copper, what would I do?

Mr. YOUNG. You would go around to the Equipment Division to see whether the equipment was available. Assuming the equipment is available, then if you need financial assistance they would probably have you go over and talk to the Metals Reserve, if it was domestic property. After you found out you could get the financial assistance, then you would come back, and the project would be put through the Facilities Bureau, and you would go over and get the money.

Senator ELLENDER. Would the Facilities Review Committee have the power to veto all that these prior boards or persons connected with the Government have done?

Mr. YOUNG. I am not familiar with the powers that committee has in the War Production Board, but I will tell you what my experience is, that the Vice Chairman reviews the matter, and assuming that there is a difference between the Board and the Division asking for the facilities, they can appear before that Vice Chairman, and his decision as far as the War Production Board is concerned is final.

Senator ELLENDER. Is he on the Facilities Review Committee?

Mr. YOUNG. No, sir; he is Vice Chairman of the War Production Board.

Senator ELLENDER. Is there not some board or some official in between the Copper Committee and the final decision?

Mr. YOUNG. That is right.

Senator ELLENDER. Would that board have a veto power over what the Copper Committee would do?

Mr. YOUNG. I would like to ask a gentleman in the Legal Division, who can tell you. I do not know.

Senator ELLENDER. I am not surprised that you do not. Remember, I started on that premise.

Mr. YOUNG. I do not know just what power they have, but I should say the Facilities Bureau is charged with the responsibility and should be the one who should say whether you could have the equipment or could not, within the limits of its authority, which is under the Vice Chairman. If there is a difference between your judgment and its judgment and that of the Copper Division, then you could go to the Vice Chairman, who has authority to rule either for or against you.

Senator ELLENDER. Would you say the committees, boards, and persons under the Vice Chairman simply act in an advisory capacity?

Mr. YOUNG. They do not.

Senator ELLENDER. Would it be possible for the Vice Chairman to say, "Throw it all out the window," whatever the boards have done? Would it be possible for him to do that?

Mr. YOUNG. The Vice Chairman's and the Chairman's decision, would be final.

Senator ELLENDER. In other words, what he could do would be to override all that the boards had done to the point when it comes to him.

Mr. YOUNG. I think from a theoretical standpoint you are absolutely right, but from a practical standpoint there is no such policy or attitude. I have noticed that in the War Production Board they see the merits of these things, and they have to review first things first. They have information that we in our Division do not have and that the Copper Division does not have, and they have to meet

the situation that seems to be the most important thing to do to expedite the war effort, and that is the basis on which every decision is being made.

Some of them are wrong, but most of them are right.

WHY MUST EACH MINERAL BE HANDLED BY A SEPARATE GROUP?

Senator ELLENDER. Does the same thing hold true with respect to other miners, that is, in the production of iron, let us say, or manganese or other materials?

Have you in the Government a separate and distinct board or group of people or persons to handle each different mineral?

Mr. YOUNG. That is right.

Senator ELLENDER. Why is that necessary?

Mr. YOUNG. It is necessary in order that you may keep a close check on the production and in the development of the particular metal or the transportation of it.

Let us take copper. You are interested in copper. You have a man in charge of copper, and he has under him the necessary assistants to keep a check on the development and production and the refining and the distribution of labor cost and transportation, the stockpiling, and all factors that are present.

Senator ELLENDER. What kind of force does the committee or head man have? He has to have a thousand and one clerks.

Mr. YOUNG. No, sir; I can tell you how many we have on zinc, which is an important item. We have 61 people.

Senator ELLENDER. All you deal with is zinc?

Mr. YOUNG. No; we deal with zinc and cadmium.

Senator ELLENDER. What?

Mr. YOUNG. We deal with zinc and cadmium.

Senator ELLENDER. Why would it not be feasible to add others?

Why could you not put copper there?

Mr. YOUNG. You would add onto the staff when you add others.

Senator ELLENDER. Transportation of copper and zinc would be practically the same.

Mr. YOUNG. No; it would not be the same. On copper you bring a lot of refined copper in here and a lot of copper concentrates.

Senator ELLENDER. Bring it in from where?

Mr. YOUNG. From South America, primarily.

On zinc, you are moving concentrates from Africa, South America, Canada, Newfoundland, and Australia.

You do not necessarily move copper from the same places you move zinc. One man could head all the divisions, but he would necessarily need good assistants under him to handle these individual problems.

Senator ELLENDER. It strikes me offhand, and I don't know much about it, but it looks to me from a distance that there is a lot of duplication.

Mr. YOUNG. There is bound to be some duplication, Senator.

Senator ELLENDER. I am assuming a lot of what I stated. Of course, I may be wrong about it, but I cannot for the life of me see why it is necessary for persons trying to help this war effort to resort to so many boards and persons connected with this, that, and the other thing before being able to get an answer.

It strikes me that when you have an organization, a coordinating division, that you ought to be able to get a quick answer on anything when any proposition is placed before it.

Mr. YOUNG. We can give a quick answer, but our answer is not the final one.

Senator ELLENDER. Well, that makes it worse, of course.

Would you be able to tell me how many different boards, let us say, handle copper or zinc or other strategic materials or metals?

Mr. YOUNG. There is one division that handles each.

Senator ELLENDER. Let us take the Copper Division.

Mr. YOUNG. You mean the total number?

Senator ELLENDER. The total number. You start off with what?

Mr. YOUNG. We have eight operating divisions handling all metals, including steel. Five of those are under the Minerals Bureau.

Senator ELLENDER. What is the total?

Mr. YOUNG. We have branches. For instance the Steel, Copper, Aluminum, Manganese, Miscellaneous Minerals, Mica-Graphite, Tin-Lead and Zinc Divisions, and the Mining and Equipment Divisions.

Senator ELLENDER. That is eight altogether?

Mr. YOUNG. That is right.

Senator ELLENDER. They handle what?

Mr. YOUNG. The Steel Division is charged with all the problems in connection with the mining of ore and the making of alloy steel, steel production, steel labor, and transportation, every item in connection with steel.

Senator ELLENDER. Is that one of the eight divisions?

Mr. YOUNG. That is one of the eight divisions.

Senator ELLENDER. Let us take that Steel Division. How is it subdivided, do you know?

Mr. YOUNG. I could not answer.

Senator ELLENDER. Do you know what kind of force they have?

Mr. YOUNG. It takes a large force, the largest force of any branch in the W. P. B., I believe.

Senator ELLENDER. That is all, thank you.

#### DO DIVISION HEADS HAVE ENOUGH AUTHORITY?

Senator BUCK. Mr. Young, perhaps some confusion is brought about by the heads of these divisions not having ample authority.

Take yourself, for instance, do you have the authority you think you should have?

Mr. YOUNG. Under present conditions I think I have. You realize, Senator, that this is a new committee or a new division. Thus far we have gotten along very well with the type of set-up we have. We are dealing with metals produced all over the Allied world, and that, as you can appreciate, makes for a rather complicated situation, and I believe that we can accomplish the best results with our present set-up provided everybody cooperates with that committee.

Senator BUCK. Yes; but will they?

Mr. YOUNG. I do not know.

Senator BUCK. That is the time you need your authority.

Mr. YOUNG. That is right.



Senator ELLENDER. Since your committee has been functioning, have there been any serious differences of opinion among or between the various divisions that you are seeking to coordinate?

Mr. YOUNG. I do not exactly understand your question.

Senator ELLENDER. You are trying to coordinate the Bureau of Mines, the Reconstruction Finance Corporation, and a lot of others you have mentioned.

Since you have started, has there been any division of opinion between them, or have any been resentful or jealous of each other?

Mr. YOUNG. No; there is a difference of opinion. That is the real value of our set-up, because you get the opinion of everyone there, both those for and those against what you are considering.

That is the real value of it. You get all those ideas together, and you can determine what seems to be the best thing to do.

#### EXTENT OF DUPLICATION AMONG BOARDS AFFECTED BY COORDINATING DIVISION

Senator ELLENDER. Would you say that there is duplication or that there is now duplication of these various boards you are now trying to coordinate?

Mr. YOUNG. There is, necessarily so, on account of the set-up of the Bureau of Economic Warfare. There is bound to be. The Bureau of Economic Warfare has to work under one directive, and the War Production Board under another. There is some duplication, but not much.

Senator ELLENDER. Do you not think a lot of this work could be facilitated if there were less duplication?

Mr. YOUNG. It is always very desirable to have it simplified as far as you possibly can.

