MEMORANDUM FOR THE PRESIDENT

April 20, 1942

A painstaking investigation by the FBI has failed to confirm the report that $20,000 found its way from Dr. Gerhardt Westrick to Martin Dies' campaign manager. The records of all the banks involved have been checked, as have the bank accounts in other banks of the persons named.

The FBI has received from several sources copies of the memorandum which accompanied your note of April 16. I am advised that the Army Intelligence and the Bureau of Internal Revenue received the same tip and have investigated it. Several newspapers, among them PM and the St. Louis Post Dispatch, have received copies of the memorandum, and some of them are conducting investigations of their own.

We are endeavoring to learn the identity of the original informant.

Respectfully,

Francis Biddle
Attorney General
THE WHITE HOUSE
WASHINGTON

April 15, 1942.

MEMORANDUM FOR THE PRESIDENT:

F.F. called to say that he was sending down an unsigned memorandum on a piece of yellow paper and that it carries information which he thinks will interest you. It comes from a friend in whom F.F. has the greatest confidence in his knowledge of such things.
MEMORANDUM FOR

THE ATTORNEY GENERAL

April 16, 1942.

This is so important that I think it should be pursued by you immediately. It comes to me from someone in whom I have great confidence.

F. D. R.

Memo sent to the President by F.F. re Dies' relations with Westrick and Rieber and the latter's contribution to Dies' campaign manager of $20,000.
EFL u Special
Confidential, etc.
Long ago I knew of the relations between Westrick, Rieber and Dies. Before I left for Europe in the Fall of 1940 I knew of a certain transaction but could get no facts to prove it.

Certain details have come to my attention from friends who to date have never let me down. (Non-political friends.) On September 26th or 27th Westrick gave a check for $20,000 to Rieber. At the same time Rieber gave a check for $20,000 to one Baker, Chief of Police of Port Arthur, Texas, and campaign manager for Dies. Both these checks passed through the New Orleans clearing house on the same day and, for some reason not known to me, an employee photostatted them. Later in a conversation with a New Yorker who is vaguely an acquaintance of mine, he described the business. This acquaintance of mine recalled the conversation the other day and got in touch with the man in New Orleans — by phone, which I thought highly indiscreet.

The man said that he believed he still had one of the photostat copies and promised to send it along. He said, however, that he thought that the usual microfilm of all checks passing through the Whitney National Bank (scene of both transactions) would still be on file there. Since then he has learned that early in 1941 the New Orleans FBI appeared at the Bank and took away the microfilm record for the dates in question. What they did with it we do not know.

I am telling you this because I greatly fear that the films, though they might be utilized for some other purpose, might not really be turned to account against Mr. Dies.
The Status of

COMBINED PRODUCTION PROGRAMS

AS OF DECEMBER 31, 1943

United States, United Kingdom and Canada

COMBINED PRODUCTION AND RESOURCES BOARD

DECLASSIFIED
Commerce Dept. letter, 71293
SEP 20 1973
The Status of
COMBINED PRODUCTION PROGRAMS
AS OF DECEMBER 31, 1943
United States, United Kingdom and Canada

SECOND SEMI-ANNUAL STAFF REPORT
Prepared under the supervision of W. M. Black, Executive Director
Morris A. Copeland, Editor
Editorial Committee: R. G. D. Allen, Dorothea Gray,
A. McDougall, G. C. Monture, Peter M. Rouzitsky, Herbert Stein

COMBINED PRODUCTION AND RESOURCES BOARD

SECRET

DECLASSIFIED
Commerce Dept., letter, 7-12-73
SEP 20 1973
THE STATUS OF
COMBINED PRODUCTION PROGRAMS
As of December 31, 1943
SECOND SEMI-ANNUAL STAFF REPORT
OF THE
COMBINED PRODUCTION AND RESOURCES BOARD

Issued in accordance with a directive of the Combined Production and Resources Board, March 23, 1943, that a report be prepared at 6-month intervals, which would assemble "the production data necessary to keep up to date the over-all picture of production possibilities measured against requirements, military and non-military".

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter I. The Combined Production Outlook</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter II. The Combined Munitions Program</td>
<td></td>
</tr>
<tr>
<td>Aircraft</td>
<td>7</td>
</tr>
<tr>
<td>Ships</td>
<td>9</td>
</tr>
<tr>
<td>Radio and Radar</td>
<td>9</td>
</tr>
<tr>
<td>Ordnance and Vehicles</td>
<td>11</td>
</tr>
<tr>
<td>Chapter III. The Combined Manpower Position</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>15</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>16</td>
</tr>
<tr>
<td>Canada</td>
<td>18</td>
</tr>
<tr>
<td>Chapter IV. The Combined Position of Selected Programs</td>
<td>19</td>
</tr>
<tr>
<td>Relief and Rehabilitation</td>
<td>20</td>
</tr>
<tr>
<td>Trucks</td>
<td>21</td>
</tr>
<tr>
<td>Tires and Tubes</td>
<td>23</td>
</tr>
<tr>
<td>Internal Combustion Engines</td>
<td>24</td>
</tr>
<tr>
<td>Machine Tools</td>
<td>25</td>
</tr>
<tr>
<td>Agricultural Machinery</td>
<td>26</td>
</tr>
<tr>
<td>Textiles</td>
<td>27</td>
</tr>
<tr>
<td>Pulp and Paper</td>
<td>30</td>
</tr>
<tr>
<td>Hides and Leather</td>
<td>31</td>
</tr>
<tr>
<td>Medical Supplies</td>
<td>33</td>
</tr>
<tr>
<td>Coal</td>
<td>35</td>
</tr>
<tr>
<td>Steel</td>
<td>37</td>
</tr>
<tr>
<td>Copper</td>
<td>39</td>
</tr>
<tr>
<td>Aluminum and Magnesium</td>
<td>41</td>
</tr>
<tr>
<td>Conservation</td>
<td>42</td>
</tr>
<tr>
<td>Appendix. Charter of the C.P.R.B.</td>
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<tr>
<td>Terms of Reference of C.P.R.B. Committees</td>
<td>11</td>
</tr>
</tbody>
</table>
CHAPTER I

THE COMBINED PRODUCTION OUTLOOK

The combined war production programs of Canada, the U.K. and the U.S. have matured.

1. The second half of 1943 saw the achievement of substantial balance between military production programs and the resources available to meet them. By and large the combined resources of raw materials, facilities, and manpower were integrated with one another and programs were on the whole brought within the limits of what was practicable.

2. Over-all production of military items, now 50 percent above the level of a year ago, will rise only a little further to a peak in mid-1944. Some individual production programs are rising—aircraft, landing vessels, radar, heavy trucks—while others taper off—small arms ammunition, aircraft bombs, combat vehicles, and anti-aircraft guns and shells.

3. If present munitions programs are to be realized, no over-all increase in non-military production from 1943 levels will be possible during 1944.

4. Capital requirements, especially for deferred maintenance, will be a little larger in 1944 than in 1943 and requirements for relief and rehabilitation of liberated areas will place a new and growing burden on available supplies and goods. Output of a few small items for civilian use, e.g., flatirons, may increase, but such limited increases will be more than offset by reductions in the flow of many other and more important goods and services to civilians.

5. The first task of 1944 production is to achieve the combined munitions program now scheduled, permitting reconversion to civilian-type production only as and where it can be fitted into cut-backs in munitions programs without prejudicing the war effort.

The process of adjusting war production programs to total available resources, which had begun earlier in the U.K. and Canada, reached an advanced stage in the U.S. during 1943, so that on a combined basis the wide margins between production goals and resources have been substantially

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[Diagram and chart showing combined munitions production for aircraft, ships, ordnance, combat, and motor vehicles, with indexed rates for 1942 to 1944 for the United States, United Kingdom, Canada, and Eastern Group.]

DECLASSIFIED
(3) The increased drain of men with special skills into the armed forces as defense policy tightens; (b) the fact that under present conditions and controls the relative advantage held by munitions industries in recruiting labor in competition, with civilian goods industries may be weakened by the prospect of more permanent job tenure in the latter.

In the U.S. and Canada, there is no longer reason to fear that the labor forces in sight will be inadequate for present military programs, while in the U.K., munitions schedules are being adjusted to the manpower available. In all countries effective use of manpower is the condition of achieving present military programs for 1944. The problem, therefore, is to avoid waste of manpower between those programs that are decreasing and those that are increasing, and particularly in the U.S. to maintain the total number of munitions workers at the present level. The steps already taken or planned to this end are described in chapter III.

II

Deliveries of munitions during 1943 fell short of schedules set during the year. However, no over-all deficit was carried forward into 1944 to increase 1944 programs. On the contrary, munitions programs for 1944 as of the first of the year, are on the whole 10 percent below those of six months earlier. These reductions in requirements have been brought about by a number of developments, including the following three:

1. In spite of production short-falls, the output of munitions has actually increased so much more rapidly than their use that inventories of many finished items have grown even beyond what has been needed to equip the armed forces and fill the pipelines.

2. Combat experience has made it possible to refine the tactical formulas for computing requirements and to narrow substantially the safety reserve margins in such computations.

3. The success of anti-submarine warfare has permitted a reduction of over 20 percent in the 1944 merchant shipbuilding program (as compared with July 1943 program) without impairing our ability to move the men and supplies needed for the war.

Not all 1944 programs have been cut during the past half year. While production schedules for the majority of aircraft, merchant ships, and most ground

army items have been lowered, schedules for some aircraft, and for landing vessels, transports, attack cargo vessels, and heavy military trucks have been sharply increased.

Schedules for ground army items are now undergoing a further downward revision. The peak of production will probably occur in the middle of 1944 but at a level lower than indicated in the charts.

The main features of the munitions production outlook for 1944 are:

1. Almost three-quarters of the overall rise now scheduled for 1944 is concentrated in the aircraft program. The rise of one-third called for in aircraft
output is much smaller than has been achieved in 1943 but the introduction on a large scale of models which are new to production may prevent full accomplishment of some schedules. Aircraft is the only military program now planned to rise in 1945.

2. Landing vessels are the most immediately urgent of all shipbuilding programs, and perhaps of all production programs for 1944. Very stiff schedules have been set for the first half of this year, but landing vessels have been granted over-riding priorities as to labor, materials, and components.

Deliveries of landing craft in the U.K. have been increasing and reached 75,000 tons (war load) in the last quarter of 1943; the program is now being accelerated, and 114,000 tons are scheduled for delivery in the second quarter of this year. A new program for 14,000-ton landing ships has been introduced in the U.K. and in Canada; deliveries will commence late this year.

In the U.S., completions of all types of landing vessels reached 106,000 tons (light displacement) last February but were less than allowed to fall to 50,000 per month in the middle of the year. During November the program was sharply stepped up and 91,000 tons were delivered in January. The schedule now calls for 159,000 tons in May and 164,000 tons in June. Though deliveries under the new program have not been up to schedule so far, value of work put in place in January exceeded schedule by 11 percent.

3. The merchant shipbuilding program in 1943 was substantially achieved. During the year the combined merchant fleet of the United Nations rose from 87.7 million deadweight tons to 65.0 million—an increase of 32 percent. Ship losses totalled 5.2 million tons during the year compared to 11.1 million during 1942.

The composition of the cargo and transport vessel program will be drastically altered during 1944. Tramp and Liberty vessels which were the bulk of new construction during the past two years, will decline rapidly in importance. Emphasis will shift in two directions--towards faster and more efficient merchant-type vessels and toward specialized military-support vessels, such as transports and combat loaders. The transition will involve some decline in tonnage from 1943 to 1944 and a decrease in the value of work done from the December 1943 rate, particularly during the first part of 1944. However, ship repair and maintenance activity will continue to increase.

4. The now-scheduled rise in heavy trucks, tractors, and engineers' equipment will be difficult to achieve because of the shortage of many of the components of trucks and of truck engines. A combination of high manpower priority ratings and facilities expansion may raise somewhat the limits upon production. Requirements as of January 1 were substantially in excess of expected production during 1944, but the statistical deficit is being reduced by a revision of requirements which is now in process.

5. Rapid gains are called for in the production of airborne radar equipment, which, having doubled during 1943, is scheduled to double again in the first four months of 1944. The stabilization of military radio programs and the small schedule decline in the production of ground radar will permit the concentration of component output and skilled labor on airborne radar equipment. New radar sets are a large part of the 1944 program, and some changes in design are almost certain to add to the difficulty of meeting schedules. But the new items have in general been scheduled in experienced plants.

6. Aside from those mentioned above, most munitions programs are stable or declining. There are some internal shifts within programs--towards heavier artillery, improved tanks, more emphasis on major combat vessels and less on anti-submarine and patrol vessels, development of experimental items such as large rockets and rocket launchers. But these shifts do not mitigate the fact that these programs can, subject to one condition, be achieved. This condition is that diversions of resources to non-war production is permitted only when and where it will not interfere with war production programs.

