CF "D" – GENERAL

Office of the Attorney General
Washington, D.C.

Gp 13
Filed by
Mr. Brady 5/5/42.

file Personal

6F
"D"

April 20, 1942

MEMORANDUM FOR THE PRESIDENT

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.

xPP73458

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

x10-B

THE WHITE HOUSE
WASHINGTON

April 15, 1942.

MEMORANDUM FOR THE PRESIDENT:

x41-A
xPPF 140

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.

THE WHITE HOUSE
WASHINGTON

10-F

April 16, 1942.

MEMORANDUM FOR

THE ATTORNEY GENERAL x10

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.

Extra Special

Confidential etc

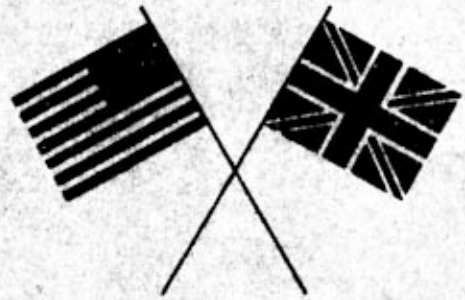
CF: D Gen.

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 employe 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.

[Att., 3/24/44, #1
Nelson to FDR]



The Status of

COMBINED PRODUCTION PROGRAMS

AS OF DECEMBER 31, 1943

United States, United Kingdom and Canada

COMBINED PRODUCTION AND RESOURCES BOARD

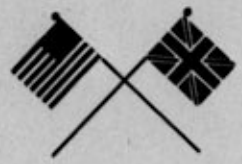
DECLASSIFIED
Commerce Dept. letter, 7-12-73
SEP 20 1973

The Status of

COMBINED PRODUCTION PROGRAMS

AS OF DECEMBER 31, 1943

United States, United Kingdom and Canad



SECOND SEMI-ANNUAL STAFF REPORT

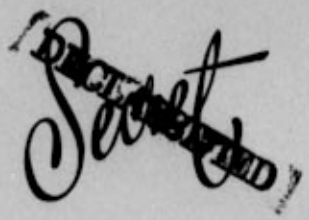
Prepared under the supervision of W. M. Black, Executive Director

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



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

S-35688 contents nebu

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.

I

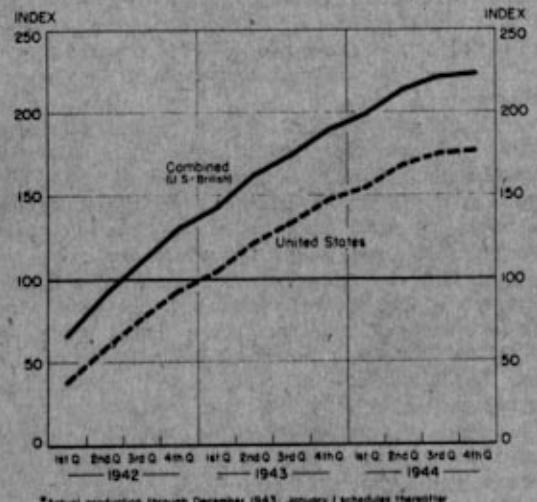
The process of adjusting war production programs to total available resources, which had begun earlier in the U.K. and Canada, reached an advanced stage in the U.S. during 1943, so that on a combined basis the wide margins between production goals and resources have been substantially

CHART I

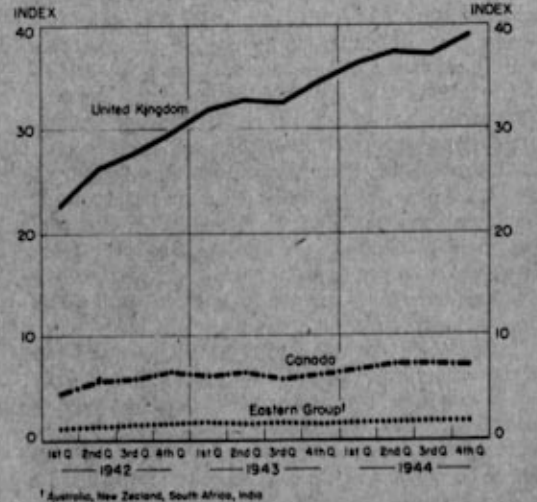
COMBINED MUNITIONS PRODUCTION*

AIRCRAFT, SHIPS, ORDNANCE, COMBAT AND MOTOR VEHICLES

COMBINED RATE IN 1942 = 100



*Actual production through December 1943, January 1 schedules thereafter. Ships are on estimated value in place basis.



†Australia, New Zealand, South Africa, India

DECLASSIFIED

eliminated and realistic programs are the order of the day for 1944. Although the target output in 1944 will be from 25 to 30 percent larger than actual output in 1943, it is now some 10 percent below the goal for 1944 set six months ago.

Revisions of requirements for finished military items in the light of combat experience and of growing inventories have helped to bring about a balance between available resources and production goals. So also have improved production planning and the accumulation of production experience. Finished item schedules have become firmer, as additional items have moved from a developmental stage to a mass-production basis, and as additional new facilities have recruited, trained, and organized their personnel. With firmer schedules it has been possible to correlate the schedules for initial complements of equipment for planes, ships, and tanks more closely with the plane, ship, and tank programs. Inventory controls for equipment spares have been tightened. Lack of balance in the scheduled flow of components into finished items and materials into components has been largely eliminated, thus reducing requirements for materials.

Available resources are no longer a significant over-all limitation on the actual level of munitions production. With few exceptions the munitions now seen to be required can be produced. Available resources do continue to impose an over-all limit on non-military production.

In the field of raw materials, the large deficiencies of steel, copper, and aluminum for war production programs have largely disappeared. This is due, first, to the success of efforts to increase production and conserve supplies, second, to the filling of production pipelines, third, to the substantial completion of munitions pipelines to the various theaters of operations, and fourth, to the downward revision of many military requirements. Shortages of other raw materials continue to emerge, e.g., coal, hides, woodpulp, cotton textiles, and some medical items. Crude rubber supplies are dwindling in accordance with expectations but at a rate which, with disappointing progress in the production and use of synthetic rubber, is now a cause for increased concern if global military operations must continue into 1945. But contrary to expectations in mid-1943, raw materials will not impose significant limitations upon military production programs in 1944, and have not, in fact, done so in the second half of 1943.

In the field of industrial facilities, the tremendous expansion undertaken in the U.S. is nearing completion. The same is true of military construction work except in overseas theaters of war.

It is in the field of manpower that the over-all limitations on production programs is to be found.

The armed forces will continue to grow during the first half of 1944 and will be stable thereafter. About one and a half million persons will be required for military service during the year, half of them for replacements.

In the U.K., it is no longer a question of how to use an increasing labor force. It is a question of sharing a declining labor force most effectively between the armed forces and the munitions and other essential industries and services. The hours worked cannot be increased and in some cases may need to be relaxed. Employment in the civilian sector has reached rock-bottom and has to sustain increasing pressure from the use of Great Britain as an operational base. The contraction of manpower therefore must fall largely on the munitions labor force. U.K. munitions production will be maintained in 1944 only by some increase in productivity per worker and the utmost refinement in correlating changing production schedules with manpower allocations.

In the U.S. and Canada, little further increase in the labor force beyond the normal growth of the working population is expected under present manpower controls. Until the middle of 1944, the planned increase in the strength of the armed forces will equal the expected growth in the labor force.

Although the U.S. labor position may ease before the end of 1944, it will be necessary during the first half of the year to maintain at least the existing total number of munitions workers, adding new workers to expanding programs as rapidly as workers are released from declining programs. A number of factors will make the maintenance of the munitions labor force a difficult task, including: (1) Differences in the location of rising and declining programs and in the skills required; (2) The need for a material expansion of the munitions labor force in a number of areas where the labor market is already extremely tight, particularly in certain coastal areas;

DECLASSIFIED

(3) The increased drain of men with special skills into the armed forces as deferment policy tightens; (4) 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.

Table 1.--SELECTED MUNITIONS PROGRAMS, 1941-1944, AS OF JULY 1, 1943 AND JANUARY 1, 1944
(Combined Production)

ITEM	Unit	1943		1944	
		Scheduled July 1, 1943	Actual Production	Scheduled July 1, 1943	Scheduled Jan. 1, 1944
Airplanes	Each	124,195	113,939	162,574	142,879
Major Naval vessels[a]	Thousand SDT	2,075	2,560	2,056	2,451
Landing vessels (U.S. only)	Thousand LDT	721	781	655	1,598
Merchant vessels	Thousand DWT	23,146	21,990	24,810	19,203
Ordnance and combat vehicles	Billion Dollars	$15.1 b	$14.0	$17.3 b	$15.2
Military trucks ½ tons and over	Each	43,617	36,758	35,282	71,878

[a] New construction only, excluding small sub-chasers, mosquito craft, and auxiliaries.
[b] As of June 1, 1943.

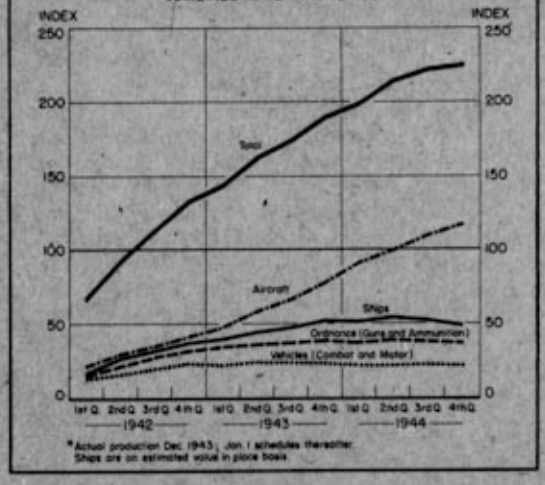
2. Combat experience has made it possible to refine the tactical formulas for computing requirements and to narrow substantially the safety reserve margins in such computations.

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

CHART II

COMBINED MUNITIONS PRODUCTION*
BY MAJOR PROGRAMS
COMBINED RATE IN 1942=100



*Actual production Dec. 1943; Jan. 1 schedules thereafter.
Ships are on estimated value in place basis.

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 over-all rise now scheduled for 1944 is concentrated in the aircraft program. The rise of one-third called for in aircraft

SECRET
DECLASSIFIED

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 large 4,800-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 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 47.7 million deadweight tons to 63.0 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 scheduled 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 combatant 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 gainsay the fact that these programs can, subject to one condition, be achieved. This condition is that diversion of resources to non-war production is permitted only where and when it will not interfere with war production programs.

III

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

SECRET
DECLASSIFIED

of restrictions on the civilian economy.

Provision must be made during 1944 for relief and rehabilitation requirements of areas to be liberated. Special problems have arisen in connection with coal, textiles, footwear, farm machinery, and some medical, and other items, production of which must be increased if there is to be adequate provision against the most urgent needs of liberated areas. Stocks of such commodities must be built up. Some steps have already been taken independently by various countries in this direction. The incidence of relief requirements on supplies of some commodities, particularly food, clothing, and fuel, will be large, and heavy demands will be made on shipping.

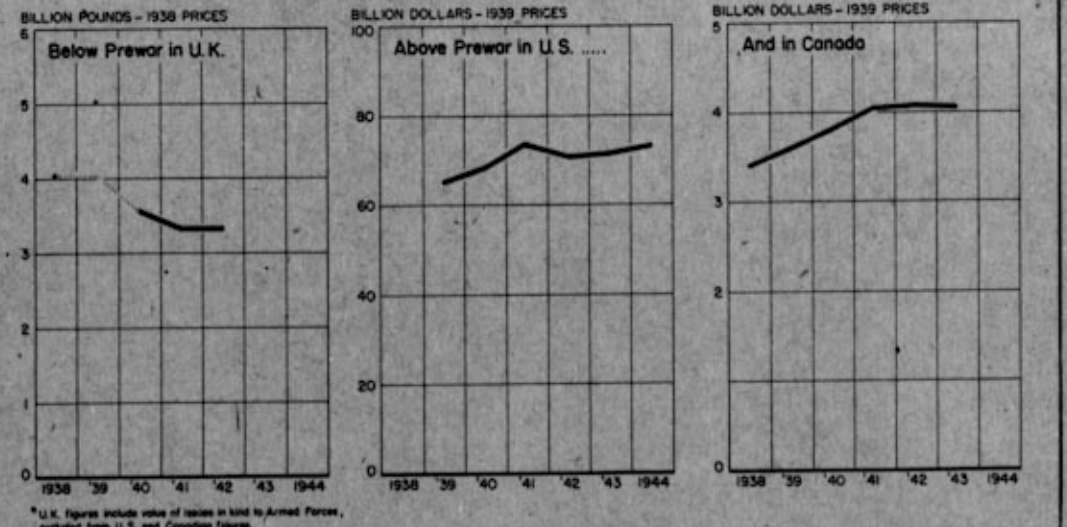
Notwithstanding the easier supply position of such vital materials as steel, copper, and aluminum, the popular expectation, especially in the U.S. and Canada, that more goods will become available for civilian consumption in 1944 appears to be unfounded. The first claims upon these materials will be for making good, in part, long-deferred maintenance and capital replacement needs of transportation and other public utilities. The U.K. has gone longest without such maintenance and replacement and has the most urgent problem. But similar needs exist in the U.S. and Canada, and it is now possible, for the first time since the war began, to grant to U.S. railways substantially their full requirement of steel for these purposes. This does not give civilian consumers more goods. Moreover, relief, and rehabilitation needs will be a charge--for items such as coal, food, textiles, medical supplies, and farm equipment a substantial charge--on what is produced. The total output of goods for civilian use in 1944 is expected to decline. With the approaching exhaustion of inventories, civilian standards will be depressed during 1944 below the levels of 1943.