Senator ELLENDER. It strikes me, if it is possible to simplify, that you have just indicated that this new Board of Coordination would not be necessary.

Mr. YOUNG. Maybe it would not.

Senator ELLENDER. That is all.

Senator BUCK. I have no other questions to ask Mr. Young.

Mr. YOUNG. Mr. Chairman, on account of your interest in small business, I thought probably you would like to have some information in the record as to what is being done.

Senator BUCK. I will be very glad to have it.

#### ASSISTANCE GIVEN SMALL MINERS BY RECONSTRUCTION FINANCE CORPORATION

Mr. YOUNG. Inasmuch as your committee is vitally interested in assisting the small operators to produce needed metals and minerals, I thought you would be interested in knowing what has been done in this respect in 1942 and the first 2 months of 1943 by the Reconstruction Finance Corporation.

Total commitments during the past 14 months to all small operators amounted to approximately \$4,000,000 to assist in mineral and metal development, this sum going to 448 different projects. 258 of these 448 loans averaged \$3,943 each and applied to projects involving 10

different strategic metals and minerals in 18 different States and totaled over \$1,000,000.

190 of the 448 commitments were to mine operators in 24 different States and Alaska in connection with projects to produce 18 different strategic metals and minerals. The average of these loans was \$15,360, and their total amounted to \$3,000,000.

The premium price quota applying to copper, lead, and zinc covers all new production of these metals, and recently the price applicable to zinc and lead has been increased to a point where today a zinc producer can receive a price as high as 16½ cents a pound, which is 100 percent above the ceiling price. In lead the maximum price is 12 cents per pound. In copper the maximum quota price at this time is 17 cents per pound, but special contracts have been made in which Metals Reserve has paid as high as 26½ cents per pound for copper.

These premium price quotas are now being paid to about 1,200 companies, and the total money expended will be in excess of \$4,000,000 per month by the end of June of this year. Quotas have been issued to 2,127 mines.

Special consideration has been given to mining companies to enable them to push necessary development work so that they can continue their present rate of production over a long period of time.

Senator BUCK. We are very glad to have that for the record.

Mr. Young. And I will give for your record a distribution of the number of projects for each metal.

Senator BUCK. We will be very glad to have that.

(The tables referred to are as follows:)

Statement of development loans approved Jan. 1942 through Feb. 28, 1943, segregated by principal metals

State	Lead-zinc		Copper		Tungsten		Manganese		Chrome		Mercury		Fluorspar		Graphite		Iron		Nickel	
	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount
Alabama															2	\$40,000				
Alaska					1	\$20,000			2	\$40,000										
Arizona	17	\$274,000	5	\$69,000	4	63,000	4	\$36,000			1	\$20,000	2	\$14,000						
Arkansas	2	40,000									3	52,000								
California	4	80,000	1	20,000	20	317,500	6	88,000	4	51,000	4	71,000								
Colorado	14	244,000	1	15,000	6	78,000							1	5,000					1	\$20,000
Idaho	2	20,000			1	10,000	1	10,000												
Kansas	6	97,000																		
Kentucky	2	35,000											2	27,000						
Michigan			1	20,000																
Missouri	6	88,000																		
Montana	3	47,000					2	25,000	1	10,000							1	\$10,000		
Nevada	2	42,500			3	37,500					3	80,000								
New Mexico	3	97,000	1	10,000			1	10,000					1	20,000						
New York	1	40,000																		
North Carolina	1	6,000	1	20,000																
Oklahoma	2	40,000																		
Oregon	1	20,000							1	6,000	2	15,500								
Pennsylvania															1	20,000				
South Dakota					1	20,000														
Texas			1	20,000									1	20,000						
Utah	5	75,000					1	20,000												
Washington	1	20,000			1	5,000														
Wisconsin	6	107,000																		
Wyoming							1	7,000												
Total	83	1,372,500	11	174,000	37	561,000	16	196,000	8	107,000	14	208,500	6	66,000	3	60,000	1	10,000	2	40,000

Statement of development loans approved Jan. 1942 through Feb. 28, 1943, segregated by principal metals—Continued

State	Tin		Quartz crystals		Beryl		Steatite talc		Rutile		Magnesium		Antimony		Vanadium		Total	
	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount
Alabama.....	1	\$20,000															3	\$60,000
Alaska.....																	3	80,000
Arizona.....																	33	470,000
Arkansas.....									1	\$18,000							6	107,000
California.....			1	\$10,000													40	637,800
Colorado.....					1	\$20,000											24	342,000
Idaho.....																	4	40,000
Kansas.....																	6	97,000
Kentucky.....																	4	62,000
Michigan.....																	1	20,000
Missouri.....																	7	98,000
Montana.....							1	\$7,800									7	89,800
Nevada.....													1	\$11,000			10	121,000
New Mexico.....																	10	137,000
New York.....																	1	40,000
North Carolina.....																	2	20,000
Oklahoma.....																	2	40,000
Oregon.....																	4	41,800
Pennsylvania.....																	1	20,000
South Dakota.....																	1	20,000
Texas.....											2	\$40,000					4	80,000
Utah.....															1	\$10,000	7	106,000
Washington.....																	3	45,000
Wisconsin.....																	6	107,000
Wyoming.....																	1	7,000
Total.....	1	20,000	1	10,000	1	20,000	1	7,800	1	18,000	2	40,000	1	11,000	1	10,000	190	2,918,800

PROBLEMS OF AMERICAN SMALL BUSINESS

Statement of "\$5,000" loans through Feb. 28, 1943, segregated by principal metals

State	Lead-zinc		Copper		Tungsten		Mercury		Manganese		Chromium		Molybdenum		Tin		Quartz crystals		Total	
	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount	Number loans	Amount
Arizona.....	22	\$101,000	24	\$147,500	2	\$10,000	1	\$5,000	1	\$5,000			4	\$20,000					64	\$288,500
Arkansas.....	3	11,000																	3	11,000
California.....	8	12,800	6	24,800	3	8,500	10	47,500	9	34,500	7	\$28,600					1	\$5,000	40	161,550
Colorado.....	45	147,525	8	21,800	20	86,000							2	10,000					75	245,325
Idaho.....	6	23,200	4	13,500															10	36,700
Kansas.....	1	1,500																	1	1,500
Missouri.....	5	19,500																	5	19,500
Montana.....	10	40,700	2	7,000					2	10,000									14	57,700
Nevada.....	7	23,000	2	10,000															9	33,000
New Mexico.....	7	33,550	2	10,000					1	5,000									10	48,550
Oklahoma.....	8	13,000																	8	13,000
Oregon.....	3	10,000	2	8,500			1	2,000	1	2,400									7	22,900
South Dakota.....															1	\$5,000			1	5,000
Texas.....			1	5,000															1	5,000
Utah.....	5	21,000																	5	21,000
Virginia.....									1	2,900									1	2,900
Washington.....	3	14,000	3	15,000									1	5,000					7	34,000
Wyoming.....			1	5,000	1	5,000													2	10,000
Total.....	123	471,475	68	267,800	26	89,500	12	54,500	15	59,850	7	28,600	8	35,450	1	5,000	1	5,000	238	1,017,175

Mr. BROADGATE. Senator, may I ask the witness another question?  
 Senator BUCK. Yes, sir.

POLICY ON PREMIUM PRICE PLAN CHANGES

Mr. BROADGATE. Is your committee consulted on Premium Price Plan changes?

Mr. YOUNG. The chairman of the quota committee consults with us freely on matters where there is any difference of opinion between the agencies that are represented on that committee.

These agencies are the War Production Board, Copper, Lead and Zinc Branches, and the Office of Price Administration, and they make their recommendations to Metals Reserve.

Mr. BROADGATE. I was not referring to particular properties under the present plan, but if there is any intention of changing the structure of Premium Price Plans or adding a premium, which is a matter more or less of policy, would that be apt to come before your committee for review and recommendation?

Mr. YOUNG. That would depend entirely on the policies of the present set-up. It is not required that it come to us for review, but I think it would.

Mr. BROADGATE. That committee has information to the effect that at the time the advances in the zinc and lead premiums were made it was also proposed to increase the copper premium by an additional 5 cents. The committee has not been able to discover why that was not done. Do you know?

Mr. YOUNG. I do not. Our committee had not been organized at that time.

Mr. BROADGATE. I thought you would possibly know in spite of that.

Would your committee, do you think, or would you, personally, be inclined toward an increase in the copper premiums to bring out more domestic production?

