

• PSF Wm S. Knudsen

Subject File

Box 15-3-

*PSF
Knudsen*

THE ADVISORY COMMISSION TO THE COUNCIL OF NATIONAL DEFENSE
FEDERAL RESERVE BUILDING
WASHINGTON, D. C.

*File
personal*

September 12, 1940

Dear Mr. President:

I wish to report that during the last two weeks I have visited sixteen of the twenty airplane plants involved in the airplane program. In giving a general impression of the factory picture, it should be remembered that practically every factory is expanding at the moment and that fifteen million square feet additional floor space is required to fulfill the program requirements by April, 1942.

TRAINING An extensive training program for employees, the number of which will increase five times from what it was July 1, 1940, is in progress in every large plant and there is no apparent labor shortage anywhere except in the tool and engineering departments.

TOOLS Machine tools are no problem as yet, except in scattered instances but is bound to be a problem in the Spring of 1941. Jigs and fixtures show a very great variety of design and effort should be made to standardize these items. With the increased quantity of planes coming through the factories next year, processing will undoubtedly be much improved and I found two or three of the plants giving much study to this phase of the business, which will produce more planes in the long run.

DESIGN There is still room for improvement in the allocation of plane types. Too many types of planes are made in the different plants but effort is being made to reduce the number of types to a minimum in order to simplify the tools and increase production. Also, efforts are being made to reduce changes to a minimum or to coordinate them with a certain number of planes in order to keep production going.

QUALITY I was very much impressed with the quality of the work, considering the expansion of employment which has taken place to date. The inspection was well under control and the workmanship appeared excellent. This is a great advantage in the expansion of the facilities and the working force.

THE ADVISORY COMMISSION TO THE COUNCIL OF NATIONAL DEFENSE

FEDERAL RESERVE BUILDING

WASHINGTON, D. C.

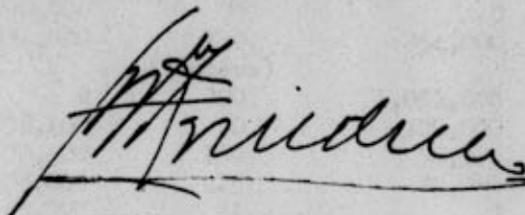
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September 12, 1940

CAPACITY I attach a short statement showing the allocated capacity in the April 1942 program, and you will observe that there are two projected new plants for 2-engine and 4-engine bombers. After examining the facilities on these heavy units, I advocate building of these two plants by the Government in order to insure proper quantities in these two designs where I believe the promises of present sources too ambitious.

MORALE There is of course a distinct difference in manufacturers, some being more progressive and forward looking than others, but in the overall picture, I believe that every manufacturer I have visited is doing his level best to cooperate in and expedite the program. I received the finest of cooperation everywhere and the expressed desire by everyone to do all they could to accomplish the result. All were businessmen of the highest type and character.

Respectfully submitted,



William S. Knudsen

K:c
att:

LEADERSHIP INFORMATION TO THE COMMISSION ON THE AIRCRAFT INDUSTRY

AIRPLANE CAPACITY

Manufacturer	Deliveries July, 1940	Floor Area July 1, 1940	Capacity Units per Month April 1, 1942	Floor Area Added
Beech	6	137,800	99	320,000
Bell	2	320,000	90	100,000
Boeing	3	789,323	60 est.	1,250,000
Brewster	14	384,000	100	500,000
Cessna	11	50,000	7	0
Consolidated	0	509,000	80	860,000
Curtiss-Wr. (Buf)	153	665,500	180	1,000,000
" (St.L.)	1	149,000	27	1,163,250
" (Colum)	0	0	145	1,000,000
Douglas (S.M. & El S)	78	1,475,000	69	231,000
Douglas (L. Beach)	0	0	261	1,405,000
Vendors	0	0		2,000,000
Fairchild	27	110,000	80	15,000
Grumman	8	180,000	80	420,000
Lockheed (& Vega)	29	972,600	230	717,500
Glenn L. Martin	35	1,238,000	125	1,720,000
Naval Aircraft	25	200,000	70	0
North American	126	654,000	100	354,000
(trainers)			(bombers)	
" " (Dallas)	0	0	300	1,053,000
Republic	23	238,400	80	300,000
Ryan	9	78,400	150	55,000
Stearman	61	158,000	225	80,000
Spartan	2	45,000	24	0
Stinson	27	189,200	50	0
Vought-Sikorsky	4	341,500	90	90,000
Vultee	12	331,000	300	446,000
X Plant (2eng. Bomb.)	0	0	60	1,000,000
Y Plant (4eng. Bomb.)	0	0	60	2,000,000
	656	9,215,723	3,142	18,079,750

PSF
Knudsen

MEMORANDUM

October 15, 1940

TO: The President
FROM: Leon Henderson

Bill Knudsen is bothered about the story in the Wall Street Journal yesterday (October 14, 1940) that you have appointed a four-man board to speed up plane production, with Worgenthau as Chairman.

Don Nelson learned this yesterday from Fred Eaton, counsel to Knudsen, when Don tried to get clearance on a Priorities Board procedure we expect to submit to you soon. Eaton told Nelson that Knudsen, who is still away making speeches, would not "clear" anything until the matter of this Worgenthau board was settled.

I thought you ought to know about this.

original see H - General]

THE ADVISORY COMMISSION TO THE COUNCIL OF NATIONAL DEFENSE

FEDERAL RESERVE BUILDING

WASHINGTON, D. C.

PSD
Knudsen
Naval Dept
2-40

December 6, 1940

Dear Mr. President:

With reference to our cargo ship discussion on November 29th, with particular reference to British construction, there is submitted herewith a sketch with characteristics showing 11 knot ships with 9300 deadweight and 15 knot ships with 5000 deadweight. There are also submitted two Data Sheets with regard to this matter giving additional information, together with the advantages and disadvantages of the types under discussion.

As between two ships the first of which is full-bodied of simple construction and about 2500 I.H.P. with a service speed of 11 knots and a cargo deadweight of 8600 tons and the second of more complicated construction (due to finer underbody) with 3750 I.H.P., a service speed of 15 knots, with a cargo deadweight of but 4300 tons, the following comparison may be drawn:

The second ship (15 knots) possesses only the doubtful advantage of four knots in speed. This will probably be of little value when under attack by a submarine.

The second ship (15 knots) will have to make about one and one-half trips to every one of those made by the first ship in order to carry an equal amount of cargo. This means that to transport the same total cargo in a given time 150 of the 15-knot type will have to be built for every 100 of the 11-knot type.

The building time for the 15-knot ship will be definitely greater than that for the 11-knot ship, because the machinery is yet to be designed and the hull shape will not lend itself so readily to fabrication.

The amount of steel required will be greater for the larger number of 15-knot, more highly powered ships. The machine shop and boiler shop capacity utilized will be correspondingly greater if a program of the 15-knot ships is adopted. This difference might interfere with the current naval program if the construction of a very large number of such ships were to be undertaken.

The total cost of a program of more 15-knot ships will be greater than for a program of fewer 11-knot ships. While cost is a consideration of importance ultimately, it is not of real moment under the present circumstances, because we face a crisis and are not planning a financial venture.

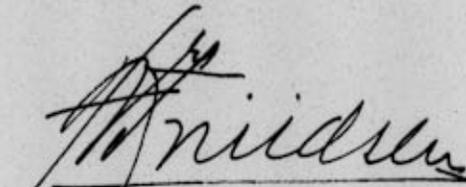
In view of the foregoing it is obvious that building the 15-knot type of vessel will require more steel; will occupy more shop capacity, and will be more time consuming than building the 11-knot type. The 11-knot type, the larger of the two, will actually serve the purposes intended better.

The above conclusions apply not only to the ships above described but represent generally the relative merits of large full-bodied ships of low speed compared with much smaller fine-lined vessels of relatively high speed.

Neither of the types discussed above is satisfactory for modern peace time service.

There is also enclosed a Memorandum from Admiral Land with regard to some late information relative to German submarine tactics.

Respectfully,



William S. Knudsen

UNITED STATES MARITIME COMMISSION
WASHINGTON

December 6, 1940.

OFFICE OF THE CHAIRMAN

Memorandum for The President:

via Mr. William S. Knudsen

The present German submarine menace takes on two phases - one, a question of speed, the other, a question of aircraft. Recent German submarine successes are due in part to German aircraft advising German submarines by radio the location, course and speed of British convoys permitting submarines to locate themselves in advance of a probable convoy location at a given time where the submerged submarine attacks in or near the center of a convoy, thereby doing the greatest damage. The speed of individual ships of the convoy is of some importance but comparatively negligible for this type of attack as the torpedoes of a submarine can and are quickly discharged; in fact so quickly that speed of ships, while useful, is not very helpful except in case of reload of torpedoes in the submarine.

The rumor that submerged speed of German submarines has been increased to 13 knots cannot be verified and is probably incorrect because too much space would have to be given to the storage batteries to obtain such a speed reducing in turn other more essential characteristics of the boats. So far as can be learned, no nation has repeated the R Class British design of the last war, which submarines had a submerged speed of about 13 knots for about one hour's duration.

It is recognized that the speed of a convoy is that of the slowest ship of the convoy. This problem may be ameliorated by segregating vessels of similar speeds, i.e., high speed convoys and low speed convoys. Frequently this is more theoretical than practical. The problem has other methods of amelioration, the most important of which are (a) aviation convoy (b) more combatant ships in the convoy (c) combatant ships to meet incoming ships at greater distances out and stay longer with outgoing ships.