In the U.K., the operational burden on internal transport in coming months, and the additional demands on U.K. supplies by the growing Allied forces in the U.K., will almost inevitably lead there to a further depression in the civilian standard of living. But for these further burdens, the rate of civilian consumption in the U.K. might have been expected to remain, as in 1943, around 20 percent below the pre-war level. With clothes wearing out, houses blitzed or going without repair, the amelioration of these conditions in the U.K. will become an even more pressing problem, but one which must be postponed, in general, until after the defeat of Germany.

In the U.S., in spite of the publicity given to isolated examples of resumed or increased production of civilian goods, it

CHART III

PERSONAL CONSUMPTION IN THE U.S., U.K.* AND CANADA
(AT CONSTANT PRICES)



*U.K. figures include value of issues in kind to Armed Forces, excluded from U.S. and Canadian figures.

SECRET
DECLASSIFIED

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.

DECLASSIFIED

E.O. 12958 Sec. 3.5

CHAPTER II

THE COMBINED MUNITIONS PROGRAM

Achievement of the planned munitions program will be the first objective of combined economic policy in 1944 as in the past. The program is feasible, but only as a first goal. It would cease to be feasible if it were subordinated in any way to non-military programs.

The major features of the 1944 program have been presented in the Summary above. This Chapter briefly treats the outstanding aspects of the main munitions programs. One important category of munitions is discussed in the Truck Section of Chapter IV.

AIRCRAFT

In 1943 the U.S. and the British countries produced 115,000 military airplanes, as output increased from 7,300 planes in January to 11,500 in December. The composition of the program shifted markedly in the direction of heavier combat planes, and the value of plane production increased 105 percent during the year. The shift towards bigger planes is epitomized by the 150 percent rise in the output of 4-engine bombers to a total of 1,676 produced in December. Trainer production, meanwhile, is declining rapidly and will be one-third lower in 1944 than in 1943.

During 1943 the U.S. aircraft program was threatened from time to time by manpower difficulties and in spite of the adequate aluminum ingot supply, by shortages of certain fabricated forms and shapes. Increased production and better distribution of aluminum forgings and other shapes, improved screening of manpower requirements and control of the distribution of workers, and reductions of aircraft schedules have greatly reduced these problems. The planned transfer of workers from ordnance to aircraft was achieved in the latter half of 1943 in the U.K. and production for the year was 94 percent of the first of the year schedule (in numbers).

The 1944 program as of January 1 calls for only a slight increase in the number of planes delivered monthly and even the increase in value, 44 percent over the year, is much less than was achieved in 1943. Yet this program will account for about three-fourths of the expected rise in total munitions output during 1944. In the U.S. the major task will be to bring up to volume production a number of relatively new models (especially to step up production of models in new plants) and to introduce design improvements smoothly in established models. The success of the program will depend upon the optimum application of managerial and technical skill and upon the effective utilization of the available labor supply. The B-29 long-range heavy bomber is the outstanding example of the problem and of the steps necessary to meet it. Thirty-five of these planes were delivered in December 1943; 223 are scheduled for December 1944. Moreover, 163 of the planes scheduled for December 1944 are to come from three plants which together delivered four B-29's in

Table 2.--THE COMBINED AIRPLANE PROGRAM [a]
(Unit - Each)

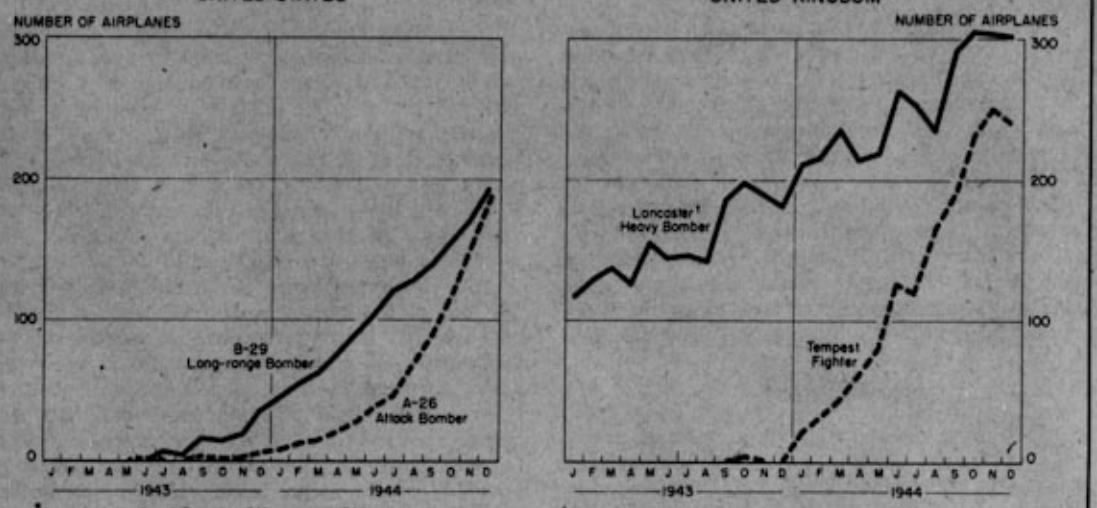
ITEM	Combined Total			United States			United Kingdom			Canada			Australia	
	1943	1944	1945	1943	1944	1945	1943	1944	1945	1943	1944	1945	1943	1944
Total military airplanes	115,859	148,915	151,092	82,997	109,134	113,090	26,862	31,827	32,434	4,104	5,291	5,268	272	1,163
Total combat planes	75,981	110,715	124,379	53,985	81,555	92,464	20,746	25,685	28,495	745	2,435	3,420	505	1,080
Heavy bombers, long-range	98	1,437	4,402	98	1,437	4,402	0	0	0	0	0	0	0	0
Heavy bombers, standard	14,009	21,984	21,179	9,595	15,647	13,270	4,600	6,054	7,585	16	223	324	0	0
Flying boats	1,560	1,870	1,694	1,154	1,068 [b]	985	209	256	201	197	546	508	0	0
Medium bombers	9,859	9,694	6,479	6,582	6,648	4,625	2,737	3,012	1,854	0	0	0	0	0
Light bombers, ex. naval	6,749	6,843	9,626	5,310	5,770	8,671	732	384	347	336	501	608	351	188
Fighters, ex. naval	28,991	39,856	45,380	17,905	26,083	31,200	10,727	12,202	13,760	165	159	420	154	892
Naval types	15,361	29,751	35,619	13,609	24,888	29,311	1,721	3,797	4,748	31	1,046	1,560	0	0
Heavy and medium transports	3,666	8,363	10,782	3,443	7,427	10,050	223	1,136	732	0	0	0	0	0
Light transports and communications	8,436	6,870	6,178	7,738	5,970	5,682	469	445	19	209	452	480	60	0
Trainers	25,856	16,767	9,739	17,851	10,182	4,974	4,825	3,961	3,117	3,150	2,481	1,668	10	143

[a] As of January 1, 1944. Combined total for 1945 excludes Australia, for which schedules are not available.
[b] Including 41 PBMY's which will be used as transports.

DECLASSIFIED
E.O. 12958 PT IV

CHART IV

SELECTED AIRPLANE PROGRAMS*



*Actual production through December 1943, January 1, 1944 schedule thereafter.

†Does not include Canadian and Australian Lancaster programs.

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 Materiel 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 Bolingbroke 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

SECRET
DECLASSIFIED

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 2.6 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 workers 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 106,000 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 83,000 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 8½ 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.

Table 3.--DEVELOPMENT OF THE LANDING VESSEL PROGRAM *
(Unit - Thousand Tons)

COUNTRY	1943		1944	
	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter
United States (light displacement tons)				
Schedule as of July 1, 1943	166.9	180.1	186.4	167.2
Schedule as of Nov. 1, 1943	184.6	224.8	234.8	266.0
Schedule as of Jan. 1, 1944	184.6	203.3	306.5	452.6
United Kingdom (war load tons)				
Schedule as of July 1, 1943	56.2	55.5	*	*
Schedule as of Jan. 1, 1944	62.5	74.9	72.7	113.7

* New constructions only. Actual deliveries to date of schedule; scheduled deliveries thereafter.
* Not available.

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 LCT's (Landing Craft, Tank) in the first half of 1944. In addition to this, in December, 44 large 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.

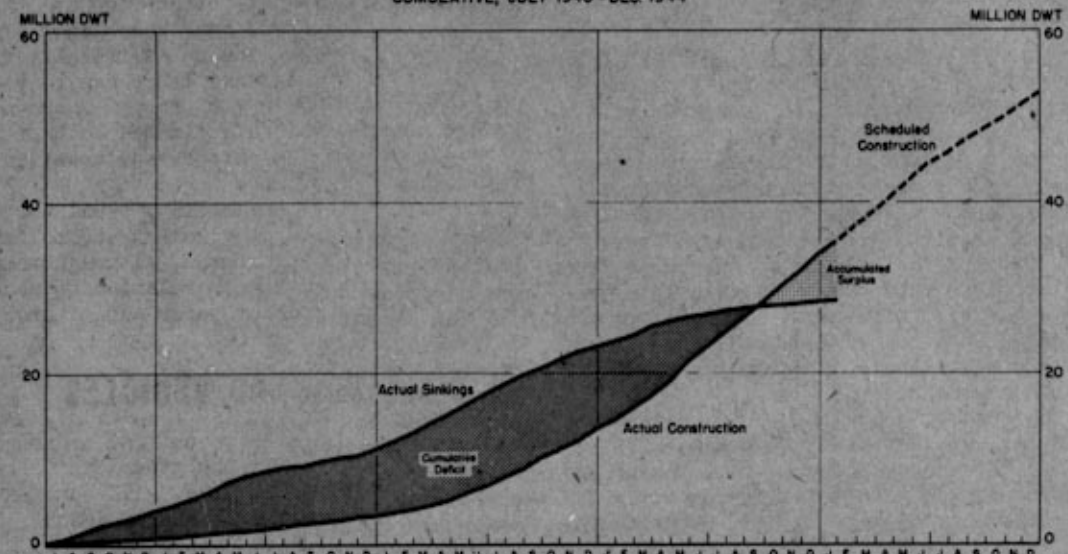
RADIO AND RADAR

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-

DECLASSIFIED SECRET

CHART X

UNITED NATIONS MERCHANT VESSELS*
CONSTRUCTIONS AND SINKINGS
CUMULATIVE, JULY 1940 - DEC. 1944

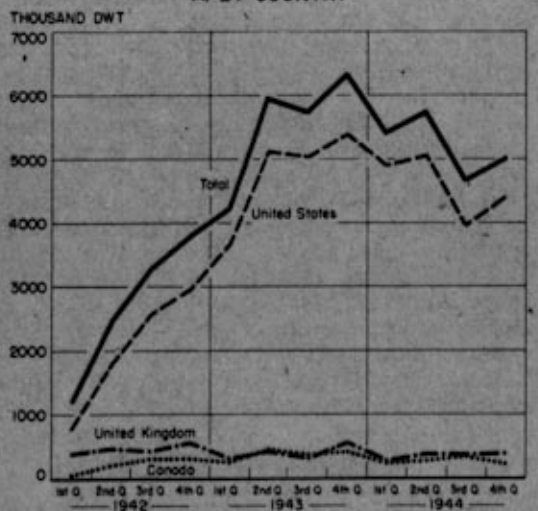


*Including minor types but excluding vessels designated for Navy use.

