PRESIDENT'S SECRETARY'S FILE
Subject File
War Production Board:"War
Progress":11/6/43-2/5/44
Box 173

The President

a

WAR PROGRESS

Confidential

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Commerce Dept. Letter, 11-15-72
By RHP, Date MAR 29 1973

Assigning Munitions: Who, What, How

Scorecard on Merchant Shipping

Number 164

November 6, 1943

From Detroit to the Dnieper via MAB

Munitions Assignments Board is responsible for getting planes, tanks, guns, etc. to the right battle fronts at the right time. Is arm of Combined Chiefs of Staff.

THE MUNITIONS ASSIGNMENTS BOARD is the link between United States munitions production and United Nations strategy. Yet few persons have heard of the MAB, and few of those know what it does and how.

In terms of dollars and geography, the "what" of MAB's job is big and broad. Each month the MAB assigns $800.000,000 in ships, airplanes, tanks, guns, ammunition, trucks, fuel, etc. to this country's allies—the United Kingdom, British troops in the British Empire, Russia, etc. Around $9,000,000,000 in munitions has been transferred since MAB went to work in February, 1942—about three-fourths to the British Empire, about one-fifth to Russia, and less than 5% to all the others.

SIGHT UNSEEN

The "how" of MAB's job is more complex. Though MAB has the responsibility of assigning munitions, the planes, tanks, guns, etc. never come into its physical or legal possession. The MAB proposes, but the Army and the Navy dispose. And it must put across its point of view so that operating officials will implement its proposals. This it does through committees and subcommittees, of which more later.

The MAB functions under a broad directive; and because it must assign the right weapons to the right places at the right time for military operations, MAB must be in the know on overall Anglo-American (and, ideally, overall United Nations) strategy. Therefore, MAB was set up as an arm of the Combined Chiefs of Staff. And like the Combined Chiefs of Staff, membership includes Army, Navy, and Air Forces officers from both the United States and Britain, with a civilian, Harry Hopkins, as chairman.

MOST OUT OF LEAST

When MAB was first set up, this country's war production lines were just beginning to limber up. Scarcity, not plenty, was the rule. And MAB's initial job might be described as assigning scarcity: deciding who shouldn't get what. One of the earliest problems which landed on MAB's round table was how to distribute a far-too-inadequate supply of armor-piercing machine-gun ammunition, needed in the air defense of Great Britain and in both air and ground warfare in the Middle East. The Combined Chiefs of Staff had instructed the MAB that both the North African and British theaters were of equal priority. Therefore, MAB could not assign the ammunition to one theater as against another. However, it did conclude that the ammunition would be most effectively used in the air, rather than on the ground. It therefore authorized the use of the ammunition in both theaters, but in the air only.

The assignments routine begins when foreign nations enter bids for munitions to subcommittees of U.S. officers, designated by the War and Navy Department and the Air Forces. These subcommittees are charged with working out allocations of specific materials and supplies—bombers, fighters, petro-

leum, quartermaster's items, naval ordnance, etc. Their listings of munitions, by nation and even by theater of operation, pass upward to committees of combined U.S.-British membership with U.S. chairmen. There are four of these —land, sea, and air, and a new one called CRACC (Communications and Radar Assignments Coordinating Committee) which deals in communications items common to all services but in most instances procured by one, such as teletype printers by the Army.

STRATEGIC BALANCE

These committees' plans for assignments are submitted to the Munitions Assignments Board every month. Usually the proposals are accepted as is—largely because the committees have worked in close relationship with the Army and Navy and with the working staff of the MAB, who are familiar with the strategic balance of the war, and are able, thereby, to direct their assignments accordingly.

But there are times when the British and American members of committees may have diametrically opposed views. Then these differences are hashed out in the entire board. Usually a compromise is reached. In only two cases have appeals from MAB judgments been carried to the Combined Chiefs of Staff, and one of these was really a request for further information on strategic preference.

ALL INTERESTS POOLED

With only Britain and the U.S. represented directly before the MAB, the board must act as advocate for other nations. The interests of the passive belligerents—even of neutrals—require support against the natural demands of the fighting allies. Russian munitions are a matter of protocol, but even they may need a push when competition for critical weapons or shipping space runs high. So, a U.S. Army representative might be heard arguing for a cut in the allowance to our own forces in a particular month to permit assignment to one of our allies.

Thus, members of the MAB have a special obligation—to get away from strictly nationalistic viewpoints. They must see the overall picture, and vote assignments which in the long run will bring to bear the greatest united pressure on the Axis. President Roosevelt and Prime Minister Churchill made this approach mandatory when they described Anglo-American war production as a "common pool." The Washington MAB, accordingly, has a counterpart in London to assign British output where it will count most heavily.

SHARING SHORTAGES

A problem which persistently has perplexed the MAB occurs whenever production does not come up to schedule—and that has been often. The plan of distributing U.S. munitions, of course, is of a long-term nature, and allocations depend on production schedules being met. If schedules are not met, then the MAB must wrestle with the problem of whom to deprive. In such cases,

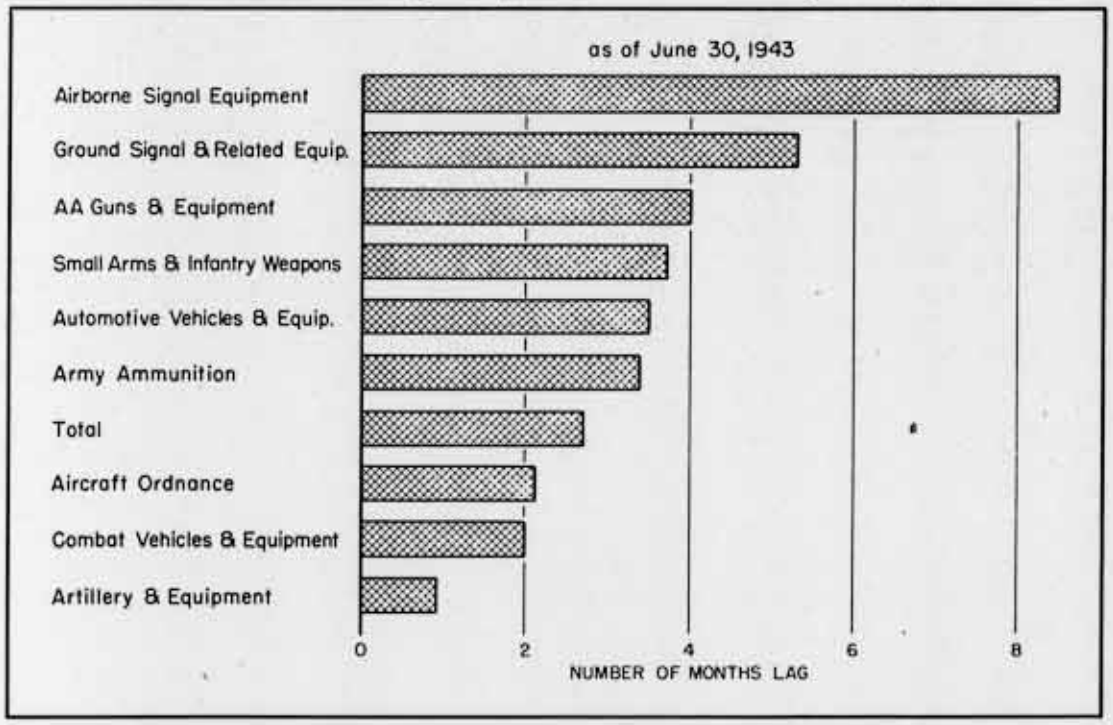
IN THIS ISSUE:

the urgent needs of U.S. forces are closest at hand, and the percentage tends to run in this country's favor. Thus in the first half of 1943, for example, assignments of army signal equipment ran about 15% under the share which the other United Nations could have expected on the basis of ASP requirements. On the other hand, it is an outstanding fact that early in 1942 U.S. forces were virtually stripped of tanks in order to ship them P.D.Q. to British and Russian fighting forces. Motor trucks, self-propelled artillery are other examples of assignments which outran the proportion originally proposed for our allies.

Because of recurrent shortages in basic weapons, the MAB constantly had to examine the urgency and legitimacy of requirements of all the United Nations. It also had to see that munitions

FROM ASSIGNMENT TO TRANSFER

By June, the lag between MAB assignment and transfer of major ASP items was 2 ½ months. Farthest behind: Signal equipment. Closest: Artillery and equipment.

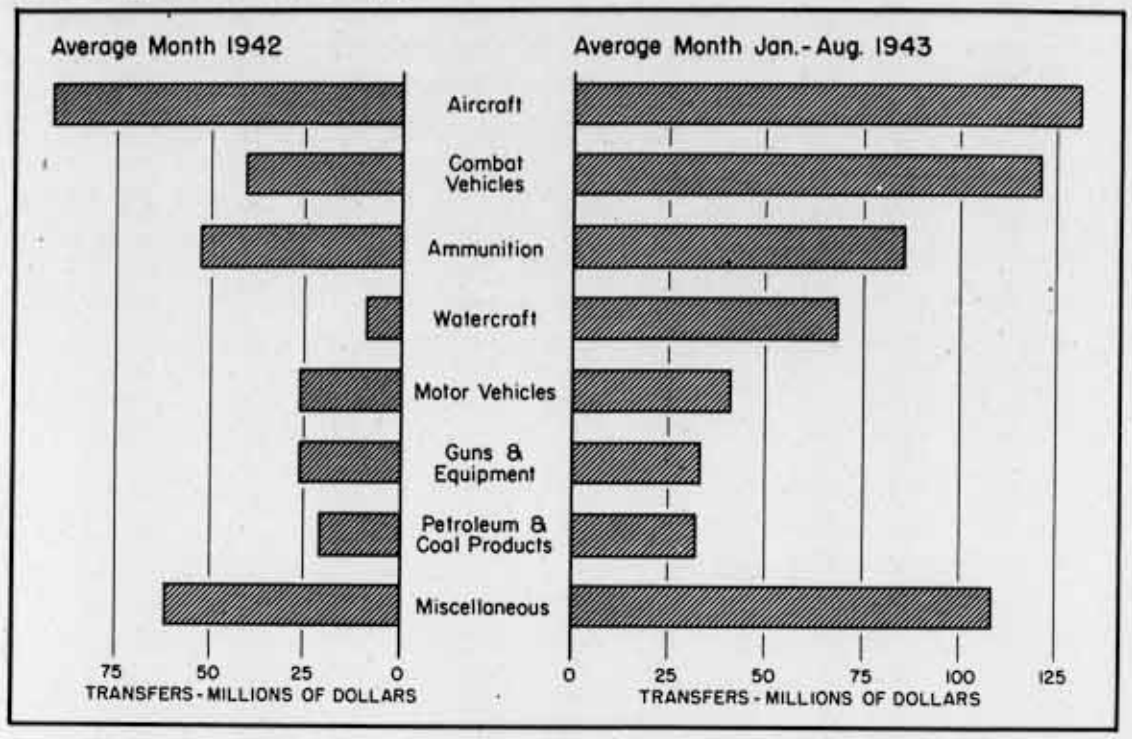


WAR PROGRESS

The Munitions Assignments Board is responsible for assigning U.S. munitions production to Russia, Britain, and others of the United Nations. In the last week of each month the board passes on the distribution of tanks, ammunition, etc. due to come off the production line the month following. When the tank or gun is completed, the Army (or the Navy) notifies the ultimate recipient. After that the munition is shipped to a port, where the physical transfer usually takes place. An average time of more than two and one-half months elapses between assignment and actual transfer on major army items. (Of this, however, up to a month is routine on most—the time between assignment and completion.) But there are wide differences among items, as the chart shows. Delays may occur when production schedules are missed, when urgent needs at a particular front upset assignment plans, when further work is done on equipment after it leaves the manufacturer, and so on.

MUNITIONS TO OUR ALLIES

Average monthly transfers by Army and Navy so far this year are nearly double 1942's. Watercraft up sharply.



WAR PROGRESS

moved, that they did not lie around inutile in ports. To this end, MAB applied a 45-day rule. This provided that any goods not floated 45 days after notice of availability were subject to review and reassignment. The rule not only made it possible to clear ports of slow-moving stuff, but it also kept MAB informed of shipping bottlenecks and, in effect, pulled MAB into shipping questions. When, early in 1942, shipments to the U.S.S.R. were inadequate, MAB looked into the feasibility of the Persian Gulf route to Russia; the Army and War Shipping Administration made studies of port capacity and then increased the capacity and use of the route substantially.

MAB's combined membership made it possible to compare the stated requirements of the U.S. and the British armies and navies. It might develop that the British ratio of rounds of ammunition to a weapon was different from that of this country; or that expectations of bombs dropped per plane were higher over here than over there, and so on. These cross-the-table comparisons have often led MAB into penetrating studies of individual programs in both Britain and the U.S. To make such studies, MAB has its own staff of economic and statistical analysts who must be familiar with the strategic and tactical uses of ships and weapons.

BIGGEST CHUNK: PLANES

As might be expected, aircraft has comprised the biggest chunk of MAB assignments to America's allies; combat vehicles came next and, during the first eight months of this year, approached planes and parts (chart, above). By

far the bulk of munitions transfers from January, 1942, through August, 1943, were Army procured ($6,900,000,000), a bit over $2,000,000,000 were Navy procured, as follows:

	Army	Navy	Total
		(millions)	
Aircraft.....	$1,928	$238	$2,166
Combat vehicles	1,461	—	1,461
Guns & equipment.....	471	98	569
Ammunition.....	1,193	124	1,317
Watercraft.....	—	660	660
Motor vehicles.	642	—	642
Petroleum & coal products.	10	494	504
Miscellaneous..	1,193	430	1,623
Total.....	$6,898	$2,044	$8,942

MAB's job is apt to change dramatically if the European theater becomes less important than the Pacific theater. Then the whole scale of preferences would change. Once the Japanese blockade is broken, aid to China might rise to high C. Moreover, apart from the war's trend, MAB's work is changing. As U.S. production approaches its peak, scarcity problems become less acute. With more munitions to go around, the decisions confronting the MAB are not so hairline as formerly. And in this, the MAB, itself, has been instrumental. To the extent that the board has been influential in changing requirements, in saving materials, it has relieved the tightness in munitions and hence the pressures for supplies which were so critical six months and a year ago. Like most war agencies, the better it does its job, the quicker it gets out of it.

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program - Checks paid (millions of dollars)	1,536	1,616	1,640	2,112	1,196
War bond sales (millions of dollars)	194	137r	712	720	271
Wholesale prices (1926=100)					
All commodities	102.8p	102.9p	103.0p	103.5	99.7
Farm products	122.2	122.7	123.6p	124.3	109.1
Foods	105.0	104.8p	105.0	108.7	103.0
All other than farm products and foods	97.5p	97.5p	97.5p	96.9	95.7
Petroleum:					
Total carloadings	51,934	53,903	54,921	56,833	52,039r
Movement of cars into the East	24,584	24,303	25,709	29,770	25,069
Total stocks of residual fuel oil (thousands of barrels)	63,838	64,747	66,407	66,991	79,149
East coast stocks for civilian use (1940-41=100 Seas. Adj.)					
Gasoline	36.0	34.9	n.a.	n.a.	n.a.
Kerosene	51.9	51.6			
Distillate fuel oil	55.7	53.1			
Residual fuel oil	79.5	81.1	n.a.	n.a.	n.a.
Bituminous Coal:					
Production (thousands of short tons, daily average)	1,883p	1,954	2,017	1,973	1,925
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	2,417	2,423	2,719	1,673	1,284
Gulf Coast ports	405	420	384	376	313
Pacific Coast ports	1,259	1,288	1,454	1,149	911
Steel operations (% of capacity)	100.0	100.6	100.8	98.2	99.6
Department store sales (% change from a year ago)	+10	+12	-5	-5	-15

p. preliminary r. revised n.a. not available

Bumper Crop of Forts, Liberators, et al.

One out of five combat planes is a heavy bomber. October showing all along the line is handsome, even discounting the special factors which hiked total.

LAST month's airplane production was not only at a new high, it was also wide and handsome. At 8,362 planes, acceptances ran 10% above September; in airframe weight the gain was nearly as good —9%. More important, the increases reached throughout the list of combat planes. And it was the handsomest month-to-month rise since May.

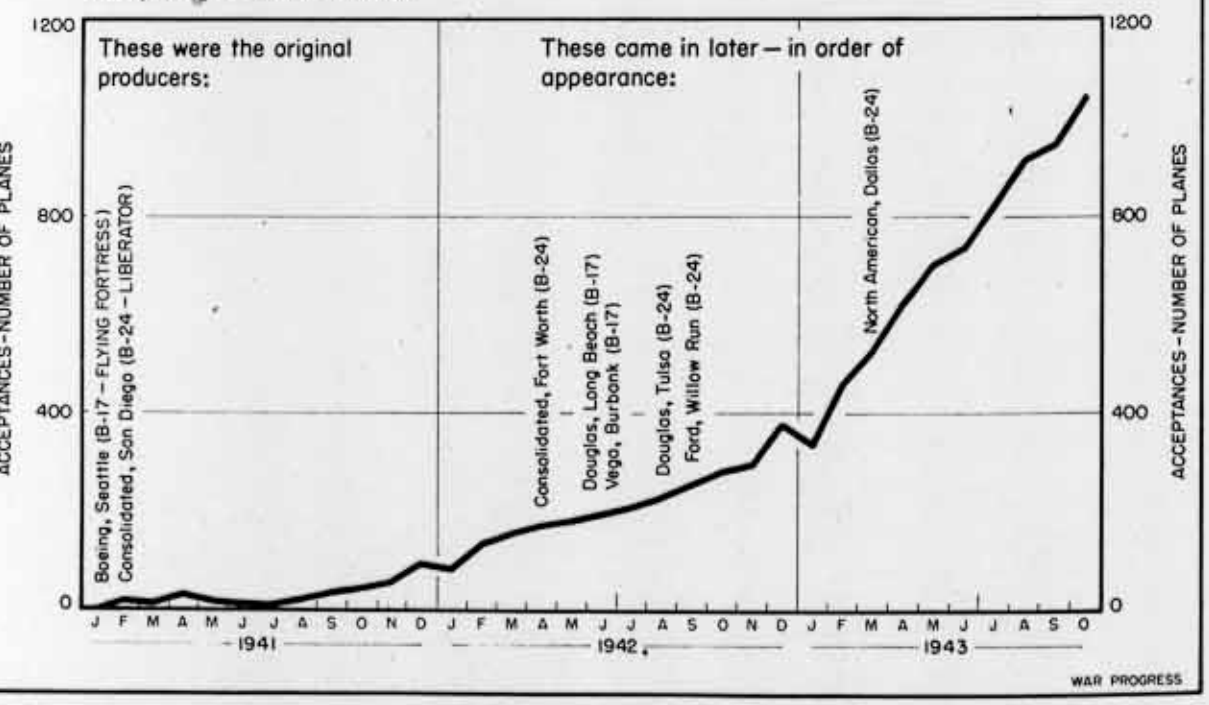
However, it can be exaggerated. Special factors were at work. For one thing, the gain in communications planes (puddle jumpers) was exceptional; the same goes for special-purpose planes. Furthermore, about 150 combat planes and possibly more represented a carryover from previous months' production; they had been almost, but not quite, finished and were awaiting materials, components, or the completion of design changes. For example, in the case of the 2-engined P-38 Lightning, the 351 accepted were 126% ahead of September and 1% ahead of schedule. Yet in August only 102 were accepted; many were held back because of engineering changes.

ENCORE UNLIKELY

These special influences boosted the October total of acceptances by perhaps 300 planes all told; hence it is not wise to expect November to follow through with another increase of the same magnitude. Equally it is not sound to look for next month's production to come so

THE FORTS AND THE LIBERATORS...

And the cast of characters. All plants are now in operation as acceptances pass the 1,000-a-month mark.



close (4%) to the W-8 schedule as October's did.

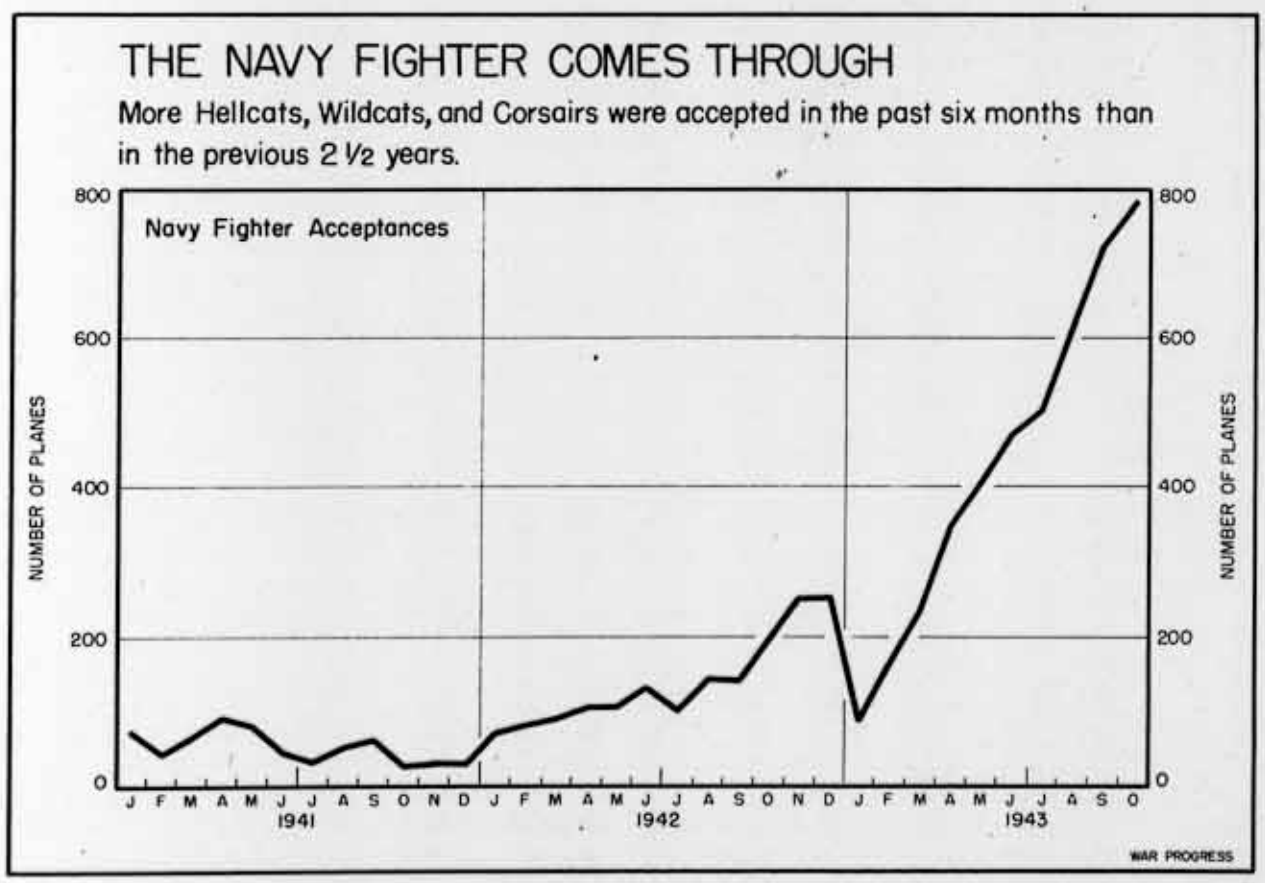
With the exception of light bombers, each major combat-plane group exceeded September, as the following table shows (airframe-weight basis):

	October Acceptances as % of	
	September	W-8
All mil. planes.....	109%	96%
Combat planes.....	111	97
Heavy bombers.....	110	98
Patrol bombers....	116	98
Medium bombers....	111	98
Light bombers.....	94	94
Fighters (incl. naval reconn.)...	123	95
Transports.....	87	85
Trainers.....	105	95
Communication.....	141	110

One out of every five combat planes last month was a Flying Fortress or a Liberator; a record-breaking total of 1,048 of these heavyweights was accepted (chart, page 6). Indeed, the showing was 11% better than September and 3% ahead of the October, 1943, goal of 1,014 set in the 8-I program directly after Pearl Harbor. That monthly goal was then regarded as terrific, if not unattainable.

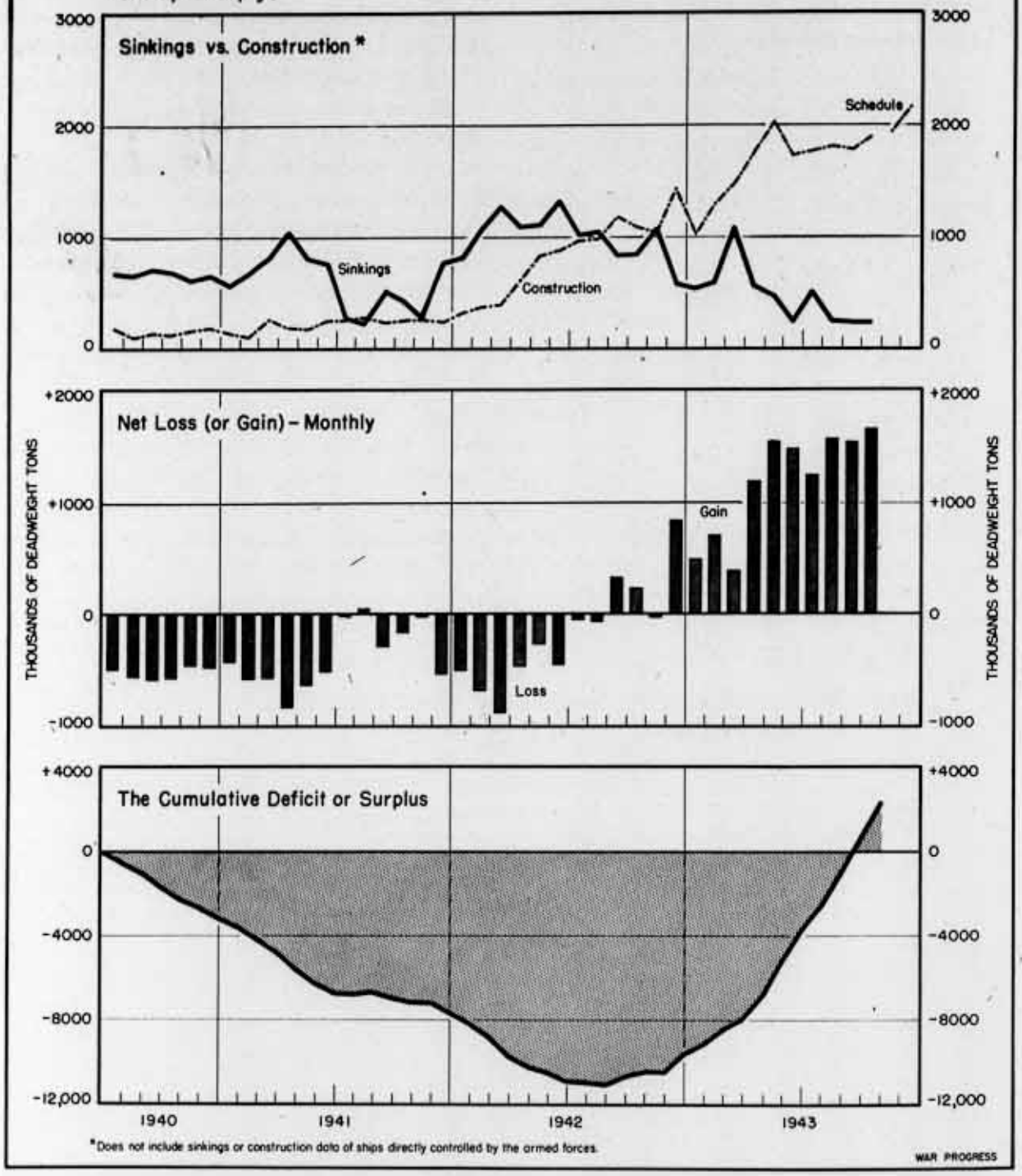
All Fort and Liberator plants except North American, Dallas, where installation of the latest type of anti-icing equipment hampered output, and Consolidated Vultee at Ft. Worth met or exceeded schedule. And the showing in West Coast plants reflected the new manpower plan (WP-Oct30'43,p1):

Plant and Location	Oct. Accept.	% Deviation Sept.	W-8
Boeing Seattle (B-17)....	210	+5%	+2%
Consolidated Vultee Ft. Worth (B-24)..	169	+37	-6



SCORECARD ON MERCHANT SHIPPING

Sinkings of United Nations vessels continued low in October, and the cumulative surplus went up sharply.



United Nations construction of merchant ships in October was the second highest on record, just short of the May peak. Chief factor was the record construction in U.S. shipyards, which amounted to some 1,600,000 deadweight tons (excluding conversions). Sinkings, on the other hand, continued at the low August-September levels. The United Nations fleet (excluding military) is now some 2,000,000 deadweight tons larger than in June, 1940.

Plant and Location	Oct. Accept.	% Deviation Sept.	W-8
Consolidated Vultee			
San Diego (B-24)..	245	+7	Nil
Douglas			
Long Beach (B-17).	88	+4	+1
Douglas			
Tulsa (B-24).....	53	+6	+2
Ford			
Willow Run (B-24).	163	+9	+9
North American			
Dallas (B-24).....	12	+100	-52
Vega			
Burbank (B-17)....	108	+4	+4

The long-range heavy (super) bomber didn't do so well last month; the 13 accepted at Boeing's Wichita plant were two below September and five short of the W-8 plan. Failure to receive Wright Cyclone 2,200hp engines was a major factor.

Acceptances of 250 Billy Mitchell medium bombers (B-25s) topped September by 37% but failed to make schedule by 10 planes. Trouble here was that North American's Kansas City plant ran into a late-in-the-month shortage of shimmy dampers for the tricycle landing gear.

AVENGER MISSES TARGET

Navy light bombers continued to make the poorest showing among combat planes; the 638 accepted were 13% behind September and 19% short of schedule. About half of the deficit from schedule—70 planes—was accounted for by General Motors' Eastern Aircraft Division at Trenton, which failed to hit the target on the Avenger for the first time since April. Reportedly, bad weather cut down on flight testing so that 63 completed planes weren't accepted; these should come through in November.

Republic at Evansville turned out 136 Thunderbolts, three ahead of September; but the schedule called for 160. Planes delivered to modification centers were returned for additional work and crowded assembly lines slowed down output. A clean-up is expected this month. On the other hand, the high-preference P-51 Mustang scored a new peak in October: 283 were accepted, 41% ahead of September and 13% more than called for.

NAVY FIGHTERS CLIMB

Navy fighters continued their unbroken record of monthly increases in 1943 with a gain of 8% in October to 786 planes (chart, page 7). However, results fell short of the ambitious schedule for the second month in a row: in September the deficit was 3%; last month it widened to 13%. More than half of the deficiency occurred at General Motors' Eastern Aircraft Division at Linden, where Wildcat acceptances were hindered by a shift to a new engine.

The 2-engined Curtiss Commando (C-46) transport plane had its lowest month since February; only 14 came through, against 38 in September and a schedule of 42. The C-46 is still being redesigned; last reports were that 11 major engineering changes were in process, including a new hydraulic system.

Not Out of the Woods

There aren't enough loggers to cut down the timber and consumers have been forced to dig deeply into lumber stocks. Stricter controls over distribution are sought.

WHEN THE WAR broke out, lumber was the substitute of all trades—if you couldn't use steel, use wood. By June, 1942, it was a critical material (WP-Aug21'42, p5). And now it's one of the tightest commodities. There's still plenty of wood in the woods, and more than enough milling capacity to saw all the lumber we need. The problem is manpower.

Normally, the industry employs some

460,000 workers—in the woods and in mills. By now more than 100,000 have been lost, some to the armed forces, more to shipyards and airplane plants offering higher wages. The most acute shortage is in loggers, who are the hardest to replace. Still worse, the average output per worker has declined —as much as 20% according to some estimates—as experienced men have been replaced by older, less vigorous men and by women and boys.

NO LUMBER TO BURN

Hence production has fallen well below consumption, even though the use of lumber has been severely curtailed:

Year	Production	Consumption
	(billions of board feet)	
1941.....	36.0	36.0
1942.....	36.4	42.0
1943 (est.)..	32.5	36.0
1944 (est.)..	32.0	32.9

The deficiencies in production have been made up chiefly out of stocks. (Imports have helped somewhat, but they have been dropping, as Canada too is up against a manpower problem.) Now stocks can't be counted on to help out much longer. Where there were 16,000,000,000 board feet in mills and yards at the end of 1941, by June 30 of this year there were only about 7,000,000,000 board feet—little more than a working inventory. Moreover, the remaining stocks are badly unbalanced in respect to the particular species, grades, and sizes required for war uses.

To ease the manpower shortage, the government has provided draft deferments for loggers, authorized longer hours with overtime pay and a higher minimum wage, and improved recruiting and training facilities. As a result, the industry is now about holding its own. But it can hardly hope to get back the workers it has lost.

The immediate job is to make the best of what lumber we have—to develop a set of controls which will allocate supply to the most urgent demands. To date, limitation and conservation orders have been the main method of distribution and have made it possible to meet major military needs.

ENOUGH WOOD FOR PLANES

Thus aircraft lumber is no longer a problem. Although the available supply of Sitka spruce—the species best suited to airframe purposes—is still below requirements, both the U.S. and the U.K. have surplus stocks of adequate substitutes. And no shortages are anticipated for 1944, especially since glider and other wooden aircraft programs have been cut back. Likewise, distribution of the once critical Douglas fir and the various species of Western pine, which account for about half of the total lumber production, has been controlled so effectively by L orders restricting sale only to the armed services or to buyers authorized by the War Production Board that large quantities can now be released for essential civilian and indirect military uses.

TOO MUCH MILLING AROUND

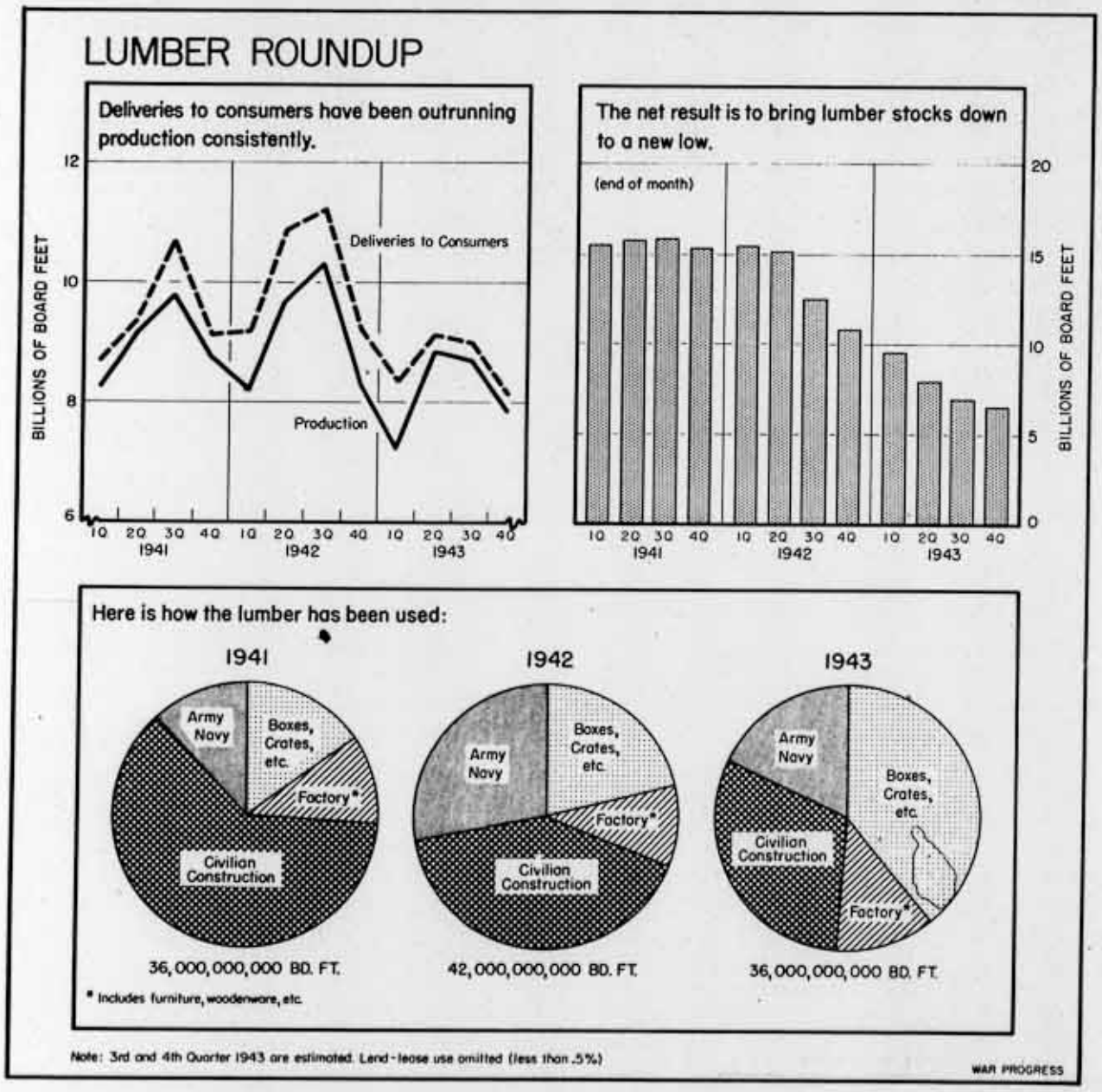
However, this still leaves a lot of lumber to be taken care of; and the controls over this balance have not been generally effective. Lumbering is an extremely heterogeneous industry. There are some 80 different species of lumber falling into any of 100 grade classifications, produced by 37,000 active mills scattered all over the country, and distributed through 25,000 retail and wholesale yards. Approximately 1,000 mills account for 60% of the total production, but 26,000 small mills ac-

count for as much as 15%, or 5,000,000,000 board feet. This setup is not conducive to easy control of distribution.

FIGURES DON'T HOLD STILL

For one thing, the War Production Board's Lumber Division can never be sure of the figures. All production, consumption, and stock statistics involve some rough estimation. A recent survey of inventories, for example, cut previous stock estimates by 2,000,000,000 board feet. And the division won't be surprised if the consumption estimate of 33,000,000,000 board feet in 1944 is later revised by two or three billion.

Much more serious, distribution controls are hard to devise for all the species and grades of lumber, with their countless uses, and are hard to enforce upon all the small, scattered mills. The preference rating system that has been used for miscellaneous lumber has necessarily involved such numerous and



often complicated regulations that widespread violations have occurred, either through ignorance or by intention. And there aren't enough investigators to go around.

TIGHTENING UP CONTROLS

Moreover, the Lumber Division has no check on how authorized buyers use their lumber after they get it. Oftentimes statements of needs are high, and stockpiles are built up. That's one reason why an attempt to ration lumber to necessary uses—for Army, Navy, Maritime, and other war projects—is being worked on.

To prepare for a closer control, WPB is conducting the Timber Production War Project in cooperation with the U.S. Forest Service. Field men have been sent out to check on controls but especially to educate the small producers and distributors regarding regulations. Furthermore, the newly reorganized Lumber Division has sent complete instructions to the claimants for lumber, whose requirements estimates hitherto have generally been incomplete; it expects to receive more accurate estimates for 1944.

LITTLE END OF THE HORN

Stricter controls will be the more necessary because of growing pressure from civilian users. Lumber used for civilian construction has fallen from 61% of the total production in 1941 to 31% in 1943 (chart, page 11)—with 60% of this in turn being devoted to such indirect military uses as war housing. Likewise, the great bulk of the lumber used for boxing, crating, and dunnage—now the chief consumer—will be for direct or indirect military use. Altogether, civilians will get only 8,000,000,000 board feet, or 23% of the total, for their ordinary purposes in 1943.

War Progress Note

MORE HOURS, PAY, AND COAL

EFFECT of the new bituminous coal agreement is to make the coal miner one of the highest-paid workers in industry; but he'll have to work for it.

Until this week, earnings of bituminous coal miners ran less than those of workers in durable-goods industries generally. But they worked less time. Thus in August, miners averaged only $46.21 on a 40.5-hour week as against $49.61 in durable-goods industries on a 46.8-hour week.

The new wage agreement turns this picture upside down. Miners are scheduled to put in a 52.5-hour week (including 4.5 hours portal-to-portal time) and collect $56.75. Only shipbuilding, aircraft engines, and a few other industries can top that take-home pay. In machine tools, for instance, August earnings ran to $52.50 on a 50-hour week. Here's how miners' wages and hours compare with those of some other industries:

	Aug., 1943, Average Earnings	Hours
Shipbuilding....	$61.07	47.8
Aircraft engines	59.18	46.7
Bituminous coal*	56.75	52.5
Machine tools...	52.49	49.7
Durable goods av.	49.61	46.8
Airframes, parts	49.26	46.1

*Under new agreement

At first glance the statistics seem to indicate that the miner will put in 30% more time—12 additional hours—to get the $10 weekly increase over his former August pay. Actually, four and one-half of these hours are really a pay credit for portal-to-portal time. The miner put them in formerly, but they weren't allowed for. Now overtime pay will start after 40 hours; previously it was figured after 35 hours.

The President

3

WAR PROGRESS

Confidential

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Commerce Dept. Letter, 11-16-72
By RHP, Date MAR 29 1973

Cooler Weather, Hotter Production

Another Billion in Lend-Lease

Construction Roundup

Number 165 November 13, 1943

More Know-how + Cool Weather=5% Gain

Munitions production recovers from summer letdown. Expanding programs—aircraft, ammunition, ships, signal equipment—lead the advance. Experience builds up.

MUNITIONS PRODUCTION last month dramatized the drop in temperature. It rose to $5,700,000,000, a gain of 5% over September. Five out of six major munitions groups participated in the advance—and the one that declined, combat vehicles, was just about on schedule.

Indeed, the outstanding fact of the month was that expanding programs made substantial gains:

Aircraft	9%
Ships	5%
Ammunition ...	11%
Signal	9%

Guns, scheduled upward through December, rose 1%. War construction, a declining program (page 7), was off 9%.

EXPERIENCE PAYS OFF

The cooler weather undoubtedly stimulated production—workers were less inclined to take days off, work was more bearable after the summer heat. And generally, labor problems, design changes, and spotty shortages were less troublesome than in earlier months. This reflects experience. Despite isolated bad examples, individual plant scheduling of materials and parts into end products has been improving, and most assembly lines have been moving more smoothly.

There is this further inference: the midsummer slowness was not actually as bad as painted by the statistics. Though month-to-month production gains were not up to those of January through April, nonetheless the accumulation of know-how—better management, better trained workers, etc.—was a hidden net gain, which showed up in last month's deliveries. It is, moreover, a continuing influence.

However, the October performance does not change a basic fact about the war program: production is much farther along toward the ceiling than earlier in the year; thus gains will come harder. This is especially true since the number of programs still scheduled to expand is narrowing.

Aircraft

As usual, airplanes carried production. At $1,586,000,000, output of airframes, propellers, engines, gliders, spare parts, etc. was up 9% over September, duplicating the gain in airframe weight (WP-Nov6'43,p6). The increase of $136,000,000 was more than half the gain in total munitions production.

The airplane showing was particularly impressive relative to schedule. For the first time this year, the number of models meeting or exceeding their goal (excluding trainers, communications, and light transports) was higher than the number that failed to do so—32 as against 26. In January, 39 were below schedule as compared with 15 at or above.

MORE REALISTIC GOALS

Not all of this exceptional record is to be taken at face value. The reduced airplane schedule (W-8) went into effect in the middle of October (WP-Oct-23'43,p1), bringing goals down to more

realistic levels. Moreover, about one-quarter of the 771-unit increase represented a clean-up of planes which were almost completed in previous months. But there is no gainsaying that design changes and materials and components shortages were few and far between.

Practically all of the below-schedule performances last month were in new models—planes being produced at particular plants for less than a year. Typical examples were the P-47 Thunderbolt at Republic, Evansville, and the B-29 superbomber at Boeing, Wichita. Conversely, most of the above-schedule performances were in the so-called established models—planes which plants have been working on for more than a year. These included the P-39 Airacobra at Bell, Buffalo, and the P-51 Mustang at North American, Inglewood.

OLD-TIMERS DO BEST

During October, production of established models came within 1% of the W-8 schedule; but new models were 11% short. In relation to schedules, the performance of both groups has been unimpressive throughout the year (chart, page 4).

IN THIS ISSUE:

But established models have done consistently better than new models, a reflection of the high incentive factor put into new-model schedules (WP-Oct23'43, p1).

SPURS FOR THE COLTS

Since virtually all new combat models represent top-preference planes, they are subject to the heaviest over-scheduling—from 3 to 5% at the beginning to as much as 25% at peak monthly output. The Navy light bomber group, which includes four new models out of a total of seven, illustrates the point; it has been making the poorest showing of all combat-plane groups.

Another factor is the plant itself. Manufacturers often underestimate the time it takes to line up suppliers, build up the efficiency of their labor force, and fix on the best method of flowing materials to the assembly line. Moreover, design changes are likely to be more frequent as well as more difficult to handle.

Army Ordnance

Army ordnance output in October can be summarized in three sentences.

1. Artillery fell and small arms climbed, but both exceeded schedule.
2. Ammunition jumped sharply as scheduled.
3. Combat vehicles dropped off as per plan, but trucks and tractors as a group rose above schedule in contrast with recent laggard months.

The decline in artillery ran to 9% and reflected the recent (July-October) 19% reduction in 1943-44 ground artillery schedules. Next year's program calls for a 42% lower output than this year. The 1944 stepdown starts right off with a big drop in January.

By far the major factor in the gun cutback is antiaircraft; 1944 schedules run to less than half of this year's. In

keeping with this trend, the 90mm. mobile AA gun was down last month from 267 to 93, the 4.7-inch from 69 to 50, and the 40mm. Bofors from 1,020 to 935. The 75mm. tank gun, in accord with the step-down in the tank program, was off from 1,455 units to 995. This program all but passes out of the picture next year.

The trend toward larger, more offensive weapons (the program calls for a one-fourth gain in pieces over 105mm. next year) is borne out to a moderate degree by the October results. Thus the 155mm. howitzer beat schedule by 17,

GUNS WITH GUNS, SHIPS WITH SHIPS...

WITH this issue of WAR PROGRESS, statistics on munitions production are put on a new basis.

Until now, the standard procedure has been to classify a gun or a type of ammunition by a particular use. Thus, airborne signal equipment, aircraft guns and ammunition, as well as airplanes and spare parts, were classified under aircraft. Yet signal equipment, whether used on the ground or in the air, is still signal equipment. And many guns mounted on airplanes are used on the ground too —machine guns particularly.

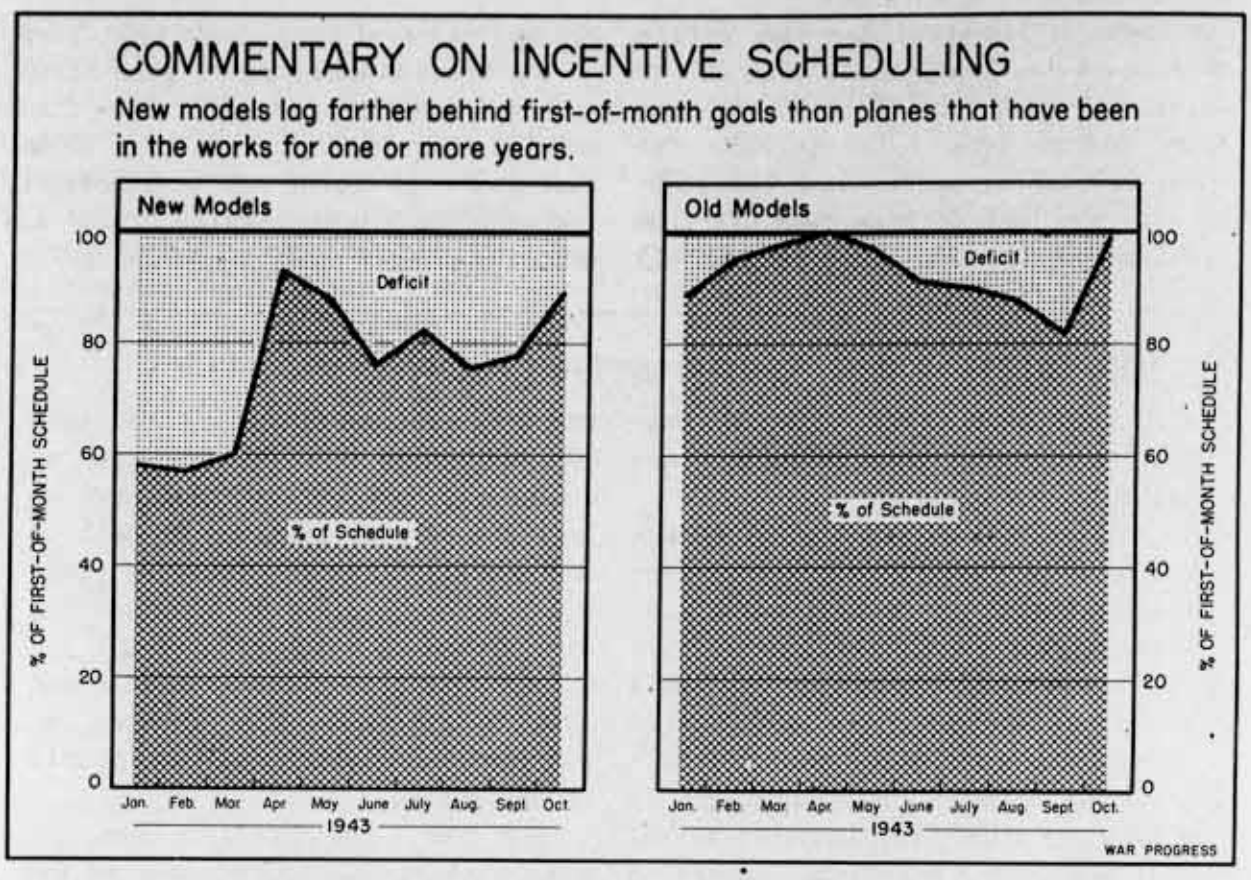
For this reason a new type of classification was worked out by the War Production Board's Bureau of Planning and Statistics. Hereafter guns will be lumped together as guns—whether used in the air, on the ground, or on the ocean; whether used by the Army or the Navy. Similarly with ammunition; similarly with communication and electronic equipment (the new term for signal devices); etc.

The new classification has a definite production purpose. The same general type of facility is used in the manufacture of guns. And the characteristics of facilities used to load most types of ammunition are also more or less the same. Similarly, no matter under whose jurisdiction cargo ships or patrol vessels are built—the Maritime Commission, the Army, or the Navy—shipyards making the same type of ships use the same type of equipment, and collaterally more or less the same proportions of skilled and unskilled labor. Thus, by lumping like with like, it is possible, say, to work up a schedule of all gun or all ship production into 1944 and then to determine the probable requirements for labor in all gun plants or shipyards.

The new classification uses the same statistical ingredients as the old, but it breaks them down much finer. Hence it is still possible to obtain all totals formerly available, including the procurement agency—Army, Navy, Maritime—totals and subtotals.

Also it is possible to work up groupings according to use; thus items specifically and exclusively under aircraft, from airframes down through ordnance, can be combined into a single total; similarly all specific naval items, whether procured directly by the Navy or the Maritime Commission.

But for simplicity of presentation —for the purpose of putting like with like regardless of which service ultimately uses the gun or the shell—the new classification speaks for itself. Its advantages are indicated by the new WAR PROGRESS preliminary production table, page 5. The table, however, is not necessarily in final form. Changes may suggest themselves.



holding to the September level of 197 pieces. This gun is scheduled to rise to over 200 per month next year. It's noteworthy that the 75mm. aircraft gun —new big gun for airplanes—beat September by 70% but missed schedule by 52%.

MEDIUMS POINTED DOWN

The medium guns (75mm. to 105mm.), on the other hand, went down sharply—this too is in accord with plan: the 1944 program is 70% below 1943. Exception to the rule was the new and much-in-demand 76mm. self-propelled gun—526 were produced as against a schedule of 500 and a September production of 339. Also running counter to the general rule were the 37mm. and 57mm. pieces; both of these were up last month. The 1944 program for this group is some 40% under this year.

Among small arms, rifles led the advance. Carbines surpassed September by 24% with 411,000 accepted; this was 7% ahead of schedule. And 129,000 Garands were accepted, 14% above schedule and 15% higher than September output. The group was up 10%.

Combat and motor vehicles dropped 2% in October. Tanks led the decline —the M4 medium, with 1,246 produced, was off 21% and about on schedule. Light armored cars M8 and M20 fell in about the same ratio. But trucks, a rising program in contrast to combat vehicles, gained 5%, exceeding schedule. Heavy trucks, which have been a problem because of components, still failed to make their goal, but nevertheless rose 5%. And tractors were on schedule with a 20% gain but must more than double October output to achieve their November goal.

Artillery ammunition, up 26%, almost met schedule and was the main factor in the 11% gain in ammunition as a whole. Small arms ammunition was even with September and slightly above schedule,

and the same holds for the principal items—.30- and .50-cal. cartridges.

The bazooka rocket, which returned to production in August, surpassed September production by 27%, with 453,000 rounds. Parenthetically, the launcher fell off 30% to 7,500, as scheduled.

Signal Equipment

Communication and electronic equipment pushed into new high ground. It was up 9% to $416,000,000 (preliminary), and only 4% behind the stiff schedule.

The showing for the month follows:

	October Production as % of Schedule	Sept.
Total signal equip. ..	96%	109%
Radio	96	110
Radar	97	105
Other	93	111

Ground radio items for the Army came back from a 15% below-schedule performance in September to 2% above last month. Army airborne radio also performed well, exceeding its goal by the same margin.

The airborne radar program, which has been slowed up from time to time by

PRODUCTION PROGRESS – Preliminary

Value delivered or put in place – millions of dollars.

	Oct. Preliminary	Sept. Actual	% Change	Oct. Schedule*	% Deviation Oct. Prelim. vs. Schedule
MUNITIONS AND WAR CONSTRUCTION	$6,400	$6,211	+ 3%	$6,632	- 3%
TOTAL MUNITIONS	5,700	5,444	+ 5	5,932	- 4
Aircraft	1,604	1,468	+ 9	1,725	- 7
Total airframes, engines, propellers	1,180	1,072	+10	1,264	- 7
Airplane spare parts	389	362	+ 7	418	- 7
Other aircraft and equipment (ex. commun.)	35	34	+ 3	43	-19
Ships (incl. maintenance)	1,210	1,153	+ 5	1,294	- 6
Combat	488	472	+ 3	451	+ 8
Landing vessels	90	79	+14	110	-18
Cargo and supply	340	320	+ 6	373	- 9
All other	292	282	+ 4	360	-19
Guns and Fire Control	407	403	+ 1	402	+ 1
Small arms (under 20mm.)	108	99	+ 9	104	+ 4
Artillery, mortars, rocket launchers – ASF	89	98	- 9	88	+ 1
Fire control and searchlights (ex. Radar)	101	99	+ 2	102	- 1
Naval guns and other	109	107	+ 2	108	+ 1
Ammunition	707	636	+11	711	- 1
Small arms (under 20 mm.)	198	198	0	197	+ 1
Artillery, mortars, rocket launchers – ASF	215	171	+26	219	- 2
Aerial bombs	88	87	+ 1	88	0
Naval ammunition and other	206	180	+14	207	nil
Combat and Motor Vehicles	542	553	- 2	547	- 1
Combat vehicles	230	257	-11	236	- 3
Motor carriages for S.P. guns	76	74	+ 3	79	- 4
Automotive vehicles and tractors	236	222	+ 6	232	+ 2
Communication and Electronic Equipment	416	381	+ 9	435	- 4
Other Equipment and Supplies	814	850	- 4	818	nil
WAR CONSTRUCTION	700	767	- 9	700	†

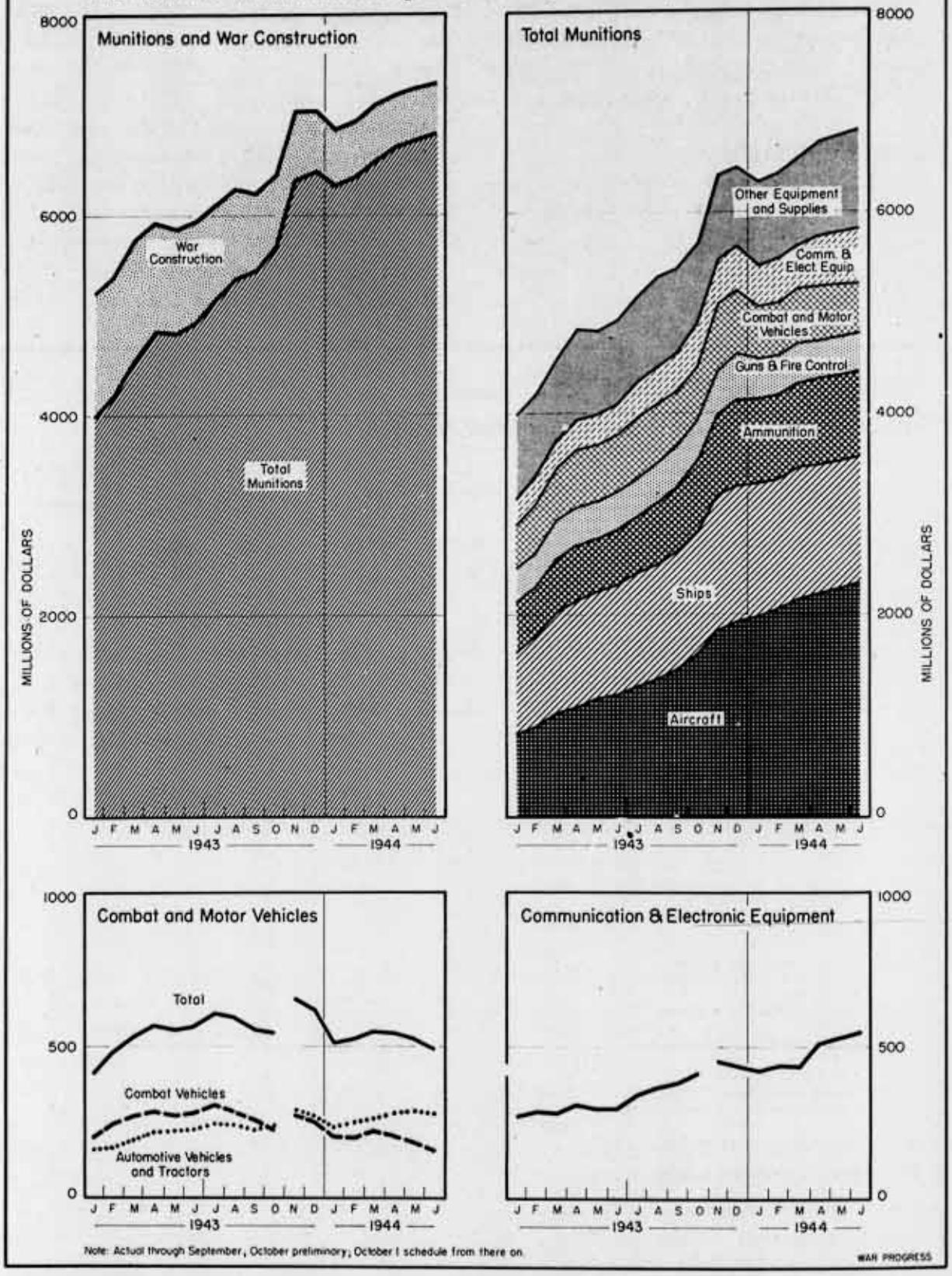
* As of October 1.

† Schedule used for preliminary.