E. S. Land

E. S. Land
Chairman

December 5, 1940

The following data was obtained on this date from Mr. Frederick Gibbs of the firm of Gibbs & Cox, Inc., New York City over long distance phone:

PROPOSED BRITISH SHIP (11 Knots)

Length B. P.	416'
Beam mld.	55.9'
Depth mld.	37.33'
Draft mld.	25.33'
Dead Weight-tons	<u>9300</u>
Displacement-tons (Approximate)	13100
I. H. P.	2500
Speed-Knots sustained	11
Cargo dead weight-tons (Approximate)	8600

The data below was derived from that above applicable to the second ship.

(15 knots):

Length B. P.	400'
Beam mld.	55'
Depth mld.	34'
Draft mld.	23'
Dead Weight- tons	<u>5000</u>
Displacement tons	8350
I. H. P.	3750
Speed-knots sustained	15
Cargo Deadweight-tons (Approximate)	4300

PROPOSED BRITISH STANDARD SHIP (11 KN)

Advantages

Moderate horse power
Machinery design available now
Appreciable length parallel mid. body
Shape is favorable to cheap and rapid fabrication
Large Cargo deadweight capacity
Relatively few ships required
Relatively few building ways necessary
Low cost per ship

DISADVANTAGES

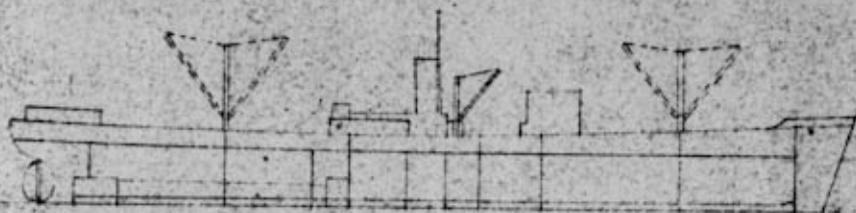
Low speed
Larger target (about 15%)
15 knot derivative from above

Advantages

Can make more trips in a given time
Whatever additional safeguard may be furnished by increased speed
against a submarine attack.
Smaller target

DISADVANTAGES

Larger horse power
Machinery design yet to be made
Shape varies throughout entire length
Hull structure difficult to fabricate-expensive in dollars and time
Small cargo capacity
Many ships required
Will necessitate many building ways



BRITISH SHIP 11 KNOTS

LENGTH BP	-----	416'
BEAM MLD	-----	55.9'
DEPTH MLD	-----	37.33'
DRAFT MLD	-----	25.33'
DEADWEIGHT TONS	-----	9,300
DISPLACEMENT TONS	-----	13,100
I. H. P.	-----	2,500
SPEED KNOTS SUSTAINED	-----	11
CARGO DEADWEIGHT (APPROX.)	-----	8,600

2ND SHIP 15 KNOTS

LENGTH BP	-----	400'
BEAM MLD	-----	55'
DEPTH MLD	-----	34'
DRAFT MLD	-----	23'
DEADWEIGHT TONS	-----	5000
DISPLACEMENT TONS	-----	6,350
I. H. P.	-----	3,750
SPEED KNOTS SUSTAINED	-----	15
CARGO DEADWEIGHT (APPROX.)	-----	4,300

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*PSF
Knudsen*

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THE ADVISORY COMMISSION TO THE COUNCIL OF NATIONAL DEFENSE
FEDERAL RESERVE BUILDING
WASHINGTON, D. C.

y. Conf.

December 19, 1940

Dear Mr. President,

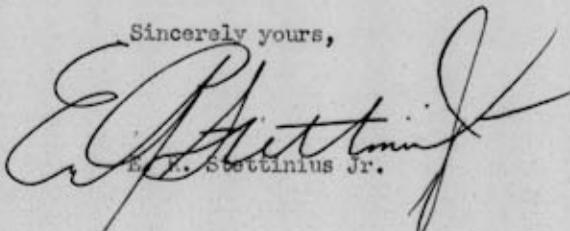
I hand you herewith "An Outline of Plans for Gathering Waste Materials in a National Emergency".

In preparing these tentative plans we have followed the general principle of using established machinery for collecting waste materials, supplemented wherever desirable by public support, under the direction of the Division of State and Local Cooperation. Such plans will serve the two-fold purpose of increasing supplies of urgently needed materials, and of enabling the public to contribute to National Defense.

We recommend that plans for emergency methods of collection should not be employed until circumstances justify such action. Premature use of emergency plans would, we fear, unduly disturb and confuse the public. Also it would tend to cause hoarding of waste materials and a run on related finished goods.

The experience of England shows clearly the advisability of using existing collection machinery and of avoiding premature action.

Sincerely yours,


E. R. Stettinius Jr.

The President
The White House

LHE YD1205A.COM

December 19, 1940

Subject: An Outline of Plans for Gathering Waste Materials
in a National Emergency

The factual material of the plans has been cleared with the interested group executives and with the Transportation and Price Control Divisions.

The plans cover four waste materials --Rubber, Aluminum, Tin, and Iron and Steel. These are the only waste materials in which emergency plans for collection may be necessary, according to a canvass of group executives. However, we are making with group executives a further study of other materials and any plans which it may be found necessary to set up for them will follow the same general lines.

The following supplementary information may be helpful to you in connection with your presentation:

RUBBER

Sources of Scrap - Tires, tubes and miscellaneous rubber goods. Collection is now made only in areas where transportation costs to reclaiming centres make such collection profitable, but such areas contain about 70 percent of existing scrap.

Sources of Additional Scrap - Only about half the available scrap in present collection areas is now collected. Scrap from outside present collection areas can be collected. It is estimated that scrap for 600,000 tons of reclaimed could be collected a year for two or three years.

Collection of Additional Scrap - Public support will be mobilized:

- (a) To get in the other half of the scrap in the areas where it is now collected;
- (b) To bring scrap to junk dealers or depots in remote or sparsely settled areas where scrap is not now collected because transportation costs to reclamation centres do not make collection profitable.

Reclamation of Scrap - The present annual production of reclaim is 186,000 tons, and the present maximum capacity is 300,000 tons a year. The estimated cost of additional reclaiming facilities for 300,000 tons a year is \$27,500,000. Additional reclaiming facilities would be completed in stages of three to fifteen months.

ALUMINUM

Sources of Scrap - Worn out pots and pans and household utensils, engine and body parts from wrecked automobiles and structural parts from other machines and equipment. Present collection, due to the value of metal, is, in the opinion of the industry, very complete.

Collection of Additional Scrap - Public support will be mobilized:

- (a) To get in all household scrap in the areas where now collected -- mainly urban areas;
- (b) To bring household and other scrap to junk dealers or central collection depots in remote or sparsely settled areas where there is collection machinery.

Reclamation Facilities are adequate to take care of any possible volume of scrap which could be obtained.

TIN

Sources of Old Scrap - Copper alloys, solder and babbitt. In the opinion of the industry, due to the value of the metal, present collection of such scrap is very complete.

Collection of Additional Scrap - Public support will be mobilized:

- (a) In large urban centres to save and clean all tin containers and put them into separate receptacles from other refuse. The municipality or volunteer organizations will collect them, and municipal or volunteer labor will be used to sort and bale them.
- (b) To get all manufacturing plants, garages, contractors and individuals to be sure no alloys, solder or babbitt is lost and to make available to dealers any such scrap in their possession.

Reclaiming Facilities - There are at present five detinning plants of any size, one or more of which are located in New York, Pittsburgh, Chicago and San Francisco. They are currently recovering tin from clean tin plate clippings and other scrap from the fabricators. Such plants have certain surplus facilities which could be converted to operate on used tinned containers. Studies are being made of the feasibility and problems of erecting additional plants in other large urban areas.

IRON AND STEEL

Sources of Purchased Scrap - Manufacturing plants, railroads, junked automobiles, demolition of structures and peddlers' collections. Collection is fairly complete in areas where transportation costs to consuming centres make such collection profitable. The extent of these areas depends upon prevailing price for scrap.

Sources of Additional Scrap - Scrap not now being made available by manufacturing plants and railroads. Scrap from sources outside of areas where freight rates make collection profitable. Junked automobiles and farm machinery in remote areas, household scrap not collected by peddlers.

Collection of Additional Scrap - Public support will be mobilized:

- (a) To get manufacturing plants and railroads to make available all possible scrap;
- (b) To encourage the demolition of unused structures;
- (c) To bring scrap to junk yards or central depots in remote or sparsely settled areas where scrap is not collected because of high collection and transportation costs;
- (d) To increase and supplement peddlers' collections.

PSF Knudsen
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P. C. C. C. C.
THE WHITE HOUSE
WASHINGTON

January 18, 1941

MEMORANDUM FOR: General Watson.

Mr. Knudsen telephoned. He said the President asked for some alternate suggestions in the Harriman matter. These are my personal suggestions:

In addition to Mr. Harriman, the following names are suggested:

Gordon Rentschler of New York City.

S. Clay Williams of the Reynolds Tobacco Company, North Carolina.

EAK

PSF: *Knudsen*
Fisher

THE WHITE HOUSE
WASHINGTON

January 26, 1941.

MEMORANDUM FOR BILL KNUDSEN:

~~PRIVATE AND CONFIDENTIAL~~

There has just come to my attention a feeling on the part of some pretty decent people on the outside that it would be a mistake to make Fred Eaton secretary of OPM. Hard-boiled and fast-moving but a little hesitation as to whether he would be thinking sufficiently in the public interest only.

I don't know much further but thought you ought to have this information.

F.D.R.