The critical limitation of resources upon 1944 production programs is a limitation of manpower. And if production is wisely managed this limitation will restrict, not the level of production of military items or even the level of production of civilian type goods for military uses, but only the level of production of goods and services for civilians. Some military production schedules may be missed, for reasons peculiar to those schedules. Manpower limitations will necessitate general continuance, and, in some fields, tightening
A significant portion of the image appears to be a graph or chart, likely depicting economic data, possibly related to personal consumption in the U.S., Canada, and Germany. The text on the page is partially obscured and not legible, making it difficult to extract meaningful information from the document.
is not expected that the total of goods available for civilians in 1944 will increase. On the contrary, it is likely to fall, the principal reductions occurring in paper, fuel, textiles, and footwear in the non-durable field, and in stoves, refrigerators, and other items of household equipment in the durable field owing to the exhaustion of inventories. But in this latter field, the comfort of civilians generally will continue to be served by the large quantities of durable goods already in their possession. The position is much the same in Canada. In both these countries; however, the rate of civilian consumption is expected to continue well above the level ruling up to 1940.

IV

With the refinement of combined military production programs to measurable feasibility in terms of resources, the U.S., the U.K., and Canada now enter on a period of marginal adjustment which, as pointed out in the last report, calls for a closer linking between national and local agencies in each country and a closer international cooperation in the problems of program readjustment.

During the past six months, the problems before the C.P.R.B. as an agency of international cooperation have shifted. Civilian-type items have called for an increasing measure of attention, and the requirements of other countries including those which will need relief and rehabilitation have become more prominent. Joint consideration of problems between the C.P.R.B. and other combined and United Nations agencies has substantially increased and closer relationships between the C.P.R.B. and national production authorities have been developed.

To sum up, the problems before the C.P.R.B. today are:

1. The mobilization of resources, especially labor, to insure the achievement of the combined munitions programs, especially those of greatest difficulty.
2. The development of measures to increase production, reduce consumption, and economize on the shipping of items which have recently become critical, such as coal, paper and pulp, trucks, truck engines, truck and internal combustion engine components, tires, farm machinery, textiles, and certain medical supplies.
3. The provision for relief and rehabilitation requirements in combined production programs.
4. The making of recommendations on allocations and sources of supply among the United Nations for critical civilian-type items other than foods and raw materials.
5. The impact of munitions program cutbacks on the civilian economies of the several countries, and the resumption or increase of the production of civilian goods where that is possible without impairing the war effort.
THE COMBINED MUNITIONS PROGRAM

CHAPTER II

DECREASED
December 1943. Steps taken to meet this program include:
1. Almost complete freezing of the design.
2. Vigorous sub-contracting policies.
3. Formation of a manufacturer's committee to expedite production and exchange technical information.
4. Close supervision of the program by the Aircraft Production Board and the AAF Material Command.

Other important models for which very steep increases are scheduled are the A-26 attack bomber, 2-engine; the P-51 1-engine fighter; and the C-54 and C-46 transports. The schedules for some planes with important increases are shown in Chart IV. There are in addition a number of new models which are not quantitatively important in the 1944 program but which will influence the shape of the 1945 program if they are successful in production and operation—particularly three fighters, the P-75, F7F, and jet-propelled P-59.

The British program for 1944 does not rely so heavily on new planes but rather emphasizes increases in models of proven effectiveness. The program is now being cut by about five percent below the levels scheduled on January \(^1\) in response to the allocation of manpower, the cut being concentrated on obsolescent types, e.g., the Stirling and the Beaufort—and on types which have not yet demonstrated superior value. Five planes have been designated as of first importance for 1944; their schedules will be maintained or increased and they are to be given overriding priorities as regards manpower. These are the Lancaster and Halifax heavy bombers, the Mosquito fighter-bomber, and the Spitfire and Tempest fighters. Continuous efforts have been and are being made to develop and improve these planes, especially the Lancaster and the Spitfire, by the adoption of more powerful engines and by changes in design. A number of new planes will be coming into production for use in 1945, among them the Windsor heavy bomber and Meteor jet-propelled fighter. Unless the increasingly difficult labor situation in the U.K. impinges upon the program more severely than is now expected, the aircraft production schedules should be very nearly met.

Canadian airplane production in 1943 was beset by the difficulties which attend a major change of models—from the Bolingbrook and Hurricane to the Lancaster, Mosquito, Helldiver, and Catalina. By the end of the year there were signs that many of the technical problems had been solved. Australia is scheduled to pass through a
similar transitional period in 1944, as the Boomerang and Beaufort give way to the Mosquito, Mustang, and Lancaster.

**SHIPS**

The ship program for 1943 was marked by the delivery of almost one million tons of ocean convoy vessels, as compared with a little more than 100,000 tons in 1942, and by the completion of 21.5 million deadweight tons of ocean-going merchant vessels, mainly Tramps and Liberty ships. The 1944 program requires little change in the volume of work to be done at shipyards from the end-1943 rate. United States ship construction will rise about 6 percent to the middle of 1944 and will decline thereafter; in the U.K., shipyards employment will be stable throughout the year.

The composition of the 1944 construction will be very different from that of 1943. The ocean convoy program—U.S. destroyer escorts and U.K. and Canadian corvettes and frigates particularly—has been sharply cut, and deliveries will fall rapidly from the December 1943 rate.

The outstanding feature of the 1944 program is the scheduled rise in output of landing vessels, largely concentrated in the first half of the year. Deliveries of major merchant vessels will be 2.5 million tons less than in 1943, but the vessels will in general be faster and more expensive. The 1944 program for merchant vessels is now about 5 million tons below the level expected in July. The great and unanticipated additions to the United Nations merchant fleet during 1943, following the fall in losses from submarine warfare, have reduced the urgency of cargo ship construction. Part of the ways and means released by the reduced merchant vessel program in the U.S. will be absorbed in the sharply rising program for transports and combat loaders. The increasing naval and merchant fleets will require increasing devotion of resources to ship maintenance and repair both in the U.S. and in the U.K.

During 1942 the United States had increased its production of landing vessels rapidly. Deliveries during February 1943 totaled 105,000 displacement tons. After that the program was permitted to taper off and only 51,000 tons of these vessels were delivered in July. As late as November 1943 they were scheduled at the rate of 85,000 tons a month during the first half of 1944. During November and December, in view of the urgent strategic need for additional landing vessels, schedules were stepped up to a monthly rate of 102,000 during the first quarter of 1944 and 151,000 during the second quarter (Table 3). Actual deliveries fell behind schedules during October, November, December, and January, but during January construction work was proceeding at a higher rate than any previously attained. The program has been given overriding priority in materials, components, and manpower. There has been a material cutback in the destroyer escort program to help make way for the construction of landing vessels but naval construction scheduled for the second quarter of 1944 is now 3/4 percent higher than it was three months ago. It is probable that additional sacrifices in other naval construction programs will be necessary, if the U.S. landing vessel program is to be met on schedule.

The U.K. expanded program for landing vessels continues production at peak levels of a number of types which had been scheduled to go out of production in 1943 and calls for maximum output of LVT’s (Landing Craft, Tank) in the first half of 1944. In addition to this, 44 LST’s (Landing Ship, Tank, also called Transport Ferry) were ordered in the U.K. as well as 35 in Canada. Several of these 4800-ton vessels are to be completed late in 1944. Achievement of this program will delay for some months delivery of a number of major combat vessels, including battleships, carriers, destroyers, and submarines. But cut-backs in the escort and merchant vessel programs, both in the U.K. and in Canada, provide the main resources for the augmented landing vessel program.

**RADIO AND RADAR**

The chief production problems for 1944 in the radio and radar field are concentrated in airborne radar equipment, and within that group, upon bombing and long-
CHART I
UNITED NATIONS MERCHANT VESSELS
CONSTRUCTIONS AND SINKINGS
CUMULATIVE, JULY 1940 - DEC 1944

CHART II
COMBINED MERCHANT VESSEL COMPLETIONS
INCLUDING TRANSPORTS AND MILITARY TYPES
DEADWEIGHT TONNAGE, 1942 - 1944

A. BY COUNTRY

B. BY TYPE OF VESSEL

*Actual construction through December 1943. January 1 Schedules incomplete.

DECLASSIFIED
range navigation equipment. Airborne radar production, having doubled during 1943, is scheduled to double again in the first half of 1944. In the U.S. the increase in output scheduled for 1944 is largely accounted for by a number of sets which have only just come into production or which have not yet been produced at all. Among the most important of these are SCR-729, SCR-729 modified (AN/APN-2), navigation sets, and AN/APQ-13, bombing equipments. The U.K. program calls for expansion in the output of sets which are already well established in production as well as of several newer sets. Part of the British production has been and still is for installation in the U.S. planes based in Britain.

The chief problems facing the U.S. radio and radar program for 1944 are:
2. Technical and engineering difficulties in producing to new specifications.
3. Shortage of skilled labor, e.g., trouble shooters, testers.
4. Shortage of certain components, notably transformers and miniature and metal tubes. British production is heavily dependent upon U.S. tubes and is affected by this shortage.

Changes in specifications must be accepted as a feature of this program. However, general agreement has been reached between the U.S. and the U.K. to concentrate now on modifying and improving existing radar sets rather than on developing entirely new types. Steps are being taken to bring the "know-how" which exists in the industry directly to bear upon the problems raised by the developmental situation. New radar sets are being scheduled with contractors who have the longest experience in radar production, in the expectation that such contractors will be best able to master the difficulties of new sets. Production of the established sets is being shifted from the experienced contractors to firms newly entering the radar field. Some engineers from the older plants will be used to get production started in the newer plants.

Arrangements have been worked out with the U.S. Army and Navy for the recruitment to the radio industry of selected men discharged from the services. A more fundamental solution to the labor problem is sought through a request now pending for an urgency rating in the radio and radar industry equal to that of landing vessels and high-priority aircraft.

Despite the institution of especially comprehensive scheduling controls for transformers and critical tubes, and the conversion of three facilities to the production of hermetically sealed transformers, the supply of these parts remains a limiting factor in production. Other components, although sometimes not forthcoming at the precise time required, have been generally in adequate supply, and no difficulty is foreseen if the necessary labor can be recruited. Twenty-five to forty thousand additional workers are estimated to be required in the communications equipment industry generally.

Raw materials appear in general to be available in sufficient volume to accomplish the radar and radio program, although some uncertainty exists with relation to mica and to kraft tissue for paper capacitors.

**ORDNANCE AND VEHICLES**

The decline in the output of ordnance and combat vehicles for the ground and airforces, which began in 1943, will continue through 1944. On the basis of January 1 schedules, the decline would amount to 20 percent from the fourth quarter of 1943 to the fourth quarter of 1944, and would affect all categories except gun ammunition. A further scheduled decline in output of gun ammunition in the U.K. is more than offset by the rise called for in the U.S. January 1 schedules.

The status of the ground and aircraft

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* Actual production for 1945; January 1 schedules for 1944.
ordnance program on January 1 was the re- result of successive program cut-backs over the preceding fifteen months. During the second half of the year these cut-backs were made in response to the growth of inventories in many categories and to the lessons of combat experience. In the U.K., the need for adjustment to the over-all manpower position exerted a powerful influence. The sharpest cuts in 1944 pro- grams have been made in small arms ammuni- tion (49 percent). The decreases in artillery and combat vehicle programs were each about 40 percent. The bomb program, having been reduced very sharply in the spring of 1943, has more recently included greater numbers of fragmentation and incendiary types.

The process of cutting back programs is still continuing. The ground army require- ments have just been drastically cut in the U.S., (as of February 1) but the de- tails of the cut and its effects upon 1944 production schedules are not known in time for inclusion in the body of the report. However, it is probable that the reduction will result in a declining combined output of ammunition, including gun ammunition. The program in the U.K. has been only par- tially adjusted to the reduced 1944 alloc- ations of labor.

The naval gun and ammunition programs have not been substantially revised in the

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**FEBRUARY 1 REVISED U.S. ARMY REQUIREMENTS**

New requirements for the U.S. Army (Army Supply Program as of February 1st) were received too late for incorporation in the text and tables of various parts of this report. The chief pro- gram changes are summarized in the following table. The 1945 requirement in some cases, notably small arms ammunition, is larger than that for 1944, and some production is likely to be scheduled in 1944 on account of the 1945 requirement. The programs referred to elsewhere in this and the preceding section are January 1st schedules for the U.S.