Mr. YOUNG. It seems the three metals should have three steps in the quota—A, B, and C steps—but as yet they have not seen the wisdom of putting copper except on an A basis.

Mr. BROADGATE. It has been the position of this committee that copper should also have a step quota.

Do you know if there is any move at the present time to make a step quota arrangement for copper?

Mr. YOUNG. I understand that it is being considered but has not been presented to our committee for consideration.

Mr. BROADGATE. Thank you, Mr. Young.

Senator BUCK. Thank you very much, Mr. Young.

I would like to announce that the hearings will be resumed this afternoon at 2:30, when Mr. Donald Nelson will testify.

(Whereupon, at 12:15 p. m., the hearing was recessed until 2:30 p. m., this date.)

AFTERNOON SESSION

(The subcommittee resumed hearing at 2:30 p. m.)

Senator SCRUGHAM. The hearing will come to order, please.

We have with us this afternoon Mr. Donald Nelson, who, I am very happy to say, has done a splendid job, I think, and the effort of this meeting is to endeavor to assist him in coordinating certain phases of his work in which we are particularly interested.

Mr. Nelson.

**STATEMENT OF DONALD M. NELSON, CHAIRMAN, WAR PRODUCTION BOARD**

Mr. NELSON. Would you like me to read this short statement?

Senator SCRUGHAM. Yes, sir.

Mr. NELSON. Then if there are any questions, I shall be glad to answer them. I attempted in this to give a brief statement of the policy. Necessarily, it must be brief, because it would take a long time if we tried to tell you everything we have tried to do.

**TO WIN THE WAR, PRODUCTIVE CAPACITY MUST BE USED TO THE MAXIMUM**

Our prime purpose is to win the war, as conclusively and expeditiously as possible. To win the war as conclusively and expeditiously as possible, we must use at all times our productive capacity—men, machines, materials—to the maximum. We must try at all times to get the utmost out of our productive capacity, but what we get out of it must differ from time to time. Great as our resources are, they are not great enough to do everything at once. That is, we must make selections and choices as to what to do now and what to do later.

So far as the securing of strategic and critical metals and minerals is concerned, I have long advocated the policy of maximizing our supplies by every available means. By saying this, I mean that I believe we must maximize our domestic production of new materials, must maximize our recoveries of scrap, and must maximize our imports. In other words, the only prudent national policy for us to follow, in order to hasten and make sure the winning of a total victory, is to provide ourselves, and through ourselves, our allies, with every possible pound of critical materials upon which, as we all know, victory must rest.

**BALANCE BETWEEN MAXIMUM FINISHED PRODUCT AND MAXIMUM RAW MATERIALS PRODUCTION**

But I think it appropriate in this connection to distinguish sharply and clearly between maximizing finished product production, on the one hand, and raw materials production, on the other hand. This distinction has often been expressed by the term "seed corn." At any one time, we can elect to use our basic raw materials for the manufacture of end products—the guns, ships, planes, and other goods used for direct impact upon the enemy. Or, conversely, we can elect to put all our scarce materials back into the facilities, such as mining equipment, mining supplies, smelting and refining plants, and so on, which later on will yield far greater quantities of materials and therefore ultimately far greater quantities of munitions of war.

To go to either extreme would obviously be foolish at any time, and to have gone to either extreme after the declaration of war would have been well-nigh fatal. Our problem has been to strike the best possible balance between 100 percent finished goods production and 100 percent expansion of facilities, here and abroad, for future supplies of raw materials.

The year 1942 was a most crucial one, so far as laying down policies for maximizing production was concerned. It was a year in which the armed forces were being rapidly increased; a year in which we had, with great haste as a sheer matter of self-protection, to equip our armed forces with the tremendous quantities of military finished products needed to convert the Nation from a peace to a war basis. Not only did we have to supply the original equipment and arms for vastly increased military forces, but we had also to establish full depots of reserve supplies all over the world behind our advancing fighting lines. This process of providing original arms and equipment, and then seeing to it that the pipe lines of supply would be filled to the limit, imposed upon us a policy of maximizing finished goods production in the sense of devoting a minimum of scarce materials to expansion aimed at future increases in raw materials beyond the year 1943.

During the year 1942, therefore, sound policy, in my opinion, dictated the postponement of many otherwise acceptable projects which were designed to provide future supplies of raw materials. Current output of finished weapons of all kinds was too urgently needed to permit a theoretically nicely adjusted policy of seed corn and food corn.

#### NOW POSSIBLE TO GIVE MORE WEIGHT TO LONGER RUN EXPANSION PRODUCTION

Very early in the current year 1943, however, I foresaw that the time would soon arrive when we could safely begin revising our relative weights upon immediate production as contrasted with future production, and, among other steps, I took the step of establishing a Minerals and Metals Coordinating Committee, the organizational aspects of which you have had described to you by the chairman of the Committee, Mr. Howard I. Young. You know, therefore, that the functions of that Committee are to review projects for metals and minerals production, to initiate such projects as it may deem proper, and to advise me concerning changes in policies and procedures.

I am sure that Mr. Young agrees with me that we are now entering upon a period in which longer run expansion projects can be given much more weight, relative to last year's urgent insistence upon finished military goods. As a long run policy, we shall be moving toward an optimum distribution of materials between needs for expanding raw material production and needs for current production of finished goods.

#### PROGRAM FOR OPENING OF NEW MINES

Translated into immediate steps, this long run policy means that we are actively working on opening a substantial number of new mines. This program will be pushed aggressively. This is a metal war, but even more important, this is a metal world. By this I mean that the machines that turn out weapons, our transportation system, our power production and transmission system, our vast and vital communication system, and many other aspects of our basic



economy must be maintained by metals—metals which wear out and have to be replaced. Only for very short periods can we live on our fat and withhold metals from these uses.

Nevertheless, it would be most unwise to attempt now to lay down general policies applicable to all scarce and strategic materials alike. We must, on the contrary, proceed with an attitude of careful discrimination. Within the general policy of maximizing production for the attainment of prompt and complete military victory, we must constantly review our specific production goals, throwing emphasis now upon one kind of production, and later upon another kind. The changing nature of strategic and tactical military needs gives us no free option; the war comes first, and we must remain both flexible and alert to take every advantage of military opportunities as they open up before us.

#### SMALL QUANTITIES OF RAW MATERIALS ARE IMPORTANT

However, one thing has become perfectly clear to all of us concerned with policy making, and that is that small quantities of raw materials are of the utmost importance. Last year, of necessity, our efforts were concentrated upon getting the most we could, as fast as we could, from whatever sources of supply stood ready and able to provide us with the tremendous quantities which we had to have. Henceforth, we can look much more aggressively for every additional source that can be found or can be established. If large numbers of small producers of a scarce metal, for instance, can supply us with a few hundred tons per year, even though their percentage contribution seems small, we shall weigh that contribution as a most desirable addition to our supplies, even though it is only 1, 2, or 5 percent of the total supply in sight. Within the limits of our manpower and equipment possibilities, we shall pursue the policy of operating all producers, large and small, to the fullest possible extent.

#### FOREIGN SUPPLY TO BE BROUGHT IN BY INCOMING SHIPPING

And we shall also continue to bring to our shores every increment of foreign supply that can be borne by our incoming shipping. I say this with no thought of discriminating against our domestic producers, for we shall want to have, safely here on our soil, the total procurable supplies of every critical and strategic material. Our supply ships necessarily visit many ports of the world. It seems to me plain common sense that their return voyages should be used to the utmost to bring in materials that we need. I would put this limitation on that policy, that in loading return cargoes, ships should not be diverted so far from their regular runs or delayed so much at the turn-around that they become less available as military supply ships.

If we find that by so doing we have surpluses over and above current needs, then we shall recommend stockpiling such surpluses against a future time of need. If we are so fortunate as to come to the end of this war with reserves still on hand and unused, then, it seems to me, arrangements should be made for permanent stockpiles to be used only in periods of future crisis, military or otherwise, according to the criteria governing use to be determined by Congress

itself. And very possibly domestic producers should be encouraged to add to such stockpiles for a definitely stated period after the end of the war, in order to smooth out the many readjustments of the post-war period.

ANSWERS TO SUBCOMMITTEE'S QUESTIONS ON STRATEGIC MINERALS POLICY

The committee has asked for my answers to a number of specific questions. These answers are appended in brief terms, for such elaboration as the committee may request.

Would you like to have me answer those questions now, sir?