DECLASSIFIED
By Deputy Archivist of the U.S.
By W. J. Stewart Date JUN 2 1972

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Kudwin*

*PSF Kudwin
Folder*

[1941]

AIRCRAFT PRODUCTION FIGURES

Assuming the public should have a measure of the progress of aircraft production:

Assuming deliveries for military reasons should not be broken down for publication into specific types (pursuit, bombers, observers, etc.):

And assuming we should not give out British deliveries in detailed breakdown:

Would not the following monthly announcement by The Office of Production Management (eliminating all other statements from whatever agency) be helpful in an increasingly controversial situation and still be entirely prudent:

"During January, 1041 airplanes were delivered by United States manufacturers to the Army, Navy, British, other governments and commercial airlines. Of the 1041, 962 were delivered to the Army, Navy and the British, as compared to 799 in December. Of the 962, 455 were combat types."

majority

THE WHITE HOUSE
WASHINGTON

*file
personal*

February 7, 1941.

MEMORANDUM FOR

HON. WILLIAM S. KNUDSEN

What do we do with people
like these? This memorandum
comes from a man whose information
so far has been pretty good.

F. D. R.

~~From~~ Bergman
to
H. Z. P.

PST

Kennelstein
Folder

Feb. 5, 1941.

WHERE DOES THE AMERICAN TYPEWRITER INDUSTRY STAND
IN THE PRESENT DEFENSE PROGRAM?

It is of interest to note that the important American typewriter companies: The Remington, The Underwood and The Royal, all own factories in Germany, and their respective heads or sub-heads are ~~Americans~~ Americans/^{of German parentage} who have long taken an interest in their great German developments. These/^{German} factories, even/^{long} before the War, were manufacturing munitions for the German Army. The Remington Company owns and controls the large Torpedo Works of Frankfurt which is producing not only typewriters and bicycles but machine guns and fuses, etc. for the German Army. The chief stock-holder of the Remington is Mr. James Rand, Jr., well-known anti-Labor Industrialist in this country and for years one of the strongest opponents of The President in his policy to help the workers in America. He is known to employ thugs in keeping the workers down, and his reputation as an opponent of all free institutions is well known and a record in the courts of this country. It was this gentleman who threatened to move his factories out of America to Europe if necessary some time before the War. He, no doubt, meant to Germany. The German business of this Company, like the German business of/^{the} other Companies, now controls all of their former very valuable export trade to all parts of Europe, and long before the War began these Industrialists neglected their American business and sold as much as possible from Ger-

2/5/41.

many, sending to Germany their best mechanics, all their American patents, and thereby built up their German business so far with cheap Labor that the American Labor man could not compete.

At the same time, they insisted on maintaining open shops in the American factories to keep the Laborers down in this Company.

There has been a recent sit-down strike at the Royal factory which has necessitated the Royal's paying the workmen about 4¢ per hour more. This Company is paying dividends of about \$7.50 on its common stock, while their workmen have been working at a wage which necessitated the whole factory going on strike.

The Underwood Company, whose President is Phillip D. Wagoner who has made many trips to Europe and Germany and who recently appeared ^{in print} as a friend of Westrich, the famous German Agent in this country, owns and controls by 90% majority the Mercedes, largest office-machine equipment Company in the World and Factory in Germany. This Company has about 6000 workers, and even many years ago ~~this~~ ^{an extra} Factory was built in Germany by the Mercedes Company which is owned and controlled by the New York firm for the purpose of building munitions. This certainly was done with their knowledge and consent. Since the recent exposure, Mr. Wagoner has stepped very much into the background, turning his management over to Mr. Treske, another gentleman very friendly with Mr. Westrich.

2/5/41.

The Underwood Typewriter Company, which had a business of six to eight million dollars in Europe before the War under John Underwood, has in recent years, through their Management, and their German subsidiaries where they build practically all the models of the Underwood Typewriter business, given that business, as well as a great part of their South American business to the subsidiaries of the Mercedes Company.

The Royal Typewriter Company, which owns and controls the Orga Typewriter Company in Germany, is headed by Mr. Edward Faustmann and Mr. Max Miller, which company has developed its business and given its ^{models} ~~typewriters~~ to the Orga Company for production.

In all these factories in Europe these American Companies, with investments amounting to at least four or five million dollars, have been building in Germany munitions, fuses, machine-guns, etc. to destroy England.

Their factories in this country are still untouched for the same purpose by our Government. All of their machine-tool mechanics could immediately go into manufacturing our machine-tools which are necessary for airplanes, and most of the machines could be changed over without delay to manufacture fuses, machine-guns, etc.

It is quite evident that these men in charge, who even at the present time are doing all possible to develop and aid the German manufacturers and helping to defeat England, are defeating the very purpose of the All Out Aid that we are trying to render to that country, to save our own.

2/5/41.

The Government should take over these ^{factories} ~~plants~~ without further delay in their own interest. Certainly there are enough typewriters in the country, used and otherwise, to supply the immediate demands, while these factories can be used for armament purposes.

It is quite evident that the men in charge --with their very anti-Labor psychosis and very pro-German affiliations -- are not fit to handle these jobs.

Mr. John Zellers, who was born in Germany, has recently been cited by the Dies Investigation to aid the German-American Bank in this country and was listed as a strong supporter.

No doubt there are other Industries which are under similar management and which should be considered seriously from a Defense point of view.

* * * *

P. S. Hitler acts fast! Why don't we -- and then talk afterwards?

PSF Knudsen
Folder

THE WHITE HOUSE
WASHINGTON

February 12, 1941.

MEMORANDUM FOR

HON. WILLIAM S. KNUDSEN

This suggestion has been
made to me. Will you think it
over and speak to me about it?

F. D. R.

Memo on Aircraft production
figures and suggestion that the
Office of Production Management
give out a monthly announcement
of number of planes delivered to
Army, Navy, British, other govern-
ments and commercial airlines.

*file
Personal*

*PSF
Knudsen*

OFFICE OF PRODUCTION MANAGEMENT

SOCIAL SECURITY BUILDING
WASHINGTON, D. C.

February 12, 1941

RECEIVED
FEB 12 1 46 PM '41
THE WHITE HOUSE

The President
The White House

My dear Mr. President:

Referring to your memorandum of February 7 dealing with the typewriter industry, please be advised that the facilities of all three companies surveyed are as follows:

<u>COMPANY</u>	<u>LOCATION</u>	<u>ASSIGNMENT</u>
Remington Rand	Bridgeport, Conn.	Pistol components
" "	Elmira, N. Y.	Fuzes and parts
" "	Ilion, N. Y.	Fuzes and parts
" "	Middletown, Conn.	Small arms components
" "	Tonawanda, N. Y.	Bomb pin assemblies
Underwood-Elliott-Fisher	Bridgeport, Conn.	Pistol components
" " "	Hartford, Conn.	Pistol components
" " "	Burlington, Conn.	Pistol components
" " "	Burlington, N. J.	Small arms components
Royal Typewriter Company	Hartford, Conn.	No assignment

Up to the present time there has been no serious shortage in the items on assignment in the different plants. The first ones involved will be the plants assigned to fuzes, which will probably be needed on the next program, at which time all companies will be asked to bid on their respective items.

Respectfully submitted,

W. S. Knudsen

William S. Knudsen

PSF Knudsen Folder

July 9, 1941.

My dear Mr. Knudsen:

I am very anxious that we substantially increase our output of tanks and that we do it as promptly as possible.

I wish you would get together immediately with the Secretary of War and Mr. Hillman to work out a program utilizing the maximum tank capacity in America. I am particularly anxious that the program include as much increase as possible in the planned production for the balance of the year.

As you know there is an immediate and urgent need on the part of the British for tanks. I know how difficult it is for anyone to try to indicate the exact number of tanks which are needed by the British and ourselves and it seems to me, therefore, that the criterion should be, for the next year or so at least, that the only limiting factor should be the ability of industry to produce the tanks.

I assume there will be a need for machine tools and I want to stress again the importance of getting as many of these tools as possible from existing consumer goods plants.

I am sure that your Department has given serious consideration to the increased production of tanks and I am, therefore, asking if you will let me have your general recommendations by Friday of this week.

Very sincerely yours,

The Honorable
William S. Knudsen.

July 9, 1941.

~~CONFIDENTIAL~~

My dear Mr. Knudsen:

I am convinced that if we are going to get production where it must be during the coming months that it is essential that we utilize for defense purposes a substantial part of the large durable goods factories in America that are now manufacturing items to meet consumer needs.

I am convinced that we must have the services of the foremen, the skilled workers, existing engineering departments and, in fact, the going organization of these great plants if we are to get on as rapidly as our national interest requires.

I realize there will be some delay in the change over of manufacturing and there must inevitably be a cost, which in the last analysis must be borne by the Government.

I am anxious that you arrange through appropriate conferences to put this proposal into effect at once. I am prepared to take whatever executive actions are necessary in order to accomplish this objective.

Very sincerely yours,

The Honorable
William S. Knudsen,
Director General,
Office of Production Management.

PSF Knudsen Folder
3-41

August 30, 1941

MEMORANDUM FOR MR. KNUDSEN:

I am enclosing, for your information and guidance, a copy of a memorandum just sent to the Secretary of War.

In conformity with the policy outlined in that memorandum, will you please submit to me not later than September 10, 1941, and after consultation with Army and Navy officials, your recommendations as to the amount of aid in the form of raw materials, intermediate materials, and manufacturing equipment that can be made available to Russia, prior to June 30, 1942.

Information as to the stated needs of the U.S.S.R. will be made available by the Division of Defense Aids report.

F. D. R.

See: Secy of War Folder - 1-41 for copy of memo from the Pres. referred to above.
Copy also sent to Secy. of the Navy.

PSF: Knudsen Folder

THE WHITE HOUSE
WASHINGTON

PRIVATE AND CONFIDENTIAL

Hyde Park, N. Y.,
September 8, 1941.

MEMORANDUM FOR

HON. WILLIAM S. KNUDSEN

I will talk with you about
Arthur Bunker and Gordon Reed
at the first opportunity and
will defer final action until
that time.

F. D. R.

DECLASSIFIED
By Deputy Archivist of the U.S.