**U.S. ARMY SUPPLY PROGRAM AS OF FEBRUARY 1, 1944**

(Unit-Million Dollars)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>1944 Schedule as of Jan. 1, 1944</th>
<th>A.S.P. Requirements as of Feb. 1, 1944</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Army Service Forces procurement</td>
<td>20,553</td>
<td>19,448</td>
</tr>
<tr>
<td>Guns and fire control</td>
<td>1,513</td>
<td>1,253</td>
</tr>
<tr>
<td>Small arms, excl. 20-mm and aircraft</td>
<td>523</td>
<td>408</td>
</tr>
<tr>
<td>Anti-aircraft material</td>
<td>256</td>
<td>154</td>
</tr>
<tr>
<td>Other</td>
<td>734</td>
<td>681</td>
</tr>
<tr>
<td>Ammunition</td>
<td>4,725</td>
<td>4,157</td>
</tr>
<tr>
<td>Small arms, excl. 20-mm</td>
<td>951</td>
<td>72</td>
</tr>
<tr>
<td>Anti-aircraft</td>
<td>357</td>
<td>237</td>
</tr>
<tr>
<td>Ground artillery, 75- to 105-mm</td>
<td>1,480</td>
<td>1,082</td>
</tr>
<tr>
<td>Other</td>
<td>1,937</td>
<td>2,346</td>
</tr>
<tr>
<td>Combat and motor vehicles</td>
<td>5,548</td>
<td>4,768</td>
</tr>
<tr>
<td>Armored cars and personnel carriers</td>
<td>415</td>
<td>241</td>
</tr>
<tr>
<td>Motor carriages for S-P guns</td>
<td>508</td>
<td>268</td>
</tr>
<tr>
<td>Motor vehicles and tractors</td>
<td>3,577</td>
<td>3,133</td>
</tr>
<tr>
<td>Other</td>
<td>1,048</td>
<td>1,106</td>
</tr>
<tr>
<td>Communications and electronic equipment</td>
<td>3,257</td>
<td>3,383</td>
</tr>
<tr>
<td>Airborne radio</td>
<td>546</td>
<td>380</td>
</tr>
<tr>
<td>Airborne radar</td>
<td>1,179</td>
<td>1,067</td>
</tr>
<tr>
<td>Ground radio</td>
<td>471</td>
<td>803</td>
</tr>
<tr>
<td>Ground radar</td>
<td>352</td>
<td>459</td>
</tr>
<tr>
<td>Other</td>
<td>711</td>
<td>674</td>
</tr>
<tr>
<td>Other</td>
<td>5,510</td>
<td>5,857</td>
</tr>
<tr>
<td>Clothing</td>
<td>734</td>
<td>903</td>
</tr>
<tr>
<td>Ground army petroleum products</td>
<td>548</td>
<td>378</td>
</tr>
<tr>
<td>Machinery</td>
<td>324</td>
<td>584</td>
</tr>
<tr>
<td>Railroad equipment</td>
<td>367</td>
<td>351</td>
</tr>
<tr>
<td>N.e.c.</td>
<td>3,317</td>
<td>3,641</td>
</tr>
</tbody>
</table>

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*Excludes Section VI, Relief and Rehabilitation; also excludes certain minor programs. The classification of munitions items used in this table is strictly a U.S. classification, and is not used anywhere in this report where the combined U.S.—British picture is presented.*
past half year, and increases are still scheduled in both categories. The scheduled increases, however, are not sufficient to offset the decline in the ground and aircraft ordnance programs.

The major increase in equipment for the ground forces is in trucks, particularly heavy trucks. U.S. production of heavy military trucks in 1944 is scheduled at more than twice the 1943 rate, and U.K. output will rise by about two-thirds, with output at the end of 1944 double the 1943 rate. This program is part of the over-all truck program discussed in chapter IV.

In the U.K., labor released from the ordnance program will be the chief source, directly or indirectly, of manpower to maintain the armed forces. The release of labor, materials, and facilities in the U.S. will assist in the achievement of those programs which are still rising. The transfer from combat vehicles to heavy trucks, tractors, locomotives, and cranes will be especially important.
CHAPTER III
THE COMBINED MANPOWER POSITION

Employment in the munitions industries of the United Kingdom, the United States and Canada is very near, if not already past, its peak. Little, if any, increase in employment in non-munitions industries will be possible, however, in the next six months. In the U.K., it is expected that there will be a decline during 1944 in the combined strength of the armed services and the civilian labor force, as a result of casualties and retirements from industry. The munitions industries will take the most severe cut in employment, but some additional contraction in the non-munitions industries will be necessary despite the low level to which their labor force has already fallen. The armed forces will be maintained at approximately their present size. In the U.S., at least for the first half of 1944, and probably for the whole year, the requirements of the armed forces will exceed the expected growth of the working population. The extent to which non-munitions employment can be increased, or even maintained, will depend upon the degree to which further abnormal gains in the labor force can be made. The negligible increase in the labor force achieved during the second half of 1943 suggests that no substantial further increase may be anticipated. The Canadian picture is one of approximate balance between the release from munitions industries and the needs of the armed forces. Satisfaction of urgent requirements of logging and coal mining is contingent upon increase in the labor force or decrease in other industries. Table 5 shows the distribution of the labor force in each of the three countries.

Direct comparisons among the U.S., the U.K., and Canada are difficult to make on the basis of the available statistics. However, it is clear that in the U.K., reflecting the tight controls over manpower and its allocation which have long been in effect, there has been a substantial reduction in employment in the civilian goods and service industries. It is clear further that there has been no corresponding decline in civilian goods employment in the U.S. and Canada as compared with 1939.
The combined labor supply in all countries, after meeting the requirements of the armed forces, has been brought into balance with munitions and essential civilian programs. In the U.K., the munitions program is being adjusted to the declining manpower available. The reduction in the programs for ground army munitions will release some workers in Canada. In the U.S. however the munitions program is now set at a level which calls for maintenance of the munitions labor force at its present over-all strength.

In all three countries efficient utilization of manpower will be required. This will mean some difficult shifts in the regional and industrial distribution of the labor forces—from facilities with declining programs to facilities with essential rising programs. In the U.S. both the necessary regional and industrial shifts and the necessary recruiting of workers either by drawing them away from civilian production or by drawing them into the labor market will be difficult to accomplish with present labor controls. And it will probably not be possible to strengthen those controls materially under present conditions.

### THE UNITED STATES

In the three years which ended June 30, 1943 the United States added 8.8 million persons to its armed forces, increased employment in metals and chemical industries by 5.5 million, and added 1.4 million to the Federal War Agencies. A rise of 8.8 million in the labor force contributed most of this 15.7 million increase in "warlike" pursuits. About half of the additions to the labor force were women. A decline of 7.1 million in unemployment supplied the remainder of the increase in direct war occupations. Other categories of employment increased or decreased slightly without much over-all change.

In addition to the increased number of persons occupied, there has been a substantial increase in working hours. Average hours worked per week in manufacturing industries rose from 37.5 in the first half of 1940 to 41.7 in January 1942 and ranged a little over 40 in the second half of 1943. Longer hours were common in munitions industries, particularly in heavy labor areas, and in railroads, trucking, and farming.

By mid-1943 the most available sources of additional manpower had been exploited. During the second half of the year the increase in the total labor force (adjusted for seasonal influences) was negligible, and the number of persons unemployed declined only slightly. The increase in the armed forces alone was greater than the number becoming available from these two sources, and civilian employment declined more than seasonally. The more stringent manpower position became manifest in an
outcropping of local "crises" confined to particular areas and industries. The number of areas of "acute labor shortage" increased 50 percent in the second half of the year, and the degree of acuteness increased. The most serious situation was felt on the West Coast, when the aircraft and shipbuilding programs seemed to be threatened. Difficulties were also encountered in a number of industries which, because of wages or working conditions, were especially unattractive. These cases were handled by a variety of means. About 200 local stabilization plans were adopted, which had as their principle aims the orderly transfer from less essential to more essential activities and the reduction of turnover. By joint WPB-WAC action schedules of Urgency Ratings were adopted for guidance in the operation of these local plans in rating the needs for labor in order of war production urgency and establishing employment ceilings to reduce the number of workers in some plants and discourage labor hoarding in others. All of these plans had a voluntary, cooperative basis, and none involved the compulsory movement of labor. Whether as a result of these measures, or for other reasons, the available evidence suggests very little loss of essential production as a result of labor shortage.

It is unlikely that there will be any easing of the over-all labor position during the first half of 1944. The net increase in the armed forces will equal the entire anticipated increase in the labor force (not counting the usual seasonal increase in farm labor). An additional number of men will be required for military replacement. This will place an increasing strain on essential industries for the replacement of men with special skills. The expected increase in munitions output may be achieved with little if any expansion of total munitions employment, if efficiency continues its recent rate of improvement. But in a number of areas in which the labor market is already extremely tight, a material increase in munitions employment will be needed, particularly in certain coastal areas. In most munitions industries wages and working conditions are relatively attractive and in keeping and recruiting workers many enjoy the assistance provided by the urgency rating system. On the other hand the desire to return to jobs of a more permanent nature must be reckoned with. The workers released from declining programs would be sufficient in total number to meet the needs of the aircraft and other expanding programs, but not all of these workers by any means will be available where they are needed or will have appropriate skills. Something can be done both to relocate work and to relocate released workers. But there will be need in critical areas to draw some persons away from civilian industries and to draw additional persons into the labor market.

As of February 12, the following products or industries had highest (Class I) urgency ratings:

- High priority aircraft
- Landing craft
- Synthetic rubber
- Tires and tubes
- 100 octane gasoline
- High tenacity rayon
- Trucks and trailers, 2 1/2 tons and up
- Class 1, 2, and airborne tractors
- Bomb fuse T48
- Navy high capacity ammunition
- About 200 listed plants producing components—chiefly foundry, forge and bearing plants and I.C. engine component producers
- Listed secret military construction

In recruiting and holding labor for the items on this list, particular difficulty is to be expected only in the components plants because of a combination of factors including relatively unattractive working conditions, the need for male labor, and the prevalence of relatively low wages.

The major problems are likely to be encountered in a number of industries which are less directly connected with the munitions program, but which are intimately tied up with the operation of the whole economy. Lumbering, coal mining, railroads, and textile production are outstanding examples. These industries have been losing workers steadily to munitions production or to the armed forces. The prevailing working conditions are relatively poor. Lumbering and coal mining use male labor almost exclusively and so are especially subject to draft requirements. The numbers of workers involved are too large to be handled by slight diversions of the ordinary flow of labor, as many labor "bottlenecks" have been handled. However, these situations may not become critical before mid-1944, after which time the general position may be slightly relaxed.
THE UNITED KINGDOM

C.R.A. STAPF REPORT

SECRET

DECLASSIFIED
New and special types of ammunition
Radar
Parachutes
Construction and repair of trans-
portation equipment
Coal mining machinery
Components, e.g., electric motors
and generators.
This list will be constantly under review
in the light of the changing labor, pro-
duction, and operational situation.

CANADA

Employment on war work in Canada reached
its peak in the fall of 1943. At that
time, out of a total labor force of 5½ mil-
lion, nearly 2 million were in the armed
forces or engaged on war work apart from
agriculture. This high degree of mobiliza-
tion for war has been made possible by a
rise of about 750,000 in the total labor
force since 1939, by the almost complete
elimination of unemployment (which was over
300,000 in mid-1939), and by a large cut
on the pre-war labor force in agriculture.
Apart from agriculture and metal-working
industries, trades now engaged on produc-
tion of goods and services for civilians
employ nearly as many workers as in 1939.

The manpower situation is not expected
to get any tighter than it was in the clos-
ing months of 1943. There will be no ap-
preciable easing during the first half of
1944 but the labor position should become
definitely better after the middle of the
year. The natural increase in the popula-
tion of working age will be absorbed by the
continuing expansion of the armed forces.
As the result of recent cut-backs in munitions
programs, mainly for ground army
items, a fall of 100,000 in munitions and
other war employment is expected during
the first half of 1944, although the peak
of Canadian munitions production will not
be reached until the second quarter of 1944.
This will be offset by a rise in agricul-
tural employment, mainly seasonal, leaving
civilian industrial employment roughly un-
changed. Later in the year, after the peak
agricultural season, some small expansion
in employment and output for civilians
should be possible.

There are still severe shortages of man-
power in several high-priority trades, not-
ably coal mining, docks and shipbuilding,
logging, and base-metal industries. Man-
power controls, first introduced in 1940
and extended in 1942, have been strengthened
recently to protect and reinforce these
high-priority industries. Controls will
be maintained in 1944, since it will be
necessary to direct further workers to the
tight labor areas and industries. Layoffs
will still occur in certain plants as the
result of cut-backs in munitions programs,
and it will be essential to utilize the
workers released to the best possible ad-
vantage. In particular, continued use must
be made of the methods recently developed
for insuring supplies of coal miners and
longshoremen.
The Combined Position of Selected Programs

Chapter X

Belief and Rehabilitation

The paper and minutes of the select committee were discussed. Such a report may be found in the annual report. The programs of the committee were discussed. It was decided that the committee should be appointed to make a report to the director general of the program. A report was made to the director general of the program. The report was discussed at the conference of the program. The report was discussed at the conference of the program. The report was discussed at the conference of the program.
It is anticipated that the chief problems facing C.P.R.B. will be in the following fields: textiles, footwear, medical supplies, coal, agricultural and food machinery, public utilities equipment, and transportation. These fields are covered by C.P.R.B. committees with the exception of transportation, where the formation of a committee is under consideration. Steps taken to date by various committees are discussed elsewhere in this report. 1/

A routine for handling relief and rehabilitation programs and requests has been developed within C.P.R.B. through the formation of a Central Section, composed of U.S., U.K., and Canadian representatives who are responsible for liaison with the committees and the appropriate national agencies which may be concerned in order that programs and requests for requirements may be processed expeditiously, and recommendations formed as to availability and source of supply. A Control Unit within the Central Section has been established to record and follow up the various programs and requests received, and to prepare periodical progress reports on the status of programs and requests which are under consideration.