CONFIDENTIAL

OCTOBER MUNITIONS OUTPUT SPURTS, UP 5%–

The month-to-month munitions gain is the largest since April. Aircraft carries

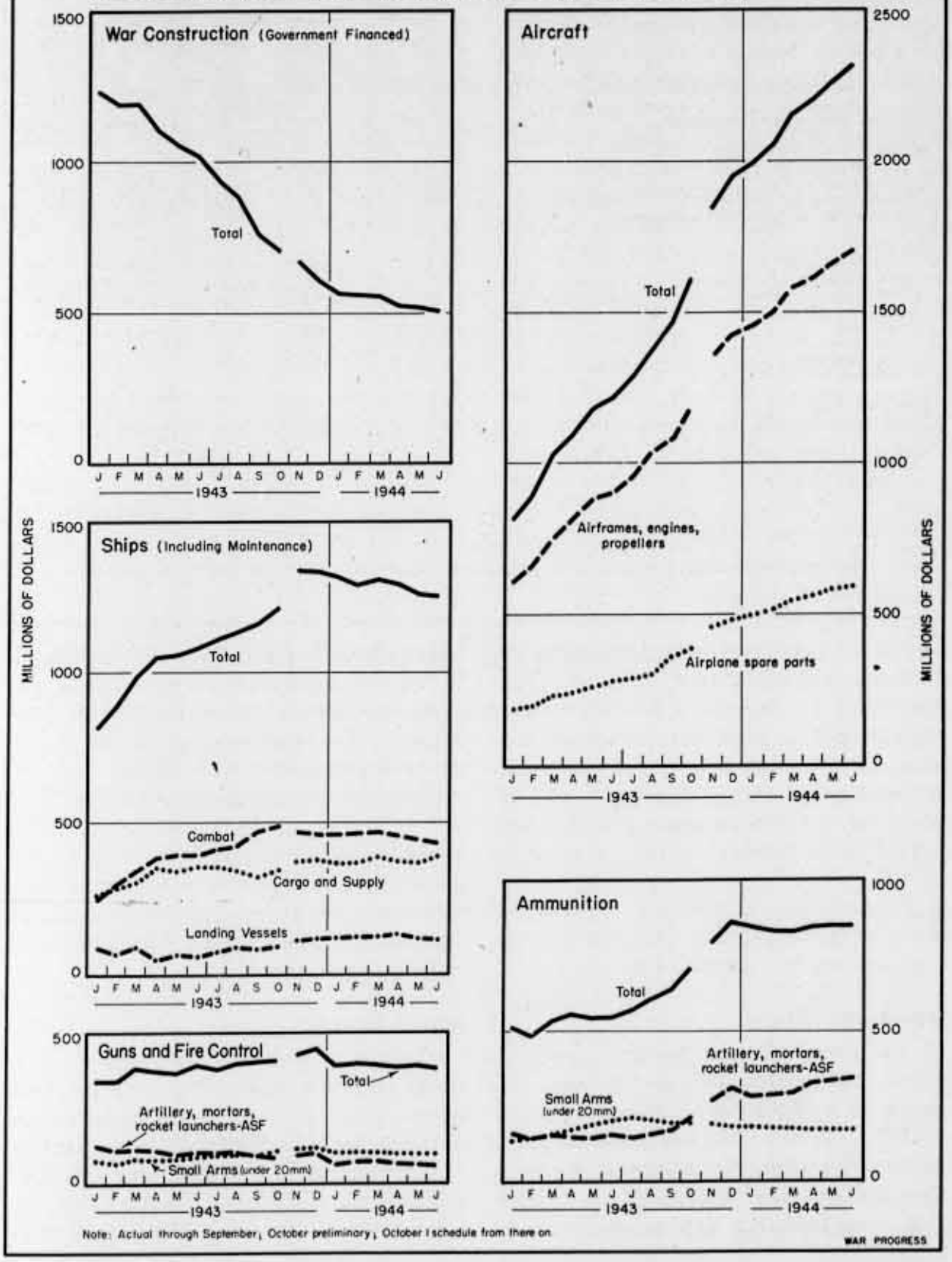


Note: Actual through September, October preliminary; October I schedule from there on.

WAR PROGRESS

—AND WAR CONSTRUCTION IS DOWN AS USUAL

the show, though all major groups, except combat vehicles, rise.



Note: Actual through September, October preliminary, October I schedule from there on

WAR PROGRESS

CONFIDENTIAL

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program - Checks paid (millions of dollars)	1,796	1,536	1,762	1,462	1,922
War bond sales (millions of dollars)	152	194	662	576	96
Wholesale prices (1926 = 100)					
All commodities	102.9p	102.8p	102.8p	103.7	99.7
Farm products	122.8	122.2	122.7p	124.8	109.8
Foods	105.7	105.0	104.9	109.4	102.9
All other then farm products and foods	97.5p	97.5p	97.5p	96.9	95.7
Petroleum:					
Total carloadings	53,766	51,934	55,042	57,762	51,666
Movement of cars into the East	24,289	24,584	25,950	31,058	24,766
Total stocks of residual fuel oil (thousands of barrels)	63,551	63,838	66,585	67,577	79,057
East coast stocks for civilian use (1940-41 = 100 Seas. Adj.)					
Gasoline	36.9	36.9	n.a.	n.a.	n.a.
Kerosene	52.7	51.9			
Distillate fuel oil	56.7	55.7			
Residual fuel oil	79.9	79.5	n.a.	n.a.	n.a.
Bituminous Coal:					
Production (thousands of short tons, daily average)	1,571p	1,588	2,016	1,595	1,963
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	2,618	2,417	2,462	2,003	1,222
Gulf Coast ports	414	405	330	400	356
Pacific Coast ports	1,217	1,259	1,290	1,124	961
Steel operations (% of capacity)	98.2	100.0	102.2	99.4	99.6
Department store sales (% change from a year ago)	n.a.	+10	+9	+12	+20

p. preliminary n.a. not available

technical problems, design changes, introduction of new models, etc., was right on schedule. But goals for October were reduced 20% below actual September output. AN/APN-4 navigation equipment made an especially strong comeback: the 159 accepted met the program; in September only 31 came through against a schedule of 300.

Production of ground radar ran 26% ahead of September and exceeded its increased October schedule by 5%.

Merchant Ships

Emergency tankers featured merchant ships last month; 19 came through, one ahead of schedule and 11 ahead of September. In all, 153 merchant ships of 1,660,000 deadweight tons were completed. This was two fewer ships than in September, four less than scheduled. Tonnage was up 5,000 but 13,000 under schedule.

The emergency tankers accounted largely for an increase in all tankers to 35—from 22 in September, when the first emergency models were completed. Deliveries of dry cargo vessels dropped from 113 to 106—with tonnage of 1,128,000. Liberty ships—though they surpassed schedule by five—were responsible. The 98 completed were eight fewer than in September. Preparations for the Victory ship explain the drop.

Naval Ships

The estimated value of work done on naval vessels continued to rise last month. No heavy tonnage ships—battleships or full-sized carriers—were scheduled or delivered. Completions (including aircraft carrier escorts and frigates built by Maritime Commission) ex-

ceeded September by 4% in total of displacement tons, but again lagged behind the first-of-the-month schedule:

	Deliveries (tons)	% Change from Sept.	% Change from Schedule
All combatants	127,200	+8%	+4%
Landing ves.	63,100	-10	-20
Patrol & mine	21,000	+5	-38
Aux. & all others ...	35,100	+25	-5
Total ...	246,400	+4%	-10%

Combatant ships beat par because Maritime came through with four carrier escorts, one more than called for. All other combatant types were right on schedule except submarines, of which four were completed instead of five. The biggest ship delivered was the 13,400-ton heavy cruiser "Canberra." Destroyer escorts hit a new high of 45 deliveries, four more than in September, and continue to account for almost one-quarter of the tonnage of the total program; but they are slated to fall off sharply after December (WP-Oct23'43,p5).

Landing vessels as a whole were a disappointment. Their 20% lag behind schedule was due almost entirely to the sluggishness (as forecast in September) of the big LSTs—landing ship, tank. All other high-preference types were practically on schedule or running ahead of it. (The schedules were jacked up as of October 1.)

Deliveries of patrol craft, at 10,100 tons, were close to the August peak, though still more than 50% behind schedule—chiefly because Maritime delivered only three of the 11 frigates that were due. Patrol craft have been deemphasized in accord with the new trend to the offensive (WP-Oct30'43,p10).

Construction Nears Depression Low

Military and war-industry building programs are nearly completed except for rounding out existing installations. Housing and community facilities are still needed.

IT IS NOT NEWS to say that total construction in the United States is expected to decline again next year. That has been the pattern ever since 1942. But what is news is that construction in 1944 will approach the levels of the 1932-35 depression years (chart, page 11). Private as well as public projects will run to $3,900,000,000, or roughly half the estimated figure for 1943 and less than a third of the wartime peak of $13,400,000,000 reached in 1942.

All major types of building activity will be down, with military construction—barracks, airfields, hospitals, warehouses, etc.—showing the biggest drop from the 1942 high and housing and community facilities the smallest, as the following table shows:

	1942	1943	1944	% Decline from '42 Peak
	(billions)			
Military....	$5.4	$3.0	$1.5	72%
Industrial..	3.8	2.1	0.8	69
Housing & com. facil.	1.9	1.5	0.9	53
All other...	2.3	1.0	0.7	70
Total.....	$13.4	$7.6	$3.9	71%

In 1942 domestic military construction was concentrated in troop housing, and this year the accent has been on

airfields. But, in 1944, it will be devoted largely to (1) conversion of some camps so as to enlarge facilities for training jungle fighters, ski troops, paratroops, and other specialized types of combatants, (2) increased internment facilities for prisoners of war, and (3) day-to-day rounding out of existing installations: a hospital wing, a post exchange, new storage sheds, etc. The main job—building a gigantic military establishment virtually from scratch—has already been done.

TIEING UP LOOSE ENDS

Similarly, the trend in industrial construction next year will be toward rounding out a program already largely completed (WP-July23'43,p6). Chief attention will be given to special-problem facilities, such as plants to treat synthetic rubber for tire manufacture and additional capacity for producing high-tenacity rayon, 100-octane gasoline, and aircraft and aircraft parts.

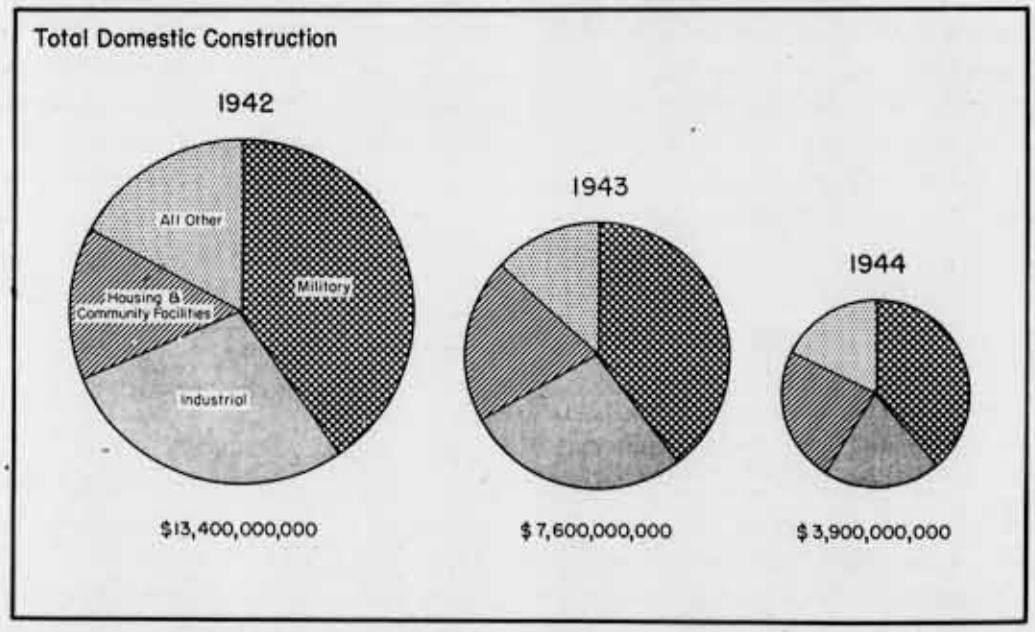
DROPS IN THE BUCKET

At $175,000,000, aircraft next year will lead all other industrial construction in dollar volume for the first time since the war program began. By contrast, ammunition and explosives, the volume item in 1942—totaling $1,305,000,000—will amount to only $45,000,000 in 1944. And plants for manufacturing combat vehicles, a $64,000,000 construction program in 1942, will amount to a mere $4,000,000 in 1944.

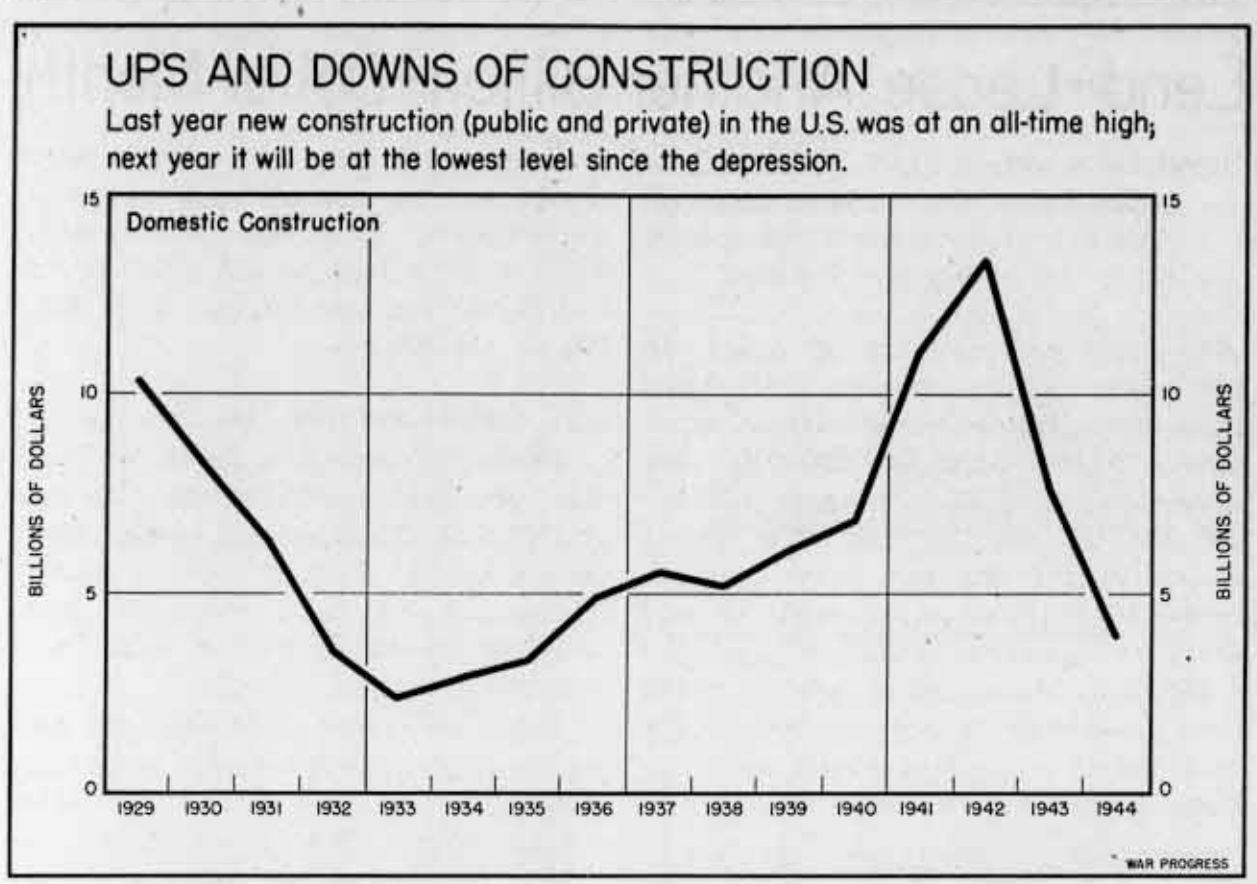
Back in 1942, the value of industrial construction (public and private) put in place exceeded the value of machinery and equipment deliveries—$3,800,000,000 to $3,600,000,000. This year, however, the relationship will be reversed; industrial construction is expected to total $2,100,000,000, machinery and

A SMALLER PIE FOR CONSTRUCTION

Next year's building activity will be half of the 1943 total, but the military proportion will be cut only slightly; industrial down sharply.



WAR PROGRESS



equipment deliveries, $3,100,000,000. And in 1944, with industrial construction declining to $800,000,000, machinery and equipment deliveries will run about twice as much, or $1,500,000,000.

WAR WORKERS COME FIRST

Like military and industrial construction, housing will also be specialized in 1944. Whereas home-building activity was general throughout the country during 1942 and 1943, next year it will be concentrated in supercritical war production areas such as Brunswick, Ga.; Mobile, Ala.; Los Angeles; San Francisco Bay; Charleston, S.C.; Hampton Roads; and Puget Sound. Special attention will be given to attaining a closer-to-normal relationship between war housing and community facilities—the stores, schools, hospitals, restaurants, etc., that must accompany expansions in residential construction (WP-Oct2'43,p4).

Housing and community facilities are expected to decline with the general trend, yet this group will account for a rising proportion of all construction this year and next (chart, page 10). In 1942, this type of building was held back by priorities and other restrictions, but building of barracks, airfields, warehouses, and war plants was encouraged to race ahead.

ROUNDING THE CURVES

Having gone up fastest in 1942, military and industrial construction will go down fastest in 1943 and 1944. On the other hand, housing and community facilities, having covered less territory on the upside in 1942, will go down more slowly.

But cutbacks in war programs in congested areas may result in cutbacks in housing and related programs as time goes on.

Lend-Lease: Another Billion-Dollar Month

September exports, at $1,002,000,000, top August figure. Shipments to Soviet are close to peak; constitute 30% of total. Aid to U.K. is near all-time high.

LEND-LEASE exports were up again in September, further emphasizing the steady improvement in the United Nations shipping position; at $1,002,000,000, they showed a slight gain over August's $989,000,000. It was the first time actual shipments for any one month ever exceeded the billion-dollar mark; the July all-time high of $1,020,000,000 included a $56,000,000 item for planes which had been flown away in previous months but credited to July in one lump for bookkeeping purposes (WP-Sep11'43,p9).

30% TO THE SOVIET

September exports to U.S.S.R., amounting to $301,000,000, were not far from the August peak of $313,000,000. In tonnage, shipments to the Soviet (exclusive of flyaways and sailaways) declined from 522,000 tons in August to 468,000 tons. Petroleum products, which have been steadily increasing, registered another gain from 45,600 tons to 62,300 tons, but the value remained about the same, indicating a larger volume of low-value items. On the whole, however, lend-lease exports to the U.S.S.R. rank high in dollar terms, comprising as they do a heavy proportion of munitions and industrial products. Thus, in dollars, they constituted 30% of all September lend-lease shipments (32% in August); in tonnage they amounted to only 17%.

Shipments of industrial products to Russia, which had increased nearly threefold in August over July to reach a peak of $115,000,000, dropped to $93,000,000 in September. The only other major change was in agricultural products, the value of which went up from $43,000,000 in August to $56,000,000, although the tonnage declined from 147,000 to 135,400.

U.K. EXPORTS PUSHING PEAK

September exports to the United Kingdom were second only to the July peak of $427,000,000, amounting to $397,000,000, as against $370,000,000 in August. The United Kingdom's share of lend-lease shipments in dollar value rose from 37% in August to 40%.

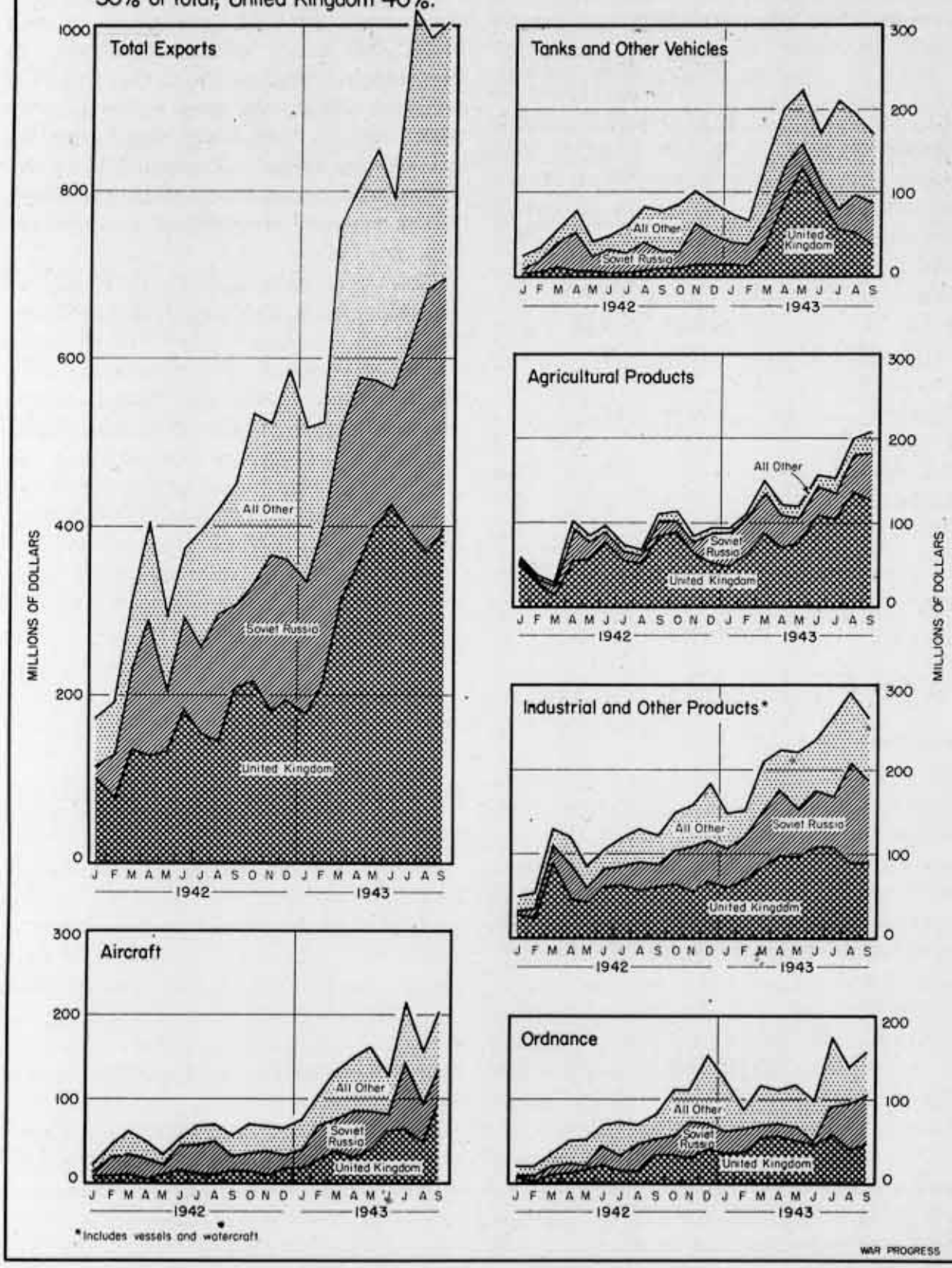
Munitions items dominated the September lend-lease shipments, comprising somewhat more than half of the total dollar value. Of this, 20.4% was aircraft, 17% tanks and other vehicles, and 15.9% ordnance. But shipments of munitions to neither the United Kingdom nor Russia reached 50% of the exports to those countries. Agricultural exports to the U.K. again ran heavy (32%), while industrial products comprised 30.9% of the Russian total:

Category	U.K.	U.S.S.R.	All Others
Munitions			
Ordnance.....	12.3%	17.9%	18.1%
Aircraft.....	23.4	14.6	21.9
Tanks & other vehicles....	9.6	16.3	27.7
Total.....	45.3%	48.8%	67.7%
Vessels & other watercraft...	1.5	1.7	2.0
Agricultural..	32.0	18.6	7.6
Industrial....	21.2	30.9	22.7
Grand total..	100.0%	100.0%	100.0%

Shipments to Algeria in September were at a new high of $56,900,000—more

ANOTHER BILLION DOLLAR LEND-LEASE MONTH

September shipments of ordnance, aircraft, agricultural products rise. Russia gets 30% of total; United Kingdom 40%.



WAR PROGRESS

CONFIDENTIAL

than the total sent to that country during the first six months of the year. Egypt and the United Kingdom were the only other countries to show major increases over shipments during August:

	Sept.	Aug.	July
	(in millions)		
U.K.	$397.0	$370.0	$392.0
Russia	301.0	313.0	230.0
Egypt	92.8	83.4	105.4
Australia	33.6	41.3	70.1
New Zealand	8.2	7.7	7.1
India	34.2	56.8	64.2
Iran	2.0	0.8	1.6
Iraq	5.8	4.0	10.8
Union of S.Africa	12.0	11.0	5.9
French Morocco ..	1.6	5.0	0.8
Algeria	56.9	33.5	54.2
Nigeria	0.9	1.2	1.1
Turkey	7.5	12.8	31.4
Brazil	5.2	2.2	6.9
China	4.4	4.7	4.0

Lend-lease exports to China have been running at the highest level since the closing of the Burma Road.

War Progress Note

FOR WANT OF A GLOVE

DURING THE SUMMER an Anaconda Copper mine in Butte, Mont., was shut down twice for two days because miners had no work gloves. For want of gloves, war production was slowed down in Long Island aircraft plants, Pacific Coast shipyards, Michigan metal refineries, and elsewhere until the War Production Board granted the plants preference ratings. And much of the Florida orange crop and the fall fish catch in New England would have been lost if small jobbers in those localities had not received emergency shipments of gloves after appeals to WPB.

About 22,000,000 dozen pairs of gloves are needed yearly to protect the hands of persons who work outdoors in winter, or who work with rough castings, sharp-edged metals, hot molds, slippery tools, molten metals, or acid solutions. But the current rate of production is only 10,000,000 dozen pairs. Manpower is the reason. Employment in the industry declined 14% in the year ended July 1, 1943, and is currently declining at about 2% per month. Result: 43% of the sewing machines of the five largest companies representing 60% of the production are idle.

Low wages have made it difficult to maintain their working force, and producers are not eager to pay higher wages unless price ceilings are raised. Thus far the Office of Economic Stabilization has not approved the War Labor Board recommendation for a 10¢ per hour increase in minimum wages to 50¢ per hour, and a 25% increase in piece rates, which would involve a 7.5% boost in prices. In the meantime, the Office of Price Administration and the industry's cost accountants are trying to work out a pricing formula while the WLB establishes a procedure for handling requests for wage boosts through its regional offices.

REPORTS ON REPORTS

Bombed Away

The extent to which the intensive bombing campaign started last spring by the RAF would result in loss of production to the highly integrated Axis industries turning out combat munitions, heavy machinery and machine tools, steel, etc. is appraised in *The Effect of Aerial Bombardment of the Ruhr on Axis War Potential* (secret; pp. 35). This report is based on estimates of bomb damage and comparison with the experience of raided British cities. It also considers the possibility of selective evacuation of Ruhr industries, analyz-

ing their relative vulnerability and transferability, and citing probable areas of relocation.
(Office of Strategic Services, Research and Analysis Branch)

Rayon on Wheels

Facilities for manufacturing high-tenacity rayon tire yarn and for weaving tire fabrics are being expanded by rayon producers under the direction of the War Production Board. Total rayon yarn production, however, may soon be curtailed because of shortages of wood pulp and chemicals, reports *Rayon and Other Synthetics and Silk* (confidential; pp. 18). Synthetic fibers made of casein and soybean are gaining wide acceptance, especially in blended wool fabrics.
(Department of Commerce, Bureau of Foreign and Domestic Commerce)

[This record is an attempt to select from the many documents coming to the attention of WAR PROGRESS those studies which would be of most interest to readers. The list is by no means comprehensive, and no attempt has been made to evaluate reports for accuracy. Whether reports are available depends on the policy of each individual agency.]

SELECTED MONTHLY STATISTICS

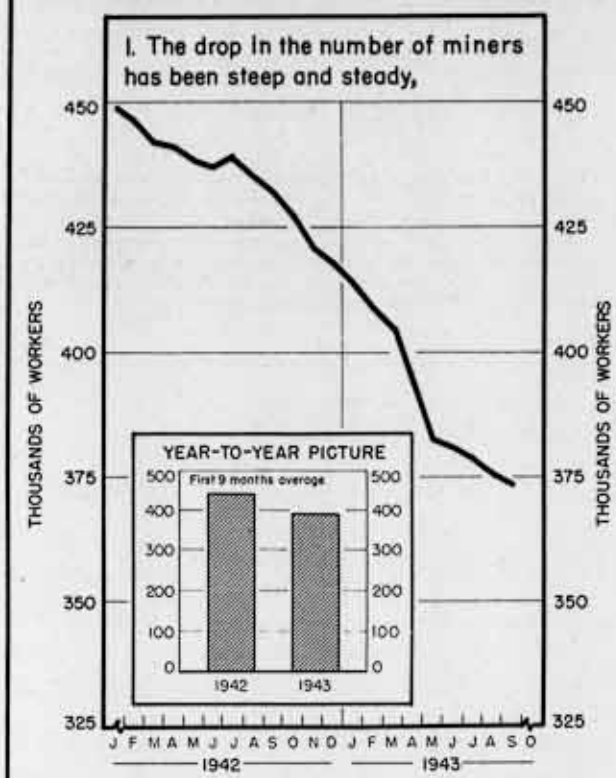
Federal Finance – Income Payments – Labor Force – Labor Turnover

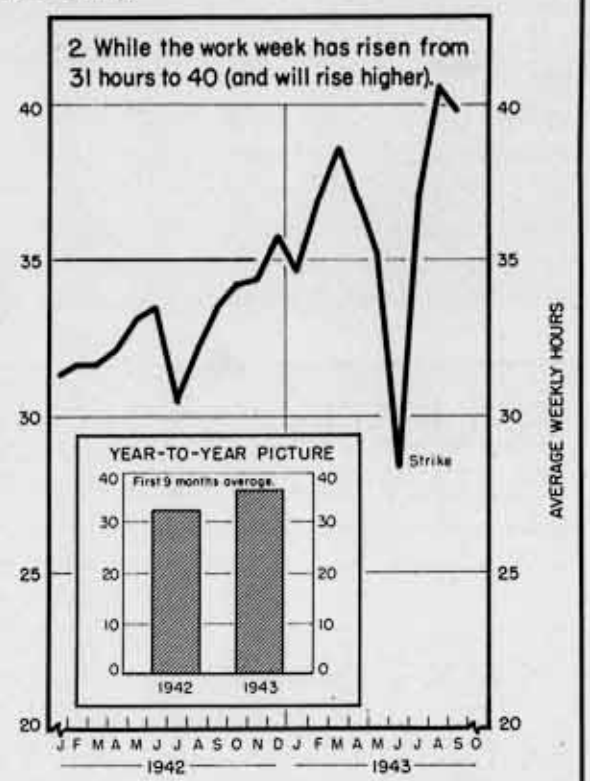
	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
FEDERAL FINANCE (GENERAL FUND)							
Expenditures - Total (billion dollars)	7.5	7.5	7.6	7.5	5.9	.7	.6
War	7.0	6.9	7.2	7.0	5.5	.1	-
Nonwar	.5	.6	.4	.5	.4	.6	.6
Revenues - Total	2.0	5.5	2.7	1.5	.6	.3	.3
Income Taxes	1.3	4.8	1.6	1.0	.2	.1	.1
Other	.7	.7	1.1	.5	.4	.2	.2
War Bond Sales	1.7	1.9	.8	1.5	.9	-	-
"E"	1.3	1.4	.7	1.0	.6	-	-
"F" and "G"	.4	.5	.1	.5	.3	-	-
Net Debt	145.8	140.2	137.7	117.2	88.0	39.1	34.3
INCOME PAYMENTS - TOTAL (million dollars)	12,545 p	11,677	11,748	11,261	10,450	6,094	6,151
Salaries and Wages	8,680 p	8,466	8,367	8,001	7,083	3,859	3,915
Comm., Distr., and Serv. Industries	6,809 p	6,721	6,646	6,271	5,825	3,235	3,341
Government	1,871 p	1,745	1,721	1,719	1,228	509	463
Military	949 p	924	890	810	483	38	33
Nonmilitary	922 p	821	831	909	745	471	430
Other	-	-	-	11	30	115	111
Other income payments	3,865 p	3,211	3,381	3,260	3,367	2,235	2,236
Income payments, annual rate (adjusted for seasonal, billion dollars)	144.9 p	144.8	143.2	137.3	119.8	71.9	72.2
LABOR FORCE - TOTAL (millions)	52.6	53.3	54.9	52.1	54.0	n.a.	n.a.
Employment	51.9	52.5	53.9	51.2	52.4		
Male	35.5	35.8	37.0	36.0	38.1		
Female	16.4	16.7	16.9	15.2	14.3		
Unemployment	0.7	0.8	1.0	0.9	1.6	n.a.	n.a.
LABOR TURNOVER IN MFG. INDUSTRIES† (rate per hundred employees)							
All Manufacturing							
Accessions	7.61p	7.62	7.83	8.32	9.15	6.17	3.78
Separations - Total	8.12p	8.18	7.56	7.69	8.10	2.79	4.62
Quits	6.25p	6.30	5.61	5.36	5.19	1.07	1.59
Military Separations	0.64p	0.67	0.69	1.12	1.48	n.a.	n.a.
Aircraft							
Quits	5.43p	5.67	5.22	4.75	4.72	1.46	1.22
Military Separations	0.74p	0.79	0.73	1.41	2.41	n.a.	n.a.
Shipbuilding							
Quits	7.26p	7.76	6.91	7.11	6.66	1.35	1.77
Military Separations	0.97p	1.00	1.07	1.70	2.39	n.a.	n.a.

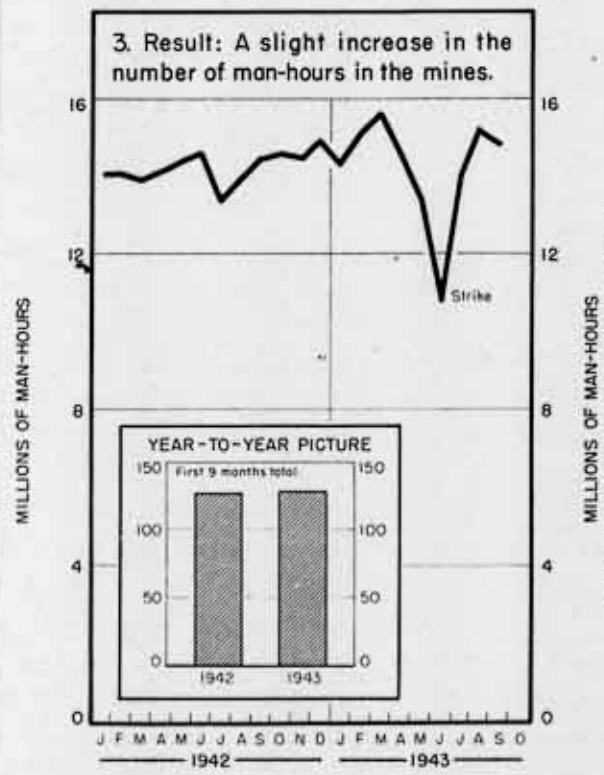
* Federal Finance, Labor Force, October; Income Payments, Labor Turnover, September. † Rates beginning 1943 refer to all employees rather than to wage earners only and are not strictly comparable with earlier data.
p Preliminary. n.a. Not available.

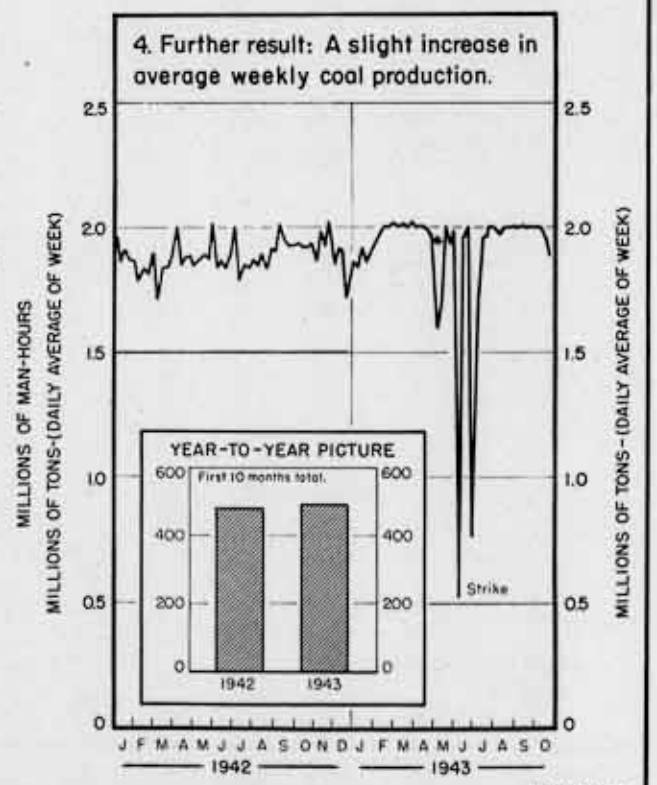
TWO SIDES OF THE BITUMINOUS EQUATION

There are fewer mine workers this year than there were in 1942 – but they are working longer hours, and coal output is up slightly.









WAR PROGRESS

The President

to

WAR PROGRESS

Confidential

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Guidelines Dept. Letter, 11/26/72
By RMP, Date MAR 29 1973

4th Round for CMP

Number 166

November 20, 1943

CMP Matures: Closer to Reality

Claimant requests for fourth quarter run much closer to probable supply. Result: reductions by Requirements Committee are smaller. Larger share for nonmilitary.

REPORTING on the operations of the Controlled Materials Plan three months ago, WAR PROGRESS observed:

"Experience has begun to tell in CMP. Claimant agency requests for allotments of carbon steel—controlling controlled material—were far more realistic this quarter than in the previous quarter."

EVEN MORE REALISTIC

That paragraph applies to the fourth round of CMP—only more so. Total claimant agency requests for carbon steel ran only 11% above allotments and 25% above estimated supply for the first quarter of 1944. Last time requests exceeded allotments by 16% and probable supply by 38%.

Aluminum, copper, and alloy steel, unlike previous quarters, did not present important allotment difficulties, because of an easier supply-demand relationship. Most critical material was steel plate, and it is to be allocated to claimants month by month, dependent on rolling-mill schedules. In the case of the Maritime Commission program, steel plate was an all-controlling factor. The Maritime allowance of carbon steel, in effect, was contingent on the supply of steel plate.

12% OVERALLOTMENT

The overallotment in carbon steel this time amounted to 12%. Last time, when the Requirements Committee acted on allotments for the fourth (current) quarter, the overallotment was only 10%. That was based on the then-existing estimates of supply. But now, based on current production prospects, it looks as if the overallotment for the fourth (current) quarter will run to 20%, instead of the original 10%.

This time there was little difference between the screened requests and the decisions of the Requirements Committee. After statistical screening for duplication, errors, excessive reserves, allowances for unfeasible projects, etc., total overall requests for carbon steel were brought down from 18,138,000 tons to 16,480,000 tons, and still later, to about 16,000,000 tons. Then the Program Vice Chairman, after consulting the Program Bureau, proposed 16,297,000 tons—1% under the screened total—and this was adopted by the Requirements Committee. In the preceding quarter, the Requirements Committee cut the screened requirements by 9%.

NEARLY HALF TO MILITARY

As usual, the military claimants—the Army, Navy, Maritime Commission, and the Aircraft Resources Control Office—received nearly half of the direct allotments—46%. And, of course, they will participate in the allotments to the Operations Vice Chairman (second largest allottee) and the Construction and Facilities Reserve. Since the share of the export claimants—Office of Lend-Lease Administration, Office of Economic Warfare, and Canada—was cut almost 25%, the net result is that other nonmilitary claimants fare somewhat better than in the fourth quarter.

The distribution of carbon steel al-

lotments among claimants, and their proportion of the total, follow:

	1st Quarter Allotments (net tons)	% of Total
Military:		
ARCO.....	156,000	1.0%
Army.....	3,250,000	19.9
Navy.....	1,700,000	10.4
Maritime.....	2,400,000	14.7
Export claimants:		
OLLA.....	870,000	5.3
OEW.....	235,000	1.4
Canada.....	320,000	2.0
Nonmil.claimants:		
WFA.....	850,000	5.2
NHA.....	50,000	.3
PAW.....	345,000	2.1
ORD.....	36,000	.2
ODT.....	1,475,000	9.1
OWU.....	225,000	1.4
OCR.....	155,000	1.0
OVC.....	3,130,000	19.2
Other:		
MRO.....	750,000	4.6
C & F reserve..	350,000	2.2
Total allotment..	16,297,000	100.0%

The Army took a 3% cut from the preceding quarter, but it still received about one-fifth of the total allotment. Indeed, it now ranks as the largest recipient, succeeding the OVC, which ranked first last time. Both ARCO and Navy received sizable increases; but the Maritime Commission took a 6% cut. This may be revised upward, contingent on the allocation of steel plate.

BIGGEST CUT: LEND-LEASE

Among the nonmilitary claimants, the War Food Administration and the Office of the Rubber Director got the biggest increases percentagewise; National Housing Administration and the Office of War Utilities took big cuts. Biggest single cut: the Lend-Lease Administration. It asked for less steel and got still less. Its allotment was 31% below that of the preceding quarter, as the table below shows:

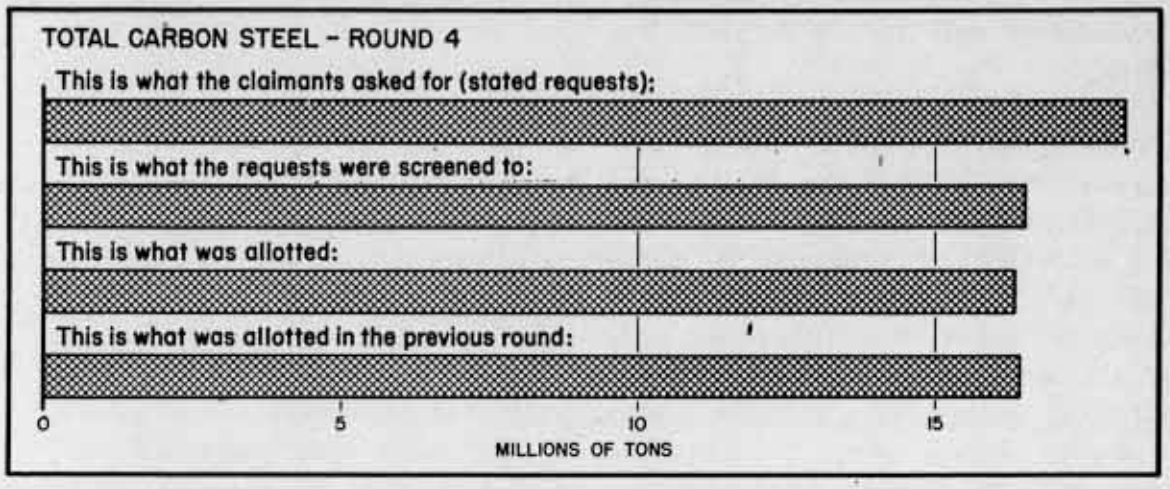
	% Change From Allotments of Preceding Quarter
Total military.....	-1.0%
ARCO.....	+14.9
Army.....	-3.0
Navy.....	+11.6
Maritime.....	-6.5
Export claimants...	-24.1
OLLA.....	-31.4
OEW.....	+8.4
Canada.....	-18.4
Nonmil. claimants..	+1.9
WFA.....	+24.0
NHA.....	-18.2
PAW.....	+4.0
ORD.....	+21.0
ODT.....	+8.2
OWU.....	-11.8
OCR.....	+15.0
OVC.....	-4.6

There were two main reasons for the cut in the OLLA allotments. The Soviet preferred to use shipping space for food and munitions rather than steel; British lend-lease needs declined because of increased domestic steel production, a slightly smaller munitions

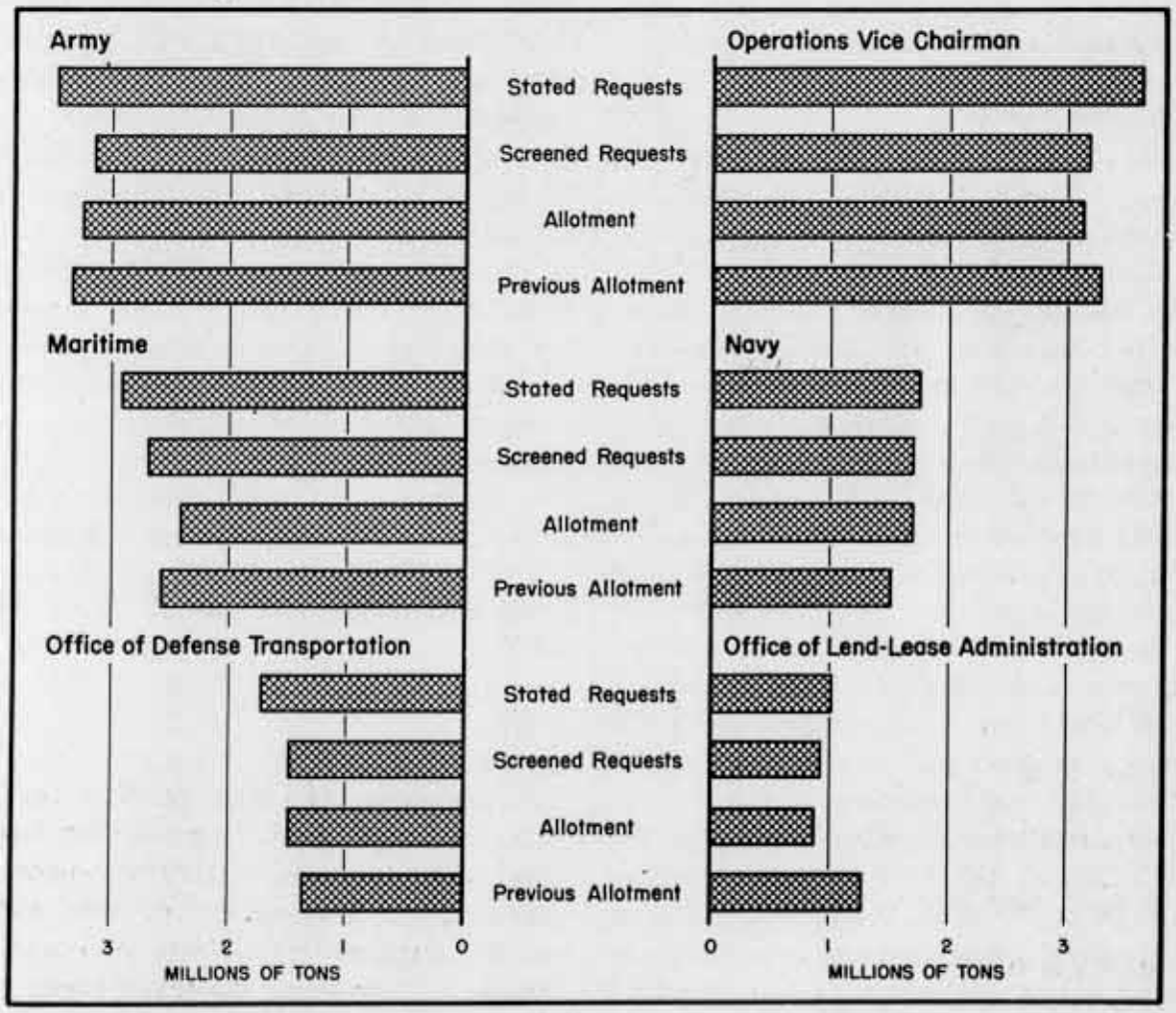
IN THIS ISSUE:

CMP CLAIMS, PROPOSALS, AND ALLOTMENTS

Program analysts screen carbon steel requests 9%; Requirements Committee cuts a bit more. Result: allotments are 1% below the previous round.



Here is how major claimants fared:



WAR PROGRESS

program, decreased estimates of requirements of steel for the rest of the Empire, and a smaller allowance for steel lost to the submarine en route.

Canada's allotment was reduced largely because of cuts in the shipbuilding program.

In screening original requests of the nonmilitary claimants, statistical analysts of the Program Bureau placed particular weight on the need for and the feasibility of programs in terms of the supply of components and availability of labor, regardless of the over-all supply-demand situation in the controlled materials. However, when the supply seemed easy, the Program Bureau and the Program Vice Chairman in some instances saw fit to reinstate portions of programs which had been eliminated in screening.

STEEL FOR TRACTORS

In the analysis of the War Food Administration's program, for example, the analysts questioned the feasibility of the proposed acceleration of the farm equipment program in the first quarter and the proposed enlargement of the tractor and the harvesting machinery programs. They also suggested postponing an allotment of 50,000 tons of carbon steel for containers into the second quarter in order to relieve pressure on flat-rolled steel products in the first quarter.

In its final determination, the Requirements Committee allotted materials which would permit the expansion of the tractor program but would reduce substantially the projected stepup in the War Food Administration's program for agricultural machinery. After further consideration with the Steel Division of the question of flat-rolled products, it was also decided to allot the full amount requested for containers and closures with the understanding that this action might be modified if and when shortages appeared in sheet and strip.

Similarly, in the case of NHA, screening brought down the original request for 57,000 tons to 42,000 tons; but this was raised to 50,000 tons—more or less splitting the difference. Again, in the case of the Petroleum Administration for War, the Requirements Committee accepted the proposal to allocate more steel for drilling purposes than will probably be required in the first quarter.

CUTS INTO INCREASES

Sometimes what seemed to be cuts were not cuts at all, but increases. Take the case of OLLA's original request of 930,000 tons. This included 65,000 tons of steel for the Saudi Arabia petroleum project. But this request was withdrawn by Secretary Ickes. Yet when the Requirements Committee handed down its allotment, OLLA received not 865,000 tons but 870,000.

The following table shows the changes of allotments from the stated requests and from the screened requests. Note that the Requirements Committee allotted seven claimants more than their screened requests:

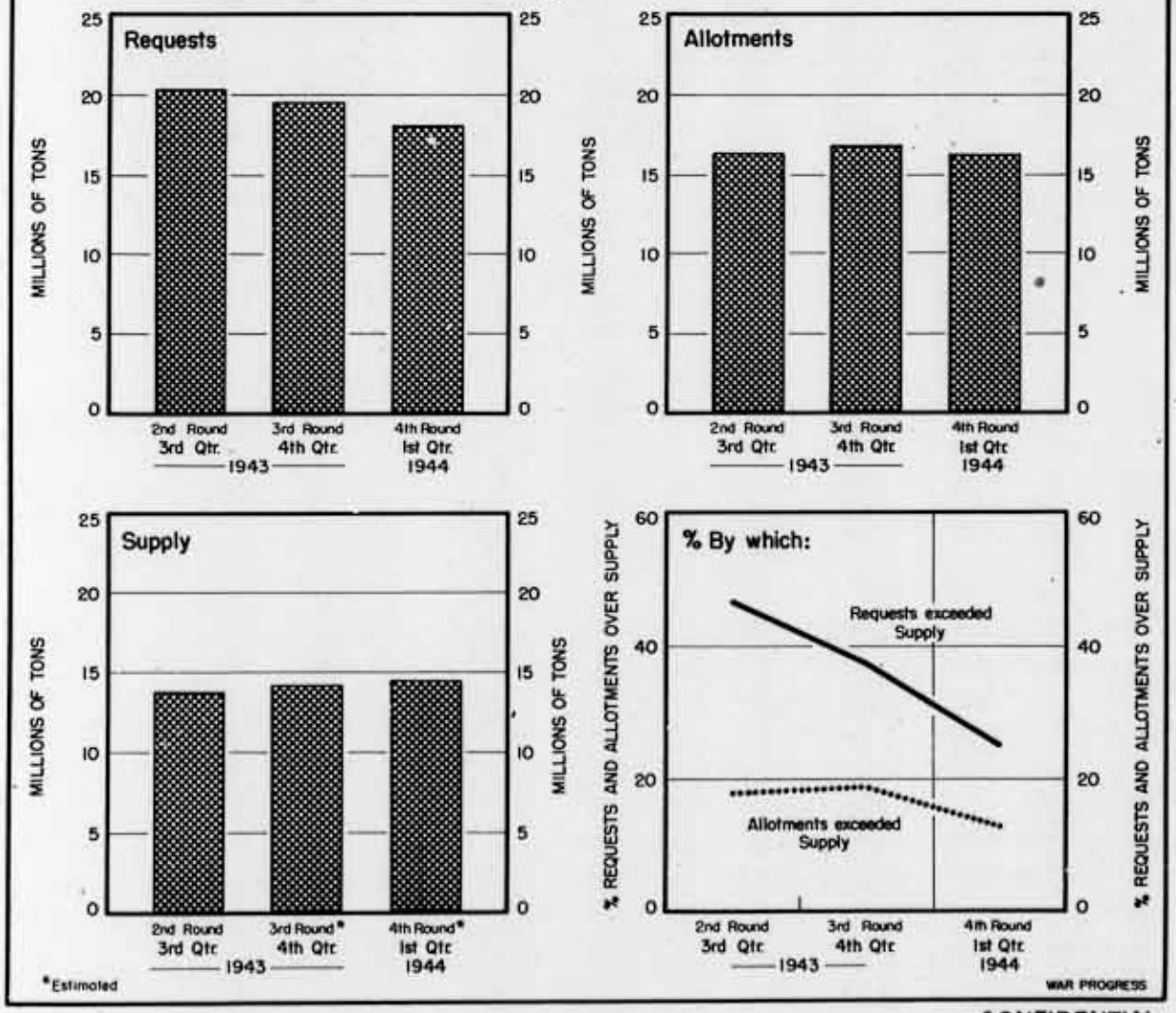
	Allotments as % of Stated Requests	Allotments as % of Screened Requests
Total military.....	90.5%	97.5%
ARCO.....	0	0
Army.....	93.8	103.2
Navy.....	97.0	99.8
Maritime.....	82.2	89.3
Export claimants...	88.0	94.4
OLLA.....	85.7	93.6
OEW.....	88.7	91.1
Canada.....	94.1	99.4
Nonmil. claimants..	88.2	101.5
WFA.....	95.9	114.1
NHA.....	82.0	119.0
PAW.....	95.8	100.9

	Allotments as % of Stated Requests	Allotments as % of Screened Requests
ORD.....	94.7%	106.0%
ODT.....	85.8	100.3
OWU.....	95.3	0
OCR.....	92.8	108.5
OVC.....	86.0	98.7
Other:.....	98.3	99.8
MRO.....	0	0
C & F reserve....	94.8	99.5

Two important changes in procedure were made this round. The Steel and the Aluminum-Magnesium Divisions of WPB are no longer given direct allotments though they still claim directly. In the future their needs will be met out of allocations made to the Construction and Facilities Reserve. Secondly, virtually the whole of the construction and facilities reserves of each of the claimants have now been incorporated in the central Construction and Facilities Reserve allotment, from which they will be reassigned to individual claimants as needs dictate. Parts of this reserve have been earmarked for each of the claimant agencies.

CMP'S METHOD IN CARBON STEEL

Requests decline; allotments hold steady; supply rises slightly. Effect: Requests and allotments come closer to reality.



CONFIDENTIAL

Incentive Production in the Soviet

Russian output has increased sharply under patriotic and wage stimulants. Workers are paid on basis of performance; also get prizes, trips to front.

EVERYBODY KNOWS that Russia has done a remarkable production job despite the loss of some of her richest industrial regions. Not everybody realizes how much the Soviet has depended on established industrial production incentives: the more you produce, the more you're paid. Nobody can measure the exact success of these incentives. But this fact remains: the Soviet announced that output per worker in the first four months of 1943 had risen anywhere from 11% to 46% over the average for the corresponding period in 1942, as follows:

Industry	% Increase
Tank	38%
Aircraft	30
Armament	15
Heavy industry (metallurgy, etc.)	11
Electrical	27
Meat-packing & dairy	20
Light industry (textiles, etc.)	46

These percentages are not to be taken at full value. Productivity was abnormally low in 1942—industry was still being shifted and reorganized following the loss of the Ukraine. Moreover, it is impossible to isolate how much the increased output was due to specific incentives or to new equipment, improved management, longer hours. Yet production incentives have unquestionably contributed to these gains.

Soviet workers are never allowed to forget that the assembly line is a battle line. Big war maps are posted in every factory; war heroes keep visiting the plants to talk with the workers; disabled veterans join the assembly lines. In turn, workers with the best production records are taken on tours of the war front. Thus the Soviet uses every possible means to bring the war home to the workers. And this hasn't been too difficult. With one person out of every six families killed, captured, or permanently incapacitated, with whole populations dispossessed or enslaved by the Germans, almost every worker has a personal stake in the war.

PAGE FROM THE SOVIET BOOK

RECENTLY the incentive wage system has been proposed as one way to help the manpower stringency by boosting the output per worker. The airplane industry, particularly, has been singled out; Grumman at Bethpage, L.I., introduced a wage incentive plan in September, and other airplane companies are studying similar ones.

The idea is far from new. Before the war Soviet Russia was using wage incentives in all its industries—and the Russians got results. It doesn't follow that Soviet methods will yield the same results in a different economic setting. But it's worth while taking a look at them.

CONTESTS ADD ZEST

Constant competition also keeps workers in high gear. Plants post the names of men and women who exceed their production quotas, and often the pictures of those making spectacular records. Moreover, contests are organized between teams within a department or between different departments and trades. At the

Molotov Motor Works, for instance, 780 out of 6,000 workers doubled or tripled their output in six months as the result of team competitions. Some plants boast of workers who have jumped their production by as much as 500%.

Winning teams are likely to get cash prizes as well as prestige, but these are in addition to a regular system of wage incentives. The government wanted to increase transportation efficiency along the Volga. So workers exceeding their norms by 10% got 50% higher piece rates for the extra output, those who did 20% better got 100% higher rates, and all who improved on their previous par were rewarded by a bonus of highly prized commodities—cotton cloth, soap, tobacco, matches, etc.

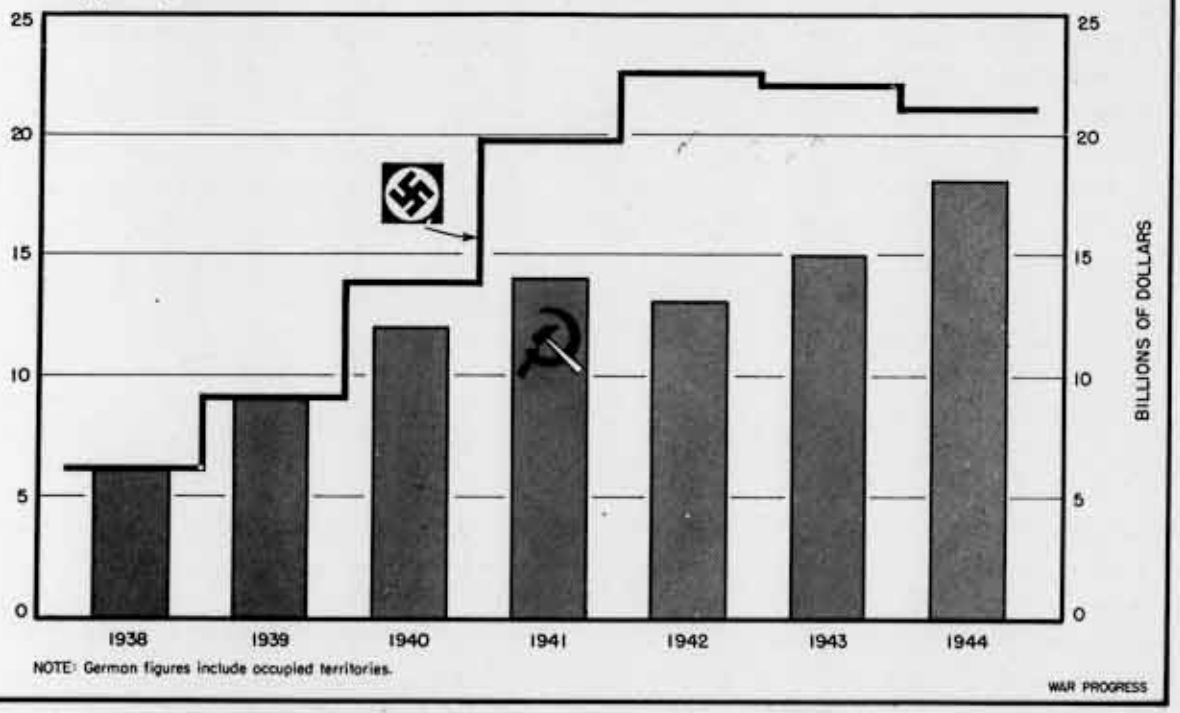
Such incentives have long been important in the Soviet wage system. The Soviet Constitution of 1936 reads: "From each according to his ability, to each according to the work performed."

EQUALITY POLICY REVERSED

In 1928, the beginning of the period of "reconstruction," the earnings of some skilled workers, engineers, etc. ran to more than eight times those of the lowest-paid industrial workers. The official objective was still a gradual equalization of earnings, but in 1931 Stalin formally reversed this policy and called for wider differentials. By 1934 the directors were getting up to 28 times more than the lowest-paid workers. In Moscow factories today, wages vary from

BEHIND THE RED SOLDIER

A steady rise in the Soviet's output of combat munitions. But German production stepped up faster.



It is estimated that in 1938-39, the Russians and Germans were producing about the same amount of combat munitions; but in 1941-42 the Soviets fell far behind due to the loss of the Ukraine and other industrial areas. Success in moving entire factories eastward, lend-lease, and the recapture of many of these important areas enabled Soviet production to recover. And for next year, Soviet output will not lag far behind that of the Germans.

250 rubles a month for a packer in a chocolate factory to 2,000 a month for a skilled electrician and much higher for a factory manager.

This tendency toward payment according to performance was accentuated by the early adoption of the piecework system. In 1928 piecework rates covered 58% of all man-hours in large-scale industry, by 1935 this had risen to 70%, and today piecework is practically uniform throughout Soviet industry. In the early 1930s, moreover, the Soviet introduced the progressive piece system: the more produced, the higher the piece rate. And this movement was accelerated in 1935 when Alexei Stakhanov, a Donbas miner, became a national hero by rediscovering Adam Smith's principle of the division of labor.

Stakhanov was one of a team of four in a coal mine. Each miner would first use a pneumatic pick to loosen the coal, then shovel it, then cart it away. Then Stakhanov had his idea. He would do all the picking, the others the shoveling and carting. Result: a big jump in output—and a nationwide campaign. The Soviet ballyhooed Stakhanov as a symbol: a worker, all by himself, had introduced a scientific method to increase industrial efficiency.

ORIGINALITY REWARDED

Workers who boosted their output by similar discoveries were handsomely rewarded and given official titles; factories vied with one another in breeding Stakhanovites. One outcome was the creation of a special category of highly paid, privileged workers. Another was the raising of norms, or standard "tasks," by 20% to 30% in 1936.