By W. J. Stewart Date JUN 9 1972

HENRY L. STIMSON
SECRETARY OF WAR

FRANK KNOX
SECRETARY OF THE NAVY

WILLIAM S. KNUDSEN
DIRECTOR GENERAL

SIDNEY HILLMAN
ASSOCIATE DIRECTOR GENERAL

OFFICE OF PRODUCTION MANAGEMENT
OFFICE OF THE DIRECTOR GENERAL
WASHINGTON, D. C.

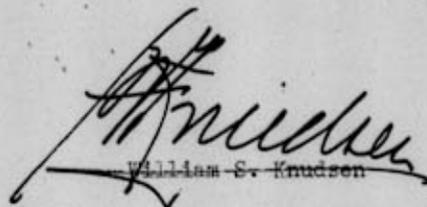
September 5, 1941

The President
The White House

My dear Mr. President:

In the case of Arthur H. Bunker and Gordon Reed, I ask respectfully that action on their approval be held in abeyance until I have had a chance to see you and explain the special circumstances which govern their situation in O.P.M.

Respectfully yours,


William S. Knudsen

THE WHITE HOUSE
WASHINGTON

*Knudsen Folder
PSF Subject
3-41
file*

October 7, 1941.

~~CONFIDENTIAL~~ MEMORANDUM TO MR. KNUDSEN:

I have not approved the appointment of William A. Parker because of a definite irregularity in his income tax return reported by the Treasury Department.

F.D.R.

No papers accompanied the original of this memorandum to Mr. Knudsen.

also see: Dollar & Ryan Folder

PSF Knudsen Files

Hyde Park, New York
November 2, 1941.

Dear Bill:

The British have made a formal protest against the mimeographing and publication of the information contained in Defense Progress Report No. 57 and Defense Record No. 7 of merchant shipping losses.

They protest furthermore against the very secret data concerning the British bomber program, including weight of bombs, as revealed in Defense Record No. 8.

I have before me Defense Progress Report No. 57 and there is nothing on it to indicate that it is confidential except in very finely printed words at the bottom of the report.

I feel very strongly that this confidential data must be more carefully guarded. It is bound to get into the hands of Germany. I believe there are very few people in this government entitled to this information. I question whether reports of this kind should be placed on any mimeographing or multi-graphing machine.

I hope you will caution the personnel who have access to any of these figures not to discuss the figures with any one.

For instance, I note the article by Hanson W. Baldwin, in Section FOUR of the New York Times of today which gives away some of our most secret information. Obviously, this newspaperman had access either to a report which had been published, or to some individuals in the government who gave him secret information.

Very sincerely yours,

/s/ FRANKLIN D. ROOSEVELT

The Honorable
William S. Knudsen,
Director, Office of Production Management.

RG/43

FSF Knudsen Folder 3-41

HENRY L. STIMSON
SECRETARY OF WAR

FRANK KNOX
SECRETARY OF THE NAVY

WILLIAM S. KNUDSEN
DIRECTOR GENERAL

SIDNEY HILLMAN
ASSOCIATE DIRECTOR GENERAL

OFFICE OF PRODUCTION MANAGEMENT
OFFICE OF THE DIRECTOR GENERAL
WASHINGTON, D. C.

November 4, 1941

THE WHITE HOUSE
NOV 5 10 09 AM '41
RECEIVED

The President
The White House

My dear Mr. President:

Replying to your letter of November 2 dealing with Defense Progress Report No. 57 and Defense Record No. 7, please be advised that I have ordered these two reports discontinued.

From time to time when information is requested by duly authorized Government agencies, reports will be furnished over my signature and will be definitely controlled as to secret information.

Respectfully yours,

William S. Knudsen
William S. Knudsen

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THE WHITE HOUSE

RECEIVED
NOV 10 1941
DIRECTOR'S OFFICE
BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE

THE WHITE HOUSE
WASHINGTON

November 6, 1941.

MEMORANDUM FOR HARRY HOPKINS:

For your information.

F.D.R.

THE WHITE HOUSE
WASHINGTON

November 7, 1941

MEMORANDUM FOR HARRY HOPKINS:

FOR YOUR INFORMATION AND
RETURN FOR MY FILES.

F.D.R.

Schedules setting forth magnesium requirements and estimates of production from now throughout the full year of 1942.

RSF Knudsen Folder

155

OFFICE OF PRODUCTION MANAGEMENT

SOCIAL SECURITY BUILDING

WASHINGTON, D. C.

3 November 1941

The President

The White House

My dear Mr. President:

I have now assembled the information which you requested in your letter of October 22, with respect to the distribution of aluminum and magnesium. The principal classifications of allocation of aluminum for the month of November, which can be regarded as a typical month, are as follows. The subdivisions of all of these classifications appear on a schedule attached to this letter.

Aluminum — Allocations for November 1941
by final use
(Unit: 1,000 pounds)

<u>Direct Defense</u>	<u>Primary</u>	<u>Secondary</u>
Aircraft	36,361	262
Army Ordnance*	5,200	82
Other Army*	2,250	414
Navy Ship*	7,330	92
Other Navy*	979	287
Maritime	83	80
Lease Lend, etc. (Excluding Russia)	1,625	142
Russia	513	—
<u>Indirect Defense</u>	<u>3,348</u>	<u>6,457</u>
Steel	41	5,037
Other Uses	3,307	1,420
<u>Civilian (Incomplete)</u>	<u>35</u>	<u>748</u>
TOTAL	57,724	8,564

* Includes pro-rata portion of unclassifiable Army and Navy Purchases.

To provide for the allocations of primary metal, there will be approximately 56 million pounds of production, 3-1/2 million pounds imported from Canada, and two million pounds of new metallurgical scrap returned to the system, a total of 61-1/2 million. However, the small amount allocated to Russia is not typical, it being understood that this will require more nearly 5 million pounds a month, or 4-1/2 million greater than that for November. Ordinarily, these November allocations would be somewhat increased by some additional civilian allocations a little later on, when it had been definitely determined that no more defense requirements for the period would arise.

You have particularly asked what the production of aluminum and magnesium is expected to be for the year 1943. From existing plants, together with those plants which are to be erected by the Government, the production of primary aluminum should be 1,441,000,000 pounds; in addition, the purchases arranged for from Canada should be 242,000,000 pounds; a total of 1,683,000,000 pounds. In 1944 metal from Canada should increase to 337,000,000 pounds. In addition to this amount of virgin metal available in 1943, there should be recovered and returned to the system at least 20% of the total in the form of new scrap. This would provide an additional 336,000,000 pounds. There should be therefore available for allocation 2,019,000,000 pounds.

While no actual figures are readily available as to secondary aluminum supplies and requirements, we feel fairly certain that as a corollary to the large increases in primary production, there will be sufficient secondary metal to meet estimated military and essential civilian requirements.

We are preparing facilities for fabricating all of the above aluminum which should all be in operation for the full year 1943. I am sure it will interest you to know that the total stated requirements for all direct defense uses, at their peak annual rate, amount to 1,209,000,000 pounds. Therefore the stated direct defense requirements at peak, including lease-land and excluding Russia, will require about 60% of the aluminum which will then be available. However, differences sometimes develop between stated needs and actual requirements for certain uses. For November the Aircraft requirements and Army requirements were in close agreement with their previously estimated needs. The Navy, however, estimated their needs as four million pounds and required over double that amount.

As to your general inquiry with respect to present uses of aluminum, less than 2% is currently being shipped for any purposes other than defense, direct or indirect. In the past 12 months, civilian use of aluminum has decreased from several hundred million pounds a year to less than a million pounds a month. We have tried to accomplish this necessary reduction with a minimum disturbance to the labor situation.

In this period, there has been at all times sufficient aluminum metal available for defense needs, except for some minor restrictions placed upon the borderline cases. There have been periods in which certain fabricating facilities have not been adequate for the particular forms in which aluminum was needed for defense production. It has been necessary to expand fabricating facilities as rapidly as the production of metal has increased.

As to inventories and reserve stocks in the hands of manufacturers of civilian materials, they have generally been consumed during the past six months. There may be some small amounts of aluminum being bootlegged, but compliance steps are being actively pursued to eliminate this. I shall be glad to furnish more detailed data, should you so desire.

The President

Page Two

As to magnesium, the Government expansion program has been arranging for facilities, using the electrolytic method, to the extent of 334,000,000 pounds of production per year. It is contemplated to increase this by an additional 18,000,000 or total production by this method to 352,000,000 pounds.

In addition, there are now facilities for producing magnesium by the Hansgirg process, owned by Todd California Shipbuilding Company. At the present time facilities for making 8,000,000 pounds annually have been completed and facilities for making 16,000,000 pounds more are under construction. This plant may further be increased by another 24 million or 48 million, depending upon the degree of success attained in operating a plant using the electro-thermal process.

For 1943, the production of new magnesium metal should be between 352,000,000 and 430,000,000 pounds, depending upon final decisions respecting increase of facilities referred to above.

Again, as in the case of aluminum, the total stated military peak requirements would consume slightly over 60% of this amount of metal. However, the possible variables in magnesium requirements are much greater than they are in aluminum. The whole technique of incendiary bombing is rapidly changing, and could conceivably double or treble the quantity now considered ample. Also greater percentages of magnesium, if available, could and would be used in aircraft and other military construction.

You have further inquired what the opportunities may be for building up stockpiles of aluminum and magnesium during the next few months. In the case of aluminum, the demands are constantly increasing month by month and approximately keep pace with supplies. If we adhere to the same rigid policy of allocations, we should be able to meet the Russian requirements. These allocations, in our opinion, are not so restrictive as to hold up any production of defense materials. By spring or mid-summer of 1942 the new facilities under the Government program should begin to come into operation and will produce generous supplies for any programs which so far have been formally approved.