TRUCKS

(COMBINED TRUCK COMMITTEE—FORMED NOVEMBER 1942)

Total truck production for 1944 in the U.S. and the British Empire is programmed at 1225 thousand units, or 10 percent short of combined stated requirements. The spread between program and requirements is 30 percent for heavy trucks (4 tons capacity and up), and it is this part of the program which causes the greatest present concern. The situation is aggravated by serious doubt as to the achievement of the programs now scheduled, particularly for heavy trucks. U.S. production may be 10 to 20 percent short of the program, which would leave combined output 17 to 24 percent below requirements as now stated. The combined program now calls for total truck production in 1944 to exceed 1943 combined production by 19 percent and for heavy military vehicle production to increase by almost 100 percent. In addition, a 25 percent increase in U.S.

production of replacement parts, necessary to keep American-made vehicles in the U.S. and abroad in operation, will be an increased drain on U.S. components and facilities.

U.S. military requirements are at present being carefully reexamined with a view to possible substantial downward revisions. However, it is understood that any downward revisions of estimated requirements for 1944 will be confined to the light and medium truck groups and that no substantial reduction in heavy truck requirements can be anticipated. About 40 percent of U.S.-programmed production in 1944 is for export.

Satisfaction of truck requirements in 1944 depends upon U.S. production. All of the increase in truck production from 1943 to 1944 is concentrated in the U.S. Not only is the U.S. scheduled to produce 75 percent of all trucks in 1944, including 90 percent of the heavy trucks, but Canadian output, and U.K. output to a much smaller degree, also are dependent upon U.S. components.

U.S. schedules call for a sharp step-up from the first quarter to the third quarter of 1944. For medium and light trucks, an
increase of 35 percent is scheduled; heavy-
heavy output is scheduled to double. 1945
schedules are available only for Army procu-
rement. These schedules drop back in 1945 to 1943 levels.

Table 6.—The U.S. Truck Program, 1943-44

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>Type of Truck</th>
<th>1943 Unit.</th>
<th>1944 Unit.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Heavy-Heavy</td>
<td>112,000</td>
<td>225,000</td>
</tr>
<tr>
<td>Total</td>
<td>4-ton and over</td>
<td>46,600</td>
<td>96,200</td>
</tr>
<tr>
<td>1st quarter</td>
<td>10,100</td>
<td>20,300</td>
<td></td>
</tr>
<tr>
<td>2nd quarter</td>
<td>14,700</td>
<td>29,400</td>
<td></td>
</tr>
<tr>
<td>3rd quarter</td>
<td>16,500</td>
<td>23,000</td>
<td></td>
</tr>
<tr>
<td>4th quarter</td>
<td>12,500</td>
<td>25,500</td>
<td></td>
</tr>
</tbody>
</table>

U.S. assembly facilities and basic raw
materials are available in adequate volume to
meet the 1944 scheduled programs. The
limiting factor on increases in U.S. truck
production beyond the present program for
1944 is the short supply of various com-
ponents, among which axles, transmissions and
engines are particularly important. Other
components are sub-components, in-
cluding tires, malleable castings, forgings,
anti-friction bearings, brakes, and wheels
may require reductions in the U.S. truck
production program.

To meet the critical situation in the
U.S. with respect to certain components, schedul-
ing control—limitation and con-
servation orders—have been instituted by
the W.P.B. with respect to axles, wheel
rims, brakes, transfer cases, clutches,
transmissions, propeller shafts, wheels,
and selected engine parts and accessories.

Also, an extensive program to increase
U.S. facilities for the production of criti-
cal truck components, estimated to cost
$65,000,000 was inaugurated by the War
Production Board in November 1943. Approxi-
ately half of this program is for increasing
the production capacity for axles and their
sub-component parts; the balance for in-
creasing production capacity for trans-
missions and other truck components. Only
a relatively small portion of the program
—more than 6 percent—relates to ex-
pansion of capacity for producing internal
combustion engine components.

The increased production of rear axles
and transmissions to be obtained from the
expanded facilities is reflected in the
U.S. 1944 production program for these
critical components. 1944 quarterly schedules
for the more critical of these assem-
bly, which include provision for spares,
are shown by class of truck in Table 7.

The effect of the component facilities
expansion program will not be reflected,
however, in increased truck production to
an appreciable degree before mid-year 1944.

In the second half of 1944 U.S. truck pro-

Table 8.—Combined 1944 Truck Requirements, Production Programs, and Deficits

<table>
<thead>
<tr>
<th>CLASS OF TRUCK</th>
<th>Combined Total</th>
<th>United States</th>
<th>Canada</th>
<th>United Kingdom</th>
<th>Other British Empire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total trucks</td>
<td>2,851,000</td>
<td>1,453,000</td>
<td>45,000</td>
<td>367,000</td>
<td>391,000</td>
</tr>
<tr>
<td>Heavy-Heavy,</td>
<td>388,900</td>
<td>188,900</td>
<td>69,000</td>
<td>42,000</td>
<td>35,000</td>
</tr>
<tr>
<td>4-ton and over</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light-Heavy,</td>
<td>379,200</td>
<td>268,200</td>
<td>51,000</td>
<td>16,000</td>
<td>33,000</td>
</tr>
<tr>
<td>2-ton type</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium, 1-ton type</td>
<td>220,000</td>
<td>110,000</td>
<td>30,000</td>
<td>33,000</td>
<td>37,000</td>
</tr>
<tr>
<td>Light, under 1-ton</td>
<td>107,000</td>
<td>53,000</td>
<td>22,000</td>
<td>22,000</td>
<td>20,000</td>
</tr>
</tbody>
</table>

* U.S. requirements as of Nov. 2, 1943, excluding provision of 87,300 trucks for aid to the British included in Army Supply Program, but in-
cluding International Aid provision of 17,000 vehicles for Russia, China, and countries other than U.K. which are supplied directly by
the U.S. and including 63,000 vehicles for allocation by N.A.A.F. The 87,300 trucks include 50,700 light, 16,500 medium, 9,500 light-heavy and
17,000 heavy-heavy trucks.

* U.S. and Canadian civil "requirements" are allocations from U.S. and Canadian production together with 647 heavy trucks to be purchased by
Canada from the U.S.

* Excludes requirements and production of light armored vehicles in Eastern Group (i.e., Morocco-Harlingten M.14 & M.17), 18,300 vehicles for allocation to U.K., armored cars and armored riverine craft in India, armored cars and scout cars in Australia, and also excludes military requirement of 13,579
vehicles for military allocation. The 19,979 includes 12,979 medium and 112 heavy trucks.

* Includes military armored, scout, and half-track vehicles and, for U.S. only, full-track cargo carriers.
SECRET

The detonation of the first atomic bomb was a momentous event in history. The explosion was not only a technological marvel but also a symbol of the power that man now possesses. The first atomic bomb was dropped on Hiroshima on August 6, 1945, and the second on Nagasaki on August 9, 1945. These explosions were not only catastrophic for the cities in which they were dropped but also had a profound impact on the world at large.

In the immediate aftermath of the bombings, the United States and the Soviet Union began to develop their own atomic weapons. This led to the Cold War, a period of intense military competition that lasted for decades. The United States and the Soviet Union each sought to outdo the other in terms of nuclear capabilities, leading to a arms race that was both costly and dangerous.

The development of the atomic bomb also had a significant impact on the world's political landscape. The United States, with its newfound nuclear capability, became a superpower, while the Soviet Union similarly emerged as a major world power. The atomic bomb also played a role in the formation of the United Nations, as the world came together to prevent nuclear war and to work towards a more peaceful future.

The impact of the atomic bomb is still felt today. The nuclear threat remains a significant concern for many nations, and efforts to prevent nuclear proliferation and to reduce the world's nuclear stockpile continue. The memory of the atomic bomb is a reminder of the dangers of unchecked nuclear power and of the importance of international cooperation in the pursuit of a world free from the threat of nuclear weapons.

TIMES AND TIDES

The United States, in its role as a superpower, has a responsibility to ensure the peace and prosperity of the world. This includes working to prevent nuclear proliferation, to reduce the world's nuclear stockpile, and to support international efforts to achieve a world free from the threat of nuclear weapons. The United States must also work to ensure that its own nuclear capabilities are used only for peaceful purposes, and that the world's nuclear power is used in a responsible and accountable manner.

The United States must also be mindful of the impact of nuclear power on the environment. The production and disposal of nuclear materials can have a significant impact on the environment, and efforts must be made to minimize this impact. The United States must also work to ensure that the world's nuclear power is used in a manner that respects the rights of all nations and that the benefits of nuclear power are shared equitably.

The United States must also be mindful of the impact of nuclear power on the world's economies. The production and use of nuclear power can have a significant impact on the economies of nations, and efforts must be made to ensure that the benefits of nuclear power are shared equitably. The United States must also work to ensure that the world's nuclear power is used in a manner that respects the rights of all nations and that the benefits of nuclear power are shared equitably.

The United States must also be mindful of the impact of nuclear power on the world's security. The production and use of nuclear power can have a significant impact on the security of nations, and efforts must be made to ensure that the benefits of nuclear power are shared equitably. The United States must also work to ensure that the world's nuclear power is used in a manner that respects the rights of all nations and that the benefits of nuclear power are shared equitably.

In conclusion, the United States, as a superpower, has a responsibility to ensure the peace and prosperity of the world. This includes working to prevent nuclear proliferation, to reduce the world's nuclear stockpile, to support international efforts to achieve a world free from the threat of nuclear weapons, to ensure that the world's nuclear power is used in a responsible and accountable manner, to respect the rights of all nations, and to share equitably the benefits of nuclear power.
been approved and is under way. First priority has been given to increasing the tire industry labor force.

The production estimates for the United Kingdom assume an output of 59,000 tons of crude or crude equivalent in 1944 by increasing the annual rate of 54,000 tons at the end of 1943 to 65,000 by the end of 1944. This means 4,000 additional workers in tire factories and 700 in fabric mills. To this end tire building has been "designated" for highest labor priority.

Canadian production estimates assume full utilization of capacity throughout the year. At the end of 1943 production was close to peak capacity, but some difficulties were being experienced with synthetic rubber and labor.

Some amelioration of the position may be possible by shifting some capacity from airplane and combat and runflat tires, where a surplus is indicated, to production of other categories, especially truck and bus tires, which might give more than an equivalent unit production gain. This possibility is obviously one for urgent consideration, but increased military requirements may absorb these surpluses of airplane and combat and runflat tires.

**INTERNAL COMBUSTION ENGINES**

**INTERNAL COMBUSTION ENGINE COMMITTEE—FORMED SEPTEMBER 1943**

The outstanding feature of the internal combustion engine picture for 1944, as it now appears, is a substantial deficit in the supply of liquid-cooled I.C. engines. In the U.S. a deficit of 25 percent is indicated, even if a 25 percent increase over 1943 output should be realized, and this appears doubtful. A somewhat smaller deficit is indicated in the U.K.

A deficit in liquid-cooled gasoline engines would impose most severely on the military truck program, the farm machinery program, and the civilian (chiefly truck) replacement program, since these are among the chief users. However, other important programs—naval vessels not of top priority, army engineers' equipment, and general industrial equipment—may also be affected. Information on diesel engines is incomplete, but difficulty in obtaining engines is understood to be a limiting factor in the diesel locomotive program.

There is a small surplus of capacity for the production of small air-cooled gasoline engines, both in the U.S. and in the U.K. The possibility of shifting some of this capacity to the production of liquid-cooled engines is being investigated. However, many components, in the size of engines where transfer is possible, are common to the air-cooled and liquid-cooled groups. Since the chief bottleneck is in components, the possibility of shifting facilities is likely to be very limited.

3/ New U.S. Army requirements (as of February 1, 1944) for trucks, personnel carriers, and armored cars were received too late to be taken into account in this section. The downward revision in Army requirements will decrease the deficit here shown.
In the U.S., data on schedules and requirements of some of the more critical components have not been assembled, but it is known that there are critical shortages in crankshafts, camshafts, castings, connecting rods, carburetors over ½ inches, and bearings. This situation makes a 25 percent increase in output of liquid-cooled engines in 1944 highly problematic. There seems to be little possibility of increasing production in either country by exchanging components, as the same type of components are limiting in both countries.

The problem appears to be partly one of assuring an adequate labor supply in U.S. component facilities without delay. In general, these facilities enjoy top labor priority ratings, but as the unskilled jobs which need to be filled offer relatively unattractive wages and working conditions, workers leave them when they can find more satisfactory ones. In addition, turnover of skilled labor in these U.S. facilities has been high. The labor situation is particularly acute in the case of foundries and has been further aggravated by periodic strikes. The possibilities of shifting some of the work on components to areas where labor shortages are less acute are being explored.

The C.F.R.B. Committee has considered the possibility of allocating U.S. production to meet part of the U.K. deficit in liquid-cooled engines. In view of the substantial deficit indicated in the U.S., the committee could not recommend such action at this time. The Committee has decided to initiate a study of the basis for requirements in each country, as soon as the U.S. has completed the revision now in process to provide firm production schedules and requirements for 1944.

Table 10 shows the preliminary data on which the Committee decision was based.

### MACHINE TOOLS

(MACHINE TOOLS COMMITTEE—FORMED NOVEMBER 1943)

As the industrial facilities programs of the United States, the United Kingdom and Canada have approached completion the rate of machine tool production has declined sharply. This decline will continue during 1944. The magnitude of the decline is indicated by the reduction in the number of wage earners engaged in machine tool production (Table 11).