Some of the Russian devices to stimulate workers to greater effort are natural and suggest themselves. They

have been used in all warring countries. In the United States, for example, returning soldiers, sailors, and marines are called on to talk to factory workers, reminding them of how their weapons are used; official newspapers and magazines extol American weapons.

Transplanting the type of wage incentives used in the Soviet, however, presents an entirely different problem. For the plans would have to be accepted in an obviously different economic and social climate. Wage incentives were introduced in Russia when it was still a young and growing industrial community; there were no long-standing wage agreements and structures.

But one conclusion is inescapable: the Soviet production incentives have come through by American standards. They've worked.

Planes Doing It Again

Acceptances for first 15 days run 200 ahead of same period last month, and November may equal or better October's record. Heavy bombers are going strong.

AIRPLANE OUTPUT this month bids fair to equal—and possibly exceed—the October showing, when a record-breaking total of 8,362 planes came through.

During the first 15 days of November, 3,598 planes were turned out, an increase of 6%, or 202 units, over the 3,396 accepted in the first half of October. On an airframe weight basis, the midmonth gain was 12%; but this is likely to be reduced by the month-end.

Medium bombers stood out; 254 were accepted, 94% ahead of the first half of October. But last month's total was

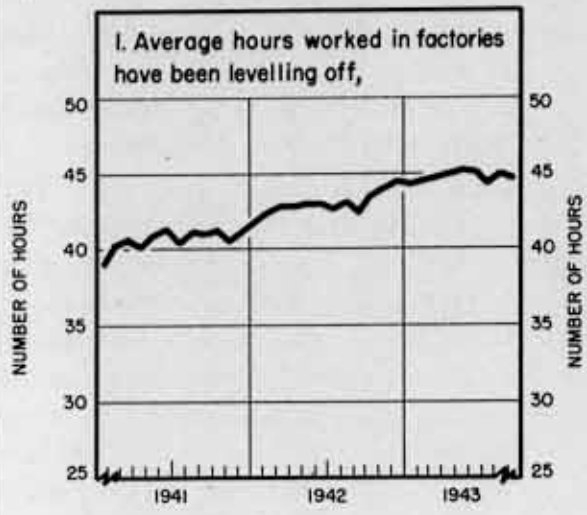
KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program—Checks paid (millions of dollars)	1,937	1,796	1,600	1,595	1,254
War bond sales (millions of dollars)	188	152	470	131	166
Wholesale prices (1926=100)					
All commodities	102.8p	102.9p	102.9p	103.8	100.1
Farm products	122.1p	122.8	122.8	125.7	110.7
Foods	105.5	105.7	104.7	110.2	103.0
All other than farm products and foods	97.5p	97.5p	97.5p	96.9	96.1
Petroleum:					
Total carloadings	51,320	53,766	53,449	58,870	51,689
Movement of cars into the East	23,177	24,289	25,008	31,148	25,145
Total stocks of residual fuel oil (thousands of barrels)	62,647	63,551	65,518	67,311	78,543
East coast stocks for civilian use (1940-41=100 Seas. Adj.)					
Gasoline	36.6	36.9	34.2	N.A.	N.A.
Kerosene	52.9	52.7	51.0		
Distillate fuel oil	59.7	56.7	50.5		
Residual fuel oil	76.3	79.9	83.4	N.A.	N.A.
Bituminous Coal:					
Production (thousands of short tons, daily average)	483p	1,647	2,008	1,695	1,897
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	2,624	2,648	2,505	2,104	1,236
Gulf Coast ports	398	414	347	380	292
Pacific Coast ports	1,226	1,217	1,284	1,202	1,025
Steel operations (% of capacity)	97.8	98.2	100.7	98.6	98.7
Department store sales (% change from a year ago)	+14	+10	+13	+16	+13

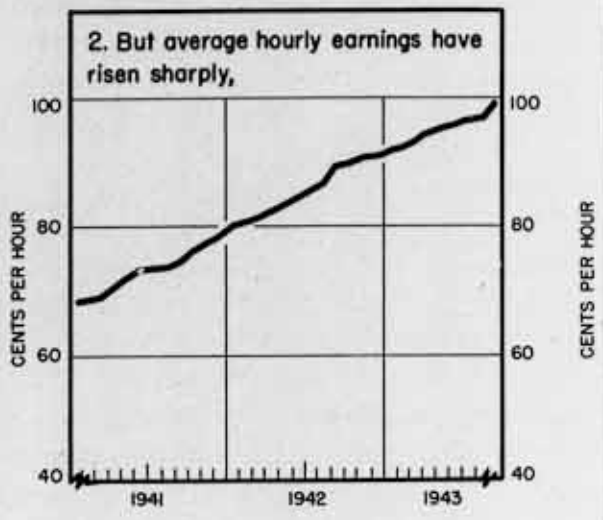
p. preliminary n.a. not available

OF HOURS, WAGES, AND THE COST OF LIVING

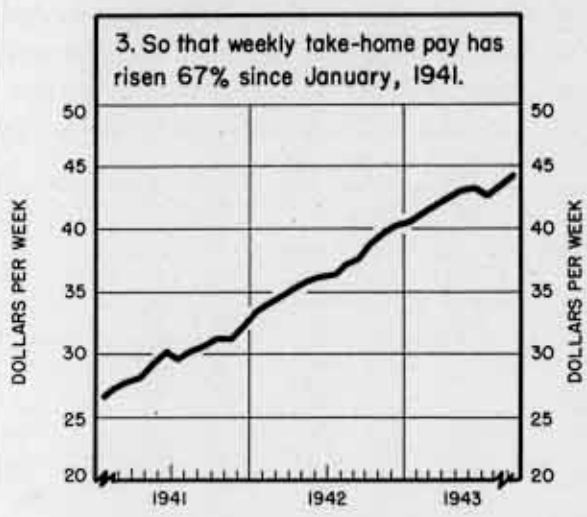
1. Average hours worked in factories have been levelling off,



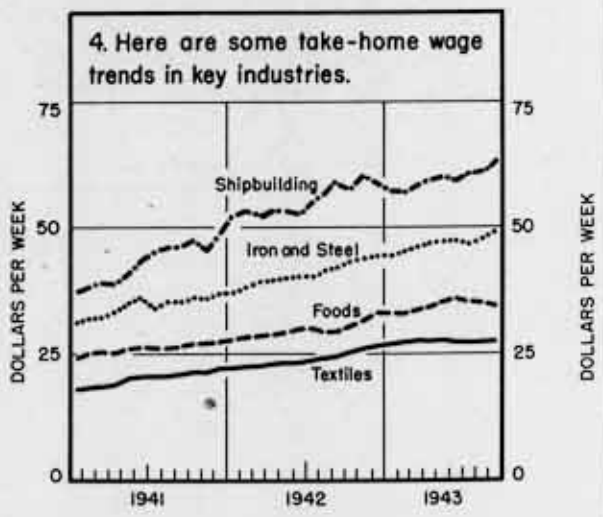
2. But average hourly earnings have risen sharply,



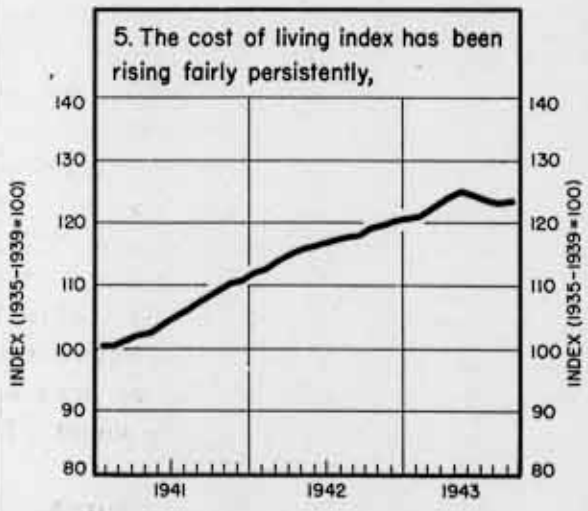
3. So that weekly take-home pay has risen 67% since January, 1941.



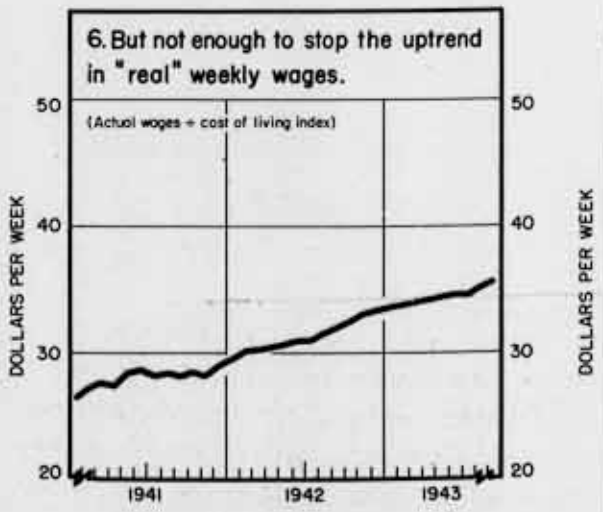
4. Here are some take-home wage trends in key industries.



5. The cost of living index has been rising fairly persistently,



6. But not enough to stop the uptrend in "real" weekly wages.



WAR PROGRESS

artificially low; 60 B-26 Marauders produced early in October were classified as advanced trainers. If they had been treated as medium bombers, then the 15-day increase in this group this month would have been cut in half. However, at North American's Kansas City plant, where production of B-25 Billy Mitchells had been held up by a components shortage, output more than doubled—from 46 to 96 planes.

HEAVYWEIGHTS UP 18%

Liberator and Flying Fortress production was up 18%; the 501 accepted suggest that the 1,084 scheduled for November may be exceeded. Boeing's labor problems at Seattle continued to ease; Flying Fortress output ran 28% ahead of October's midmonth figure.

Nine B-29 superbombers came off the line at Boeing's Wichita plant, compared with six in the first half of October. This is the industry's "hurry-up" program. The November schedule calls for 35—a formidable total in view of the 15-day result.

November should be another good month for 2-engined fighter planes. The 185 Lightnings (P-38s) accepted at Lockheed's Burbank plant were 41% ahead of the first half of October and well on the way to making the November schedule of 352 planes.

1-ENGINED FIGHTERS FALTER

But the Army's 1-engined fighters didn't do so well; 531 came through in the first 15-days—10% behind October and only about a third of the 1,700 slated for the full month. Republic at Farmingdale, with 48 P-47 Thunderbolts, was 64% behind the 15-day period in October; actual production was considerably better, but acceptances were cut down by bad weather which interfered with flight testing.

In the Navy fighter group, Grumman at Bethpage produced 156 F6F Hellcats, an average of about 10 a day. To meet its schedule of 400, the average must rise to around 16 per day over the final half. Grumman made 345 Hellcats in October, a new high.

ONE DAY LESS TO PRODUCE

Over at Curtiss, Buffalo, the 2-engined C-46 Commando transport plane showed signs of coming out of its 10-month slump; 20 came through, compared with 14 at the mid-point last month. The November schedule calls for 47 Commandos.

On an overall basis, the 9,010 planes scheduled for the month seem well out of reach and any numerical gain over October should be modest. October is a 31-day month as compared with November's 30 days. True, the extra day in October was a Sunday, but it fell at the end of the month, when workers normally go to the plants to clean up unfinished planes for month-end acceptances.

REPORTS ON REPORTS

Slump in Sugar

A 35% decrease in domestic beet-sugar production in 1943 plus a sharp decline in offshore receipts of cane sugar since July will bring end-of-the-year stocks 12% below those of December 31, 1942. The 1944 supply will be stabilized and an increase in stocks permitted by the U.S. Government's agreement to purchase 4,400,000 tons of sugar from Cuba and the Dominican Republic next year. *Sugar* (confidential; pp. 16) also anticipates that more tanker space will be available to move Caribbean molasses, both blackstrap and invert, which can be used instead of foodstuffs, such as wheat, for alcohol manufacture.

(Department of Commerce, Bureau of

Foreign and Domestic Commerce)

Postwar Rubber

Goaded by wartime development of synthetics, producers of Far Eastern rubber are expected after the war to increase productive capacity and lower costs by plantings of higher-yield trees and improved utilization of labor, according to *Supplementary Report on Crude Rubber* (confidential; pp. 13). Marked increases in postwar rubber consumption are anticipated. The competitive position of synthetic rubber will be dependent upon reduction in current costs.
(Coordinator of Inter-American Affairs, Research Division)

Kitchen Salvage

Waste-fat collections declined during the summer, although the number of women participating in the campaign increased from about 40% in May to 52% in September. Responses of 1,000 housewives, summarized in *Effectiveness of the Fat Collection Campaign* (restricted; pp.5), indicate that the decline was partly seasonal, less meat being consumed in summer diets. Other reasons: meat rationing and shortages; more use of fats and drippings in cooking. About 64% of the housewives who were canvassed approved a proposed plan of giving ration points to boost waste-fat contributions.
(Office of War Information, Bureau of Special Services)

[This record is an attempt to select from the many documents coming to the attention of WAR PROGRESS those studies which would be of most interest to readers. The list is by no means comprehensive, and no attempt has been made to evaluate reports for accuracy. Whether reports are available depends on the policy of each individual agency.]

SELECTED MONTHLY STATISTICS

Employment - Hours and Earnings - Transportation

	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
NONAGRIC. EMPLOYMENT - TOTAL (Thousands)	38,286p	38,251p	38,245r	38,336	38,478	31,110	n.a.
Manufacturing - Total	16,206p	16,179	16,245	15,956	15,313	10,780	
Durable Goods	9,724p	9,659	9,650	9,462	8,682	4,829	
Nondurable Goods	6,482p	6,520	6,595	6,494	6,631	5,951	
Government	5,861p	5,854p	5,771r	5,890	5,672	4,051	
Other	16,219p	16,218	16,229	16,490	17,493	16,279	n.a.
AVERAGE HOURLY EARNINGS (Cents)							
All Manufacturing Industries	99.3p	96.5p	96.3	93.4	89.2	62.8	n.a.
Durable Goods	109.8p	106.0p	106.0	103.0	99.7	69.7	n.a.
Nondurable Goods	82.3p	81.1p	80.6	78.2	74.3	57.4	n.a.
Bituminous Coal Mining	116.7p	114.7p	115.0	111.9	106.5	89.6	89.0
Metalliferous Mining	99.5p	98.3p	98.6	94.9	90.6r	70.1	71.6
AVERAGE HOURS PER WEEK							
All Manufacturing Industries	44.7p	45.1p	44.4	44.7	42.4	38.1	n.a.
Durable Goods	46.5p	46.8p	46.0	46.4	44.6	38.5	n.a.
Nondurable Goods	42.2p	42.5p	42.2	42.3	39.7	37.7	n.a.
Bituminous Coal Mining	39.8p	40.5p	37.1	38.6	33.5	28.5	27.5
Metalliferous Mining	44.5p	46.0p	43.7	43.7	43.2r	39.6	43.6
TRANSPORTATION - COMMODITY AND PASSENGER (1935-39 = 100)†	224p	224	222	203r	198	123	118
Commodity	210p	209	206	193	195	127	121
Passenger	271p	275	274	234	207	108	108

* Nonagricultural Employment, October; All Other, September.
p Preliminary. r Revised. n.a. Not available. †Unadjusted.

The President

1

WAR PROGRESS

Confidential

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652 Sec. 3(E) and 5(D) or (E)
E.O. 11652 Sec. 3(E) and 5(D) or (E)
Commerce Dept. Letter, 11-16-72
By RHP, Date MAR 29 1973

Contracts and Cutbacks--
An Accelerating Problem

Number 167 November 27, 1943

A Cutback Today, a Claim Tomorrow?

Reductions in war programs augur increased contract terminations. Problems of making adjustments will mount. Small companies face biggest difficulties.

JOURNALISTS have made much of the fact that so far in this war some $8,000,000,000 of munitions contracts have been terminated—more than total terminations at the end of the last war. What is not made much of is that this time claims against terminations have so far been negligible—less than 10¢ on the dollar value of the uncompleted portion of the contracts.

Terminations of contracts to date have been, more often than not, introductions to new ones—what with programs in general rising, what with demand for contractors outrunning supply. Thus, contracts for making tanks have been switched to locomotives; contracts for destroyer escort vessels have been supplanted by landing craft; contracts for artillery components have been shifted to aircraft parts; and so forth.

USING UP THE LEFTOVERS

Take the case of the Higgins Company of New Orleans. Last summer its $140,000,000 contract to produce C-76 Caravan plywood transport planes was canceled; but it promptly received a $120,000,000 contract to produce C-46 Commandos. Higgins is expected to present a claim against this termination to cover certain costs, such as engineering and research, but it will represent

only a fraction of the face amount. Similarly, a relatively small claim should be forthcoming from the Baldwin Locomotive Works of Philadelphia, which has been ordered to cease manufacturing tanks at the close of this year; it will use up its inventories to produce locomotives.

SOME HAPPY ENDINGS

But most companies have not been filing any claim at all—losses under termination have been either nonexistent or so small as to be insignificant. Thus, no claim was presented by Bethlehem Steel Company last April when a $2,000,000 contract for projectiles was canceled. The same was true of Empire Ordnance on a $3,200,000 termination involving 75mm. guns; similarly with Martin-Parry Corporation, whose $3,900,000 contract for cartridge cases was canceled.

Procurement agencies have had the same experience with thousands of lesser-known companies making any one of a number of products. Examples include Morse, Lockhart, manufacturing fuses ($1,300,000); Westfield Manufacturing, ammunition storage kits ($340,000); Covered Wagon Company, wood cargo bodies ($350,000); Auto Specialties, high-explosive shells ($2,000,000); and Jackson Metal, bomb-fin assemblies ($168,000). Indeed, an analysis of 5,100 Army terminations shows that 3,600, or seven out of every 10 cancellations, involved no financial claim against the government!

The point is that the $8,000,000,000 of cancellations to date are small relative to the $250,000,000,000-plus overall war program. But tomorrow the problem will be of different magnitude.

About one-half of American industry is now producing war goods—tanks, guns, ships, and supplies and equipment of every description. The number of major prime contracts involved is approximately 250,000; the number of subcontracts in the first tier alone, 800,000. From now on, cancellations are apt to increase at an accelerating rate because of program cutbacks (page 6). Thus the problem may assume major proportions long before the end of the war.

NOT SO PAINLESS LATER

And the solution will not lie simply in a shift from one war contract to another or in the use of inventories for other munitions production, as it does now. There won't be replacement awards to make termination the comparatively painless operation it is today. Nor will it be possible to terminate contracts at so low a percentage cost in claims as at present. At the end of the first World War, total claims against the Ordnance Department alone ran to $2,500,000,000, or more than 60% of the face value of all cancellations ($4,000,000,000). When this war ends, cancellations may range as high as $50,000,000,000 to $75,000,000,000.

What's more, it takes time to settle claims. Even under present favorable circumstances, about a third of the

IN THIS ISSUE:

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program – Checks paid (millions of dollars)	1,731	1,937	1,616	1,557	1,420
War bond sales (millions of dollars)	163	188	137	205	182
Wholesale prices (1926=100)					
All commodities	102.6p	102.8p	102.9p	103.8	100.1
Farm products	121.2	122.1p	122.7	125.8	110.9
Foods	105.6	105.5	104.8	110.3	103.3
All other than farm products and foods	97.5p	97.5p	97.5p	96.9	96.1
Petroleum:					
Total carloadings	51,162	51,320	51,903	59,300	52,793
Movement of cars into the East	24,607	23,177	24,303	31,793	25,675
Total stocks of residual fuel oil (thousands of barrels)	62,662	62,647	64,747	67,717	77,796
East coast stocks for civilian use (1940-41=100 Seas. Adj.)					
Gasoline	39.5	36.6	34.9	N.A.	N.A.
Kerosene	N.A.	52.9	51.6		
Distillate fuel oil	64.2	59.7	53.1		
Residual fuel oil	76.3	78.3	81.1	N.A.	N.A.
Bituminous Coal:					
Production (thousands of short tons, daily average)	1,910p	499	1,954	2,050	2,009
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	2,859	2,624	2,423	2,433	1,190
Gulf Coast ports	477	398	420	388	316
Pacific Coast ports	1,313	1,226	1,288	1,260	944
Steel operations (% of capacity)	99.1	97.8	100.6	99.3	98.3
Department store sales (% change from a year ago)	N.A.	+14	+12	+21	+30

p. preliminary n.a. not available

Army's cases average eight months from termination to pay-off. In the last war, it took about the same time to clear up half of the Ordnance Department's claims, but many hung fire for years. One Bethlehem Steel contract exaggerates the point: terminated in 1918, it wasn't settled until 1942.

Moreover, Bethlehem had many contracts. Then, as now, it was in that relatively small group of industrial companies holding a major share of government business—a group which today includes General Motors, General Electric, International Harvester, Ford, United States Steel, Allied Chemical, du Pont, Chrysler, Pullman, Standard Oil Company of New Jersey, Westinghouse, et al. These contracts range far and wide over many products, and will be in various stages of completion when peace comes. Each company has, so to speak, a diversified commitment to and from the government. Though some terminations may take a long time, others should be settled quickly.

BIG FELLOWS CAN TAKE IT

These companies invariably are in good balance-sheet shape. They manage to keep a satisfactory ratio of current assets to current liabilities; and they have banking connections to tide them over. But these are exceptional companies. For many smaller enterprises having little or no diversification in their contractual risks, a comparatively small termination without a quick replacement may mean frozen inventories and a shutdown for want of working capital.

This war has already produced such an example: the Dover Stamping and Man-

ufacturing Company of Cambridge, Mass. Last February, the Navy canceled a $600,-000 contract for war-head containers. All of Dover's funds were tied up in this work; and no replacement contract was immediately available. The consequences were swift and several: (1) the machine shop closed down; (2) the company lost most of its skilled help; (3) a substantial part of its machinery had to be sold to raise cash; and (4) the business had to be reorganized.

SETTING THE TONE

Moreover, even though big companies are in little danger of insolvency, large unsettled claims are bound to affect their postwar operations. A company with a contingent credit, say, of $50,000,000 on its books is not so apt to embark on an extensive reconversion venture as a company that has such a sum already in its bank account.

Thus, contract termination will set the industrial tone during the transition from war to peace.

When the time comes for wholesale reconversion, will it be best—as a general policy—to cancel war contracts immediately or taper them off? Directly following the armistice in 1918, one smokeless-powder plant ceased production at once. That saved the government $10,000,000; but it did away with 45,000 jobs overnight.

WHAT PRICE THRIFT?

Closely allied is the question of what to do with nearly completed contracts. At the end of the last war, contracts at least 75% finished were generally carried through to completion. Thus, in an instance where work on rifles was 80% done, the government preferred to continue the contract and receive usable rifles rather than negotiate a claim and accept parts.

Another question is how to liquidate subcontractors' claims. In fixed-price or lump-sum contracts—which comprise 70% of all outstanding war contracts—procurement agencies have no legal relationship with subcontractors; yet they reserve the right to review and even audit subcontractors' claims prior to paying off the prime contractor. If a prime contractor settles with his suppliers before the procurement agency's okay, then the prime assumes liability for any overpayments. This delays payments to subcontractors, sub-subcontractors, etc. long after they've shipped the goods. For example, early this year two Baldwin tank contracts were terminated. Yet the disposition of anywhere up to 4,000 subcontracts still awaits the filing, auditing, and payment of Baldwin's claim.

FURTHER COMPLICATIONS

Another problem is: Should advance payments be made a part of termination procedure? And how much—what percentage? At the present time, advances are a matter of judgment; contracting officers in the various procurement agencies decide what a contractor is entitled to receive pending final settlement. Under existing practice, individual judgment is also the chief factor in making allowances for engineering expenses, experimental costs, and early-model production. Obviously, these costs will bulk higher per unit in a contract just getting under way than in one well on the way to completion.

Probably no substitute for individual judgment—taking the multitude of variables into account—will be possible in all settlements. Contract termination is a massive, overall problem.

Nevertheless, some attempt to formularize the problem—to lay down specifications and methods—must be made.

And this requires an intimate knowledge of the types of contracts made by all procurement agencies. The problem would be simplified by unification of contract-termination rules, procedures, and allowances which would reconcile differences among Army, Navy, Maritime Commission, Treasury, and other contracts.

War Program Enters Fifth Phase

Day of rapidly rising requirements is past, and schedules are cut in the light of battle experience and prospective needs. German defeat would accelerate trend.

U.S. WAR production now seems to be entering a fifth, and perhaps next-to-last phase. It's a phase that flows naturally and expectably out of the four previous ones:

1. From the outbreak of the war in Europe in September, 1939, to the fall of France in June, 1940, production was infinitesimal by present standards—largely experimental or tuning-up operations in a comparatively few private plants. Appropriations were extremely modest.

2. From the fall of France to Pearl Harbor, appropriations were greatly increased; there was talk of a two-ocean navy; and goals for the armed forces were greatly expanded. However, the program was still small in relation to U.S. resources—manpower, machines, and materials.

3. In January, 1942, President Roosevelt outlined to Congress a breath-taking program for 1942 and 1943, calling for specific numbers of planes, tanks, and guns. Subsequently, the program got so high—to more than $100,000,000,000 for munitions and war construction in 1943—that it overreached even this country's resources.

4. This program was not feasible, and over a period of time—from the spring of 1942 to the present—it has gradually been cut back.

Now the program is entering a new phase. Some programs are still being cut back because they're unfeasible: thus, airplane schedules were recently revised downward. But, increasingly, cutbacks are being introduced because the armed forces have decided that the continuation of existing programs would provide more than would be needed under

SMALL AMMUNITION CUT AGAIN

NO RECENT MONTH has passed without a substantial reduction in the 1943-44 program for small-arms ammunition. Last month was no exception. Requirements for .30-caliber cartridges were cut 11% in value—this on top of a 10% reduction in August and September.

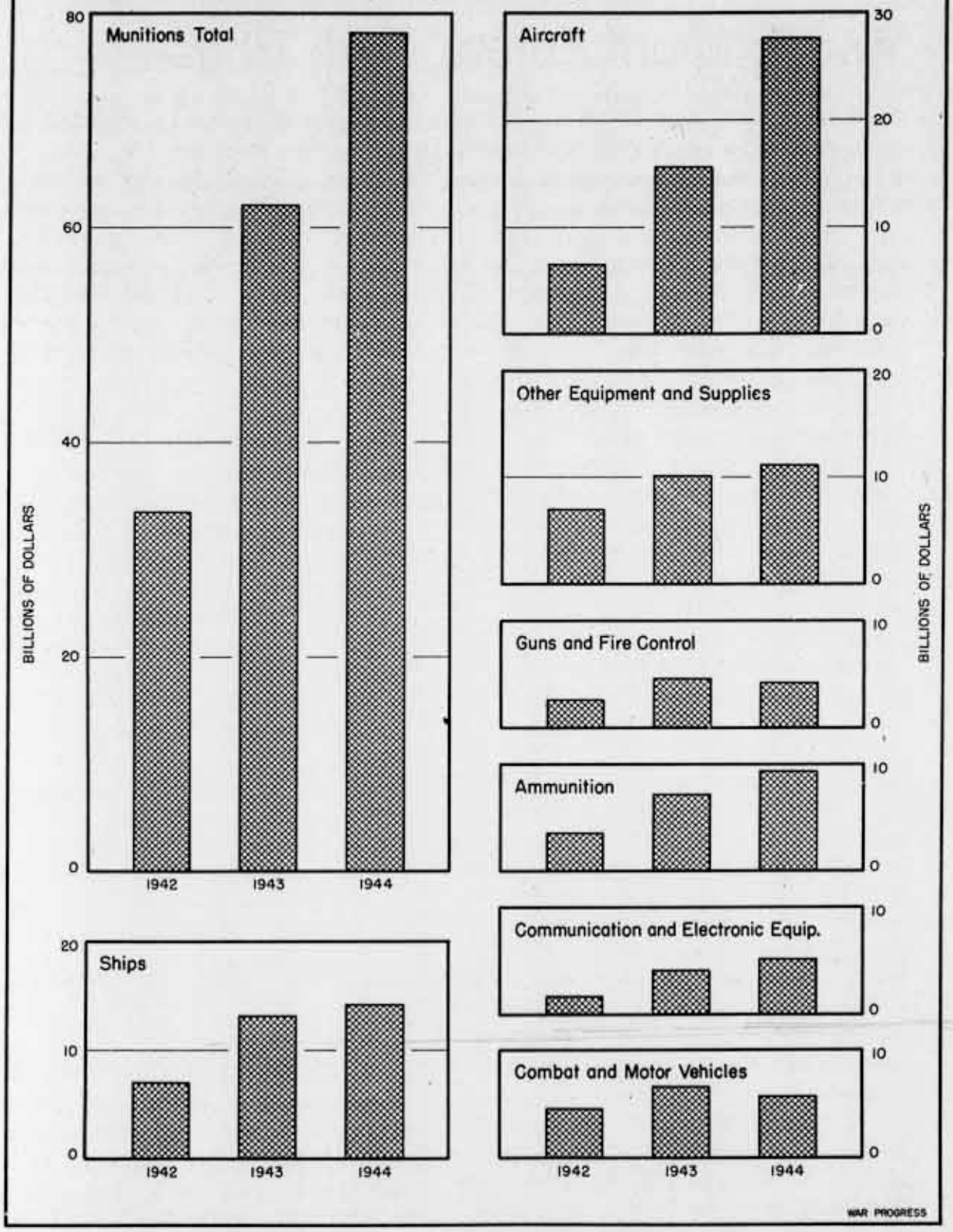
The .50-caliber cartridge also has been cut back. And the two-year small-arms ammunition program (of which .30- and .50-calibers constitute 95%) has been reduced about one-third in value since July. In rounds, the changes in requirements in the .30- and .50-caliber cartridges stack up as follows:

	July 31	October 31
	(thousands)	
.30-cal..	29,000,000	22,600,000
.50-cal..	14,000,000	9,000,000

By far the bigger cutback occurs next year; indeed, indicated production of small-arms ammunition in 1944 runs about 15% under this year's.

AS THE MUNITIONS PROGRAM LOOKS TODAY

This year's gain over last year is expected to be about 85%, but 1944's rise over 1943 will be some 26%—depending on the military situation.



any circumstances. In recent months the Army's programs for tanks, antiaircraft guns, and .50-caliber ammunition have been slashed in the light of probable needs, and now a new cut has occurred in .30-caliber ammunition (page 5). Similarly, the Navy cut its patrol craft and destroyer escort programs—though here it was important, also, to clear the ways for landing craft.

ENOUGH IS PLENTY

In short, some programs are now being reduced, not because they can't be realized, but because tactical and strategic requirements can be met with lower schedules. And it is possible—in the light of battle experience in the use of weapons and ammunition—that the 1944 munitions program may undergo further downward readjustments from the $78,025,000,000 now scheduled; in that case, the indicated gain over 1943 will be reduced:

	1943	1944	% Change
	(millions)		
Aircraft	$15,865	$27,844	+76%
Ships	13,225	14,251	+8
Guns & fire control	4,672	4,336	-7
Ammunition	7,297	9,448	+29
Combat & motor vehicles	6,694	5,821	-13
Commun. & electronic equip.	4,173	5,211	+25
Other equipment & supplies	10,083	11,114	+10
Total	$62,009	$78,025	+26%

Neither the 1943 nor the 1944 goals, as set forth above, are apt to be made. But for different reasons.

So far this year, munitions production has amounted to $49,000,000,000. To reach $62,000,000,000 for the year, production during this month and December would have to average $6,500,000,000, or 14% higher than October's record high of $5,700,000,000. Such gains seem out of the question. A total of $61,000,000,000 for 1943 is more likely.

But the 1944 program does not appear to be excessively ambitious. In aircraft, of course, there are particular models in which schedules are high relative to past performance (WP-Oct23'43, p1). In other programs, such as ships and ammunition, the stepups from 1943 to 1944 are comparatively modest and practicable in terms of materials, facilities, and probable manpower; and in still others, such as guns and tanks, the programs decline.

In all cases, however, the possibility of further downward change must be reckoned with. Tactical and strategical requirements may become so saturated in the next few months that cuts in particular types of weapons may be ordered—without compensating boosts elsewhere. Thus, overall requirements will actually decrease. The Army Supply Program has already shown this tendency.

BIG IFS AND BUTS

On the basis of present schedules, the probable peak in production comes in the middle of 1944. But cutbacks may bring an earlier peak. When? That depends in large part on the war in Europe. If Germany capitulates, then the production program will change drastically. That much is certain.

But regardless of a German capitulation, it is unlikely that work will halt on battleships and other big combat vessels which have a chance of getting into the Pacific war. However, keel layings for vessels which will be delivered well into the future—perhaps too late for combat—might well be stopped.

Programs for defensive ships—subchasers, destroyer escorts, etc.—also might be expected to drop sharply with

the cessation of U-boat attacks in the Atlantic. Similarly, merchant ship requirements would be changed if the chief war demands (other than relief and rehabilitation) were in the Pacific.

Ground army equipment requirements—now figured on the basis of a two-continent war—would also undergo review. Cuts would depend on the strategic plans for the use of naval, air, and ground forces—in what quantity and what proportion. For example, if plans call for a large-scale attack through Burma and China, more ground troops and equipment would be needed than in, say, a series of direct attacks on Japan and its island outposts.

In the case of aircraft, a Pacific war would place a heavy premium on long-range planes—superbombers, transports, and fighters. Operations against Japan—at least at the outset—will have to be carried on from faraway bases. Indeed, the number of bases and their equipment will largely determine the number of aircraft the United States and Great Britain will be able to deploy against the Japanese.

STILL PLAYING SAFE

Until the war in Europe is decided, the tendency will be to cut back only those programs in which (1) stocks on hand, supplemented by incoming schedules, are beyond probable needs, including contingencies, or (2) stand-by facilities can be retained so that production, if required, can start up quickly. The idea will be to hold productive capacity in reserve for all military possibilities. If, for example, a landing in Europe were beaten back, it would be necessary to speed production in order to prepare for another and greater attempt.

Even after Germany falls, the same attitude is apt to dominate production planning—to be sure to have enough in readiness. And for that reason, overall production probably will go on at a much higher rate than is necessary to defeat Japan.

The defeat of Japan would lead to the sixth, and final, phase in war production—calling it a day.

Rubber's Coming Test

Main job is to use expanding synthetic production by reconverting tire-fabricating facilities. But getting butadiene from petroleum is still a problem.

AT THE END OF 1943, the country's rubber stockpile—both crude and synthetic—will total 205,000 long tons. That's about double what February estimates figured it would be. Yet—and this is something of a paradox—synthetic production, because of delays in plant construction, is behind schedule. Explanation: consumption also fell below early estimates, and imports of crude have run higher than expected. Thus the real test comes next year, and it's a double test.

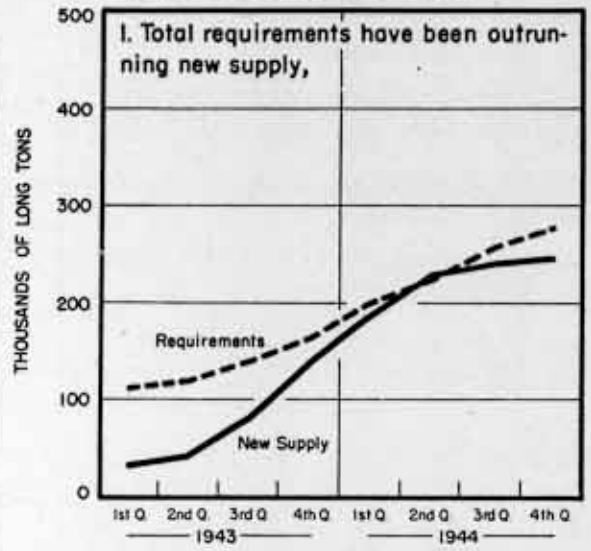
First, synthetic production must more than triple from 1943's 233,000 long tons to 818,000—close to the final goal of 850,000. This, plus 81,000 long tons of crude rubber imports, will be only 54,000 short of estimated requirements of 953,000 (chart, page 9).

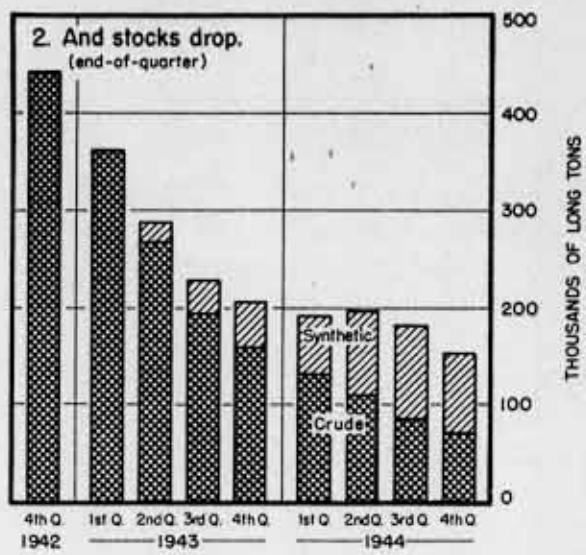
HARDEST JOB AHEAD

The second and harder test will be to make all the required end products of this synthetic—and especially to make tires. Military requirements for rubber will rise from 268,000 tons this year to 390,000 in 1944—and the principal increase is in large-sized, heavy-duty tires. (One large bomber tire would make 30 passenger-car tires.) At the

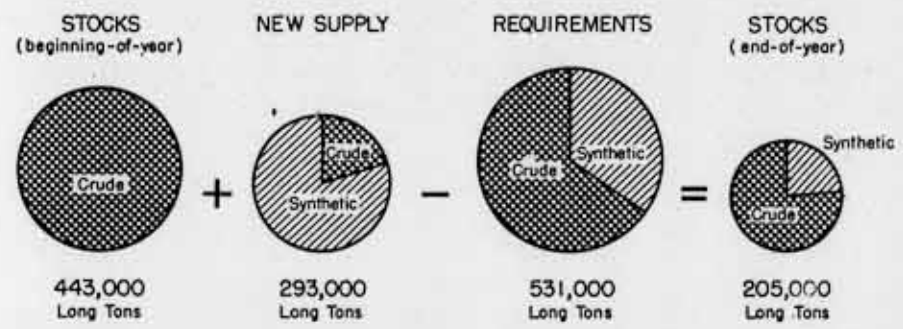
LESS CRUDE, MORE SYNTHETIC RUBBER

This year, 35% of requirements were filled by the synthetic variety; but for next year the figure is 82%.

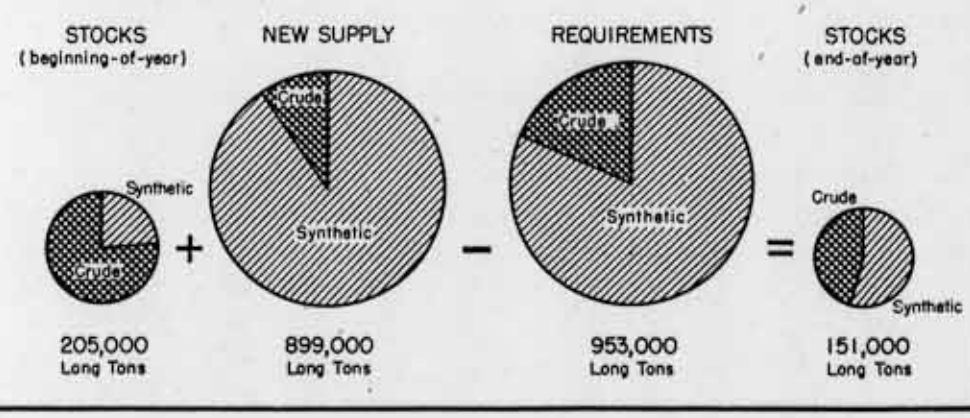




3. This is the 1943 picture:



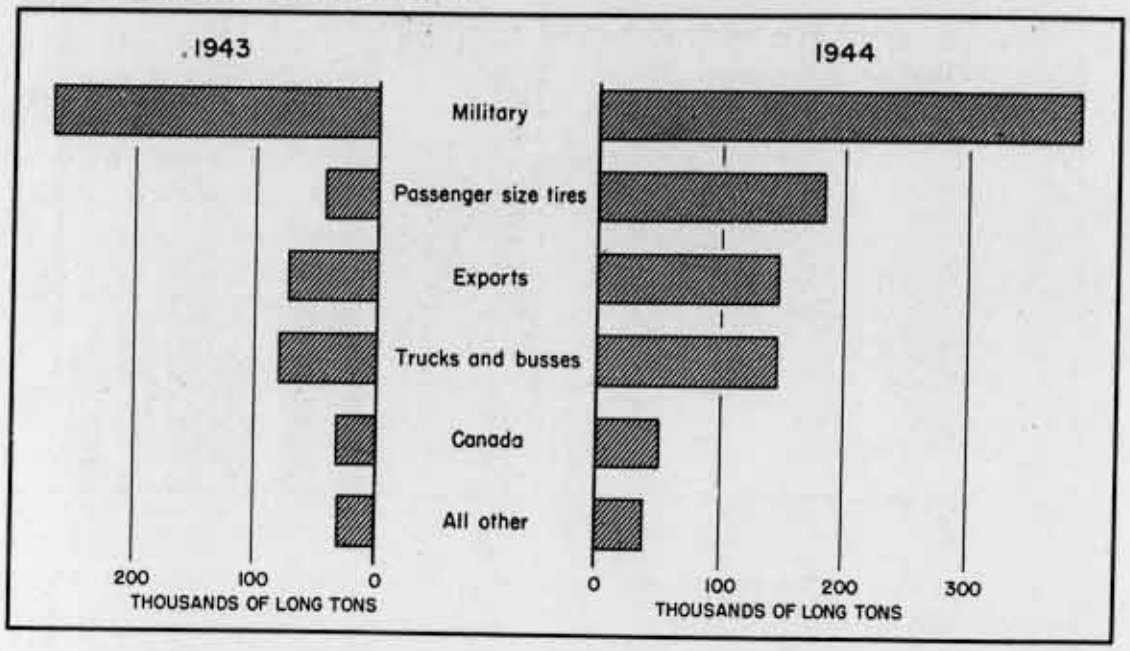
4. This is the 1944 picture:



WAR PROGRESS

WHERE THE RUBBER GOES

Next year's requirements rise 80%, as allowance for civilian tires shows big gain. Military total up, proportion down.



WAR PROGRESS

same time, civilian passenger-car tires —30,000,000 of them—plus tires for civilian trucks and buses will require 329,000 tons, as against only 124,000 this year (chart, above). And, unless production does come through, a large part of America will be flat on its wheels. Tire inventories are down to next to zero.

RECONVERSION STARTING

Accordingly, the Office of the Rubber Director has scheduled two new fabricating plants, but chiefly it's depending on expanding existing facilities. And that means that production of rayon tire cord, carbon black, and other components must be stepped up in unison.

This might seem an easy job for a country that turned out 50,000,000 passenger-car tires a year before the war. But it's not. The rubber companies converted most of their facilities to other war work; now they've got to reconvert. Tire equipment still in place is wholly insufficient to meet the new demands. Furthermore, synthetic rubber requires new machinery and 20% more milling and processing time than crude; making a tire out of synthetic may involve almost twice as many operations. Still further, manpower is especially short; many of the important fabricating plants are in Akron and Los Angeles.

At best, it will be a year before this expansion program is completed, and the tire shortage is due to get worse for some months. In the meantime, civilians will have to depend on retreads. The reclaim program, however, is in good shape; more recapping material is on hand than ever before.

Standard synthetic rubber for tires is Buna S ("S" for styrene, which is co-polymerized with three parts of bu-

tadiene). All passenger car, tractor, and smaller-sized tires are now made exclusively of Buna S. For larger sizes, from 10% to 30% of natural rubber is still added. For big heavy-duty tires, no synthetic will be used until more rayon tire cord is available. Buna S generates more heat than natural rubber when driven, and then loses tensile strength and resistance to tear.

TIRES HOLD UP—WITH CARE

Nevertheless Buna S makes a better tire than rumor has had it. Army, ORD, and private tests indicate that Buna S passenger-car tires will last almost as long as natural-rubber ones—given careful driving. Likewise truck and bus tires give good service in city use, where speeds are limited. The trouble begins with over-the-road service. They can't stand up under overloading, speeding on hot pavements, jolting on rough roads, etc.

However, Buna S remains the best all-purpose synthetic. It is the closest to natural rubber in processing and performance, and therefore comprises the bulk of the program—735,000 of the total scheduled production of 850,000 long tons a year. And 80% of the plants scheduled have been completed.

But there are the inevitable bugs. In this case it's the feeder program—styrene and butadiene. Although styrene plants are up to schedule, butadiene plants are only 55% completed. Here there were components problems. But the serious problem is that two-thirds of the butadiene is scheduled to be made from petroleum, the rest from alcohol—and it's the butadiene-from-petroleum plants that have been lagging. They are only 39% completed. Moreover, the plants in operation have barely got started and are still producing well under rated capacity. Of the butadiene-from-alcohol plants, 87% have been completed, and they are producing more than 30% above rated capacity. But this does not off-

SELECTED MONTHLY STATISTICS

PRODUCTION-COST OF LIVING-FEDERAL CIVILIAN EMPLOYMENT

	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
PRODUCTION INDEX-INDUSTRIAL (1935-39=100)†	248 p	248	245 r	235	218	127	111
Total Manufactures	267 p	267	263	255	233	127	109
Durable	373 p	370	367 r	356	312	133	117
Nondurable	182 p	184	180 r	173	168	121	103
Minerals	138 p	143	140 r	127	134	128	119
PRODUCTION OF CLOTHING AND SHOES FOR CIVILIANS (1935-39=100)†							
Clothing and Shoes combined	102 p	105	102 r	112	105	N.A.	N.A.
Clothing	105 p	107	104 r	115	107	N.A.	N.A.
Shoes	93 p	94	94	98	96	N.A.	N.A.
COST OF LIVING-ALL ITEMS (1935-39=100)	124.4	123.9	123.4 r	124.1	119.0	100.3	104.0
Food	138.2	137.4	137.2	140.6	129.6	97.6	106.5
Other than food	117.4	117.1	116.4	115.7	113.5	101.7	102.7
FEDERAL CIVILIAN EMPLOYMENT (thousands)	3,022	3,044	3,131 r	3,049 r	2,633	974	868
War	2,191	2,214 r	2,306 r	2,234 r	1,765	N.A.	N.A.
War Department	1,297	1,316 r	1,407 r	1,393 r	1,097		
Navy Department	677	678 r	676	619	519		
Other War Agencies	218	220 r	223 r	221 r	149		
Nonwar	831	830	825 r	815 r	868	N.A.	N.A.

* Production Index, Cost of Living, October; Production of Clothing & Shoes, Federal Civilian Employment, September.
† Unadjusted. p Preliminary. r Revised. n.a. Not available.

set the butadiene-from-petroleum lag.

Of the other synthetics, neoprene is making the best showing. All government plants are now in operation and are producing at the scheduled rate of 40,000 long tons a year; an additional 9,000 is being turned out by du Pont. Neoprene has proved an excellent rubber for mechanical belts, hoses, etc., because of its high resistance to oil.

On the other hand, butyl—considered the best synthetic for inner tubes—is nearly all promise and no performance. It's a test-tube winner; but so far it has failed to make the jump to large-scale production. Estimated production in '44 is 39,000 tons, as against the 75,000 scheduled.

MORE CRUDE STILL WANTED

Natural rubber still comes in from various sources: plantation rubber from Ceylon and Africa, wild rubber from the Amazon basin, cryptostegia from Haiti, guayule from Mexico, etc. But new supplies are still well under present requirements, which are higher than anticipated because of the shortage in rayon tire cord. (Heavy-duty synthetic tires require rayon cord.) By the middle of next year, stocks of crude rubber are expected to fall below the minimum inventory of 100,000 long tons recommended by the Baruch committee.

This whole picture conceivably could be changed for the better through research now being carried on, under the auspices of ORD, in industrial, university, and government laboratories. A way of reducing Buna S heat generation would win the Rubber Director's "E." But no such spectacular discovery figures in plans for the near future.

However, slow, steady research gains can be expected to open up postwar possibilities. There is pretty sure to be a huge market for all rubber for some time after the war; the plantations in the Far East probably won't be able to swing at once into full production. Ultimately, the ability of any synthetic rubber to compete in an open market will depend on production costs. Present costs are no index—speed was the primary objective. But it is believed that Buna S will be manufactured for less than 15¢ a pound, which is slightly under what natural rubber sold for before the war. Some rubber growers think that Far Eastern plantations will have to be replanted with the best stock to meet this competition.

REPORTS ON REPORTS

Britain's Way

Occupational Deferment of Administrative, Professional, and Technical Personnel in Great Britain (confidential; pp. 5) describes how Britain allocates specialized personnel in wartime through national advisory committees in medicine, banking, government service, and other fields, which work under the supervision of government departments.
(War Manpower Commission, Labor Market Planning Division)

Opinion on Inflation

Since early summer, dissatisfaction with high food prices has increased and sentiment for income limitation has been decreasing, because of uncertainty about the future cost of living, *Public Appreciation of Inflation* (restricted; pp.21) reports. Willingness to cooperate with the government's inflation control program is greater among those persons who have been exposed to the hold-the-line information campaign.
(Office of War Information, Surveys Division)

[This record is an attempt to select from the many documents coming to the attention of WAR PROGRESS those studies which would be of most interest to readers. The list is by no means comprehensive, and no attempt has been made to evaluate reports for accuracy. Whether reports are available depends on the policy of each individual agency.

2 31590

The President

1

WAR PROGRESS

Confidential

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Commerce Dept. Letter, 11-1-72
By HHP, Date MAR 29 1973

Plane Production in November

Where Are the Shoes Coming From?

Food for Us and Freedom Too

Number 168

December 4, 1943

THIS DOCUMENT IS THE BEST
AVAILABLE. EVERY TECHNICAL
EFFORT HAS BEEN TAKEN TO
INSURE LEGIBILITY.

1943—An 86,000-Plane Year

November acceptances reach 8,789 and boost 11-month total to 77,142. Increase over October of 7%, on airframe weight basis, follows 9% gain from previous month.

IT LOOKS LIKE an 86,000-plane year—not far from doubling last year's output of 47,857. November acceptances ran to 8,789 planes—5% more than in October—bringing the 11-month total to 77,142 (chart, ~~page 3~~ below). And December should come through with at least 9,000 more. On an airframe-weight basis, the November showing was up 7%, comparing favorably with the gain of 9% in October, a 31-day month.

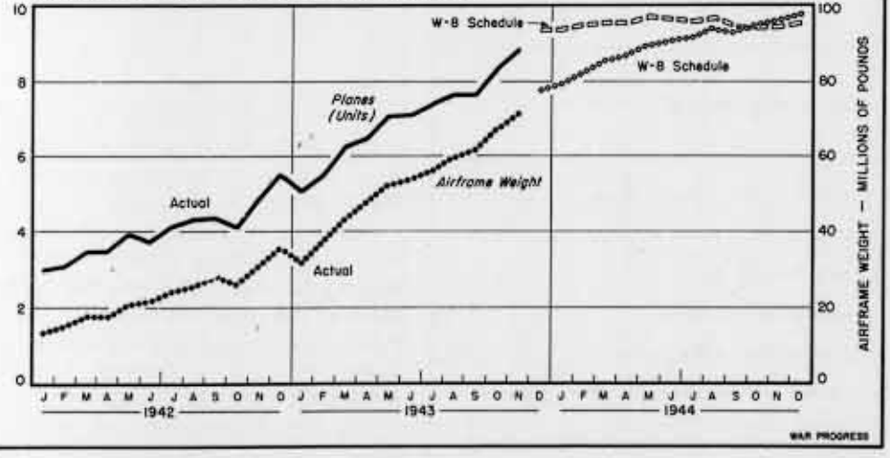
The tendency is still toward heavier planes. In November, the average airframe weight per plane was 8,130 pounds as against 7,560 pounds in the first 11 months, and 5,790 pounds in 1942. Next year, the average is slated to rise 17% above current levels to 9,450 pounds.

For the second straight month, neither labor problems nor design changes were major obstacles to production. West Coast plants continued to benefit from the three-month-old manpower plan, with Boeing at Seattle still reflecting the September wage increase at Seattle; acceptances of 230 Flying Fortresses ran 10% ahead of schedule and October to score a new high. Over at Burbank, Lockheed gave another demonstration of comeback power by turning out 38" P-38 Lightnings, a new peak and 11% ahead of schedule as well as October.

But November was a banner month for new highs at numerous other plants working on top-preference models. Gains

TWENTY-THREE MONTHS OF AIRPLANE OUTPUT

So far this year there has been an 80% rise in numbers and a 140% rise in weight over the first eleven months of 1942.



ranged from 2% all the way to 314%:

Plant and Model	November Acceptances	% Gain Over October
Consolidated Vultee, San Diego		
B-24 Liberator.....	250	2%
Chance-Vought, Stratford		
F4U Corsair.....	230	18
Grumman, Bethpage		
F6F Hellcat.....	400	16
Goodyear, Akron		
FG Corsair.....	78	24
Boeing, Wichita		
B-29 superbomber...	18	38
North American, Dallas		
P-51 Mustang.....	55	67
General Motors, Trenton		
TBM Avenger.....	205	71
Curtiss, Columbus		
SB2C Helldiver.....	158	136
Curtiss, Buffalo		
C-46 Commando.....	58	314

With the exception of patrol bombers, all major combat-plane groups went ahead of the previous month; moreover, the November showing against schedule was the best for 1943 to date—only 3% shy of W-8, as the following table shows (airframe weight basis):

	November Acceptances as % of	
	October	W-8
All mil. planes..	107%	97%
Combat planes...	108	97
Heavy bombers..	104	97
Patrol bombers.	87	92
Medium bombers.	115	98
Light bombers..	117	95
Fighters (incl. naval reconn.)	111	99
Transports.....	123	92
Trainers.....	74	96
Communication...	98	112

Acceptances of 1,083 Flying Fortresses and Liberators missed W-8 by one plane but again moved into new high ground, with an increase of 3% over October. The 18 B-29 superbombers turned out at Boeing, Wichita, compared with 13 in the preceding month; but design problems with the fire control system contributed to widening the gap between acceptances and a steeply rising schedule to 17 planes in November from seven in October (chart, page 3).

MEDIUMS GET BIG GUN

Of 260 Billy Mitchells (B-25s) turned out at North American's two plants, 80 were B-25Hs, the attack-bomber version which carries a 75mm. gun.

After a poor showing in October, Navy light bombers snapped back for the biggest monthly gain since May; acceptances of 798 were 25% ahead of the previous month. And whereas schedule was missed by 19% in October, last month the deficit was cut to 8%.

The P-51 Mustang did it again last month, scoring a new peak at 295 planes,

IN THIS ISSUE:

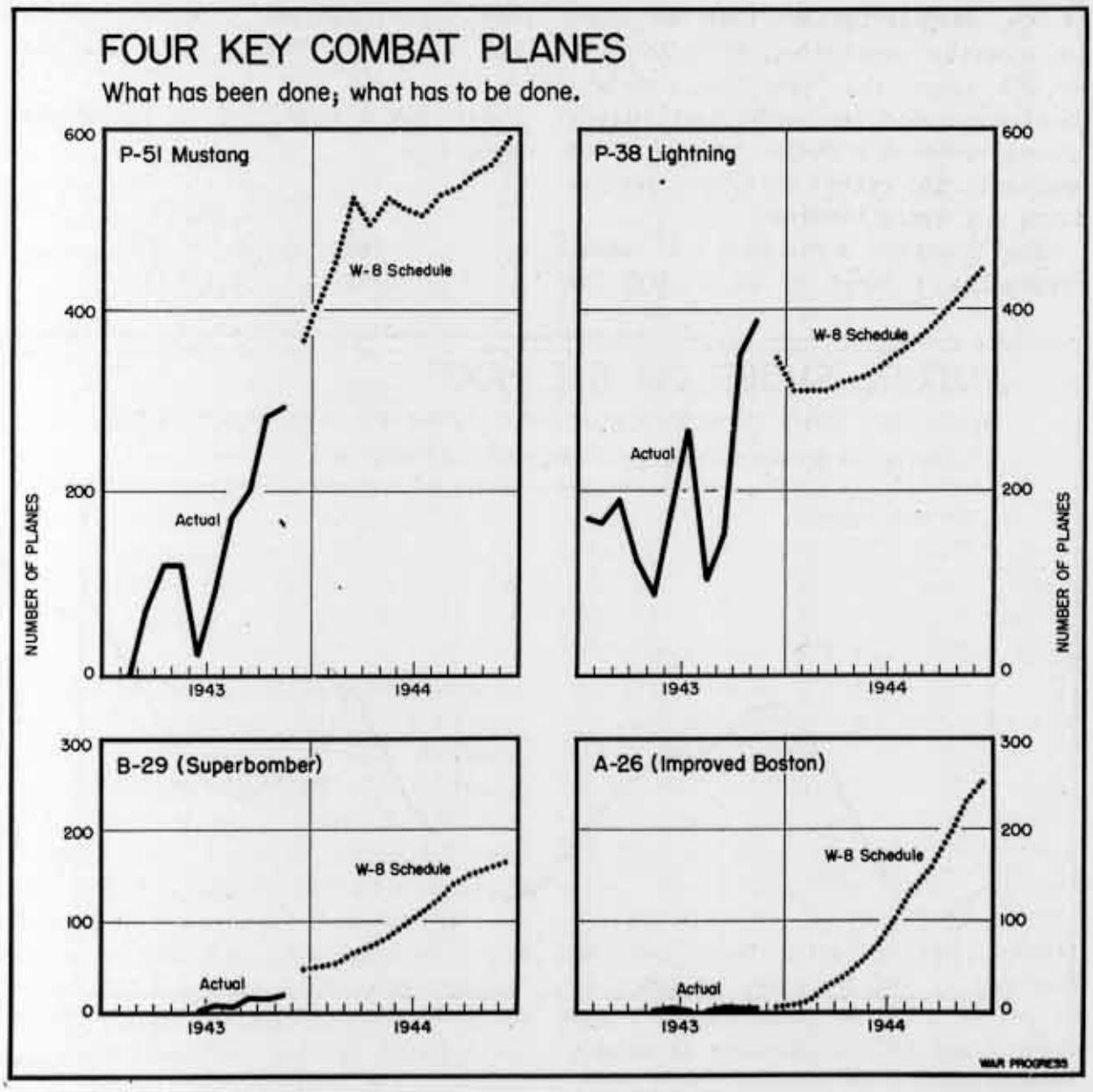
2-33767-p2-bu

4% above October and only 2% shy of the W-8 plan. The P-47 Thunderbolt was another high-stepping model in November, running 11% ahead of October to a new top at 549. And if production hadn't been held up by incomplete tooling for wing fittings plus defective parts from subcontractors at Republic's Farmingdale plant—the volume producer—the P-47 schedule might have been exceeded, rather than missed by 6%.

Navy fighters continued to score sharp monthly gains, with acceptances of 929 Corsairs, Wildcats, and Hellcats running 18% ahead of October. But for the third month in a row, results fell short of the stiff schedule (WP-Nov6'43, p9); the deficit was 8% last month.

COMMANDOS QUADRUPLED

Over at Curtiss, Buffalo, the C-46 Commando transport pulled out of its five-month slump; acceptances of 58 planes more than quadrupled September's poor showing and exceeded schedule by 11 planes.



Where the Shoe Leather Pinches

Available hides fall short of needs despite largest cattle herd in history. Third of supply goes into military footwear, and civilian quota drops accordingly.

THE UNITED STATES has the greatest stock of hides on the hoof in its history. Yet shoes must be rationed.