In the matter of magnesium, the situation is unavoidably serious from now until at least July of next year. We will, however, be able to take care of all requirements for aircraft, including the magnesium needed for alloying aluminum. We will be able to take care of the Army and Navy powder requirements at the rate of 200,000 pounds a month, the Canadian requirements in full, small miscellaneous requirements for defense and ships, varying amounts to the British for their bombing program, running on the average somewhat over 500,000 pounds a month. This excludes any production from the existing Todd-California plant, which is designed for a capacity of 650,000 pounds a month. Anything tending toward full scale operation of this plant together

Y. L. STIMSON
SECRETARY OF WAR

FRANK KNOX
SECRETARY OF THE NAVY

WILLIAM S. KNUDSEN
DIRECTOR GENERAL

SIDNEY HILLMAN
ASSOCIATE DIRECTOR GENERAL

*PSF Knudsen Folder
3-41*

OFFICE OF PRODUCTION MANAGEMENT
OFFICE OF THE DIRECTOR GENERAL
WASHINGTON, D. C.

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November 13, 1941

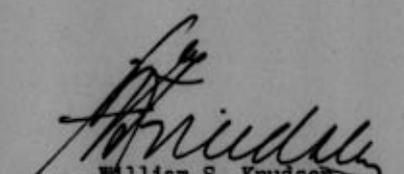
The President
The White House

Dear Mr. President:

Referring to the matter discussed
in your letter of October 16, please be advised
that the Defense Record will be reinstated and sent
to the parties you outline.

On the Defense Progress Report,
the committee will be formed as you direct and the
report reinstated as soon as possible.

Sincerely yours,


William S. Knudsen

PSF: Knudsen Folder
5-41

THE WHITE HOUSE
WASHINGTON

November 16, 1941.

MEMORANDUM FOR HARRY HOPKINS:

To read and return to me.

Tell me where did this report in the
black binding come from?

E.D.R.

Letter from Hon. Wm. S. Knudsen, Director General,
OPM, 11/13/41 to the President, returning black
leather binder, in re Automobile Industry,
Production of Copper, More Efficient Steel
Operation, Speedy Expansion of Steel Capacity,
Electrical and Machine Industry, General
Difficulties of Defense Program, and Suggested
Program for Prosecution of National Defense Program,
together with Mr. Knudsen's comments regarding the
above.

PSF: Knudsen Folder
3-41

~~PRIVATE AND CONFIDENTIAL~~

November 10, 1941.

Dear Bill:-

Who gave me this a few days ago I do not remember. Please do not copy it or let anyone else see it but read it yourself and let me have your slant.

As ever yours,

Honorable William S. Knudsen,
Office of Production Management,
Washington, D. C.

Report on Automobile Industry, Production of Copper, More Efficient Steel Operation, Speedy Expansion of Steel Capacity, Electrical and Machine Industry, General Difficulties of Defense Program, and Suggested Program for Prosecution of National Defense Program.

HENRY L. STIMSON
SECRETARY OF WAR

FRANK KNOX
SECRETARY OF THE NAVY

WILLIAM S. KNUDSEN
DIRECTOR GENERAL

Knudsen Folder
SIDNEY HILLMAN 3-41
ASSOCIATE DIRECTOR GENERAL

OFFICE OF PRODUCTION MANAGEMENT
OFFICE OF THE DIRECTOR GENERAL
WASHINGTON, D. C.

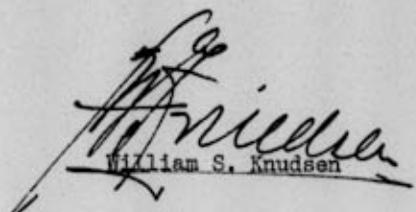
November 13, 1941

The President
The White House

My dear Mr. President:

I am returning herewith the report
which you asked me to look over. My comments
are attached hereto.

Respectfully yours,


William S. Knudsen

Enclosures

The automobile industry is being converted as fast as tool making and fixture making permits. It is not possible at the moment to get the full 16% capacity employed. This will probably take another year, or cause still more dislocation of employment.

Defense contracts with the industry will reach close to three billion dollars by the end of 1941, and will keep it busy during 1942. The statement that company owned tool shops are working short time is incorrect. A check up on November 12 showed every manufacturer working six days per week and two working seven days per week, all on two or three shifts.

(a) Ford, Chrysler and General Motors have received orders for medium tanks so as to get the fuller use of their facilities. The tank was designed with an air-cooled motor all made by one company which cannot produce the number needed. Therefore, the three companies are working on their own liquid cooled power plants and will each make complete tanks. Ford cannot make all the castings. There are 44 companies working on tank castings at present and we will have to bring more in for 3,000 tanks per month. Three sets of material sources will not be established. The work will be spread.

(b) The reference to Ford on aircraft cylinders is partly true - the Ford cylinder has recently been approved. Other cylinders are made from steel by the upsetting method. The requirements are about 200,000 per month at the peak. We now have three companies making cylinders and could not risk one company making all.

(c) The statement about sub-contracting breaking down is incorrect. The sub-contracting program has been delayed by the reorganization of the Contract Distribution Division which is rather confused at the moment, but the companies are employing the regular sub-contractors within the industry as always. The reference to the unemployment in the automobile industry is at cross purposes with this remark. The companies cannot satisfy the sub-contracting effort and take care of the unemployment problem in their own plants. We must strike a reasonable balance between the two.

COPPER

(1) The Walker mine has been closed down but not on account of cost - the ore body is getting worked out. It is not a question of subsidy, it is a question of practical operation.

(2) I was in Butte in July and found that the mines were working 5 days a week and that the Union imposed a fine on anyone working the sixth day. I called Mr. Hillman and two months after I was told about the ventilating trouble. I had the company officials in and they pointed to the Bureau of Mines inspection system, every regulation of which was complied with. They also pointed out that the closed shop condition in Butte had created a shortage of miners, the miners being unwilling to break in new men. It should be admitted however, that a wage demand had something to do with labor conditions. When men on top of the ground can get work at \$7.00 - \$8.00 per day, it is difficult to get people to work a mile below ground for about \$6.50. The price of copper is involved in this and will probably be adjusted when a new wage scale is established. Attached statement shows additional copper supply planned for the next two years.

STEEL

The typical examples of steel inefficiency portrays two instances in 75 companies. The first one in Lackawanna talks about the 54" blooming mill not converted to slab use. This is not correct. The mill is running 24 hours a day making slabs for plate, which is being produced at the rate of 20,000 tons per month. Otis will convert 18,000 tons of its monthly strip capacity to plate by next Spring. To spread the plate load over more companies will produce the same amount of plate, with less dislocation.

The amount of steel required for defense is mostly made up of special steels -- armor plate, alloy forgings, and plate. There is no need at the present time for pooling civilian steel allocations. The net result of pooling at this stage would probably be to hurt the smaller mills which have few facilities for the special steels most required. Attached is a statement showing the extent of new capacity, and the extent of conversion from strip to plate.

The scrap situation is admittedly serious. We are getting 40% more scrap than we ever had, but we are getting more steel also. We saw the scrap picture getting tight and spurred the construction of blast furnaces for more Pig which can produce synthetic scrap. We are also organizing scrap collection through dealers on a national scale exactly as the memorandum states. There is some complaint of price from the dealers, but the more honest dealers admit that higher prices would not produce more scrap. This is a matter of forced collection of scrap and perhaps a fifty cent per ton incentive to the broker, who is really the main scrap collector. Another thing which has aggravated the scrap question is the excessive quantity of foundry scrap required for heavy castings - (machine tools, etc.).

STEEL EXPANSION

You wrote me about the first of June asking increases in steel production. On September 30, SPAB approved the proposed program. Since the date of your letter, 32 projects have been submitted to the RFC and 17 have been passed by the RFC. The tonnage is 7,044,000 tons of Pig Iron and 5,794,700 tons of Steel. We have naturally given preference to Pig Iron, Plates and Electric Furnace Steel, these being the important items.

The expansion of electric furnace capacity takes in five companies. Both welding rod and armor plate is taken care of in the expansion program. The welded tank has been approved and will be placed in production without interfering with present output. The statement that riveted tanks are dangerous is exaggerated. The steel industry is being coordinated. The recent meeting on Armistice Day gave every support to your appeal for more steel.

ELECTRICAL - MACHINE INDUSTRY

The sudden cut in output of electrical refrigerators and household devices produced some dislocation in the industry. Equipment used in manufacturing these devices is only partly adaptable to defense work. We are making special efforts to get the companies involved help in getting defense contracts, both prime and sub-contracts. The Zipper industry is getting some relief from priorities. Westinghouse had a refrigerator plant in Mansfield, Ohio, which was the only one of their many plants which had a lay-off. The company has created a sub-contracting division in charge of a vice president, to give special attention to more sub-contracting. The Contract Distribution Division is working on all these problems and will assist in getting better results.