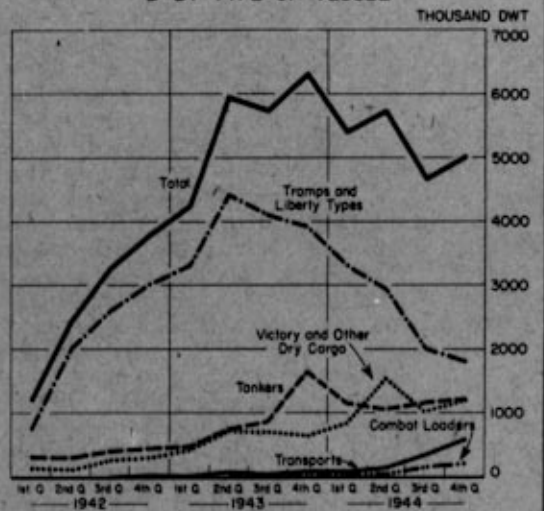
CHART XI

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 thereafter

DECLASSIFIED
SECRET

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:

1. Changes in specifications.
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 air forces, 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

Table 6.--THE COMBINED ORDNANCE PROGRAM [a]
(Unit - Million Dollars, U.S. August 1943 Standard Costs)

ITEM	Quarterly Average		Fourth Quarter	
	1943	1944	1943	1944
Total ordnance, and combat and motor vehicles	$4,433	$4,430	$4,260	$4,290
Total aircraft and ground ordnance, and combat vehicles	2,182	2,760	2,810	2,622
Weapons	970	862	980	762
Artillery and aircraft guns	390	195	385	135
Small arms and infantry weapons (incl. 20-mm)	400	385	455	330
Naval guns	180	285	200	300
Ammunition and bombs	1,710	1,980	1,860	1,970
Small arms ammunition (incl. 20-mm)	595	480	590	495
Gun and infantry weapon ammunition (ex. Naval)	580	765	605	795
Aircraft bombs	275	345	360	225
Naval gun ammunition, torpedoes, depth charges, mines, and antisubmarine projectiles	260	430	310	465
Combat and motor vehicles	1,722	1,682	1,712	1,652
Combat vehicles (incl. M-7 chassis, scout cars, etc.)	945	690	875	665
Trucks and tractors (military only)	810	995	840	990

[a] Actual production for 1943; January 1 schedules for 1944.

SECRET DECLASSIFIED

E-36688 PII b4

ordnance program on January 1 was the 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 programs have been made in small arms ammunition (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 requirements have just been drastically cut in the U.S., (as of February 1) but the details 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 partially adjusted to the reduced 1944 allocations of labor.

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

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 program 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)

ITEM	1944 Schedule as of Jan. 1, 1944	A.S.P. Requirements as of Feb. 1, 1944	
		1944	1945
Total Army Service Forces procurement[a]	20,553	19,448	16,689
Guns and fire control	1,513	1,253	788
Small arms, excl. 20-mm and aircraft	523	408	226
Antiaircraft materiel	256	164	1
Other	734	681	561
Ammunition	4,725	4,187	4,616
Small arms, excl. 20-mm	951	522	906
Antiaircraft	357	237	142
Ground artillery, 75- to 105-mm	1,480	1,082	1,374
Other	1,937	2,346	2,194
Combat and motor vehicles	5,548	4,768	3,532
Armored cars and personnel carriers	415	241	154
Motor carriages for S-P guns	508	288	174
Motor vehicles and tractors	3,577	3,133	2,362
Other	1,048	1,106	842
Communications and electronic equipment	3,257	3,383	2,141
Airborne radio	546	380	165
Ground radio	1,177	1,067	747
Airborne radar	471	803	525
Ground radar	352	459	258
Other	711	674	446
Other	5,510	5,857	5,612
Clothing	754	903	1,237
Ground army petroleum products	548	378	494
Machinery	524	584	416
Railroad equipment	367	351	225
N.e.c.	3,317	3,641	3,240

[a]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 elsewhere in this report where the combined U.S.—British picture is presented.

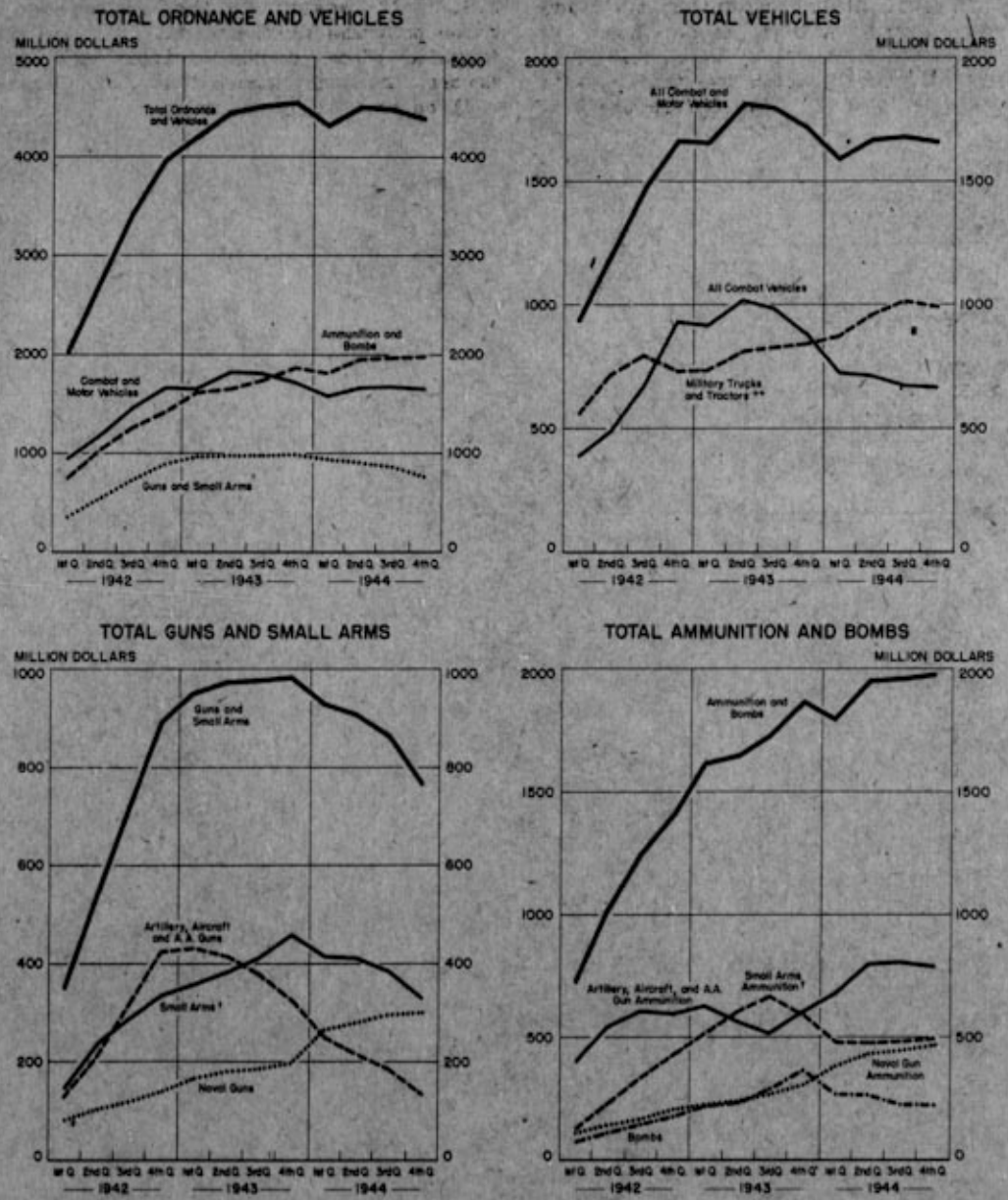
SECRET DECLASSIFIED E-36688 pi2 by

CHART XIII

COMBINED ORDNANCE AND VEHICLE PRODUCTION*

1942-1944, BY VALUE

AT U.S. 1943 STANDARD COSTS



* Actual production through December, 1943; January 1 schedules thereafter

** Excludes non-military procurement, which is particularly large in 1944

† Includes 20 mm.

DECLASSIFIED

D-86588 p13 by

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.

DECLASSIFIED

SECRET

E-26689 p 14 by

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.

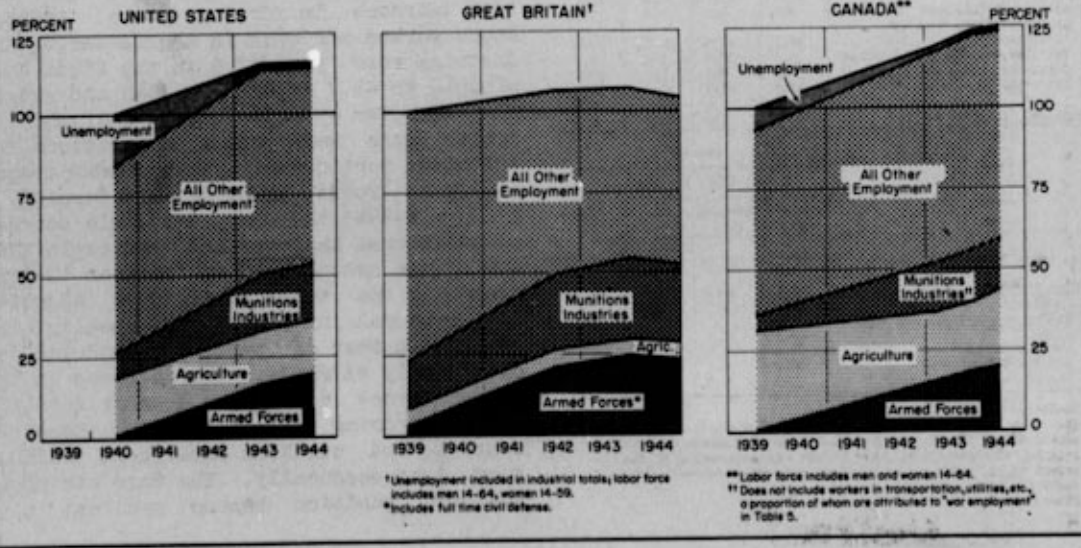
Direct comparisons among the U.S., the U.K., and Canada are difficult to make on the basis of the available statistics. However, it is clear that in the U.K., reflecting the tight controls over manpower and its allocation which have long been in effect, there has been a substantial reduction in employment 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.

CHART XIII

THE MANPOWER POSITION

DISTRIBUTION OF THE LABOR FORCE

Total Labor Force at Base Date = 100



†Unemployment included in industrial totals; labor force includes men 14-64, women 14-59.
*Includes full time civil defense.

**Labor force includes men and women 14-64.
†† Does not include workers in transportation, utilities, etc., a proportion of whom are attributed to "war employment" in Table 5.

SECRET
DECLASSIFIED
E-36689 pts bu

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.

Table 5.--DISTRIBUTION OF THE LABOR FORCE
UNITED STATES, GREAT BRITAIN, AND CANADA

	United States (Millions of Persons; Age 14 and over)			
	July 1, 1940	July 1, 1943	Jan. 1, 1944	July 1, 1944
Total labor force	56.2	65.3	66.0	65.7
Armed forces	0.2	9.2	10.5	11.3
Agriculture	10.1	9.5	9.6	9.5
Civilian non-agricultural labor force	45.9	46.5	44.9	44.9
Metals and chemicals (munitions) industries	4.1	9.6	9.5	9.6
Federal war agencies	0.2	1.6	1.5	1.5
Transportation, fuel and utilities	3.9	4.4	4.4	4.5
Textiles, clothing and leather	2.4	2.7	2.6	2.7
Construction and building	1.7	1.2	0.7	0.7
All other employment	25.1	25.6	25.1	24.9
Unemployed	8.5	1.4	1.1	1.0

	Great Britain (Percent of total labor force in mid-1939; men 14-64, women 14-59)			
	Mid-1939	Mid-1942	End-1943	End-1944
Total labor force	100.0%	106.3%	107.4%	104.9%
Armed forces and full-time civil defense	2.6	21.1	23.4	23.7
Agriculture	3.4	3.1	3.2	3.2
Civilian non-agricultural labor force	92.0	80.1	77.8	76.0
Metals and chemicals (munitions) industries	15.3	23.6	25.3	25.7
Government (national and local)	6.8	8.2	8.6	8.7
Transportation, fuel and utilities [a]	12.3	10.3	10.3	10.6
Textiles, clothing and leather	9.3	6.3	5.8	5.7
Construction and building	7.2	4.3	3.6	3.3
All other employment	40.9	27.2	24.2	24.0
Unemployed (included above)	6.8	0.8	0.5	0.5

	Canada (Percent of total labor force in August 1939; age 14-64)			
	August 1939	February 1943	January 1944	July 1944
Total labor force	100.0%	117.9%	123.8%	125.0%
Armed forces	0.2	12.1	18.6	20.0
Agriculture	31.1	21.7	20.8	23.6
Civilian non-agricultural labor force	68.7	81.1	84.4	81.4
War employment [b]	c	24.1	26.6	24.1
All other employment	62.0	56.1	56.9	56.1
Unemployed	6.7	0.9	0.9	1.2

[a] Including metal mining and quarrying.
[b] Including not only employment in munitions production and war construction, but also proportions of the employment in mining, logging, transportation, power, trade etc., according to the extent to which the output of these industries estimated to be involved in the war effort.
[c] Assumed to be zero.