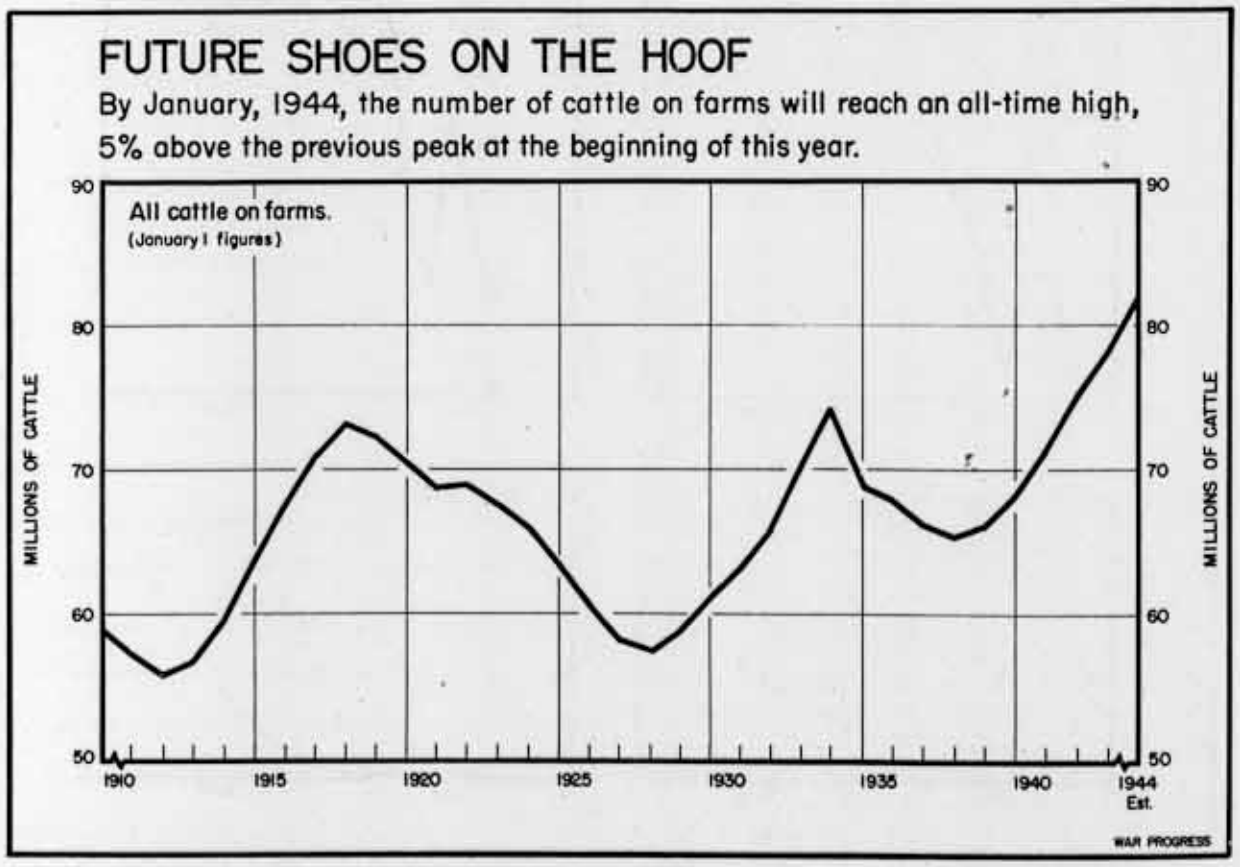
The point is that hides are a byproduct. Every time a steer is killed, a hide is born. But the hide birth rate is low, despite the fact that the country's cattle population, at 81,000,000, is 25% above the peacetime average. Cattlemen are holding on for still higher prices, and meat packers, because of OPA wholesale and retail ceilings, are not doing any fancy bidding.

The domestic birth rate of hides, originally figured at 19,800,000 for this year, has now been reduced to 17,500,000. At the same time, imports have fallen off from 8,500,000 in 1941 to 4,500,000. Hence the domestic hide supply is down more than 10% from last year and is not far above the prewar average:

	Domestic	Imports	Total
	(thousands of hides)		
1934-40 avg...	16,546	2,151	18,697
1941.....	17,920	8,536	26,456
1942.....	19,746	5,762	25,508
1943 (est.)...	17,500	4,500	22,000

But the demand runs to 25,430,000, as follows:

	Hides
Army.....	6,780,000
Navy.....	1,127,000



2-33767-p4-bu

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program—Checks paid (millions of dollars)	1,392	1,731	1,536	1,932	1,139
War bond sales (millions of dollars)	189	163	194	277	211
Wholesale prices (1926=100)					
All commodities	102.6p	102.6p	102.8p	104.0	100.1
Farm products	121.2	121.2	122.2	126.7	110.8
Foods	105.8	105.6	105.0	110.7	103.6
All other than farm products and foods	97.5p	97.5p	97.5p	96.9	96.1
Petroleum:					
Total carloadings	53,911	51,162	51,934	54,081	51,832r
Movement of cars into the East	24,778	24,607	24,584	28,708	25,146
Total stocks of residual fuel oil (thousands of barrels)	62,143	62,662	63,838	67,682	78,674
East coast stocks for civilian use (1940-41=100 Seas. Adj.)					
Gasoline	40.4	39.5	36.0	N.A.	N.A.
Kerosene	49.0	52.3	51.9		
Distillate fuel oil	65.1	64.2	55.7		
Residual fuel oil	75.4	76.3	79.5	N.A.	N.A.
Bituminous Coal:					
Production (thousands of short tons, daily average)	2,117p	1,910	1,888	1,936	1,954
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	2,579	2,859	2,417	2,396	924
Gulf Coast ports	366	477	405	354	239
Pacific Coast ports	1,216	1,313	1,259	1,274	962
Steel operations (% of capacity)	99.5	99.1	100.0	98.4	98.3
Department store sales (% change from a year ago)	+13	+21	+11r	+43	-1

p. preliminary n.a. not available r. revised

	Hides
ARCO.....	71,000
Maritime..	31,000
OLLA.....	243,000
OEW.....	45,000
Canada....	37,000
OCR.....	17,096,000
Total....	25,430,000

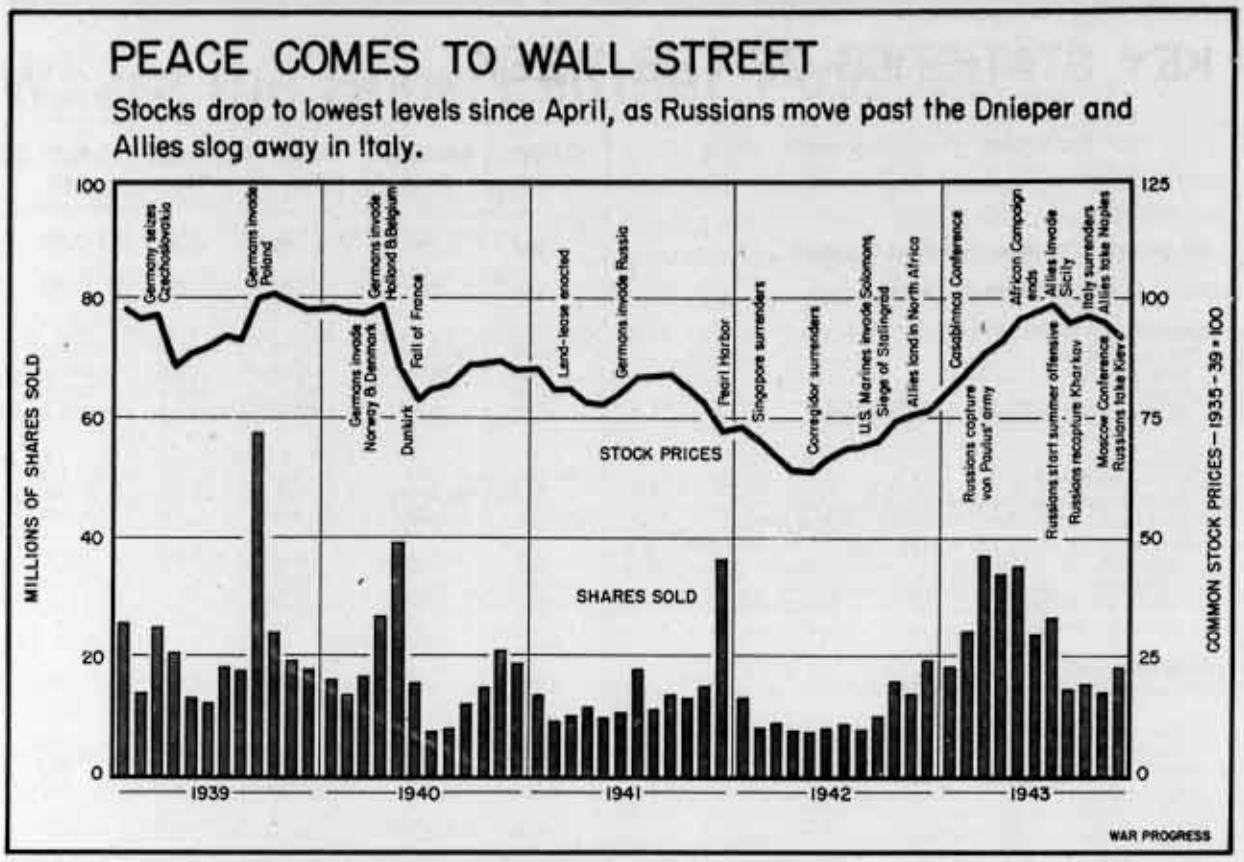
Four-fifths of the hides go into footwear. The rest wind up in gun slings, holsters, scabbards, industrial belts (which alone take 1,000,000 hides a year), saddles, etc. These are all intimately tied in with military needs, and the War Production Board has specified that sufficient leather be set aside to meet the requirements. That means that the pinch is on the civilian foot. Though demand for leather shoes is greater than ever before, total footwear production is down from the 1941 peak, viz.:

	Civilian	Military	Total
	(million pairs)		
1934-40 avg....	394.4	n.a.*	394.4
1941.....	483.1	15.3	498.4
1942.....	443.0	40.9	483.9
1943 (est.)....	411.5	43.5	455.0

* Figure not available, but less than 1,000,000.

A third of this year's supplies—8,000,000—are going into military footwear. The Army takes most. It buys WAC, parachutist, skiing, jungle, shoe pac, and other special types of footwear, but the service shoe is the bulk item. Unlike most civilian shoes, it is made almost entirely of cattle-hide

S-33767-p5-bm



leather; it has a rubber composition outer sole, but the middle and inner soles as well as the uppers are of cattle hide. And soldiers are hard on shoes; they wear out about four pairs a year. Moreover, shoes have to be carried in storage; Army service shoe stocks, for example, stand at 14,000,000 pairs, Navy stocks at about 2,000,000. The 1943 military requirements roundly shape up as follows:

	Pairs
Army	
Service shoe.....	21,500,000
Other types.....	5,000,000
For Russia.....	3,500,000
Navy.....	10,500,000
Marines.....	2,500,000
Coast Guard.....	500,000
Total.....	43,500,000

This leaves about 411,500,000 pairs, including slippers and other nonrationed footwear, for U.S. civilians, or about 5% more than the prewar average. Third-quarter production of rationed footwear was at the rate of 300,000,000 pairs a year; but the fourth-quarter rate will be lower.

CUTBACK IN "BENDS"

Sole leather—known as "bends" in the trade—is restricted for civilians, both in repairs and in new shoes. During the first half of this year, civilians were allocated 317,000 bends a month—enough to repair 7,600,000 pairs of men's shoes (one bend fixes 24 pairs). Now this is down to 250,000 bends a month. To make these repair hides available, it has been necessary to reduce the number of bends going into new civilian manufacture. In prewar years, more than 1,000,000 bends a month were used for this purpose. During the first half of this

year, shoe builders had to get along with 620,000 bends a month. And now there has been a further cut: they are winding up the year with only 458,000 bends monthly.

Attempts to conserve sole leather by substitutions have been partially successful. Rubber has always been used for soling a certain proportion of shoes, but shortage of facilities for processing the reclaimed rubber available has impeded substitution. Also, reclaimed rubber soles mar floors, and consumers complain. Some other soling materials have required the use of plastics or synthetics; these in turn have been in short supply.

To meet the tight supply-demand situation, the Department of Commerce has advocated slaughter of 5,000,000 head of cattle under government auspices, thus getting beef and hides at once. This would not be unprecedented. During the 1934 drought, the government purchased and killed 8,000,000 head.

Further, the U.S. and Great Britain will set up a Joint Hide Control Office in Washington to supervise foreign purchasing of hides. The combined cattle-hide supply will be treated as a single aggregate to be allocated between the U.S. and Great Britain on an agreed-upon basis. This formula was based on the number of hides put into tanning process for the U.K. in 1940 and for the U.S. in 1942.

Food for Us and Freedom Too

Total production hits new high and civilians have plenty to eat in spite of increasing military and export demands. Plans for '44 call for even greater output.

SINCE MIDSUMMER, U.S. civilians have been eating well—not so much as in the peak-consumption year of 1941, but more than in prewar 1939. And they'll continue to eat in about this style during the first six months of '44.

What's in the books is a twice-told tale: there's more food—the farmers have seen to that—but there are more mouths to put it in. Military and export demands took an increasing share throughout '43, and they are apt to keep increasing as victory follows victory and many more hungry people have to be fed.

By any standard but 1942, this would have been a bumper crop year. Although a long dry spring and local shortages of manpower, machinery, and fertilizer kept many crops below the goals set for them, the harvest was second only to last year's. Moreover, livestock products reached a record high—10% above 1942. This carried total U.S. food production to an all-time peak, 5% higher than '42.

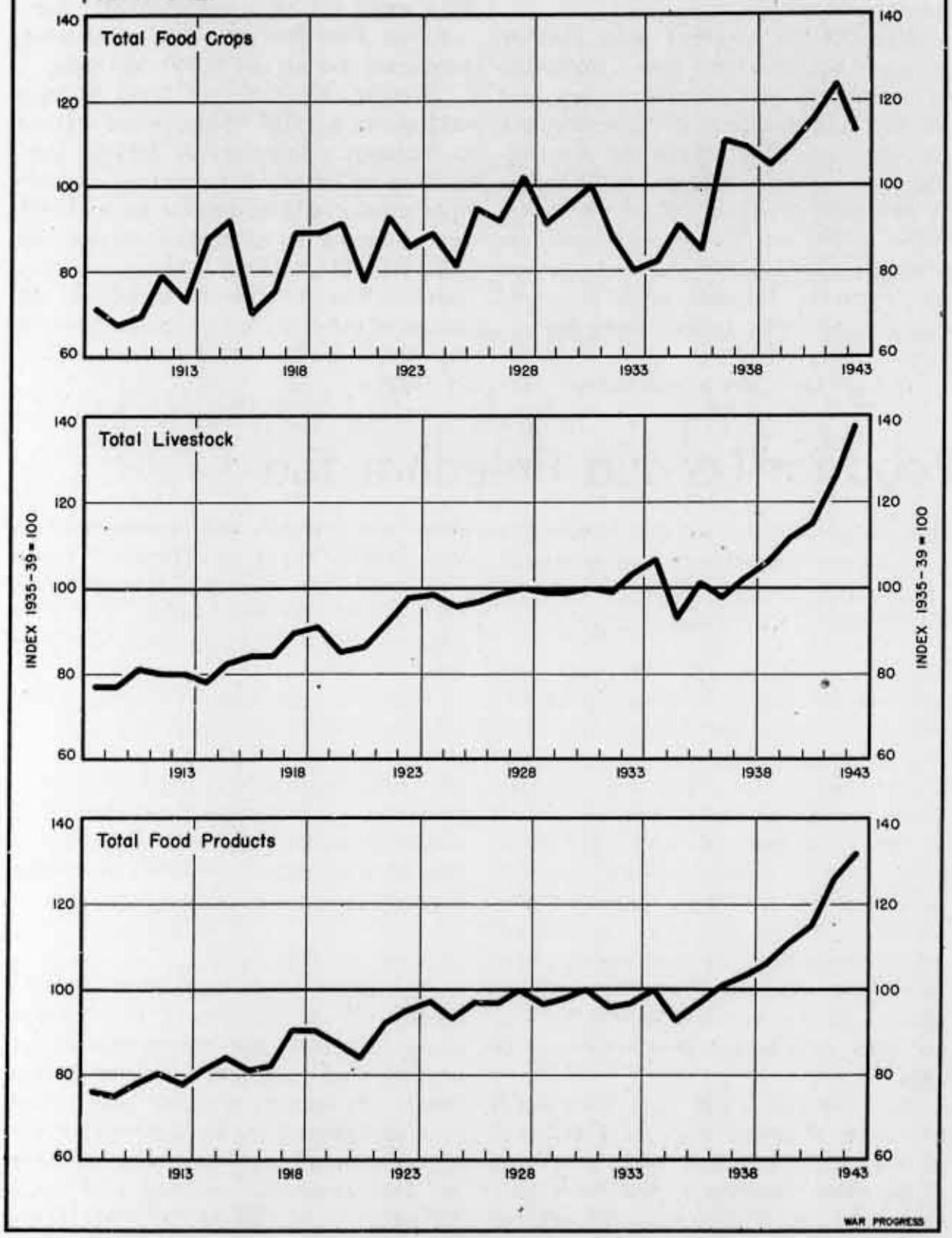
Thus meat, eggs, and a few other foods will be more abundant in the next six months than in '42 or the first half of '43; most foods will be only a bit less plentiful—milk, food fats and oils, for example; and some will be short, as they are now—butter, cheese, processed vegetables and fruits, etc.

SHORTAGE IN FEED

The great wheat and corn crops—second only to 1942—are still not large enough to feed the record number of cattle, hogs, and chickens now on the farms. Slaughter of beef cattle and hogs will therefore be high during the winter months. And although military and lend-lease allocations will call for substantial quantities, civilians

FOOD CROPS DOWN, LIVESTOCK UP

And total food products in 1943 reach an all-time high, 5% ahead of the previous peak in 1942.



will still get more beef and pork. The Office of Price Administration has already lowered point costs for December.

The chicken will be America's pièce de résistance. There'll be one for every family's pot almost every week next year, just as this year. Also, there'll probably be an egg a day per person—at least for the first half of '44. The 1943 civilian consumption—347 eggs per person—is likely to continue into 1944. This would run 8% above 1942 consumption.

Likewise civilians will have more potatoes, beans, and dry peas next year even after military and other allocations take 18% of the potatoes, 39% of the dry beans and peas. This reflects this year's big boost in output.

Harvests of fruits, fresh market and processing vegetables were generally lower this year, but home gardens helped to make up the deficit in fresh vegetables and have provided canning carryover. And from present indications, the 1943-44 citrus fruit crop will equal the all-time high of 1942-43.

Production of major food commodities for 1943 shows gains as high as 54% for

SELECTED MONTHLY STATISTICS

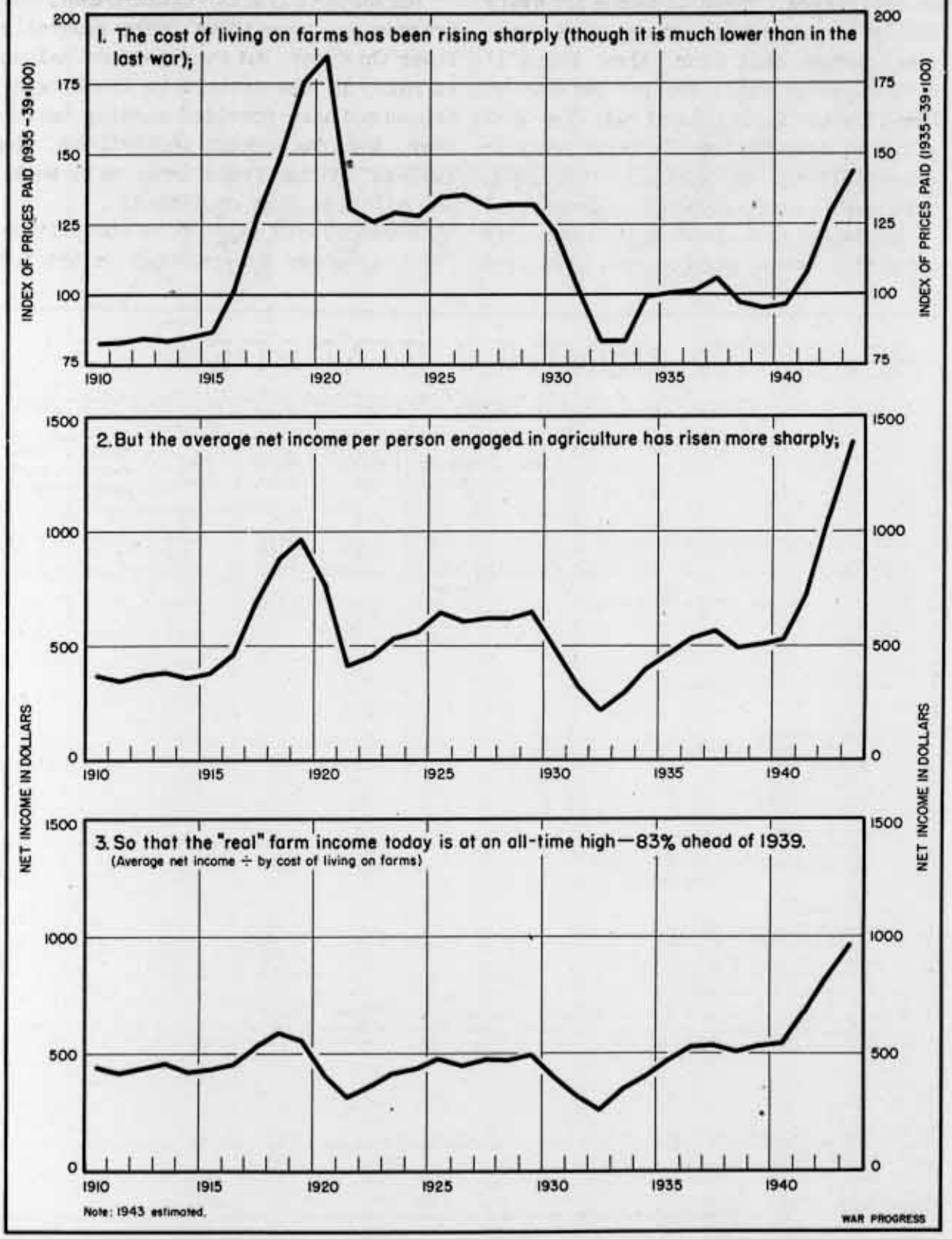
Consumer Expenditures-Retail Sales*-Food Production - Labor Disputes

	Latest Month**	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
CONSUMER EXPENDITURES (million dollars)	7,672p	7,388	7,454r	7,251r	7,028	5,293	5,304
Goods	5,237p	4,954	4,998r	4,826r	4,698	3,385	3,430
Services	2,434p	2,434	2,458r	2,424r	2,330	1,908	1,875
RETAIL STORE SALES-TOTAL (million dollars)	5,717p	5,357	5,088	5,212	5,430	3,748	3,732
Durable goods	801p	775	777	792	864	939	903
Nondurable goods	4,916p	4,582	4,312	4,421	4,566	2,809	2,829
FOOD PRODUCTION							
Dairy Products (million pounds)							
Butter, creamery	107.6	s	s	s	124.0	123.2	118.9
Cheese	73.2				71.6	53.9	51.2
Evaporated Milk	188.9				203.1	144.6	124.1
Meats-Total (incl. lard, million pounds)	1,680.0				1,532.0	1,162.0	1,000.0
Beef and veal	684.4				686.0	499.3	459.0
Lamb and mutton	104.5				90.7	62.1	59.3
Pork, including lard	891.1				755.6	600.5	451.7
Lard	148.2				120.0	99.5	59.0
Poultry and Eggs							
Eggs (millions)	2,957.0				2,725.0	2,088.0	1,999.0
Poultry (receipts at 5 principal markets, million pounds)	53.2	s	s	s	58.9	37.2	33.2
LABOR DISPUTES							
Number of strikes in progress	310	N.A.	N.A.	445	269	356	583
Workers involved (thousands)	219			230r	67	140	127
Number of strikes beginning during month	290			395	207	205	320
Workers involved (thousands)	215			225	62	107	67
Man-days idle (thousands)	975	N.A.	N.A.	675	244	1,508	1,182

* Entire series revised. ** Consumer Expenditures, September; All other, October.
p Preliminary. r Revised. s Seasonal influences invalidate month-to-month comparisons. n.a. Not available.

THROUGH FAT YEARS AND LEAN WITH FARMERS

Agricultural purchasing power is at the highest level in history, as individual incomes soar.



canned juices, while canned fruits are only 77% of 1942 and 97% of 1939:

	1943 Production As % of	
	1939	1942
Meats.....	138%	113%
Chicken.....	155	127
Eggs.....	140	113
Milk.....	111	99
Cheese.....	129	82
Canned milk.....	134	84
Butter.....	97	101
Lard.....	138	118
Margarine	216	148
All fats and oils.	119	110
Citrus fruits.....	97	106
Canned fruits.....	97	77
Canned juices.....	190	154
Dried fruits.....	99	112
Vegetables, fresh.	92	89
Vegetables, canned	n.a.	98
Potatoes.....	137	125
Dry beans.....	148	117
Dry peas.....	495	134
Sugar.....	77	81
Wheat.....	113	85
Rice.....	128	105
Corn.....	118	96
Oats.....	120	85
Total foods.....	125%	105%

On the basis of allocations from October, 1943, through September, 1944 (which are "firm" for only three months at a time), civilians will get about 75% of the total food production; military allotments will take 14%; lend-lease and other exports, 11%.

FOOD FOR FIGHTERS

Person for person, military consumption is greater than civilian. Driving a tank or toting a full pack takes more calories than sitting in a swivel chair or pounding a typewriter. A soldier needs three times as much sugar, for instance. as the average civilian, and his consumption of other foods is proportionately high; he needs meat, canned fish, butter, etc., in large amounts. And as the services grow and more men are sent to distant fronts, stores in many outposts must increase and be adequate for any contingency.

Military needs have taken an increasingly large slice of total supply, as follows:

1942... 7%
1943... 13%
1944... 14%

Lend-lease is the largest government claimant for such foods as cheese, dried skim milk, dried whole milk, dried eggs and fruits, fats and oils (excluding butter), and dry beans and peas, which have a maximum of food value and a minimum of bulk.

MORE PORK, LESS CHEESE

In the 1943-44 allocations, almost all the meat assigned to lend-lease is pork; but the supply is so great that civilians, with only 66% of the output, will be left with more than they ever ate before. Cheese illustrates the other side of the picture. Lend-lease will take 23%, the services, 15.5%; civilians will get only a little more than half of their 1942 supply.

The big question mark, which can change all percentages in 1944 food plans, is relief for people in liberated areas. Only small allocations have been made thus far for this purpose, but as the allied armies advance, relief needs will increase. In the meantime, military and lend-lease stores are expected to tide them over, and these allocations will increase accordingly. (Italy is now being fed from military supplies.)

Food of all kinds gets wider distribution now than ever before. People who couldn't afford the food they needed

R-33767-pil-bu

before the war can get their share of scarce foods and any amount of the plentiful products. For one thing, they have been buying more milk. Consumption of fluid milk has risen 15% during the past year, although milk production has been declining. The result is fewer manufactured dairy products, such as butter and cheese. In an effort to check this trend, the War Food Administration's quota system, based on June consumption, has been put into effect in 100 metropolitan markets.

PLAN MORE FOR '44

To insure an adequate diet for everyone, and at the same time allow leeway for possible relief needs, agricultural goals for 1944 have been set high. Acreage is expected to total 380,000,000, compared to 364,000,000 planted in 1943. Major crop acreages compare with 1943 as follows:

	1944 Goal	1943
	(million acres)	
Corn.....	100.3	96.8
Wheat.....	67	54.2
Rye.....	2.4	2.9
Rice.....	1.5	1.5
Soybeans.....	13.7	11.5
Peanuts.....	6.2	5.0
Sugar beets.....	1	.6
White potatoes..	3.5	3.4
Fresh vegetables	1.7	1.5
Proc. vegetables	2.2	2.1
Dry beans.....	3	2.8
Dry peas.....	.9	.7

Manpower, machinery, and fertilizer—the big Ifs of wartime agriculture—must be in adequate supply if the goals are to be reached. The manpower situation this year, except for local shortages, was better than anticipated and is not expected to worsen in 1944. More farm machinery will be available, and fertilizer, once a problem, is now in better supply (WP-Oct23,p9'43).

But even if all these conditions are favorable and the weather is perfect, there will be claimants for all of a bumper harvest.

REPORTS ON REPORTS

Not on the Shelf

Yesterday's shelf items are today's critical components, and claimant agencies and prime contractors must allow subcontractors adequate time to procure raw materials, manufacture, and deliver these items. *Time Cycle for Procurement* (unclassified; pp. 20) charts the estimated lead time needed for selected components and subcomponents handled by the War Production Board's industry divisions. For example, manufacturers need additional time to work off backlogs of orders for diesel engines and parts, but stocks of certain kinds of marine fittings hardware are on hand, and lead time can be considerably lessened. (War Production Board, Office of Operations Vice Chairman)

Emphasis on Efficiency

During the first eight months of 1943, U.S. railroads have met increasing traffic demands with virtually no change in total equipment, according to *Domestic Transportation* (confidential; pp. 20). And although freight-car production in the last quarter of this year is expected to increase from an average of 2,000 per month to between 3,000 and 4,000 a month, there will be continued emphasis on more efficient use of present equipment. (Department of Commerce, Bureau of Foreign and Domestic Commerce)

[This record is an attempt to select from the many documents coming to the attention of WAR PROGRESS those studies which would be of most interest to readers. The list is by no means comprehensive, and no attempt has been made to evaluate reports for accuracy. Whether reports are available depends on the policy of each individual agency.]

2-33767-p12-bu-final

The President

1

WAR PROGRESS

Confidential

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 5(E) and 5(D) or (E)
Commerce Dept. Letter, 3-14-73
By RHP, Date JUN 29 1973

War Production in November

Who Gets U. S. Planes

Scorecard on Merchant Shipping

Number 169 December 11, 1943

Settling Down for the Long Pull

November production gain is at 3% average; programs more feasible, easier to meet. Naval tonnage delivered is sharply above August peak; 3 big carriers completed.

WAR PRODUCTION has now more or less settled down for the long pull. November output was up 3%—which is just about the average monthly gain for the year to date. Moreover, in contrast to the early phase of the program, there were few spectacular highs or lows. If a commentary on the montn must be offered, it is: "Average."

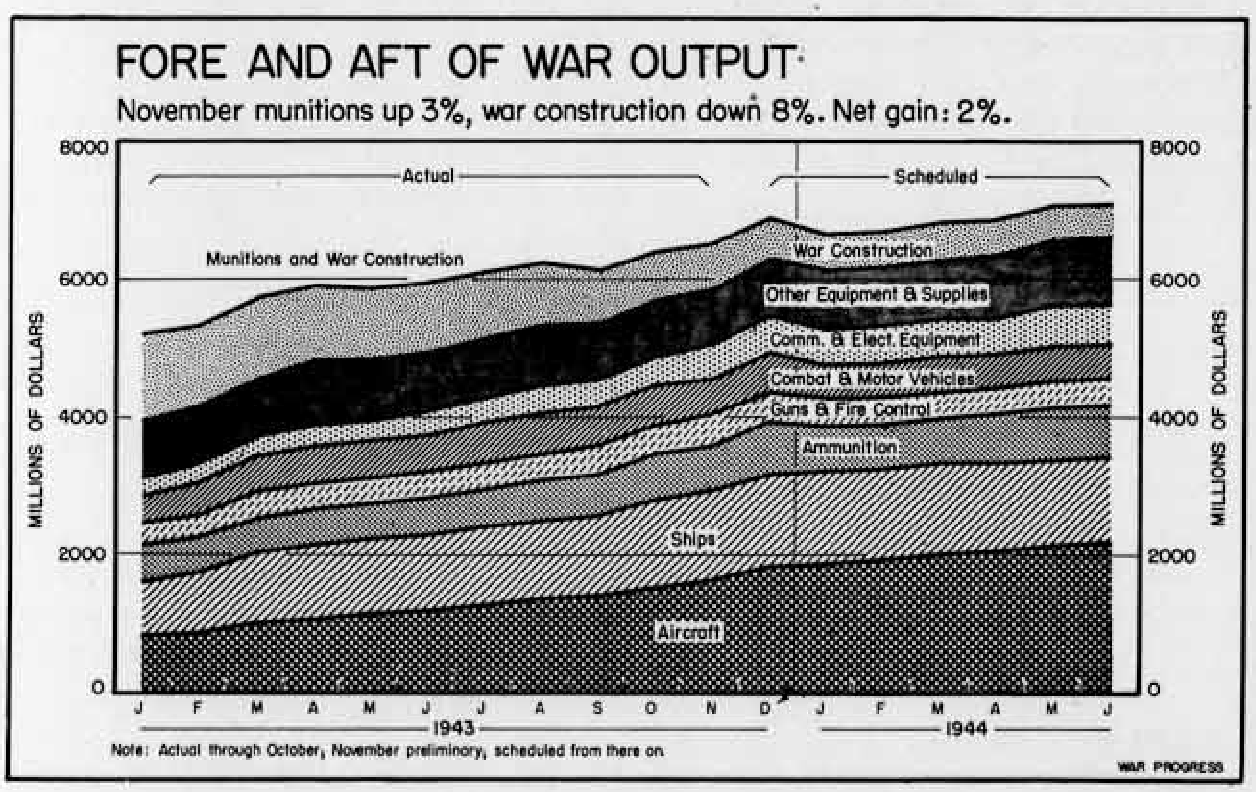
Total munitions reached a new high—$5,850,000,000 (preliminary). That in itself, however, is not outstanding, for the program calls for new highs well into next year. Nor was the increase over October especially noteworthy. At $155,000,000, it was in between the minimum monthly gain of $5,000,000 in May and the maximum of $370,000,000 in March. And the gain—quite in keeping with the past—was not up to schedule, which called for a rise of $400,000,000.

$61,000,000,000 UNLIKELY

Munitions output for the first 11 months amounts to about $54,700,000,000. If the December schedule of $6,300,000,000 is met—hardly a conservative bet—the total for 1943 would reach $61,000,000,000.

Construction continued its downward course. The value of work done last month, at $650,000,000 (preliminary), was 8% less than that of October.

Total production—munitions and war construction—amounted to $6,500,000,000,



S-33977-p1-of-15-bu-fo-eee-vp

up only 2% over October, and 4% short of schedule.

From now on—in terms of scheduled gains—production programs should be much easier to meet (chart, page 1). By June, total munitions output is slated to rise to $6,600,000,000, or only about 13% more than in November. A gain of $110,000,000 per month from now on would carry production to that level. That's a 1.7% monthly rise. However, in particular groups—especially aircraft and radar—the schedules are steep.

And November's showing suggests that small but steady gains may be entirely feasible. There were comparatively few major bottlenecks. For one thing, the acute shortage of labor on the Pacific Coast is under control. Materials problems were few and far between. Models of planes are becoming standardized—design changes are fewer. And the experience of getting out war goods is telling (WP-Nov13'43,p1).

COMBAT SHIPS COME THROUGH

Deliveries of combatant ships last month bear this out. More than 225,000 displacement tons came through, 50,000 higher than the best previous result (August) and 15,000 tons above schedule. Although the gain was not so pronounced on a work-done basis, the inescapable conclusion is that the naval program has matured.

Aircraft

Aircraft continued to set the pace in war production last month. Total output of airframes, propellers, engines, gliders, spare parts, etc. came to $1,625,000,000, a rise of 6% over the preceding month. And as noted in WAR PROGRESS last week, the gain in airframe weight was 7%.

West Coast plants were a stand-out last month, their combined production rising to a new high of 29,600,000 pounds of airframe weight, or more than 40% of the overall total of 71,200,000 pounds. And whereas the industry as a whole was 3% short of schedule, West Coast plants as a group ran 3% ahead. The better-than-average showing in this region reflects Selective Service deferments for airplane workers; a wage increase at Boeing, Seattle; and the operation of the West Coast Manpower Plan (WP-Oct-30'43,p1).

During the month, production continued to move in the direction of heavier planes, as per plan. But the trend is toward the newer and more powerful ones as well.

ACCENT ON SUPERBOMBERS

For example, only three B-29 superbombers were produced in 1942, all of them experimental jobs. This year, the 57 accepted plus 47 scheduled for December are still a small proportion of the heavy bomber program—2% on an airframe weight basis. But in 1944, output of B-29 superbombers is slated to constitute 15% of all heavy-bomber airframe weight.

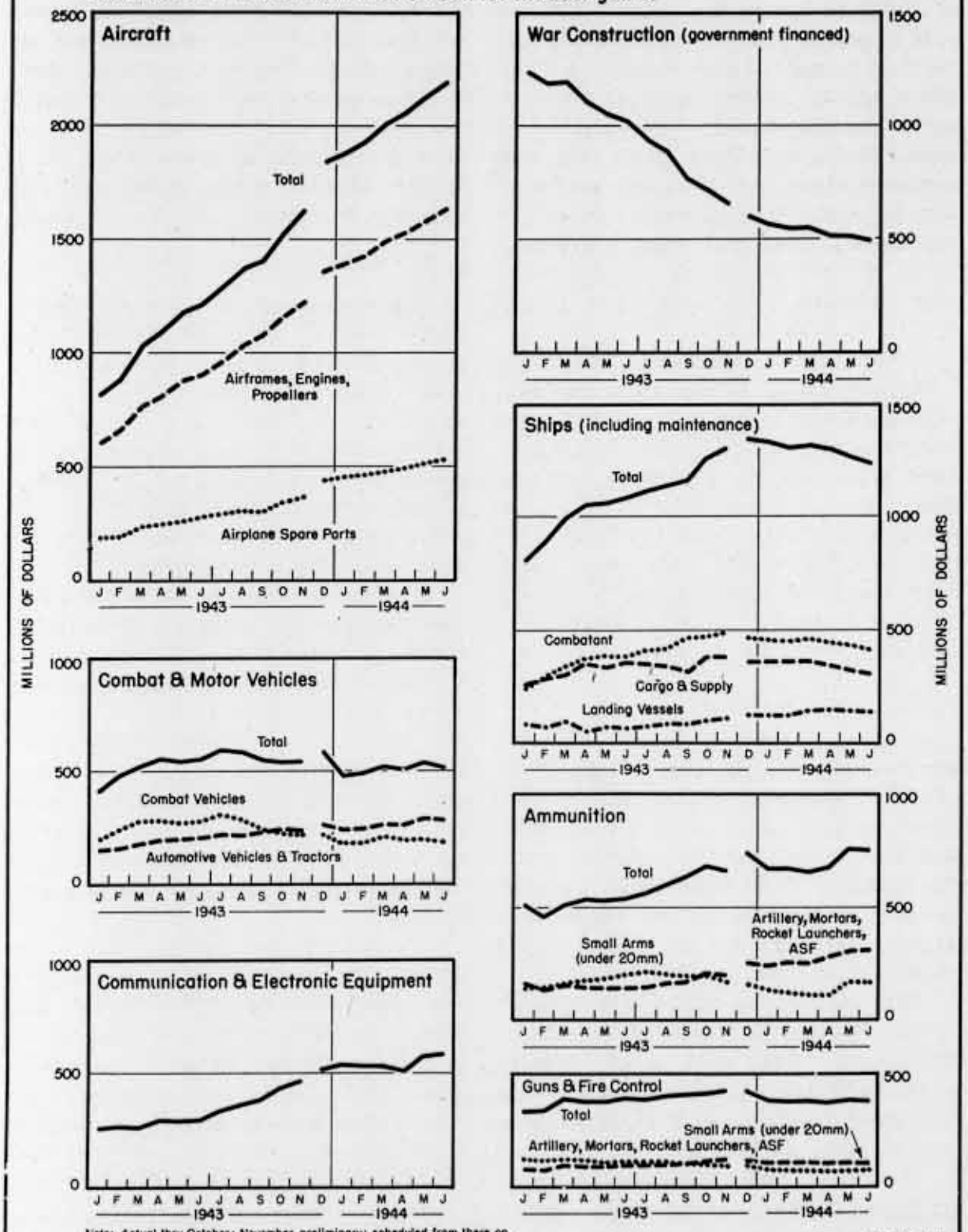
This trend toward improved models is also evident in the 2-engined light

IN THIS ISSUE:

3-33077-p5-su

KEYS TO THE WAR PROGRAM

November, an unspectacular month with aircraft carrying the big load as usual.
Munitions schedules from now on call for modest gains.



Note: Actual thru October; November preliminary; scheduled from there on.

WAR PROGRESS

CONFIDENTIAL

2-33877-p3-bu

bomber group. Here the accent is on the A-26 (improved Boston). Not only is this plane almost as heavy as a medium bomber; it is "three years ahead of the A-20 Boston in design." It has greater power (4,000hp vs. 3,200hp), and carries, as part of its armament, a 75mm. gun as against a 20mm. gun for the Boston. The first A-26 was accepted in June, 1943, and three more have been accepted since; if the four scheduled for December come through, total acceptances in 1943 will equal a fraction of 1% of the weight of all 2-engined light bombers. But next year it is slated to rise to 30%.

After having dominated the Navy's 1-engined light bomber group in 1942, with acceptances running to 37% of total airframe weight, the 1,200hp SBD Dauntless will account for about 30% this year. It is giving way to a 1,700hp model with greater striking power—the SB2C Helldiver: from only 4% of total Navy 1-engined light bomber output in 1942, the Helldiver will approximate 12% this year, 32% in 1944.

THUNDERBOLT TOPS WARHAWK

Similarly, the P-40 Warhawk dominated the 1-engined Army fighter group in 1942; acceptances equaled 56% of airframe weight. But it will be less than 25% this year, and only 6% next year. The 2,000hp P-47 Thunderbolt is now, and will continue to be, the volume Army fighter, rising from 10% in 1942 to 39% this year and 45% in 1944.

The P-51 Mustang, with a high-altitude 1,300hp engine, is another up-and-coming Army model. Last year, acceptances by airframe weight comprised 9% of all 1-engined fighters; in 1943 it moves up to 11%, then in 1944 to 27%.

Last year, 84% of the entire output of Navy fighters by airframe weight was accounted for by the F4F Wildcat, a 1,200hp plane. The remainder was made up of the F4U Corsair (15%) and the F6F Hellcat (1%), both 2,000hp planes. This year and next, positions are reversed: the Wildcat falls to 16%, the Corsair and Hellcat share the remaining 84% almost equally. The Corsair is used largely for land-based operations. The Hellcat is the only plane designed and put into quantity production since Pearl Harbor; it has greater speed and climb than the Wildcat.

Army Ordnance

Army ordnance production during November was more or less nondescript—always the sign of a program well along toward maturity. The output of guns, ammunition, and vehicles ran about even with October, but fell slightly below schedule. Outstanding ups and downs—so frequent during the early days of the war effort when new programs were beginning to come in—were few.

Army gun production was up about 2% over October and also ran 3% ahead of schedule. Output of artillery dropped off again—as scheduled—but it is scheduled to rise this month before dropping off rather steeply next year. There were two notable deviations from schedule: the 40mm. Bofors gun came through with 1,340, as against 1,065 scheduled; but fewer than a hundred 3-inch antitank guns were produced, against a goal of 250.

The .30-caliber carbine, as in October, led small-arms production to a new peak; over 530,000 carbines were turned out—17% more than during the previous month and 29% more than scheduled. The .30-caliber aircraft gun jumped from 400 to 3,000, but even so missed schedule by a third; less than half of the year's requirements have been produced. Altogether, small-arms output exceeded October by 8% and schedule by 6%.

In the category of combat vehicles, armored cars are doing better: 1,600 were delivered—a new peak and 45 more than schedule. Medium tanks, scheduled to rise slightly, fell off 5%, continuing on their generally downward course. But the M5 light tank, with 348 produced, jumped 39%. All in all, combat-vehicle output in November, although equaling October's, was 5% under schedule. This was due in part to a 50% failure of M2 and M9 personnel half-tracks to meet schedule. However, self-propelled gun mounts outdid the schedule and rose 14%.

Trucks and tractors had a below-schedule month. In the medium- and heavy-truck field the going was mixed. The medium kept pace with October and met schedule; heavies, however, fell 5% below schedule. And tractors—another key program—were 6% below the mark.

Artillery ammunition, a rising program, not only missed schedule by 11% but fell short of October output by 4%. Here the 105mm. howitzer shell, which dominates the program, beat its best

PRODUCTION PROGRESS – Preliminary

Value delivered or put in place – millions of dollars.

	Nov. Preliminary	Oct. Actual	% Change	Nov. Schedule*	% Deviation Nov. Prelim. vs. Schedule
MUNITIONS AND WAR CONSTRUCTION	$6,500	$6,400	+2%	$6,752	-4%
TOTAL MUNITIONS	5,850	5,695	+3	6,102	-4
Aircraft	1,625	1,534	+6	1,749	-7
Total airframes, engines, propellers	1,228	1,158	+6	1,294	-5
Airplane spare parts	369	340	+9	420	-12
Other aircraft and equipment (ex. commun.)	28	36	-22	35	-20
Ships (incl. maintenance)	1,300	1,251	+4	1,338	-3
Combat	491	474	+4	475	+3
Landing vessels	110	95	+16	119	-8
Cargo and supply	380	381	nil	363	+5
All Other	319	301	+6	381	-16
Guns and Fire Control	430	417	+3	422	+2
Small arms (under 20mm.)	117	108	+8	110	+6
Artillery, mortars, rocket launchers - ASF	88	91	-3	88	nil
Fire control and searchlights (ex. Radar)	110	111	-1	106	+4
Naval guns and other	115	107	+7	118	-3
Ammunition	660	676	-2	705	-6
Small arms (under 20mm.)	173	198	-13	185	-6
Artillery, mortars, rocket launchers - ASF	198	206	-4	222	-11
Aerial bombs	102	92	+11	96	+6
Naval ammunition and other	187	180	+4	202	-7
Combat and Motor Vehicles	540	537	+1	557	-3
Combat vehicles	221	224	-1	233	-5
Motor carriages for S.P. guns	81	71	+14	78	+4
Automotive vehicles and tractors	238	242	-2	246	-3
Communication and Electronic Equipment	465	440	+6	486	-4
Other Equipment and Supplies	830	840	-1	845	-2
WAR CONSTRUCTION	650	705	-8	650	nil

* As of October 1 for Construction; as of November 1 for all others.

[illegible]

previous record by 265,000 rounds, but the 1,673,000 rounds produced were well below stiff schedules calling for nearly 2,200,000. Small-arms ammunition, a sharply declining program, fell 13% short of October production and missed schedule by 6%—undoubtedly in anticipation of further cutbacks.

Aerial bombs, beating their goal, rose 9% from October.

Signal Equipment

Communication and electronic equipment scored another new high last month, preliminary estimates showing a gain of 6% to $465,000,000. This was only 4% behind the sharply rising schedule, compared with a deficit of 5% in October.

As a group, radar made the best showing over the preceding month—up 9%—but again fell short of schedule. Since next year's radar program has been expanded, even wider monthly gains are called for if schedules are to be met. On the other hand, radio schedules are slated to taper off early next year. November results were:

	November Production as % of	
	October	Schedule
Total signal equip.	106%	96%
Radio.....	106	97
Radar.....	109	93
Other.....	101	95

Some critical items continued their erratic performance in November. After an on-schedule showing in October, AN/-APN-4 airborne navigation equipment missed its goal by 23%. As an extreme instance, AN/APN-2 navigation equipment deliveries were only 4% of schedule.

On the other hand, previous laggards began to show real life. SCR-511, a short-range cavalry radio, came within 10% of schedule; November acceptances of 2,525 sets more than quadrupled October and came to about half the total for the first 10 months of 1943. Almost 2,500 SCR-510 lightweight vehicular radios came through in November; this was 25% more than called for and two and a half times October acceptances.

Merchant Ships

For the last eight months, merchant ship construction has been on a plateau. Only feature last month was the delivery of the first concrete cargo ship. In all, 141 ships were completed, totaling 1,620,000 deadweight tons—2% behind schedule, 1% ahead of October. (Total Maritime tonnage, including military and minor-type ships, was almost 1,-700,000.)

Deliveries of Liberty ships dropped from 98 to 89, but this was in exact accord with schedule; conversely, standard types of cargo ships rose from 8 to 15, again just as scheduled. The emergency tanker program, due to wind up in two more months, made the only departure from schedule; 17 were delivered, three fewer than called for, and two under October.

Naval Ships

The Navy continues to get the big warships (WP-Sep25'43,p8). It now looks as if deliveries of battleships and cruisers will meet the year's tonnage requirements, while full-sized carriers are already over the top by 28% on a tonnage basis. Three were completed last month.

Deliveries of naval vessels last month jumped 35% over October to a new peak of 340,600 displacement tons (preliminary)—21% above the previous high of 282,000 reached in August. More than a third of November's tonnage consists of 11 aircraft carriers: two 27,000-tonners—the new "Wasp" and the new

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program - Checks paid (millions of dollars)	1,802	1,392	1,796	1,604	1,348
War bond sales (millions of dollars)	211	189	152	117	184
Wholesale prices (1926=100)					
All commodities	102.8p	102.6p	102.9p	103.9	100.1
Farm products	121.8	121.2	122.8	126.3	110.6
Foods	105.6	105.8	105.7	110.6	103.3
All other than farm products and foods	97.6p	97.5p	97.5p	96.9	96.1
Petroleum:					
Total carloadings	50,837	53,911	53,766	54,267	51,342
Movement of cars into the East	22,312	24,778	24,289	28,886	25,358
Total stocks of residual fuel oil (thousands of barrels)	61,603	62,143	63,551	67,461	75,980
East coast stocks for civilian use (1940-41=100 Seas. Adj.).					
Gasoline	41.3	40.4	36.9	N.A.	N.A.
Kerosene	49.4	49.0	52.7	|	|
Distillate fuel oil	66.6	65.1	56.7	|	|
Residual fuel oil	75.9	75.4	79.9	N.A.	N.A.
Bituminous Coal:					
Production (thousands of short tons, daily average)	2,147p	2,117	1,647	1,990	2,173
Exports(no. of freight cars unloaded for export Friday, excl. grain).					
Atlantic Coast ports	2,922	2,579	2,648	2,314	1,144
Gulf Coast ports	393	366	414	340	431
Pacific Coast ports	1,311	1,216	1,217	1,344	1,021
Steel operations (% of capacity)	99.3	99.5	98.2	97.5	98.6
Department store sales (% change from a year ago)	+7	+13	+10	+2	+10

p. preliminary n.a. not available

"Hornet"; the 11,000-ton "Bataan"; and eight carrier escorts. Half of the carrier escorts were completed in Navy yards and half in Maritime. Maritime escorts were one over schedule.

The big gain last month was in combatant ships, which ran ahead of schedule. Landing craft, now the rush-rush naval program, lagged 11% behind:

	Deliveries (tons)	% Change From Oct.	% Change From Sched.
All combatants..	226,000	+78%	+7%
Landing vessels.	67,100	+2	-11
Patrol & mine...	26,400	+16	-31
Aux. & all other	21,100	-44	-49
Total.....	340,600	+35%	-7%

The destroyer escort program rolls toward a robust conclusion; 53 were delivered, eight ahead of schedule and the October record. It also topped the peak scheduled for December-51. But its record-making days are now numbered. The schedule turns down sharply.

PATROL CRAFT MOVING UP

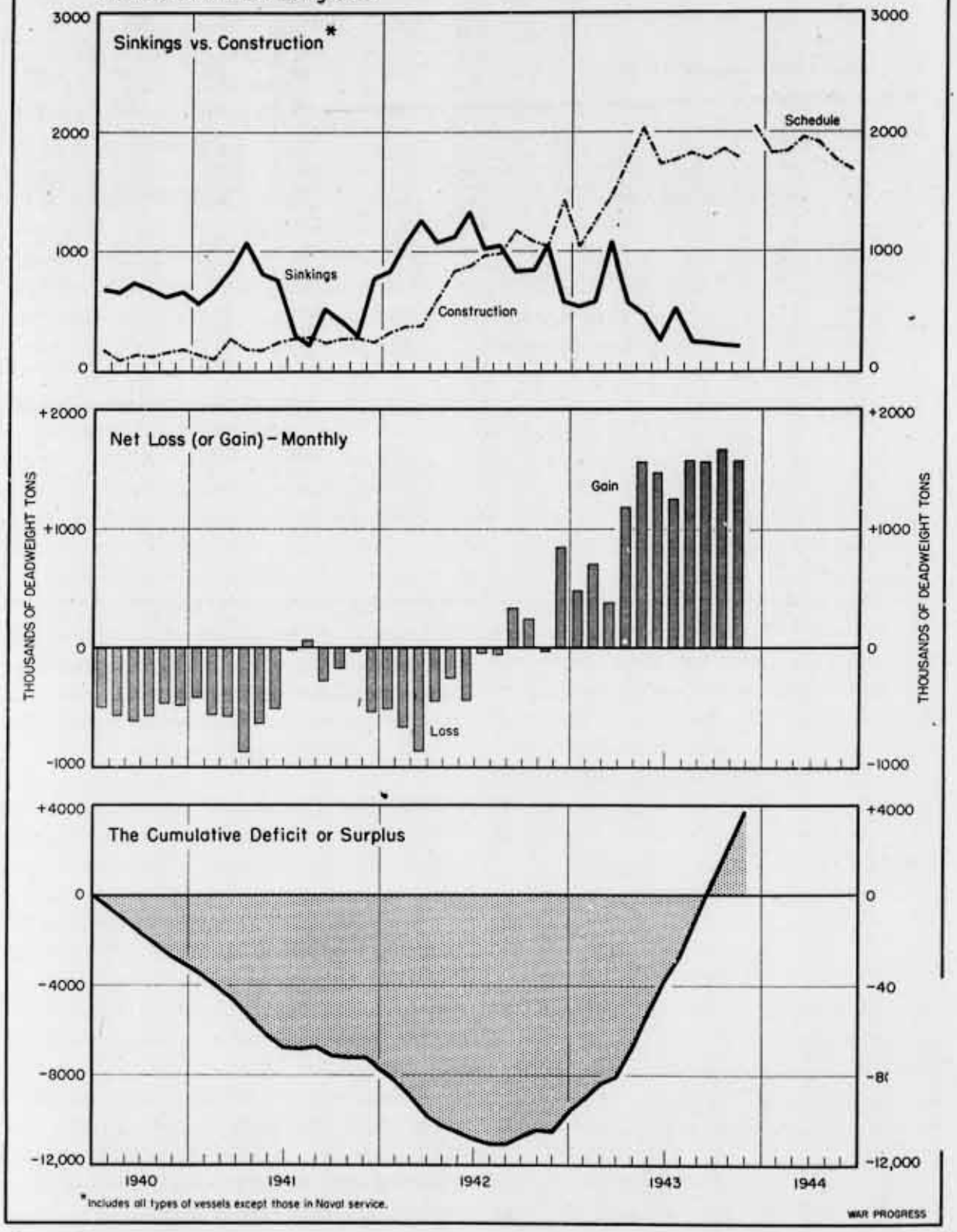
Though 38% behind schedule, patrol craft, with 17,300 tons delivered, went well over the previous high of 11,800 tons in October. Frigates comprise more than half of this total (10,700 tons). Maritime delivered nine frigates last month, as against only five for the 10 months through October; but the schedule called for 16.

Among landing craft, the big LSTs were again the chief laggards—20% behind. However, first-of-the-month schedules for this program were jacked up for the second successive month.

2-33377-p7-bu

SCORECARD ON MERCHANT SHIPPING

Sinkings of United Nations vessels in November continue at the lowest levels of the war. And the fleet grows.



CONFIDENTIAL

2-33977-p8-bm

1 Out of 6 Planes...

Produced in the United States now goes to Allies. Early in 1942, when aggregate output was much smaller, they got one out of four. Bulk to Russia and U.K.

DURING EARLY 1942, one out of every four airplanes made in the United States was shipped or flown away to Britain, Russia, or other nations. Today, only one out of every six goes to an ally. Yet, though we're sharing less, we're sending more. It's a matter of production proportions.

Back in 1942, U.S. airplane production was just getting started on a big scale. In the first six months, for example, production averaged about 3,500 planes per month. Of that number, 900 were shipped to other countries. And even that one-out-of-four ratio is an understatement. Of the 1,700 bombers and fighters turned out per month in the first half of 1942, some 700 went to the United Nations, or about two out of every five. But only 200 out of 1,800 noncombat planes—principally inexpensive models like trainers—were exported.

MORE FOR US AND EXPORTS TOO

As production expanded during 1942, the United States was able to retain a larger proportion of planes for its own air forces without cutting down exports importantly. This year, exports went up fairly sharply. Thus, in the third quarter, shipments to our allies rose to more than 1,300 planes monthly; but production has increased to 7,500 a month.

The export emphasis was still on combat types, but only one out of five bombers and fighters produced was sent abroad. Exports of bombers rose from a monthly average of 302 planes in the first half of 1942 to 438 per month recently, and fighter exports increased from 385 per month to more than 500, as the following table shows:

Monthly Average	Bombers	Fighters & Nav. Recon.	Total Exports*
1942:			
1st half	302	385	891
2nd half	345	295	845
1943:			
1st quar.	277	320	826
2nd quar.	335	387	983
3rd. quar.	438	514	1,335

*Includes transport, communication, and trainer planes.

During the first nine months of this year, exports of 9,400 planes were only 1,000 short of 1942's full-year total. And whereas last year the British Empire (including the United Kingdom) got half and Russia one-quarter, this year the numerical split has been more nearly 50-50. In the first nine months, exports to Russia came to 3,500 planes, to the Empire 3,900; of these 3,900, more than one-third went to the U.K.:

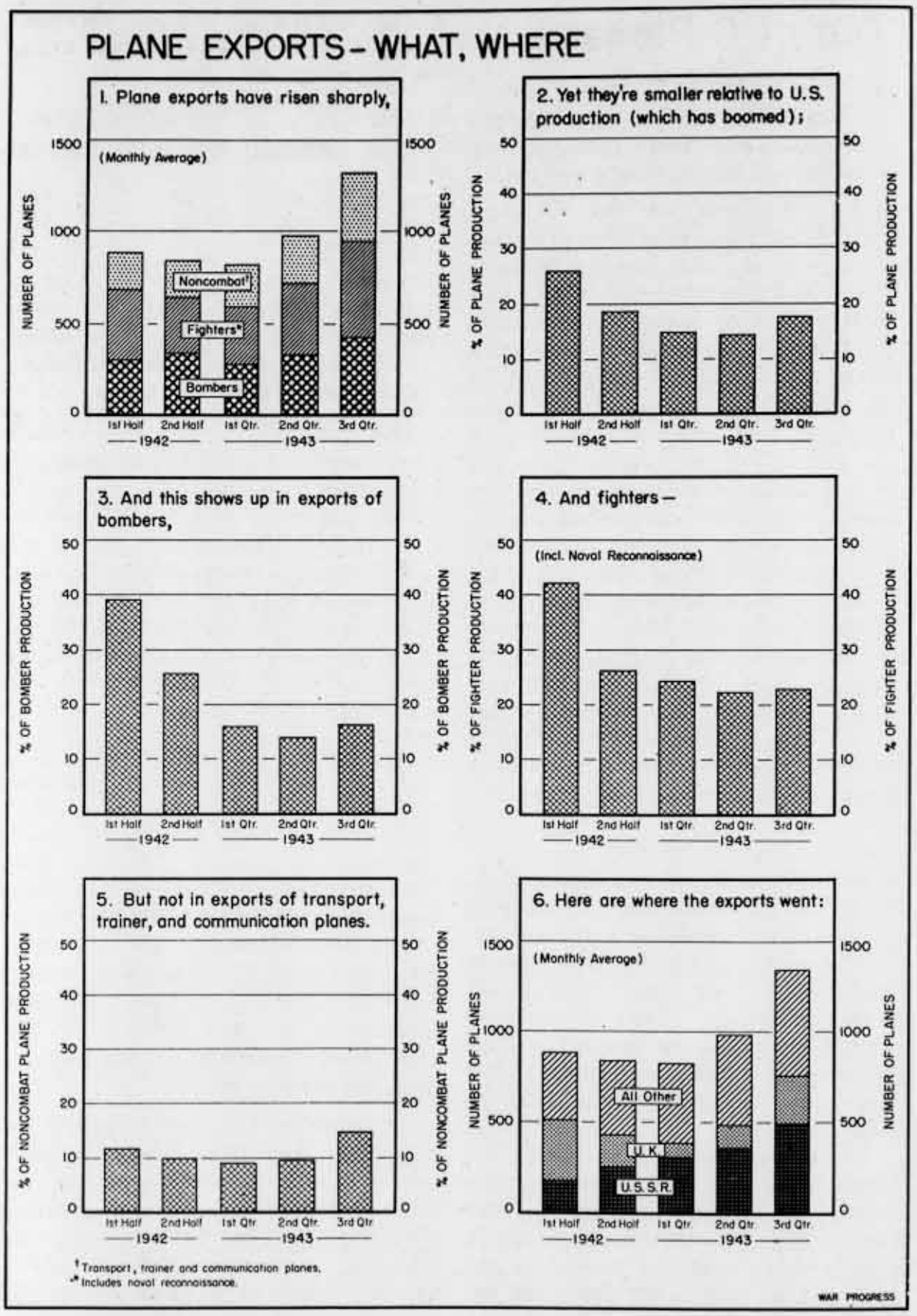
	Bombers	Fighters & Nav. Recon.	Total Exports*
Brit. Emp...	1,950	869	3,915
U.K.....	836	305	1,424
Canada....	128	66	493
India.....	252	0	538
Australia.	275	237	543
Egypt.....	459	261	917
U.S.S.R....	961	2,395	3,469
All other..	239	400	2,046
All exports	3,150	3,664	9,430

*Includes transport, communication, and trainer planes.

In addition to these shipments and fly-aways, some U.S. planes already abroad have been transferred in the field; among them were high-priority combat types. But, by and large, the exported planes haven't run very heavily to the newest or biggest models. Of

2-33877-p9-bs

PLANE EXPORTS – WHAT, WHERE



the 3,150 bombers exported during the first nine months of this year, three-fourths were light and about 8% were 4-engined planes. These heavies—most of which went to England—represented only 4% of U.S. 4-engined bomber production.

Only three types of Army fighters have been shipped to other nations this year. Russia got all of the P-39 Airacobras exported and a large share of the P-40 Warhawks; Russia, in fact, got 65% of the fighters. Only a few P-51 Mustangs were exported—to the U.K.

More Aid to Far East

Lend-lease exports to India and Australasia rise sharply in October, but shipments to Russia and U.K. decline, and the total for all countries is the lowest since June.

LEND-LEASE AID to the United Nations in the Far East increased sharply in October. Combined shipments to the Indian and Australasian theaters amounted to $120,000,000, a total exceeded only by the $141.000.000 for July.