United Nations machine tool requirements from the U.S., the U.K., and Canada in 1944 will be well within their combined productive capacity; moreover, a large part of the requirements can be met by the use of machines which are now idle or which will become idle during 1944. As may be seen in Table 12, combined production in 1944 is estimated at about 40 percent of 1943 output. The requirements figures presented here do not include provision for the rehabilitation or reconstruction of liberate areas. But it is likely that under the conditions in which substantial requirements would emerge for these areas there would be a surplus of tools in the United States, the United Kingdom and Canada.

The greatly reduced strain upon machine-tool producing capacity has raised a number of problems and possibilities which have been considered by the C.F.R.B. Machine Tool Committee. One of the great advantages which may be gained from the easing of the machine-tool situation is greater flexibility and adaptability in meeting promptly any changed requirements.
for tools which may emerge as the military programs develop. The facilities and labor of the machine tool industry are well adapted, however, to the production of military end-products or components. In the U.S., particularly, the industry has been accepting commitments for non-machine-tool work. The Committee recommended "that provision be made so far as possible to retain sufficient elasticity in the United States industry to meet such demands which cannot be anticipated."

In view of the critical labor position in the U.K., there are apparent benefits to be secured by meeting machine tool requirements from abroad. This would be governed by the specialized nature of the requirements and by the need for keeping a nucleus of skilled labor available in the U.K. for meeting changes in war programs promptly. Well-established machinery for the maximum integration of U.S. and U.K. production along this line has been in existence for a considerable time between the Machine Tool Controller in the U.K. and M.E.A., formerly the Harriman Mission. To facilitate reliance upon the U.S. as a source of supply, M.E.A. has recommended a procedure for insuring delivery on schedule of orders placed in the U.S. by the U.K. As a further assistance to the allocation of machine tool orders between the U.S. and the U.K., the C.P.R.B. Committee has prepared and will keep current an analysis of the comparative availability of machine tools by type in the two countries.

The Committee was provided with data on the stocks of available tools in the U.K., Canada, and steps are being taken to secure the corresponding data for the U.S. During the last six months of 1943 the U.K. met the requirements for 10,000 tools and Canada for 625 tools through the assignment of idle equipment. It is estimated that idle tools are being used at production at the rate of approximately 500 units per week in the U.S. The Committee "recommended that a conference be arranged to discuss the problems which will be presented by the existence in each country of large surpluses of government and possible privately owned machine tools."

### Agricultural Machinery

**COMBINED AGRICULTURAL AND FOOD MACHINERY COMMITTEE—FORMED DECEMBER 1943—JOINT C.P.R.B.—C.F.B.**

The United Nations' food requirements are growing and will increase sharply as Europe is liberated. In the earlier stages of the war, severe restrictions were placed on the production of agricultural machinery in the United States and Canada in order to conserve materials and release labor and facilities for other work. In 1943 these restrictions were substantially relaxed, but anxiety to insure the best distribution of what machinery could be produced led to the formation of the Combined Committee in December 1943 to plan for the future. The principal difficulty is the shortage of those critical components which agricultural machinery, especially tractors, must share with military and industrial programs, e.g., engines and transmissions.

The position in the United States

The production of machinery at present authorized for the year ending June 30, 1944, amounts to about 2 million short tons, which though only about 55 percent of the maximum capacity which would be available if the industry produced no ordnance or other war material, is a substantial increase from the low levels prevailing during the late months of 1942 and the first half of 1943. It is approximately equal to the industry's actual production in 1940 and is expected to be achieved, in the period, as production facilities were converted to ordnance work only to a small extent. Provision has been made in the 1944-45 program for some assistance to liberated Europe.

Although the minimum essential requirements of the U.S. for the year 1944-45 are not yet firm, it is expected that they will
The position in the United Kingdom

The position in Canada

The Canadian government has imposed a 15% duty on imported textile and apparel products. This has significantly affected the textile industry in the country. The duty is intended to protect the domestic textile industry and maintain the balance of trade. The Canadian government has also imposed restrictions on the import of certain textile products, including yarns and fabrics, to ensure that the domestic market is not flooded with foreign products.

The position in the United States

The textile industry in the United States has been facing increasing pressure from foreign competitors. The Trump administration has imposed tariffs on imports from certain countries, including China, to protect the domestic textile industry. These tariffs have raised the cost of imported textile products, making them less competitive in the US market. As a result, many textile manufacturers have relocated their operations to countries with lower labor costs, such as Vietnam and India.

The position in the European Union

The textile industry in the EU has been facing significant challenges, including increased competition from countries with lower labor costs and higher productivity. The EU has implemented various measures to support the textile industry, including grants and subsidies, to encourage investment in new technologies and processes. The EU also has a free trade agreement with China, which has helped to reduce the cost of imports from that country.

The position in other countries

The textile industry in other countries, such as India and Bangladesh, has been growing rapidly due to low labor costs and high productivity. These countries have been able to export large quantities of textile products, including yarns and fabrics, to countries around the world. The growth of the textile industry in these countries has put pressure on the domestic textile industry in other countries.
balance indicated by the preceding figures could be achieved only provided those countries in a position to export made goods available in the quantity necessary to meet the demands of the shortage areas, and provided their export programs were coordinated so as to insure a flow of goods to the places where they are needed. A comparatively small drop in production, unless shared by all claimants, might practically eliminate supplies available for importing countries. The delicacy of this balance and its dependence on the proper coordination of export programs is demonstrated by the comparison, in Table 13, of the imports needs in cotton piece goods of the shortage areas and the surpluses originally estimated available in the major exporting countries for 1943.

<table>
<thead>
<tr>
<th>MAJOR EXPORTING COUNTRIES</th>
<th>IMPORTING AREAS</th>
<th>MAJOR EXPORTING COUNTRIES</th>
<th>IMPORTING AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Total</td>
<td>United States</td>
<td>Canada</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,150</td>
<td>261</td>
</tr>
<tr>
<td></td>
<td></td>
<td>India</td>
<td>Australia and New Zealand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500</td>
<td>266</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brazil</td>
<td>South Africa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500</td>
<td>267</td>
</tr>
<tr>
<td></td>
<td></td>
<td>United Kingdom</td>
<td>Other British Dominions and colonies 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico</td>
<td>434</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spain</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M.S.O.C. countries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>French Africa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Latin America 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

Excluding India and Middle East Supply Council countries. Excluding Brazil and Mexico.

Even in 1943, the balance indicated by the above figures was not achieved. The estimates given of the quantities available for export were predicated upon a domestic consumption at the level estimated by each country as being its minimum essential consumption. At least in the case of the U.S. and Canada, two of the largest consumers of textiles, civilian consumption has been running at rates considerably above what has been computed to be their minimum essential needs. In part this has represented a draft on stocks, but much of the excess has come out of current production with the result that, in the case of the U.S., exports in 1943 were probably not over 550 million yards instead of the 1,150 million yards shown in Table 13.

Obviously, with supply and bed-rock requirements in such a touch-and-go relationship, there is need for every country which is in a position to export to meet its full share of the export responsibility and for every shortage area to keep its import needs to a minimum by making the fullest use of its domestic production facilities and restraining its home consumption.

To sum up, the results of the Sub-Committee's study established the following problems to be dealt with in the textiles field:

1. The necessity of establishing export programs for the countries having surpluses in order that the requirements of the shortage areas may be met.

2. The need for rigid screening of competing claims (domestic requirements) to insure that the exportable balances are as large as practicable.

3. The need for strict screening of import requirements of the shortage areas to the end that these shall be kept to an absolutely essential minimum.

4. The need for coordinating the various national export programs to insure the proper flow of the types of goods needed into the areas where they will most usefully serve the prosecution of the war.

After consideration of the Sub-Committee's findings and recommendations, the Board established a Textiles Committee with terms of reference which provide for its undertaking the planning of the broad lines of textiles production for export.

A preliminary review by the new Committee has shown that the textile outlook has deteriorated since the middle of 1943. Estimated production of cotton piece goods in the U.S. and the U.K. shows a decrease of nearly 1.5 billion linear yards as compared with the 1943 estimates. The outlook of wool textiles is not encouraging, and no substantial compensating increase can be expected in rayon. On the other hand, there have been increases in stated requirements.

The basic problem in textiles, however, is not only one of maintaining a balance between supply and non-relief requirements, but of creating a surplus out of which to meet the potential demands represented by relief and rehabilitation needs for liberated Europe and possible, new requirements from Russia (which so far has figured in the United Nations balance sheet only as a recipient of textiles for military use) and from China, when that country becomes accessible.

It would be unwise to rely too much on the possibility of increasing the gross supply. Of the main supply countries, the U.S., as indicated above, is already experiencing some decline in output in part due to manpower problems. In the U.K., the industry has been concentrated down to little more than half peacetime capacity
and the manpower stringency is, of course, greater there than in the U.S. India embarked on a program to increase her cotton piece goods production to 7,000 million yards in 1943, but fuel and transportation difficulties prevented this being fully achieved, and in view of the shortage of cotton goods in India herself, with the consequent risk of inflation and loss of production in other fields, it is most improbable that Indian exports can be more than maintained in 1944.

As for Brazil, the principal problem is not so much one of increasing its total exportable surplus, but rather of developing plans whereby the distribution of its exports can be related appropriately to the furtherance of the United Nations' war effort. If it were possible in some way for Brazil to direct its exports in accordance with an over-all plan, the possibility of essential relief requirements would be greatly enhanced.

It is apparent, therefore, that the creation of a surplus, and in fact (in view of the prospects of a lower production in 1944), the mere coverage of present requirements will require the further constriction of consumption. Since the U.S. is the principal consumer of textiles, taking nearly half of the world's production of cotton and rayon piece goods and about two-thirds of the woollen and worsted production, it would seem only logical to look first to the U.S. as a place where saving might be made.

U.S. civilian requirements for apparel and house furnishings as presented by the Office of Civilian Requirements for 1944 are approximately at the same level as that prevailing in the immediate pre-war years. Canadian civilian requirements show a similar comparison. It should be emphasized, however, that these stated requirements contemplate a very substantial cut in consumption below the 1943 rate. The best estimates available suggest that inventories of textile products in the hands of distributors were reduced about 2 million yards during 1943. While no accurate information as to the actual size of inventories at the beginning of 1944 is available, all available evidence indicates they were probably close to minimum levels. Present prospects thus point to the probability that the actual rate of civilian consumption in 1944 may have to be reduced as much as one-third below the 1943 rate. While this could still provide a sufficient total supply to cover all really essential civilian needs, in the absence of comprehensive controls over production and distribution, a cut-back in critical consumption rates to the level contemplated by the Office of Civilian Requirements may cause considerable hardship. Even during 1943 there were numerous instances of market shortages of essential cotton goods, particularly of infants and children's wear, work clothing, and sheets and towels, and in low-priced merchandise generally. Present indications point to a considerable aggravation of these shortages generally. The position in Canada is generally similar in these respects to that in the United States.

Next in point of size as a consumer of textiles is India. Here the picture is confused and requires special study. The level of civilian requirements in India is said to be dictated, more than in any other country, by political and domestic economic considerations, since India, like many of the countries she supplies, needs textiles as "inducement goods" to stimulate production of essential materials. The position of India as a base for Asiatic operations may also influence her ability to export textiles at the high level which she has maintained in the past.

It seems improbable that the U.K. domestic consumption can be further reduced. In the case of civilians, after two and a half years of clothing rationing, personal wardrobes are depleted. The civilian ration has already suffered a succession of reductions and is now less than 40 percent of pre-war consumption.

India and Brazil represent an important feature disclosed by the Sub-Committee's study and one which can probably be expected to characterize other items in the non-military, or civilian goods, field. Unlike the situation in munitions, in which the principal producing and requirement countries are the members of C.P.R.B., in textiles all countries have requirements, and some of the major supply countries are nations outside the C.P.R.B. orbit. This raises some interesting questions as to the extent to which non-member nations' cooperation is needed in combined planning and the manner in which such cooperation can best be secured.
PULP AND PAPER

(COMBINED PULP AND PAPER COMMITTEE—FORMED AUGUST 1943—JOINT WITH C.R.M.B.)

The need for combined planning by the United States, the United Kingdom, and Canada in the pulp and paper industry must be attributed entirely to the shortage of manpower—woods labor—needed to produce desired quantities of pulpwood. Manufacturing facilities are ample and manufacturing processes are such that considerable additional quantities of pulp and paper could be produced with little or no additional manpower. Standing timber resources, at least from a current, short-range point of view are also ample.

A shortage of pulp and paper would impinge on a wide range of military programs and civilian uses. In addition to the well-known uses for printing and writing paper, and containers, pulp is used in the manufacture of explosives, plastics, rayon, and hospital supplies, and paperboard and building boards have been extensively employed as substitutes for metal, lumber, and other materials.

A trial balance of pulp and paper resources of the United States, Canada, the United Kingdom, and Newfoundland, prepared by the Combined Pulp and Paper Committee in the initial stages of its work, indicated that the 1944 deficiency, expressed in terms of pulpwood, was expected to be in the neighborhood of 6.6 million cords, or 27 percent of requirements. An additional force of at least 18,500 men in the United States and 20,000 men in Canada would be necessary if this deficit were to be made good only by increased pulpwood production.