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 45 in the second half of 1943. Longer hours were common in munitions industries, particularly in tight 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

DECLASSIFIED

E-28689 P16 bu

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-WMC 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, 2½ 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.

DECLASSIFIED

DECLASSIFIED

THE UNITED KINGDOM

Three main features characterize the manpower situation in Britain. First, the nation has been fully mobilized for war for upwards of a year. There remain no means of increasing further the total labor force or of diverting additional manpower from the civilian to the war sector. Increases in the volume of employment, including the armed forces, had tailed off by the end of 1942 and transfers within the labor force were made with increasing difficulty during 1943. Altogether, in four and one-half years of war, over seven million persons, or about one-third of the present labor force, have been found to add to those previously in jobs of direct war use. Well over half of this increase was obtained by decreasing employment in non-munitions trades (broadly by reducing output for civilians); the remainder came in approximately equal proportions from additions, mainly women, to the total labor force and from the almost complete disappearance of unemployment.

Secondly, the broad disposition of the British labor force is now fixed, as between the armed forces, the munitions trades, agriculture, and other general groups of trades and services. Manpower planning has been confined for some time to marginal adjustments between and within large groups of labor. Some increase in the armed forces was achieved during 1943 by making further cuts in the non-munitions trades with a consequent reduction in civilian standards. Equally important, in 1943, were the shifts of manpower within a constant munitions labor force--broadly from ground army munitions to aircraft, naval vessels and other urgently needed equipment. Although such adjustments are small, they will present increasing difficulties on account of the high degree of mobilization attained.

Finally, the present prospect in Britain is a declining--and not merely a stationary --total labor force. The expected increase in military losses, together with some normal wastage from industry, is estimated to result in a substantial fall during 1944. This decrease cannot be offset by more intensive utilization of the manpower available. Hours of work can no longer be increased; in view of the sustained effort still to come, some relaxation of the long work-week (now averaging about 56 hours) may be necessary. Part-time work has already been developed as far as possible; large numbers of women have taken part-time jobs, 200,000 of them in the munitions industry alone. More than 1,500,000 persons, two-thirds of whom are women, are undertaking civil defense jobs (not counting fire-watching) outside their regular occupations. Indeed, the adult population as a whole must devote 48 hours of spare-time per month to civil defense, to fire-watching, to Home Guard duties or to other such activities.

The main manpower problem of 1944 is to implement the broad allocation of the labor force already settled. The decision has been to maximize the impact against the enemy in 1944 while absorbing the manpower loss. The strength of the armed forces is to be maintained, apart from slight reductions mainly in training personnel. Continued intake by the armed forces will reduce seriously the reserves of fit men available for heavy unskilled work (e.g., tire manufacture). No further inroads on civilian standards are generally possible, but a little pinching here and there must produce some labor for transport, coal mining and other essential work mainly connected with the development of U.K. as an operational base. The main cut, therefore, must be taken by the munitions trades which are planned to decline, during 1944 by over 6 percent or back to the level of mid-1942. Munitions output will be maintained for some time and increasingly concentrated on aircraft and other items in demand. But, certainly by 1945, there must be some decline in production of weapons for the armed forces.

The implementation of the manpower allocation necessitates further refinements of the effective methods of labor control already in operation. There has been, for some time, complete regulation of the distribution of prime contracts between critical and easier labor areas. More recently, the control has been increasingly extended, e.g., to subcontracting and to small employers. Changes in munitions programs have now to be planned in great detail and with a close check on the labor implications; expansions must be made in the easier areas as far as possible, and the labor released from declining programs must be absorbed with the least loss of time. The latest developments are in the "designation" of urgent items which are given overriding priority in labor recruitment. The list of designated products includes those for which industries are given the highest priority in the U.S., where they are also made in the U.K., and also, among others, the following:

DECLASSIFIED

New and special types of ammunition
Radar
Parachutes
Construction and repair of transportation 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, production, 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 million, nearly 2 million were in the armed forces or engaged on war work apart from agriculture. This high degree of mobilization 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 production 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 closing months of 1943. There will be no appreciable 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 population 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 agricultural employment, mainly seasonal, leaving civilian industrial employment roughly unchanged. 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 manpower in several high-priority trades, notably coal mining, docks and shipbuilding, logging, and base-metal industries. Manpower 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 advantage. In particular, continued use must be made of the methods recently developed for insuring supplies of coal miners and longshoremen.

DECLASSIFIED

SECRET

DECLASSIFIED

CHAPTER IV

THE COMBINED POSITION OF SELECTED PROGRAMS

During the past year and a half a number of areas have come to require such continuous surveillance by the C.P.R.B. as to cause the formation of permanent committees or special staff groups to handle them. In general, these have covered commodities which are of common concern to both military and civilian programs--either because they are used in the production of both military and civilian items, e.g., coal, steel, copper, wood pulp, machine tools, or because they are used as end products by civilians and the armed forces, e.g., trucks, textiles, shoes, medical supplies. These same resources and commodities will be directly involved in the satisfaction of relief and rehabilitation requirements.

The present position with respect to these areas is described in this Chapter. Although in this connection the activities of the C.P.R.B. committees are occasionally mentioned, no attempt has been made to present a well-rounded record of committee actions. Such a record may be found in the papers and minutes of the several committees.

RELIEF AND REHABILITATION

As a result of the UNRRA Conference at Atlantic City the several Combined Boards accepted a special responsibility towards the United Nations as well as member countries for recommending source and availability of supplies in connection with the requirements of liberated areas for relief and rehabilitation.

Relief and rehabilitation requirements cover both the civilian goods which the military will have to take with them in an invasion or period of military control and the civilian goods which will be required after the national civilian authorities have taken over from the military. It is impossible to say how long the period of military control will last. For purposes of procurement planning it has been agreed to operate on the hypothesis that there should be a military period of six months, followed by two civilian periods of six months each.

The Director General of UNRRA is responsible for determining and financing the civilian requirements of liberated areas which cannot finance themselves as soon as the period of military control is over. He is also responsible for seeing that the countries which can finance themselves do not get an unfair advantage over the countries which are financed by UNRRA and for advising the appropriate Combined Board if he sees objection to any requirement put forward by a paying country.

There has been considerable difficulty in determining the requirements of liberated areas owing to the impossibility of knowing in advance the date of liberation or the condition in which the various areas will find themselves immediately after liberation.

The Combined Civilian Affairs Committee under the authority of the Combined Chiefs of Staff, working in conjunction with the U.S. and U.K. civilian agencies responsible for requirements, is developing a comprehensive and coordinated program for the military period. It is expected that this will enable the Combined Boards to make allocations of source of supply so that procurement action can take place. This program has not yet been received. It will be necessary, in planning the program for the post-military periods, to integrate it with the supplies to be made available during the military period. It is assumed that the requirements for these later civilian periods will be coordinated by the Director General of UNRRA working closely with the Combined Supply Committee set up by the U.S. State Department, and the British Foreign Office. Thus programs coming to the Combined Boards either directly from the combined military, from UNRRA, or from paying countries would be screened and coordinated before the Combined Boards are called upon to make their recommendations.

C.P.R.B. recommendations have been made concerning various spot programs which have come forward, but these have been comparatively insignificant. In order to make a start in meeting the urgent requirements of liberated areas C.P.R.B. has been encouraging independent action by the U.S. and U.K. national supply agencies leading to advance procurement of minimum quantities of the more important items for which it is known that requirements will be large.

DECLASSIFIED

DECLASSIFIED

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.

FEBRUARY 1 REVISED U.S. ARMY REQUIREMENTS

The February 1st U.S. Army requirements for trucks, personnel carriers, and armored cars were received too late for incorporation in this and the two following sections. They compare with the War Production Board November programs as follows:

	November Program	*February 1 Requirements*
	(Thousand Vehicles)	
Heavy-Heavy Trucks	67	65
Other Trucks and Vehicles	706	565

The November program of 773 thousand vehicles represents that part of the total U.S. program of 932 thousand vehicles (referred to elsewhere in this report) which the Army procures.

Except in the case of heavy trucks, the revised requirements eliminate the deficit. However, the February 1 Army Supply Program includes a new $130 million program for the reconditioning and remanufacture of motor vehicles, which will involve substantial requirements for motor vehicle components. Hence component deficits may not be reduced.

TRUCKS

(COMBINED TRUCK COMMITTEE—FORMED NOVEMBER 1942)

Total truck production for 1944 in the U.S. and the British Empire is programmed at 1223 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

1/ See Sections on Farm Machinery, coal, medical supplies.

DECLASSIFIED SECRET

E-36669 par by

DECLASSIFIED

increase of 35 percent is scheduled; heavy-heavy output is scheduled to double. 1945 schedules are available only for Army procurement. These schedules drop back in 1945 to 1943 levels.

Table 6.—THE U.S. TRUCK PROGRAM, 1943-44
(Unit - Thousand)

PERIOD	Type of Truck	
	Heavy-Heavy 4-ton and Over	All Other Trucks Less than 4-ton
Total - 1943	43.0	660.0
Total - 1944	89.6	849.7
1st quarter	18.7	174.0
2nd quarter	18.3	204.7
3rd quarter	25.8	235.5
4th quarter	25.8	235.5

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 components, among which axles, transmissions and engines are particularly important. Other components are sub-components, including 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, scheduling controls--limitation and conservation 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 critical truck components, estimated to cost $65,000,000, was inaugurated by the War Production Board in November 1943. Approximately half of this program is for increasing the production capacity for axles and their sub-component parts; the balance for increasing production capacity for transmissions and other truck components. Only a relatively small portion of the program --not more than 8 percent--relates to expansion of capacity for producing internal combustion engine components.

Table 7.—THE U.S. PROGRAM FOR REAR AXLE AND TRANSMISSION ASSEMBLIES, 1944
(Unit - Each)

PERIOD	Type of Truck on Which Used			
	Heavy-Heavy 4-ton and Over	Light-Heavy 2½-ton Type	Medium 1½-ton Type	*Light Under 1-ton
1st quarter	14,256	78,187	75,337	75,543
2nd quarter	19,937	91,003	93,196	75,546
3rd quarter	26,424	106,732	103,078	88,940
4th quarter	26,430	106,737	103,133	88,941

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 assemblies, 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
(Unit - Thousand Trucks)

CLASS OF TRUCK	Requirements					Production Programs				Surplus or Deficit (-) Before Transfer from U.S. and Canada to U.K.			
	Combined Total[a]	United States[a]	Canada[b]	United Kingdom[b]	Other British Empire[c]	Combined Total	United States	Canada	United Kingdom	Combined Total	United States	Canada	United Kingdom, incl. Other British Empire
Total trucks	1361.2	994.2	42.6	292.4	18.6	1222.2	792.2	136.0	134.6	-138.6	27.4	110.4	-276.4
Heavy-Heavy, 4-ton and over	128.4	80.6	2.5	44.2	1.1	90.0	82.6	0.0	7.4	-38.4	2.0	-2.5	-37.9
Light-Heavy, 2½-ton type[d]	358.2	361.2	29.6	213.1	7.0	762.4	298.2	116.7	82.5	-73.8	0.9	87.1	-137.6
Medium, 1½-ton type		227.3					355.0				-26.2		
Light, under 1-ton	394.9	235.8	13.5	135.1	10.5	370.5	286.5	39.3	44.7	-84.4	50.7	25.8	-100.9

[a] 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 including International Aid provision of 218,000 vehicles for Russia, China, and countries other than U.K. which are supplied directly by the U.S., and including 56,000 vehicles for allocation by FEA. The 87,300 trucks include 50,700 light, 10,300 medium, 9,300 light-heavy and 17,000 heavy-heavy trucks.

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

[c] Excludes requirements and production of light armored vehicles in Eastern Group (i.e., Marmon-Herrington Mks. IV & VI in South Africa, armored cars and armored wheeled carriers in India, armored cars and scout cars in Australia), and also excludes requirements of 12,679 civil vehicles included in U.S. requirements for FEA allocation. The 12,679 include 12,563 medium and 116 heavy trucks.

[d] Includes military armored, scout, and half-track vehicles and, for U.S. only, full-track cargo carriers.

SECRET

DECLASSIFIED

DECLASSIFIED

duction capacity will equal the present rate of U.S. requirements if the expansion program is completed on schedule and facilities are fully manned; but added production in the last six months of the year, arising from these expanded facilities, will not make-up the deficit between requirements and production which develops in the first two quarters of 1944.

The ability to achieve the production goals reflected in the U.S. production program is contingent not only upon the completion of the full expansion program on schedule but also upon the full manning of all present facilities and expanded facilities as soon as they become available. Substantial increases in the labor force will be required over December 1943 employment levels in component manufacturing concerns, and much of the increase is required in areas of current labor shortage or stringency.