Senator SCRUGHAM. Yes.

Mr. NELSON. The first question you have asked is, "Should supplies of strategic and critical materials be planned for through 1944, 1946, 1948?"

For practical purposes, I believe we can well distinguish three degrees of planning—one degree of planning is full detailed production planning with actual investments now of materials, equipment, and manpower to secure production. This type of plan, I believe, should generally be extended through the end of 1944, and for some minerals, when the preparation period is very long, for whatever period necessary.

A second degree of planning is exploration and determination of reasonably satisfactory sources of materials with full proving of reserves and detailed paper plans as to how they are to be exploited. This type of planning should be generally extended through 1946, and for some minerals through 1948.

Finally, we should have general plans to meet contingencies if they should develop, for all critical minerals through 1948.

Second: "By how much can domestic production of strategic and critical materials be increased by the end of—1944, 1946, 1948?"

For many minerals, W. P. B. witnesses have submitted figures in confidence. I will be glad to submit any others the committee may request. In general, some can be increased materially, and others need constant effort to maintain present rate of output.

Third: "Should it be our policy to rely as much as possible on imports or to maximize production in North America—in the continental United States?"

I believe our policy should be to get the maximum possible output in North America and to bring in as much as we can from overseas.

Fourth: "Should the fullest possible use be made of small and marginal ore deposits?"

In general I believe it should be our policy to make the fullest possible use of small and marginal ore deposits, subject to these limitations:

(1) That the return in usable minerals is sufficient to justify the use of critical materials and equipment;

(2) That the return in usable minerals is sufficient to justify the use of manpower, not only in operation of the mine, but also in the construction of access roads and similar facilitating construction.

Fifth: "What policies should we follow in regard to building up stockpiles of strategic and critical materials during the war?"

If we can secure supplies of particular strategic and critical materials in excess of our ability to use them currently in production for

essential uses, I believe we should endeavor to build up stockpiles to insure us against unforeseen developments.

Sixth: "To what extent should the money cost of increased production be a factor in deciding whether or not to increase production?"

In my judgment money cost should not be a controlling factor in deciding whether or not to increase production. In any particular project, output of product per unit of labor, expenditure of materials and equipment per unit of output, availability and reliability of transportation, and time required to secure a usable product are all factors of more importance than money cost. To some extent, of course, money cost is a shorthand way of expressing manpower and materials requirements, but we should always look primarily at these factors directly—that is, at manpower and material requirements.

By using the phrase "money cost" I am seeking to emphasize the fact that in this war money must be regarded as a means to an end, and not as a measure of the value of that end. The ends we have in mind—complete and speedy military victory—are to be measured only in terms of the lives of our fighting men and the security of the Nation.

But I also must make clear that so far as price to any particular producer is concerned, it is a governing principle that the price paid bears a reasonable relation to the costs of production and the earning of a fair return over the costs of each separate producer.

Seventh: "Should the production of strategic and critical minerals have first call on manpower, materials, and equipment?"

In my judgment it is doubtful whether we should lay down a rigid long-time policy that one or another possible use of manpower and equipment should have first call over all others. Our problem is rather one of balancing a great variety of competing important needs with the objective of getting the largest possible output which we can use to get an impact against the enemy or to maintain our minimum essential civilian economy.

Within this broad limitation, however, I believe our policy should be to assign a very high preference so far as manpower goes to the relatively small needs of domestic mining. We should make even more aggressive efforts to provide labor by recruiting and training, for existing mines and for new projects.

With respect to equipment, our first policy should be to use all existing idle mine facilities and equipment, either in their present locations or elsewhere, for the production of critical minerals. So far as new equipment goes, our policy, I believe, should be to provide it when the return in critically needed minerals is substantial, subject to the needs of the so-called "must" programs. Very often it will develop that a mining project can go ahead with improvised equipment, providing low dollar cost is not insisted upon by the Government.

#### POST-WAR MINERALS POLICY

Now, you asked me some questions about the post-war mineral policy, and I must confess that I have not given that a great deal of thought. We have been immersed in the primary job, and I have been doing some thinking that is not thoroughly thought through, but I shall be glad to give you the benefit of the preliminary thinking if you would like to have it.

Senator SCRUGHAM. Yes.

Mr. NELSON. One: "Should the Nation now adopt a policy of having stockpiles of critical minerals covering, say, 3 years' military requirements during the post-war period?"

I am heartily in accord with the general principle of having the Government maintain stockpiles of strategic and critical materials for war purposes.

Two: "If so, should these stockpiles be absolutely frozen for war purposes?"

I believe they should be frozen for war purposes. Otherwise there will always be the risk that they will not be available if war comes.

However, I should say I believe there should be some flexibility to take care of other crises in minerals than just war and, by some method of safeguarding that Congress will put on it, then make it available for use for some other crisis, such as a drought, that might arise through not having the minerals available.

Three: "If so, should any unused balances of stockpiles accumulated during this war be transferred to the permanent stockpiles?"

It is conceivable that emergency conditions at the end of the war would dictate the use of such materials. In general, however, I believe we should plan to transfer unused balances in war stockpiles to the permanent stockpile.

Four: "If so, should plans be made now to build up these post-war stockpiles by continuing production from mines brought into production or expanded during the war, including the payment of premium prices where necessary?"

I find it very difficult to give a categorical answer to this question, in view of uncertainty as to the conditions which will prevail at the end of the war. I doubt if the national welfare would be served by legislation which is rigid on this point.

Senator SCRUGHAM. Thank you, sir, for a very excellent presentation.

I will read over briefly the suggestions made by the committee, which you have answered in large part, and then we will review them to see what we have uncovered.

Mr. NELSON. All right, sir.

Senator SCRUGHAM. It was the opinion of the committee in its discussions that these problems can be resolved about declarations of policy, flexibility of policy; and any legislation which might be proposed or passed by this Congress is of course subject to change by succeeding Congresses.

Mr. NELSON. Quite naturally.

#### OBTAINING MINERAL REQUIREMENTS AS MUCH A PRODUCTION TASK AS ACTUAL PRODUCTION OF WEAPONS

Senator SCRUGHAM. But, taking things as they are at this time, I make this suggestion: The obtaining of the required amounts of metal and minerals is a production task that calls for the same type of production planning and scheduling as that which is necessary for the production of the weapons of war themselves.

There is no question about that statement, is there?

Mr. NELSON. None at all. None at all, sir. I would be 100 percent in agreement.

## NECESSITY FOR ADEQUATE STOCKPILES

Senator SCRUGHAM. Our second suggestion was: In the computation of wartime requirements for essential metals and minerals, full provisions must be made for the possibility of a long war and for the necessity of building up adequate stockpiles. A definite plan should be devised for the continuation of such stockpiles in the hands of the Government after the war as insurance against dumping and against future emergencies.

Now, commenting on this particular phase of it, in 1934, when I was a member of the House, it was proposed that so many millions of dollars be invested in a stockpile of strategic minerals.

This was not supported by the military forces. I have reports made by the Army officers and Navy officers which went so far as to state that it was a scheme of some of the mining agencies to have their properties subsidized by the Government.

But the fact remains that there is now a widespread and general understanding that it was a mistake not to stockpile those materials at that time?

Mr. NELSON. I am sure that is true, Mr. Chairman.

Senator SCRUGHAM. And the next point, following the line of this question: Immediately after the last war orders for large numbers of strategic minerals were canceled, and I personally handled, as late as 1929 or 1940, appropriations for claims for something that happened 20 or 22 years ago.

The cost of examining those claims was without doubt as great or greater than if we had bought the minerals outright, the whole portion. That leaves the conclusion that it is wise policy not to cancel orders at the end of this emergency but to let them continue in order to accumulate stockpiles.

Is that a sound statement, do you believe, as a matter of policy?

Mr. NELSON. Yes; I do, Mr. Senator, in general. That would vary with each specific mineral and each specific situation. I really believe that a sound policy must be devised soon, and I will certainly be glad to assist the Congress in any way that I can in the settlement of it, looking forward to the conversion—the reconversion, if you please—of the whole economy from a war economy to a peace economy; and I look upon the production of minerals as being one of the important phases—that the reconversion be accomplished in such a way that it will not cause violent disruptions to the economy and make it impossible for us to get started on peacetime production.

## MUST DEPEND UPON DOMESTIC RESOURCES IN TIME OF WAR

Senator SCRUGHAM. Now, a corresponding statement or approach would be that we must depend on our own resources in time of war, due primarily to the necessity for conservation of shipping.