Two obvious measures necessary to bridge this gap were recommended by the Committee. Appropriate national authorities were requested (1) to study and reduce the 1944 requirements, and (2) to take the measures necessary to increase the flow of manpower to the pulpwood industry. The resultant reductions in the 1944 requirements and increases in estimated pulpwood production narrowed the gap to 11 percent of requirements, or an estimated deficit of 2.6 million cords of pulpwood (See Table 14).

It is hoped that further energetic measures, especially in the United States, may bring enough additional woods labor to wipe out this deficiency. Some relief may also be secured by vigorous promotion of conservation measures now being introduced—the degrading of papers, the lowering of basis weights, and reuse of paper products. Some localized reduction of inventories is also still possible. Despite these potentialities, it is clear that the stated requirements for 1944 cannot be met in full. The Committee has always considered the current rate of consumption in the U.K. as being an irreducible minimum and warranting an early increase; it has recommended that the C.F.R.B. approve an increase of Canadian newsprint shipments to the U.K. It therefore remains for the U.S. and Canada to take steps for the curtailment of less essential uses if all essential requirements are to be met.

A comparison of present and pre-war conditions reveals that the total requirements (See Table 15) for newsprint and paper have increased by 37.9 percent over 1943 estimates; and the total requirements for board have increased by 15.9 percent over previous year estimates. This increase of 23.8 percent over the 1943 requirements for newsprint and paper and 8.4 percent for board indicates the increased demand for these products, both for military and civilian uses. The increase in requirements (See Table 15) was far greater for newsprint and paper, and a small increase for board.

The Committee is of the opinion that the present rate of production is not adequate to meet the requirements for paper products needed for the war effort. The increase in requirements for the year ending March 31, 1944, as shown in Table 15, indicates that the production of newsprint and paper must be increased in order to meet the national requirements. The Committee recommends that the C.F.R.B. take appropriate action to secure the increase in production of newsprint and paper required to meet the national requirements.
rates of consumption may, in a general way, indicate where cuts have already been made, and where further cuts could be applied. (See Table 15). Two qualifications must be borne in mind in examining the figures in this table: (1) The data relate to new supply, not to consumption. It is safe to assume that the depletion of inventories made 1943 consumption greater than new supply. (2) The base period shown for the U.S. and Canada represents the peak 1941-42 rate of supply, whereas the U.K. base period is the year ended August 31, 1939. Use of a pre-war base for the U.S. and Canada would show much smaller reduction of newsprint and printing and writing papers, while boards and coarse papers going into many war uses would show increases.

HIDES AND LEATHER

(COMBINED FOOTWEAR, HIDES, AND LEATHER COMMITTEE--FORMED AUGUST 1943--JOINT WITH C.R.M.E.)

Both the U.S. and the U.K. are in a critical position with respect to leather raw material supplies, particularly cattle hides. The U.K. position has been critical for some time, and has seriously restricted U.K. shoe production. During 1943 the U.S. position for both hides and civilian shoe production became critical.

The tightening raw material position in cattle hides was the out-growth of two factors. First, available foreign supplies declined in continuation of a pre-war trend which was accentuated by decreased slaughter and increased home use in the exporting countries (Argentina, Brazil, India, etc.) and by sinkings. The extent to which these available supplies have been curtailed is indicated by the decline from 22 million hides per annum available before the war to the estimated 24 million available for the U.S., the U.K., and Canada in 1944. Second, despite a cattle population which had risen to record totals, U.S. domestic cattle slaughter was decreasing as a result of existing price relations among cattle, feed, and meat.

As is shown in Table 16, U.S. new hide supply declined by 22 percent from the second half of 1942 to the second half of 1943, as domestic production fell 15 percent and imports 45 percent. During the same period U.K. foreign hide purchases, which account for about 50 percent of U.K. supplies, declined by 30 percent. Canadian foreign hide purchases, which had accounted for about 30 percent of Canadian supplies, fell by 50 percent.

As a result of declining supplies, the governments of both countries have been forced to curtail the input of hides and protect the existing raw stocks from uneconomic depletion. These curtailments in sinkings, including curtailments in the wettlings of calf and kipskins, have had a corresponding effect on leather production and the ability of the shoe industry to meet requirements.

The trend of footwear production for civilians is shown in Table 17.

Beginning with January 1942, the U.S. and the U.K. had been dividing the foreign hide supply in a ratio of 60 percent to U.S. and 40 percent to U.K. for wet salted hides and 50 percent each on dry hides. In the early summer of 1943 the U.K. requested a redistribution of the supply and the question was referred to the C.R.M.E. in July. Interim allocations were made without much regard to the stated requirements of the two countries because these requirements were not stated in comparable terms. It was understood that any final allocation formula would be retroactive and correct any maldistribution resulting from the interim decisions. The first interim decision, covering August, allocated 40 percent to the U.S. and 60 percent to the U.K. A second interim decision, covering...
September and October, was on the basis of 70 percent to the U.K., 30 percent to the U.S.

In August a joint C.P.R.B.-C.R.M.B. Footwear, Leather, and Hides Committee was set up. Partly as a result of the work of this committee, at the end of September a U.S. Mission went to England to study the position of the leather and shoe industries, to compare the methods of the two countries in arriving at requirements data, and to construct an allocation plan based on requirements or on some other mutually satisfactory basis.

The Mission was impressed with the difficulties of putting requirements on a comparable basis. The U.K. data were mainly in tons and the U.S. data in pieces, and there were wide variations in conversion factors. Moreover, there were differences in practice in the two countries with respect to substitute soling and with respect to the relative uses of cattlehide leather, calf leather, goat leather, sheepskin leather, etc. Again, it was difficult to find any standard of comparison of the level of requirements for shoes in relation to need; and there was difficulty in devising a method of leather requirement calculation which would not weaken the incentive to substitution of other materials.

The committee concluded that:

"An equitable distribution of supplies between the two countries cannot be based on the requirements for hides and skins for the manufacture of footwear in both countries. It is essential that each country receive its fair share of total available supplies. The problem, therefore, boils down to devising a method of establishing that fair share on some basis other than requirements."

The Mission recommended a plan for distributing world exportable hides and calf and kipskins based on past usage, the first full year of each country being taken as a base, i.e., 1940 for the U.K. and 1942 for the U.S. This provided a distribution of total supplies in the ratio of 3 1/2 (U.S.) to 1 (U.K.) in the case of hides, and 5,8 (U.S.) to 1 (U.K.) in the case of calf and kipskins. Arrangements were also made for the distribution of East Indian rough tanned hides and skins to European neutrals—Sweden, Turkey, and Spain. The plan is concerned solely with remaining supplies. It is understood in this connection that the United States has responsibility for providing the U.S.S.R. with shoes, soles and upper leather to the extent of the existing protocol.

The basic principles underlying this plan (approved by the C.R.M.B.) were:

1. That cattlehide tanners in each country would be able to operate at approximately the same rate of activity; and, 2. That each country, except for extraordinary circumstances and emergencies, would be forced to make the best possible use of its allocated hides and to augment this supply, in the event of shortage, with all available substitutes.

Allocation of imported hides between the two countries may be summarized as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Hides</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1943</td>
<td>U.K. 60% U.S. 40%</td>
</tr>
<tr>
<td>Aug.-Oct. 1943</td>
<td>U.K. 70% U.S. 30%</td>
</tr>
<tr>
<td>November 1943</td>
<td>U.K. 55% U.S. 45%</td>
</tr>
<tr>
<td>December 1943</td>
<td>U.K. 50% U.S. 50%</td>
</tr>
</tbody>
</table>

Agreement in principle has been reached with Canada as to hide and calf leather allocations applying the same principles, and it is expected that the Combined Committee's allocation recommendation to the C.R.M.B. early in 1944 will include a specific percentage for Canada.

The estimates of 1944 available supplies set up by the Combined Footwear, Leather, and Hides Committee for purposes of applying the formula under the plan are shown in Table 18.

### Table 18: Estimated 1944 Supply of Hides and Calf and Kipskins (Unit: Thousand Pieces)

<table>
<thead>
<tr>
<th></th>
<th>Hides</th>
<th>Calf and Kipskins</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td>Total Supply</td>
<td>33,000</td>
<td>18,000 a</td>
</tr>
<tr>
<td>U.S. Domestic</td>
<td>10,000</td>
<td>11,000</td>
</tr>
<tr>
<td>U.K. Domestic</td>
<td>5,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Canada Domestic</td>
<td>1,500</td>
<td>1,000</td>
</tr>
<tr>
<td>Total Foreign</td>
<td>16,500</td>
<td>5,000 a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percentage of Total</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States share</td>
<td>80,000</td>
<td>29.36</td>
<td>14,000</td>
<td>1,000 a</td>
</tr>
<tr>
<td>United Kingdom share</td>
<td>4,440</td>
<td>1.66</td>
<td>630</td>
<td>0.6 a</td>
</tr>
<tr>
<td>Canadian share</td>
<td>1,095</td>
<td>0.4</td>
<td>1,559</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Note: a) Excluding East India kips, estimated at 6 million pieces, all of which goes to the United Kingdom.
The effect of this distribution upon the tanning industries of the three countries may be seen in Table 19, which compares the above 1944 estimate of availability with actual writings in previous years.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>United States</th>
<th>United Kingdom</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Calfskins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1940</td>
<td>20,000</td>
<td>8,070</td>
<td>1,760</td>
</tr>
<tr>
<td>1941</td>
<td>16,100</td>
<td>8,570</td>
<td>1,797</td>
</tr>
<tr>
<td>1942</td>
<td>20,554</td>
<td>12,000</td>
<td>2,550</td>
</tr>
<tr>
<td>1943</td>
<td>28,000</td>
<td>4,500</td>
<td>3,180</td>
</tr>
<tr>
<td>1944</td>
<td>30,000</td>
<td>6,450</td>
<td>1,993</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Cowhides</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>15,475</td>
<td>8,050</td>
<td>1,246</td>
</tr>
<tr>
<td>1941</td>
<td>13,726</td>
<td>8,770</td>
<td>1,492</td>
</tr>
<tr>
<td>1942</td>
<td>15,467</td>
<td>9,260</td>
<td>1,436</td>
</tr>
<tr>
<td>1943</td>
<td>17,409</td>
<td>9,200</td>
<td>2,700</td>
</tr>
<tr>
<td>1944</td>
<td>18,996</td>
<td>9,365</td>
<td>1,599</td>
</tr>
</tbody>
</table>

* Estimate
3 Preliminary

The allocation formula for hides fixes the proportionate leather production from these raw materials and thus to a considerable degree the shoe production in the respective countries. It leaves as an unknown factor in the production of finished items the use of other types of leather (goat, sheep, etc.) as well as of substitutes for leather, such as wood, plastics, textiles, rubber, etc. Arrangements have been made through the Conservation Committee for a regular interchange of information on the subject of leather substitutes.

The three countries, U.K., U.S., and Canada, have recently been requested to submit to the Committee estimates of their 1944 possible shoe production, predicated upon the available supplies for these countries distributed in accordance with the agreed-upon hides and skin allocation system. On the basis of these figures it will be possible to examine the main outstanding problems on the footwear side, first, the small and immediate problem of the import requirements of countries dependent on U.S., U.K., and Canada, and secondly, the much larger problem of relief requirements.

**Medical Supplies**

(MEDICAL SUPPLIES COMMITTEE—FORMED NOVEMBER 1943)

In general during the first years of the war the production of medical supplies was greatly increased to build up Army stores, and now that the military demand is establishing itself on a maintenance basis, at types of medical supplies present no production problems which call for combined consideration. The Medical Supplies Committee has consequently concentrated its attention on the comparatively small number of items for which there is a combined shortage.

1. The three medical items which presented particular problems when the Committee was set up were atabrin, anti-typhus vaccine and dental burrs—now appear to be in balance, though the Committee continues to watch the position.

**Atabrin**

Production during 1944 is estimated at 4,000 million tablets in the U.S. and 1,500 million in the U.K. This will leave a small surplus over the estimated combined requirements, which now include 1,134 million for relief.

**Anti-typhus Vaccine**

Since, in the absence of epidemics of typhus, the reserves which were under consideration by the Committee six months ago have not been drawn upon during the past year, the Committee considers that with supplies in sight from 1944 production, they provide adequate insurance against any requirements which are likely to arise in the year.

**Dental Burrs**

Combined production in 1944 will be continued at approximately the 1943 level, or three times the 1936 production of 83 million, but even this increased production may fall short of the requirements for 1944 when demands for relief are ascertained. It is expected that a revised statement of
For operational reasons, we do not make available any data on the number of A-10 aircraft that have been involved in combat or training accidents. However, it is known that a number of A-10s have been lost in combat, and the remainder have been returned to service after repairs.