Dissatisfaction with wage rates, work schedules and working conditions, which were the most serious factors contributing to labor turnover and recruitment problems in component manufacturing concerns during 1943 may be expected to make it difficult fully to man all facilities throughout 1944 unless, as is expected, better manpower utilization and cut-backs in some programs will release manpower, while high production urgency and manpower priorities ratings continue to be assigned to the truck industry and its components.

TIRES AND TUBES

(TIRES AND TUBES COMMITTEE—FORMED OCTOBER 1943)

In October 1943, in spite of conservation measures in all countries, the prospect of a deficiency of tires and tubes in 1944 was widely recognized and the C.P.R.B. set up a Committee in Washington to review the situation with the help of a London Tyre and Tyre Fabric Working Party. The tubes position has not proved to be critical but the deficiency of tires, especially heavy tires for trucks and buses, is causing great concern.

Nationally screened net requirements for new tires on the U.S., the U.K., and Canada together in 1944 are 64.2 million tires,2/ after allowance for the use of all other United Nations production and for expected production and use of reconditioned tires. The estimated 1944 production of the three countries is only 52.2 million tires, so that the 1944 deficiency is 12 million, of which the first quarter shortage is 5 million (Table 9).

The most serious problem is the shortage of almost 30 percent in heavier truck and bus tires. The deficiency of over 50 percent in solid industrial tires is a problem of smaller dimensions and is not as serious from the military standpoint in 1944.

The estimated tire inventories of the three countries, including U.K.--but not U.S.--service stocks abroad, provides no substantial aid in meeting the deficiencies. These stocks, amounting to 7,122,000 tires are less than one-half of the requirements for the first quarter of the year. They include new tires in manufacturers' and dealers' hands. They cover the whole range of sizes and are widely dispersed. Tighter inventory controls are being considered in the United States.

The requirements reflect the most recent programs for new vehicles e.g., the 1944 U.S. truck program of November 2, 1943 which is now being cut and the Canadian program for 156,000 trucks and light armored vehicles in the year (of which 36,000 are to be shipped to Australia without tires). They do not include 3,785,000 truck and bus tires requested by the U.S. Office of Defense Transportation for some 700,000 civilian vehicles principally engaged in wholesale and retail delivery service, which will ultimately require some new tires. Nor do the requirements include any provision for relief and rehabilitation.

The production estimates for the United States take account of the tire building expansion program (which involves 70 to 80 million dollars) and assume an adequate supply of labor and materials. As to labor, this means an additional force of 16,840 workers during the year (1st quarter 5,780, 2nd quarter 5,990, 3rd quarter 2,850, and 4th quarter 2,220). Should a further expansion of facilities prove necessary proportionately more labor will have to be provided. The supply/requirements position of various materials such as crude and synthetic rubber and rayon and cotton cord has not yet been fully reviewed, but tire cord is in short supply and a very substantial increase of U.S. rayon cord capacity has

---

2/ New U.S. Army Requirements (as of Feb. 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.

DECLASSIFIED

DECLASSIFIED

Table 9.--THE COMBINED TIRE POSITION, 1944
(Unit - Thousand Tires)

TYPE OF TIRE	Stated Requirements [a]				Estimated Production [b]				Surplus or Deficit (-), ex. Supplies from Latin America			Net Available from Latin America	Combined Surplus or Deficit (-)		Combined Stocks Jan. 1, 1944, United States, United Kingdom, and Canada
	Combined Total	U.S. and Net Deficit of Allies, ex. British Empire	U.K. and Net Deficit of Empire ex. Canada	Canada	Combined Total	United States	United Kingdom	Canada	U.S. and Allies, ex. British Empire	U.K. and Empire, ex. Canada	Canada		Number	Percent of Requirements	
Total tires, excluding bicycle	64,815	56,240	5,734	2,141	58,141	45,586	4,149	8,406	-10,724	-1,585	265	30	-12,084	-18.7%	7,122
Airplane	1,900	1,447	423	30	2,224	1,765	423	36	318	0	0	0	318	16.7	597
Combat and run-flat	587	239	109	39	406	286	80	40	47	-29	1	0	19	4.9	123
Truck and bus - 10 ply and over	11,222	7,547	2,437	938	8,083	5,879	1,018	1,186	-1,968	-1,419	248	8	-3,131	-27.9	1,298
Truck and bus - 8 ply and under	13,169	12,711	398	60	11,742	11,268	398	76	-1,443	0	16	12	-1,415	-10.7	1,598
Tractor and farm implement	2,412	2,224	102	86	2,109	1,955	88	86	-289	-14	0	0	-303	-12.6	158
Solid industrial	1,204	1,148	53	3	584	528	53	3	-620	0	0	0	-620	-51.5	17
Pneumatic industrial	302	238	59	5	628	565	58	5	327	-1	0	0	326	107.9	26
Passenger and motorcycle	33,613	30,486	2,153	974	26,365	23,360	2,031	974	-7,126	-122	0	30	-7,218	-21.5	3,315

[a] Excludes provision for quality debasement in U.S. and Canada. U.S. requirements exclude 3,785 thousand truck and bus tires for vehicles now classified as ineligible but which may have to be given new tires.
[b] U.S. production is maximum based on industry estimates. Canadian production is assumed at present capacity, which is substantially at peak.

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.3/ A somewhat smaller deficit is indicated in the U.K.

A deficit in liquid-cooled gasoline engines would impinge 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.

DECLASSIFIED

8-30688 P84 bu

DECLASSIFIED

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 1½ inches, and bearings. This situation makes a 25 percent increase in output of liquid-cooled engines in 1944 highly problematical. 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.P.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.

Table 10.--SUPPLY AND REQUIREMENTS FOR INTERNAL COMBUSTION ENGINES, 1944
(Unit - Thousand)

COUNTRY	Air-cooled, under 30 H.P.	Liquid-cooled		
		Gasoline	Diesel, 750 RPM and Over	Diesel, under 750 RPM
United States [a]				
Estimated supply [b]	906 [c]	1,692	190	Data not available
Requirements	482 [d]	2,273	185 [e]	
Surplus or deficit (-)	424 [c]	-581	5	
As percent of requirements	88%	-26%	3%	
United Kingdom [f]				
Estimated supply [g]	100 [c d]	60 [h]	26	3
Requirements	90 [d]	71 [h]	37	4
Surplus or deficit (-)	10 [c]	-11 [h]	-11	-1
As percent of requirements	11%	[h]	-30%	-25%

[a] Excluding tank and aircraft engines.
[b] Supply represents 125 percent of 1943 production. Due to the tight component situation, this estimate is considered optimistic.
[c] Supply figure is capacity. Production will be held to requirements.
[d] U.K. 1944 requirements accepted by the U.S. as well as those held over from 1943 are included in the U.K. supply and the U.S. requirements.
[e] The fact that manufacturers' unfilled orders in this group rose from 149,000 on Mar. 1, 1943 to 196,000 on Dec. 1, 1943 indicates that 1944 requirements are probably understated.
[f] Excluding engines for wheeled vehicles, tanks, and aircraft.
[g] Supply is the sum of planned production plus accepted orders on U.S. production. There is thus a slight duplication in the figures.
[h] Excluding engines for trucks; requirements and supply of such engines are understood to be in approximate balance. A percent deficit is not shown; if truck engines were included it would probably be less than 6 percent.

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).

Table 11.--EMPLOYMENT IN MACHINE TOOL PRODUCTION
(Unit - Thousand Wage Earners)

END OF YEAR	Combined Total	United States	United Kingdom	Canada
1937	79.2	51.0	28.0	0.2
1942	209.8	140.0	67.3	2.5
1943	158.8	92.0	64.3	2.5
1944 est.	78.8	50.0 [a]	28.0	0.8

[a] This estimate assumes that output per worker will decline somewhat but will remain above pre-war levels.

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 liberated 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.P.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

DECLASSIFIED

E-35689 pgs by

DECLASSIFIED

Table 12.--COMBINED MACHINE TOOL REQUIREMENTS AND SUPPLY, 1944

ITEM	Combined Total	United States	United Kingdom	Canada
	(Unit - Each)			
Requirements	192,100 [a]	112,000 [a]	80,000	4,950
Domestic	164,500	90,000	70,000	4,500
Foreign	27,600 [a]	22,000 [a]	10,000	450
Supply	192,100 [a]	112,000	80,000	4,950
From location of used machines	54,000	32,000	20,000	2,000
From imports	0 [a]	0	3,100	1,750
From production	138,100	80,000	56,900	1,200
	(Unit - Million Dollars)			
1944 estimated production	$615	$485	$120 [b]	$10
1943 actual production	$1,542	$1,363	$160	$22
1944 production as % of 1943 (value)	40%	36%	75%	45%

[a] U.S. requirements include 3,100 tools for the U.K. and 1,750 tools for Canada which are also included in the requirements of those countries. The duplication has been eliminated from the totals.
[b] Including metal-working machinery other than rolling mills.

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. and 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 put into 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 stage 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 materiel 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

DECLASSIFIED

E-86669 per bu

leave some production available for export even if the present level of production does not increase. The U.S. is, however, the residual supplier to the world of agricultural machinery. It is not now clear whether satisfaction of minimum agricultural machinery requirements of the United Nations and liberated areas in 1944-45 will necessitate an increase in U.S. production. If required, production of equipment which does not need critical components may be increased as munitions contracts decline and raw materials and labor are released. But a significant increase in the production of those machines which use critical components is unlikely before calendar year 1945 if the European war continues through 1944.

The Position in Canada

The Canadian restrictions on farm machinery since the beginning of 1942 have been made to conform rather closely with those of the United States. Canada's production during the current quota period is expected to approximate 106,000 short tons. This figure represents about 45 percent of maximum Canadian capacity.

Component bottlenecks are limiting Canadian production because Canada imports many of these items from the U.S. There was a somewhat greater conversion of farm machinery facilities to ordnance work in Canada than occurred in the U.S., and the Canadian industry is, therefore, more directly affected by the level of ordnance production than are the United States manufacturers.

Preliminary information from Canadian sources indicates that their domestic requirements for the next quota period will be somewhat higher than for the period ending on June 30, 1944.

The Position in the United Kingdom

The pattern of production in the U.K. has been quite different from that in the U.S. and Canada. Much of the capacity of the comparatively small industry was necessarily converted to munitions production, but the urgent need to increase food production to the maximum has caused the remainder of U.K. capacity to be used to the full. This level of production has now fairly well caught up with British requirements for most of the key items, but some items are not manufactured in the U.K. and have to be imported. Nevertheless, the U.K. has indicated that it will be in a position to supply some--though not large--quantities of farm machinery for rehabilitation purposes.

Rehabilitation

Requirements for 186,000 tons of farm machinery for European liberated areas for the year following liberation have been approved by the Combined Supply Committee. It has been assumed that this equipment will have to be furnished in the 18 months beginning January 1, 1944. Roughly, 60 percent of this total weight is carbon steel, or 112,000 tons. Against this requirement, 15,000 tons of steel for the fourth quarter of 1943 and the same amount for the first quarter of 1944 have already been allotted in the U.S., and it is anticipated that additional amounts will be made available as the time and nature of the requirements become clearer. The U.K. has listed specified items which will be stockpiled prior to September 30, 1944, against these requirements to a total of 19,125 tons of machinery at equivalent U.S. weights (about 11,500 tons of carbon steel), including spare parts. It is anticipated that a further allotment of about 8,000 tons of carbon steel will be made by the U.K. to supply an additional 13,281 tons of machinery, including spare parts, prior to June 30, 1945. The extent of Canadian participation in the satisfaction of rehabilitation requirements is not yet known. Preliminary evidence suggests that some difficulty may be encountered in meeting rehabilitation requirements for heavy tractors, and for binders, mowers and grain drills.

It is likely that as the supply of raw materials, labor and components permit increased non-munitions production, agricultural machinery will have a high priority.

TEXTILES

(COMBINED TEXTILE COMMITTEE—FORMED JANUARY 1944)

The world textile position for 1943 as set out in the August Report of the Combined Textile Sub-Committee which was established by the Non-military Supplies Committee in February 1943, showed a total estimated production of about 25.2 billion linear yards of cotton, rayon, and woolen and worsted piece goods with estimated requirements set at 25.2 billion linear yards, excluding Russia, China, and Axis and Axis-occupied countries.

The August report made it clear that the

DECLASSIFIED

DECLASSIFIED

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 import needs in cotton piece goods of the shortage areas and the surpluses originally estimated available in the major exporting countries for 1943.