The bulk of the exports to the Far

SELECTED MONTHLY STATISTICS

Federal Finance - Income Payments - Labor Force - Labor Turnover

	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
FEDERAL FINANCE (GENERAL FUND)							
Expenditures - Total (billion dollars)	7.8	7.5	7.5	7.4	6.4	.6	.5
War	7.5	7.0	6.9	7.1	6.0	.1	-
Nonwar	.3	.5	.6	.3	.3	.5	.5
Revenues - Total	2.1	2.0	5.4	1.5	.6	.4	.3
Income Taxes	1.5	1.3	4.8	.9	.2	.1	.1
Other	.6	.7	.7	.6	.4	.3	.2
War Bond Sales	.8	1.7	1.9	1.3	.7	-	-
"E"	.7	1.3	1.4	1.0	.5	-	-
"F" and "G"	.1	.4	.5	.3	.2	-	-
Net Debt	151.2	145.8	140.2	123.2	93.0	39.1	34.5
INCOME PAYMENTS - TOTAL (million dollars)	12,775p	12,538	11,677	11,240	10,836	6,329	6,324
Salaries and Wages	8,841p	8,676	8,466	8,127	7,396	4,042	3,981
Comm., Distr., and Serv. Industries	6,925p	6,805	6,721	6,369	6,001	3,366	3,369
Government	1,916p	1,871	1,745	1,751	1,369	548	497
Military	973p	949	924	819	547	40	33
Nonmilitary	943p	922	821	932	822	508	464
Other	-p	-	-	7	26	128	115
Other Income Payments	3,934p	3,862	3,211	3,113	3,440	2,287	2,343
Income Payments, Annual Rate (adjusted for seasonal, billion dollars)	146.8p	144.8	144.8	139.3	122.9	73.2	71.6
LABOR FORCE - TOTAL (millions)	51.9	52.6	53.3	53.0	54.5	N.A.	N.A.
Employment	51.3	51.9	52.5	52.1	52.8		
Male	35.3	35.5	35.8	36.2	37.5		
Female	16.0	16.4	16.7	15.9	15.3		
Unemployment	0.6	0.7	0.8	0.9	1.7	N.A.	N.A.
LABOR TURNOVER IN MFG. INDUSTRIES† (rate per hundred employees)							
All Manufacturing							
Accessions	7.06p	7.73	7.62	7.43	8.69	5.89	2.84
Separations - Total	6.91p	8.16	8.18	7.54	7.91	2.91	5.69
Quits	5.11p	6.29	6.30	5.41	4.65	0.93	1.05
Military Separations	0.61	0.64	0.67	0.87	1.71	N.A.	N.A.
Aircraft							
Quits	4.85p	5.55	5.67	4.62	4.41	0.95	2.19
Military Separations	0.71p	0.73	0.79	0.84	2.82	N.A.	N.A.
Shipbuilding							
Quits	6.23p	7.30	7.76	6.30	5.39	0.99	1.28
Military Separations	1.00p	0.98	1.00	1.45	2.60	N.A.	N.A.

* Federal Finance, Labor Force, November; Income Payments, Labor Turnover, October. †Rates beginning 1943 refer to all employees rather than to wage earners only and are not strictly comparable with earlier data.
p Preliminary. n.a. Not available.

East went to India, the all-time high of $71,400,000 more than doubling the $34,200,000 for September. The biggest increase in shipments to India was in tanks and other vehicles—$27,000,000, as against $6,000,000 in the previous month. There were also sharp increases in airplanes and industrial products.

EXPORTS OFF PLATEAU

Shipments to Australia and New Zealand amounted to $49,000,000, compared to $42,000,000 in September. Exports of planes to that theater increased from $10,000,000 to $15,000,000. There were also gains in motor vehicles and agricultural products.

On the whole, lend-lease exports for October declined and total shipments dropped off the billion-dollar plateau of the last three months; at $942,000,000, they were the lowest since June's $792,000,000 and $60,000,000 behind September. However, they were still far in excess of the $707,000,000 average for the first six months of this year.

PLANES TAKE DIVE

Total airplane exports dropped from $204,000,000 in September to $164,000,000, accounting for two-thirds of the overall decline. Inasmuch as a large proportion of planes are flown away, the volume of lend-lease goods moving by ship in October was probably not far short of that in September. The only category to show an increase was tanks and other vehicles—$207,000,000, compared to $171,000,000 in September.

Decreases in exports to both the United Kingdom and the U.S.S.R.—the two biggest recipients of lend-lease aid—accounted for the October decline. The U.K. at $356,000,000, was off $40,000,000 from September, but got 38% of shipments to all countries, as against 40% in September. Only in ordnance did the U.K. register an increase, and this only $2,000,000. Biggest drop was in plane shipments—from $93,000,000 to $60,000,000.

Exports to Russia declined $38,000,000 to $263,000,000, and the U.S.S.R. share of total shipments was down two points to 28%, compared to 30% in September and 32% in August. Aid to Russia declined in all categories except tanks and other vehicles. Plane shipments were down from $44,000,000 to $27,000,000.

MUNITIONS TO TURKEY

In addition to India and Australia, the only countries to receive increased lend-lease aid in October were French Morocco, Nigeria, and Turkey:

	Oct.	Sept.	Aug.
	(in millions)		
Total.....	$942.0	$1,002.0	$989.0
U.K.....	356.0	397.0	370.0
Russia.....	263.0	301.0	313.0
Egypt.....	86.2	92.8	83.4
Australia.....	43.0	33.6	41.3
New Zealand...	5.9	8.2	7.7
India.....	71.4	34.2	56.8
Iran.....	0.1	2.0	0.8
Iraq.....	1.2	5.8	4.0
Union of S.A..	6.4	12.0	11.0
French Morocco	7.0	1.6	5.0
Algeria.....	45.6	56.9	33.5
Nigeria.....	1.5	0.9	1.2
Turkey.....	7.9	7.5	12.8
Brazil.....	3.3	5.2	2.2
China.....	2.0	4.4	4.7
All others....	41.5	38.9	41.6

The figures for Turkey fail to present a true picture of the total aid that country receives, for large stocks of lend-lease goods reach her indirectly through other countries. Roughly about 90% of lend-lease exports to Turkey consists of ordnance and tanks and other vehicles, and about 10% of industrial equipment and materials.

2-28877-pis-bu-final

The President

1

WAR PROGRESS

Confidential

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Commerce Dept. Letter, 11-16-72
By RHP, Date MAR 29 1973

What About 1944 Production?

Making Demand Fit Supply

Outlook for Incentive Wages

Number 170 December 18, 1943

Cold Turkey on 1944 Production

Despite pending program changes, output will rise in first half, and major release of manpower or materials for civilian goods is hardly an early prospect.

THE IMPRESSION is gaining currency that sharp cuts in munitions programs are in the offing, that labor and materials will be freely available in short order, and that reconversion is next door to yesterday. Unless you assume a near-term collapse of Germany, the facts hardly bear this out:

1. During the final three months of this year, munitions production (excluding construction) will amount to about $17,800,000,000. Thus production will be at an annual rate of $71,300,000,000.

2. Accepted schedules for 1944 currently call for munitions output of $76,300,000,000, or $5,000,000,000 above current levels.

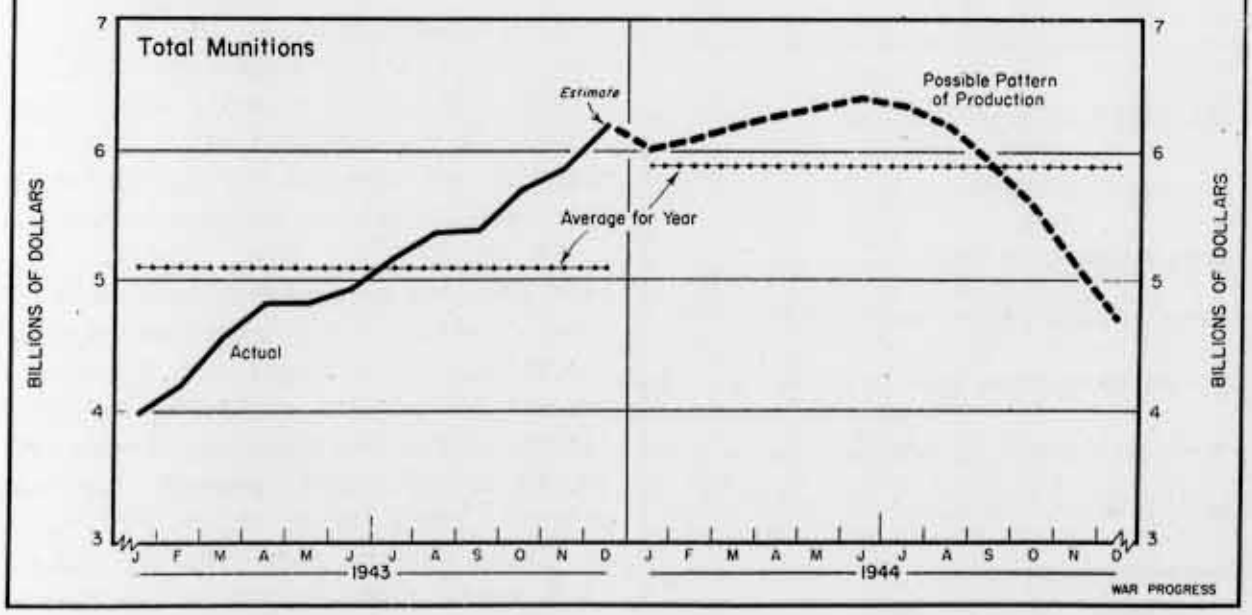
3. If allowance is made for pending cutbacks, then schedules for 1944 would tote up to $72,700,000,000—or $1,400,000,000 above the current annual rate of production.

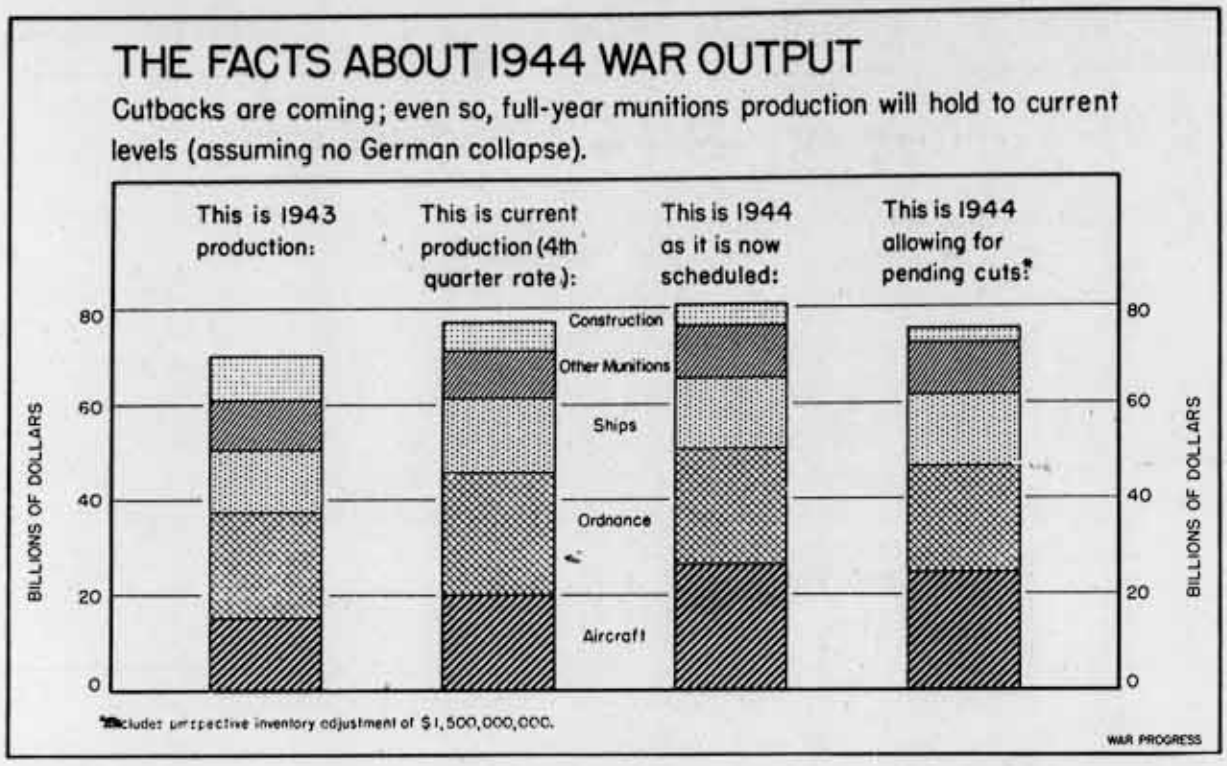
4. On top of this, cutbacks will be made in 1944 schedules to take account of the armed services' inventory of military equipment as of January 1. A necessarily tentative estimate places the magnitude of such adjustment at $1,500,000,000. If that occurs, then production for the full year 1944 would amount to $71,200,000,000, or a mite under current levels.

Thus, prospective declines in production—on the basis of either current schedules or prospective cutbacks—are

THE NEW YEAR'S PRODUCTION PATTERN

Allowing for pending cutbacks, this is what next year's munitions output might look like.





relatively narrow. Only a quick change in the European war could modify that outlook.

Even if construction—long a declining program—is taken into account, it makes no significant change in the basic pattern (chart, above).

The pattern of production for next year has long been indicated. Seven months ago WAR PROGRESS noted that average monthly output during the first half of 1944 would be greater than in the second half (WP-May14'43,p7). At the time it was expected that schedules would have to be reduced in the light of battle experience.

IN THIS ISSUE:

PEAK CEILING LOWER

The main change from seven months ago is that the peak production ceiling today is lower than it was then. At that time munitions schedules rose to some $7,000,000,000 a month. Admittedly, the figure was regarded as on the high side; it was expected that as cutbacks developed it would be reduced, probably to $6,800,000,000. Now, however, the best that can be expected is a peak of about $6,400,000,000 sometime during the first half of 1944. In November, production amounted to $5,850,000,000, and in December is scheduled to approach $6,300,000,000. That, however, is a high year-end level, after which production is likely to drop back. By the end of 1944, monthly production may be down to

less than $5,000,000,000 (chart, page 1).

The main point is that production in the munitions industries is still slated to rise. And no important release of manpower or materials is likely until well into 1944, unless the war in Europe ends earlier than expected.

Moreover, if the United Nations meet reverses—a possibility seldom allowed for—then the prospective production pattern for 1944 may be altered. Instead of dropping steadily in the second half, production may hold up—and items eliminated from programs may actually be reinstated. Indeed, the assumption of a quick release of men and materials for civilian production depends, not on the program as scheduled now or in the near future, but on a fairly early collapse of Germany (which can't be scheduled!).

Extra Pay for Extra Effort

With manpower short, incentive-wage plans are being pushed to get larger output per worker, but layoffs may hurt. Each scheme must be tailor-made.

WAGE-INCENTIVE plans aren't new. As far back as 1895, Frederick W. Taylor, "the father of scientific management," introduced them to American industry. And long before that, piecework pay was an incentive wage without a fancy name.

The war has stimulated interest in wage-incentive plans. With manpower short, paying more for output in excess of a predetermined standard is one way of getting workers to push themselves and their machines beyond the point of "normal" effort. Moreover, workers can then take home more pay for the same job and yet remain within the letter and spirit of the President's national stabilization policy, which generally froze the wage structure at September, 1942, levels. Hence, the wage incentive idea has its points—for both labor and management.

INCENTIVES ENCOURAGED

During the year, and particularly since September, the War Production Board has actively encouraged the introduction of wage incentive plans. About 1,500 requests for information have already cleared through its Management Consultant Division, which gives engineering assistance on incentive-pay schemes to companies requesting it.

So far, approximately 1,000 plans have been formally presented to the War Labor Board, which reviews each one to see that it is in keeping with the national stabilization policy. Of this total, some 700 were evaluated by the engineers of WPB's Management Consultant Division in collaboration with the Office of Labor Production. And a recent analysis of the operation of more than 200 of these shows production increases of from 3% to more than 100%. In only one case was no increase recorded.

$9 FOR NINE UNITS

Straight piecework is the simplest form of incentive wage; it's used extensively in the electrical equipment, textile, coal-mining, flat-glass, steel, and clothing industries. Suppose you set eight units as the standard for an eight-hour day at $1 per unit. If a worker turns out nine units, he gets $9 for that day's work.

But there are many variants. In Soviet Russia, the government uses the progressive piece system extensively—the more turned out, the higher the piece rate (WP-Nov20'43,p6). The worker might

PROSPECT: ANOTHER BUMPER MONTH IN PLANES

DECEMBER will be another good month in plane production. During the first 15 days, 3,809 airplanes were accepted, 6% ahead of the like period a month ago. In airframe weight, the gain was even greater—8%. This follows gains of 7% in November and 9% in October.

If production keeps the first 15-day pace, acceptances for the full month will run to 9,300 planes, as against 8,789 in November. Indeed, since December is invariably an end-of-the-year cleanup month, a closing rush might top the tough schedule of 9,354 planes.

Only seven superbombers were accepted, compared with nine in the same period last month. But acceptances of 562 Flying Fortresses and Liberators were 12% ahead of November and well on the way to making the December schedule of 1,120. Boeing at Seattle was a star performer; output of 131 Forts ran 16% ahead of November; and if the daily rate of 10 acceptances per working day continues, it will beat schedule by 25%.

The P-38 Lightning was 10% lower in the first 15 days—166, as against 185. On the other hand, 1-engined Army fighters increased 13% to 599. Navy fighters—445 Corsairs, Wildcats, and Hellcats—were up 24%.

get $9.50 for the nine units instead of $9; in other words, the extra unit would yield $1.50. That system, however, in effect raises unit labor costs, hence would not be likely to qualify under the War Labor Board's stabilization standard.

The incentive schemes introduced in this country do not always pay increased earnings in direct proportion to increased production. Thus, a man turning out nine units in an eight-hour day would get neither $9.50 nor $9 but, say, $8.50.

NORMAL OUTPUT IS BASE

Frequently, incentives apply to groups of workers such as departments, and in rare cases to whole plants. Here, studies are often made of what a normally qualified group of workers turns out under normal conditions. That becomes the basis for a standard—and the incentive wage then applies to all members of the given group or plant.

No overall statistics are available. But, in a dozen recent cases where the standard was set on an individual-worker basis by time study, production gains have ranged from 11% to 65% above the established standard and from 24% to as much as 103% above past performance.

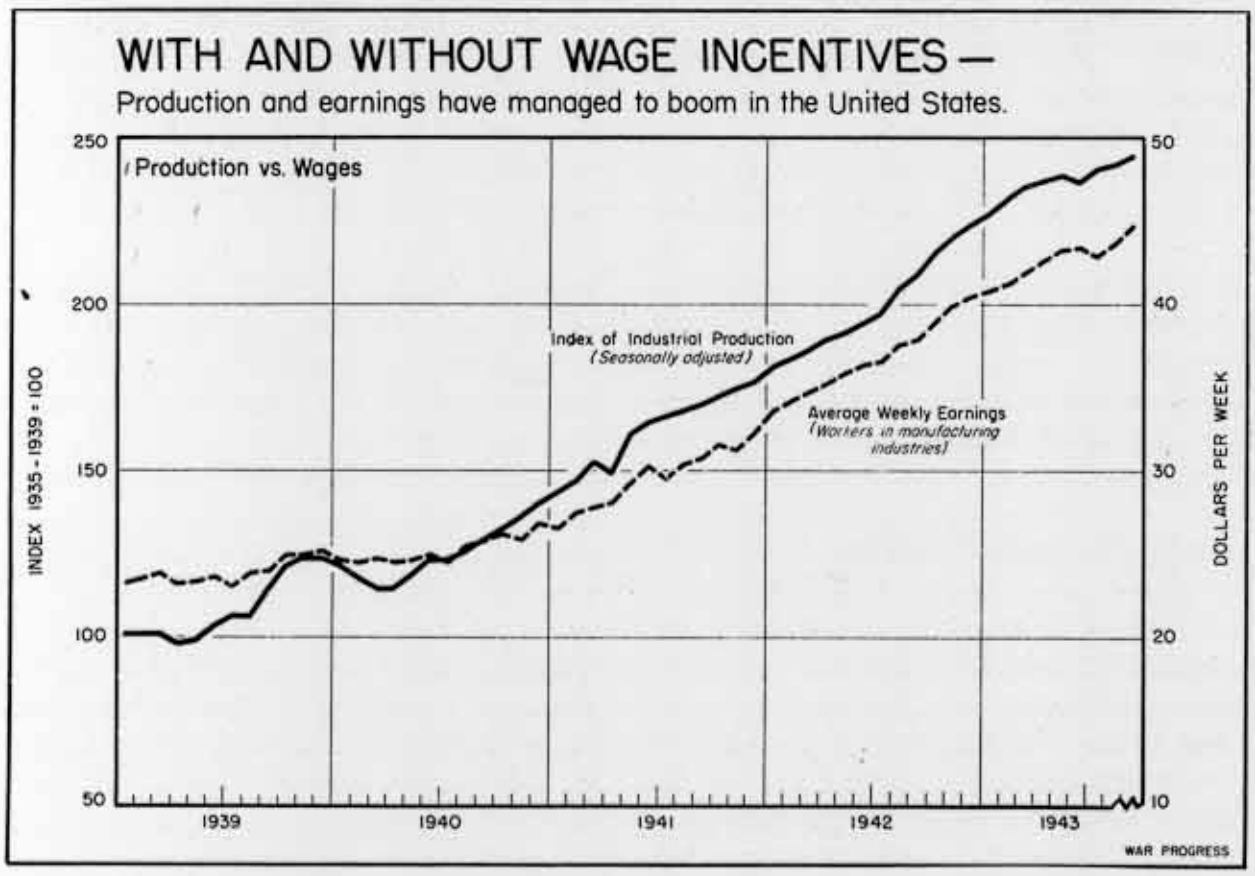
	% Increase in Production	
Product	Above Standard	Above Past Performance
Stop-nuts.....	11%	24%
Tank treads.....	11	40
Aircraft bearings.....	13	41
Baling presses..	14	83
Aircraft parts..	15	73
Plastics.....	20	44
Aircraft equip..	24	47
Life belts, rubber boats...	27	32
Electronic tubes	30	63
Steel products..	55	86
Machine tools...	64	64
Metal products..	65	103

Although a well-engineered incentive plan is a safe bet to increase production, only about half of U.S. industry is now on an incentive-pay basis, roughly the same proportion as before the war. Today's ratio might be higher except for the still persisting fear of abuses. Rate cutting, for example, was common in the past: once workers pushed their average earnings above those for comparable work in the surrounding labor market, some employers reduced rates to pull earnings back to the competitive level; workers were put in the position of chasing a mechanical rabbit. As unions grew, so did the pressure against incentive plans. The motor-vehicle industry is illustrative: less than one-fifth of the workers are currently paid on an incentive basis, as against more than half a few decades ago.

The fact is that abuses—whether by management or labor—impair mutual confidence. And without mutual confidence, no incentive plan can work, no matter how efficiently engineered. The prospect of higher wages alone will not bring increased production. What happened in the heavy-machining department of an aircraft-parts company in the Middle West explains the point.

DISTRUST MEANS DISPUTES

Early in 1942, an incentive plan was adopted providing for extra wages after workers produced the equivalent of $1.07 per hour. But largely because of the allegedly arbitrary attitude shown by an outside management engineer, workers distrusted the standard; they thought it unfair. For almost a year, production in the heavy-machining department actually averaged only 65% of standard (though all that time workers were collecting a guaranteed rate of $1.04 per hour). And by then, workers had talked



themselves into believing the standard couldn't be reached, much less surpassed. Employer-employee friction increased; misunderstandings multiplied. The case finally came to the attention of Washington.

CONFIDENCE TURNS TRICK

A management and a labor consultant who had the confidence of both employer and employees were put on the job. They negotiated for ten days, during which the standard was tested and found fair. Labor was satisfied; so was management. On the eleventh day, not only did earnings meet the guaranteed rate of $1.04 per hour, they went through the incentive level as well, averaging $1.20 per hour! Two weeks later, they reached $1.40. There haven't been any complaints since.

Sometimes an incentive plan runs into trouble for the opposite reason—workers think the standard is too loose, too easy to accomplish. In one department of a company making truck parts, workers found they could earn as high as $1.75 per hour at the expense of little more than normal effort. But they decided to work only hard enough to earn in the neighborhood of $1.10, which was about in line with the plant average; they feared a rate cut if they earned too much. Meanwhile, production of the plant at large was being injured by the self-imposed slowdown in this department.

PLANT-WIDE PLANS PRESSED

Situations of this kind don't arise in plant-wide wage-incentive plans, which include all factory hands (and sometimes even white-collar employees). These are being encouraged by the WPB as a method of increasing output in critical war plants. Only a handful of such plans were in operation prior to 1943; a notable instance is Beech Aircraft of Wichita, Kansas, making trainer planes. Today, an estimated 10% to 15% of the plans passing through the regional offices of the War Labor Board are plant-wide affairs. But they present problems of their own.

Take the matter of setting the standard, or base—the point at which incentive pay is to begin. That's a time-consuming job if done thoroughly. The wage plan under which Murray Corporation's auto-body plant employees in Detroit have been operating is a marked success; but it took more than a year to establish an acceptable standard.

EMERGENCY STANDARDS

Now consider a case typical of the present day, such as the Lafayette plant of the Aluminum Company of America, with 5,000 employees. Production at this plant involves some 22,000 separate operations. To time and study all of these on a scientific basis would take years. Some sort of emergency standard would have to be devised if a plant-wide incentive plan here were to help current war output. However, the Alcoa Lafayette management never did submit a plant-wide plan: instead, it is introducing its system piecemeal. But this has its drawbacks too: as recently as November, ladle fillers in the pits were not earning incentive pay, but pouring crews working with them were.

Grumman Aircraft at Bethpage is a good example of a plant-wide incentive plan based on an emergency standard; it was set just a shade under one-half pound of airframe weight per man-hour. And the incentive consists of a 1-for-2 arrangement: if production per man-hour increases by 10%, all employees receive an incentive payment equal to 5% of their base pay.

It is precisely because of the emer-

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program - Checks paid (millions of dollars)	1,675	1,802	1,937	1,616	1,387
War bond sales (millions of dollars)	199	211	188	229	203
Wholesale prices (1926=100)					
All commodities	102.9p	102.8p	102.8p	104.0	100.5
Farm products	122.0	121.8	122.1p	127.6	112.0
Foods	105.9	105.6	105.5	110.9	104.0
All other than farm products and foods	97.8p	97.6p	97.5p	96.9	96.2
Petroleum:					
Total carloadings	50,036	50,837	51,320	53,417	51,192r
Movement of cars into the East	22,553	22,312	23,177	29,147	24,974
Total stocks of residual fuel oil (thousands of barrels)	59,715	61,420r	62,647	67,652	75,287
East coast stocks for civilian use (1940-41=100 Seas. Adj.).					
Gasoline	42.0	41.3	36.6	N.A.	N.A.
Kerosene	52.0	49.4	52.9	↕	↕
Distillate fuel oil	73.0	66.6	59.7	↕	↕
Residual fuel oil	69.7	71.9r	78.3	N.A.	N.A.
Bituminous Coal:					
Production (thousands of short tons, daily average)	2,108p	2,147	499	524	1,889
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	2,924	2,922	2,624	2,308	1,088
Gulf Coast ports	558	393	398	326	319
Pacific Coast ports	1,260	1,311	1,226	1,377	925
Steel operations (% of capacity)	99.3	99.3	97.8	97.8	98.4
Department store sales (% change from a year ago)	-1	+7	+15r	+29	+17

p. preliminary r. revised n.a. not available

gency character of the standard that the War Labor Board okayed the 1-for-2 arrangement; it allows for production increases which are not related to employee effort: revisions in the program, introduction of new machinery, etc. And to clinch the protection all around—for labor, management, and the President's stabilization policy—WLB will review the operation of the plan quarterly, beginning January 15, 1944, suggesting whatever changes may be necessary at that time.

In the aircraft industry, relatively little has been done in the way of wage-incentive plans. By and large, the industry has been too dynamic to handle. Thus, at Curtiss-Wright in Buffalo production methods changed so rapidly that an incentive-pay plan had to be discarded. Except for Grumman, only one other combat-plane plant is operating under incentive pay: Chance-Vought, Stratford, Conn. And only one plane-plant incentive-wage scheme is pending before the War Labor Board: Republic Aviation in Farmingdale.

IN THE TALKING STAGE

Other such plans are now in the talking stage—Consolidated Vultee, San Diego; Douglas, El Segundo; and Bell Aircraft, Buffalo, to mention a few. Indeed, practically all West Coast plants that are at least out of the "breaking-in" phase are reportedly developing studies which could be used as the basis for incentive-pay schemes. But most West Coast plane plants are unionized. And where a union is the collective-bargaining representative for employees, the War Labor Board won't consider a

plan unless it is agreed to by both employers and the union. Thus, assuming that employers become sold on the idea, the speed with which plans are put into effect must depend chiefly on the speed with which labor takes to incentive-wage schemes.

AS MANY PLANS AS PLANTS

But whatever the industry, there is no definite formula for a proper incentive-pay plan. Managerial ability and worker competence vary from plant to plant. So do labor relations. What's more, each factory has its own technical background, its own technical problems. Each plan must be tailor-made—whether it's individual, group, or plant-wide.

At this stage of the war effort, it may be too late to do a major manpower-saving job with wage-incentive plans. There have already been contract cancellations (WP-Nov27'43,p1). There have also been program cutbacks (WP-Nov27'43, p5). And more are in prospect. Thus, workers may look upon wage-incentive plans as a way of "working themselves out of jobs"—despite the fact that many programs, such as aircraft, naval ships, and heavy trucks, are still rising.

Adjusting Demand to Fit Supply

Program Bureau's main job is to clear way for war production, but schedule cuts will bring it increasingly up against basic problems of reconversion.

WHEN DEMAND for carbon steel runs to 18,000,000 tons a quarter and supply to only 14,500,000 tons—as is the case for the coming three months—then something must give. Figuring which demands must give is the job of the War Production Board's Program Bureau. But it's more than a problem in the arithmetic of the supply and demand for steel, or copper, or aluminum.

When the Navy asks for steel for landing craft, the very request implies a further demand for propulsion machinery and for manpower to build the craft. Hulls without diesel engines or steel plate without welders are wasted resources. Thus, what started out as a job of analysis of supply and demand for raw materials has broadened out to cover almost all of the nation's critical resources—manpower, industrial components, transportation.

Although the bureau's responsibilities are great, it makes no policy decisions itself, issues no directives. These are responsibilities of the Program Vice Chairman, after the Program Bureau's proposals are considered by the claimant agencies—first, in the Program Adjustment Committee, and secondly (when major issues are involved) in the Requirements Committee, on both of which committees all claimants are represented.

ANALYTICAL ARM

But as the statistical and analytical arm of the Program Vice Chairman and the claimant agencies, the Program Bureau lays all the facts about supply and demand before the claimants. Through the Program Bureau, each claimant is enabled to see the picture as a whole. And from this picture they can draw their own conclusions about which requirements must give.

The Program Bureau statisticians and analysts demonstrate to military claimants that if they want petroleum for the tanks, planes, and ships, then the Petroleum Administration for War must

have certain critical materials or components. And so it goes for the Office of the Rubber Director, the Office of War Utilities, the Office of Defense Transportation, etc. In a sense, the bureau helps claimant agencies decide how to split up scarcities among themselves so as to maximize war production.

Program Bureau analysts go a long way toward bringing demand into nearer balance with supply by pointing out errors or overstatements in requests. Thus, the 584,000 pounds of copper that crept into the Army ammunition program for the first quarter of 1944 through a miscomputation were screened out. Similarly, 75,000 tons of steel were screened out of the naval program; here it was a case of overstatements on bills of materials for ships.

LEFTOVERS, "LEAD TIME"

It is relatively easy to persuade claimants that materials carried over from allotments in preceding quarters justify reduction in current requirements. For example, when the Army cut its tank and utility command-car program, 22,000 tons of steel and considerable copper and aluminum were left over. As a result, the Army agreed that its tank and motor-transport program needed 35% less steel than initially requested.

It is not so easy to persuade claimants when engineering questions such as "lead time" come up. But it can be done. Shortening the lead time for Victory ships—the period between delivery of steel plate to the shipyard and the launching of the ship—from six months to four cut 220,000 tons from the Maritime Commission's carbon steel requirements. Maritime still wanted this steel —to build more ships—but agreed that the shorter lead time reduced inventory requirements per ship.

And the Program Bureau also is able to show claimants that some of their requests, though justified, are not feasible and hence ought to be reduced. The National Housing Agency, for example, was shown that anticipated shortages of labor and lumber, as well as difficulties in placing contracts, made it extremely unlikely that the steel it requested could be used. Similarly with PAW. There was no doubt about the essentiality of its programs, nor about the feasibility of producing all the drilling equipment it wanted. But the bureau analysts were able to demonstrate that capacity to produce casing and tubing was limited.

OCCASIONALLY OVERRULED

Sometimes the Program Bureau will raise questions about the essentiality of a program. Thus its analysts assembled evidence to persuade the War Food Administration that increased food production did not necessarily depend on increased output of farm equipment. WFA couldn't be shown. The case went to the Program Adjustment Committee; in effect, WFA appealed to its fellow claimants to overrule their staff. And this particular appeal won.

The Program Adjustment Committee may find that in view of the steadily improving supply-demand situation cuts suggested by Program Bureau analysts are not always necessary. This, coupled with high policy decisions, is why WFA's farm machinery program for the first quarter of 1944 was restored almost to its original size, and why a number of OCR and other nonmilitary programs were reinstated.

PAC ACTS AS APPEALS BOARD

The Program Adjustment Committee is the appeals board not only for the allocation of controlled materials but for virtually all allocations and for urgency

ratings. If, say, a claimant agency is not satisfied with the share of components or manufactured products allotted to it by one of WPB's industry divisions, it can appeal to the Program Adjustment Committee. Recently, OEW appealed the Construction Machinery Division's allocation of track-laying tractors. But the Program Bureau's analysts showed that the needs of other claimants were irreducible, and accordingly the Program Adjustment Committee rejected the appeal.

FINAL ARBITER

PAC decisions then can be carried to the Requirements Committee, of which the Program Vice Chairman is chairman and final arbiter. These cases usually involve policy issues. One now pending is the appeal of the Army, Navy, and ARCO against the OCR-Consumers Durable Goods Division program for the production of 2,076,000 electric flatirons in 1944. The Requirements Committee has tentatively decided to approve the program; though it has still to determine whether production may be permitted in critical labor areas. The military services fear that this might drain away manpower in these areas.

AGENT FOR POLICY-MAKERS

The Program Bureau does not confine itself to allocations. It would not do to have critical components go into office machinery at the expense of landing craft. So the bureau assigns what are called "urgency ratings." And again it acts not as a policy-making body but as an agency of the policy-makers. The policy—the urgency of programs—is decided on high: by the Joint Chiefs of Staff, the Chairman of the War Production Board, the War Mobilization Director, or, in the most controversial cases, by the President himself. It then devolves on the Program Bureau to fit these high commands into a basic rating structure.

Similarly competing demands occur for labor. Accordingly, the Program Bureau also draws up production urgency lists as a guide to the War Manpower Commission's activities.

FIRST THINGS FIRST

For the most part, rating consists of ranking programs in order of importance—putting aircraft, for an obvious example, ahead of bicycles. However, more complicated problems of balance arise. For example, when the aviation gasoline and synthetic-rubber programs —both of which have the very highest urgency ratings—were threatened with slowdowns because of impending shortages of sulphuric acid, the bureau recommended the up-rating of four uncompleted sulphuric acid plants to AA-1, to assure delivery of materials and components to these plants on schedule.

Since many programs depend on foreign supplies—tin, quebracho, manganese, etc.—the bureau (through its Stockpiling and Transportation Division) also draws up "import quota lists" to make sure that the most critical needs get first call on shipping space. These lists then govern the Foreign Economic Administration's purchases abroad, and the War Shipping Administration's allocation of cargo space.

CORRELATES URGENCIES

Here again, the bureau does not determine urgencies but correlates them. Whenever there are competing demands upon limited capacity, the bureau weighs one against the other, and then shows why one must be given priority. Recently it showed that shipping space wanted by WFA for 1,000,000 tons of Chilean nitrates was more urgently needed for Chilean copper. WFA appealed the case

to the Program Adjustment Committee, finally to the Requirements Committee, but to no avail.

Once supplies have been allotted and urgency ratings assigned, the work of the Program Bureau is done—almost. Implementation of programs becomes the responsibility of the industry divisions and other war agencies, including the claimant agencies. However, the Program Bureau keeps records and checks up on results.

WORK ENTERING NEW PHASE

Today, the work of the Program Bureau is entering a new phase. Its main job has been to clear the way for military programs. This is still the main job. However, materials are getting easier, and the pressures to expand production of civilian goods are mounting. In the future, the bureau's problem increasingly will be to clear the way for expanding civilian programs—but in such a way as not to interfere with war production. If there is not to be a premature draining away of manpower and managerial attention from military programs, only those civilian goods can be manufactured which do not conflict with military requirements for facilities, materials, and manpower.

SOUNDING OUT RECONVERSION

This will bring the War Production Board smack up against the basic problems of reconversion.

To deal with these problems, it has to gather the relevant facts about both military and civilian needs, as we move through the various stages of war and demobilization. As a first step toward this end, the Program Vice Chairman has sent a letter to all claimant agencies and industry divisions, requesting proposals for the resumption of civilian production. When these suggestions are received, they will be reviewed by the

SELECTED MONTHLY STATISTICS

Cost of Living - Employment - Transportation

	Latest Month *	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
COST OF LIVING - ALL ITEMS (1935-39=100)	124.1	124.4	123.9	125.1	119.8	100.1	103.3
Food	137.3	138.2	137.4	143.0	131.1	96.7	104.1
Other than food	117.4	117.4	117.1	116.0	113.9	101.8	102.9
NONAGRIC. EMPLOYMENT - TOTAL (Thousands)	38,251p	38,276p	38,227	38,262	38,533	30,932	n.a.
Manufacturing - Total	16,235p	16,205	16,179	15,911	15,434	10,746	
Durable Goods	9,806p	9,739	9,659	9,483	8,844	4,911	
Nondurable Goods	6,429p	6,466	6,520	6,428	6,590	5,835	
Government	5,835p	5,854p	5,830	5,948	5,723	4,023	
Other	16,181p	16,217	16,218	16,403	17,376	16,163	n.a.
FEDERAL CIVILIAN EMPLOYMENT (Thousands)	2,997p	3,000r	3,044	3,093r	2,741	859	971
War	2,164p	2,171r	2,214	2,270r	1,880	n.a.	n.a.
War Department	1,263p	1,277r	1,316	1,413r	1,190		
Navy Department	682p	676r	678	633	531		
Other War Agencies	219p	218r	220	224r	159		
Nonwar	833p	829r	830	823r	861	n.a.	n.a.
TRANSPORTATION - COMMODITY AND PASSENGER (1935-39=100) †	224p	226	225r	208r	204r	127	116
Commodity	213p	212	210r	196r	202	134	119
Passenger	263p	271	275	246	207	104	104

* Cost of Living, Nonagricultural Employment, November; Federal Civilian Employment, Transportation, October.
p Preliminary. n.a. Not available. r Revised. † Unadjusted.

Program Bureau and ultimately by the Requirements Committee, and then ranked in order of desirability. Programs ranked high will be referred to the industry divisions for detailed programming.

This does not imply that reconversion is just around the corner. Rather, it is an effort to find out what reconversion may involve. It is a sounding.

REPORTS ON REPORTS

Food Plan for Italy

To eliminate food hoarding in occupied Italy, *Food Supplies of Italy* (confidential; pp. 32) recommends that occupation authorities restore legal markets where peasants, who now withhold large quantities of food for themselves, the black market, or livestock, can exchange their produce against the goods they want—clothes, household items, farm supplies, or even U.S. currency. While the overall caloric supply is believed adequate, interregional trade is needed to provide a properly balanced and protective diet in all parts of the country: durum wheat must be shipped to the South; citrus fruits, vegetables, meat, and oil to the North.
(Department of Agriculture, Office of Foreign Agricultural Relations)

British Manpower Control

In Great Britian, control of hiring, labor utilization, transfer of workers from nonessential to essential industries, and military conscription have all come to be considered as a single problem which must be solved by coordinated labor procurement. *The Administration of Control of Hiring in Great Britain* (confidential; pp. 16) describes the integrated functioning of the Ministry of Labour and National Service, which directs all hiring, with the war supply departments under the Ministry of Production; the development of the labor priorities system; and the classification of labor areas.
(War Manpower Commission, Foreign Labor Market Section)

Paper Pinch Pending

U.S. and Canadian production of newsprint fell about 10% during the first 10 months of 1943, while consumption declined only about 1%; even in November, limitation orders permitted publishers to order 16% more than the current output of the mills. *Pulp and Paper* (confidential; pp. 18) points out that, although the downward trend of pulpwood cutting has been reversed, inventories of finished stock, wood pulp, and pulpwood have fallen so rapidly that the shortage will be felt early in 1944.
(Department of Commerce, Bureau of Foreign and Domestic Commerce)

Oil Overland

Tankers which once delivered 98.5% of the petroleum moved to the East Coast are now carrying oil to the fighting fronts; to replace them, a vast overland oil transportation system has been mobilized, using approximately 70,000 railroad tank cars and 10,000 miles of newly built or converted pipelines. Additional pipeline completions will soon raise capacity for overland petroleum deliveries to the Atlantic seaboard to 1,625,000 barrels a day, according to *Report on United States Inland Petroleum Transportation* (unclassified; pp. 28); petroleum supplies, not transport facilities, will then be the bottleneck.
(Petroleum Administration for War, Transportation Division)

[This record is an attempt to select from the many documents coming to the attention of WAR PROGRESS those studies which would be of most interest to readers. The list is by no means comprehensive, and no attempt has been made to evaluate reports for accuracy. Whether reports are available depends on the policy of each individual agency.]

PSF
Bx131.

The President
1

WAR PROGRESS

Confidential

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Commerce Dept. Letter, 12-15-72
By RHP, Date MAR 29 1973

Easier Metals and Their Meaning
The Strategy of Subsidies
Size and Shape of U. S. Rationing

Number 171 December 25, 1943

Metals Precipitate Reconversion Problem

Easier position in steel, copper, aluminum, etc. opens way for selective increases in civilian goods output. But controls are needed to prevent free-for-all.

A YEAR AGO, prospective supplies of such key metals as steel, copper, aluminum, molybdenum, and zinc were so short, relative to prospective demand, that the war production program was constricted.

Now the situation is easier. This is suggested by what has happened to the Conservation Division's critical list (table, page 3). At one time, 41 metals and related fabricated materials were considered scarce even for military and the most essential civilian requirements; substitutes had to be sought wherever possible. Today, only 17 are "critical," and seven, including steels and copper, will come off the list shortly. This does not imply that the declassified metals are free and easy, that allotment of them to critical needs can be dispensed with. But it does imply that critical needs can be met.

PLANTS DE-INVENTORYING

More than a simple supply-demand relationship is involved. In recent months, as programs have been cut back, many manufacturers have been de-inventorying. Manufacturers are particularly concerned lest, under contract cancellation, they be reimbursed for inventories of no more than 60 days. So the full volume of orders doesn't come through against CMP and other allotments.

No figures are available on how much de-inventorying is likely to take place. But there is some evidence that manufacturers, to be on the safe side—to be sure that delays in deliveries from mills don't hold up their production lines—have built up as much as four months' supply, including work in process. The tendency is now to get back to a two months' supply or less.

There are other and more direct reasons for the easing in materials. Probably the most important is the successive stating and restating of military programs on an increasingly realistic basis. A good deal of water has been squeezed out of the war program.

DIMINUTION IN DEMAND

Moreover, some program cutbacks have resulted in a genuine diminution in demand. The reduction in the Army tank program pulled down needs for carbon and alloy steel and correspondingly for certain alloying metals—particularly molybdenum. And because cutting tools are on a virtual replacement basis—the main job of plant expansion has been done—tungsten requirements are down 10% from a year ago. The continuing drop in construction has cut demand for steel.

Exports also are lower. Because of increased home production and cutbacks, the United Kingdom and the rest of the British Empire need less U.S. steel than formerly. Russia, too, has cut its requests—here shipping was a factor. In the case of zinc, Great Britain used to request 11,000 tons per month, now takes none. Reason: the British ammunition program has been reduced and supplies from Australia and Canada are up. Russian requests have gone down too—from 3,500 to 1,100 tons per month (WP-Oct2'43,p8).

And while requirements have been whittled down, supplies have been main-

tained at high levels. New facilities coming into production have persistently lifted the output of aluminum and magnesium. In the case of steel, it's more of the same. New facilities have been added; at the same time requirements have been cut. And when new rolling mills for sheet and plate come into operation this spring, loosening the current squeeze in those departments, a satisfactory balance in steel is in sight. Copper and zinc mining has been kept up by payment of premiums to high-cost producers; now, however, further expansion in premium payments for increased production over and above existing quotas has been stopped.

BUILDING SAFE MARGINS

Conservation and stockpiling have played their part. The introduction of National Emergency steels saved nickel, chromium, vanadium, and other alloying materials in making alloy steels. The building up of scrap supplies has also cut down need for new production of alloying metals, as well as brass and copper. And through stockpiling, domestic supplies of tin have been built up to fairly safe margins.

The statistics on supply and demand do not tell a complete story. There are always possible changes in demand. For a while, magnesium went begging. But there is a possibility of a greatly expanded use in the Air Forces program. In which case magnesium will complete another cycle, going from plenty to scarcity. Cadmium still has a critical aspect: overhanging is a large contingent demand for it in chemical warfare.

Moreover, bottlenecks in the manufacture of specific shapes and types still persist. In aluminum, sporadic shortages may still occur in fabricating operations. Castings and forgings are a possible bottleneck. Claimants have been urged to submit their requirements of numerous shapes and forms to the Aluminum Division so as to permit scheduling.

Manpower, too, is an unknowable factor. Certain copper and brass mill products have been in short supply because of a shortage of labor; the same is true of steel castings and forgings.

STATISTICAL DEFICITS

But by and large, the position of leading metals is unquestionably easier. In eight of the 14 metals shown in the following table, 1944 supplies are figured to exceed estimated screened requirements. And revisions in the statistics may cut the indicated deficits on other metals. Thus alloy and carbon steel requirements may come down; if, in addition, de-inventorying takes place, what appears as a 1944 deficit might become a surplus. In tin and lead, new supplies are down, but the country has stockpiles to take care of the deficiency. The size of the cadmium deficit, as previously noted, is contingent. And in nickel—where demand and supply square off—the country's requirements have been gradually worked down to what Canada is able to supply after meeting the demands of other United Nations:

IN THIS ISSUE:

ON AND OFF THE CRITICAL LIST

THE CONSERVATION DIVISION placed 41 metals and related materials on the critical list because supplies were insufficient to meet war and essential industrial and civilian requirements. But 24 have been taken off the list. Of the other 17, seven are about to come off; only 10 continue as critical:

ON

Beryllium	Iron, malleable cast	Tantalum
Bismuth	Nickel	Tin
Cadmium	Platinum	Tin plate
Columbium		

ABOUT TO COME OFF

Copper	Steel, NE alloy	Steel, straight chrome stainless
Iron, low phosphorous pig	Steel, carbon	Steel, SAE alloy
	Steel, tool	

OFF

Aluminum	Iron alloys	Rhodium
Aluminum scrap	Iron, alloy cast	Silicon
Brass	Lithium	Terneplate
Bronze	Magnesium	Tungsten
Calcium	Manganese	Tungsten carbides
Chromium	Molybdenum	Vanadium
Cobalt	Nickel alloys	Wrought iron
Iridium	Osmium	Zinc

Material	New Supplies	Screened Requirements	Surplus or Deficit
	(in millions)		
Short Tons:			
Carbon steel*	60.9	65.9	-8%
Alloy steel*	8.9	10.0	-11
Copper.....	3.55	3.51	+1
Lead.....	1.08	1.11	-3
Zinc.....	1.1	1.0	+10
Long Tons:			
Tin.....	57.6	74.2	-22
Pounds:			
Aluminum..	3,325.0	3,217.0	+3
Magnesium.	510.0	467.6	+9
Chromium..	324.0	320.0	+1
Molybdenum	60.4	44.6	+35
Nickel....	201.9	201.9	nil
Tungsten..	24.8	19.6	+27
Vanadium .	4.5	3.8	+18
Cadmium...	4.1**	6.0**	-32

*Finished products. **First half only.

The main point is this: Right now, supplies are still somewhat tight; after all, military production is still rising. However, toward the middle of the year, especially if pending cutbacks actually go through, production will turn down (WP-Dec18'43,p1). At that time, as a result of de-inventorying and reduced consumption, supplies will be more than ample for military requirements. This opens the way to expansion in repairs and maintenance of the country's overworked plant and perhaps to more capital additions to railroads and public utilities.

Unquestionably, in view of the improving supply-demand position in most metals, the War Production Board and other war agencies will be subjected to tremendous pressures to let down the bars to all civilian goods. Such a general relaxation of controls, however,

would undoubtedly interfere with military production. It is necessary, therefore, not to release existing controls freely, but to use them to obtain increased production of those goods most essential to the civilian economy—not "any old goods." In short, the controls should be used for an orderly reconversion. All of which means that plans for reconversion must be laid now.

For $1 Invested, $1.29 Is Saved

Food subsidies help to check rise in living costs, boost production. Various methods used, including incentive payments. But savings are not up to those in copper.

IN FISCAL TERMS, the battle over subsidies is a battle over $1,450,000,000 annually, or about 1.5% of the war program. And of that amount, $350,000,000 paid out on copper, zinc, lead, and some industrial products is in the Congressional clear. It's the food subsidies that cause the ruckus.

But more than dollars is at stake. Subsidies are part of the nation's price structure. Remove them, and you leave a vacuum which rising prices will rush to fill. If food subsidies were to go, food prices would go up 7% almost immediately; inevitably demands for higher wages would result; higher wages would raise costs; higher costs would tend to force prices up some more. It's the old inflation roundelay—so well known and so easily ignored.

NONFOODS: $4.74 FOR $1

Food subsidies, at $1,100,000,000, constitute 75% of all subsidies. They save ultimate consumers, including the government, $1,420,000,000 (table, right). Thus, for every $1 in subsidies, direct savings amount to $1.29. In nonfoods, the ratio is much higher—$4.74 saved for every $1 laid out in subsidies.

In such large food programs as butter, pork, Cheddar cheese, all commercial producers get the subsidy on an across-the-board basis. Thus, Cheddar cheese manufacturers get the subsidy on all Cheddar cheese produced; all creameries get the same subsidy on butter, regardless of whether they are high- or low-cost producers.

SUBSIDY SCORECARD

THE FOLLOWING TABLE shows the annual expenditures under the subsidy program, the estimated direct savings, and the ratio of savings to cost:

	Cost	Direct Savings	Ratio: Savings to Cost
	(millions)		
Foods	$1,100	$1,420	$1.29-to-$1
Non-foods	350	1,660	$4.74-to-$1
Total	$1,450	$3,080	$2.12-to-$1

ONLY TO MARGINAL MINES

Nonfood subsidies are usually confined to marginal producers. Copper, lead, and zinc account for most of the savings in this group: an $80,000,000 subsidy keeps prices down by $1,000,000,000. (Remove this subsidy, and the nonfood and food ratios of savings to cost would be about the same.) In copper, the subsidy is paid only to marginal copper mines whose costs would not permit mining at the ceiling price —12¢ per pound. Thus, the country gets increased production without paying higher prices to the whole industry.

That's where the large saving comes in. This principle, when possible, has been applied to foods—potatoes, for example.

But in many foods, savings above the subsidy depend largely on how the industry sets prices. In bread the cost of production would have risen about ½¢ a loaf; to pass on that increase to consumers, bakers would have had to boost the price a full cent. So the Office of Economic Stabilization worked out through the Commodity Credit Corporation a ½¢ subsidy. Cost of bread and flour subsidy: about $100,000,000. Consumers' savings: at least $125,000,000.

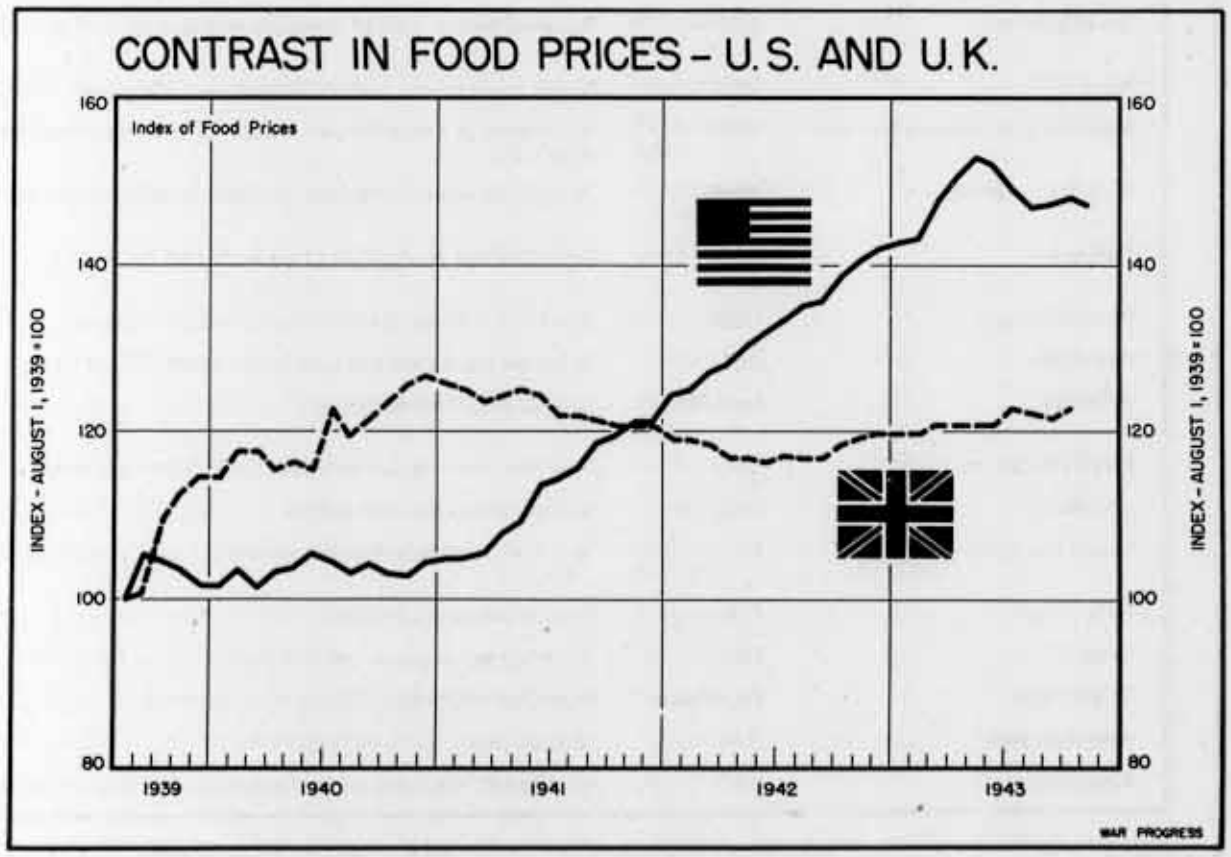
A HALFPENNY SAVED—

Or there's the saving in markup. In the case of butter, for example, a subsidy of 5¢ a pound is paid at the creamery. It's customary for the retailer to mark the price up 10%. Thus the subsidy saves the consumer not 5¢ but 5½¢. It's small, but a halfpenny saved per pound is a lot of dollars in a mass market.

Subsidy payments not only prevent the particular price from rising, they also prevent a lot of other prices from being forced up. Take the case of the subsidy on wheat used for feed. If this price were given free rein, farmers' costs for feeding livestock and poultry would rise. And so would meat, dairy products, poultry, eggs. Thus this subsidy holds the line in a lot of other prices, prevents market disturbances.

To get higher production of truck crops and potatoes, incentive premiums have been used. Each farm gets a quota; all production between 90% and 110% of that quota receives a bonus payment. This resembles the copper subsidy.

The OPA has also worked out measures to absorb transportation differentials. Thus when waterway shipments of coal



SUBSIDIES AT A GLANCE – HOW THEY WORK

Program	Paying Agency	Why subsidized
Aluminum products	DSC	To bring in marginal producers
Apples	CCC	To cover high transportation costs of away-from-market producers
Butter	DSC	To roll retail prices back to September, 1942, level
Canning fruits & vegetables	CCC	To compensate for higher costs
Cheddar cheese	CCC	To compensate for higher costs
Chilean nitrate of soda	DSC	To compensate for increased wartime shipping costs
Coal	DSC	To offset increased transportation costs to East Coas
Copper, lead, zinc	MRC	To bring marginal mines into production
Corn price adjustment	CCC	To induce movement of yellow corn to East and Southeast where price ceilings are lower
Dairy feed	CCC	To compensate for increased feed and labor costs
Dried beans	CCC	To encourage production
Flour & bread	DSC	To compensate for rise in wheat prices
Fluid milk (in 4 urban areas)	CCC	To compensate for increased prices paid to farmers
Imported metals	MRC	To offset wartime transportation costs
Jewel bearings	DSC	To offset higher cost of domestic production
Meat	DSC	To roll retail prices back to September, 1942, level
Miscellaneous domestic ores	MRC	To encourage domestic production of arsenic, beryllium, chrome, cobalt, etc.
Nicotine sulphate	AMA	To divert low-grade tobacco to nicotine sulphate production
Peanuts	CCC	To encourage production of peanuts and peanut oil
Peanut butter	CCC	To roll retail prices back to September, 1942, level
Petroleum	DSC	To offset increased transportation costs to East Coast
Potatoes	Dept. Agric.	To encourage production
Prunes & raisins	CCC	To offset increased prices paid by packers to growers
Soybeans	CCC	To expand soybean oil output
Sugar transport	CCC	To offset increased shipping costs
Sugar beet	CCC	To encourage production
Tires	DSC	To utilize extra passenger-car tires
Truck crops	Dept. Agric.	To encourage production
Wheat for feed	CCC	To keep down costs of feedstuffs
Wood pulp	DSC	To utilize (1) inferior grades of wood pulp and (2) marginal paper mills

* No direct estimate available; savings figure shown is equal to estimated cost of program and is a minimum.

‹, TO WHOM THEY'RE PAID, AND WHY

How subsidized	Paid to:	Annual Cost	Direct Savings
		Millions of Dollars	
Buy output of high-cost producers above prevailing price	Manufacturer	$ 6	$ 6+*
Pay additional transportation costs	Shipper	4	30
Pay 5¢ per lb. at creamery	Creamery	82	92
Buy pack, resell at loss; also compensate for increased wage costs	Cannery	27	33
Buy output from mfrs. at 27¢ lb., resell at 23 1/4¢ ceiling	Manufacturer	29	40
Buy nitrates at $37 per ton, resell for $30	Importer	7	11
Pay cost differential between prewar and war routes	Consignee	25	25+*
Pay premiums to high-cost producers above specified quotas	Producer	80	1000
Pay 5¢ per bushel to sellers who ship from corn areas to East and Southeast	Corn-belt seller	5	5+*
Pay farmer 30-50¢ per cwt. for whole milk or 4-6¢ per lb. for butterfat	Farmer	200	250
Buy at price higher than ceiling, resell at loss	Country shipper	10	14
Direct payment to miller	Miller	100	125
Direct payment to distributor	Distributor	5	8
Buy imports at above-ceiling prices, sell at loss	"Buy & resell"	25	25+*
Buy domestic output at cost plus 6%, plus certain development expenses	Producer	8	8+*
Direct payments on live animals slaughtered	Slaughterer	436	591
Pay marginal costs, also fees	Producer, or gov't agent	25	25+*
Government absorbs about 50% of the higher raw material costs	Nicotine sulphate manufacturer	2	4
Buy peanut crop above ceiling price, resell at loss to peanut crusher	Peanut crusher	10	10+*
Direct payment to manufacturer on civilian output	Manufacturer	15	22
Pay cost differential between prewar and war routes	Consignee	100	390
Pay 50¢ a bushel for normal yield on all acreage planted between 90% and 110% of goal	Farmer	25	25+*
Buy pack at higher-than-1942 price; resell at loss	Packer	13	19
Buy soybeans and resell at loss	Processor	10	24
Pay increased shipping costs; also buy sugar, resell at loss	Importer and "buy & resell"	43	43+*
Pay $150 per ton to processor for higher price to growers	Processor	11	11+*
Buy from private car owners, resell at loss	"Buy & resell"	20	20+*
Pay $50 an acre on all acreage between 90% and 110% of goal	Truck farmer	6	6+*
Sell wheat to feeders at not less than corn parity	"Buy & resell"	68	68+*
Pay increased costs of mills using bleached sulphite wood pulp	Mill	1	20

and petroleum to the East Coast were decreased because of U-boats, the War Shipping Administration and the Defense Supplies Corporation stepped in and absorbed the increased costs of moving the products by rail. Similarly, OPA worked out a plan for paying the increased cost of moving apples to the eastern seaboard from the West Coast. Normally, such a cost would be absorbed by the seller—but not in a wartime seller's market.