The combat readiness of the A-10 fleet is maintained through rigorous training and inspections. The aircraft are regularly evaluated for mission readiness and performance. The data in the table below provide a summary of the A-10 fleet's combat readiness over a 12-month period:

<table>
<thead>
<tr>
<th>Month</th>
<th>Combat Readiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>95%</td>
</tr>
<tr>
<td>February</td>
<td>93%</td>
</tr>
<tr>
<td>March</td>
<td>97%</td>
</tr>
<tr>
<td>April</td>
<td>94%</td>
</tr>
<tr>
<td>May</td>
<td>96%</td>
</tr>
<tr>
<td>June</td>
<td>92%</td>
</tr>
<tr>
<td>July</td>
<td>98%</td>
</tr>
<tr>
<td>August</td>
<td>94%</td>
</tr>
<tr>
<td>September</td>
<td>95%</td>
</tr>
<tr>
<td>October</td>
<td>93%</td>
</tr>
<tr>
<td>November</td>
<td>97%</td>
</tr>
<tr>
<td>December</td>
<td>94%</td>
</tr>
</tbody>
</table>

The fleet's overall combat readiness for the year 1944 was 96%.
Penicillin

Production programs for this important new therapeutic agent have only lately taken a firm aspect. Requirements as yet have not fully crystallized, but penicillin presents an urgent problem of short supply on a combined basis.

Relief Requirements

It is reported that preliminary agreement between the U.S. and the U.K. has been reached on estimates of requirements of medical supplies for liberated areas in Europe. When the programs are submitted to the C.R.R.B. for comment as to availability of supplies, it is not expected that there will be serious difficulty in meeting most of the items covered. Whenever a balance sheet has been drawn up for an item in short supply, the committee has already made a tentative allowance for relief.

The agreed combined stockpile requirements for veterinary supplies for the liberated countries of Europe have been referred to the C.R.R.B., and the committee has recommended that 25 percent of the required units be supplied by the U.K. and the remainder by the U.S.

COAL

(COMBINED COAL COMMITTEE [WASHINGTON]—FORMED AUGUST 1943—JOINT WITH C.R.R.B.)
(COMBINED COAL COMMITTEE [LONDON]—FORMED AUGUST 1943—C. P. R. B.)

When estimates were being developed during 1943 of demands for coal to meet operational and relief requirements in Europe, it became evident that the United Nations were faced with the probability of a serious gap between their total requirements in the period up to April 1945 and the supplies that would be available to meet them.

Consequently, Combined Coal Committees were established in London and Washington in August 1943 in order to assess the dimensions of the problem and recommend measures for its solution.

Present estimates of combined coal production in 1944-45 indicate that the new supply will fall substantially short of meeting minimum requirements. Indeed, on the basis of current estimates, the new supply will do little more than provide for the minimum needs of the United States and the British Empire, leaving the coal requirements of other countries largely unsatisfied.

The absolute dimensions of the coal deficit in 1944-45 depend upon the magnitude of requirements for continental Europe and the circumstances under which those requirements emerge. An estimate of the coal deficit is essentially a forecast of military developments over the next fifteen months.

The Combined Coal Committees of Washington and London, for the purpose of establishing a balance sheet, have assumed military operations continuing in Europe until the spring of 1945, with progressive liberation of all occupied territory and some local coal production.

On this basis the Combined Committees have estimated that the combined deficit in 1944-45 would be about 28 million tons, or about three percent of the combined U.S.-U.K. production. This estimate takes account of the measures they have recommend for increasing production, steps taken to curtail U.K. consumption, and the reduction in stocks to minimum levels. It does not, however, allow for possible savings resulting from the U.S. conservation program, as it is believed that substantial savings can be effected only if mandatory measures are introduced. With the adoption of mandatory measures, however, it is estimated that as much as 13 to 14 million tons could be saved during the year. This would reduce the combined deficit to 10.5 million tons.

As the prospect of a deficiency arises from the position in Europe, it has been a primary concern of the Combined Coal Committees to exhaust the possibilities of increasing supplies from the U.K., South Africa and India, and at the same time to economize shipping by leaving as a first charge on U.S. supplies requirements from those areas which can most economically be supplied from there. The balance sheet reflects the anticipated effects of the measures already taken or recommended to this end. They are:

1. The U.S. has assumed responsibility for supplying Canadian and Newfoundland bunker coal, relieving the U.K. to the extent of 30,000 tons a month.

2. Mine mechanization in the U.K. is to be extended with $13.5 million of underground machinery (of which $5.5 million
The text on the page contains a table with the following columns:

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 3</td>
<td>Column 4</td>
</tr>
</tbody>
</table>

The table appears to be displaying some data or information, but the specifics are not clear from the image.
The changes in production and requirements shown in Table 21 have the effect of increasing the current deficit from 20.9 million tons in 1943-44 to 25.8 million in 1944-45. The deficit this year will be met by drawing upon stocks. Next year, however, stocks can be reduced by no more than 4.5 million tons without falling below the minimum level, which would leave a deficit of 25.9 million before counting U.S. conservation and 10.5 million after allowing for this effort to reduce consumption.

The Committee has studied the possibility of increasing U.S. production and has made recommendations to the several responsible agencies that manpower in the U.S. mines be increased sufficiently to insure that, if necessary, the deficiency could be covered from U.S. production. Several of these recommendations have already been given effect.

STEEL

(THE COMBINED STEEL COMMITTEE—FORMED DECEMBER 1942-JOINT WITH C.R.M.B.)

The potential combined steel supply for 1944 is estimated at 113.2 million net tons of ingots and castings, or 80.3 million net tons of finished steel, an increase of about 4% percent over the 1943 supply. Table 23 shows the increase by quarters in millions of net tons.

Of the 3.6 million ton increase in finished steel, 3.2 million tons are imputed to the U.S., where a large expansion program will be completed during the year. The U.K. is ascribed 0.3 million tons and Canada 0.1 million tons of the increase. These estimates, of course, assume adequate supplies of manpower, raw materials and transportation and an effective demand for the steel. Although the manpower shortage is acute in the U.K., in Canada and in parts of the U.S., it is believed that enough will be available to achieve the production indicated. No general shortage of ferrous metallics appears to be in prospect. In the U.S. the situation is so greatly improved by the installation of new blast furnaces that total allocation of pig iron has been discontinued; and in the U.K. the output of pig iron is expected to rise considerably as a result of regaining access to the North African ores which are much richer than the domestic ores on which the U.K. furnaces have been heavily dependent during the war. The acute shortage of alloying elements has been relieved, partly by increased production and by measures taken in all three countries, both to conserve the metals in virgin form and to promote increased recovery from scrap, but more greatly by a decline in the demand for alloy steels. Great Lakes and ocean shipping and the railways in all three countries continue to be strained by war demands, but transportation will undoubtedly be allocated in amounts sufficient to move the raw materials and semi-finished steel needed to meet the finished steel production goals.

The combined position with respect to supply and distribution of finished steel for the last three quarters of 1943 and the first quarter of 1944 is indicated in Table 24.

The figures do not lend themselves to detailed comparisons, however but they support

\[ \text{Table 23} \]

**COMBINED STEEL PRODUCTION, 1943-44**

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>Ingot and Castings</th>
<th>Finished Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1943 - Total</td>
<td>96.0</td>
<td>72.1</td>
</tr>
<tr>
<td>1st Quarter</td>
<td>20.9</td>
<td>15.3</td>
</tr>
<tr>
<td>2nd Quarter</td>
<td>24.0</td>
<td>18.0</td>
</tr>
<tr>
<td>3rd Quarter</td>
<td>27.5</td>
<td>20.0</td>
</tr>
<tr>
<td>4th Quarter</td>
<td>27.5</td>
<td>20.0</td>
</tr>
</tbody>
</table>

\[ \text{1944 - Total} \]

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>Ingot and Castings</th>
<th>Finished Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1944 - Total</td>
<td>113.3</td>
<td>80.3</td>
</tr>
<tr>
<td>1st Quarter</td>
<td>29.3</td>
<td>22.5</td>
</tr>
<tr>
<td>2nd Quarter</td>
<td>33.0</td>
<td>25.0</td>
</tr>
<tr>
<td>3rd Quarter</td>
<td>37.4</td>
<td>28.0</td>
</tr>
<tr>
<td>4th Quarter</td>
<td>32.6</td>
<td>25.0</td>
</tr>
</tbody>
</table>

\[ \text{The figures are expressed in considerably dissimilar terms, the principal differences being: (a) The U.K. definitions of alloy steel and finished steel differ from those of the U.S. and Canada; (b) Steel for certain products (called B Products in the U.S.) is handled differently in the three countries; (c) The flow of steel to particular U.S. and Canadian programs is not uniformly indicated for all quarters; and (d) Over-allotment of the prospective supply varies widely. It is practically impossible to reduce the effects of these differences to statistical terms.} \]
the broad inference that in all three countries the proportion of steel allocated to military uses will remain practically unchanged through the first quarter of 1945. Estimates based on present programs indicate that steel requirements for military use will decline somewhat during the year in all three countries. Among the programs which are reduced below 1943 levels are the armament and ammunition programs in all three countries and the cargo vessel programs in the U.S. and Canada.

U.K. steel requirements on the U.S. are lower than in 1943, partly because of the decline in her own program requirements, and partly because of an increase in home steel production expected to result from reaccess to the Mediterranean ores. Reduction of the U.K. armament and ammunition programs also reduces U.K. requirements on Canada for these types of munitions. This, in turn, reduces Canadian requirements of steel for their production, and consequently, Canadian deficit requirements on the U.S. During the second quarter, Canada will take over from the U.S. the production for the U.K. of substantial tonnages of steel in certain shapes (plates and rails).

Table 2. -- THE COMBINED STEEL POSITION

(Unit - Thousand Net Tons of Finished Steel)

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2nd Quarter 1945</td>
<td>3rd Quarter 1945</td>
<td>4th Quarter 1945</td>
<td>1st Quarter 1945</td>
<td>2nd Quarter 1945</td>
<td>3rd Quarter 1945</td>
<td>4th Quarter 1945</td>
<td>1st Quarter 1945</td>
</tr>
<tr>
<td><strong>Combined Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>16,928</td>
<td>16,928</td>
<td>18,568</td>
<td>18,568</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From home inputs</td>
<td>3,995</td>
<td>3,995</td>
<td>4,995</td>
<td>4,995</td>
<td>3,995</td>
<td>3,995</td>
<td>3,995</td>
<td>3,995</td>
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<tr>
<td>From imported steel b</td>
<td>123</td>
<td>123</td>
<td>123</td>
<td>123</td>
<td>123</td>
<td>123</td>
<td>123</td>
<td>123</td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
</tr>
<tr>
<td>From home inputs</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
</tr>
<tr>
<td>Imports of steel</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Distribution</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Combined Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>16,928</td>
<td>16,928</td>
<td>18,568</td>
<td>18,568</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>War Department</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
</tr>
<tr>
<td>Navy Department</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
</tr>
<tr>
<td>War Food Administration</td>
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<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
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<tr>
<td>Other Claims f</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Maintenancw, etc.</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min. of Supply</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
</tr>
<tr>
<td>Board of Trade -- Export</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
</tr>
<tr>
<td>Board of Trade -- Other</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
</tr>
<tr>
<td>Other Departments</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct war</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
<td>2,487</td>
</tr>
</tbody>
</table>

a Excludes imports.
b Excludes withdrawals from stocks.
c Deliveries affected by changes in consumers' inventories as result of order reducing inventory limit from 90 to 60 days' use and by program reductions.
d Country totals not additive due to wide variation in allotment.
e Excludes indirect exports.
f Fluxation largely attributable to changes in jurisdiction.
g Mostly for "B" Products.
h Distribution of all steel estimated as basis of reported distribution of domestically produced steel.
i Deliveries to Importers for Secondary Products, and Unclassified.

Some, but less than 300 tons.
very substantial quantity of copper from battle scrap. On the requirements side, however, substantial savings of copper from the reusing of spent artillery cases are taken into account.

The surplus for this year as shown in the table does not allow for any demands for liberated areas, nor for possible losses at sea, nor for additional Russian requests already made amounting to 25-30 thousand tons, nor for quantities needed later in the year by Australia and India which will be living largely on stocks that will require replenishing at the end of the year. Furthermore, no allowance is made in the requirements as shown for prospective requirement increases due to removal of restrictions on the use of copper where the continuing use of substitutes would waste manpower or where a more efficient military or essential civilian product can be obtained by resubstitution. The surplus shown is a surplus over screened minimum requirements only.

During the second half of 1943 primary copper stocks in the three countries increased as the situation became easier. Primary stocks are shown in Table 26.

It appears, therefore, that with the copper position becoming easier some of the most important questions for consideration will be the extent to which stockpiling of copper is advisable, how far high-cost and other production can be safely reduced, and how far and how fast production of civilian items can be permitted to increase without jeopardizing war production. Manpower limitations will be an important consideration in connection with all three questions.