Table 13.--1943 IMPORT REQUIREMENTS AND EXPORTABLE SURPLUS OF COTTON PIECE GOODS
(Unit - Million Linear Yards)

MAJOR EXPORTING COUNTRIES	Estimated Exportable Surplus, as of August 1943	IMPORTING AREAS	Estimated Import Requirements, as of August 194
Total	2,421	Total	2,364
United States	1,180	Canada	261
India	600	Australia and New Zealand	316
Brazil	300	South Africa	225
United Kingdom	227	Other British dominions and colonies [a]	427
Mexico	65	M.E.S.C. countries	240
Spain	50	French Africa	285
		Latin America [b]	581
		Other	215

[a] Excluding India and Middle East Supply Council countries.
[b] 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 1,180 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

DECLASSIFIED

DECLASSIFIED

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 woolen 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 childrens wear, work clothing, and sheets and towels, and in low-priced merchandise generally. Present indications point to a considerable aggravation of these shortages during 1944. 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.

DECLASSIFIED

E 26000 PRS by

DECLASSIFIED

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.P.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

Table 15.--PAPER SUPPLY FOR DOMESTIC CONSUMPTION
(Unit - Thousand Short Tons and Percent of Base Period)

COUNTRY AND PERIOD	Total		Newsprint		Paper		Board	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
United States								
Base period [a]	21,726	100%	4,282 [b]	100%	7,995	100%	9,451	100%
1943 [c]	19,650	91	3,487 [b]	81	6,772	85	9,391	99
1944 [c]	18,958	87	3,045 [b]	71	6,555	82	9,358	99
Canada								
Base period [a]	1,113	100	210	100	345	100	558	100
1943 [c]	964	86	192	92	287	83	505	91
1944 [c]	962	86	178	85	266	72	518	93
United Kingdom								
Base period	4,267	100	1,500	100	1,660	100	1,107	100
1943 [c]	1,568	37	290	19	614	37	664	60
1944 [c]	1,720	40	416	28	621	37	683	62

[a] Six months ended March 31, 1942 (peak production), converted to annual rate.
[b] Including imports from Canada and Newfoundland.
[c] Final estimates by C.P.P.C.; the 1944 figures are requirements.
[d] Year ended August 31, 1939.

Table 14.--COMPARISON OF PRELIMINARY AND FINAL ESTIMATES OF THE 1944 COMBINED SUPPLY AND REQUIREMENTS FOR PULP AND PAPER PRODUCTS--EXPRESSED IN TERMS OF PULPWOOD
(Unit - Thousand and Rough Cords of 120 Cu. Ft.)

COUNTRY	Preliminary Report	Final Report	Change from Preliminary to Final Report	
			Amount	Percent
Total supply	17,826	20,946	3,120	17.5%
United States	9,949	11,852	1,903	19.1
Canada	7,472	8,660	1,188	15.9
United Kingdom	0	0	0	0.0
Newfoundland	415	444	29	7.0
Total requirements	24,463	23,577	-886	-3.5
United States	21,548	20,595	-953	-4.6
Canada	1,918	1,869	-49	-2.5
United Kingdom	910	1,060	150	16.5
Newfoundland	89	73	-16	-18.0
Prospective deficit	6,629	2,641	-3,988	-60.2
As percent of requirements	27.1%	11.2%		

DECLASSIFIED

P-96689 P30 bu

DECLASSIFIED

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.B.)

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 cattlehides 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 8½ 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 80 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 rawstocks from uneconomic depletion. These curtailments in soakings, including curtailments in the wettings 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.

Table 16.--U.S. SUPPLY AND CONSUMPTION OF CATTLEHIDES
(Unit - Thousand Pieces)

PERIOD	New Supply	Domestic Production	Imports	Domestic Consumption (wettings)
1942 - Total	35,517	19,746	5,771	28,334
1st half	12,021	9,300	2,721	14,811
2nd half	13,496	10,446	3,050	13,523
1943 - Total	22,700	18,100	4,600	21,972
1st half	12,131	9,214	2,917	12,887
2nd half	10,569 a	8,886 a	1,683 a	9,706 a

a December estimated.

Table 17.--AVERAGE MONTHLY CONSUMPTION AND PRODUCTION OF CIVILIAN FOOTWEAR
(All types of footwear except footwear made wholly of rubber)
(Unit - Thousand Pairs)

COUNTRY	Pre-war Consumption a	1942 Consumption	1943 Production b
United States	34,190	36,776	34,897
United Kingdom	12,450	8,491	7,450
Canada	2,171	2,640	2,583 c

a 1936-38 for the U.S. and Canada; 1935 for the U.K. Consumption was higher in the U.S. and Canada in 1940 and in the U.K. in 1938.
b No adjustment for exports and imports. Monthly average for 9 months.
c Stated requirements.

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 redivision of the supply and the question was referred to the C.R.M.B. 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

DECLASSIFIED

Access pai by

DECLASSIFIED

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, goatskin 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 war 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 3½ (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 kips after the U.K.'s imports of these had reached a specified level. The distribution of hides and skins to European neutrals--Sweden, Turkey, and Spain--is a prior charge on the world supplies. 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:

	U.K.	U.S.
July 1943 (1st Interim allocation)	60%	40%
Aug.-Oct. 1943 (2nd Interim allocation)	70	30
November 1943 (Mission still in London)	55	45
December 1943 (Under the Plan) Hides	50	50
Calf and Kipskins	35	65

Agreement in principle has been reached with Canada as to hide and calfskins 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)

COUNTRY	Hides			Calf and Kipskins		
	Supply					
	Number			Number		
Total Supply	31,000			19,000 [a]		
U.S. domestic	19,000			11,000		
U.K. domestic	2,000			1,000		
Canada domestic	1,600			1,000		
Total foreign	8,400			6,000 [a]		
	Distribution					
	Number	Ratio to United Kingdom	Percent of Total	Number	Ratio to United Kingdom	Percent of Total
United States share	22,599	3.5	72.9%	14,896	5.8	78.4%
United Kingdom share	6,448	1.0	20.8	2,565 [a]	1.0 [a]	13.5 [a]
Canadian share	1,953	0.3	6.3	1,539	0.6	8.1

[a] Excluding East India kips, estimated at 6 million pieces, all of which goes to the United Kingdom.

DECLASSIFIED

E-38688 per bw

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 wettings in previous years.

Table 19.--WETTINGS OF HIDES AND SKINS
(Unit - Thousand Pieces)

YEAR	United States	United Kingdom	Canada
	Cattlehides		
1940	80,005	8,070	1,763
1941	86,985	7,560	1,997
1942	86,334	7,880	2,358
1943	82,000 p	5,800 e	2,100 e
1944	82,599 e	6,448 e	1,955 e
	Calf and Kipskins		
1940	13,475	2,330	1,386
1941	15,294	2,220	1,195
1942	14,647	2,520	1,424
1943	13,400 p	2,300 -	1,300 e
1944	14,896 e	2,565 e	1,339 e

e Estimate
p 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, firstly, 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, st types of medical supplies present no oduction 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.

I. The three medical items which presented particular problems when the Committee was set up--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 1938 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

DECLASSIFIED

combined requirements including relief will be available shortly.

II. The medical supplies for which serious deficits are still indicated are emetine, gas-gangrene antitoxin, bismuth, and penicillin.

Ipecac

Ipecac is the source of emetine, used primarily for the treatment of amoebic dysentery. Brazil is the principal supplier of ipecac; smaller amounts come from Costa Rica and Nicaragua.

The combined requirements for ipecac are far in excess of the normal supply, and recent exports from the producing countries have been substantially below normal. The low level of ipecac exports is chiefly due to the Brazilian program to develop domestic emetine manufacture rather than export ipecac. It is also believed that the purchase price for ipecac, which was set by agreement of the U.S. and the British, is not now sufficiently high to evoke maximum output. The U.S. is now negotiating an agreement with Brazil, in which the British will participate, guaranteeing a minimum export of both ipecac and emetine and providing an increase in ipecac prices. However, the 1944 requirements will probably not be completely met unless the British accept the substitution of carbazone or some other synthetic drug. Requirements must be reviewed to insure that the most urgent needs are met from the available supply.

Gas-gangrene Antitoxin

The bulk of U.S. gas-gangrene antitoxin requirements are for Lend-Lease. The U.S. Army depends largely upon sulfa drugs and prompt surgery in the treatment of wounds infected from contaminated soil. In July 1943 the U.S. Army reported that they were unable to secure bids for the manufacture of the special trivalent formula requested by the U.K. In view of the substantial difference between the U.S. and U.K. Army formula, the British were asked to re-examine their formula. However, British field experience leads the War Office to believe the British formula to be necessary to control oedematiens infection. The Medical Supplies Committee, therefore, constituted a special working group composed of representatives of the National Research Council, the Surgeon General's office and the Navy's Bureau of Medicine and Surgery to confer with British medical authorities, in order to arrive at a standardized formula which will considerably facilitate the production problem. A relatively small amount of antitoxin is being produced to British specifications in Canada.

It is evident that a substantial increase in production will be required to meet the British requirement.

Bismuth

As a result of substantial increases in the metallurgical requirements for bismuth metal, both in the U.S. and U.K., for the year 1944, the amount of bismuth available to meet pharmaceutical requirements is about half of the estimated normal world demand in pharmaceutical uses of 1,965,000 pounds. The problem of tailoring requirements to fit the reduced supply has been considered by a special working group. The recommendation of this group as approved by the Medical Supplies Committee will be submitted to the C.R.M.B. as a basis for the allocation of the balance of the Peruvian supply, which has not been set aside for metallurgical uses. Table 20 gives a brief summary of screened bismuth requirements for pharmaceutical uses in 1944.

Table 20.--SUMMARY OF BISMUTH REQUIREMENTS OF THE U.S. AND THE U.K. FOR PHARMACEUTICALS, 1944
(Unit = Pound)

REQUIREMENT	Total	United States	United Kingdom
Total	1,162,850 a	788,380	373,850
Military	237,950	200,250 b	37,700 c
Civilian	924,900	588,130	336,150
Domestic	708,000	480,000	228,000
Export	204,500 a	102,250 d	102,250 d
Relief	11,800	5,900 d	5,900 d

a Excluding Canada's requirements as she is assumed to be self-sufficient.
b Includes a U.S.S.R. military requirement of 8,500 lbs.
c Includes an Indian military requirement of 35,000 lbs.
d Assumes an arbitrary 50-50 division of the export trade, other than military.

The Combined Raw Materials Board has tentatively allocated 974,000 pounds of the world's new supply for pharmaceutical requirements. There is thus an indicated deficit of approximately 190,000 pounds, some part of which may be met from stocks. There is hope that by mid-1944 a review of requirements and supply may indicate that an additional amount can be made available for pharmaceutical uses.

SECRET DECLASSIFIED

DECLASSIFIED

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.P.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.P.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.M.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 24 million tons, or about three percent of the combined U.S.-U.K. production. This estimate takes account of the measures they have recommended 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 $3.5 million

DECLASSIFIED

DECLASSIFIED

will come from the U.S.), and is expected to increase British production by 6.2 million tons in 1944-45.

3. Equipment is being provided to increase strip mining output in the U.K. from 5 million tons in 1943-44 to 15 million tons in 1944-45.

4. Delivery of mining and transportation equipment has been accelerated, and support has been given to a request for additional coal cars in order to increase the exportable surplus in South Africa from 3.1 million tons in 1943-44 to 4.2 million tons in 1944-45.

Every effort is being made to expand production further in India, to reduce requirements wherever possible, and to promote local self-sufficiency in other producing areas (North and West Africa and Latin America).

It will be noted that granting the success of the conservation program, the U.S. exportable surplus would be sufficient to meet the requirements of Canada and Newfoundland with a margin of 0.8 million tons toward the requirements for Latin America and bunker depots, amounting together to 2.8 million tons. Import requirements in all other parts of the world exceed the combined exportable surplus of the U.K., South Africa and India by 8.5 million tons. There would thus remain a deficit of 10.5 million tons after allowing the full estimated effect of conservation measures successfully applied in the U.S.

The Committee's preliminary estimates of the combined coal position for the three coal years 1942-43, 1943-44, and 1944-45 are given in Table 21.

Table 21.--THE COMBINED COAL POSITION (BITUMINOUS AND ANTHRACITE)
(Unit - Million Long Tons)

REQUIREMENTS AND PRODUCTION	Tonnage		
	1943	1944	1945
Requirements	772.9	811.1	836.8
United States domestic	547.0	577.1	582.6
United Kingdom domestic	196.8	197.4	198.0
Export, including operational and relief	29.1	36.6	56.2
Production	a	790.2	806.0
United States	584.2	588.5	590.6
United Kingdom	203.0	198.0	212.2
Other sources (export surplus)	*	3.7	3.2
Deficit on current production	a	20.9	28.8
Change in industrial and retail dealers' stocks			
United States	15.0	-16.3	-4.3 b
United Kingdom	4.4	-4.6	-0.6 b
Remaining deficit after change in stocks	a	0.0	23.9

a Information lacking on amount available from other sources. A surplus in excess of 18 million tons is indicated.
b Reduction possible without reducing stocks below minimum level.
* Not available.