PARES DOWN PROFITS

There is this difference between most subsidies on food and subsidies on industrial products: The food subsidy is designed to prevent living costs from rising—and, in the past, to roll them back. The subsidy on industrial products, however, is designed to bring in marginal output of goods vital to the war program and to keep down windfall profits while doing this. Thus, were copper to rise to 17¢ a pound, in order to get the marginal production, low-cost mines would reap huge profits.

STANDARD PRACTICE

Food subsidies have been standard practice in all war countries. In Britain, the government itself buys and sells at a loss about 50% of all foodstuffs (WP-July2'43,p1). Although the U.S. also uses this procedure, we do not actually engage in marketing, as do the British. Currently, food subsidies cost the British more than $700,000,000 a year; or some 3% of their war program. But food prices are still at the April, 1941, level—the line the British government resolved to hold.

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program—Checks paid (millions of dollars)	1,469	1,675	1,731	1,580	1,237
War bond sales (millions of dollars)	165	199	163	164	213
Wholesale prices (1926=100)					
All commodities	102.9p	102.9p	102.6p	103.5	100.7
Farm products	121.8	122.0	121.2	127.0	113.3
Foods	105.7	105.9	105.6	109.0	104.2
All other than farm products and foods	97.8p	97.8p	97.5p	96.9	96.2
Petroleum:					
Total carloadings	51,125	50,036	51,162	57,495	49,974
Movement of cars into the East	23,696	22,553	24,607	31,399	23,966
Total stocks of residual fuel oil (thousands of barrels)	58,272	59,715	62,662	67,455	74,449
East coast stocks for civilian use (1940-41=100 Seas. Adj.)					
Gasoline	42.4	42.0	39.5	N.A.	N.A.
Kerosene	N.A.	52.0	52.3	|	|
Distillate fuel oil	75.1	73.0	84.2	|	|
Residual fuel oil	67.7	69.7	76.3	N.A.	N.A.
Bituminous Coal:					
Production (thousands of short tons, daily average)	2,163p	2,122	1,910	1,956	2,005
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	2,570	2,924	2,659	2,233	1,066
Gulf Coast ports	399	558	477	333	351
Pacific Coast ports	1,225	1,260	1,313	1,424	909
Steel operations (% of capacity)	93.0	99.3	99.1	97.6	98.1
Department store sales (% change from a year ago)	N.A.	-1	+22r	+28	+10

p. preliminary n.a. not available r. revised

Rationing Has Its Points—and Problems

OPA's job is administrative; other agencies decide which commodities to ration, and when. Biggest difficulty is in tailoring to fit all the different needs.

IF THE UNITED STATES comes to ration clothing, or liquor, or coal, the Office of Price Administration will get the job. But it won't decide whether or when to ration. Other agencies—War Production Board, War Food Administration, Petroleum Administration for War, etc.—propose; OPA's Rationing Department does the administrative work.

Already it has distributed more than 500,000,000 food ration books, and set up a ration banking system to account for the billions of green, red, brown, blue, gray bits of paper—4,000,000,000 stamps are spent every month. It gets involved in such important but incidental problems as collecting ration books from the dead—more than a million a year. And OPA also has to keep adjusting values of rationed commodities to available supplies, on the basis of (1) reports from WFA, (2) wholesalers' reports on how stocks are moving, and (3) monthly consumer surveys conducted by the Bureau of the Census—household diaries of some 3,000 representative housewives. Thus, when WFA found pork supplies temporarily high, point values were lowered.

LOCAL BOARDS DO TAILORING

But, in addition, rationing has to tailored to fit. The Rationing Department lays down general regulations; then local boards have to apply them to specific applicants—deciding just how much gasoline or fuel oil they need, just who is entitled to get one of the few available tires, bicycles, stoves, etc. Likewise special provisions have to be made: extra shoes for growing children, extra sugar for home canners, ration points for soldiers and sailors home on furlough.

To date, gasoline has presented the hardest problem. There's no satisfactory substitute for gas, and civilian consumption of no other major commodity has been curtailed so drastically. With the armed forces and lend-lease taking a third of U.S. production, less than 1,200,000 barrels a day is available for civilians, as against a prewar consumption of 1,700,000. Commercial and farm users get first whack at this and take more than half. And what's left for passenger cars won't go so far as it used to: quality is getting poorer as the limited supply of tetraethyl lead goes increasingly into high-octane gas.

ENFORCEMENT BIG PROBLEM

Civilian quotas for each section of the country are set by PAW, and other agencies determine essential requirements: Office of Defense Transportation for trucks and buses, Office of Civilian Requirements for various industrial uses, WFA for farm and off-the-highway use. OPA's job is to carry out these directives and see to it that the country lives within its gasoline income.

The big difficulty is with enforcement. Although the problem of counterfeit and stolen ration coupons has been largely licked, there are still serious leaks through black markets and dealer laxities. And OPA has to rely on voluntary cooperation. Its enforcement staff is negligible.

With food rationing, however, there's not the same incentive to chisel; most people can get plenty to eat with their

SELECTED MONTHLY STATISTICS

Industrial Production - Hours and Earnings

	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
PRODUCTION INDEX-INDUSTRIAL(1935-39=100)†	247 p	249	248	239	220	126	97
Total Manufactures	268 p	269	267	258	236	127	95
Durable	378 p	377	372 r	360	319	136	98
Nondurable	179 p	181	182 r	175	168	119	93
Minerals	131 p	140	143	132	132	124	109
AVERAGE WEEKLY EARNINGS (Dollars)							
All Manufacturing Industries	44.90 p	44.43 r	43.52	42.48	38.89	24.96	n.a.
Durable Goods	51.46 p	51.06 r	49.61	48.67	45.31	28.32	n.a.
Nondurable Goods	35.18 p	34.73 p	34.55	33.58	30.66	22.16	n.a.
Bituminous Coal Mining	45.22 p	46.05 p	46.15	41.39	36.56	28.49	26.25
Metalliferous Mining	45.17 p	44.46 p	45.31	42.57	40.11 r	30.64	31.26
AVERAGE HOURLY EARNINGS (Cents)							
All Manufacturing Industries	98.9 r	99.4 p	96.5	94.4	89.3	63.5	n.a.
Durable Goods	108.8 p	109.8 p	106.0	104.0	99.0	70.1	n.a.
Nondurable Goods	82.4 r	82.3 p	81.1	79.0	75.1	58.0	n.a.
Bituminous Coal Mining	116.1 p	117.0 r	115.0	112.8	107.0	88.2	88.7
Metalliferous Mining	99.4 p	99.5 p	98.3	96.2	91.3 r	72.7	70.8
AVERAGE HOURS PER WEEK							
All Manufacturing Industries	45.4 p	44.7 r	45.1	45.0	43.6	39.3	n.a.
Durable Goods	47.3 p	46.5 p	46.8	46.8	45.8	40.4	n.a.
Nondurable Goods	42.7 p	42.2 p	42.6	42.5	40.8	38.2	n.a.
Bituminous Coal Mining	39.0 p	39.4 p	40.3	36.9	34.2	32.6	29.6
Metalliferous Mining	45.1 p	44.5 p	46.0	43.9	43.8 r	42.4	44.2

* Industrial Production, November; Hours and Earnings, October. †Unadjusted. p Preliminary. r Revised.
n.a. Not available.

points. Here the chief problem is to make exceptions to the rules. Puzzler right now is how to allot extra points to occupational trenchermen—miners, lumbermen, riveters, etc. They obviously require a lot more calories than clerks do. The trouble is that when you grant a miner more red meat, the longshoremen, cab drivers, and grocery boys will want more too.

To solve the question of what constitutes a proper occupational appetite, an interagency committee has been set up, including representatives of War Manpower Commission, WPB, WFA, and OPA. Food specialists are making first-hand studies in plants, mines, etc. to put differential food rations on a scientific basis, or at least a basis the public can accept.

Lumbermen are already being given extra rations. One reason for making this exception was to keep them from drifting to shipyards and airplane plants (WP-Nov6'43,p9); another is that out in the woods they can't buy fresh vegetables, fruit, and fish. Similar exceptions have been made with other isolated people who don't have access to nonrationed foods. Western sheepherders, for example, have been given additional points to buy the beans and canned goods they need while on the range.

"IN-PLANT FEEDING" PUSHED

Pending further developments in differential ration plans, OPA has pushed the "in-plant feeding" program as a stopgap. Started two or three months ago, this is a good example of interagency cooperation. WFA assists man-

agement and labor in the installation and operation of food service facilities in the plant; WPB gives priorities on the materials and equipment required to set up this service; WMC helps to provide the necessary manpower; OPA chips in with liberal supplies of ration points and keeps prices reasonable. Result: food-on-the-job is now available for about 33% of all industrial workers, as against 20% before the war, and for more than 50% in the bigger plants—6,500,000 out of 12,000,000 workers. Goal for next year is to service the remainder of the big plants. And this nutritional program not only has enabled workers to get more food without spending ration points, but has improved their efficiency. Plants report production increases of up to 10%, less absenteeism, and fewer accidents.

REFRESHMENTS vs. FOOD

Less serious but more complicated is the problem of rationing restaurants. Their allotment is based on their consumption in December, 1942, and adjusted to increases in the number of customers served; but the formula also has to define a "normal" meal so as to eliminate customers who have only a beer or coke, distinguish between milk-and-pie sales and six-course dinners, prevent disproportionately large allotments of scarce foods (for example, to restaurants that used to specialize in pound-and-a-half steaks), etc. OPA has just issued new rules that distinguish more sharply between "refreshments" and food; places serving both will have to keep two sets of records, but rations can then be apportioned more fairly.

Inevitably there are some inequities. All restaurant-goers can get more than their share of meat; so can most farmers; so can families with young children. But try to administer these disparities out of the system. The Rationing Department believes that it can afford to shy away from further complications so long as basic rations hold up well.

In general, this whole rationing system is much the same as the British, which has stood up under a longer and harder strain. Principal difference is that the British consumer is usually tied to a particular dealer; he can't

WHAT THE U. S. RATIONS

COMMODITIES now being rationed in the United States are:

- gasoline
- fuel oil
- new automobiles
- tires
- bicycles
- stoves
- typewriters
- shoes, certain rubber footwear
- sugar
- most meats, processed foods
- firewood (Pacific Northwest)

The British list is much longer. It includes many more foods (in less liberal quantities): eggs, milk, tea, oranges, dried fruit, candy, gum, crackers, cakes, sirups, rice, tapioca, cereal breakfast foods, etc. It also includes all clothing, furniture, musical instruments, sports goods and games, thermos bottles, alarm clocks, and coal.

Not included in the British list are fuel oil, new automobiles, tires, and bicycles. Scarcely any English civilians use fuel oil, and automobiles and tires are available only to government officials. Bicycles are still manufactured in quantity and are unrationed; they're an essential means of transportation.

buy his meat and groceries wherever he pleases. This considerably simplifies the problems of distributing food evenly and curbing chiselers. OPA uses this method with Mexicans living near the border, who have been granted processed-food and fats-and-oils rations. But a shop-as-shop-can country, such as ours, wouldn't welcome such confinement.

Finally, we have a possible preview of postwar rationing. When limited production of stoves was resumed last summer, OPA began to ration them, at the request of WPB. Local boards were each given a quota to dole out to those who needed a stove—whether or not they were essential war workers.

POSTWAR RATIONING

Presumably, essential commodities such as food, gasoline, and tires will continue to be rationed as long as they are scarce. Possibly the first new automobiles, radios, refrigerators, etc. will also be rationed to prevent a wild scramble when they are first marketed. But if so, it won't be easy to decide just who needs them most. And the country may be less inclined to play ball once the war is over. Nevertheless the problems will remain. We're beginning to discover that with war—as with love—the art is not so much in how to fall in as in how to fall out.

REPORTS ON REPORTS

Russian Rations

Manual workers (heavy industry, mining, etc.) in the Soviet Union receive preferential distribution of food; special consideration is given to other groups such as blood donors, nursing and expectant mothers, and families of Red Army men. *Food Rationing in the Soviet Union* (secret; pp. 23) describes how ration cards are issued and food purchased. Even the official rations, which are barely adequate for health and efficiency, cannot always be fulfilled because of shortages of meat, fats, sugar, and protective foods. (Department of Agriculture, Office of Foreign Agricultural Relations)

Overall Output

This year's output of civilian overalls, mackinaws, work shirts, and other work clothing may fall below requirements by as much as 25%, because of labor shortages, according to *Manpower Situation in the Work Clothing Industry* (confidential; pp. 22). Since the number of new recruits who can be trained to reach the required level of productivity is limited, the report recommends improved on-the-job instruction, return of experienced women workers who have taken up home duties, and fuller utilization of the trained "core" of employees. (War Manpower Commission, Reports and Analysis Service)

Not-So-Healthy Axis

Health conditions and resistance to disease have declined in German-occupied countries because of air-raid hazards, population movements, physical and mental strains, overwork, and nutritional deficiencies. *Health in Axis Europe* (restricted; pp. 107) reports the spread of specific diseases and the methods of prophylaxis and treatment, shows how the decrease in medical personnel and facilities—hospital space and equipment, soap, and drugs such as insulin and liver extracts—has resulted in a marked lowering of medical standards. (Office of Strategic Services, Research and Analysis Branch)

[This record is an attempt to select from the many documents coming to the attention of WAR PROGRESS those studies which would be of most interest to readers. The list is by no means comprehensive, and no attempt has been made to evaluate reports for accuracy. Whether reports are available depends on the policy of each individual agency.]

The President

PSF: WPB

1

WAR PROGRESS

~~Confidential~~

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Commerce Dept. Letter, 11-15-72
By RHP, Date MAR 29 1973

Flatirons Raise Reconversion Problems

What To Do With U. S. - Owned Facilities?

The Changing Naval Program

Number 172

January 1, 1944

Flatirons Don't Mean Refrigerators

Case involves small amounts of materials, manpower, and facilities; so, while it points up problems of reconversion, it hardly sets the pattern.

WHEN LAST WEEK the Requirements Committee authorized the production of some 2,000,000 electric flatirons for 1944, practicality ruled. And practicality—what seems expedient in the instance—will probably continue to rule during the first stages of reconversion.

The Requirements Committee took cognizance of competitive relationships within the flatiron industry—this by prorating production on the basis of 1940 output. Firms whose equipment, facilities, or management is tied up in war work will have the right to subcontract their flatiron quotas to other firms. But distribution will be on a prorated basis—each flatiron company will be permitted to market its share of the 1944 output.

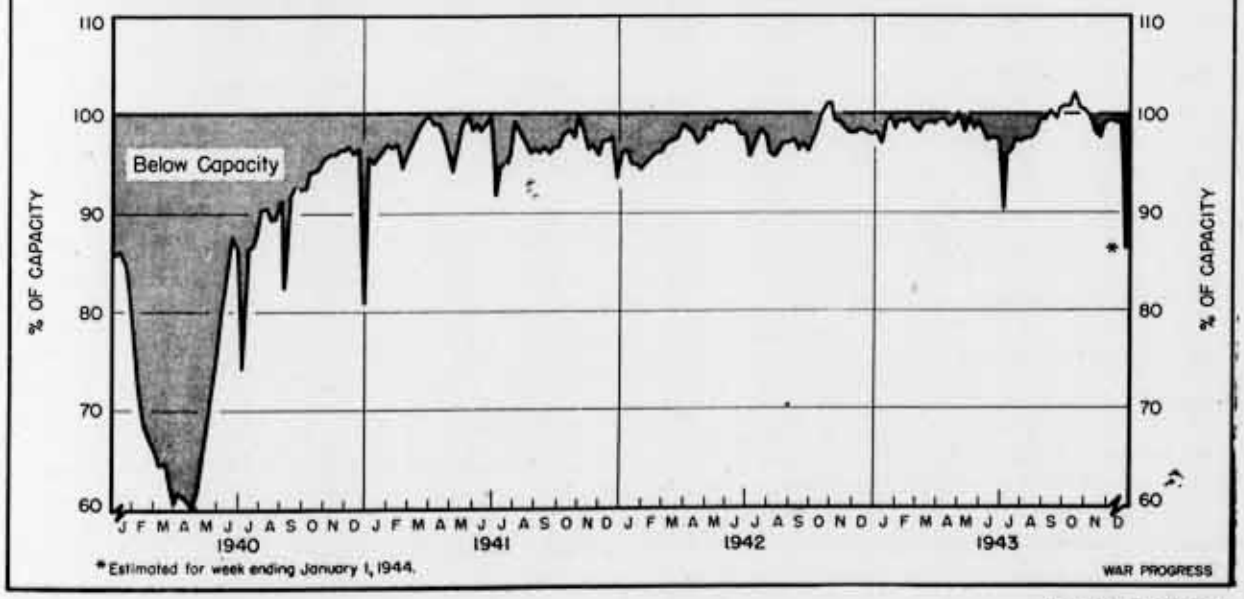
To prevent possible holdups in production of war materials or components, the Requirements Committee and the Consumers Durable Goods Division laid down this limitation: No facility may be used in flatiron production unless its availability is certified by the War Production Board after investigation in the field and consultation with military representatives and the Office of Manpower Requirements.

FEARED REPERCUSSIONS

The Army and Navy objected to the program—not because of materials (only 1,600 tons of steel are involved and relatively small amounts of copper, nickel, and chrome), nor components

SAG IN STEEL OUTPUT

Because of strikes and holidays, year-end production drops. Not so last year, when workers stayed on jobs both Christmas and New Year's.



(which are getting easier), nor yet because of labor requirements (600 workers will suffice for the whole program), but because of possible psychological repercussions.

They argued: Once civilian production resumes, no matter on how small a scale, it might provoke a rush out of war work. Workers would try to find jobs in companies which may be able to convert early. Management might be reluctant to take new war contracts, might devote more and more time to tooling up and experimentation on peacetime products and less time to pushing war production.

NO FIGHTING MATTER

Yet in spite of this danger, what counted in the last analysis was that too little was involved in the flatiron case to make an issue—600 workers, 1,600 tons of steel, and the few simple components are not fighting matters.

That does not mean that the pattern has been set for other reconversions—that competitive relationships will always be so scrupulously regarded, that no distinctions will in the future be made between tight and loose labor areas. It does suggest the considerations that will come up when decisions must be made on refrigerators, washing machines, or automobiles. Yet one thing is clear: Flatirons today do not signalize refrigerators tomorrow. Far from it.

It is not merely that 43% of 1940 output of refrigerators would require 150 times as much steel as 43% of 1940 output of flatirons, as well as proportionately larger amounts of aluminum, copper, nickel, tin, rubber, and other materials. The necessary materials might become available before long, or substitutes might be used. But a comparable refrigerator program would require 15,000 to 20,000 workers—25 to 30 times those for flatirons. What is more, while relatively few flatiron workers are skilled, a large part of the refrigerator labor force must have just the skills needed in war work. Then too, while

FIRST 9,000-PLANE MONTH

DECEMBER shapes up as a 9,000-plane month. As WAR PROGRESS went to press, 7,400 planes had been accepted. But there were three more days to go. Acceptances during the tail-end of the month may run to 500 per day, possibly higher. That would bring the December total to about 8,900 planes. But the month-end rush may well be heightened by a year-end cleanup of assembly lines; and in that case December acceptances could easily cross 9,000 and bring the year's total to over 86,000 planes. In November, 8,789 were accepted.

Particularly worth noting is that 23 B-29 superbombers came through in the first 28 days of the month; that would compare with 18 in the full month of November. Flying Fortress and Liberator output headed for another record, running at a rate 7% above November's 1,083 total.

IN THIS ISSUE:

only about 7% of the flatiron industry's capacity is in Group I labor-shortage areas, 55% of refrigerator capacity is in such areas.

The contrast in the components situation is even more striking. None of the essential components of flatirons is really critical; three essential refrigerator components—fractional-horsepower motors, compressors, and thermostatic controls—are highly critical. There are, for example, only two sources for the bellows that are necessary parts of thermostatic controls in refrigerators, and both are up to their necks in war work. In contrast, flatiron components are comparatively simple and can be made by numerous producers, each of whom need use only part of his capacity a part of the time to fill flatiron orders.

Perhaps most important of all, while there has been virtually no conversion of flatiron equipment and relatively little of plant facilities, about 75% of all refrigerator equipment and more than 99% of plant facilities have been converted to war work.

PATTERN FOR PRACTICALITY

And automobiles are to refrigerators what refrigerators are to flatirons.

That is why the flatiron case, if it sets any pattern at all, sets the pattern only for programs that (1) use comparatively small quantities of manpower and materials; (2) don't interfere with war production; (3) don't require extensive conversion of facilities. In short, it sets the pattern for programs in which most practical considerations point to "Yes, let's do it."

IRONING OUT THE FLATIRON CASE

Sep. 10—The Office of Civilian Requirements proposes production of 2,000,000 electric flatirons in 1944.

ov. 1—Proposal goes to Consumers Durable Goods Division for programming.

Nov. 20—Consumers Durable Goods Division's Requirements Committee approves 2,076,000 irons—2,000,000 for domestic use, 76,000 for military and foreign claimants; specifies that production be confined to No. III and IV labor areas. OCR, the War Food Administration, and the Consumers Durable Goods Division object to the exclusion of producers in No. I and II labor areas. Army, Navy, and the Aircraft Resources Control Office oppose the program as a whole.

Dec. 2—Review by Program Bureau is completed.

Dec. 3—Requirements Committee approves program tentatively, sustains OCR-WFA-Consumers Durable Goods Division objection to confining production to No. III and IV labor areas. Program is returned to Consumers Durable Goods Division for revision.

Dec. 8—Consumers Durable Goods Division resubmits program.

Dec. 10—Requirements Committee returns program to Consumers Durable Goods Division with the specific suggestion that it be discussed with the Industry Advisory Committee. It was felt that too great preoccupation with preserving prewar competitive relations might endanger completion of program.

Dec. 17—Industry Advisory Committee to the Consumers Durable Goods Division is advised of plans.

Dec. 23—Requirements Committee approves program.

A 15-Billion-Dollar Liquidation Job

Peacetime disposal of government-owned war facilities will pose such basic problems as which plants to retain, which to sell to whom — and for how much.

WHEN COMPLETED, the nation's war facilities program will approximate $20,000,000,000. Some $4,000,000,000 of the new plant and machinery will have been added with private funds. Much more than that—about $15,500,000,000—will have been government financed. And as the war program moves along, this publicly owned plant is bound to become an increasingly important problem. How much of it can be absorbed in the nation's postwar economy? By whom?

According to a preliminary statistical analysis, about $9,600,000,000, or more than 60%, of this government-financed plant and equipment has peacetime possibilities of one kind or another.

FOR WAR AND PEACE

Of this amount, $5,500,000,000 is in facilities which can turn out steel, chemicals, gasoline, machine tools, electrical equipment, synthetic rubber, industrial components, and other products which are basic to a peace as well as a war economy.

Another $2,800,000,000 is in plants which could be converted to peacetime products after some alteration and modification—airframe, aircraft engine, tank, gun-machining, munitions assembly, and other such facilities.

But some of this convertible plant is likely to be kept as standby against the possibility of future wars: the Pratt & Whitney aircraft-engine plant in Kansas City has been specifically mentioned in this connection.

Roughly $1,100,000,000 more is in so-called scrambled plants, plants in which substantial amounts of U.S. funds have been invested to round out existing privately owned facilities: a new blast furnace to raise the capacity of a steel mill, a warehouse to increase storage space for copper, a new building to house the expanding administrative staff of a shipbuilding company, and so forth.

And the remaining $200,000,000 represents privately owned plants financed through Reconstruction Finance Corporation loans; the Kaiser steel plant at Fontana, Calif., for instance.

PRIVATE OWNERSHIP IS AIM

The ultimate objective will be to get these facilities into private use as far as possible. One of the problems here is to dispose of properties without causing an undue concentration of ownership in facilities such as magnesium, aluminum, pipelines, and synthetic rubber. Virtually all the publicly financed plants in this group have not been optioned to their private operators.

Most of the government-financed war plants are big. The average cost is $6,000,000. Seventy out of every $100 invested in these facilities has gone into projects costing over $10,000,000. And $12 out of every $100 is in such $100,000,000-plus whoppers as Basic Magnesium, Las Vegas ($130,000,000); Columbia Steel, Provo, Utah ($190,000,000); Chrysler, Chicago ($175,000,000) (chart, page 6).

Obviously, small companies don't stand a chance of buying into this class, or even into the $10,000,000 one—though lease arrangements for all or part of these large properties would enlarge the prospect list. Such facilities can be bought only by large corporations. Indeed, to get some perspective on the size of the plants, it is worth observ-

ing that the publicly financed expansion of some of the nation's biggest enterprises far exceeds the value of their net property accounts in 1939.

In the case of one automobile company, the publicly financed expansion authorized was twice the company's net property account in 1939; in the case of another, it was five times greater. The value of an office machinery company's publicly financed expansion was nine times its 1939 net property value; a shipbuilding company's, seven times; an electrical equipment company's, four times. And in the case of aircraft the government-financed expansion relative to 1939 property goes to such levels as 15 times for one company, 20 times for another, and 30 times for a third.

This prewar-postwar relationship extends to entire industries as well as to individual companies. Aircraft is the standout example, as might be expected. War-financed expansion runs to more than $3,000,000,000 (chart, below) —some 10 times the property account in 1939 and 30 times the industry's capital expenditures from 1935 through 1939.

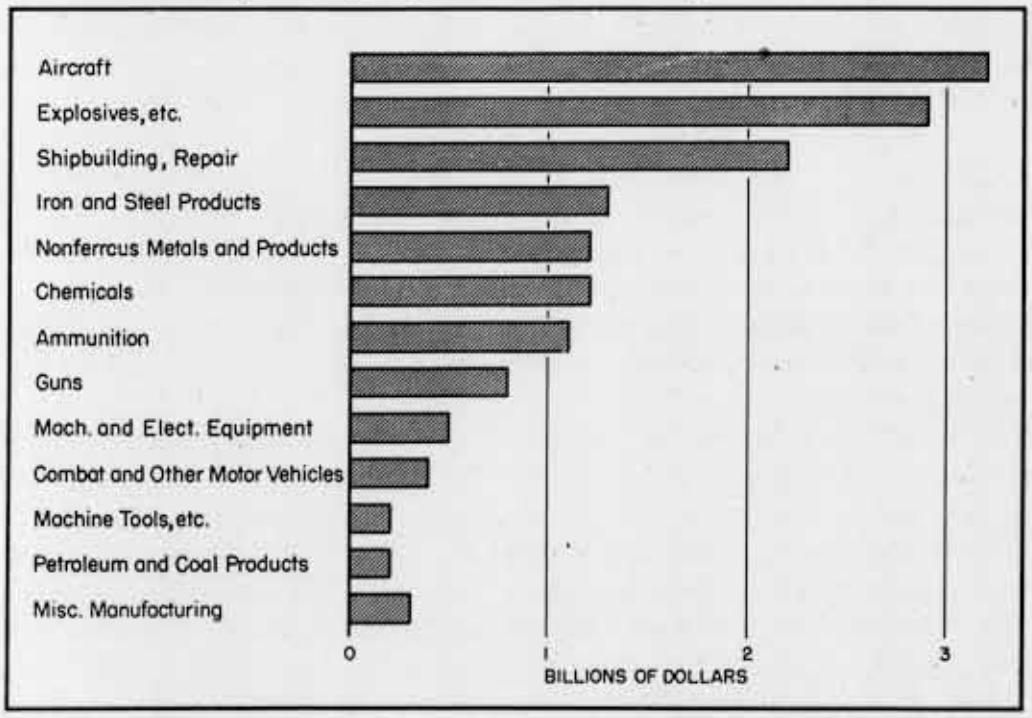
OPTIONS TO OPERATORS

As an overall example, the net property account carried on the books of all U.S. metal-fabricating companies in 1939 amounted to about $7,000,000,000. But publicly authorized expansion since then has amounted to more than $9,000,000,000; and on top of that there has been another $2,000,000,000 of private expansion.

Some $7,000,000,000 of government-financed facilities was built under contracts which granted options to the

PREVIEW OF THE POSTWAR PLANT PROBLEM

Here are the government-financed war facilities which must be fitted into a peacetime scheme, be scrapped, or be held as standby plant.

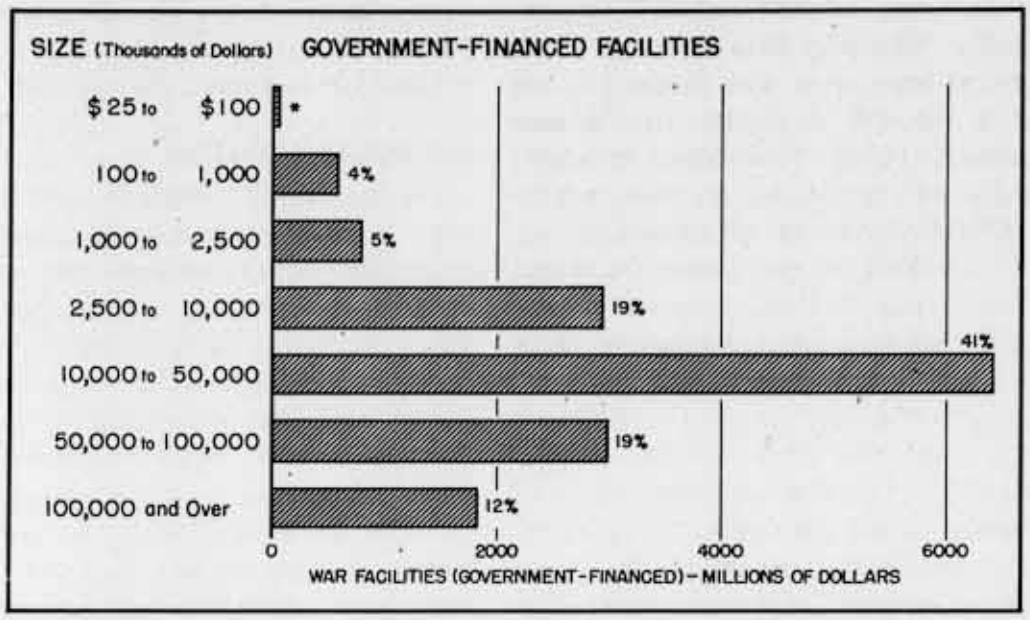


WAR PROGRESS

CONFIDENTIAL

WHO CAN BUY THESE PLANTS?

Over 70% of government-financed war facilities cost $10,000,000 or more; small companies are not apt to be in the bidding for such big jobs.



*Less than 0.5%

WAR PROGRESS

operators. These options generally run for 90 days following termination of the lease and must be exercised on the entire facility. As a rule, price is based on cost less stated depreciation rates with a residual, or minimum, value for all items. But how many of these options will be exercised is a question. So far, relatively few private operators have officially expressed their postwar intentions, although there have been some unofficial statements. Ford, for example, is interested in the Willow Run bomber plant; and Henry Kaiser would like to acquire some of the publicly financed properties he operates.

By and large, war-born facilities have been high-cost affairs. One reason for this was the demand for speed, which brought considerable overtime pay at premium rates. And prices generally were high. Nor have locations always been the most advantageous from an economic standpoint: the aluminum reduction plant at Maspeth, Long Island, uses high-cost coal-generated power. Nor did they always follow pre-existing industrial patterns: a giant steel works was built in Utah, the world's largest magnesium plant went up in Nevada, rubber plants were concentrated in Texas and Louisiana.

SINGLE-PURPOSE FACILITIES

On the other hand, these plants are generally the last word in efficiency. Floor space and clearances are generous; lighting is modern; machinery and equipment incorporate the most advanced technological developments.

So much for the $9,600,000,000 of plants with peacetime possibilities.

Left is $5,900,000,000. But little of this is likely to be employable in peacetime operations.

In this area, the preliminary anal-

ysis suggests that $4,500,000,000 consists of single-purpose facilities—for smokeless powder, shipways, specialty steel products, ammunition loading, etc.—and these would lose most or all of their value in conversion. The major problem here will be to decide how much is to be retained as a reserve against a future emergency. Already, the Navy has publicly announced its desire to hold on to key facilities for after the war, to keep them in grease if necessary. The American Torpedo plant at Forest Park, Ill., and a group of ordnance factories in the Ohio-Michigan-Kentucky area are cases in point.

The balance, $1,400,000,000, represents facilities which are government operated as well as government owned—Navy yards and arsenals, for example. These will probably undergo little change.

But the analytical work on just what can and cannot be done has yet to be undertaken; only then can realistic estimates be made. That calls for engineering studies to determine: What kind of equipment is in each plant? How much is removable without destroying the production process? What is the type of construction? How many square feet of floor space? How much clearance? What type of heating, lighting, ventilation?

LITTLE FELLOW TOO?

Such an analysis would not only indicate the peacetime utility of war plants and their machinery, it would also indicate whether large facilities could be partitioned so that small firms might participate—through purchase or lease—in the liquidation.

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program—Checks paid (millions of dollars)	1,203	1,469	1,392	1,850	1,176
War bond sales (millions of dollars)	124	165	189	217	216
Wholesale prices (1926=100)					
All commodities	102.9p	102.9p	102.6p	103.1	101.2
Farm products	122.0	121.8	121.2	126.2	115.2
Foods	105.7	105.7	105.8	108.0	104.6
All other than farm products and foods	97.8p	97.8p	97.5p	96.9	96.2
Petroleum:					
Total carloadings	48,123	51,125	53,911	58,239	50,058
Movement of cars into the East	21,099	23,696	24,778	31,191	24,224
Total stocks of residual fuel oil (thousands of barrels)	57,596	58,272	62,143	67,960	72,943
East coast stocks for civilian use (1940-41=100 Seas. Adj.)					
Gasoline	43.2	42.4	40.4	n.a.	n.a.
Kerosene	52.9	51.4	49.0	|	|
Distillate fuel oil	80.0	75.1	65.1	|	|
Residual fuel oil	66.9	67.7	75.4	n.a.	n.a.
Bituminous Coal:					
Production (thousands of short tons, daily average)	2,029p	2,175	2,117	2,017	1,969
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	2,592	2,570	2,579	2,162	926
Gulf Coast ports	497	399	366	354	343
Pacific Coast ports	1,169	1,225	1,216	1,305	805
Steel operations (% of capacity)	86.3	93.0	99.5	90.3	98.2
Department store sales (% change from a year ago)	n.a.	-4	+13	+19	+15

p. preliminary n.a. not available

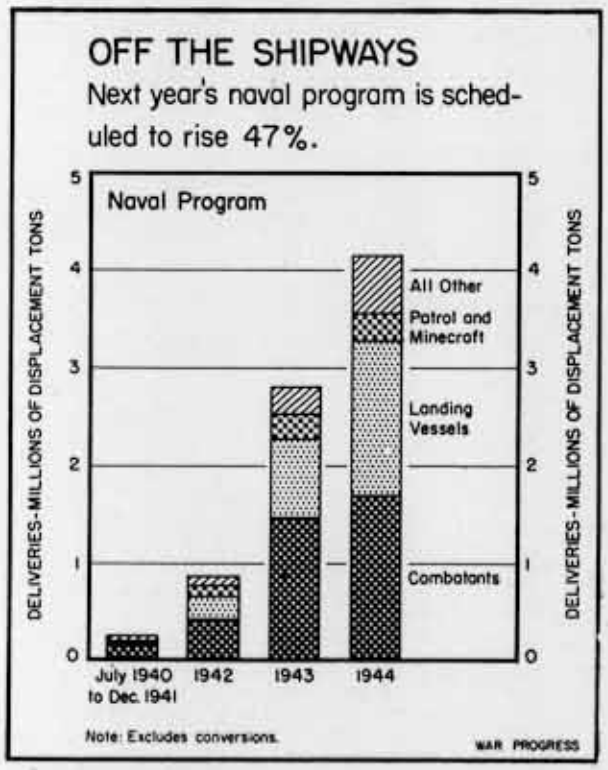
Shifting Composition of the Fleet

Changes in design for fighting have brought many innovations: landing vessels, DEs, baby flat-tops, etc. And carriers have taken precedence over battleships.

THE original Navy construction program in July, 1940, called for a traditional fighting fleet: more battleships, cruisers, destroyers, submarines, and a few aircraft carriers, with enough tenders and supply ships to keep them sailing.

Today the Navy has a fighting fleet—but one that looks a lot different; the design for fighting has changed. Landing vessels, for example, were at first a merely incidental program; only a few thousand tons of small ones were built before 1942. By now the Navy has completed 1,000,000 tons of them—more than half the tonnage of the whole 1940 fleet. And aircraft carriers have taken precedence over battleships.

The story of the modern U.S. Navy is the story of most munitions programs: constant change due to the changing fortunes of war, the introduction of new weapons and tactics, the shift of overall strategy from the defensive to the offensive.



TONNAGE TRIPLED SINCE 1940

As of July 1, 1940, the U.S. Navy comprised 1,875,000 displacement tons; and the Navy was yet to build destroyer escorts, aircraft carrier escorts, and important types of landing craft. Since then, over 4,700,000 tons (including conversions) have been added, and the fleet—allowing for losses—is more than three times bigger today than when France fell. The great bulk of this increase took place in 1943 (chart, left).

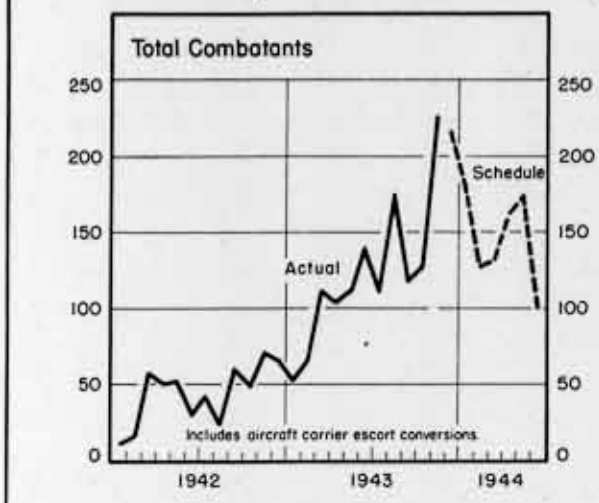
Even before Pearl Harbor, however, the composition of the fleet began to be altered. Only a handful of patrol and mine craft, totaling about 11,000 tons, were constructed from mid-1940 through 1941. Meanwhile German subs were proving the same menace as in the last war; so the Navy started building more subchasers, escort vessels, minesweepers, etc. to guard home waters and protect American shipping. In 1942 it completed 114,000 tons of patrol and mine craft—ten times the total of the preceding 18 months. In addition, it converted almost 100 vessels for such purposes.

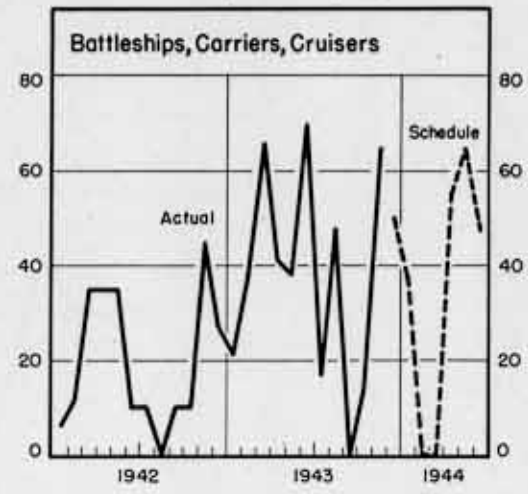
DEs MAKE DEBUT

Nevertheless, German subs that year took a heavy toll of merchant shipping off the Atlantic coast and in the Caribbean. As a result, something new was added to the program—destroyer escorts. These proved the most spectacular performers in the Navy's 1943 construction

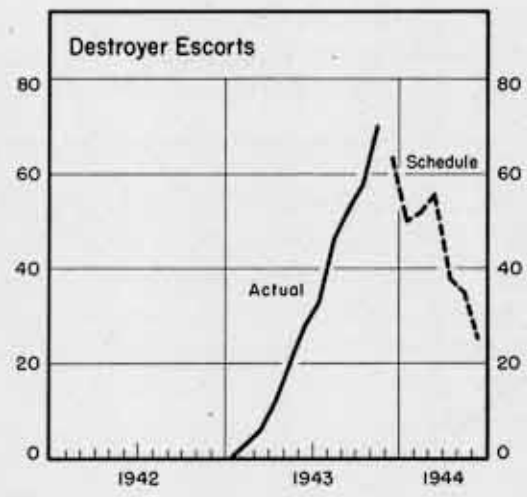
LOG OF NAVAL COMBATANT SHIPS

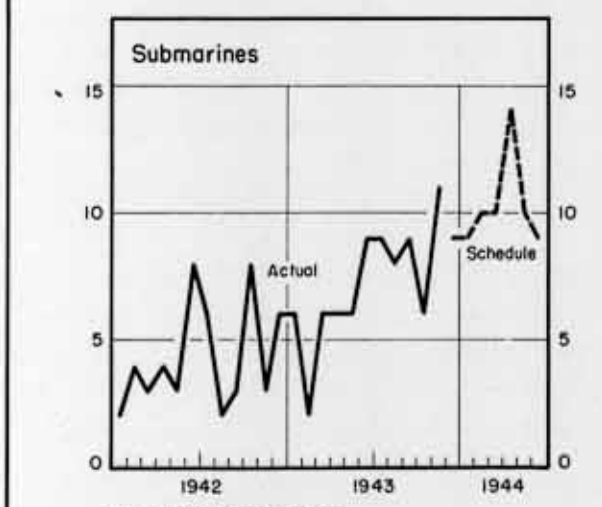
Though the peak seems past, deliveries of battleships, cruisers, carriers, destroyers, submarines, etc. are still scheduled at high levels. Total for the year is up.

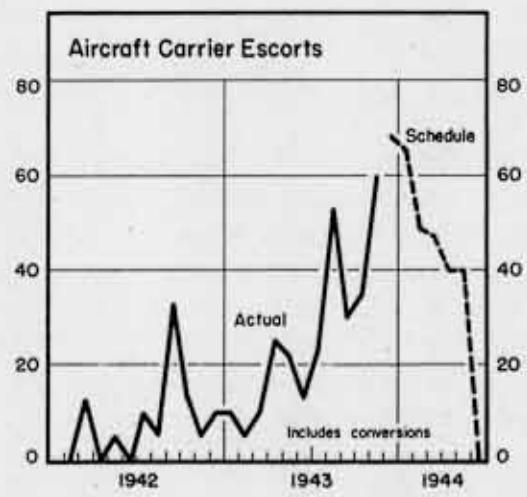




DELIVERIES—THOUSANDS OF DISPLACEMENT TONS





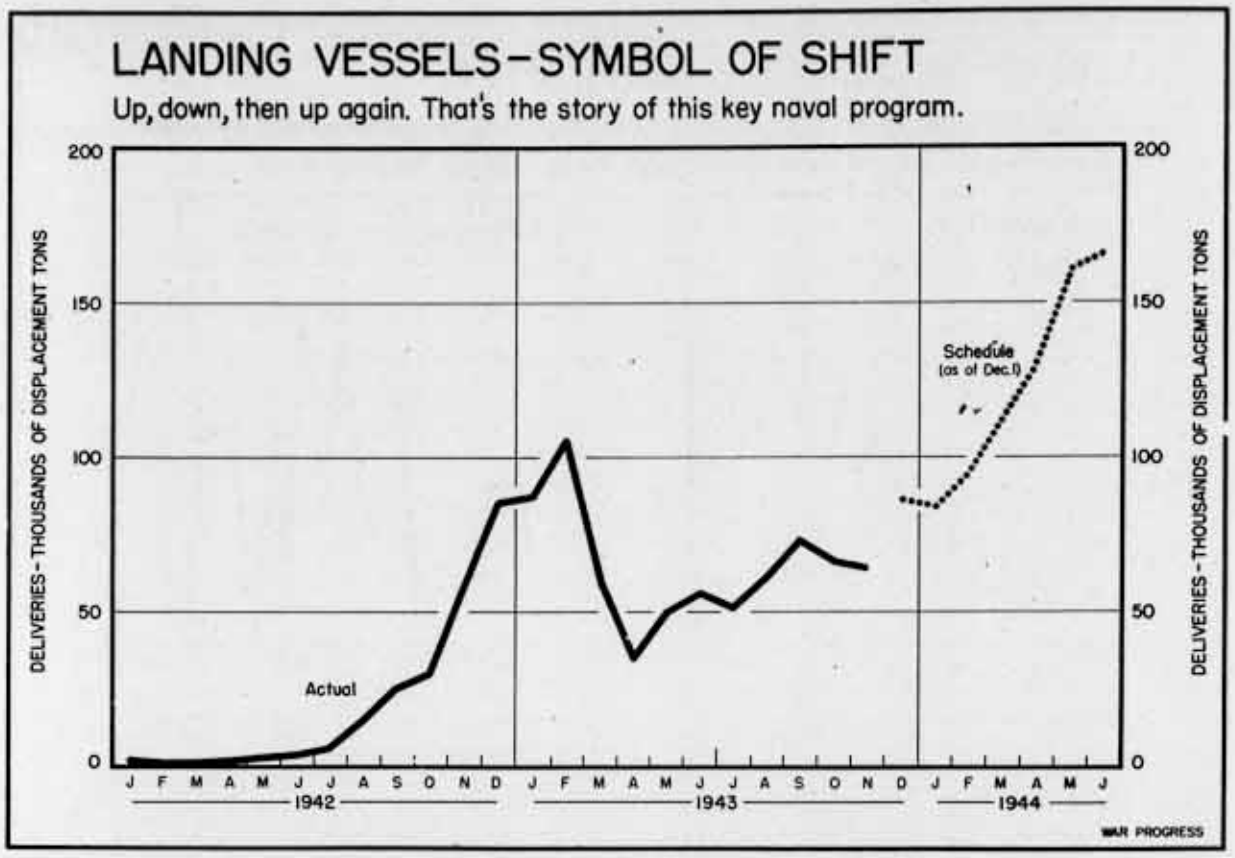


DELIVERIES—THOUSANDS OF DISPLACEMENT TONS

Schedule as of December 1, 1943

WAR PROGRESS

CONFIDENTIAL



program. Coming through with a rush in midyear, they reached a peak of 53 deliveries in November—eight above schedule—and a total of more than 300 for the year. And despite a sharp cutback, more than 300 DEs are scheduled for 1944.

BABY FLAT-TOPS PUSHED

At about the same time, the Navy began to push another antisubmarine ship—the aircraft carrier escort. As far back as 1941, urged by the British, the Navy converted two merchant ships into carrier escorts for emergency convoy duty; 17 were changed over in 1942. But these baby flat-tops proved so useful that the Navy is now building them from the keel up, for task-force as well as convoy duty (WP-July30'43,p7). In 1943, 42 escorts were completed through November—16 in Navy yards, 26 in Maritime—with nine more scheduled for December and 34 for the first half of 1944.

Meanwhile the Joint Chiefs of Staff were also laying their plans for large-scale "amphibious operations": a huge landing-vessel program got under way in September, 1942. By the end of the year 230,000 tons had been completed, and in February of '43 deliveries reached a peak of 106,000 tons (chart, above). Even the DEs, then high on the priority list, were pushed aside to make way for landing craft. Then the program dropped off almost as sharply as it picked up. But now it's rising steeply again; the high command has given it an overriding priority.

COMBATANTS STILL BACKBONE

So far these new programs have not been pushed through at the expense of combatants—still the backbone of any fleet. Since July, 1940 (including deliveries scheduled for December), the Navy has added eight battleships (in-

cluding two 45,000-tonners), four heavy cruisers, 16 light cruisers, 17 aircraft carriers, 237 destroyers, and 107 submarines.

MORE EMPHASIS ON CARRIERS

Chief development in this category (apart from the addition of the DEs, now classified as combatants) has been a shift of emphasis from battleships and cruisers to aircraft carriers (WP-Dec25-'42,p7). The battles of the Coral Sea, Midway, etc. not only proved how effective carriers could be but made necessary quick replacements. Hence the Navy rushed through nine 11,000-tonners, all from hull designs originally intended for light cruisers, as well as several bigger ones. Altogether, the Navy can now count its flat-tops by the dozen; before Pearl Harbor it had only seven. And the new regular carriers have far more power, armor, and plane capacity than the prewar models.

Present schedules for 1944 (chart, page 8) are naturally subject to further revision. However, total deliveries will pretty definitely be well above 1943; almost all ships scheduled are now contracted for or authorized. Probably still more landing vessels will be added, and more DEs and patrol craft taken out. Also the Navy is unlikely to make a strenuous effort to get the full scheduled production of district craft and auxiliaries. The schedule calls for about double the 1943 deliveries in these types because they have

SELECTED MONTHLY STATISTICS

Consumer Expenditures – Production – Labor Disputes

	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
CONSUMER EXPENDITURES (million dollars)	8,074p	7,672	7,388	7,438r	7,520	5,384	5,410
Goods	5,602p	5,237	4,954	5,010r	5,179	3,476	3,527
Services	2,472p	2,434	2,434	2,427r	2,340	1,908	1,882r
FOOD PRODUCTION							
Dairy Products (million pounds)							
Butter, creamery	91.5e	s	s	s	106.0	112.2	103.2
Cheese	57.0e	|	|	|	55.6	44.2	41.4
Evaporated Milk	156.0	|	|	|	166.0	123.7	92.3
Meats-Total (incl. lard, million pounds)	2,033.0e	|	|	|	1,553.0	1,285.0	1,042.0
Beef and veal	688.0e	|	|	|	548.6	472.2	440.8
Lamb and mutton	96.0e	|	|	|	82.5	59.1	51.9
Pork, including lard	1,249.0e	|	|	|	922.0	753.6	549.3
Lard	202.0e	|	|	|	145.6	128.4	85.5
Poultry and Eggs		|	|	|			
Eggs (millions)	2,707.0	|	|	|	2,596.0r	1,880.0	1,616.0
Poultry (receipts at 5 principal markets, million pounds)	71.1	s	s	s	78.7	81.1	68.0
PRODUCTION OF CLOTHING AND SHOES FOR CIVILIANS (1935-39=100)†							
Clothing and Shoes combined	104	103	105	108	106	n.a.	n.a.
Clothing	106	105	107	111	108	n.a.	n.a.
Shoes	93	94	94	98	98	n.a.	n.a.
LABOR DISPUTES							
Number of strikes in progress	330p	310p	n.a.	450	172	317	467
Workers involved (thousands)	510p	219p	|	655r	55	130	119
Number of strikes beginning during month	300p	290p	|	395	144	178	262
Workers involved (thousands)	500p	215p	|	650r	52	43	69
Man-days idle (thousands)	2,825p	975p	n.a.	1,500r	128	1,665	982

* Consumer Expenditures, Production of Clothing & Shoes, October; All other, November. p Preliminary. r Revised.
e Estimated. s Seasonal influences invalidate month-to-month comparisons. †Unadjusted. n.a. Not available.

been shunted into the background all along to make way for other types more urgently needed. For the same reason, however, they will probably continue to run behind schedule for some time.

In general, the outlook is for a still more pronounced trend to the offensive. Thus Maritime Commission, in compliance with a directive from the Joint Chiefs of Staff, is now scheduling 224 "combat loaders"—APAs and AKAs—for 1944, as against only 67 in the October 1 schedule. And the Navy considers these transports and supply vessels, designed for direct military operations, as attack vessels.

REPORTS ON REPORTS

Norway's Needs

Norway has always been relatively self-sufficient in animal and fish proteins and vitamins, but has had to import grain, sugar, and oils—the cheaper energy foodstuffs important to low-income groups. To guide reoccupation forces in providing emergency rations for the population, *Agriculture and Food in Norway* (confidential; pp. 44) analyzes prewar and present supply-demand balance of all types of foods.
(Department of Agriculture, Office of Foreign Agricultural Relations)

Decline in Canning

Employment in the canning industry for September—1943's peak month—was 23% below September, 1942; output of canned fruit fell 25% and canned vegetables 9%, but releases from government contingency reserves will partially offset the reduction. *Processed Foods* (confidential; pp. 13) estimates that civilian consumption of canned fish for the year ended June 30 was 68% more than the new supply for that year and 30% more than the supply becoming available during the current year; resulting heavy withdrawals from commercial stocks caused the recent increases of point values for canned fish.
(Department of Commerce, Bureau of Foreign and Domestic Commerce)

Migration in France

Since the beginning of 1939, France has had a net population loss of 1,500,000 persons. Almost 2,000,000 French workers—civilians and prisoners of war—have been taken to Germany, while 500,000 German civilians have entered France. *Population Displacement of France* (restricted; pp. 41) states that the coming of the German army and the establishment of the Occupied Zone encouraged migration southward, while the problem of obtaining food caused an exodus from the cities, reversing the prewar trend.
(Office of Strategic Services, Research and Analysis Branch)

Petroleum Balance Sheet

Long-Term United States Petroleum Supply Program; Fourth Quarter, 1943, Through Fourth Quarter, 1944 (restricted; pp. 38) presents a balance sheet of production, stocks, and imports against rapidly increasing requirements. The plan is to utilize refining capacity to the maximum, and supplement current near-top domestic production of crude by increasing crude imports. The chief technical problem: to make greater use of heavier crudes and at the same time expand output of much-needed gasoline and lighter products at the expense of heavier fuels.
(Petroleum Administration for War, Program Division)

[This record is an attempt to select from the many documents coming to the attention of WAR PROGRESS those studies which would be of most interest to readers. The list is by no means comprehensive, and no attempt has been made to evaluate reports for accuracy. Whether reports are available depends on the policy of each individual agency.]

2..32990

PSF: WPB

The President

WAR PROGRESS

~~Confidential~~

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Committee Dept. Letter, 11-28-78
By NHF, Date MAR 29 1973

These Are the Questions: To Stock, Cut Back, or Expand Use?

Scorecard on Merchant Shipping

Number 173 January 8, 1944

To Stock, To Cut, To Expand Use?

These are the questions raised by easier demand-supply position of many metals Way is opened to shift away from substitutes. Consumers' goods big problem

DURING RECENT WEEKS, aluminum pot lines have been shut down; the War Production Board has stopped construction on some steel projects; zinc has been released for weather stripping and other civilian uses; copper is being allowed unstintingly for shell cases; and limitations on the delivery and sale of such once worrisomely scarce metals as cobalt, tungsten, vanadium, and molybdenum have been removed.

QUESTIONS RAISED

The foregoing facts stem from a common cause and they point up a growing problem. Many metals which once were tight are more than sufficient to meet all direct and indirect military requirements. This raises questions:

Should production be cut back?

Or should production be continued at a peak level and additional uses for surplus materials sought?

Or should production be continued in order to build up a stockpile?

Or should all three procedures, or any combination of them, be followed?

ALUMINUM COMPLETES CYCLE

Aluminum has run through the entire range. It has been—and is being—stockpiled. The list of military and industrial uses has been greatly expanded. At the same time, production has been cut back.

The transition of aluminum from a tight to an easy metal began about February, 1943. At that time, stocks of primary aluminum ingot started to increase; from virtually zero, they are up to about 175,000,000 pounds today, or almost a full month's supply. Concurrently, stocks in the hands of producers have gone up to 95,000,000 pounds, or four times the estimated working inventory. And the aluminum fabricators' pipeline, at 750,000,000 pounds, is estimated to be 100,000,000 pounds more than necessary.

POLICY EFFECTS

This surplus had its policy effects. As far back as July, a cautious beginning was made in expanding the use of aluminum in such direct and indirect military items as lockers, mess tables, benches, bulkheads, ammunition chests, powder cans, hand wheels for guns, and kitchenware. Materials replaced include such currently tight items as steel plates and sheets, wood, glass, and malleable iron. Now under consideration as a possibility for expanded consumption are landing mats for advanced airplane bases. Their lower weight, relative to steel, is a factor in transportation, especially when they are hauled by plane.

Wider use of aluminum has not been confined entirely to Army, Navy, and Maritime requirements. The "M" order covering aluminum was amended in October and again last month, with other changes imminent. It now permits many additional industrial uses in collapsible tubes, bus bodies, internal combustion engines, electric transmission lines, machine-tool attachments, industrial instruments, X-ray equipment, and parts of

electric motors, electric switch gears, and foundry equipment. Criteria here are whether aluminum saves man-hours, yields a better product, or can be used instead of tighter material.

But the way has not been closed to aluminum in consumers' goods in special cases and on a small scale. Indeed, 4,000,000 pounds of aluminum have been authorized for the manufacture of 400,000 pressure canners during the first half of 1944—this on the recommendation of the War Food Administration that it would facilitate home canning.

PRODUCTION POTENTIAL

Other consumers' goods production could undoubtedly be authorized. However, this would raise problems of finding manpower, components, and facilities. Moreover, deferring the production of certain peacetime goods means greater civilian production six months or a year from now, when many war programs are likely to be down sharply from current levels. In other words, not producing today stores up potential production not only of aluminum but also of end products tomorrow.

IN THIS ISSUE:

Aluminum's pattern is the likely pattern for most basic materials as munitions programs taper off or as supplies increase. In zinc, for example, a considerable stockpile, running to a six-months' supply, has been built up (WP-Oct2'43,p1). And now it's a question of just how big a stockpile we ought to have. In the meantime, zinc is being released to improve existing products, save man-hours in current production, and ease the demand for tighter materials, such as wood and malleable iron. Zinc eyelets are replacing steel, and zinc repair parts are replacing cast iron. Similarly, the use of zinc is being allowed in jar tops, fractional motors, flexible couplings, and pulleys for power transportation.

SUBSTITUTION SWINGBACK

The government stockpile of copper is also being built up. And, likewise, resubstitution has begun—brass is replacing steel in shell cases, bronze is displacing steel in searchlights and malleable iron in signal gauges, portholes, maritime light casings, etc. Here, as in zinc, it's a matter of going back to the original material, which is likely to be better than the substitute. Similarly, there is a swingback to aluminum and magnesium from steel, wood, plastics, and glass.

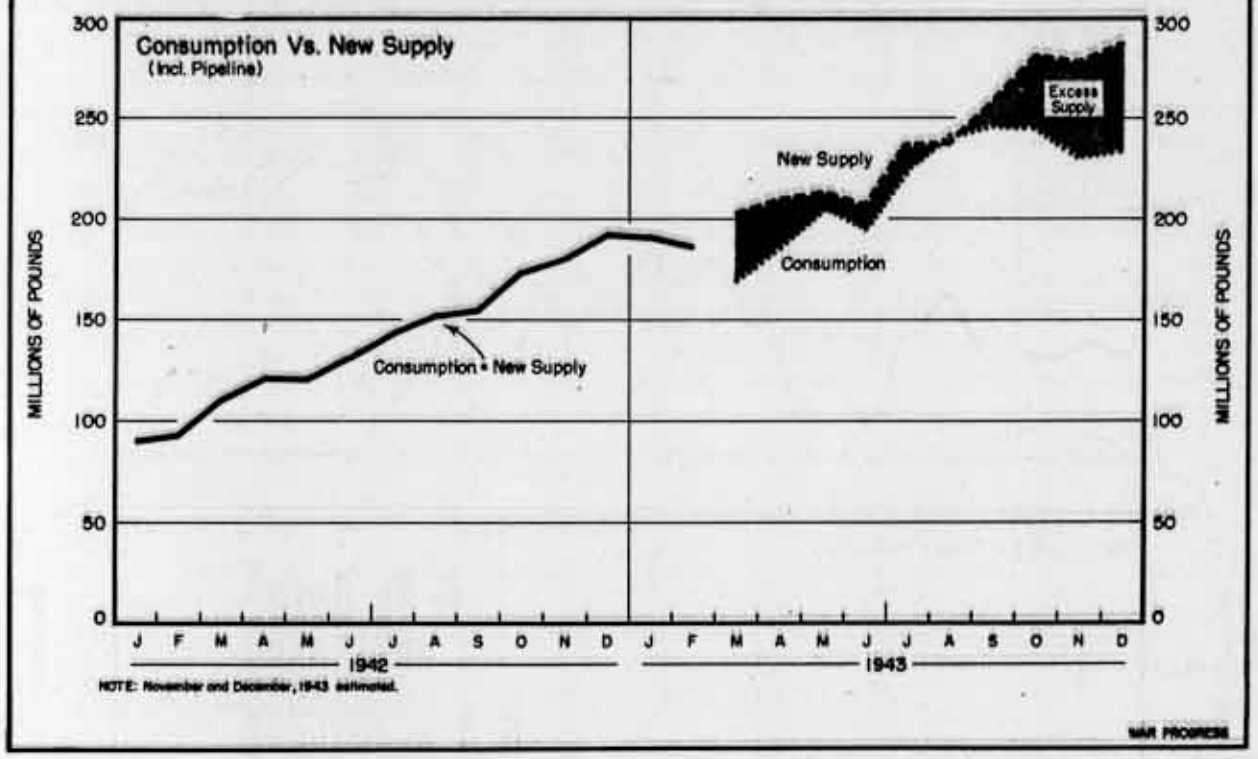
The swingback, however, does not always take place. Sometimes the substitute proves more than satisfactory. The stainless steel canteen is not bowing out to the aluminum canteen; the same goes for the plastic Mark 52 fuse, which was developed to save aluminum.

MARGINALS STILL MINING

So far, domestic copper and zinc production has not been reduced. True, top premium payments are not being offered to bring additional mines into produc-

ALUMINUM – AN EXAMPLE OF EASE

Current new supply exceeds consumption: production has been held back, new uses have been sought, and metal has been stockpiled.



tion. But as yet no effort has been made to take marginal mines out of production, nor have import quotas been cut. The surpluses here, however, have just recently developed.