That question would justify the Government in going to the length of even subsidizing production and building stockpiles for future emergencies; by subsidizing, I mean furnishing those things that may be necessary to bring about normal production.

In this connection I may say that I have 2,000 reports of various prospects submitted by the Bureau of Mines and other agencies which have made prospects in the past 10 years or more.

Of this 2,000 perhaps 95 to 98 percent are highly marginal.

Perhaps the remaining 5 percent or 2 percent would obtain under ordinary commercial conditions, but the principle must be recognized that these minerals are being produced as an element of national defense, principally for stockpiling.

I will ask the witness whether that is the right principle.

#### MANPOWER PROBLEM IN INCREASING DOMESTIC CONSUMPTION

Mr. NELSON. Well, as a general principle, I think there could be no quarrel. I think we must always bear this in mind, however: In thinking in terms of any production, no matter what it may be, we must think in terms of manpower expended.

Let us take the present situation in our nonferrous metals. We haven't at the present time enough manpower to keep our present production in domestic mining going to the fullest extent possible. I am hoping that in working through the Manpower Commission—and they are being extremely cooperative with us—I am hoping it can be solved. I do not think it is unsolvable. But until we do have enough manpower to keep our present facilities going at the maximum, certainly it would be a mistake to develop or operate properties which would take manpower from present operating properties to produce marginal quantities of materials.

We will get less that way per man available than if we went ahead and fully operated mines which are now producing and which are proven producers. I think you will agree that that is sound.

Senator MURRAY. I might ask, Mr. Nelson, if it has not been found that frequently you can get operations of these marginal mines by a class of miners who ordinarily would not engage in big deep-mine organizations?

Mr. NELSON. That is true, sir, with respect to the deep-mine organizations, and I think that certainly should be taken into account. But I do want to emphasize the fact that during the manpower shortages we do not want to take men away from present operating properties to operate marginal properties, where the net result would be to get less material rather than more. I am sure you will agree with the common sense of that point of view.

Senator MURRAY. That would be common sense, as you say; but there are some small mines that lie in secluded areas in mountains where men live in the vicinity who are farmer-miners, farmer-workers in some of the deep mines, but who would go into those more marginal mines and work there, whereas they would not take employment in bigger mines.

Mr. NELSON. Well, if there are any of those, I think they certainly ought to be used. I do not think we should pass up any opportunities to get more material, at whatever money costs. I think we should determine these costs in the terms of the materials we need today; as the seed corn we have put in in order to get the production and the manpower. I have always felt that the thing we should do is to build up the limit of our domestic capacity wherever we possibly can. I am in favor of that.

## MUST ALSO GUARD AGAINST DRAINING COUNTRY OF ITS RESOURCES

Senator ELLENDER. Mr. Nelson, is there not also this proposition: War is calling upon us for many of our materials that are here on this continent, that is, in the United States. Is it not an advantage for our future that we obtain away from this country as much of these materials as possible?

Mr. NELSON. Yes; I am sure that is true, sir.

Senator ELLENDER. In other words, I heard the story a couple of weeks ago that if we are to drain the iron ores of Michigan and Minnesota for the next 2 years to the extent that we are now draining those resources, why, we are just going to run out of them.

Mr. NELSON. I do not think we will run out of them, but we are running ores at higher cost all the time.

Senator ELLENDER. I had reference to ores which you can produce cheaply.

Mr. NELSON. Yes; that is true. We will run out of the low-cost ores, not in 2 years, but in a few years.

Senator ELLENDER. You think it is advisable to retain as much of those advantages as possible for the future?

Mr. NELSON. Yes. We are expanding at a tremendous rate now; our copper resources, for example.

Now, if another war comes, as wars usually do, although we hope against them, certainly we do not want to be caught in the position that we are, without copper; or at least until we know that we have good substitutes for copper, so that we can fight a successful war if it is forced upon us.

Senator ELLENDER. Well, I have suggested upon several occasions that with our lease-lend method of doing business our Government should by all means provide for some of these natural resources after the war. We are now dissipating, as it were, a lot of our copper, a lot of our iron ore, and other materials; and it strikes me that it would be good business, smart business, to try while this war is going on to obtain, for instance, some of the fine bauxite ore from South America; to go to other sections of the world and get in other materials to replenish our stockpiles; not only for our own safety, but for the safety of the world.

Mr. NELSON. Well, I would rather not comment upon that now, Senator.

Senator ELLENDER. Well, I am not asking that. I said that is what I think.

## WAS SHUT-DOWN OF GOLD MINES JUSTIFIED?

Senator SCRUGHAM. In time of emergency these foreign sources that have been so highly recommended to us are generally not available, due to the lack of shipping.

Now, it was testified yesterday that small mines do not affect the labor problem of large mines to any degree. That was stated by Mr. Ayer. That has been my own observation in a number of gold mines; substantially none of the labor of these gold mines, for instance, was available for a copper mine or zinc mine at some distant point. It is hardly enough to justify a general universal shut-down of some of these properties.

Mr. NELSON. Well, the figures show there have been at least 1,200 who have transferred to other mines.

Senator MURRAY. Is that since the close-down order?

Mr. NELSON. Yes, sir.

Senator MURRAY. I had some figures that the number had only gone to 400.

Mr. NELSON. Well, it has slowly increased.

Senator MURRAY. Of course, the theory of the gold-mine people was that you could have recruited those men for the deep metal mines from the gold properties without the necessity of closing them down; that they were perfectly willing to give up the men in their employ who would be available for that kind of work; but they want the right to continue using men who ordinarily would not be acceptable in the deep metal mines; and I thought that their argument was very sound.

Mr. NELSON. Well, generally, sir, we have been taking all of those factors into account in the fields involved in the order. Our purpose is not to shut down gold mines that do not use manpower for critical materials. I think it would be a mistake to dissipate very critical men or materials if we do not need gold.

I know it is never black or white, it is always shades of gray, as to whether it is this or that or the other thing, and, as we review it, in each one of these properties there have been some helpful things that came about from the closing order. There have been conversions to zinc and other mines.

I am not prepared to discuss it at the moment, because I am having a full study made as to whether it was valuable or not valuable. And if it was not valuable, I see no reason for doing it.

I see no way to prove that except to find out what the facts are.

Senator ELLENDER. Well, Mr. Nelson, why was that not done before?

Mr. NELSON. Well, I do not know how to do it without a long study. These things are not easy to ascertain, sir.

Senator ELLENDER. In this case you have ordered it; in fact it has been curtailed to a large extent, and now you want to go into it and find out whether or not your order was right?

Mr. NELSON. Well, not exactly. If I left that impression, I left the wrong impression. We still believe the order was the right one. It was to test it out. We are always open-minded. We have to stay open-minded on these things.

When we did it, we believed it was the right thing to do. We didn't study it. Sometimes the only way you can get the real evidence is on occurrences after the fact. There was a great dispute. I have had sessions with some of the miners themselves as to whether they would transfer; whether the man was too old to go or not to go.

I do not know how you could study that, Mr. Senator, except by doing it. One group said they would not go; others said they would. How do you find out except by doing it?

Senator ELLENDER. Well, your investigation was made, and on that basis you issued your order.

Mr. NELSON. That is right, sir.

Senator ELLENDER. Theoretically, on paper, it looked all right, and now you want to test whether it is all right in practice.



Mr. NELSON. That is right, Mr. Senator. It took us a long time before we issued that order. We argued it pro and con for months and, finally, came to a conclusion on it. The situation in copper mining was getting desperate, with every pound of copper needed for ammunition. We stopped mining except for the essential use of copper. If a thousand men would transfer, and we would get that much more additional copper, it would work that much more to the war than gold. I am not against the mining of gold. I am interested in getting copper.

Senator MURRAY. Well, in making the studies were those affected interrogated?

Mr. NELSON. Yes, sir. And there was the widest difference of opinion, I think.

Senator MURRAY. Well, the producers were practically unanimously in opposition to the close-down order?

Mr. NELSON. I would say that was generally true, Senator.

Senator MURRAY. And did they not also contend that they were anxious to cooperate and furnish for deep metal mining as many men in their employment as would be available? That they were willing to throw open their records and allow recruiting in their mines to the fullest extent?

Mr. NELSON. Yes. That, sir, is true.

Senator MURRAY. So that they felt that it was a very serious injury to them to have their properties closed down in that sort of a situation.