The proposed management-labor council is the so-called Murray plan submitted to you last January and referred to OPM. I have no particular objection to any arrangement which will bring labor into a better position in the defense picture, but I do want to point out that a labor leader but seldom has any engineering or even business training and, as is the case in this report, makes a lot of charges without having any

COMPLETED PLATE CAPACITY
By Successive 3-month periods
Net Tons per month

Dec.31	Mar.31	June 30	Sept.30	Dec.31	Mar.31	June 30	Sept.30	Dec.31
<u>1941</u>	<u>1942</u>	<u>1942</u>	<u>1942</u>	<u>1942</u>	<u>1943</u>	<u>1943</u>	<u>1943</u>	<u>1943</u>

" Plate Mill Capacity

<u>1. Underway</u>								
Homestead 160" *						34,500		
Homestead 100"			26,500					
Sparrows Point 132"					45,000			
Pittsburg, Calif.USS								40,000
Houston, Texas		2,400						
Inland Steel Co.	1,300							
Otis Steel Co.	2,000							
Pacific Coast "Beth"								35,000
<u>Totals</u>	<u>3,300</u>	<u>2,400</u>	<u>26,500</u>		<u>45,000</u>	<u>34,500</u>		<u>75,000</u>
								186,700

" Strip Mill Capacity

<u>Underway</u>								
Republic	17,000							
Great Lakes		23,000						
Granite City				16,000				
Wheeling			22,000					
Otis				18,000				
Inland Steel Co.			18,000					
<u>Totals</u>	<u>17,000</u>	<u>23,000</u>	<u>40,000</u>	<u>18,000</u>	<u>16,000</u>			<u>114,000</u>
to be								
<u>2. Completed on above dates.</u>								
Further Possibilities			30,000	30,000				60,000

Total Plates								
pared & Off Strip	17,000	26,300	72,400	74,500	16,000	45,000	34,500	75,000
Mills								360,700

he plate off this mill will be largely
 special armor and special heat treated.

November 5, 1941

PLATE CAPACITY
 October 31, 1941
SUMMARY

	<u>Capacity Completed</u>	<u>Capacity Underway*</u>	<u>Total</u>	<u>See Exhibit</u>
1. <u>Definite</u>				
On Plate Mills	414,612	186,700	601,312	"A"
On Strip Mills	143,000	114,000	257,000	"B"
Totals	557,612	300,700	858,312	
2. <u>Further Possibilities</u>				
On Plate Mills	-	-	-	
On Strip Mills	-	-	60,000	"C"
3. <u>Total Definite and Further Possibilities</u>				
On Plate Mills	-	-	186,700	
On Strip Mills	-	-	174,000	
			360,700	
4. Grand total completed, underway and possible:			918,312 net tons per month	

* Included in program approved and to be approved.

SUMMARY OF PROJECTS FOR INCREASED COPPER PRODUCTION

Project No.	Name of Company	Additional Annual Production	Capital Expenditures		Investment per Ton Year	Price of Copper Needed	Time Required to Bring in Production	Remarks
			By Company	By Gov't				
Group I	1 Kennecott***	48,000	---	---	---	12¢	Jan., 1942	Involves stepping up production. No plant increases. Have increased 1850 T/mo. over average of 1st 6 mos. of 1941. Involves 6-day week. Company still working 5-day week. Some improvement in labor situation. Production to begin December, 1941. Involves stepping up production. No plant increases. Have increased 300 T/mo. over average of 1st 6 mos. of 1941. Involves stepping up production. No plant increases. Have increased 100 T/mo. over average of 1st 6 mos. of 1941. Awaiting action by RFC and State Department. International Smelting Co. project.
No Gov't financing or price subsidy required	2 Anaconda***	24,000	---	---	---	12¢	Jan., 1942	
	3 Phelps-Dodge - Morenci***	75,000	35,000,000	---	\$ 467	12¢	March 1942	
	6 Magma***	3,000	---	---	---	12¢	Present	
	7 Miami***	3,600	---	---	---	12¢	Jan., 1942	
	17 Chile Copper Company*	25,000	5,000,000	---	\$ 200	12¢	June, 1943	
	20 Copper Canyon - Nevada***	1,800	---	---	---	12¢	Jan., 1942	
		180,400						
Group II	4 Phelps Dodge Morenci Add'n**	80,000	---	28,000,000	\$ 467	12¢	Jan., 1943	Construction will continue uninterrupted after Project #3 is finished. Informally approved by Cu Zn Sec. 11/1/41. Referred to RFC.
Requires Gov't financing but no price subsidy	10 Castle Dome**	23,000	---	8,500,000	\$ 370	12¢	June, 1943	
	15 Cananea	50,000	---	30,000,000	\$ 600	12¢	Jan., 1944	
		133,000						
Group III	5 Phelps Dodge - Misc.*	26,400	350,000	---	\$ 13	14¢		Project inactive. Part of production is being obtained. Turned down by RFC. Anaconda may handle. Awaiting report from A.C.M. Co. Price basis is (a) cost plus 1¢ with 17¢ ceiling, or (b) 16¢. Price basis is cost plus 2¢ with 16¢ ceiling. Awaiting report from Christmas
Requires price subsidy but no Gov't financing	11 Grey Eagle (Newmont)**	6,800	750,000	---	\$ 110		Jan., 1943	
	12 North Butte*	9,000	400,000	---	\$ 44	15¢	Oct., 1942	
	13 Inspiration*	12,000	560,000	---	\$ 47	15¢	Sept., 1942	
	14 National Tunnel & Mines*	5,000	75,000	---	\$ 15	15-17	May, 1942	
	15 Christmas	4,000	?	---	---	16¢	?	
		63,200						
Group IV	8 Quincy	4,000	---	500,000	\$ 125	Over 12¢	Jan. 1943	Reclamation of tailings. Awaiting report from Quincy. Completed.
Requires Gov't financing and also price subsidy	9 Bagdad**	10,000	---	2,500,000	\$ 250	" "	Jan. 1943	
	19 Africana	14,000	---	---	---	---	---	Awaiting decision re investments in foreign countries. Awaiting visit of president C & H next week.
	Calumet and Hecla	10,000	---	3,000,000	\$ 300	Over 12¢	Jan. 1944	

*** Indicates projects on which no action is required by RFC.
 * Indicates projects have been approved by GPM.
 ** Indicates projects approved by RFC and agreement reached.

real substantial background for them. Also the remedies proposed are so general as to preclude their adoption without at least the management side being heard.

In the flush of labor's successful organizing campaign which without your help could not have been accomplished, labor now feels that it should have a voice in the management without any risk, financial or otherwise. I think the organization effort is still in the primitive stage. Shop efficiency has definitely gone down -- costs have gone up and prices are getting harder and harder to control. Shop discipline has been seriously hurt and nothing has been offered to restore it. Pressure of the most outrageous sort is used to assume control of production and factory supervision.

The defense program is not perfect. I could make a pretty strong case for a ministry of supply handling all procurement. As far as the requirements are concerned we are in a fair way to get them far enough in advance of appropriations to do some forward planning. The reference to the original 11 billion dollar defense program fails when we remember that we have already turned out 11 billion dollars worth of product, 14 months after the 11 billion appropriation was passed. Large contracts had to be placed at the start. We had no inventory of armament and speed was essential. Small manufacturers, particularly West of the Allegheny's, were not particularly interested in defense work. Domestic business was fine and it was not until priorities and shortages made them think that the smaller manufacturers became interested. At that there are more than 24,000 prime contracts let to date. The number of sub-contracts we have no record of but it would be at least 5 times this number.

The dislocation of employment is going to be a problem and the only saving grace is that we will have enough work for total employment and our real problem then is the fellow who won't go where the work is, and where we are unable to bring the work to him. The labor rank and file are at heart patriotic and willing to work; but the organizing campaign has produced a good many leaders not always with the best knowledge of the work, but with a strong faculty for complaints and demands. As this leadership gets supplanted by higher grade men, or even the present leadership gets cool headed and begins to analyze conditions from both sides, then I think the management-labor combination is possible.

THE WHITE HOUSE
WASHINGTON

file

M E M O R A N D U M

November 21, 1941

TO: THE PRESIDENT

FROM: MR. LUBIN

Harry asked me to check up on the
attached. I find that it originated in
the office of the Secretary of the
Treasury.

PSF
Knutson

AUTOMOBILE INDUSTRY

Although the automobile industry has about 16% of the durable goods production capacity of the country not more than 10% of that capacity has been mobilized up to the present time for defense purposes. Even with heavy curtailment now threatening car production, no appreciative steps have been taken to plan for conversion of present civilian facilities to defense production. This means that the major producing power of the industry is still being held out of defense work.

As a specific example of the absence of correlation of facilities and manpower to defense production is the fact that tool and die facilities in Detroit are now being used at 35% of capacity as revealed by a recent United Automobile Workers Union survey. The captive tool and die shops of Detroit (owned by the automobile corporations) are working one shift four days a week.

As the result of absence of correlation within the industry we have the following situations as examples:

(a) Ford, Chrysler, and General Motors are all receiving separate contracts for medium tanks. This means that each one of the companies will establish a full cycle of production for tanks, ordering a few parts from the outside. Through correlation of available machinery and technical capacity tank contracts could be broken down. For instance, Ford could make all castings for all the tanks in the industry, or, more specifically, for the production quota of Michigan. This is so because Ford can do the castings best. Each company could thereby concentrate on the specific tasks that they could do best. Thereafter all of the parts could be brought to a final assembly point.

(b) The same principle applies to aircraft. Ford has developed a technique for turning out cylinder sleeves or liners which could be used to make all sleeves used by Curtiss-Wright or Pratt Whitney. Today each of the companies, Ford, General Motors, and Chrysler are working on that problem in spite of the fact that Ford has already developed the process to the highest degree of efficiency.

(c) The subcontracts system has broken down completely. The big companies take all the plums and farm out the headaches. The smaller shops are obviously least well-equipped to assume the headaches--their technical staffs being smaller and their facilities of a character that they can't accept this burden.

An official channel must be established for the expression of workers' ideas and suggestions for the solution of the difficult production problem. Countless reports from defense plants recently built and now operating in the industry, demonstrate that this essential contribution is being made but unofficially by union members at the present time.

Because of the absence of planning in the transformation of existing automobile manufacturing facilities into defense facilities will mean the idleness of approximately 215,000 men by the first month of 1942. This will include skilled, semi-skilled, and unskilled men. Of course this will involve also a corresponding idleness of existing plant facilities that had been attuned to civilian goods.