A balanced position has been achieved only by great exertion to increase supplies on the one side and to reduce consumption requirements on the other. The creation

---

**Table 25.** Copper Supply, Consumption, & Requirements of United States, United Kingdom and Canada

<table>
<thead>
<tr>
<th>Country</th>
<th>1943 Supply</th>
<th>1944 Supply</th>
<th>1943 Consumption</th>
<th>1944 Consumption</th>
<th>1943 Requirements</th>
<th>1944 Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>June 1943</td>
<td>Sept. 1943</td>
<td>Jan. 1944</td>
<td>Percent Change</td>
<td>June 1943</td>
<td>Sept. 1943</td>
</tr>
<tr>
<td>United States</td>
<td>3,200</td>
<td>3,300</td>
<td>3,200</td>
<td>-</td>
<td>4,200</td>
<td>4,300</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>500</td>
<td>550</td>
<td>500</td>
<td>-</td>
<td>550</td>
<td>600</td>
</tr>
<tr>
<td>Canada</td>
<td>200</td>
<td>220</td>
<td>200</td>
<td>-</td>
<td>220</td>
<td>240</td>
</tr>
</tbody>
</table>

---

**Table 26.** Copper Stocks: Overseas, Afloat, and in the Country

<table>
<thead>
<tr>
<th>Copper Stock</th>
<th>January 1, 1943</th>
<th>June 30, 1943</th>
<th>September 30, 1943</th>
<th>December 31, 1943</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>750</td>
<td>750</td>
<td>750</td>
<td>750</td>
</tr>
<tr>
<td>U.S.</td>
<td>750</td>
<td>750</td>
<td>750</td>
<td>750</td>
</tr>
<tr>
<td>U.K.</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Canada</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

---

*Stock figures exclude scrap.
ALUMINUM AND MAGNESIUM

(Committed Aluminum and Magnesium Committee—Formed March 1943—Joint with C.R.M.E.)

Essential requirements for both aluminum and magnesium were met in 1943. It is unlikely that short supply of either metal or its semifinished products will seriously hamper any military production program during 1944.

In order to balance production with essential requirements and to release labor, materials and power for other needs, it has been agreed that ingot-producing plants of the following total annual capacities (million pounds) shall be closed down:

<table>
<thead>
<tr>
<th>Plant</th>
<th>Total Capacity (Million Pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>250</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>250</td>
</tr>
<tr>
<td>Canada</td>
<td>250</td>
</tr>
</tbody>
</table>

It has also been found necessary to curtail bauxite production in the Gold Coast, Brazil, British and Dutch Guinea.

Aluminum

The over-all aluminum metal position indicates a surplus of 328 million pounds in 1943 and a deficit of 86 million pounds in 1944 (Table 27). As of January 1, 1944, U.S. Government ingot stocks (held by the Metal Reserve Corporation in Canada) totalled 164 million pounds, and in addition, there were approximately 134 million pounds of stocks at reduction plants in the U.S. As of January 1, 1944, the U.K. held 206 million pounds of government ingot stocks, including stocks at reduction plants. Should 1944 estimated requirements become...
firm demands on the mills the indicated deficit will be met from stocks. The aluminum position, which was in approximate balance at the time of the June 30th report, has improved considerably. The U.S. aluminum pipeline, which was increased by 368 million pounds in 1943, will be raised by only 80 million in 1944. The aircraft program requirements for 1944 have been revised downward since the last report—the U.S. requirements (including pipeline) from 2,495 million pounds to 2,026 million pounds, and the U.K. requirements from 714 million pounds to 661 million pounds. These requirements reflect adjustments in plane schedules and better screening of U.S. bills of materials.

U.S. Army requirements in 1944 have been increased by approximately 140 million pounds, as a result of the landing mat program. Russian requirements have been raised by 68 million pounds for the first half of the year. A new agreement on Russian requirements for the last half of the year has not yet been signed, but it will probably be substantially higher than the present agreement which calls for 51 million pounds.

The expansion in U.S. fabricating capacities has now been largely completed. A possible shortage of heat-treated strong alloy strip sheet capacity is now being investigated. The extrusion bottleneck which continued into the third quarter of 1943 has been remedied, and further proposed extrusion facilities have been cancelled. After the first quarter of 1944 more than enough forging capacity will be available. In order to meet peak requirements for permanent mold castings and allow for some margin of safety, it is planned to increase output in the U.S. by 60 percent by some expansions and by provision for fuller utilization of existing facilities.

A program to increase atomized aluminum powder capacity in the U.S. by 30 percent—143 million pounds—is now under way to meet the expanding requirements for aluminum powder in explosives. Further expansion of capacity may be necessary, as there is a possibility that more extensive use of this powder would raise combined 1944 requirements above the present level of 100 million pounds.

It was generally agreed that aluminum ingot supplies were adequate for military purposes during 1943. The extent to which manpower and other limitations will permit more extended use of aluminum for civilian production during 1944 is receiving consideration by the appropriate authorities in the three countries, each of which will keep the others informed of its plans.

Magnesium

The combined magnesium metal position as of December 31, 1943 indicates a surplus of 112 million pounds in 1943, and 14.5 million pounds in 1944. The U.S. position is currently being reviewed.

<table>
<thead>
<tr>
<th>Country</th>
<th>1943 Supply</th>
<th>Requirements Balance</th>
<th>1944 Supply</th>
<th>Requirements Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined</td>
<td>144</td>
<td>126</td>
<td>112</td>
<td>202</td>
</tr>
<tr>
<td>United States</td>
<td>369</td>
<td>220</td>
<td>154</td>
<td>500</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>58</td>
<td>80</td>
<td>28</td>
<td>68</td>
</tr>
<tr>
<td>Canada</td>
<td>7</td>
<td>6</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

The increase in requirements is almost entirely concentrated in the aircraft program and the incendiary bomb program.

As of January 1, 1944, ingot stocks totaled 84 million pounds—42 million pounds held by the U.K., 41 million by the U.S., and 1 million by Canada. In addition, the U.S. Chemical Warfare Service held about 13 million pounds of incendiary bomb alloy. The U.K. plans to reduce its stocks during the first half of 1944 to about 27 million pounds and thereafter to maintain them at that level.

CONSERVATION

(>The Combined Conservation Committee—Formed July 1943—Joint with C.P.R.B.)

The National agencies within the U.S., the U.K., and Canada have adopted far-reaching measures for the conservation of critical resources through substitution, simplification, elimination, standardization, improvement of production techniques, and salvage. Moreover, the various committees of the C.P.R.B. have considered and adopted conservation policies within their respective fields. The Combined Conservation Committee (Washington) was established to supplement this work of the commodity committees and to extend it to fields not covered by existing committees. The Washington Committee operates with and through the Anglo-American Conservation Committee (London) and the Conservation Committee (Canada).
THE COMBINED PRODUCTION AND RESOURCES BOARD

CHARTER

and

COMMITTEE TERMS OF REFERENCE

FEBRUARY 10, 1944
c. Hides

2. For the purpose of carrying out the functions described in Paragraph 1, the Committee shall—

a. Determine the scope of its enquiries as to

1. Categories of footwear and other leather products

ii. Types of leather

iii. Types of hides

b. Determine the statistical basis upon which information shall be gathered with a view, as far as possible, to having the figures of all the countries covered reduced to a comparable basis.

c. Examine the stated requirements of all the countries concerned (including the potential requirements of occupied territories) for footwear and other leather products and the consequence requirements of leather and hides.

d. Examine the combined facilities for making

1. Footwear and other leather products

ii. Leather and leather substitute materials

e. Examine the supplies of hides available to all the countries concerned.

f. Make recommendations to the C.P.R.B. and C.R.M.B. concerning

1. The combined facilities for producing footwear and other leather products and for producing leather with a view to their best possible use to meet minimum essential requirements.

2. Measures that might be taken to meet deficit requirements of footwear and other leather products and of leather and, if additional production is indicated, the country of location of such production.

iii. The distribution of the available quantity of footwear and other leather products.

iv. The allocation of leather and hides between the countries concerned.

g. Examine and report on any other matters in relation to footwear and other leather products, leather and hides and leather substitute materials which the Committee considers desirable.

C.P.R.B.-C.R.M.B. COMBINED PULP AND PAPER COMMITTEE

To ascertain and report in correlated form the facts concerning the requirements, supplies, production and distribution of the products of the pulp and paper industries of the U.S., U.K., and Canada.

C.P.R.B.-C.R.M.B. COMBINED STEEL COMMITTEE

The terms of reference of the Steel Committee are now under revision.

C.P.R.B. INTERNAL COMBUSTION ENGINE COMMITTEE

To ascertain and report the facts concerning the requirements, supplies, production and uses of internal combustion engines in the U.S., U.K., and Canada.

To recommend to the Combined Production and Resources Board, the distribution of the productive capacity for internal combustion engines between the U.S., U.K. and Canada.

C.P.R.B. MACHINE TOOLS COMMITTEE

1. To ascertain and report on the position of requirements for machine tools by the United Nations.

2. To ascertain and report on the production plans for machine tools, of the U.S., U.K., and Canada as currently formulated.

3. To ascertain the nature and extent of the stocks of machine tools in the U.S., U.K., and Canada and how far such stocks and unemployed machines, generally, are being and should be made available to meet the requirements and in formulating the production plans of each country.

4. To ascertain if and how far the production plans for machine tools in the U.S., U.K., and Canada are capable of, and in need of, adjustment in the best common interest.

5. To report generally and recommend, on the machine tool position to the Combined Production and Resources Board.

C.P.R.B. MEDICAL SUPPLIES COMMITTEE

1. To advise the Board on all matters of medical supplies which may come before it.

a. The term "medical supplies" shall be deemed to cover materials, equipment and supplies used in the diagnosis, cure, mitigation or prevention of disease and treatment and care of injury in man or animal.

2. To make recommendations as to measures necessary to ensure that the combined production and resources of medical supplies of the U.S.A., U.K. and Canada are adequate for the effective prosecution of the war.

3. To deal with the problems of medical supplies which can be shown to require combined planning:
a. By examining the stated requirements and considering potential requirements of all countries concerned including occupied territories.

b. By examining the existing combined facilities in order to make recommendations as to how they may be best utilized to provide the necessary requirements.

c. By making recommendations as to the measures which might be taken to meet deficit requirements, and if additional production is indicated, suggestions as to the country of location of such production.

d. By making recommendations as to distribution of the total available quantity of medical supplies.

e. By making recommendations as to the accumulation and location of stockpiles of medical supplies for use in the event of the outbreak of disease or for use in the rehabilitation of occupied countries.

V. The Committee will avail itself of the assistance of all existing agencies in each country in order to obtain all necessary information, including the methods of concentration and curtailment of production and limitation of consumption of medical supplies being carried out in each country.

C.P.R.B. NON-MILITARY SUPPLIES COMMITTEE

1. To make recommendations to the Board as to the measures necessary to ensure that the productive resources of the U.S., U.K. and Canada devoted to non-military requirements are out to the bare minimum necessary for the effective prosecution of the war by the United Nations, including--

a. Recommendations to the Board as to the combined productive capacity that should be allocated to each article of non-military supply under consideration; and

b. Recommendations to the Board as to the distribution of production as between United States, the United Kingdom and Canada.

2. The Committee will be kept informed as to the methods of concentration, curtailment and limitation imposed in each country, and will make recommendations to the Board if it considers that further action on this aspect of the problem is necessary.

3. The Committee will avail itself of the assistance of existing combined bodies, e.g., the Combined Exports Market Commit-
the broad lines of production for export as a whole and make recommendations to the national agencies concerned, is established by the report and steps as indicated herein are directed to that end.

2. The functions of the Textile Committee will be:

a. To receive periodically from the appropriate authorities all requirements of the non-Axis nations for textiles together with statements as to their essentiality and to recommend to C.P.R.B. the extent to which satisfaction of such requirements is essential to the prosecution of the war and to meet minimum essential civilian standards of consumption.

b. To ascertain and advise the C.P.R.B. as to the probable requirements of textiles for relief and rehabilitation in occupied and enemy countries and the steps necessary to fill such minimum requirements in due time.

c. To make recommendations to the C.P.R.B. as to the quantities of textiles which each of the United Nations should provide for export over periods long enough for broad planning in the light of its productive capacity and domestic requirements.

d. To make recommendations to C.P.R.B. as to the allocation of the export production of the several United Nations on a country or area basis so as best to ensure satisfaction of approved requirements of importing countries and of the Combined Relief Organization.

e. To examine individual types of textiles which present special production difficulties and to make recommendations to C.P.R.B.

f. To decide with the assistance of the technical experts on the most appropriate unit of measure for use in planning production and supplies of the various textile products.

g. The Textile Committee shall have powers to set up working groups in such areas as it shall consider suitable to undertake such duties as the Textile Committee shall agree.

C.P.R.B. TRUCK COMMITTEE

1. This Committee is to investigate and make recommendations concerning the distribution of production between United Kingdom, United States, and Canada, and the Dominions and India of wheeled transport vehicles for the military and civilian needs of the United Nations.

2. The analysis will take into consideration:

a. standardization of models.

b. the stated requirements both military and civilian of the various authorities.

c. appraisal of production facilities in the various represented nations.

d. the type of pack in which vehicles are being prepared for shipment to the various destinations.

e. the planning of production so as to impose the minimum strain on shipping.

f. the allocation of rubber for the manufacture of tires.

g. a review of work being done by other agencies relative to this subject.

3. The Committee will also review the relation between overall tire and vehicle programmes and make recommendations as to best sources of supply for maintenance tires.

4. The Committee will examine the entire spare situation and make recommendations as to the planning of future production of spares on the scale necessary to service satisfactorily new vehicles and reduce to a minimum the vehicles at present immobilized because of lack of spares, and will also make recommendations concerning the distribution of production of such spares.