Coal production of the U.S. and the U.K. is estimated to increase by 16.3 million tons--about 2 percent--from 1943-44 to 1944-45 on the assumptions, (a) that the labor force in the U.S. bituminous mines is maintained at an average of approximately 400,000 as compared with 410,000 in January 1944, (b) that the conscription measures instituted on Jan. 1 will raise the U.K. labor force from 701,000 to 720,000 and maintain the level, (c) that the mine mechanization programs in both countries and the strip mining program in the U.K. will be fulfilled in all respects, and, (d) that there are no major stoppages of work. The exportable surplus of other countries--particularly South Africa--is estimated to increase by 1.5 million tons.

Against this estimated increase of 17.8 million tons in new supply must be placed an increase of 25.7 million tons in estimated requirements. Strict conservation measures have been adopted in the U.K. Reduction in household supplies in 1942-43 saved 4.5 million tons, about 10 percent of the total, and even more stringent restrictions, including a general 10 percent cut on all industrial consumers (including munitions plants) have been imposed this winter. The effect of this policy will be to hold U.K. domestic consumption in 1944-45 at the level of 1943-44. In the U.S. a slight further increase in industrial output and rail traffic will increase domestic consumption by about one percent--5.5 million tons--without account being taken of the planned conservation measures. Three-quarters of the increase in coal requirements will be for export, most of the increase being earmarked for Northwest Europe.

Table 22 shows the estimated net import requirements of countries and areas to be supplied.

The requirements for areas to be liberated provide not more than is judged to be necessary for military operations and the prevention of disease and unrest on the strategic hypothesis adopted by the Combined Committees. Other hypotheses about military developments than the one used by the Committees would basically change the requirements picture, both export and domestic. Assuming a complete collapse of Germany, with European coal mines outside of Germany disabled, requirements would be substantially larger. Assuming a German collapse with no serious damage to European mines, requirements would be substantially smaller.

DECLASSIFIED
SECRET

8-86688 pas bu

DECLASSIFIED

Table 22.-- ESTIMATED NET IMPORT REQUIREMENTS OF COAL FOR COAL YEAR ENDING APRIL 30, 1945
(Unit - Million Long Tons)

COUNTRY	Import Requirements
Total	28.9
Canada	24.1
Newfoundland	0.8
South and Central America	1.8
Europe:	
Northwest Europe	16.6
Southern Europe	7.4
Eire	1.0
North Africa	0.7
Middle East and East Africa	2.0
West Africa	0.4
Ceylon	0.4
Other countries	z
Bunker depots	1.0
Contingent liabilities	2.7 a

a Includes Sweden (1.1 million tons), Switzerland (1.0 million tons), and Finland (0.6 million tons).
z Less than 50,000 tons.

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 28.8 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 4.9 million tons without falling below the minimum level, which would leave a deficit of 23.9 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 4½ 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, 4/ but they support

Table 23.--COMBINED STEEL PRODUCTION, 1943-44
(Unit - Million Net Tons)

PERIOD	Ingots and Castings	Finished Steel	PERIOD	Ingots and Castings	Finished Steel
1943 - Total	108.8	76.7	1944 - Total	113.2	80.3
1st Quarter	26.6	18.9	1st Quarter	27.9	19.8
2nd Quarter	26.9	19.0	2nd Quarter	28.2	20.0
3rd Quarter	27.3	19.0	3rd Quarter	28.4	20.2
4th Quarter	27.4	19.7	4th Quarter	28.7	20.3

4/ 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.

DECLASSIFIED

DECLASSIFIED

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 1944. 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 24.--THE COMBINED STEEL POSITION
(Unit - Thousand Net Tons of Finished Steel)

	Carbon				Alloy			
	2nd Quarter 1943	3rd Quarter 1943	4th Quarter 1943	1st Quarter 1944	2nd Quarter 1943	3rd Quarter 1943	4th Quarter 1943	1st Quarter 1944
Supply								
COMBINED TOTAL [a]	16,370	16,222	17,498	17,257	2,600	2,487	2,232	2,207
United States	13,546	13,898	14,717	14,471	2,272	2,192	1,950	2,024
United Kingdom	2,774	2,524	2,766	2,729	325	278	273	311
From home ingots	2,351	2,259	2,298	2,500	252	232	230	230
From imported steel [b]	423	355	468	499	73	46	43	81
Canada	793	750	672 [c]	666	89	83	61	62
From home ingots	473	456	485	486	69	60	52	53
Imports of steel	320	294	196	180	20	23	11	9
Distribution								
	Deliveries			Allotments	Deliveries			Allotments
COMBINED TOTAL [a]	16,370	16,222	17,498	[d]	2,600	2,487	2,232	[d]
United States	13,546	13,898	14,717	16,272	2,272	2,192	1,950	2,627
Air. Res. Contr. Off.	116	150	166	156	349	330	275	405
War Department	2,487	2,291	2,781	3,240	989	761	629	868
Navy Department	1,807	1,264	1,494	1,890	501	390	387	470
Maritime Commission	2,253	2,241	2,371	2,550	17	19	21	27
O.L.L.A. - U.K. [e]	287	773	693	420	85	70	42	16
O.L.L.A. - All Other	720	537	404	470	54	56	40	53
Office of Economic Warfare	126	177	218	455	4	4	4	10
Canada [e]	350	343	215	265	25	33	22	40
Office of Defense Transport.	914	1,054	991	1,475	4	3	10	88
War Food Administration	0	690	625	850	0	17	16	20
Petr. Admin. for War	1,273	413	402	545	107	39	49	87
Other Claimants [f]	0	317	196	816	0	35	27	38
Maintenance, etc.	0	835	1,091	750	0	72	60	50
Operations Vice Chairman [f & g]	3,832	2,973	3,108	3,130	485	386	369	470
United Kingdom	2,774	2,524	2,766	2,729	325	278	273	311
Admiralty	418	408	460	455	85	84	83	94
Mercantile Marine	236	215	224	228	*	*	*	*
War Off.	32	32	32	43	*	*	*	*
Min. of Supply	1,231	1,104	1,157	1,120	210	169	169	185
Air Min.	64	60	45	27	*	*	*	*
Min. of Aircraft Prod.	179	170	196	209	84	80	82	86
Board of Trade - Export [e]	32	27	40	56	1	*	1	1
Board of Trade - Other	57	61	56	56	*	*	*	*
Ministry of War Transport	144	157	166	207	1	1	1	1
Other Departments	361	362	388	413	4	4	5	4
Canada [h]	793	750	672 [c]	666	89	83	63	62
Direct war	598	569	515	503	75	63	45	42
Export	3	10	41	64	4	5	6	12
Ind. War Vit. Ind.	256	308	289	299	3	5	3	8
Unclassified [i]	196	123	130	0	9	10	8	0

[a] Excludes Imports.
[b] Includes withdrawals from stocks.
[c] Deliveries affected by drains on 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 over allotment.
[e] Includes indirect exports.
[f] Fluctuation largely attributable to changes in jurisdiction.
[g] Mostly for "3 Products."
[h] Distribution of all steel estimated on basis of reported distribution of domestically produced steel.
[i] Deliveries to Jobbers For Secondary Products, and Unclassified.
* Some, but less than 500 tons.

SECRET DECLASSIFIED

which will still be in short supply in the U.S.

It is unlikely that any military program is being curtailed or delayed because the first quarter allotment of steel to it is inadequate, although the possibility of running into such a situation has existed because of the tightness in flat rolled products mentioned below. If military demand for finished steel in general does in fact decline as present requirements estimates indicate, it follows that an increased amount might be made available for civilian uses. Certain considerations apart from the availability of steel in general, however, make it improbable that any substantially increased flow into non-military uses can be planned at this time.

No purpose would be served, for example, in permitting the use of steel for the manufacture of additional civilian products if facilities and manpower are not available to carry on the manufacturing operation. This, of course, does not apply to the case of products now being manufactured from substitute materials. Here steel may be used with advantage to release even scarcer materials, such as lumber and plastics, for more urgent uses or to permit more efficient utilization of manpower.

A second consideration is that while finished steel in general will be in easier supply this will not necessarily be true of certain particular forms of steel. Flat rolled products (plates, sheets, tinplate) are at present in tight supply and probably will continue to be so at least to mid-year. In view of the wide distribution of flat rolled products among normal peacetime civilian uses, allocation of steel to non-military uses will have to proceed with caution until a substantial decline in military requirements of these forms is clearly evident.

A third consideration is that, instead of maintaining or raising the rate of steel output in order to make increased quantities available for civilian uses, it probably will be necessary for some time to come to hold down the level of production in order to conserve manpower, raw materials and transportation used in producing steel. Decision on such a fundamental question, however, presumably will have to await the outcome of military operations in western Europe.

COPPER.

(COMBINED COPPER COMMITTEE—FORMED JANUARY 1943—JOINT WITH C.R.M.B.)

In June 1943, the United States, the United Kingdom, and Canada together faced a deficiency of copper of between 10 and 15 percent of their estimated requirements for 1943 and 1944. Even after allowing for the saving of very substantial amounts by the substitution of steel for brass in the U.S. ammunition program the 1943 deficiency was nearly 750,000 tons and that for 1944 was over 800,000 tons. There was no prospect of increasing new production sufficiently to meet these deficiencies.

By September 1943, the position had substantially improved, mainly because of drastic downward revisions in the ammunition programs of the three countries. Large savings by steel substitution were still being counted on. The deficiencies at that time had been reduced to about 700,000 tons for 1943 and 325,000 tons for 1944.

By the end of 1943, the position had so much improved that a surplus of 258,000 tons was in view for 1944, notwithstanding the virtual abandonment in the United States of steel substitution in Army ammunition. The change in outlook was once more due principally to further large-scale reductions in ammunition programs. Table 25 shows the changes in the 1943-44 copper position in the last six months.

The surplus in sight for 1944 is arrived at after allowing in the estimates of supply for some reduction of output in the U.S. and of U.S. purchases in Canada and Chile, and for a small reduction in Northern Rhodesian output. Already, however, a further reduction in Rhodesia has been announced, and further reductions in the United States are under consideration. Canadian output which is largely associated with the production of nickel and other scarce metals is likely to be substantially maintained. Australia, however, is abandoning a project which recently began producing.

Contrary to the expectation expressed by the Committee in its report of June 1943 that intensive military operations should yield large amounts of copper battle scrap, the supply of copper from this source is now expected to be small. None of the supply estimates in the table includes any

DECLASSIFIED

Table 25.--COPPER SUPPLY, CONSUMPTION, & REQUIREMENTS OF UNITED STATES, UNITED KINGDOM AND CANADA
(Unit - Thousand Short Tons)

COUNTRY	1943					1944				
	June 1943 Report	Sept. 1943 Report	Jan. 1944 Report	Percent Change Sept. 1943 to Jan. 1944	Percent Change June 1943 to Jan. 1944	June 1943 Report	Sept. 1943 Report	Jan. 1944 Report	Percent Change Sept. 1943 to Jan. 1944	Percent Change June 1943 to Jan. 1944
	Supply									
Combined total	4,340	4,481	4,494	.2%	3.5%	4,454	4,691	4,470	-3.2%	.3%
United States	3,129	3,260	3,299	1.2	5.4	3,384	3,485	3,399	-2.5	1.0
United Kingdom	862	929	934	.5	8.4	774	828	902	8.9	16.5
Canada [a]	295	292	261	-10.6	-11.5	316	308	169	-45.1	-46.5
	Consumption					Requirements				
Combined total	2,094	4,649	4,271	-8.2%	-16.8%	2,896	4,943	4,812	-14.8%	-20.3%
Ammunition	2,559	2,192	2,088	-7.7	-20.1	2,690	2,538	1,755	-35.9	-35.7
Other	2,535	2,453	2,243	-8.6	-12.5	2,590	2,607	2,479	-4.9	-4.5
United States	3,855	3,454	3,102	-10.0	-19.4	4,030	3,806	3,296	-13.0	-19.7
Ammunition	1,886	1,919	1,855	-3.0	-23.0	2,004	1,757	1,313	-25.3	-34.5
Other	1,969	1,875	1,656	-11.7	-15.9	2,026	2,049	1,923	-6.1	-5.1
United Kingdom	962	900	898	-0.2	-4.7	924	889	796	-4.0	-16.2
Ammunition	456	405	395	-2.5	-9.4	492	543	504	-11.4	-35.5
Other	506	495	503	1.6	-0.6	498	486	492	1.2	-1.2
Canada	327	295	264	-10.5	-11.1	302	310	180	-41.9	-40.4
Ammunition	217	213	180	-15.1	-17.1	238	238	112	-53.5	-50.8
Other	80	83	84	1.2	5.0	66	72	64	-11.2	-3.0
	Balance									
Combined total	-748	-168	223			-832	-324	358		
United States	-666	-194	190			-666	-321	103		
United Kingdom	-80	29	36			-180	-1	106		
Canada	-2	-3	-3			14	-2	-11		

[a] These figures apply only to "requirements for consumption" in Canada, and exclude the amounts available for export to the U.K.

very substantial quantity of copper from battle scrap. On the requirements side, however, substantial savings of copper from the resizing 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 26.--COPPER STOCKS: OVERSEAS, AFLOAT, AND IN THE COUNTRY
(Unit - Thousand Short Tons of Copper Content)

COPPER STOCK	January 1, 1943				June 30, 1943				September 30, 1943				December 31, 1943			
	Total	U.S.	U.K.	Canada	Total	U.S.	U.K.	Canada	Total	U.S.	U.K.	Canada	Total	U.S.	U.K.	Canada
Total stocks (ingot and blister)	788	483	341	84	784	421	342	21	836	453	360	23	880	490	364	26
Overseas and ocean stock	240	62	178	0	227	75	152	0	216	63	153	0	205	56	149	0
In the country, blister copper	64	31	31	2	60	28	30	2	63	27	34	2	77	30	45	2
In the country, refined copper	484	350	132	22	497	318	160	19	557	363	173	21	598	404	170	24

[a] Stock figures exclude scrap.