PRODUCTION OF COPPER

One of the raw materials for which there is an alleged serious shortage is copper. Recently the United States government increased the price which it pays for copper imported from Chile in order to create an additional incentive for increased production in South America to make up for this shortage. While this step by the United States Government had to be taken because of an alleged shortage, we find the following situation at home:

(1) Only recently the Anaconda Copper Mining Company closed down its Walker mine in California where 500 men had been employed. The reason given was that it was a mine that was losing money for the company. In spite of all the subsidies that the Government has given to the Anaconda Copper Mining Company in one form or another, the company has the absolute right to close down a mine and stop production in the face of an alleged shortage.

(2) The Anaconda Copper Mining Company, at its Butte, Montana, mines produces some 15% of the nation's copper. A recent survey disclosed that of the 5000 regular employees at the ten mines in Butte, more than one-half of the men worked less than one-half of the month.

The foregoing indicates that we are not using all of the available miners nor all the available mines for the maximum production of copper. Furthermore, even for those mines already in operation it is possible to increase production considerably. The concrete proposal which the CIO union has offered in this connection is as follows:

Improvement of the ventilating system through installation of air conditioning and fan systems; the poking of holes through the surface so as to eliminate the "hot boxes" where miners cannot work at all or where their work is handicapped by humidity and high temperatures; improvement of servicing as in haulage or placing of supplies thereby making operations more efficient;

abolition of the contract system which, as the labor turnover proves, instead of acting as an incentive plan actually boomerangs by cutting production in that men are encouraged to quit when working conditions are such as to decrease earnings.

As an indication of the technical feasibility of the foregoing proposal, we submit the program of the Magma Copper Company in Arizona which recently installed 3 new 140-ton centrifugal machines to provide air conditioning down to the 4,600 foot level of its mines at Superior, Arizona. As a result of this installation, temperatures at the deepest workings will be cut from 150 degrees to 90 degrees, thereby increasing output.

The foregoing proposal of course means financial outlay. However, it will permit the mines to be operated, not merely on the present 5-day work shift basis but on the basis of unbroken continuity of production 7 days a week for 24 hours a day with proper allowance for the minimum amount of time required for clearing work places and general maintenance.

November 4, 1941

MORE EFFICIENT STEEL OPERATION

The steel industry is still operating, for all practical purposes, as seventy-five separate companies. The coordination of the industry's facilities as a whole, with the over-all steel demands for armament and domestic purposes is not being achieved, except in a few insignificant instances.

A typical example is the manner in which steel is being produced for the restricted automobile output. For example, the Lackawanna, New York Strip Mill of the Bethlehem Steel Corporation -- annual capacity seven hundred and twenty gross tons -- is operating on a very limited schedule, going as low as two and three days a week. This mill has an auxiliary fifty-four inch blooming mill which is capable of producing large size slabs for conversion on the Strip Mill into three-eighths inch to probably as thick as one inch plate. Yet, it has not been converted for this purpose. The auxiliary equipment, such as run-out tables and shears, needed for the production of plates could be achieved with highest priority rating in a reasonable period of time. Instead, the company, through this mill, is hanging on to as much of its domestic auto business as it can. As a consequence, the Defense Program is suffering of a shortage of the type of steel plates as could be produced on this mill.

In the meanwhile, for example, the Otis Steel Company at Cleveland, Ohio is compelled to divide the production of its Strip Mill -- which is running at full capacity -- between heavy flat rolled products for defense purposes and the lighter products for essential domestic purposes. As a result, its total output of finished flat rolled steel products is less than it would be if it were operating entirely upon lighter products. Thus, the maximum output of which this mill is capable is not being achieved.

This is a typical example of industry-wide inefficiency. It results from the absence of any power, adequately informed or being capable of being continually so informed. The obvious step that should be taken to achieve maximum efficiency is to place the Otis Steel Mill 100% on lighter products for which it is especially adapted. The Lackawanna Plant of the Bethlehem Steel Corporation, on the other hand, should be placed exclusively on the production of heavy products such as plates, and kept on these products for 168 hours a week, except for such shifts as may have to be lost for maintenance. This is only one out of many instances, and is cited to illustrate the fact that the steel industry is not being operated as one unit.

Another illustration of this fact, which deals with the actual production of raw steel is the scrap iron situation. In the week of October 20th, the Lackawanna Plant of the Bethlehem Steel Corporation had five of its thirty open hearth furnaces idle because of lack of scrap iron. All of these furnaces have over a hundred ton capacity, and these five being idle, amounted to a weekly loss of 7500 ton of steel.

This gets to the problem of scrap supplies. The freezing of scrap prices has made certain scrap piles unprofitable of collection and transportation to consuming points. If the problem of scrap iron collection were tackled on an industry wide and national basis, mobile scrap units could be organized for the purpose of reducing these presently economically unmoveable scrap piles to transportable form and transported to consuming points. The cost, of course, would probably double the present top price of twenty dollars a ton but the scrap would get to the open hearth furnaces and the output of steel would not be curtailed for this purpose as it is at present and will be increasingly curtailed in the future.

SPEEDY EXPANSION OF STEEL CAPACITY

The 10,000,000 ton of steel ingot capacity expansion program has been turned over for execution and allotment among the several companies to the OPM. At this point apparently the "big eight" steel companies dominate the program. In the first instance they established a ruling that any open hearth capacity would only be built with adjacent pig iron capacity. The technical arguments that can be made in support of this ruling are impressive on first presentation. The purpose and net effect of such a ruling is to remove all of the smaller companies from eligibility in participation in the expansion program. The Apollo Steel Company, which heretofore has never made any steel, has secured a quarter of a million ingot steel capacity allotment without auxiliary pig iron manufacturing facilities. This illustrates the untenability of the ruling, although the ruling has considerably delayed expansion programs throughout the whole industry and has definitely discouraged some smaller steel companies from even attempting to participate in the program. A careful analysis of the allocation of steel making capacity indicates a concerted effort, apparently successful, of the big eight steel companies to continue their virtual monopolistic controls and in the post-war period to literally wipe out of existence most of the smaller firms. Just as the allocation of defense orders to a few large companies creates a bottleneck. In brief, a new expanded capacity can be achieved in probably half the time by spreading the capacity over most of the companies in the industry as well as allotting a larger ratio of the new capacity to the smaller companies. Forty managerial organizations at work in an expansion program will produce much faster results than having the bulk of the program tied up in the hands of the technical and managerial staffs of eight large, cumbersome corporations.

There has been outright intimidation of smaller companies that has made them fearful to press their cases for a larger ratio or for even some of the new capacities. The courageous action of the Apollo Steel Company is the exception that proves the rule.

The expansion of electric furnace steel capacity approaches a scandal. None of the smaller specialty steel companies are participating in this program to any degree. The Carpenter Iron and Steel Company has expanded its facilities to some extent but this is part of the long range program that has been substantially financed with the company's own funds. The other specialty steel producers like this one, have not gone after any new electric steel furnace capacity nor has any been allotted them.

The seriousness of this will become apparent sometime in the year 1942. For example, one of the products of these specialty steel firms is welding rod steel. There is already a shortage of this product at the present time. Each of the companies in this group, such as Universal Cyclops Steel Corporation, Rustless Iron and Steel, etc., should receive from one to five 12½ ton electric steel furnaces with auxiliary equipment to meet the demands for this specialty steel and others that are so vital to the defense program. Welding rod will become particularly scarce when the tank production scandal breaks. The American Car and Foundry Company at its Berwick, Pennsylvania, plant will soon produce its 2000th 12½ ton tank. The Chrysler Corporation is producing its M-3 31 ton metal tank at the rate of around ten a day. All of these tanks are riveted construction. The marvel of Hitler's tanks has been that they could withstand 75 millimeter shells, because they were welded. It has definitely been established by trials that even a 37 millimeter shell will stop a riveted tank. The force of it, will, in most instances, shear off the rivets and thereby kill everybody in the tank. The shells that do not shear off the rivet heads knock it out of line, thereby slowing

it up and in most instances actually stopping it from further locomotion. Of course, when this fact penetrates through the maze of the defense machinery in Washington, D. C., there will be a speedy conversion to welded constructed tanks. In fact, unless the electric steel furnace capacity of the industry is expanded throughout all the companies experienced in operating steel furnaces the turnover to welded tanks may be delayed if not completely thwarted by the shortage of welding rod steel.

In most cases, the application of the simple idea of coordinating the steel industry on an industry wide basis will produce very definite and tangible results -- speedily. Unfortunately, the industry, acting by itself, is not disposed to so coordinate the industry. And equally unfortunately the federal government is neither adequately staffed nor effectively organized to make the industry do this job by itself. But there is a way in which effective industry wide coordination of the steel industry facilities and expansion program with demands for steel products can be accomplished.

ELECTRICAL AND MACHINE INDUSTRY

As a few examples of non-use of facilities and men in the electrical and machine industry there are the following:

(1) For the refrigerator industry: 15,000 men have already been laid off and 10,000 more will be laid off in this industry by January 1, 1942. These are skilled machine tool operators as well as both semi-skilled and unskilled assembly workers. The equipment of the plants consist of excellent machine facilities as well as conveyor mechanisms for sundry work. Virtually nothing has been done to bring defense either to these unemployed men or the unused plant capacity.

(2) Westinghouse Electric Company: Westinghouse Company has a backlog of 400 million dollars in defense contracts, yet it is laying off workers. 2500 men have already been laid off and more are scheduled to lose their jobs. The company is utilizing only one-half its capacity for defense work, the rest going for consumer and industrial non-defense production. With all these contracts Westinghouse isn't even allocating its work within itself so as to avoid unemployment.