CONTINGENCY IN CADMIUM

Not all materials run the full gamut of stockpiling, wider use, and reduced output. Thus, the molybdenum supply increased so rapidly—at the same time that demand in alloy steels dropped—that production was slashed 25%. And cadmium metal is being stockpiled against a contingent chemical-warfare requirement (WP-Dec25'43,p2).

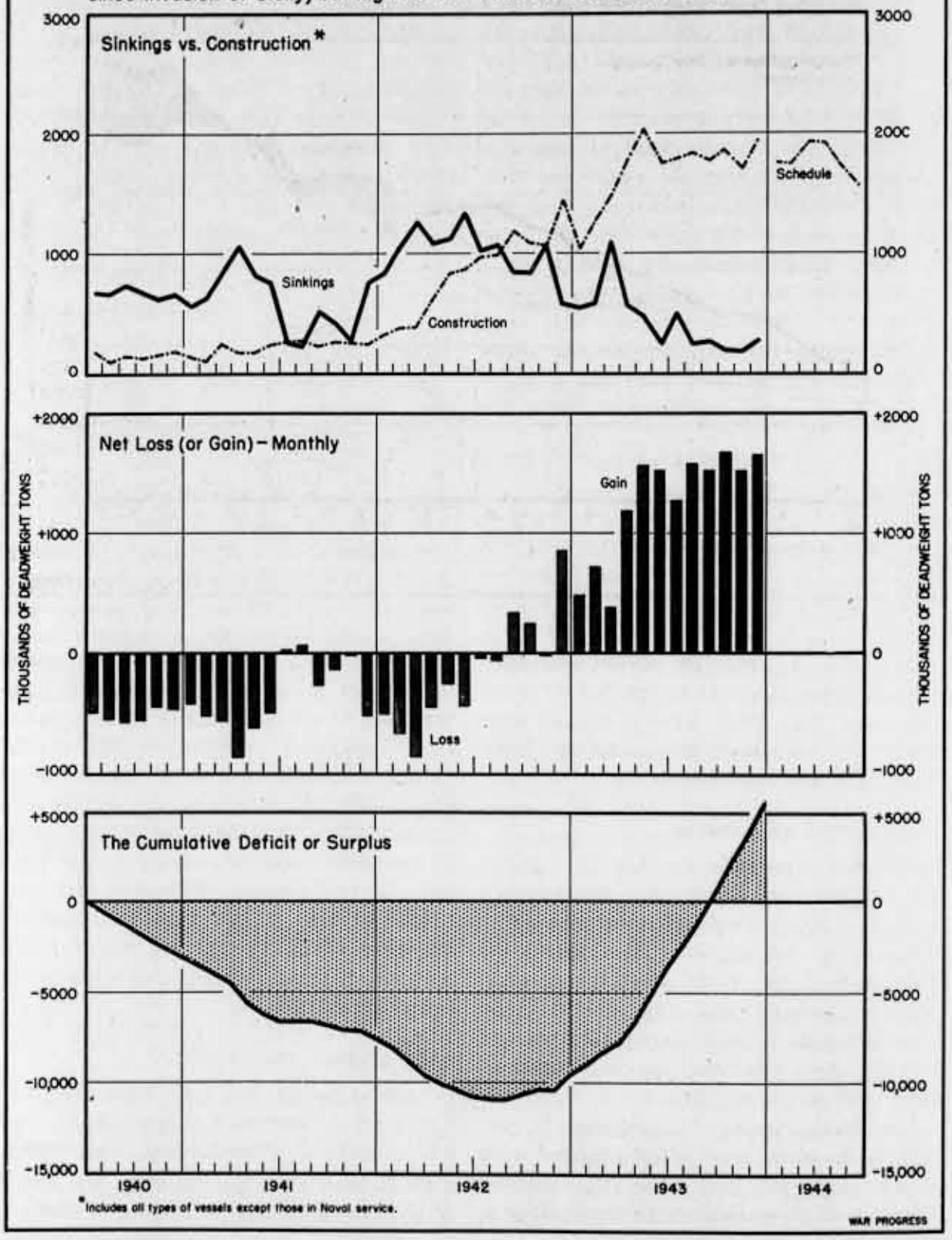
As metals reverse the process of 1941 and 1942, when one after another went on the scarcity list, the fast-shaping current problem is what to do with productive capacity. When potential demand is subject to upward revision, or continuance of a steady supply is uncertain, then continued production (and stockpiling) recommends itself. Again, when wider use would result in better end products and a saving in man-hours, continued production is in order. But when the stockpile seems sufficient and continued production would absorb manpower, cutbacks would seem to be called for—perhaps beginning with the less efficient producers.

IDLE MINES: IDLE MEN?

The argument has been made that reductions in materials output would create islands of unemployment, that therefore it is urgent to find ways and means of utilizing excess materials by seeking

SCORECARD ON MERCHANT SHIPPING

Sinkings of United Nations vessels in December, though small, rise to worst level since invasion of Sicily; but high rate of construction boosts fleet.



out consumer uses if necessary. This approach, however, has its disadvantages.

It might divert labor and management from war work to peacetime production; some companies might avoid war contracts, feeling that they could get materials for peacetime products. Moreover, the dangers of increased unemployment because of cutbacks in munitions programs have been overstressed in many quarters. The schedules for 1944, overall, continue to rise. And though some plants will close down and though men laid off may not be able to find work in their immediate neighborhood, they probably will not have far to go or long to look for employment in other munitions operations.

Additionally, the country's unemployment reserve is down to the lowest level in history; the labor market is distinctly inflexible—so much so that when a plant needs workers it has to hunt far afield to find them. And insofar as cutbacks add flexibility to the labor market and free a moderate quota of workers for employment in munitions plants, they will aid the war effort.

NO SINGLE SOLUTION

Thus what it all comes down to is this: No single method can be set forth in advance to meet the problem of excess productive capacity when the supply-demand position in a material improves. Each material has to be investigated in its own right to determine what policy promotes greater munitions output in the long run—stockpiling, wider application, a straight cutback, or a combination of the three.

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program - Checks paid (millions of dollars)	1,499	1,203	1,802	1,637	1,418
War bond sales (millions of dollars)	272	124	211	209	297
Wholesale prices (1926=100)					
All commodities	103.0p	102.9p	102.8p	103.0	101.2
Farm products	122.1	122.0	121.8	125.9	115.4
Foods	105.1	105.7	105.6	107.6	104.2
All other than farm products and foods	97.8p	97.8p	97.6p	96.9	96.2
Petroleum:					
Total carloadings	43,740	48,123	50,837	59,961	46,157
Movement of cars into the East	18,533	21,099	22,312	32,218	22,712
Total stocks of residual fuel oil (thousands of barrels)	57,330	57,596	61,420r	66,470	72,672
East coast stocks for civilian use (1940-41=100 Seas. Adj.)					
Gasoline	42.5.	43.2	41.3	n.a.	n.a.
Kerosene	50.8	52.9	49.4	|	|
Distillate fuel oil	84.1	80.0	66.6	|	|
Residual fuel oil	68.0	66.9	71.9	n.a.	n.a.
Bituminous Coal:					
Production (thousands of short tons, daily average)	1,890p	2,035	2,.47	768	1,748
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	2,029	2,592	2,922	2,192	963
Gulf Coast ports	327	497	393	350	271
Pacific Coast ports	1,002	1,169	1,311	1,260	723
Steel operations (% of capacity)	95.9	86.3	99.3	96.0r	97.0
Department store sales (% change from a year ago)	-6	+22	+7	+39	+5

p. preliminary n.a. not available r revised

Metamorphosis of Military Needs

Ordnance program is always changing. Tanks superseded by SP guns; shift to offense increases demands for bigger guns, artillery ammunition, heavier trucks, etc.

AFTER THE GERMANS, using tanks as they had never been used before, had pushed through Holland, Belgium, and three-fifths of France in six weeks, the tank became the magic weapon of the second world war. But now tanks are in eclipse. During 1942, more than 25,000 rolled off American assembly lines. In October, 1942, production plans for 1943 still called for three times that number. Yet by March, 1943—six months later—the 1943 tank schedule was down nearly 60% to 33,000. And actual 1943 production ran to only 29,000. This year's program calls for only 19,000, with still further cutbacks in prospect.

What goes for tanks goes for other ground army munitions; a war production program never stays put. New weapons, shifting strategy, battlefield experience bring changes. The armor-piercing bomb, once in demand, is now virtually out of production; the .50-caliber machine gun has succeeded the 20mm. cannon in the U.S. Army for certain uses; and bigger guns increasingly are taking the place of smaller ones. The emphasis, as always, is on more firepower.

DEFENSE CATCHES UP

The tank bears out beautifully the timeworn theory that the defense inevitably catches up to the offense—other things being equal. For each new weapon there comes a new foil. Foil for the tank was the self-propelled gun.

When the Allies began mounting guns as big as 105mm. on the tank chassis to give them mobility, they had perfected an "antitank" weapon which stopped the tanks cold, forced Rommel to retreat, turned the tide of battle in Africa. Today the self-propelled gun combines great firepower with mobility, and outstrips the tank program. The first SPs under the present program came off the assembly line early in 1942 and carried 75mm. guns left over from the last war. When the stock of these 75s ran out, smaller guns—the 37mm. and 57mm.—replaced them. But as output of heavier guns stepped up, they were used instead (WP-Apr23'43,p7). Early 1944 schedules (as of October 1, 1942) called for a total of only 12,000 SPs; now the program has been boosted to 21,000.

The "bazooka," the new rocket gun, also helped combat the tank. Production in 1944 is scheduled to remain at 6,050 a month.

CHANGING TANK PROGRAM

The tank itself is going through a metamorphosis to make it more powerful. New U.S. tanks will have heavier guns—many of the medium tanks will be equipped with 105mm. howitzers, and light ones with the 75mm. gun. (The T24, mounting a new light 75 similar to the one used on aircraft, is replacing the M5, which has a 37mm. gun.) The 1944 program also calls for the introduction of new medium and light models with electric drive.

Revisions in the wheeled artillery program reflect the increasing tendency toward heavier guns. This is attributable in the main to the shift from defensive to offensive warfare. But there is a production reason too. Small guns got into production faster at the outset of the U.S. war program—they were easier to make. Then, as heavier equip-

ment came through, demand for smaller pieces diminished.

Thus the 37mm. fieldpiece, formerly one of the big items in the program (17,600 were once scheduled in 1943), passes out of the program, while there is a sharp reduction in the 57mm. gun. But as compared with original 1944 schedules, the present program provides big gains for nearly all of the larger fieldpieces, as follows:

	Original '44 Sched.	Present Program	% Change
	(units)		
37mm. AT gun...	5,275	None	-100%
57mm. AT gun...	7,611	4,093	-46
75mm. howitzer.	972	3,474	+257
105mm. howitzer	2,881	3,077	+7
155mm. howitzer	1,520	2,637	+73
155mm. gun.....	411	722	+76
8-in. howitzer.	221	499	+126
8-in. gun.....	46	69	+41
240mm. howitzer	56	244	+336

While the 75mm. howitzer rises to a new peak, the standard 75mm. tank gun declines in accord with the decrease in the tank program.

NEW USE FOR OLD WEAPON

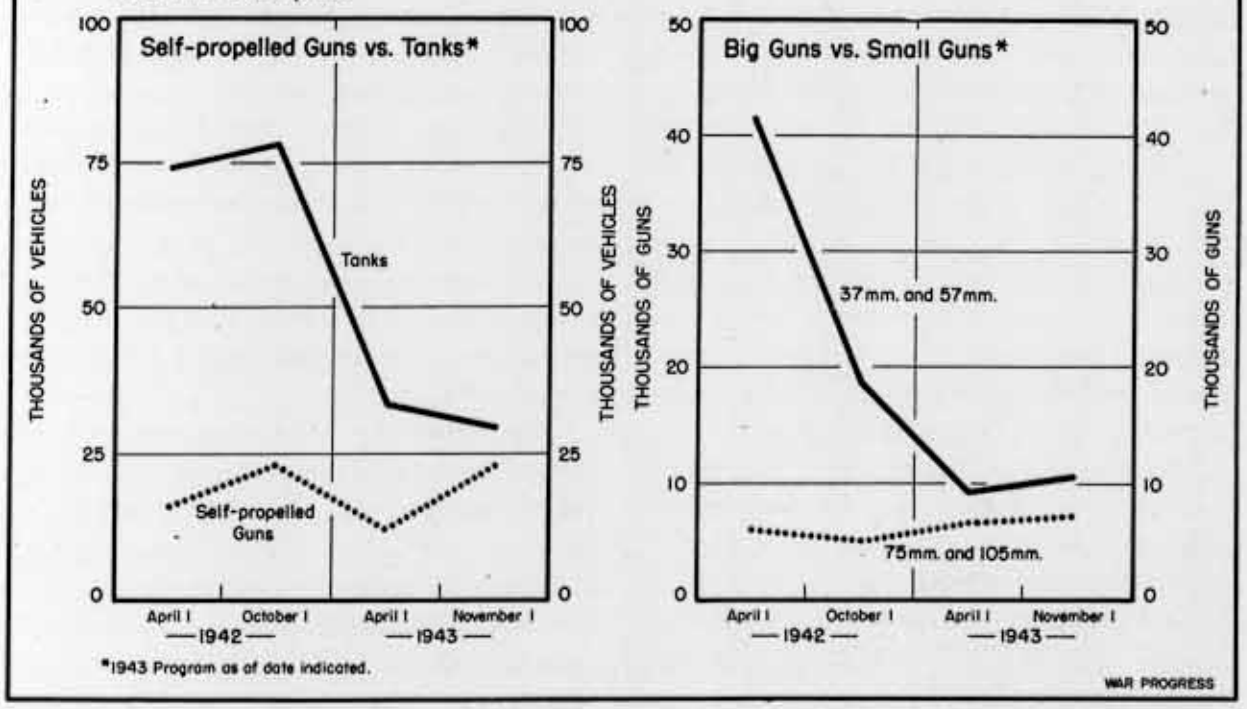
Our invasion forces have found a new use for the 4.2-inch chemical mortar—as an auxiliary artillery piece for launching HE shells. Being a very light gun easily packed, it can be carried to advanced posts which heavy artillery can't reach. The 1944 schedule calls for a big stepup in this program.

Reversing the trend toward larger guns is the shifting emphasis from the 20mm. Hispano Suiza, an automatic gun used essentially in aircraft, to the smaller .50-caliber machine gun; the latter's higher rate of fire is considered by the U.S. Air Forces better for combat and ground strafing.

Despite increases in medium and large

CHANGE—YOU CAN COUNT ON IT

Army ordnance program for 1943 accented speed and greater fire power. Here are two examples.



*1943 Program as of date indicated.

WAR PROGRESS

field artillery, the total gun program is cut back for 1944. Major factors are: the decline in AA guns (the schedule runs to less than half of that for 1943), the reduction in tank guns, and the elimination of the 37mm. fieldpiece. All of the AA guns (37mm., 40mm., Bofor, 90mm., and the 4.7-inch) are cut sharply, due directly to the shift from defensive warfare.

MORE MACHINE GUNS

One of the most important developments of the war has been the increased use of machine guns in ground warfare. Their rapid fire has made mass infantry advance sheer slaughter and has virtually eliminated hand-to-hand combat. During the 18 months between July, 1940, and December, 1941, this country produced only 126,000 machine guns of all types, but in 1942 the number was five times greater—667,000. There was another rise to 841,000 in 1943, and the 1944 program now calls for another slight increase to 867,000.

The trend in rifles has also been toward high-speed automatic weapons. At the start of the war, facilities to make Garands were inadequate. So the Springfield (the leading infantry gun in the last war) had to do. The Springfield is a bolt-action gun which has to be cocked after each shot and has a magazine of only five bullets, while the Garand is an automatic (fired by only pulling the trigger) and has a magazine of eight bullets. Today the Springfield program is winding up. The Garand program is still going strong.

Carbines are superseding sidearms and are used extensively by paratroopers and vehicle crews instead of rifles.

Small arms ammunition schedules for 1944 have been cut from 30,000,000,000 rounds to 14,000,000,000, undoubtedly because cartridges are being produced much more rapidly than they are being used. This has permitted almost complete abandonment of steel casings for both small arms and artillery. There has been some switch from .30-caliber to .50-caliber incendiary cartridges for machine guns, and a decided shift from ball to armor-piercing cartridges in .30-caliber.

The trend in U.S. bomb production is away from high explosives (blockbusters) to the smaller, lighter incendiary and fragmentation types. Stocks of the big bombs have been built up, and United Kingdom production schedules have been increased with concentration on 500-, 1,000-, and 4,000-pounders. Fragmentation bombs, which are dropped singly or in clusters, burst into small pieces on detonation and are used mainly against personnel and ground aircraft.

HEAVY TRUCK TREND

The campaigns in North Africa, Italy, and other theaters have demonstrated the need for extra-heavy trucks (4 tons and over)—cargo vehicles, prime movers, and tractor, wrecker, dump, and general purpose trucks. Not only vast quantities of food, ammunition, and supplies have to be moved by truck, but also artillery and tanks. And railroads are often either wrecked or nonexistent. About 15,000 extra-heavy trucks were made in the U.S. in 1942, and more than 40,000 were on the docket for 1943. In the revised 1944 schedule, the Army is asking 67,000, including 19,000 for international aid.

The point is that the programs are always subject to change. Although large cutbacks in the Army program are promised for '44, some particular items —extra-heavy trucks, bulldozers, tractors—are in great demand. Because of the sharp rise in program for artillery ammunition schedules, total 1944 sched-

ules run about as high as the 1943 actual production. And if the going on the battlefield gets tough, the Army may find it urgent to step up production programs or even to upgrade equipment, substituting 105mm. guns for 75s, for example. Moreover, the war against Japan —if it lasts long—may generate needs for special types of weapons, or may shift emphasis from one type of gun to another. All of which means that a war program isn't set until the last enemy is out.

Planes Up 137% in '43

Airframe-weight increase emphasizes trend to heavier models. Unit gain only 80%. December acceptances, at 8,802, fall short of goal, but heavy bombers shine.

AIRCRAFT in December failed to live up to its 15-day promise. At the midmonth, it looked as if acceptances—with the help of a year-end cleanup—might exceed the schedule of 9,372 planes. But output in the last half of the month lagged behind the earlier showing; on top of that, the hoped-for year-end rush failed to materialize. Result: acceptances of only 8,802 planes against 8,789 in November.

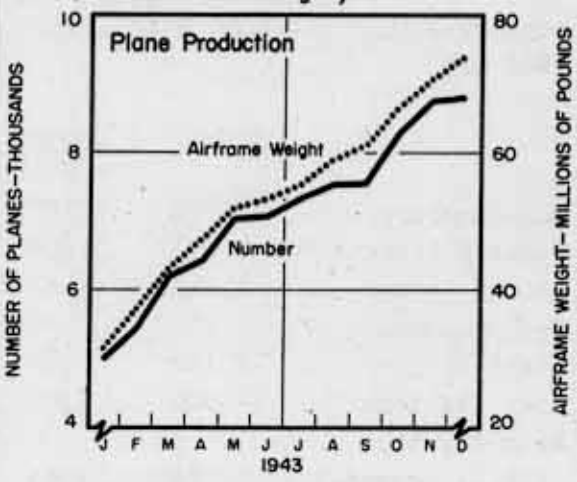
TIGHTER SCHEDULING

However, a brilliant performance in heavy bombers brought an increase of 5% in total airframe weight which, at 74,542,000 pounds, was only 4% short of the W-8 goal. Scheduling in the late months of last year got increasingly realistic; November production ran only 3% behind the forecast—the best showing of 1943.

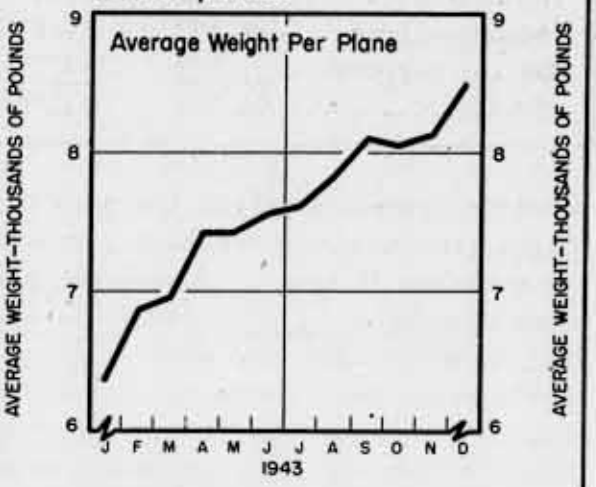
December could have come even closer to schedule if P-40 Warhawk acceptances at Curtiss, Buffalo, had not been thrown out of kilter by (1) a change in in-

1943 PLANE ROUNDUP

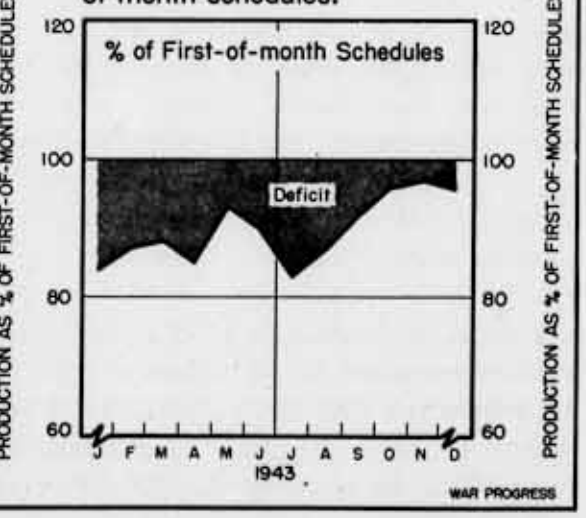
Output went up each month by number and weight;



The trend was distinctly toward heavier planes.



Production moved closer to first-of-month schedules.



PLANES OF THE YEAR

THE number of airplanes produced in 1943, by major types, and the percentage gain in airframe weight over 1942 are:

	Number	% Change (weight)
Superbombers.....	92	+3,167%
Forts & Liberators	9,393	+268
Patrol bombers....	2,342	+153
Medium bombers....	5,413	+76
Light bombers.....	12,122	+86
Army fighters.....	17,905	+108
Navy fighters (incl. reconn.)..	6,824	+244
Trainers.....	19,949	+20
Transports.....	7,003	+204
Communications....	4,377	+55
Special purpose...	524	+277
Total.....	85,944	+137%

spection procedure and (2) the need for flight-testing planes previously crated for overseas shipment. Of some 400 Warhawks that rolled off the assembly line last month, only 200 were accepted. What's more, the revision of inspection methods cut into acceptances of P-47 Thunderbolts and C-46 Commando transports at the Curtiss, Buffalo, plant.

All told, 1943 acceptances ran a shade under 86,000 planes, as against some 48,000 in 1942, a gain of 80%. As compared with 1942, however, airframe weight increased from 276,500,000 pounds to 655,000,000 pounds, or 137%—clear evidence of the powerful trend toward heavier models (chart, page 9).

The B-29 superbomber didn't attain its ambitious schedule of 47 in December; but acceptances of 35 compared with 18 in November. Moreover, two new plants began to get the feel of superbomber assembling by working on subassemblies from Boeing, Wichita; and they turned out planes. These were Bell Aircraft at Atlanta, and Glenn L. Martin at Omaha, Martin coming in three months ahead of schedule. Since deliveries started in July, 92 B-29s have been accepted; this year the superbomber program runs into real volume, with almost 1,400 on the docket (chart, page 11).

BIG BOMBERS MOVE FAST

There was no letup in the fast-moving pace at practically all Flying Fortress and Liberator plants; acceptances of 1,188 topped the November peak by 10% and exceeded schedule by 6%. As a group, heavy bombers were 12% better than November and 4% ahead of forecast, as the table shows (airframe-weight basis):

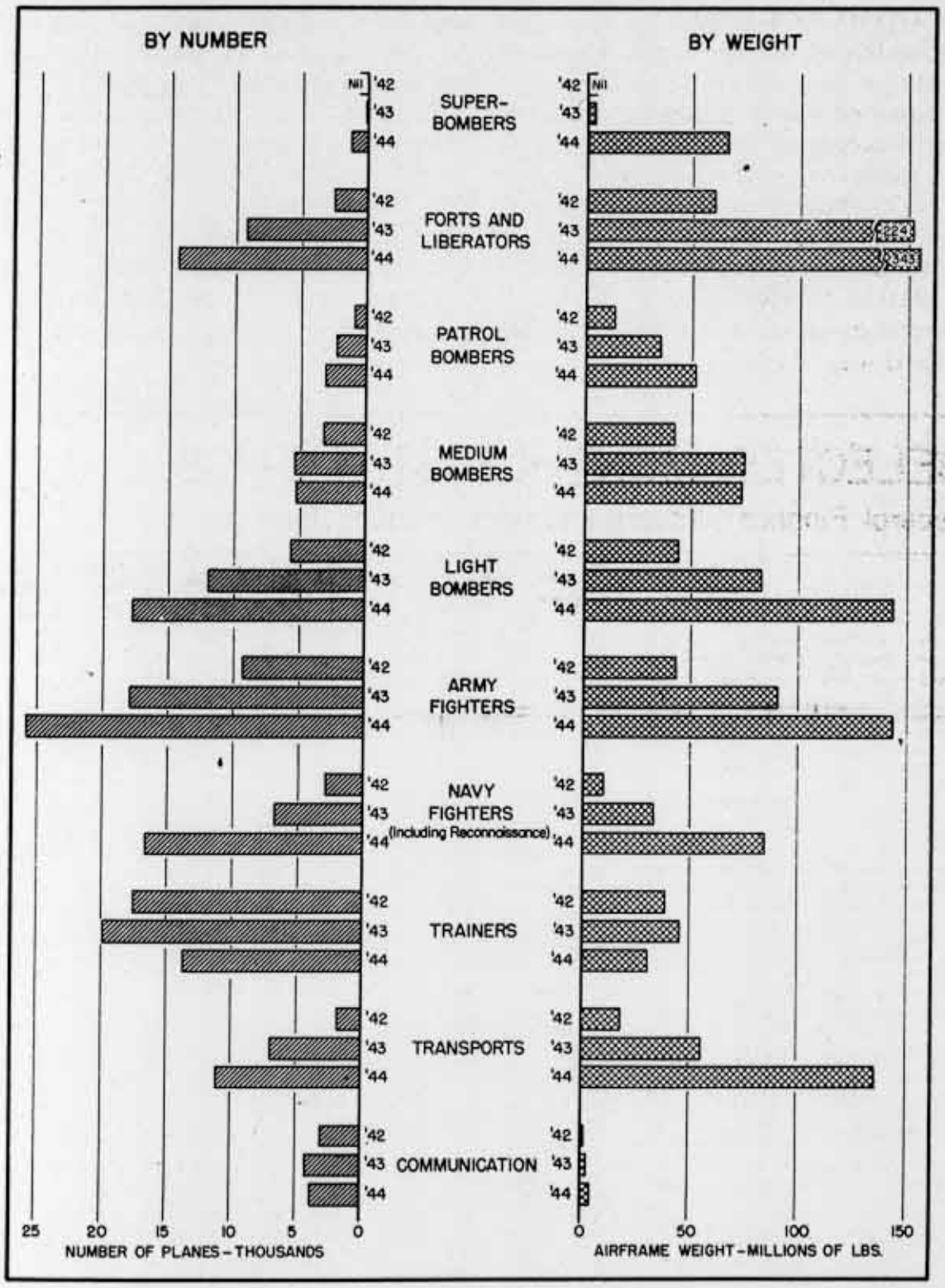
	December Acceptances as % of November	W-8
All mil. planes...	105%	96%
Combat planes....	105	97
Heavy bombers....	112	104
Patrol bombers...	115	95
Medium bombers...	101	98
Light bombers....	93	85
Fighters (incl. naval reconn.)..	101	92
Transports.....	103	88
Trainers.....	97	98
Communications....	98	111

Debut of the month was the Navy's XPB2M Mars, after more than a year of testing. The Mars is the largest flying boat in the world; its gross weight of 73 tons compares with 43 tons for the Boeing Clipper. This week, the Navy ordered 20 more of these planes, all to be built at Martin, Baltimore.

Acceptances at Douglas plants featured light 2-engined bomber output. Over at Santa Monica, a record-breaking total of 250 A-20 Bostons came through —19% ahead of November and two planes

PLANES—THIS YEAR, LAST YEAR, AND 1942

Production in 1943 rose 80% in number, 137% in weight. Biggest gain for 1944: Super-bombers. Medium bombers, trainers are scheduled to drop.



better than called for; at Long Beach, four A-26s (improved Bostons) were accepted—on schedule—as compared with only one in November.

FROM AVENGER TO HELLCAT

Acceptances of Navy light 1-engined bombers, at 638, missed schedule by 27% and November's mark by 20%. Most of the drop was accounted for by Grumman, Bethpage, where the contract on TBF Avengers ran out. Production of 39 planes compared with 135 in November. Facilities are to be concentrated on the Navy's F6F Hellcat fighter.

Acceptances of 316 P-38 Lightnings at Lockheed, Burbank, were 32 planes behind schedule; November's record-breaking total of 387 was 39 above. The Army's other 2-engined fighter, the new and as yet unnamed P-61 equipped with a power turret and special radar equipment for night fighting, is on the rise; 10 were accepted as against six in November and a schedule of seven.

For the fourth month in a row, Navy 1-engined fighters were unable to meet their tough assignment under W-8 and fell 5% short. But as compared with November, acceptances gained 17% to 1,088 planes. Grumman at Bethpage again hit the target in December by scoring a total of 458 F6F Hellcats, 14% ahead of the preceding month.

SELECTED MONTHLY STATISTICS

Federal Finance — Income Payments — Labor Turnover

	Latest Month *	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
FEDERAL FINANCE (GENERAL FUND)							
Expenditures-Total (billion dollars)	7.4	7.8	7.5	8.3	6.5	.8	.6
War	6.7	7.5	7.0	7.5	5.8	.1	-
Nonwar	.7	.3	.5	.8	.7	.7	.6
Revenues-Total	5.7	2.1	2.0	4.6	2.7	.5	.8
Income Taxes	5.0	1.5	1.3	3.8	2.0	.3	.5
Other	.7	.6	.7	.8	.7	.2	.3
War Bond Sales	.8	.8	1.7	.9	1.0	-	-
"E"	.7	.7	1.3	.7	.7	-	-
"F" and "G"	.1	.1	.4	.2	.3	-	-
Net Debt	153.6	151.2	145.8	127.2	97.6	39.5	34.3
INCOME PAYMENTS-TOTAL (million dollars)	12,420p	12,741	12,538	11,138	10,680	5,959	5,689
Salaries and Wages	8,886p	8,810	8,676	8,245	7,568	4,021	3,814
Comm., Distr., and Serv. Industries	6,942p	6,902	6,805	6,467	6,103	3,343	3,200
Government	1,944p	1,908	1,871	1,774	1,441	545	495
Military	1,030p	973	949	834	606	40	33
Nonmilitary	914p	935	922	940	835	505	462
Other	-	-	-	4	24	133	119
Other income payments	3,534p	3,931	3,862	2,893	3,112	1,938	1,875
Income payments, annual rate (adjusted for seasonal, billion dollars)	148.7p	146.4	144.8	140.2	127.1	73.7	70.0
LABOR TURNOVER IN MFG. INDUSTRIES † (rate per hundred employees)							
All Manufacturing							
Accessions	6.51p	7.17	7.73	7.18	5.14	4.10	1.79
Separations-Total	6.29p	7.02	8.16	6.57	7.09	2.95	6.87
Quits	4.40p	5.19	6.29	4.81	4.21	0.83	0.72
Military Separations	0.51p	0.61	0.64	0.69	1.55	n.a.	n.a.
Aircraft							
Quits	4.20p	4.86	5.55	4.23	3.93	1.06	0.59
Military Separations	0.53p	0.71	0.73	0.63	2.22	n.a.	n.a.
Shipbuilding							
Quits	5.34p	6.25	7.30	6.20	5.41	0.69	0.93
Military Separations	0.80p	1.00	0.98	1.10	2.43	n.a.	n.a.

* Federal Finance, December; All other, November. p Preliminary. †Rates beginning 1943 refer to all employees rather than to wage earners only and are not strictly comparable with earlier data. n.a. Not available.

PSF: WPB

The President

1

WAR PROGRESS

~~Confidential~~

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 5(E) and 8(D) or (E)
Commerce Dept. Letter, 12-15-72
By RHP, Date MAR 29 1973

War Production:
'43 Roundup—'44 Prospect

Number 174

January 15, 1944

War Output: '43 Roundup—'44 Prospect

December munitions, although "slow," came close to levels required to meet 1944 schedules. Most major problems have been licked. Labor now No. 1 obstacle.

IN DECEMBER, 1942—so the saying went—"manufacturers pushed everything but the blueprints through the nation's assembly lines and the shipyards." Result: war production soared—up 11% over November.

That was December a year ago. Last month—most emphatically—history did not repeat. Some small landing vessels, which would have boosted the gain in ships, just missed coming through, and happenstance kept several hundred completed airplanes from the December 31 deadline (WP-Jan8'44,p9). Also many plants observed the Christmas holiday, unlike the year before; more, the influenza epidemic slowed production.

It all adds up to $5,900,000,000 of munitions (preliminary), or a gain of only 1% over November. And total output for the year, at $60,600,000,000 (also preliminary), fell somewhat short of what seemed feasible as recently as last October, when an approach to $62,000,000,000 seemed a reasonable expectation.

SCHEDULES OVERAMBITIOUS

The production climate during the two years was totally different. During 1942, virtually all programs were still moving up. The country was just beginning to get into mass production of munitions. Schedules were overambitious in terms of both production possibilities and (as it turned out) military requirements. And that is indicated in part by the first-of-the-year munitions goal of $73,500,000,000 for 1943, as compared with the final product of $60,600,000,000.

Throughout last year programs generally were scaled down closer to production realism. Airplane schedules have been consistently cut; and if November and December are guides, the W series has come within range of attainment. In November schedules were missed by only 3% by weight; in December by only 4%. The Army Supply Program, at the close of the year, was undergoing a major overhauling to take into account (1) large inventories already built up and (2) a revision in the basis of computing requirements. Some of this overhauling has already been anticipated by downward revisions in schedules; but further reductions are expected when the February ASP is completed.

MATURITY ATTAINED

The upshot is this: In 1943 the U.S. munitions program matured. There was an early-in-the-year frantic push-push to get all schedules up as fast as possible, followed by a late-in-the-year tendency to cut back. Rises from here on will be more selective; programs are geared more closely to strategic needs. And the pipelines to the battlefields have been built up. That explains in part why December, 1943, closed without a year-end rush—in contrast to December, 1942.

And yet some further rise in overall munitions output still lies ahead. Aircraft is an expanding program; likewise naval ships; likewise communication and electronic equipment. Even within the downtrending ground army pro-

gram, there are ups: heavy trucks and some of the bigger guns, for instance.

And it is in these expanding areas that production problems can and will arise. Big job immediately ahead, for instance, is landing craft—the schedule for which rises steeply (WP-Jan1'44,p8).

A good indication of the maturation of the war program is construction. It declined 20% last year—for the good reason that the job of building industrial facilities has been almost completed: 90% of the important projects are now in place. The total of munitions and war construction during 1943 was $71,900,000,000 (still preliminary). This was a gain of 51% over 1942. Munitions, alone, were up 81%. The biggest increases, as might be expected, were in the expanding programs: aircraft, 132%; communications and electronics, 132%; ships, 85%. Programs that pulled down the average were combat and motor vehicles, up only 37%; guns and fire control, up 71%. But the pattern was—and is—decidedly crisscrossed.

UP 34% IN '43; 176% IN '44

Among the groups to register an outstanding gain last year was small arms ammunition, up 137%. For 1944, this group is scheduled to drop. Motor carriages for self-propelled guns are in a similar category: up more than 200% in 1943, scheduled to drop 34% in 1944. On the other hand, landing vessels, with a gain of a mere 34% in 1943, are due to rise 176% (value put in place). Most of the rise in landing craft occurs in the first half of the year.

The comparative year-to-year gains (or losses) tend to overstate the production problem ahead. Most major programs are up close to the level required to meet the 1944 goal as now scheduled. Thus, the annual rate of munitions production in December was almost $71,000,000,000, or only 8% away from the '44 schedule of $76,600,000,000. And cutbacks may pull that $76,600,000,000 total down to about $72,000,000,000.

Specific programs bear out the point (detailed table, page 3):

	Required Gain '44 Over '43	% Change '44 Over Dec. Annual Rate
Aircraft.....	+74%	+29%
Ships.....	+22	+3
Landing ves. ...	+176	+106
Artillery amm. .	+86	+42

The year 1943 divides into three main production phases. At the outset, steel, copper, aluminum, and other metals were still tight, and the Controlled Materials Plan was just getting under way. Personnel worked day and night at the Army, Navy, Maritime Commission, and the War Production Board trying to get the hang of the CMP procedures. Even before the procedural difficulties were licked, a new problem arose. Where were the valves, the heat exchangers, the compressors, and the numerous other critical components coming from to meet rapidly expanding schedules? And so, WPB undertook to speed, expand, and sometimes to schedule the production of critical components. Then, toward the middle of the year components ceased to be a major problem. Manpower became Difficulty No. 1.

Drafts by the armed services plus an increasing demand for workers in munitions industries made labor tight.

IN THIS ISSUE:

SIZING UP THE PRODUCTION JOB

Most major programs are close to rate needed to meet 1944 schedules.

	1943	Dec. 1943* Annual Rate	1944†	% Change* 1943 over 1942	% Change* 1944 over 1943	% Change* 1944 over Dec. 1943 Rate
	(millions of dollars)					
MUNITIONS AND WAR CONSTRUCTION	$71,907	$78,000	$82,374	+ 51%	+ 15%	+ 6%
TOTAL MUNITIONS	60,585	70,800	76,569	+ 81	+ 26	+ 8
Aircraft	15,126	20,460	26,379	+132	+ 74	+ 29
Total airframes, engines, propellers	11,350	15,480	19,514	+119	+ 72	+ 26
Airplane spare parts	3,365	4,584	6,559	+202	+ 95	+ 43
Other aircraft and equipment (ex. commun.)	411	396	306	+ 79	- 26	- 23
Ships (incl. maintenance)	13,066	15,480	15,976	+ 85	+ 22	+ 3
Combatant	4,761	5,712	4,550	+107	- 4	- 20
Landing vessels	941	1,260	2,597	+ 34	+176	+106
Cargo and supply	4,010	4,668	4,003	+ 98	NIL	- 14
All other	3,354	3,840	4,826	+ 66	+ 44	+ 26
Guns and Fire Control	4,693	5,100	4,291	+ 71	- 9	- 16
Small arms (under 20mm)	1,112	1,296	1,060	+ 64	- 5	- 18
Artillery, mortars, rocket launchers - ASF	1,278	1,224	791	+ 44	- 38	- 35
Fire control and searchlights (ex. Radar)	1,050	1,164	890	+130	- 15	- 24
Naval guns and other	1,253	1,416	1,550	+ 71	+ 24	+ 9
Ammunition	6,786	7,380	8,145	+ 84	+ 20	+ 10
Small arms (under 20mm.)	2,119	1,572	1,353	+137	- 36	- 14
Artillery, mortars, rocket launchers - ASF	1,946	2,556	3,627	+ 36	+ 86	+ 42
Aerial bombs - ASF	811	1,092	586	+115	- 28	- 46
Naval ammunition and other	1,910	2,160	2,579	+ 95	+ 35	+ 19
Combat and Motor Vehicles	6,382	6,480	5,666	+ 37	- 11	- 13
Combat vehicles	3,083	2,796	2,027	+ 31	- 34	- 28
Motor carriages for S.P. guns	828	948	544	+209	- 34	- 43
Automotive vehicles and tractors	2,471	2,736	3,095	+ 22	+ 25	+ 13
Communication and Electronic Equipment	4,136	5,940	5,635(a)	+132	+ 47	+ 3
Other Equipment and Supplies	10,396	9,960	10,477	+ 48	+ 1	+ 5
WAR CONSTRUCTION	11,322	7,200	5,805	- 20	- 49	- 19

* December 1943 preliminary
† December 1 schedules; army schedules in process of revision--mostly downward
(a) Does not represent full schedule for 1944; percentages are based on an estimated schedule of $6,100,000

Critical areas—where help was not to be found—developed. The Buffalo and West Coast labor plans were introduced (WP-Aug21'43,p1; Oct30'43,p1).

And as we enter 1944, labor is still a problem. But now that the Army has initiated a series of major cutbacks, the labor shortage in 1944 is not apt to be so acute as it was feared at one time. For one thing, the increase in output will be in industries in which productivity per worker is increasing, whereas production is dropping off in industries in which productivity has just about flattened out. Thus, a million-dollar cutback in production would tend to release more manpower than a corresponding increase in output would require.

However, the gains and losses won't square off—unfortunately. Layoffs in Chicago or St. Louis will not yield workers for East Coast shipyards and West Coast plane plants. And with the demand for labor in numerous civilian industries acute—busses, laundries,

restaurants, etc.—workers laid off from munitions work may quickly be absorbed in nonwar occupations. Thus, it does not follow that a curtailment of one war program will produce either unemployment or workers for other war plants.

A QUIET CLOSE

The year 1943 ended on an easy note. Most critical materials were in adequate supply—especially copper, aluminum, and steel except for flat-rolled products. Moreover, components—except in rare instances—were not holding up important programs. Labor was still troublesome in spots—in aircraft, coal, tire manufacturing centers, some shipbuilding areas. As the year develops, however, new problems will emerge. For some months, the supply-demand position of civilian-type products has been tightening: textiles, lumber, paper and pulp, leather, shoes, etc. And these tightening tendencies will be heightened by relief and rehabilitation requirements in Europe—especially after bridgeheads are won.

EXPANDING PROGRAMS

Immediate munitions production problems are in such expanding programs as communications and electronics, aircraft, heavy trucks: labor must be recruited, designs perfected, and assembly lines geared up. In this wise, 1942 and early 1943 are repeating—but on a much smaller scale, for then all areas were expanding rapidly.

Aircraft

As in recent months, aircraft will dominate munitions production this year, accounting for one-third of total production. Month-to-month gains in munitions output will be dictated by what happens in the airplane group—airframes, engines, propellers, spare parts, gliders, etc. Last month was typical. Airplanes were up 5% by weight (WP-Jan8'44, p9) and this gain was carried over to the entire aircraft category and was responsible for the 1% rise in munitions as a whole.

For the year, aircraft output amounted to $15,100,000,000. The 1944 schedule, as now set forth, comes to $26,400,000,000. However, most of the rise has already been realized: as the foregoing table shows, the December rate of production was only 29% short of the level required to meet the 1944 goal.

SOME GOALS WITHIN SIGHT

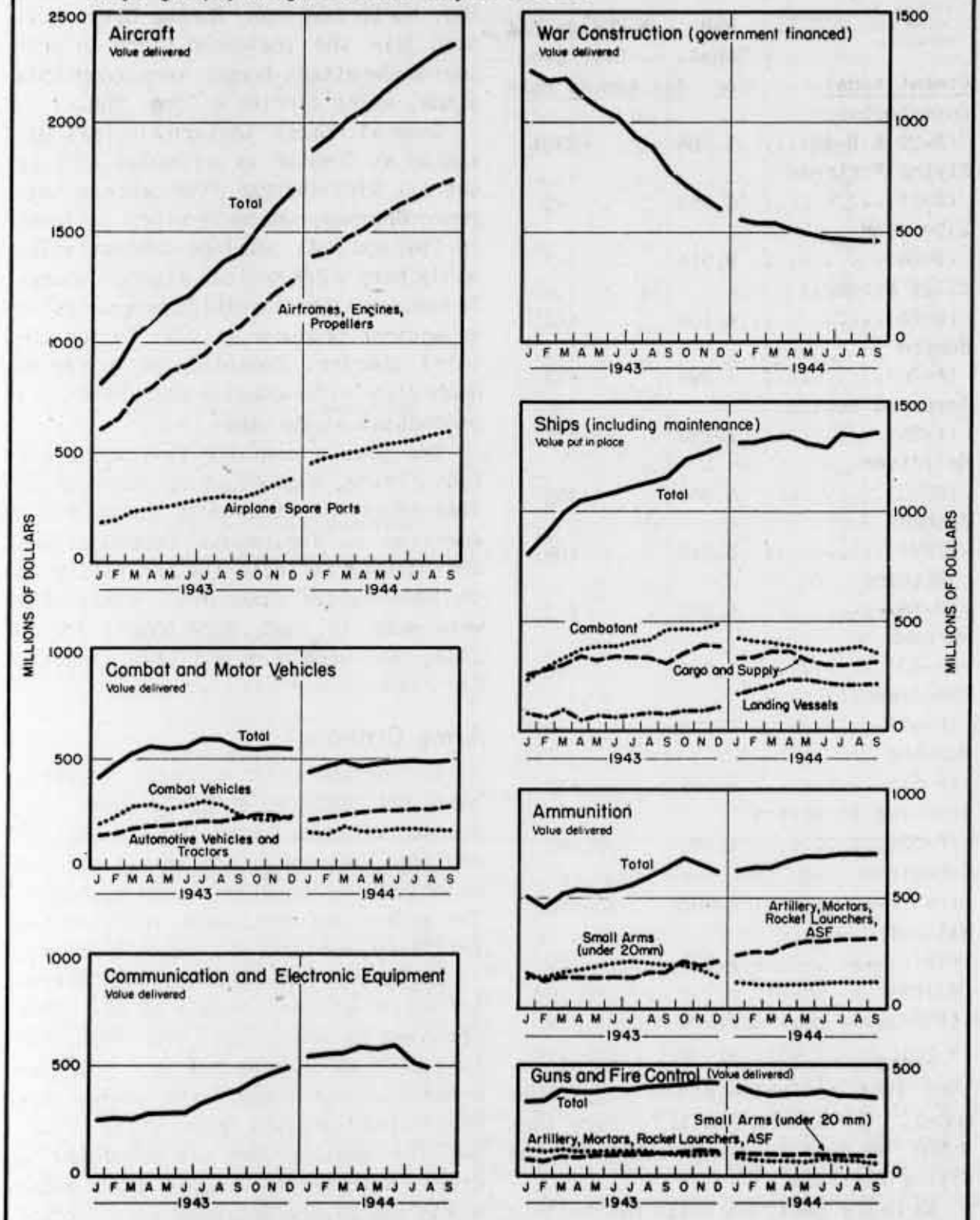
Several major combat models are already within sight of their W-8 schedules for 1944. The Liberator has only 7% to go; the Lightning, 13%; the Hellcat, 9%. Average monthly output of Flying Fortresses in 1944 actually declines from the December rate; the same is true of the Thunderbolt. At the other extreme are the superbomber, improved Boston, Helldiver, and improved Airacobra. These sharply rising programs are the ones which will pose the greatest production problems.

For example, 35 superbombers were turned out in December, but the W-8 schedule calls for a monthly rate of 193 by the end of 1944. Although magnified in the case of the huge superbomber, the difficulties ahead are common to all new models facing steep schedules—getting and training labor, establishing a smooth flow of materials and parts, solving design-change problems, and so forth.

The scope of the job ahead in 16 major combat models is indicated in the following table: it shows (1) the schedule for 1944 and (2) the per cent gain from the December rate necessary to achieve that schedule. (Obviously, in some models the gain will have to be greater than the

CLOSING THE 1943 PRODUCTION BOOKS

Aircraft and ships show consecutive monthly rises. Peaks still ahead for some major groups, though schedules may be reduced.



Note: Actual through November, December preliminary, scheduled from there on.

WAR PROGRESS

CONFIDENTIAL

percentage shown since schedules continue to expand throughout the year; indeed, some peaks are not attained until 1945.)

Combat model	W-8 Sched. for '44.	% Change '44 Over Dec. Annual Rate
Superbomber (B-29 & B-32)	1,386	+230%
Flying Fortress (B-17)	4,963	-8
Liberator (B-24)	9,516	+7
Billy Mitchell (B-25)	4,100	+23
Boston (A-20)	3,396	+13
Improved Boston (A-26)	1,285	+2,577
Helldiver (SB2C)	4,886	+208
Avenger (TBM)	3,540	+23
Lightning (P-38)	4,281	+13
Warhawk (P-40)	2,500	+4
Thunderbolt (P-47)	7,255	-8
Mustang (P-51)	6,177	+55
Improved Airacobra (P-63)	4,681	+3,446
Corsair (F4U)	6,689	+45
Wildcat (FM)	3,575	+22
Hellcat (F6F)	5,988	+9

Among heavy bombers, the Liberator—this year as last—is the big-volume model. The schedule calls for more than 9,500, as against about 5,000 for the Flying Fortress.

As in the past, the Billy Mitchell is the volume model in medium bombers—only more so; 76 out of every 100 medium bombers this year will be Mitchells. Last year the ratio was 55 out of every 100; the year before, 48 out of every 100. North American, Kansas City, will soon join the Inglewood plant in producing the attack-bomber version of this plane, which carries a 75mm. gun.

General Motors' Eastern Aircraft Division at Trenton is scheduled to turn out all Navy Avenger dive bombers this year; Grumman, the only other producer in 1942 and 1943, will be concentrating on the Navy's F6F Hellcat fighter plane. In contrast, the Lightning program picks up another producer in 1944; during the third quarter, Consolidated Vultee at Nashville will supplement Lockheed's production at Burbank.

Two plants continue to produce the fast-flying, high-climbing Mustang in 1944—North American at Dallas and North American at Inglewood. Schedulewise, the Mustang reflects its reputation as the best fighter plane in its class: 634 were made in 1942, more than 1,700 in 1943, and nearly 6,200 are ticketed for '44.

Army Ordnance

In keeping with cutbacks recently made and cutbacks still to come, production of ground army items generally declined last month; and in all but two major groups, output ran below schedule. The exceptions were combat vehicles and artillery, mortars, and rocket launchers.

Artillery, etc. exceeded both November output and the schedule by 9%. This group was up 44% in 1943 over 1942, but is slated to decline 38% this year—as schedules now stand. The trends are mixed—heavier-type guns still rise, but the smaller ones are scheduled to drop. Notable performance last month was in the 3-inch antitank gun. Output increased from 98 in November to 402,

PRODUCTION PROGRESS – Preliminary

Value delivered or put in place – millions of dollars.

	December Preliminary	November Actual	% Change	December Schedule*	% Deviation Dec. Prelim. vs. Schedule
MUNITIONS AND WAR CONSTRUCTION	$6,500	$6,467	+ 1%	$6,787	- 4%
TOTAL MUNITIONS	5,900	5,820	+ 1	6,187	- 5
Aircraft	1,705	1,620	+ 5	1,847	- 8
Total airframes, engines, propellers	1,290	1,228	+ 5	1,365	- 5
Airplane spare parts	382	361	+ 6	447	-15
Other aircraft and equipment (excl. commun.)	33	31	+ 6	35	- 6
Ships (incl. maintenance)	1,290	1,270	+ 2	1,338	- 4
Combatant	476	473	+ 1	463	+ 3
Landing vessels	105	92	+14	141	-26
Cargo and supply	389	396	- 2	342	+14
All other	320	309	+ 4	392	-18
Guns and Fire Control	425	425	nil	429	- 1
Small arms (under 20mm.)	103	114	- 5	109	- 1
Artillery, mortars, rocket launchers – ASF	102	94	+ 9	94	+ 9
Fire control and searchlights (excl. Radar)	97	106	- 8	100	- 3
Naval guns and other	118	111	+ 6	126	- 6
Ammunition	615	650	- 5	644	- 5
Small arms (under 20mm.)	131	170	-23	133	- 2
Artillery, mortars, rocket launchers – ASF	213	189	+13	219	- 3
Aerial bombs – ASF	91	96	- 5	100	- 9
Naval ammunition and other	180	195	- 8	192	- 6
Combat and Motor Vehicles	540	542	nil	531	+ 2
Combat vehicles	233	224	+ 4	223	+ 4
Motor carriages for S.P. guns	79	80	- 1	79	nil
Automotive vehicles and tractors	228	238	- 4	229	nil
Communication and Electronic Equipment	495	473	+ 5	537	- 8
Other Equipment and Supplies	830	840	- 1	861	- 4
WAR CONSTRUCTION	600	647	- 7	600	†

* As of November 1 for war construction; as of December 1 for all others.
† Schedule used for preliminary.

hitting the sharply rising schedule on the nose.

Artillery ammunition was the only other major ground army program to rise last month—up 13%. However, this was off schedule (table, above). The gain was concentrated in high explosive shells for 75mm. and up, especially shells for howitzers. More than 2,000,000 rounds of HE shells for the 105mm. howitzer were loaded—a new high. This was 20% ahead of November, but 8% below schedule. Artillery ammunition still goes up. The 1943 gain over 1942 was 36%, and the present schedule for '44 calls for a rise of more than 80% over '43. This gain, of course, may be reduced when the Army Supply Program is issued in February.

By no means is the army program clear sailing, despite the fact that most schedules drop. Heavy-truck production continued to lag in December; the 1,917 turned out were 12% behind the goal of 2,183 and only 2% ahead of November. The production problem seems to be concentrated in the 4-to-5-ton tractor

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program - Checks paid (millions of dollars)	1,701	1,499	1,675	1,390	1,414
War bond sales (millions of dollars)	309	272	199	186	219
Wholesale prices (1926=100)					
All commodities	102.9p	103.0p	102.9p	103.0	101.4
Farm products	121.9	122.1	122.0	126.0	116.1
Foods	104.6	105.1	105.9	107.3	104.4
All other than farm products and foods	97.8p	97.8p	97.8p	96.9	96.2
Petroleum:					
Total carloadings	47,029	43,740	50,036	58,155	49,045
Movement of cars into the East	20,428	18,533	22,553	31,140	25,129
Total stocks of residual fuel oil (thousands of barrels)	55,731	57,330	59,715	67,142	72,795
East coast stocks for civilian use (1940-41=100 Seas. Adj.)					
Gasoline	43.6	42.5	42.0	n.a.	n.a.
Kerosene	48.0	50.8	52.0	|	|
Distillate fuel oil	87.6	84.1	73.0	|	|
Residual fuel oil	67.6	68.0	69.7	n.a.	n.a.
Bituminous Coal:					
Production (thousands of short tons, daily average)	1,842p	1,904	2,122	1,725	1,860
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	2,173	2,029	2,924	2,288	1,262
Gulf Coast ports	430	327	558	360	363
Pacific Coast ports	1,215	1,002	1,260	1,268	1,027
Steel operations (% of capacity)	99.6	95.9	99.3	96.4r	99.3
Department store sales (% change from a year ago)	-3	-7r	0r	-1	+6

p. prelimary n. a. not available r. revised

truck, used in hauling semitrailers. Only 148 were made, as against production of 284 in November and 396 in the schedule. The schedule rises sharply this year; 441 per month are on the docket for this quarter, rising to more than 900 per month in the fourth quarter.

SP GUNS MAKE SCHEDULE

Combat vehicles ran 4% ahead of schedule; almost all types were up. Yet production in this category is due to drop sharply next year (table, page 3). Again self-propelled guns made schedule. Motor carriages for the 76mm. came through 6% ahead of schedule; 2,400 of these are wanted during 1944, as against 812 this year.

Small arms ammunition ran slightly under schedule last month and 23% behind November; this program has been sharply cut back and some further downward revisions may be made. Small arms, themselves, also ran below schedule and November. The carbine, after numerous production difficulties early in the year, came through. Nearly 3,000,000 were produced in 1943.

Worth noting is the 75% drop in output of antitank mines last month because of a changeover to mines not yet standardized, including a nonmetallic mine designed to avoid detection. This is evidence that there is always something new—and difficult—coming up.

Signal Equipment

Declining emphasis on ground radio equipment and a big expansion in airborne radar characterized 1943 production of communication and electronic equipment. The cutback in ground equip-

ment is the direct result of the big reduction in the antiaircraft program. Airborne radar is the principal program in the signal equipment field due for expansion.

Despite a 5% increase in December production to $495,000,000, signal equipment missed the sharply rising schedule by 8%, as compared to a 6% deficit in November. The greatest deficiency was in Army radar, which missed schedule by 21% and even fell 2% below November output. Both radio and other equipment made slight gains over November, but were 3% and 9%, respectively, short of schedules.

OLD STORY: NEW ITEMS LAG

New items fell back farthest. For example, AN/APN-4, airborne navigation equipment (which came into the program only a few months ago), missed schedule by 27%. Only 188 sets were delivered, as against 700 scheduled. The 1944 program calls for 54,000 sets.

Another laggard in the radar field in December was the SCR-729, airborne navigation equipment. Only 40 sets were delivered, compared to 343 on the schedule. The reason for this was that production was diverted to the badly needed AN/APN-2 (a modified form of the SCR-729). Even then the AN/APN-2 was off schedule by 4%.

Total signal equipment production in 1943 amounted to $4,136,000,000, a rise of 132% over 1942. This year the program will be expanded substantially (table, page 3). The biggest gain has been and will continue to be in radar.

Ships

Value put in place on all ships in December—Navy and Maritime, including maintenance—was $1,290,000,000 (preliminary), 2% over November and 4% behind schedule. This brought the year's total to $13,066,000,000. Total now scheduled for 1944 is $15,976,000,000—an increase of 22%.

NAVAL SHIPS

December deliveries of naval ships, at 330,000 displacement tons (including 50,000 tons constructed by the Maritime Commission), were 4% under the November peak and 13% behind schedule. Chief feature was again combatants. Completion of three light cruisers and one heavy (the "Quincy") made December the biggest cruiser month of the year. It was also a big month in aircraft carriers, with one 11,000-tonner and eight more carrier escorts, five of them delivered by Maritime. DEs, however, at last ended their dizzy climb; 49 were completed, one over schedule but four under November's record. And only 37 are called for in January.

Minor feature was the showing of patrol and mine craft, which not only reached a new peak but made schedule for the first time in many months—chiefly because Maritime came through with 15 frigates. But landing vessels, though 9% over November, again failed to keep pace with a fast-rising schedule:

	Deliveries (tons)	% Change From Nov.	% Change From Sched.
All combatants..	206,000	-9%	-5%
Landing vessels.	71,000	+9	-17
Patrol & mine...	31,000	+11	nil
Aux. & all other	22,000	nil	-49
Total.....	330,000	-4%	-13%

Total new construction of naval ships in 1943 amounted to 2,761,000 displacement tons. The program ran about 5% behind April 1 schedules but came through with more than three times the tonnage delivered in 1942. The lag was largely accounted for by minor types, such as patrol craft, district craft, and aux-

iliaries. Combatants and landing vessels—the ships most wanted—were good performers.

The present goal for 1944 is 4,156,000 tons (not including conversions). This means a 50% increase over the huge fleet built in 1943. However, the program is still heavily freighted with minor types, which for some time are pretty sure to give way to landing vessels. About 500,000 tons of landing vessels were added to the 1944 program on December 1. At the same time 53 more DEs, or 70,000 tons, were taken out.

Altogether, 1,576,000 tons of landing vessels are now on the books for this year.

MERCHANT SHIPS

Deliveries of merchant ships, on a plateau for eight months, took a big jump in December. A total of 1,960,000 deadweight tons was completed (excluding military and minor types)—23% more than in November and 6% over schedule. And all major types contributed to the new record.

Throughout 1943, merchant ships were a relatively stable program, running only slightly behind schedule until the end. Over 18,300,000 tons were added to the shipping fleet. The U.S. fleet alone is now two and a half times bigger than it was at the time of Pearl Harbor.

NEW YEAR, NEW SHIP

The program for this year is not much larger but looks a lot different. Liberty ships, which comprised about three-fourths of 1943 tonnage, drop to less than half of the 1944 total; the new Victory ship will enter the delivery column next month. (Kaiser launched the first one on January 12.) Standard cargo ships and tankers continue to rise, but the emergency tanker program is due to wind up this month.

Lend-Lease Shift

Soviet is biggest recipient as exports to Russia reach all-time high and British share declines. Rise is in agricultural and industrial products, planes, trucks.

LEND-LEASE shipments to Russia rose sharply in November to an all-time high of $337,000,000, as against $263,000,000 in October and the former peak of $313,000,000 in August. At the same time, exports to the United Kingdom declined $97,000,000 to $259,000,000, compared to $356,000,000 in October. This was the lowest level since February. As a result, the Soviet supplanted the U.K. as the biggest recipient. It was the third month that the U.S.S.R. has occupied the No. 1 lend-lease position. The other months were April and August, 1942.

Lend-lease shipments as a whole were down to $821,000,000, as against $942,000,000 in October and the all-time high of $1,021,000,000 in July. The November total is the lowest since June, when shipments to all countries amounted to $792,000,000.

FROM 17% TO 41%

Exports to the Soviet accounted for 41% of total lend-lease in November, compared to 28% in October, and only 17% last June. Agricultural exports to Russia rose from $46,000,000 in October to $67,000,000, while industrial products went up from $79,000,000 to $105,000,000. Together, these two groups constituted 51% of lend-lease shipments to the Soviet. Ordnance shipments remained at $49,000,000.

Motor vehicle exports declined somewhat, despite sharp increases in trucks (from $1,500,000 to $11,000,000) and in tanks (from $1,000,000 to $7,000,000). The decline was accounted for by reduced

shipments of armored cars, personnel carriers, and other combat vehicles. However, aircraft exports (mostly fly-aways) more than doubled, to $55,000,000. And vessels and watercraft (including sailaways) rose from $3,000,000 to $8,-000,000.