DECLASSIFIED SECRET

S-38880 pdp bu

DECLASSIFIED

anew of a difficult position can be avoided only if all countries exercise caution in relaxing production efforts and in permitting increased consumption.

ALUMINUM AND MAGNESIUM

(COMBINED ALUMINUM AND MAGNESIUM COMMITTEE—FORMED MARCH 1943—JOINT WITH C.R.M.B.)

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:

	U.S.	U.K.
Aluminum	330	46
Magnesium	84	32

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

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

Table 27.--THE COMBINED ALUMINUM POSITION BY QUARTERS, 1943-1944 [a]
(Unit - Million Pounds of Ingots)

	1943					1944				
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Total Supply	781	882	969	1,105	3,737	1,013	1,010	1,017	1,030	4,070
Primary	612	699	780	868	2,959	770	760	762	768	3,060
Secondary	169	183	189	237	778	243	250	255	262	1,010
United States [b]	476	553	620	717	2,366	638	642	652	661	2,593
Primary	362	428	492	558	1,840	471	468	473	476	1,888
Secondary	114	125	128	159	526	167	174	179	185	705
United Kingdom	86	88	92	109	375	101	94	91	95	381
Primary	31	30	31	31	123	25	18	15	18	76
Secondary	55	58	61	78	252	76	76	76	77	305
Canada - Primary	219	241	257	272	989	274	274	274	274	1,096
Total Requirements	738	781	907	983	3,409	1,000	1,041	1,051	1,064	4,156
United States [b]	530	[illegible]	612	[illegible]	[illegible]	762	759	757	[illegible]	3,139
Air (Incl. pipeline)	396	433	500	586	1,886	507	497	513	500	2,022
Army	44	32	31	46	153	48	102	102	102	354
Navy	26	28	27	40	121	54	36	55	55	220
Export										
U.S.S.R.	22	30	41	52	145	72	58	51	51	190
Other	1	1	3	6	11	5	5	6	6	22
All other uses	41	47	50	81	219	85	84	81	80	325
United Kingdom	195	180	202	200	785	201	201	213	199	804
Air	163	158	173	163	657	157	165	160	171	661
Army	11	9	10	12	42	13	13	13	13	52
Navy	3	4	4	4	15	4	1	5	[illegible]	18
Civil and export	2	2	2	3	9	2	3	3	3	11
Destructive	16	15	13	18	62	22	33	41	45	139
For Contingency	0	0	0	0	0	3	3	3	4	13
Canada	13	17	33	30	93	30	31	31	31	123
Own use	11	14	16	12	57	17	17	17	17	68
Export to Australia	2	3	3	3	11	4	5	5	5	19
Export to U.S.S.R.	0	0	14	13	27	9	9	9	9	36
Surplus or Deficit (-)	43	101	62	122	328	13	-31	-34	-34	-86

[a] Source: Data for United States: Supply-1st, 2nd and 3rd quarters 1943 actual production; beginning with fourth quarter 1943 production is estimated. Requirements-first three quarters 1943 actual shipments; fourth quarter 1943 latest CMP allotments to claimant agencies; beginning with first quarter 1944 requirements are those screened by Program Bureau, 12-31-43. The aircraft requirements also include aluminum system pipeline requirements in the following quantities: 1943-1st quarter - 77; 2nd quarter - 79; 3rd quarter - 144; 4th quarter - 70; 1944-1st quarter - 50; 2nd quarter - 10; 3rd quarter - 10; 4th quarter - 10. Data are from the Program Bureau, W.P.B.
Data for United Kingdom: Supply for first three quarters 1943 is actual production; beginning with fourth quarter 1943 supply is estimated. Requirements for first three quarters 1943 are actual releases of metal; in the U.K., plus deliveries in Canada and the U.S. of semi-fabricated products to be shipped to the U.K.; beginning with fourth quarter 1943 requirements are estimated in statement from British Air Commission dated January 31, 1944.
Data for Canada: Supply for first three quarters 1943 is actual production; beginning with fourth quarter 1943 production is estimated. Requirements for first three quarters are actual shipments; beginning with fourth quarter 1943 they are estimated.
[b] Excluding U.K. and Canadian trade.

DECLASSIFIED
SECRET

DECLASSIFIED SECRET

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 2,493 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 31 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--to 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 26.--THE COMBINED MAGNESIUM POSITION
(Unit - Million Pounds of Ingots)

COUNTRY	1943			1944		
	Supply	Requirements	Balance	Supply	Requirements	Balance
Combined total	448	336	112	228	228	14
United States	389	255	134	500	434	66
United Kingdom	52	80	-28	42	102	-60
Canada	7	1	6	10	2	8

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.R.M.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).

DECLASSIFIED SECRET

DECLASSIFIED

The chief conservation measures in which the Committee has participated can be only briefly summarized here:

1. The Committees have sponsored exhibitions in the U.S., the U.K., and Canada, displaying conservation measures adopted in the three countries in order to acquaint procuring agencies and manufacturers with the gains which have already been achieved.

2. The A.A.C.C. secured from the Ministry of Supply a report on methods adopted in the U.K. to prevent the manufacture of unserviceable goods.

3. A working group of the Combined Conservation Committee investigated the uses of manila, sisal and hemp fibers and recommended substitutions to conserve these materials.

4. The Committee is now formulating recommendations on policy and procedure in the disposition of battlefield scrap.

5. The Committee collaborated with the Combined Coal Committee in recommending steps for the conservation of coal in the U.S.; these are discussed in the Coal section of this report.

6. Upon recommendation of the Committee, the three countries have submitted statements of their end-use patterns for shellac to aid C.R.M.B. in its allocation of that material. The desirability of forming a committee to study the standardization of grades of shellac is being explored at the request of C.R.M.B.

7. The Committee appointed a Screw Thread Committee to confer with a British technical mission sent to the U.S. Agreement was reached on the U.S. production of truncated threads of the Whitworth form to the end that a complete interchangeability of truncated Whitworth threads will result. In addition, standards for a number of wartime and special purpose screw threads were discussed and are now being developed with a view to unification. Continued contact and exchange of information was recommended.

Plans for 1944

The improved balance that has recently developed between the requirements and supply of certain materials has been noted by the Combined Conservation Committee. The Committee recognizes that this favorable situation is due in large part to the rigid conservation measures that have been in force in the three countries, and while it is now possible to relax somewhat these restrictive measures, there is a possible danger that we will soon again be confronted with serious shortages unless the relaxation procedure is carefully controlled.

The Committee, therefore, will be concerned in 1944 with the study of and recommendations related to the following:

1. The interchange of information on the relaxation of restrictions governing the use of critical materials now enjoying an easier supply.

2. The conservation, substitution, elimination, and salvage of those materials still in short supply.

3. The need for standards as they relate to war production.

DECLASSIFIED

THE COMBINED PRODUCTION AND RESOURCES BOARD

CHARTER

and

COMMITTEE TERMS OF REFERENCE

FEBRUARY 10, 1944

330689 P45 nabu

TERMS OF REFERENCE OF THE C.P.R.B. COMMITTEES

LONDON COMMITTEE OF THE C.P.R.B.

The function of the London Committee of the C.P.R.B. is to deal with those aspects of the work of the C.P.R.B. which are most conveniently handled in London especially where detailed examination of the facts of United Kingdom production is involved. Within the general framework of principles approved by C.P.R.B. and in close connection with J.W.P.S. the London Committee will--

1. Consider and make recommendations on proposed adjustments in U.K. production programmes which arise in connection with Combined Production Planning by C.P.R.B.
2. To make recommendations from time to time to the C.P.R.B. in the field of Combined Production Planning.
3. Serve as a means by which preliminary consideration can be given in London to combined Production problems arising out of the work of J.W.P.S.
4. Act as a link between C.P.R.B. and Commonwealth Supply Council and other authorities in London in questions affecting the productive resources and requirements of British Countries (other than U.K. and Canada) and of other United Nations within the British sphere.
5. Deal with such other matters as shall be agreed upon from time to time between the two members of the Combined Production and Resources Board.

C.P.R.B.-C.F.B. AGRICULTURAL AND FOOD MACHINERY COMMITTEE

To assemble all pertinent facts and recommend such action as may be advisable on all problems concerning requirements, supplies, production and distribution of agricultural implements and machinery and food processing machinery.

C.P.R.B.-C.R.M.B. COMBINED ALUMINUM AND MAGNESIUM COMMITTEE

To keep under constant review the overall aluminum and magnesium supply and requirements position of the United Nations with a view to ensuring that the most economical and efficient use is made of available supplies, and to submit from time to time to the C.P.R.B. and the C.R.M.B. such proposals as appear desirable to effect any necessary adjustments in the overall position.

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

The Washington Combined Coal Committee will, in concert with the London C.P.R.B. Coal Committee, assemble all pertinent facts and recommend such action as may be advisable on all problems of coal supply and requirements for overseas operational purposes and for conquered and liberated territories where responsibility to ensure supply rests with the British Empire or U.S.A.

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

1. To promote the active interchange between the U.S., U.K. and Canada of information on matters relating to conservation, and in this connection to serve as the U.S. counterpart of the Anglo-American Conservation Committee in London, establishing close working relations with that committee.
2. To make recommendations for the adoption of improved practices found through the interchange of information in this field in order that the critical materials available to the U.S., U.K. and Canada shall be used to the greatest advantage. Recommendations calling for formal action by any national government agency shall be made to the C.P.R.B. and C.R.M.B. jointly.
3. To undertake such special inquiries as may be needed to implement its work, after consultation with appropriate officers of the two Boards.
4. To appoint sub-committees, with the approval of the appropriate officers of the two Boards.

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

To keep under review the supply and requirements position of copper and copper producing and fabricating industries and to recommend, from time to time, such action in regard thereto as may be advisable.

C.P.R.B.-C.R.M.B. COMBINED FOOTWEAR, LEATHER AND HIDES COMMITTEE

1. To keep under constant review and to report from time to time as may be necessary on the situation in reference to--
   a. Footwear and other leather products
   b. Leather and leather substitute materials

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

i. 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 consequent requirements of leather and hides.

d. Examine the combined facilities for making

i. 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

i. 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.,

ii. 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, uses, 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.

4. 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. A., U.K. and Canada devoted to non-military requirements are cut 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 Committee, and will appoint sub-committees for specific purposes.

4. The Chairman of the Committee shall be empowered to co-opt additional members and propose to the Board for approval such amendments to the Terms of Reference of the Committee as he may deem necessary.

Note: Articles of non-military supplies shall be deemed to cover

a. The production of goods for civilian consumption in the United States, United Kingdom and Canada, including production to meet requirements of the armed forces for what are predominantly civilian goods.

b. The maintenance and repair of the public utility transport and essential industrial systems, and facilities for health, education, etc. of the U.S., U.K. and Canada.

c. The export to other United Nations of that part of their essential requirements, including development projects essential to the war effort, as is beyond their own power to produce or import from other sources.

C. P. R. B. PUBLIC UTILITIES COMMITTEE

Within the authority of the memorandum of June 9,1942, of the President and Prime Ministers, to assemble all pertinent facts and recommend such action as may be advisable concerning requirements, supplies and production of equipment to re-establish electric, gas, water and telecommunication services, in the liberated and conquered areas which may be required during the relief period.

C. P. R. B. TIRES AND TUBES COMMITTEE

To assemble all pertinent facts and recommend such action as may be advisable on all problems concerning requirements, supplies, production and distribution of tires and tubes.

C. P. R. B. TEXTILE COMMITTEE

1. The Textile Committee has been reformed and its terms of reference expanded in order that it may carry on the next phase of the work which is indicated from its recent report. The necessity of establishing export programmes for the countries having surpluses in order that minimum requirements of the shortage areas may be met is apparent from the report. Requirements of certain areas specifically not covered by the report must be determined and provision made for meeting them. The desirability that C.P.R.B. should plan

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.