In addition, Westinghouse has let subcontracts to 300 companies but these subcontracts are very small. They total about 4,400,000 man hours of work. This is equivalent to one year's work for each company if only 7 or 8 men are employed on the job. Here is a beautiful example of inadequate subcontracting and altogether inexcusable unemployment of workers and plant facilities.

(3) Zipper industry: About 12,000 persons are either now out of work or will very soon be unemployed in the zipper industry. While their skills are specialized and their machinery is similarly specialized, operators must exist for utilizing this capacity for defense work. No steps of any effective nature, however, are being taken to bring these workers into this industry.

The United Electrical, Radio & Machine Workers Union is the CIO affiliate having jurisdiction in this industry. The union initiated a program to facilitate full defense production through labor, management, and government cooperation. The principal objectives of these efforts are the swift and essential conversion of consumer goods facilities to the production of defense items, the protection of union standards in this readjustment, and the development of an adequate defense training program.

As part of this program, for instance, the union initiated a conference in northern New Jersey of representatives of the union and 45 companies with which the union had collective bargaining agreements. On another occasion the union initiated and organized a Mid-West emergency conference. The first meeting was attended by 600 Mid-West Mayors and 700 labor and management representatives.

In both cases, the conferences set up a permanent organization with management and labor representation.

From these conferences, the following was obtained:

(a) Efforts to obtain a "shopping list" of defense needs proved to be futile. In other words, it was impossible to obtain from the government any idea as to what actually was needed for production needs. This almost makes it impossible to estimate the actual defense usefulness of existing facilities.

(b) Efforts to get aid from the Contracts Distribution Division of the OPM in making a survey of plant equipments in order to be in a position to determine what such equipment can be turned into failed. The union, as a result, is making its own survey without any assistance from government engineers.

(c) The washing machine industry was being turned into complete idleness. As a result of joint representations made by the union and representatives of the company in this industry contracts were finally wrenched out of Army and Navy departments for the washing machine companies 'for' the production of war materials. This result was accomplished only after the most grave difficulties in interesting the Contracts Distribution Division and the Army and Navy. The joint efforts of the washing machine manufacturers and the union are also to be devoted in this connection toward the arranging of subcontracts among all the manufacturers in this industry so as to achieve the maximum production on the basis of the available plant facilities.

(d) Insufficient effort has been addressed to the training program in cases where the change over to defense production required different skills than those formerly required. It is essential that the Training Within Industry program be expanded and fully integrated with the plans to convert plants from consumer goods to defense production. Further efforts are required in this connection before the "training as usual" inclinations of the OPM can be overcome.

GENERAL DIFFICULTIES OF DEFENSE PROGRAM

The failures of the defense program highlight the necessity for a centralized authoritative agency to head up the task of production. The fact that in some categories our armament output is now beginning to be substantial only emphasizes how much greater actual output should be. The essentials of an effective arms production program are simple:

1. Find out how much is wanted; how many tanks, planes, guns and ships.
2. Find out what the nation's facilities for manufacturing are, what facilities need to be converted and what new plants must be built.
3. Engage the nation's industry in manufacturing the required goods at maximum rate.

Within these simple propositions the failures of the present effort are encompassed. The major failures may be summarized as follows:

- I. The production program has never been laid out concretely. Those responsible for production in the nation have never known how many guns, tanks, planes or ships they might be required to produce. The major part of the responsibility lies upon the Army and Navy whose responsibility it is to lay down as concretely as possible the actual equipment needed for a maximum effort. This responsibility has not been met. At no time has the nation been presented with a clear, concrete enumeration of the articles necessary to a maximum effort.

The first few months of the defense program were marked by efforts which adjusted production to levels necessary to a program of only 6 to 10 billion dollars. As appropriations mounted over the past 18 months, so did the level of the total program. Periodically, therefore, production schedules had to be shifted and soon such schedules outgrew available production facilities. This failure to set forth a maximum plan for production contributed to other failures.

II. No survey has been made to determine the ability of the nation's industry to produce arms requirements. It is necessary to find out the total amount of available capacity, what of this is available for armament manufacture, what of it can be converted and what, in view of the total defense program, must be constructed.

No agency, in particular the procurement agencies, has any conception of the possible productive capacity that can be used in this nation.

III. Perhaps the most serious operating failures of the defense program has been the procurement job. Significant examples of this are the fact that at present only about half of the \$62 billion program is under contract. If the program is doubled, then the lag will be more serious. Six months after the Lend-Lease appropriation was made, the President's Report showed that only about half of that sum had been even let out to contract. After contracts are let there is a substantial period before manufacture can begin in most cases.

The Procurement agencies of the armed services are uncoordinated. They are manned by officers whose respect for business as usual exceeds their determination to procure the materials. The most immediate effective measure for speeding up the defense program would be to take procurement out of the hands of the Army and Navy procurement offices.

British and Canadian governments long ago removed procurement and the responsibility for speeding production out of the hands of the armed forces. One of the great handicaps to production in this country is that full control of all such policies still rests with the Army and Navy.

One result is that defense contracts are concentrated in the hands of a few major industrial corporations. About 75 per cent of all the prime contracts are in the hands of some 56 major corporations. A great majority of manufacturing establishments have no defense contracts at all, prime contracts or sub-

contracts. Many of the major corporations have defense contracts far beyond their ability to produce within the next two or three years.

Thus arms production is greatly hampered by high concentration in a few companies while enormous facilities and manpower lie idle in the nation. The United Automobile Workers, for example, has pointed out that machine tools in 34 Detroit automobile plants are now being employed at no more than 35 percent of full capacity.

A fair estimate of additional persons to be unemployed because of the dislocations is between 2 and 2½ millions. The Automobile Workers report that the idleness of the automobile manufacturing facilities will be matched by an unemployment reaching 215,000 additional jobless by the first months of 1942. The Steel Workers union has reported some 15 or 20 thousand already out of work in basic steel with a total of 100,000 expected to be unemployed in the basic steel fabrication within the next 8 months. Some 15 to 20 thousand have been already unemployed in the manufacture of refrigerators, washing machines, radios and other similar equipment. This is only the preliminary effect of curtailments in these consumer durable goods.

The picture is one of idle equipment and unemployed men on the one hand with a growing backlog of unlet contracts for defense production on the other.

SUGGESTED PROGRAM FOR PROSECUTION OF
NATIONAL DEFENSE PROGRAM

I. Introduction

The first task, and the one of greatest importance, is to produce the necessary quantities of materials within the shortest period of time. To accomplish this goal it is essential that our existing plant facilities be utilized to the full, with adequate provision for any increase in production facilities that may be necessary together with a maximum utilization of the available labor supply of the nation. This program demands extremely careful planning measures on a national scale, both for our present situation and for the one to follow the termination of world hostilities.

II. Industry Council Program

Congress has appropriated specific sums of money for the national defense program. These appropriations call for the production and supply of definite required materials. The problem now confronting the nation in the problem of production--is how to produce the required quantities of materials within the shortest period of time.

The administrative machinery contemplated under the Industry Council Plan is simple:

(1) The President of the United States shall establish for each basic defense industry an Industry Council. Each such council would be composed of equal representation through management and the labor unions in the industry, together with a government representative, the latter to serve as Chairman.

(a) Each Council will be advised of the domestic and armament requirements of its industry and the general price level that should prevail for the industry.

(b) It will be the duty of each Council to coordinate the production facilities of that industry to meet these requirements. The Council will allocate available raw materials within the industry, allocate outstanding contracts and new contracts among the available plant facilities, adjust the labor supply to the plant facilities without compelling any forced labor, arrange for housing facilities and make arrangements for necessary training to meet the labor requirements.

(c) Each Council will engage in active planning to make certain that it is achieving the greatest possible output within the industry for present needs as well as planning for the post-war needs.

(d) The Industry Councils must be implemented with full executive and administrative authority to carry out the program within each industry. Within the discretion of the Council there will be organized within each industry regional and local machinery to obtain the full participation of local management, labor and others in the communities.

(2) The President of the United States shall establish a National Defense Board consisting of an equal number of representatives for industry and labor unions over which the President or his designee shall be the Chairman. The National Defense Board will establish rules and regulations for the operation of the Industry Councils. The general policies of the national defense program shall be promulgated by the National Defense Board. The domestic and armaments requirements for each industry shall be determined by this National Defense Board. The National Defense Board will operate as a general staff. The Industry Councils will act as the generals in charge of their respective armies to

carry through the national defense program for their respective spheres of activity. The Board will act as an appeals agency for the Industry Councils and coordinate the work of the Councils by serving as a clearing house for inter-industry matters.

(3) The Industry Councils will furnish an excellent basis for promulgating industrial peace through the perfection and extension of sound collective bargaining relations between management and organized labor. Collective bargaining procedure between unions and management will not be superseded by the Industry Council program. The Industry Councils will not supersede but rather will secure the compliance of peaceful industrial relations established through basic collective bargaining negotiations.

III. Conclusion

The essence of the Industry Council program is that the persons directly involved in each industry, as management and labor, are the ones best equipped and trained to attain the goal set for each industry. The Industry Council Plan contemplates direct and active participation within each industry on the part of management and labor.

For labor we seek such representation not merely to protect labor's interests, but of equal importance, to obtain the full benefit of the resourcefulness and technical skill of labor's representatives who are fully acquainted with the problems and needs of the industry. For the national defense program to be effective, it is necessary to unleash the energies and resources of all our people and not merely of any one segment.

There is no monopoly of brains on the part of any one group. Our national defense program demands the full participation of all the people. Labor is interested in maximum production. It has no other interests.

PSF: KNUDSEN

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Appointed Advisor on Industrial Production, Advisory Commission to the Council of National Defense, May 29, 1940. (See OF 813-A)

Appointed Director General, Office of Production Management, January 9, 1941. (See OF 4245)

Appointed Director of Production for the War Department, January 16, 1942. (See OF 4745)