Mr. NELSON. Well, but Mr. Senator, we have had all through this shut-down a lot of things which in the essence were not absolutely essential to the winning of the war, and where we needed the material and the manpower. We have had to do it. It is unfortunate. Certainly no one wants to shut down gold mining or stop people from making ash trays of copper, but if it is essential to do it, I think we have to do it hardly and coldly. Is this thing necessary to win the war? If so, we have to do it.

We want to review and see whether our judgment is right.

Senator ELLENDER. Well, what is prompting you to make your review?

Mr. NELSON. The difference of opinion.

Senator ELLENDER. Well, that difference of opinion existed when you first put the order into effect.

Mr. NELSON. That is true. But by how many did transfer and how much good has been done, we will know whether we were right.

Senator ELLENDER. I do not doubt that you think that way, Mr. Nelson. It is just that I wanted to find out what methods you resorted to in order to reach the conclusions you did.

Senator SCRUGHAM. Why did they draft men into the Army who were skilled copper miners? Why were they not called upon in this emergency as being more useful to us as skilled miners than in training in the Army?

Mr. NELSON. Well, there have been, as you know, quite a few soldiers returned to the copper mining.

Senator SCRUGHAM. Has that been of material assistance?

Mr. NELSON. Yes, sir; it has been of very material assistance, sir.

## NECESSITY FOR DEVELOPMENT OF REPLACEMENTS FOR DEPLETED MINERALS

Senator SCRUGHAM. Now, there is one more point. In the hearing on January 13, 1943, conducted by Senator Murray, the Secretary of the Interior, Mr. Ickes, was present.

The chairman stated:

We feel that our national mineral resources are being alarmingly depleted beyond the possibility of reasonable replacement.

The answer of the Secretary was as follows:

I can see no cause for alarm in any projected rate of depletion of our mineral resources, provided the necessary steps are taken to insure that as a given mineral resource is depleted, other mineral resources are developed which will take its place.

Now, in the production of aluminum, there is the problem of bauxite deposits, which are being depleted; in beryllium, the Bureau of Mines is developing a product which will satisfactorily replace beryllium alloys. What I am alarmed about is the failure of the War Production Board to take sufficiently aggressive steps to assure that the minerals will themselves be produced in definite quantities so that we may not find that situation before us without a substitute therefor.

The Department of the Interior has repeatedly urged, and still urges, at least one plant for development of each mineral replacement.

I was so much interested in that statement that I went to the laboratories where they developed a number of tests.

Requests for plants have been rejected or turned down.

Mr. NELSON. I have no disagreement at all with Secretary Ickes in his statement. Certainly, we want to produce alumina from clay, and are working with a number of processes. It is a question of which ones are the best, those developed by the Bureau of Mines, or those developed by T. V. A., both Government agencies, and we have been working diligently to produce alumina from clay; and certainly we have been working diligently to produce alumina from domestic deposits, and by December we will be free from the necessity of importing bauxite. Canada will probably have to import bauxite. But our plans have been devised so that it will not be necessary to be dependent upon foreign bauxite. We need those ships badly, and therefore it would be a great waste to bring in bauxite if we can do things to help ourselves.

We have been reviewing constantly these processes of making alumina from all sorts of things. There is a wide difference of opinion as to which are the best processes, and we are studying them, and will continue to study them; and I find no disagreement with the Secretary on that, that it should be done.

On the question of electrolytic manganese, if it can be substituted for beryllium, certainly we ought to produce electrolytic manganese. We have not found it necessary to give of our supply of critical materials to put up electrolytic manganese plants. We know we can make electrolytic manganese. It is a proven process. It can be put up any time it is needed. If it can be substituted for anything, the plants are there to do it. I do not see any reason for our expending large quantities of critical materials that are needed for other things—gasoline plants, synthetic rubber, ships, airplanes, tanks, cannon, guns—to put up an additional plant when we already have the plants. Can you, sir?

Senator SCRUGHAM. The principal substitution seems to be for beryllium, if the experiments are successful. And possibly it can be substituted for nickel.

Mr. NELSON. We have technicians working on that, sir, all over this country, and we are not ever going to hold back any project that is worthy; never.

There is no difference of opinion between Secretary Ickes and myself on the necessity for finding out what substitutes you can make, what explorations, development, and so forth.

The only difference of opinion between the Secretary and myself is: Shall we now use critical materials that we need for other things for something which in our judgment we need less than those things? And that must always be the case in weighing every single advantage in what we do; and that is exactly the way we will continue to weigh it.

Senator SCRUGHAM. And parallel to that question, can you tell us whether or not Great Britain or Canada have taken the same steps in closing down their gold mines and whether we are giving them machinery and equipment to operate their gold mines?

Mr. NELSON. Well, sir, you are getting into something now that is beyond me, the question of State policy. I would not care to discuss State policy.

Senator ELLENDER. You would not agree that it would be the right thing to do, would you?

Mr. NELSON. No, sir; I would not.

Senator SCRUGHAM. A question that was raised by the gold miners was that a similar policy was not adopted by Canada and Britain, and a transfer of labor did not enter into gold-mining operations. In other words, the gold mining was being used as training schools for other mining, other metals which we have had under discussion.

Well, that has been a very interesting and instructive question, but on the question of labor, my information is that the Army has been very reluctant to release skilled miners, and that it has only been done in a small number of cases.

Will you find out how many have been returned from the Army?

Mr. NELSON. I will be glad to get the figures for you.

Senator SCRUGHAM. I would like to have those figures, because that appears to be the logical way to make up the metal deficiency. In many cases that is the reason for the shortage of materials.

Mr. NELSON. I think that is a fair criticism, although we are attempting to do it better and better all the time. There are many things we just do not foresee at the moment. I think that is a fair criticism.

#### ATTITUDE OF ALUMINUM MONOPOLY TO DEVELOPMENT OF NEW RESOURCES

Senator ELLENDER. Mr. Nelson, I was glad to note your statement on the differences in view between you and Mr. Ickes with respect to the development of these resources.

Mr. Ickes appeared before us this morning, and as I understood him to say, the Bureau of Mines, which is under him, has been trying for many months to develop our own mines, our own resources; and I followed that by a question of whether or not there was cooperation between the Bureau of Mines and Alcoa, this big aluminum company, and he stated that there was not; on the contrary, there was a

good deal of opposition; and I am wondering if you know anything about that opposition.

Mr. NELSON. Well, sir, I would not—from our experience I have not seen that opposition.

Now their technicians have been always available; certainly when it came to developing, using the domestic properties, we found that they were 100 percent cooperative.

I would hesitate to say, sir, on the basis of the evidence which we have had at our disposal and which I have seen, that there has been a lack of cooperation between our organization and Alcoa.

Senator ELLENDER. Well, are there any employees under you who are heading any boards or commissions who have to do with this proposition of extending production of aluminum? Are there any of those connected with Alcoa or any big aluminum concern?

Mr. NELSON. I do not know of any, sir.

Senator ELLENDER. You do not know of any?

Mr. NELSON. No, sir. Now, certainly the men in whom I put the trust to do this job have no relation to the aluminum company. First, there is Mr. Bunker—

Senator ELLENDER. Well, you have heard the criticism in the past?

Mr. NELSON. Oh, yes; I have heard that.

Senator ELLENDER. And the same thing with respect to rubber?

Mr. NELSON. Yes, sir. With respect to practically everything.

Senator ELLENDER. Everything. I have heard a lot myself; that is why I am asking you.

Mr. NELSON. It would seem, Mr. Senator, that whenever somebody does not get the decision he wants, it is because somebody is prejudiced. I think I have heard that of the Congress, too.

#### HAS FURTHER PRODUCTION OF MAGNESIUM BEEN HAMPERED BY PRESENT PRODUCERS?

Senator ELLENDER. Well, we are all human beings.

Let me ask you this, with respect to the production of manganese.

Mr. NELSON. Yes, sir.

Senator ELLENDER. I understand that the Dow Chemical Co. has—

Mr. NELSON. That is magnesium, sir.

Senator ELLENDER. That the Dow Chemical Co. has been given the job.

Mr. NELSON. Well, no, sir; not all of it; part of it. They have been given most of the job of producing it from sea water; but there are various other processes for the making of magnesium.

Senator ELLENDER. To what extent is Dow cooperating with you in attempting the development of other processes that conflict with their own?

Mr. NELSON. We do not even ask them. We just go ahead. We do not ask Dow. If we wanted additional production from sea water, we would ask them.

Senator ELLENDER. You might not question it, but I am just wondering if there is anybody under you who might object to it.

Mr. NELSON. Who might object to it?

Senator ELLENDER. Yes.

Mr. NELSON. I do not know. Our record on magnesium is probably the very best of any we have. We have expanded magnesium over

10 times, and before the end of the year we will, I believe, have a surplus of magnesium.

Senator ELLENDER. Do you know that for a fact?

Mr. NELSON. Yes, sir.

Senator ELLENDER. You have examined it personally?

Mr. NELSON. Time and again, sir.

Senator ELLENDER. Well, I have been informed from a very reliable authority that by the end of the year you might be disappointed as to the amount that is going to be produced. I am asking you whether or not you have examined it personally.

Mr. NELSON. I wish whoever told you that would come in and talk to me, because I would like to run that down.

Senator ELLENDER. I got it yesterday, and that is what I am doing now, Mr. Nelson; I am going to run it down.

Mr. NELSON. Will you do that, please?

Senator ELLENDER. Yes, sir. Why it is, I do not know. I was just wondering whether or not there was somebody or some group in W. P. B. that was possibly making magnesium itself.

Mr. NELSON. I am constantly trying to find any evidence of that, because certainly it is something we will not tolerate, and if we learn of it, they will not be in W. P. B.

Now, we are making magnesium not only by the Dow process, which makes it out of sea water, brine; Kaiser has a proposition out there on the Pacific coast to make it by an entirely different method, from magnesium oxide. There is another process at Las Vegas which makes it by an entirely different process. The Ford Motor Co. and others are making it by another process.

I shall be glad to review it and tell you what the quantities are and who is producing it. And if there is anything in the figures which is not right, I want to know that personally.

Senator ELLENDER. Well, have you looked into the record of performance or what they say they will produce in the future?

Mr. NELSON. Yes, sir; I have, sir.

Senator ELLENDER. Which?

Mr. NELSON. Both. On the basis of the records of performance and on the basis of the expansions. I shall be delighted to review those figures with you, Senator, any time at your convenience.

Senator ELLENDER. That is very kind of you.

Mr. NELSON. Will you do that, please? I would appreciate it if you would.

Senator ELLENDER. Yes. Now, let me ask you this; are the plants now in operation producing to full capacity?

Mr. NELSON. Well, it is a question of what is full capacity.

Senator ELLENDER. Or the expected capacity?

Mr. NELSON. No.

Senator ELLENDER. Why not?

Mr. NELSON. Some of them have not panned out. But even on the basis of a reduced expectancy, we will have magnesium on the reduced expectancy, on the basis of actual performance, so that we can be sure our supply is ample.

Senator ELLENDER. Well, suppose that the plants that are now being erected do not produce to expectations, but along the lines of the ones that you think could produce more than they are now producing, would the amount that you have in computation be reached?

Mr. NELSON. I think, so, sir. I will be glad to review those figures with you.

As I view magnesium, it is one of the few metals on which I feel comfortable.

Senator ELLENDER. The reason I am asking you that is to find out whether or not you yourself are satisfied and not depending too much on reports from the field.

Mr. NELSON. Well, sir, in the case of magnesium, I talked with principal operators. Mr. Kaiser was in my office the other day and said it was going to come through as he expected, because he has been pouring plenty into it, and giving it the advantage of technicians of all kinds, and just the other day he gave his assurance that the production has been coming up in that plant.

Senator ELLENDER. You are satisfied that though the plants that are now in operation have not reached the expected capacity—you feel that the plants that are now being built, even though they do not reach the expected capacity, you still feel that they are going to reach the goal that you expect?

Mr. NELSON. I feel sure that we are going to reach the goal of having magnesium enough for our requirements.

Senator ELLENDER. For the requirements?

Mr. NELSON. That is right, sir.

#### EXPANSION OF DOMESTIC PRODUCTION OF MANGANESE

Senator MURRAY. Mr. Nelson, I would like to ask you some questions about manganese.

Mr. NELSON. Yes, sir.

Senator MURRAY. I understand we are using now about one and one-half million tons of manganese.

Mr. NELSON. I think that is about right.

Senator MURRAY. The domestic production is about 166,000 tons, a large part of which comes from the Anaconda Copper operations.

Mr. NELSON. That is right. We have expanded domestic production.

Senator MURRAY. Do you favor the policy of giving reasonably higher prices to the producers of the scarce metals for bringing up production?

Mr. NELSON. I do very definitely and have from the very start. We are doing that, and I think it is a very necessary part of our policy.

Senator MURRAY. In the production of manganese you are paying a dollar a unit for 48 percent manganese?

Mr. NELSON. That is right, sir.

#### PRICE FACTOR IN PRODUCTION OF MANGANESE

Senator MURRAY. Now, there are a great number of small mines in the country and small deposits of this manganese that could be gotten out if they could get a higher price for their lower grade manganese. It has been suggested that there should be a price of a dollar a unit for the 40 percent manganese, which would, of course, produce a very large amount which could be mixed with the higher grades and utilized in the war effort.

Are you in favor of a program of that kind?

Mr. NELSON. I have gone into that, Mr. Senator. I think there is a question as to just how far and how fast we should go in that.

Senator MURRAY. Well, you will need more manganese, and in view of the fact we are only producing 166,000 tons at the present time and using  $1\frac{1}{2}$  million, and with a possible danger of being cut off from further outside supplies, it would be very good judgment to develop as much as possible, because there is an increased use of manganese at the present time, is there not?

Mr. NELSON. Well, of course, as our steel production expands, we need more manganese, but we have pretty near a 2-year stock today in the stockpile, and are able to bring in the amount we are using. We have not had to call on the stockpile yet. Our ships come back loaded with manganese from India.

Senator MURRAY. You cannot always depend on the ships coming back with manganese, and it seems to me that some effort should be made to develop the manganese that is right at hand with the sub-marginal producers.

Mr. NELSON. Mr. Senator, you have come in and given me a problem. From what I can see, the amounts were relatively small. True, whatever amount we have is just that much more, but it is a relatively small amount that you can get in that way. It would not be near enough to take care of our needs.

Senator MURRAY. But every ton added to the production adds to the security of the country in having manganese.

Mr. NELSON. When we have a 2-year stockpile, Mr. Senator? It is the one thing in which we have an adequate stockpile.

Senator MURRAY. Are you certain that you have an absolute 2-year supply?

#### MANPOWER PROBLEM IN MANGANESE PRODUCTION

Mr. NELSON. I would not say 2 years. It is more than 18 months. And we are getting it from the zones that have it, and the ships have to come back with it or loaded with ballast. It is a question of manpower. I would be glad to review it at any time. If it is the right thing to do, let us do it. If it is not, let us not do it.

Senator MURRAY. Then again in connection with this question of manpower, in the operation of these surface mines—you might call them surface mines, because they start right at the surface—it would be with the use of men who ordinarily would not be employed in the deep mines.

Mr. NELSON. Well, would they not be employed for something else, Mr. Senator? As you view the manpower problem—and again I do not want to appear at all critical—but we know we have an airplane plant manpower problem. It does seem that every time we think in terms of a particular thing, the manpower cannot be used for anything but that particular thing.

If so, we are in a bad way. For instance, the clothing workers feel we ought to go on producing clothing because those clothing workers will not go to the airplane plants.

Senator MURRAY. I agree that if these men were available for the big mines or other essential war work, then probably there might be some reason for saying they should not be employed in this submar-

ginal production of manganese because the necessity of producing the manganese does not justify it; but my understanding is that the men that would work in these manganese properties would be manganese miners who have retired from the deep metal mines and could not work and would not be available for other places. You cannot transfer a man, after he gets to be 60 or 70 years old, back from Montana to Pittsburgh.

Mr. NELSON. Not from Montana to Pittsburgh, but we need development work in Montana.

Senator MURRAY. These men would not be available for that kind of work.

Mr. NELSON. They would be available for something else. I would be glad to review it, Senator. I cannot give you the answer to that question offhand. I will be glad to review it again.

Now, at the time the dollar was set, if you recall, it was on the basis that that dollar would bring out—and that was the price after consultation with the manganese people—we did pay much less than the dollar, but we do pay the dollar for the 48 percent.

Senator MURRAY. It was to produce this higher grade manganese.

Mr. NELSON. That is right.

Senator MURRAY. My idea is that by producing the larger amount of the lower grade you could mix it with the higher grade and greatly expand your lower grade.

Mr. NELSON. That is true, but in thinking of the stockpile, this question has been a vital one for 3 years—I have been in this manganese problem for 3 years—and the question then was: Shall we buy lower grades? If you are carrying a stockpile, you want to carry as high a grade as you can get, because you can always get the lower grades to mix with it.

Senator MURRAY. You cannot always get the lower grades to mix with it.

Mr. NELSON. You can always get it if you have a 2-year stockpile. I do not want to labor the question with you.

Senator MURRAY. It seems to me that you should give consideration to that.

Mr. NELSON. I will be glad to review it.

Senator MURRAY. The marginal producers—

Mr. NELSON. Mr. Senator, I will be glad to review it again.

Senator MURRAY. In view of the fact that you are now using one and one-half million tons a year and are only producing 166,000 tons in this country, it seems to me to be wise production to develop some of this lower grade.

Mr. NELSON. About how much do you think we could develop by doing it?

Senator MURRAY. That I could not answer. There may be 20 States in the Union, I do not know, but I know that right in view of where I live there could be substantial increase in production. I have been right on top of the property myself. Manganese is found on the west side of Butte very extensively, and I know there are a great many owners of small claims that would open up if they could get their price.

Mr. NELSON. Well, I will be very glad to review it again.



## CHANGE OF POLICY ON STRATEGIC MINERALS REQUESTED

Senator SCRUGHAM. On February 19, 1943, Chairman Murray addressed a letter to the President as follows:

There is now going on a general readjustment of production programs for finished materials and, very properly, cancelation of facilities where there has been overexpansion. This seems to be part of a logical policy to bring manufacturing programs into line with raw material supplies.

Unfortunately, it appears to me as though the policy of disapproving expansions has extended vertically downward into the domestic strategic mineral mining program. I have noticed, for example, that for some months no new or expanded copper programs have been approved by the War Production Board despite the fact that some 133,000 tons per year could be obtained additionally from domestic sources with very small outlays of men and critical materials. Part of this production could be obtained in a few months. Had approval been granted for certain projects presented last year, some mines at present idle would now be productive.

While our industries obviously must be curtailed to fit the raw material supply, at the same time the domestic raw material supply should be increased. This will conserve shipping space and help to maintain our war and essential civilian manufacturing programs on as large a scale as possible.

It occurred to me that the domestic strategic and critical minerals program might have been caught in the general policy of contraction and cancelation. There would be nothing incompatible between policies of rational expansion of domestic mining and the contraction of manufacturing facilities. Increased raw material supplies may avoid the necessity for excessive cancelation of facilities.

The tendency to withhold facilities for domestic strategic and critical mining expansion may not have been brought to your attention. I think a change in policy should be instituted.

The President replied under date of March 11, 1943, as follows:

Your inquiry of February 19, concerning the place of minerals mining expansions in the total war-production program is one which merits full consideration.

Such consideration will be given as promptly as possible, and I shall communicate with you again on this subject.

Sincerely,

/s/ FRANKLIN D. ROOSEVELT.

Do you agree with that?

Mr. NELSON. I would not say my answer is the President's answer, but he has referred the question to us. We have prepared a statement of policy which undoubtedly he will review, and if he agrees with us, we will pass it on to the Senator.

Senator SCRUGHAM. Senator Mead, have you any questions?

## WIDE USE OF NEW TYPE OF MATERIALS IN WAR PRODUCTION

Senator MEAD. Except to review the progress that has been made in the W. P. B., and to state that during the past few weeks I have been visiting manufacturing plants, and ordnance depots, and places of that kind, and I marvel at the use of materials that were either unheard of or seldom used.

Mr. NELSON. That is right.

Senator MEAD. Before the war.

Mr. NELSON. A lot has been done in that direction. A tremendous amount.

Senator MEAD. So, Mr. Nelson, I think there should be another element to consider in connection with your calculations as to output.

You explained a few moments ago in your discussion with Senator Ellender that the continued use of these materials must be given consideration.

Mr. NELSON. Without any question.

Senator MEAD. Because you have increased production plus increased diversification. I wonder if, in obtaining this accelerated use, you have the hearty cooperation of the ordnance heads of our military units.

Mr. NELSON. I should say, Mr. Senator, that the cooperation has been all that we can possibly ask from the Ordnance Department. That group has been alert from the very start to make substitutes. When we would point out to them that nickel was getting scarce and that we could use a substitute of tungsten or molybdenum, they were eager and anxious to do it. Of course we would not ask them to do it unless we could.

When tungsten became scarce, we went to molybdenum. They followed in every shape and form. I think we have had the best cooperation we could expect from the Ordnance Department, and the results are showing it.

Senator MEAD. I was amazed at it myself.

Now, in view of the fact that it was necessary to draw into your organization experts in the well-known common fields of metal production, which would be mainly iron and steel, and in view of the fact that some of these metals, these ferrous alloys and newly developed materials are probably without men of long years of experience, I wonder if you have men in your organization that are representative of these new metal developments, or if those in charge of the use of metals come principally from the iron and steel fields, or, rather, the broader fields of the metals that were in vogue before the war.

Mr. NELSON. No, sir. I would say that we have men who would in the main be alert to follow every one of those things.

One of the things we have tried to do in W. P. B. has been to keep it as flexible as possible, so that no one person could ever turn down anything that was of great value. We are operating this as a public trust. W. P. B. is a servant of the people, of the Congress, and of the war; and I have tried, so far as we possibly could, to make it easy for anybody who felt that he had been aggrieved in any sense of the word to have a group listen to his appeal who were not from the industry; and when a group comes to our office, as many of them do, I have a group of quite eminent scientists whom I have absolute confidence in who will go in and give me the facts, and not, as so often happens in Government departments, when a question comes in, that it will be referred right back to the fellow who turned it down before, because that often happens.

I have tried to avoid that.

I know it makes our organization seem a little cumbersome, but the whole thing is so new—the diversification of American industry, the development of substitutes.

It may be a little off the subject, but I think it explains exactly what you are talking about. I went to the dentist the other day and he said, "You have crippled my style because you stopped the use of rubber."

And later he said, "A newer, better one has been developed, and we are glad you stopped rubber."

The use of substitutes, I think, when peace comes, will give a new impetus in this country, because there has been an open-mindedness in the approach to war, and an open-mindedness by the armed services, and everybody concerned, to try to find a better way of doing things if it can possibly be done.

**USE OF NEW METALS AND MATERIALS MUST BE ENCOURAGED NOT ONLY FOR WAR BUT ALSO FOR PEACETIME USES**

Senator MEAD. Now, if we have this unrestrained encouragement of all the new metals and materials, have we, would you say, a satisfactory set-up for their insistent use, not only in the military branches, but say in the construction field and the manufacturing field?

It occurs to me that if the first obstacle, that is, the hesitancy to leave our experience with the older metals, were eliminated, that it is necessary to bring out this ingenuity that we talk about by an insistence on the use of these materials where they fit in properly.

Mr. NELSON. Oh, I am sure that is true, Mr. Senator. Of course, necessity is the mother of invention.

One of the reasons in a time like this that the substitutes receive such favorable attention is because your supplies are never great enough. Now, there has been tremendous substitution of all kinds, plywood—

Senator MEAD. Plastics.

Mr. NELSON. Plastics of all kinds.

And we have a division that works to see that when these things are developed any place, they are brought to the armed services.

We have meetings of the engineering societies where all of these things are pointed out. We think we have a very quick dissipation of the knowledge, a quick apprehension on the part of manufacturers that a substance is better than the original or that there is more of it than the original or that it can be used instead of the original.

Senator MEAD. I think it will be one of the beneficial contributions to the Nation's economy and to the comfort and convenience of humanity if all these metals and all these materials are given the widest possible use and permitted to fit themselves naturally into the post-war economy.

Mr. NELSON. I think that is true.

Senator MEAD. And I think great credit will redound to your organization as an organization, and to your direction as an individual in that organization, and while I have been pleased with what I have seen, I wanted to be sure that the encouragement was there, and with the encouragement, the insistence, where the materials could be very well used.

Mr. NELSON. That I think is being very well covered, Mr. Senator.

Senator MEAD. I commend you for it.

Senator SCRUGHAM. Any further questions? Senator Murray?

I thank you for your very helpful presentation.

Mr. NELSON. Thank you, Mr. Senator. If there is anything our organization can do for your committee, we will be delighted to do it at any time.

(Whereupon at 3:55 p. m., the subcommittee adjourned.)