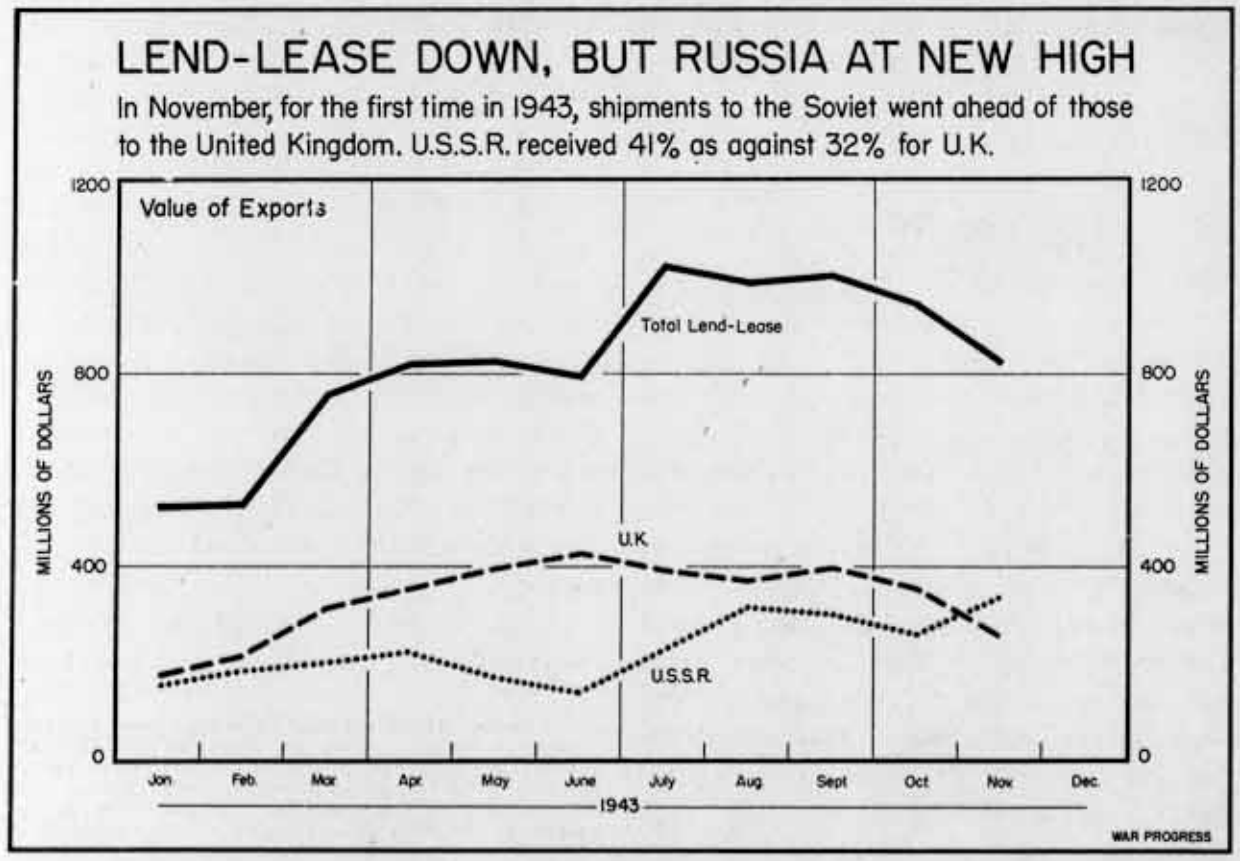
BIG INCREASE IN BUTTER

Butter exports to Russia (constituting 99% of total U.S. butter exports) are up sharply. November shipments were 20,000,000 pounds, as against 21,000,000 during the entire first eight months of 1943. The biggest month was September —24,000,000 pounds. During the three months from September through November, shipments to Russia ran at a rate of 10% of total 1943 U.S. production. Other big food items sent were pickled pork (43,000,000 pounds), dried eggs (11,-500,000 pounds), dry beans (21,000,000 pounds), rice (7,000,000 pounds), tomato paste (1,000,000 pounds), dehydrated vegetables (3,500,000 pounds), soya flour (15,000,000 pounds), soya bean oil (7,-000,000 pounds), roasted coffee (1,000,-000 pounds), linseed oil (21,000,000 pounds).

The U.K. shipments accounted for only 32% of the dollar value of November exports, compared to 38% in October and 54% in June, when shipments to the U.K. were at an all-time high of $425,000,000. The biggest drop was in agricultural products—from $124,000,000 to $54,000,-000. There were also substantial declines in industrial products (from $80,000,000 to $62,000,000) and tanks and other vehicles (from $38,000,000 to $24,000,000). Aircraft rose slightly, from $60,000,000 to $63,000,000.

FAR EAST EXPORTS DROP

Shipments to most of the other countries declined sharply in November, particularly those to Australia, Algeria, India, Egypt, Turkey, and New Zealand:



	Nov.	Oct.	Sept.
	(millions)		
Total.....	$821.0	$942.0	$1,002.0
U.K.	259.0	356.0	397.0
U.S.S.R.	337.0	263.0	301.0
Egypt	61.3	86.2	92.8
Australia	18.4	43.0	33.6
New Zealand ..	3.2	5.9	8.2
India	50.5	71.4	34.2
Iran	0.1	0.8	2.0
Iraq	3.0	1.2	5.8
Union of S.A..	9.6	6.4	12.0
French Morocco	4.1	7.0	1.6
Algeria	21.4	45.6	56.9
Nigeria	0.2	1.5	0.9
Turkey	1.1	7.9	7.5
Brazil	3.2	3.3	5.2
China	6.4	2.0	4.4
All others	50.0	41.5	38.9

Aircraft shipments comprised 91% of all exports to China in November which, though still low, more than tripled those of October and reached a new high since the closing of the Burma Road. Aircraft amounted to $5,800,000, and industrial products, $500,000. Other shipments were comparatively small, including ordnance, tanks, and other motor vehicles, and agricultural products.

REPORTS ON REPORTS

Backlog in Bearings

Production of antifriction bearings increased 6% from April to September, 1943, but demand by aircraft, truck, and farm equipment industries has also risen, and the backlog of unfilled orders remains at about 10 months. At the same time employment, particularly in the labor-shortage areas of Connecticut, Ohio, etc., declined and recruitment lagged because of the low wage scale and the 5¢-to-23¢ differential between wages of men and women. *Manpower Problems in the Anti-Friction Bearings Industry, September-November, 1943* (confidential; pp. 12) outlines the joint program of the War Production Board and the War Manpower Commission to get maximum production and labor utilization. (War Manpower Commission, Reports and Analysis Service)

Old Bottles, Old Boxes

As a stopgap for the containers' shortage, the Containers Division of the War Production Board has instituted a Reuse Program to insure deliveries of military, lend-lease, and essential civilian supplies. *Containers* (confidential; pp. 19) reports that although 1943 production of glass containers rose 17%, stocks in September were 42% below a year ago. Consumption of wooden boxes and shipping lumber (now 40% of the total lumber supply) is running 25% ahead of production; consumption of fiberboard is thousands of tons a week ahead of production; and unfilled orders of steel barrels and drums (98% for military use) have mounted to unprecedented levels. (Department of Commerce, Foreign and Domestic Commerce)

Satiation Point?

The public favors war news broadcasts and appeals to "pay no more than ceiling prices." But *Surfeit with Government's War Messages* (restricted; pp. 20) discovers indications of boredom with other radio war messages, particularly those promoting war bond sales. Need for savings against a possible postwar depression seems to be the most potent reason for buying bonds; the anti-inflationary aspect—getting money out of circulation—is considered least important.
(Office of War Information, Surveys Division)

[This record is an attempt to select from the many documents coming to the attention of WAR PROGRESS those studies which would be of most interest to readers. The list is by no means comprehensive, and no attempt has been made to evaluate reports for accuracy. Whether reports are available depends on the policy of each individual agency.]

PSF: WPB

The President

1

WAR PROGRESS

Confidential

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Guidelines Dept. Letter, 12-14-72
By NARS, Date MAR 29 1973

Britain:
Arms and the Manpower

W-9—New Airplane Schedule

Number 175

January 22, 1944

Arms and the Men (and Women) in Britain

With labor pool dry, production is closer to limit of capacity than in the U.S. Schedules call for further squeeze on civilian industry. Reconversion remote.

LIKE the U.S., Great Britain is nearing its war production ceiling—but for a different reason. In this country the ceiling has been lowered deliberately; programs have been cut back. Britain, however, is much nearer the limit of productive capacity than the U.S. And the reason is manpower. Britain was scraping the bottom of the manpower barrel three years ago.

Men and women alike, between 18 and 50, have been conscripted for war work; even mothers with young children are asked to work in their spare time. At the same time, the labor force devoted to civilian supplies and services has been cut to the bone. A year after the war broke out it was down to half of the civilian labor force; since then it has been trimmed 25% more. Even so, the munitions force barely held its own in 1943—and it's expected to fall off 8% during 1944.

SHRINKING LABOR POOL

What it all comes down to is this: whereas total employment (excluding the armed forces) in the U.S. has increased 16% since mid-1939, in Britain it has dropped 8% (chart, page 5). Britain entered the war with a pool of little more than 1,000,000 unemployed to draw on; this country then had 9,500,000 out of work. Moreover, Britain has had no year-by-year increase in population; this country can count on a normal increment of about 600,000 workers a year. And not only are Britain's armed forces larger than ours in relation to total population, but it is a base of military operations.

Despite its taut man- and woman-power situation, Britain's war production has gone up—though naturally not so fast or so far as this country's. In 1942 the gain in major munitions was almost 50% over 1941—after two hard years of war and gearing up. Last year the gain was 15%. And schedules for this quarter call for a 10% increase over output in the last quarter of '43. After that, production is due to flatten.

Britain's production has not gone up in as straight a line as ours; it fell off last summer. The drop was planned. After nearly three full years of high tension and long hours, many plants were closed down for a short va-

MIDMONTHLY PLANE TALLY

THOUGH fewer planes may be produced this month than last, they'll be heavier. That's the indicated score as of the first 15 days.

At midmonth, 3,619 planes had been accepted, some 200 short of the like period in December; but heavy bombers again put on a brilliant performance, bringing the result in airframe weight practically even with the first 15 days last month. January has one more working day than December, so some gain in airframe weight is indicated. Only 8,572 planes are scheduled for January, 230 less than the December result. First-half-month acceptances of Superfortresses ran to 17 versus 7 in December. Fort and Liberator output rose from 562 to 585.

cation spell. (Besides putting in an average 56-hour work-week, all able-bodied men—and women not tied down by children—are required to give 48 hours every month to civilian defense work). Result of this breathing spell was a sharp rise in production in the following quarter.

Basically, the patterns of war production in the U.S. and U.K. have been much alike.

EMPHASIS ON BIG PLANES

Biggest item in British production has been aircraft, with emphasis on big planes. R.A.F. bomber production doubled in 1942 and rose almost 50% more in '43; bombers now make up 60% of the total airplane program (by value of deliveries). This is despite the diversion of some British production lines from bombers to transports, to supplement troop- and cargo-carrying planes lend-leased by the U.S. British production of transports is now rising steeply (chart, page 3).

Britain has not gone in for naval carrier planes as heavily as we. Production declined during 1942 while new types were introduced, and though it almost doubled last year, it still constitutes only 5% of the total airplane program—about the same as trainers.

IN THIS ISSUE:

U.S. output has been relatively much greater. Britain depends on it for the balance of her carrier planes; also, by agreement, the U.S. Navy has largely taken over the Pacific theater, where fleets have to operate far from their main bases to make contact with the enemy.

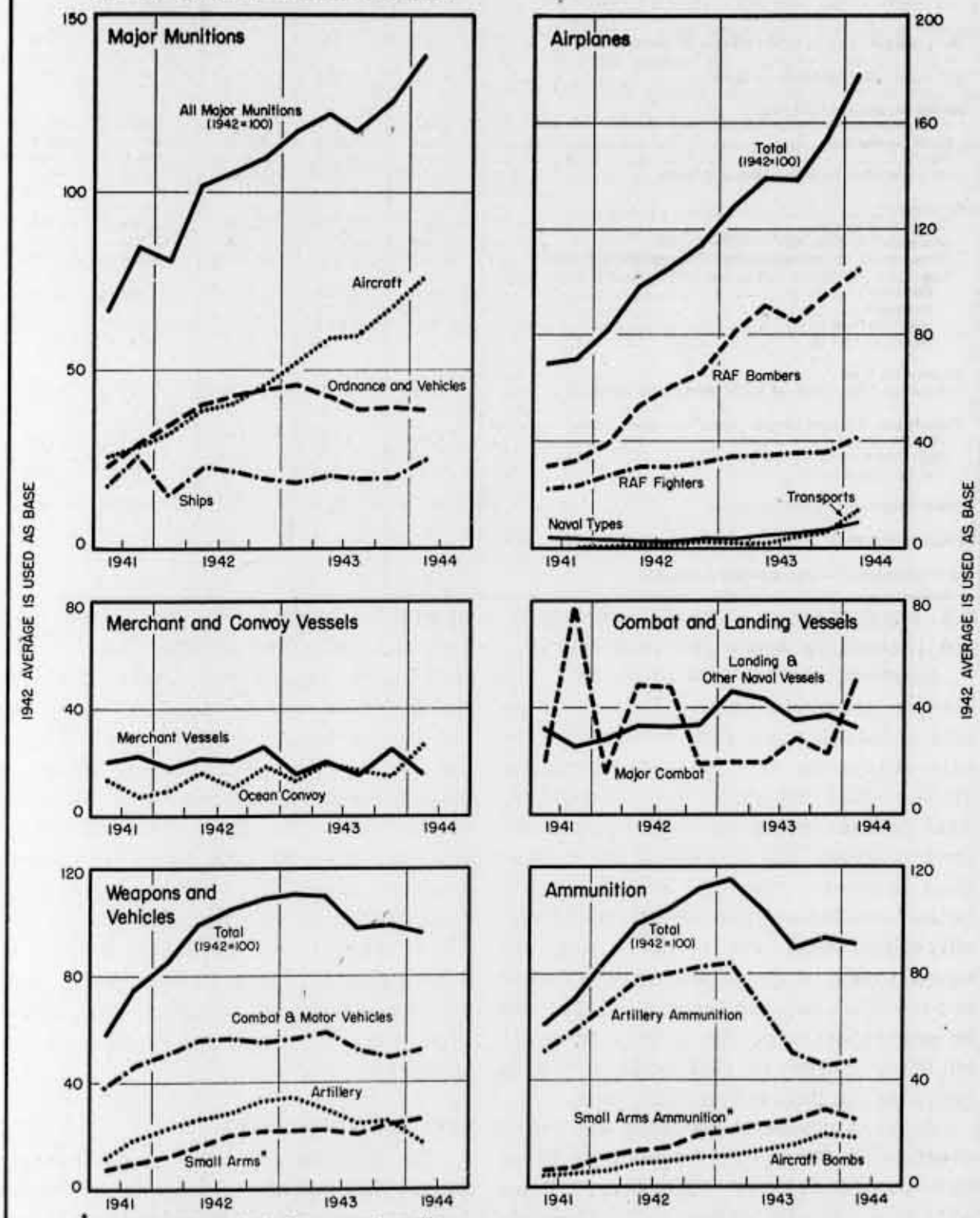
Declining programs in Britain, as in the U.S., are concentrated in ground-army munitions. But the British decline began earlier—during the first half of '43—and by now has carried more than 10% below the peak reached in the first quarter. Hence Britain has already had to deal with the shifts and dislocations that will be an increasing problem in this country, where cutbacks have been more recent but also sharper. The Ministry of Supply (responsible for procuring army munitions) surrendered nearly 15% of its labor force last year, almost all of it to the Ministry of Aircraft Production. The change-over wasn't painless; workers don't take to being uprooted. Nevertheless it was managed successfully, through the cooperation of government officials and employer and trade union representatives.

CRISSCROSSED PATTERN

Within the army supply program, however, the pattern is crisscrossed. Some programs, such as small-arms ammunition and artillery, are pointed down in both countries. Others are behaving differently. Small arms are declining in the U.S., still rising in Britain; artillery ammunition is rising here, declining there. To the extent that British inventories of a particular munition are low and ours high, their production will go up, ours down. But coordinated planning also explains divergent (complementary) production trends in some items. Thus Britain has been concentrating on big bombs up to blockbuster size; the

PATTERNS OF BRITISH PRODUCTION

Broadly speaking, the peak will be reached this quarter. Aircraft expands; ships slightly up; ground munitions down.



*British figures, unlike ours, include 20 mm. guns and ammunition.

Note: Average 1942=100 for totals where indicated. Subgroups are proportions of totals. Indexes are based on value of deliveries.

WAR PROGRESS

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program - Checks paid (millions of dollars)	1,787	1,701	1,469	1,600	1,446
War bond sales (millions of dollars)	265	309	165	212	344
Wholesale prices (1926=100)					
All commodities	103.0p	102.9p	102.9p	102.9	101.6
Farm products	122.1	121.9	121.8	125.0	116.6
Foods	104.8	104.6	105.7	106.5	104.8
All other than farm products and foods	97.9p	97.8p	97.8p	97.0	96.3
Petroleum:					
Total carloadings	49,552	47,029	51,125	59,485	53,156
Movement of cars into the East	21,265	20,428	23,696	33,302	26,666
Total stocks of residual fuel oil (thousands of barrels)	54,529	55,731	58,272	67,017	71,517
East coast stocks for civilian use (1940-41=100 Seas. Adj.)					
Gasoline	42.0	43.6	42.4	n.a.	n.a.
Kerosene	47.5	48.0	51.4		
Distillate fuel oil	86.2	87.6	75.1		
Residual fuel oil	67.9	67.6	67.7	n.a.	n.a.
Bituminous Coal:					
Production (thousands of short tons, daily average)	2,038p	1,842	2,175	1,960	1,850
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	3,051	2,173	2,570	2,343	1,156
Gulf Coast ports	369	430	399	381	370
Pacific Coast ports	1,292	1,215	1,225	1,327	926
Steel operations (% of capacity)	99.0	99.6	93.0	97.7r	99.8
Department store sales (% change from a year ago)	+4	-3	-4	+20	+1

p. preliminary n.a. not available r. revised

U.S. has shifted to lighter fragmentation and incendiary bombs (WP-Jan8'44,p6).

Sharpest contrast is in ships. The British program has kept about the same size and shape since 1940 because available shipyards were already operating close to full capacity. In this country, 1943 deliveries of merchant ships more than doubled and of naval ships more than tripled. The U.S. has been in a better position to replace United Nations shipping losses and to build the new naval types, such as destroyer escorts and aircraft carrier escorts, called for by war experience. But a British shipbuilding drive in 1943 will bring an increase in deliveries this year.

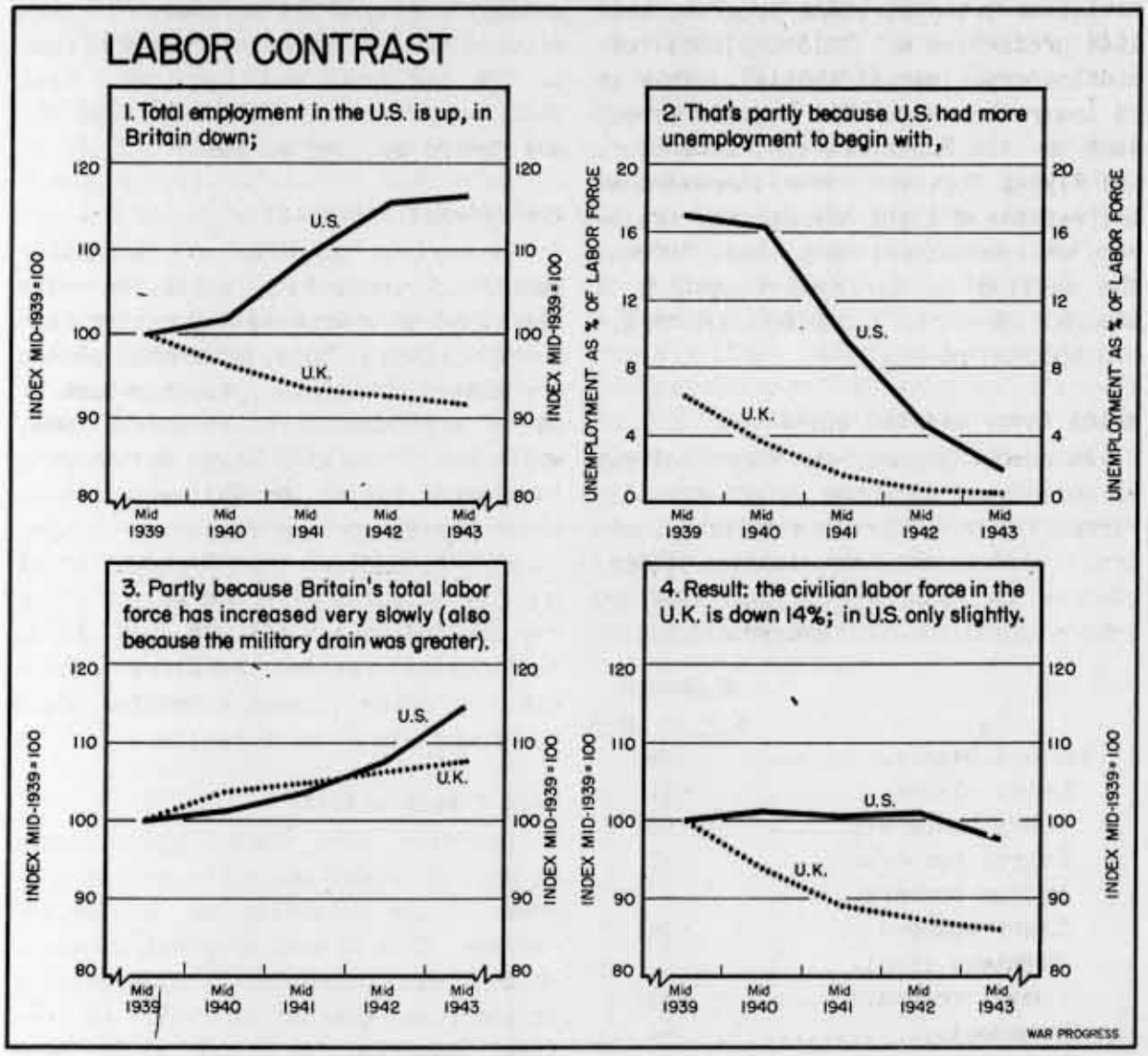
British schedules for 1944 are being overhauled—as in this country—with an eye to the all-out offensive. There will be a further expansion in the aircraft program, particularly in such successful models as Spitfires, Lancasters, and Mosquitoes. But several well-known models are being cut down sharply—for example, the Stirling bomber and the Hurricane, which did so nobly in the fall of 1940. We too are eliminating outmoded models, such as the P-39 Airacobra, and the PB2Y Coronado patrol bomber. Also in the books is a substantial boost in landing vessels and other types of ships needed for amphibious operations. Further cutbacks in the army supply program are likely, with some exceptions—notably in heavy trucks; like the U.S., Britain is pushing her heavy-truck program.

MORE BELT-TIGHTENING

The British consider their program generally feasible—despite the declining labor force. To reach and hold the peak scheduled for this quarter, they are

depending chiefly on further gains in know-how and productivity; substantial increases in efficiency are expected, if only because there will be few accessions of inexperienced hands to pull down the average. But Britain will also have to squeeze some more workers out of civilian industry—in particular the building, retail distribution, and clothing trades—and civilians will have to pull in their belts another notch.

Hence reconversion in Britain is still around the very far corner. Until Germany falls, things are due to get tighter. And when and if this country resumes somewhat larger production of civilian goods, some provision may have to be made for sharing.



A growing population can be a great asset—particularly in wartime. When the war broke out, the military drain from the British civilian labor force was great, and it was only partially offset by drawing in housewives, older people, etc., and employing the unemployed (who were only 6% of the total labor force). But in this country, not only could we draw into the labor force people who had never worked before and a large number of unemployed persons (17% of the total labor force), but also we had a normal increase of some 600,000 workers annually. Since the middle of 1939, this country has been able to offset the drain from the armed forces. Britain has not. British civilian employment dropped 8%, ours rose 16%.

Airplane Program Tightened Again

W-9 schedule for '44 is most realistic yet. Fairly modest gains are planned. Trend continues toward heavier models; 100 jet planes are to be made this year.

W-9, FIRST of a series of quarterly revisions in the airplane program, sets 1944 production at 109,340 planes (excluding experimental models). This is 6% lower than W-8. But heavier types, such as the Superfortress, Liberator, and Flying Fortress, are increased at the expense of light transports, trainers, and communications planes. Effect: the decline in airframe weight is a nominal 1%—from 1,088,600,000 to 1,076,600,000 pounds.

MAJOR GROUP CHANGES SLIGHT

In combat planes, the numerical cut is only 2% and airframe weight actually rises a fraction. Except for light bombers, trainers, and communication planes, changes in major groups for 1944 are generally slight (airframe-weight basis):

	% Change W-9 vs. W-8
All mil. planes.....	-1%
Combat planes.....	nil
Heavy bombers.....	+5
Patrol bombers.....	-2
Medium bombers.....	+7
Light bombers.....	-14
Fighters (incl. naval reconn.).....	nil
Transports.....	-4
Trainers.....	-18
Communications.....	-27

For the first time, airplane schedules are carried throughout 1945 on a monthly basis; 119,000 planes with an airframe weight of 1,313,000,000 pounds are called for next year. But what happens in the next 12 months in Europe and the Pacific will undoubtedly dictate numerous revisions.

The W-9 program is the most realistic to date, calling for an average monthly stepup of 2½% in 1944. In previous schedules, gains averaging as much as 10% per month were required. Last year, actual monthly gains averaged 7%, and ranged as high as 18%.

WORKING-DAY SCHEDULES

In setting up W-9, an increasing number of individual schedules were developed on a working-day rather than a monthly basis. Thus, all combat planes are slated to score a monthly rise of 4% in airframe weight in March, 1944, which has 27 working days; but no gain is planned for in the following month, which has 25 working days.

As the chart on page 7 shows, total monthly output of airframe weight under W-9 lags behind W-8 through July, 1944, then begins to exceed the former schedule. In combat planes, schedules begin to exceed W-8 a month earlier.

MOVE TOWARD REALISM

In effect, then, the W-9 plan amounts to another push-back of the entire program in the direction of production realism. This is most apparent in models which missed schedules by wide margins in the final quarter of 1943. At Curtiss, Columbus, for instance, the peak on the SB2C Helldiver is now slated for August instead of May. And at the following plants, peaks are all postponed from March to May: Goodyear, Akron, working on the FG Corsair; North American, Dallas, working on the P-51 Mus-

tang; and General Motors' Eastern Aircraft Division at Trenton, working on the TBM Avenger.

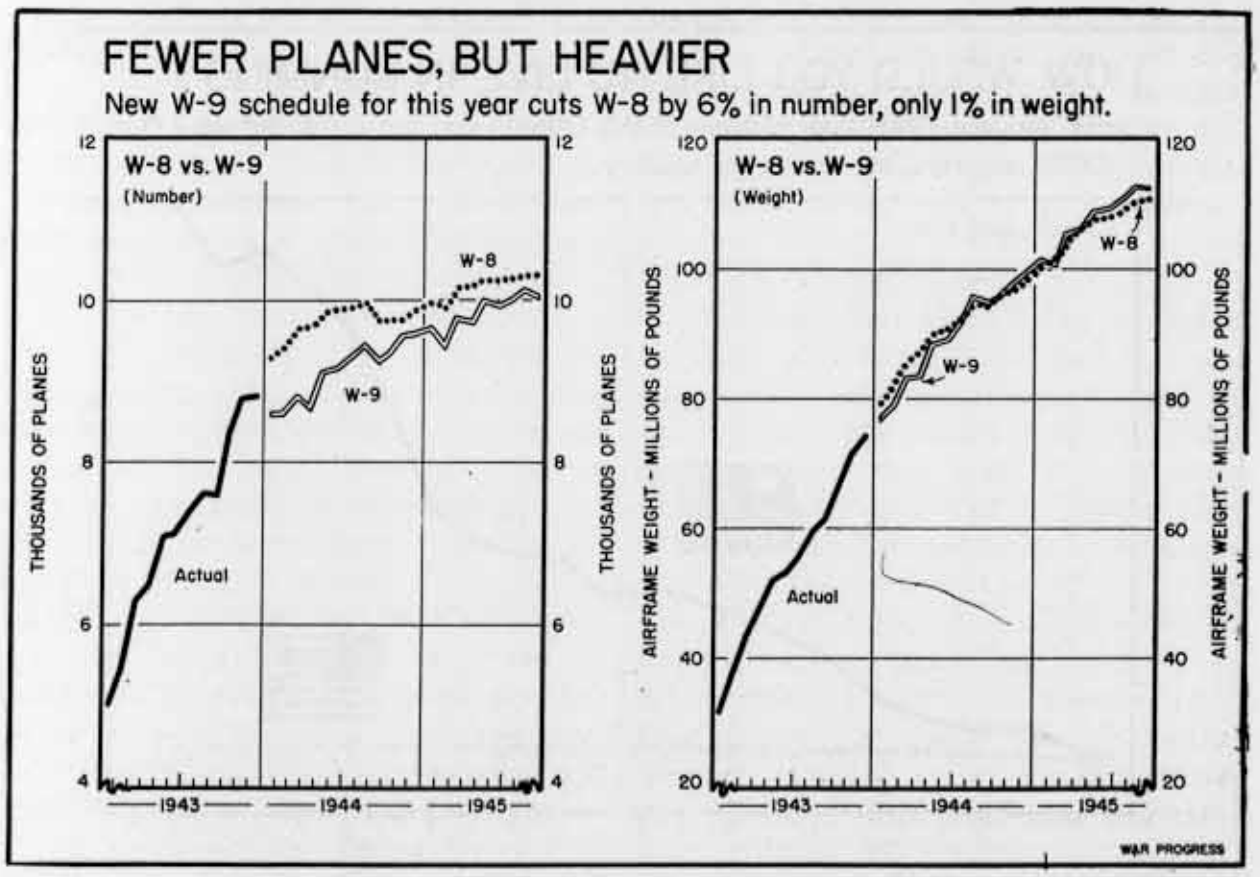
According to the new program, Brewster's labor-trouble-ridden Johnsville, Pa., plant stops producing the Corsair in March, 1945; under W-8 it was to have continued on through September. A torpedo bomber, the BTC, originally scheduled for production at Curtiss, Columbus, is dropped.

JET FIGHTER IN DEBUT

The highly publicized jet-propelled, 2-engined fighter makes its debut in the W-9 schedule; about 100 are scheduled at Bell, Buffalo. First scheduled delivery: this month. Another newcomer this year is a 2-engined photographic plane for the Army—the F-11—to be built by Hughes at Houston; still another is the S2E, a naval reconnaissance plane, to be turned out by Edo, Long Island City.

The W-9 plan increases superbomber schedules this year by 4%—from 1,384 to 1,437. An important factor here is a switch in trainer facilities to B-29 subcontract work. The B-29, recently named the Superfortress, accounts for more than 90% of the superbomber program, and Boeing at Wichita will remain the biggest single producer in 1944. Under W-9, two other Boeing plants team up on the Superfortress: Seattle will turn out subassemblies, Renton will work on final assemblies.

Combined schedules for Liberators and Flying Fortresses are boosted 5% to 15,169. And whereas W-8 established a top monthly rate of 240 Flying Forts at Boeing, Seattle, W-9 restores the old peak of 270. This is because the Seattle plant, after last summer's below-schedule performances as a result of labor shortages, has been running far above recent goals. Ford's monthly



peak of 405 Liberators will be reached in October this year instead of June, 1945; under W-9, Ford will cease work on Liberator subassemblies seven months earlier than provided in W-8 and will concentrate on completed jobs.

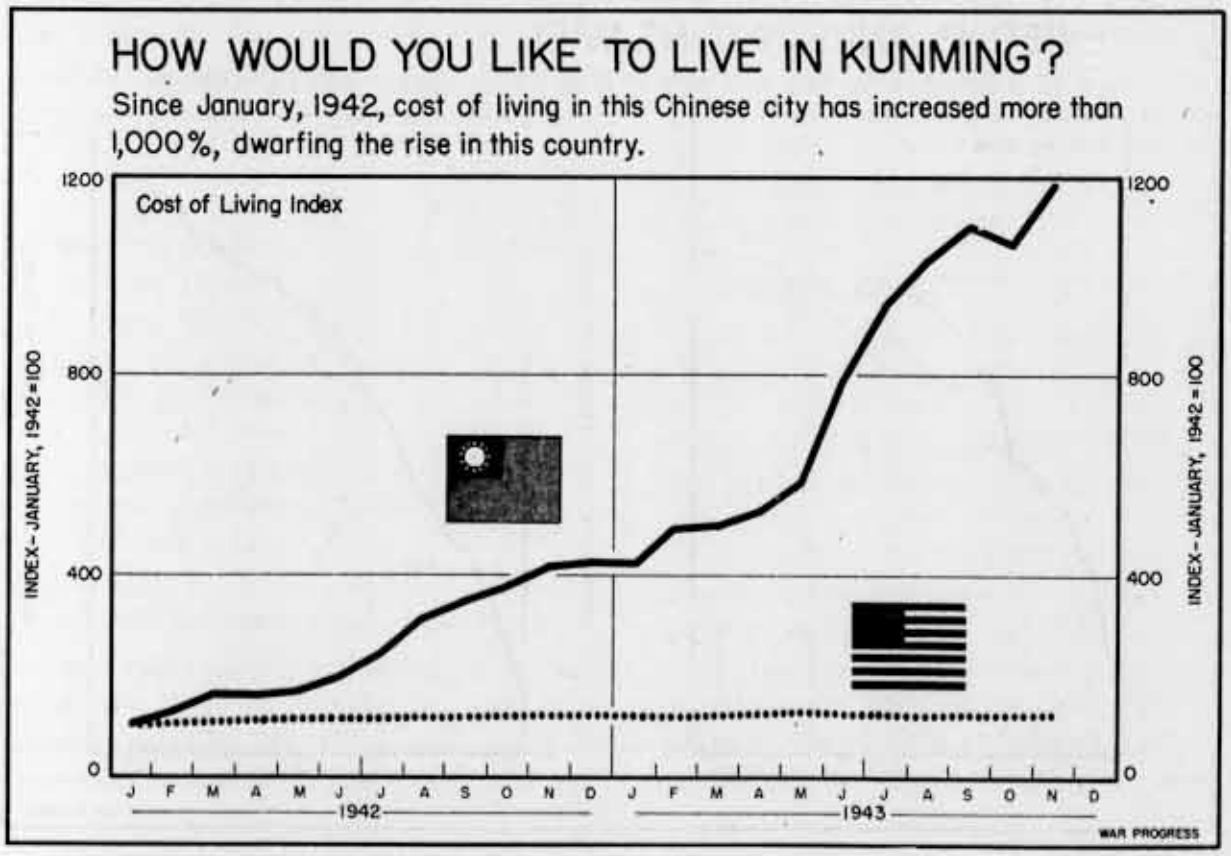
Schedules for the A-26 Invader, previously known as the improved Boston, are cut from 1,285 to 770; this anticipates design problems. Practically all of the reduction occurs at Douglas' Tulsa plant.

STEPUP IN FIGHTERS

The W-9 program raises 2-engined Lightning fighter schedules 3% this year to 4,407 planes; that means a peak rate of 540 P-38s at Lockheed, Burbank, as against 500 under W-8. A stepup is also called for at Chance-Vought, Stratford, where the top rate on F4U Corsair fighters for the Navy is set at about 250 monthly, compared with 225. And Grumman, Bethpage, is now ticketed for a monthly peak of 525 F6F Hellcats, versus 500. Each of these plants has turned in a good production job in recent months, and Grumman has been consistently outstanding.

The program on the C-87 Liberator Express, transport version of the B-24 Liberator, is cut about a third, to 227 planes, this year; this follows a decision to divert fewer bombers to transports. Despite last year's poor showing on the 2-engined C-46 Commando transport, schedules remain unchanged in 1944 at 1,614 planes.

W-9 for 1945 lists a new torpedo bomber—the BTM—at Martin, Baltimore; also booked at the same plant are 16 JRMs, the transport version of the flying boat Mars. Although originally developed as a patrol bomber, the Mars is to be used as a long-haul transoceanic cargo carrier (WP-Jan8'44,p11).



The Quid Pro Quo in Price Control

Ceilings, even though forced to give, have kept living costs in check. But while OPA fixes prices it lacks power to restrain the forces which tend to push them up.

BEFORE PEARL HARBOR, the price of a Pontiac coupe was $1,200. Today—to cover the cost of handling, insurance, storage, etc.—the price is $1,550. But a used 1941 Pontiac would cost still more—perhaps as much as $1,900!

That $350, or some 25% more than the new-car price, is a rough indication of the difference between a controlled and an uncontrolled market. For used cars, unlike new cars, are not subject to price ceilings. It is also a rough indication of the job the Office of Price Administration is up against. There is so much money floating around in relation to the supply of goods available that people will pay more for an inferior product.

$35,000,000,000 GAP

It all comes down to the much-publicized inflationary gap. With about half the country's production of goods and services going to military uses, civilians have about $35,000,000,000 a year left over after going to market and paying their taxes. And even after allowing for normal savings, that leaves a lot of hot money burning holes in pockets. It explains the numerous violations of price ceilings, the profitableness of black markets.

OPA has to fix prices—both wholesale and retail—on thousands of items of widely different sizes, grades, brands, etc., with adjustments for regional differences, seasonal fluctuations, and types of stores. But it has little or no direct control over the forces that tend to push prices up—specifically wages, farm prices, production costs, taxes. These are the responsibilities of other agencies, including Congress.

But OPA has not done badly. The cost of living has gone up only 7% since the General Maximum Price Regulation went into effect in May, 1942, and altogether 23% since January, 1941—the base date of the "Little Steel" 15%-pay-rise formula. Most of this higher cost of living is traceable to foods, up 13% since GMPR and 40% since January, 1941. This rise, in turn, is almost entirely accounted for by foods which were not brought under price control promptly—in particular, meats and fresh fruits and vegetables. Ceilings could not be put on farm prices that were below parity.

These figures, however, are not all-inclusive. There have been hidden increases in prices which the cost-of-living index can't account for. Services have been greatly curtailed: try to get your groceries delivered. And quality has been cut—especially in clothing.

TREND TO BIG-PROFIT GOODS

Moreover, the cost of living increases through up-trading. Merchandise consumers have been accustomed to buy disappears from the market. In textiles, manufacturers have been turning away from normally low-profit, highly competitive, mass-market items to more expensive, greater-profit goods, for which a mass market rapidly develops—there's nothing else to buy. Thus, production of chambray, a work-cloth fabric, fell from 26,486,000 yards in the fourth quarter of 1942 to 19,375,000 in the same period of 1943. Meanwhile require-

ments have been increasing. The Navy will take more than half the output in the next six months; so many workers will soon be out of work clothes unless production is jacked up.

LOW-COST CEILINGS UPPED

Hence the Office of Economic Stabilization has authorized the War Production Board to provide facilities and materials for the production of essential low-cost items and the OPA to raise price ceilings when necessary to secure this production. WPB recently certified chambray, denim, and sheets and pillow cases for emergency treatment; OPA is now reviewing prices at the mill on these and a few other items, including meltons (for mackinaws, etc.) and combed and carded sale yarns. Then it will have to review the mill prices of apparel made from these fabrics and retail prices on both.

As an offset against resultant increases, OES also requested OPA to look for prices that can be cut—possibly where profit margins are excessive. OPA hopes to scale down some prices that encourage converters to add fancy trimmings on high-priced fabrics. However, the price line as a whole will probably give a little more; it's never so easy to reduce prices as to raise them. And OPA itself can't require textile manufacturers to go on making low-cost items, even though their overall profits are high enough to compensate for possible losses on such items.

FRESH FRUITS, VEGETABLES

In cooperation with the War Food Administration, OPA is also drawing up regulations to bring fresh fruit and vegetables under control. At the same time, it is fixing prices for the 1944 pack of canned fruit and vegetables. Keeping food prices down today has an AA1 urgency rating—with labor leaders

SELECTED MONTHLY STATISTICS

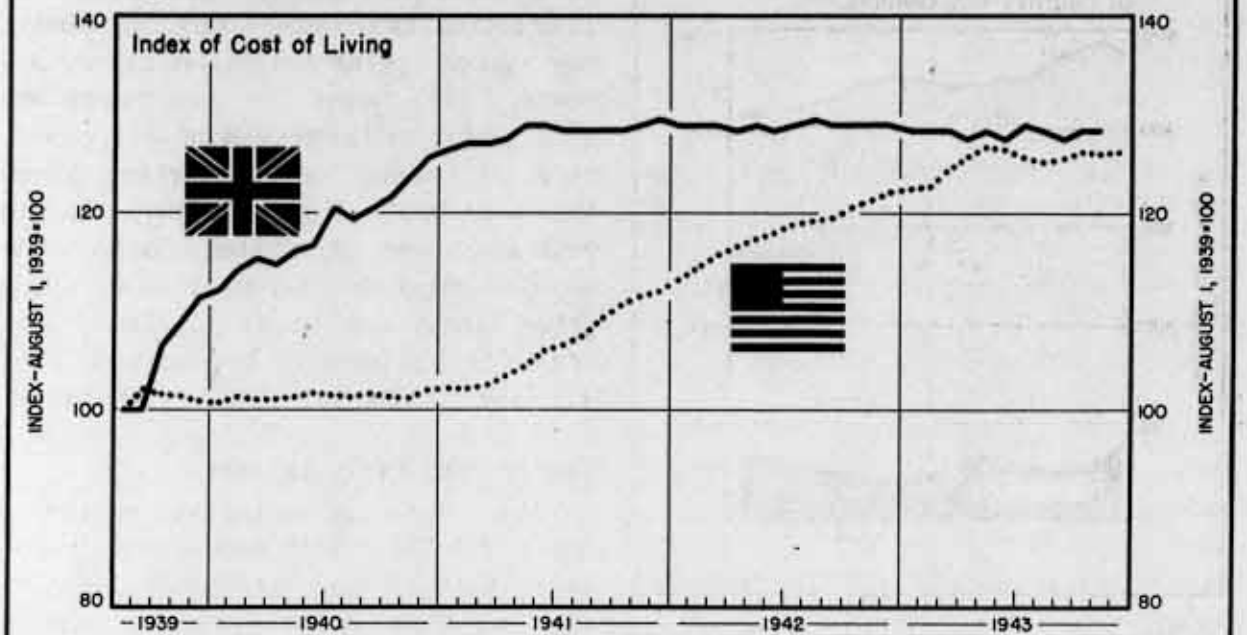
Employment-Retail Sales-Transportation

	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
NONAGRIC. EMPLOYMENT-TOTAL (thousands)	38,335p	38,292p	38,273	38,484	38,942	31,109	n.a.
Manufacturing-Total	16,128p	16,229	16,205	16,056	15,684	10,694	|
Durable Goods	9,757p	9,786	9,739	9,585	9,050	4,983	|
Nondurable Goods	6,371p	6,443	6,466	6,471	6,634	5,711	|
Government	5,895p	5,855p	5,851	5,937	5,811	4,058	|
Other	16,312p	16,208	16,217	16,491	17,447	16,357	n.a.
FEDERAL CIVILIAN EMPLOYMENT (thousands)	3,018p	2,997	3,000	3,127r	2,813	969	852
War	2,165p	2,164	2,171	2,303r	1,949	n.a.	n.a.
War Department	1,258p	1,263	1,277	1,444r	1,234	|	|
Navy Department	689	682	676	634	548	|	|
Other War Agencies	218	219	218	225r	166	|	|
Nonwar	853p	833	829	824r	864	n.a.	n.a.
RETAIL STORE SALES-TOTAL (million dollars)	5,604p	5,718	5,357	5,184	4,966	3,670	3,358
Durable Goods	787p	810	775	805	749	926	793
Nondurable Goods	4,817p	4,908	4,582	4,380	4,216	2,744	2,565
TRANSPORTATION-COMMODITY AND PASSENGER (1935-39=100)†	218p	220	225	210	197	118	101
Commodity	204p	213	212	199	193r	124	100
Passenger	264p	263	269r	247	209	99	102

* Nonagricultural Employment, Dec.; all other, Nov. p Preliminary. n.a. Not available. r Revised. †Unadjusted.

HOLDING THE COST-OF-LIVING LINE—U.S. vs. U.K.

Britain has kept prices steady since mid-1941. In this country, costs have only begun to flatten out.

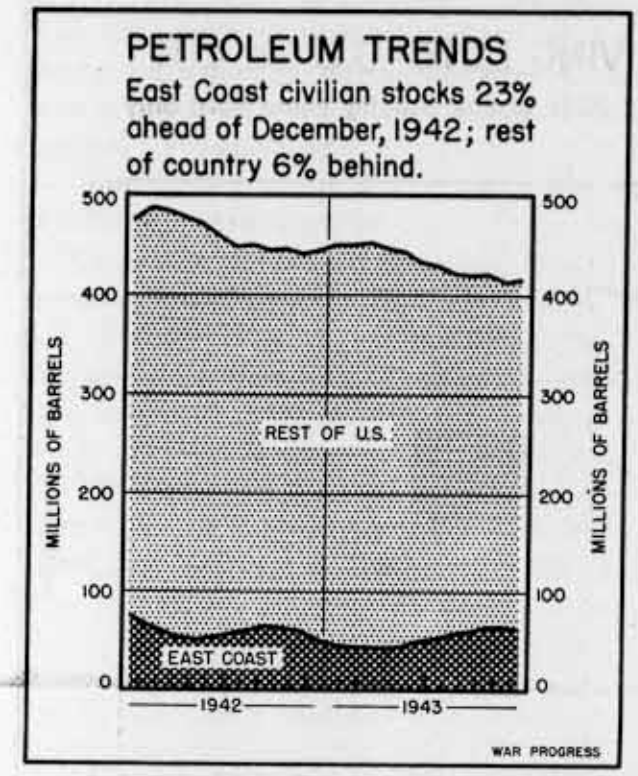


demanding higher wages to offset the rise in the cost of living. Difficulty here is that farm price ceilings are three-way affairs. The legal minimum is set either by (1) parity, as determined by the Department of Agriculture under general statutory provisions, or (2) the highest price between January and September, 1942, seasonally adjusted, or (3) the January, 1941, price adjusted for increases in production costs—whichever is the highest. With three routes to choose from, producers can often find one that leads up.

A further complication is that prices are interdependent. Corn is a critical example. When the ceiling was $1.07 a bushel at Chicago, it wasn't moving into commercial channels; because the corn-hog ratio makes it worth about $1.30 a bushel at prevailing hog prices, farmers in the corn belt were hanging on to it to feed to hogs. But if the ceiling were raised to $1.30, the prices of all corn products would have to be boosted sharply. So instead of going whole hog, OPA and WFA recently raised the price of corn from $1.07 to $1.16 a bushel, to provide parity return in the major producing area. Together with the announced reduction in the hog support price (to be effective October 1, 1944), this new price is expected to go far toward getting the corn needed for industrial and other agricultural uses.

MUNITIONS COSTS HELD DOWN

Altogether, OPA has been most successful in holding the line with commodities whose supply and distribution are also controlled—as with rubber goods, machine tools, and various war materials. Steel (tank) plate prices, for example, have been held stationary; in the last war they went up as much as 187%. This helps to explain OPA's es-



In December, U.S. petroleum stocks dropped to 480,700,000 barrels, 3% below December, a year ago, 13% behind December, 1941, and only a notch ahead of the wartime low of 480,200,000 barrels in August. However, East Coast inventories have risen since April and are now 23% ahead of a year ago. This improvement is in all categories—crude, gasoline, kerosene, heavy and light fuel oils, etc.—with gains ranging all the way from 6% in gasoline to 65% in heavy fuel oil.

timate that price control has so far kept down the cost of munitions and war construction by $65,000,000,000.

The inflationary pressures, basically economic, naturally become political as well. In theory, almost everybody favors price control. But in practice, there is a decided preference for controlling the other fellow's prices and letting your own prices run. Hence OPA is under constant pressure to raise the ceilings just on farm prices, just on oil, just on coal, etc. The chief pressure against rent ceilings now comes from the West Coast.

Great Britain introduced price control at the outset of the war. Nevertheless the cost of living went up 28% by April, 1941. Then the government determined to stabilize prices, not merely hold them in check—and the index is practically the same today. In Canada the cost of living had risen 15% by December, 1941, when the government put a ceiling over the prices of all goods, services, wages, and salaries; since then the index has gone up only 3%. In both countries, subsidies have been one of the chief devices used to hold the price line. And in April, 1943, Australia also determined to hold the line, with the use of subsidies when necessary.

CONTROL EASIER IN BRITAIN

However, price control is easier in these smaller, more homogeneous countries than it is in the U.S. In particular, Great Britain can more readily control supply and distribution because of its large imports; the government buys up and sells about half of all foodstuffs. Likewise it curbs inflationary pressures to a greater extent at their source by heavier taxes, including compulsory savings, and by more extensive rationing, together with "utility goods" production and widespread institutional feeding.

Canada faces a different problem—its main products are agricultural. The Canadian Prices Board has not put a ceiling over all farm prices, because of the obvious administrative difficulties; instead, it fixes wholesale and retail prices, with the help of subsidies. However, the board has full power over agricultural prices, without statutory limitations; and in general it has much broader powers than OPA. Thus when Canadian production of essential low-cost items began to fall off in 1942, the board could order manufacturers to resume production.

PSF: WPB

The President

1

WAR PROGRESS

~~Confidential~~

Disclosure Punishable Under Espionage Act

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D), or (E)
Commerce Dept. Letter, 11/4/72
By RHP, Date MAR 29 1973

Controlling "Noncontrolled" Materials

More Transports, Fewer Libertys

Textiles: Another Manpower Problem

Number 176 January 29, 1944

Trouble Spots in Materials Control

Tightness in lumber, wood pulp, leather, chemicals, other non-CMP commodities focuses attention on various methods used to govern their distribution.

WITH EACH ROUND the Controlled Materials Plan works more smoothly; moreover, the supply-demand position of steel, copper, and aluminum is improving. Result: fewer time-consuming problems. But a number of "noncontrolled" materials—wood pulp, lumber, cotton textiles, cordage fibers, leather, and several score basic chemicals—are today so critical that their distribution demands increasing attention.

"Noncontrolled" is a misnomer, however. Actually "noncontrolled" materials are under a great variety of controls of all degrees of severity; they simply are not under the Controlled Materials Plan.

THREE TYPES OF CONTROLS

Controls over noncontrolled materials can be grouped in three broad categories. The most basic and loosest form of control is the preference rating, which in effect says: Use A comes before Use B, and B before C. Thus the softwood-lumber order rates railroad rolling stock AA-3 and ladders AA-5; therefore a sawmill with orders from both railroad-equipment manufacturers and ladder producers is required to fill the former first.

Preference ratings, however, do not of themselves eliminate less essential uses of critical materials. Unless specific restrictions are imposed, a manufacturer can use nickel, say, for trinkets. Accordingly, a second level of control became necessary—conservation and limitation (L and M) orders which restrict or prohibit particular uses of particular materials, and so channel these materials into specific other uses. They do not supersede preference ratings; they simply sharpen the line between the essential and the nonessential. Thus the iridium order, by prohibiting most of the prewar uses of that metal, has directed the available supply into electrical contact points for aircraft and three or four other uses. Similarly, a recent cordage order restricts the use of manila hemp to special types of rope. The order that stopped automobile production saved huge amounts of nickel, tungsten, zinc, etc.

ALLOWING FOR FLEXIBILITY

Frequently, there is no outright prohibition of a particular end use, but the amount of material that may be put to that use is limited. For example, in a recent Printing and Publishing Division order, publishers of magazines and periodicals were limited in 1944 to 75% of their 1942 consumption of paper. This allows flexibility. By using paper of inferior quality, that is, less weight, publishers can stretch their allotment almost to the old volume of printed matter.

STANDARDIZATION AN AID

Another way to conserve critical materials is to specify the way in which these materials may be used. For example, to save on leather, the types and dimensions of luggage have recently been simplified and standardized.

A number of materials are so critical

that even conservation and limitation orders are not enough. To prevent any but the most essential uses, it may become necessary to supervise distribution, and even production, in detail. Such materials—some 60 chemicals and chemical groups, nickel, nylon fiber, wood pulp, plywood, etc.—have accordingly been placed under complete allocation.

Under CMP, steel, copper, and aluminum are allotted to claimant agencies for reallotment to their prime contractors, who, in turn, make suballotments to their subcontractors. The contractors use these allotments in placing orders at the mills for the shapes of steel, copper, and aluminum they require. In the main, direct War Production Board supervision ends with allotments to the claimant agencies—Army, Navy, the Maritime Commission, and the rest.

DETAILED ALLOCATION

However, in the case of steel plate, and whenever a mill or foundry receives more orders than it can handle, distribution is scheduled; that is, WPB itself allocates the available mill capacity among the producers who require steel plate, and goes on from there to supervise all stages of production and distribution. Such detailed allocation is common practice with critically tight noncontrolled materials.

EXAMPLE: BENZOL

Suppose a chemical firm wants 10,000 gallons of benzol with which to make phenol. It must say not only what the phenol is to be used for—explosives, plastics, disinfectants, etc.—but also from whom it intends to buy the benzol. The benzol supplier, in turn, must list his customers, the quantities ordered by each, each customer's product, the end use of that product, the proposed shipping unit—tank car or truck—and the shipping schedule.

Each aspect of this arrangement is then subject to modification by the Chemicals Division. If, for example, the divisional requirements committee should decide that benzol is more urgently needed for styrene or aviation gasoline than for phenol, the phenol producer's benzol requirements would be cut, unless he is both willing and able to devote part of his capacity to styrene or aviation gasoline. He may even be told how to process his benzol in order to economize facilities. If getting benzol from his customary supplier means a long haul, his order may be transferred to some other supplier. Thus, supervision may be extended all the way from production to final consumption. It is double-entry control.

SCREENING NEEDS VARY

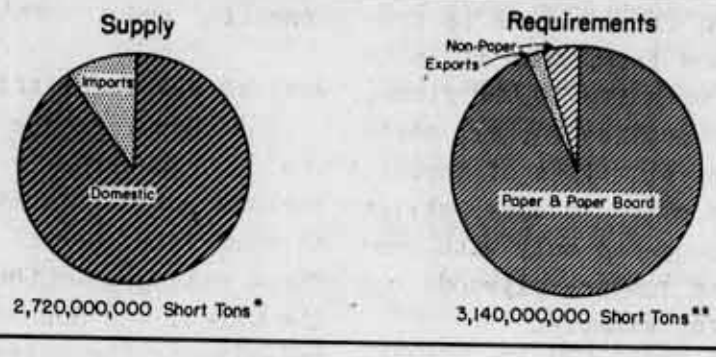
However, in most cases, controls so rigorous are not necessary. The strictness of a control depends, firstly, on the supply-demand situation. As the position of a material improves—as is the case with zinc dust—requirements are less closely screened; as it worsens

IN THIS ISSUE:

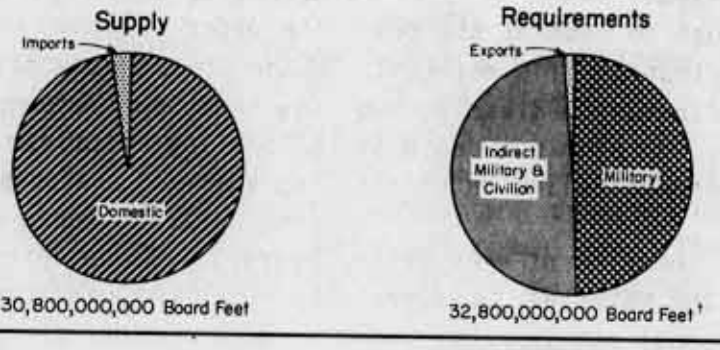
TIGHT "NONCONTROLLED" MATERIALS

Here are some commodities in which scarcity prevails, in which supply must be carefully doled out.

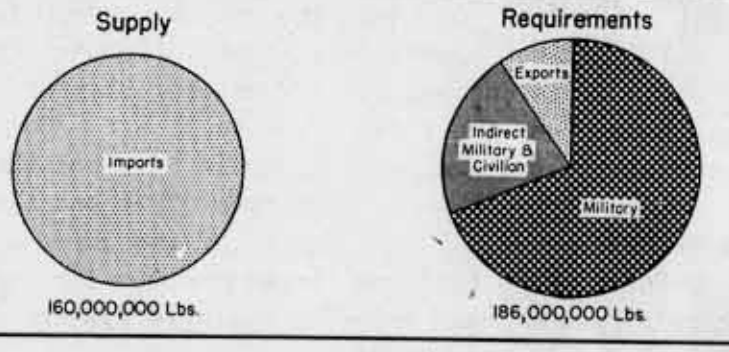
Wood Pulp
1st quarter only



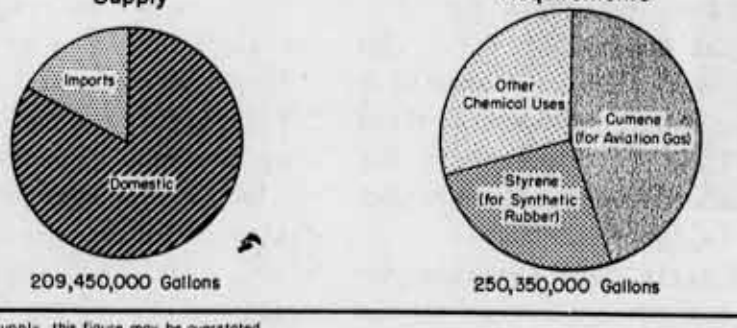
Lumber



Sisal
Long fiber only



Benzene



*Based on estimated wood supply, this figure may be overstated.
**Stated Requirements † Forest Service Estimate

WAR PROGRESS

CONFIDENTIAL

—wood pulp, for example—screening becomes stricter.

Secondly, it depends on the number of producers it is necessary to supervise. It is obviously easier to control the flow of nylon fiber, which is produced by only one firm, than it is to control lumber with its 30,000 firms, mostly small, who produce for all sorts of markets with all types of facilities (WP-Nov6'43,p9). To date, strict controls have succeeded only with certain specialized lumber—plywoods and aircraft logs, for example.

COORDINATED CONTROL

It is not enough to control the production and distribution of a material. Just as CMP coordinates the distribution of steel, copper, and aluminum, so must the control of noncontrolled materials be coordinated.

To this end, the flow of each critical noncontrolled material is supervised by a divisional requirements committee attached to the industry division in charge of that material. On this committee, not only claimant agencies but other industry divisions may be represented. This helps keep the flows of different materials in balance.

SEEING PROGRAMS THROUGH

For example, the size of the Building Materials Division's gypsum-board program was determined by the amount of paper the Paper Division Requirements Committee could make available for that use. In turn, the amount of paper the Paper Division Requirements Committee could assign to other uses was limited by what it had agreed to reserve for gypsum board. In this way, the gypsum-board program is "seen through."

Decisions of divisional requirements committees are subject to review by the Program Bureau and the central Requirements Committee. Even now, the Requirements Committee is scrutinizing the proposed distribution of cordage fibers, rayon, and wood pulp to make sure that essential requirements are met first.

WORKING OUT THE KINKS

The Requirements Committee links the distribution of "noncontrolled" materials to CMP in still another way—through its basic rating structure. These ratings, made quarterly, polarize the flow of all noncontrolled materials relative to the overall war program by arranging all products and programs in the order of their essentiality. They guide the industry divisions in assigning their own preference ratings and in allocating materials. And when industry division preference ratings conflict with basic ratings, the basic ratings prevail. These determine the sequence in which a manufacturer fills his orders.

No important changes in the procedures governing noncontrolled materials are to be expected. True, there are shortcomings; true also, some materials are getting tighter: lumber, textiles, wood pulp, etc. But most of the older controls have had the kinks worked out of them. This and the general improvement in the materials situation have eased pressure for lumping all materials in a single system.

BOON TO RECONVERSION

The very variety of controls may prove, of itself, a boon in reconversion. Individual controls can be relaxed to fit particular situations without setting overall precedents. That would not be the case were a single integrated system in force; then a specific relaxation, though unimportant in itself, could easily become a policy issue.

Maritime Program—Loaded for Combat

Large gains in attack ships, cutbacks in merchantmen booked for this year. And though schedule is 6% above '43 output, it is 11% below December annual rate.

DURING the last three months, the Maritime Commission's program for 1944 has undergone a major shift in emphasis. As late as October, 1943, transport and cargo-attack vessels accounted for only 9% of this year's program. Today they make up 28%. Merchant-type ships—both dry cargo and tankers—have been cut back accordingly.

But the Maritime Commission has about the same construction job ahead of it. The value of work to be done in military types almost offsets the decrease in merchant types. The Maritime schedule for 1944 (as of December 15) calls for $4,854,000,000, as against $4,977,000,000 in October.

SHIFT TO OFFENSIVE

This recent shift—like most shifts recently—is directed toward offensive operations. However, the change couldn't have been made so quickly or so drastically if (1) the merchant shipbuilding program had not come along pretty much on schedule, and (2) losses to submarines had not been reduced sharply below Joint Chiefs of Staff estimates.

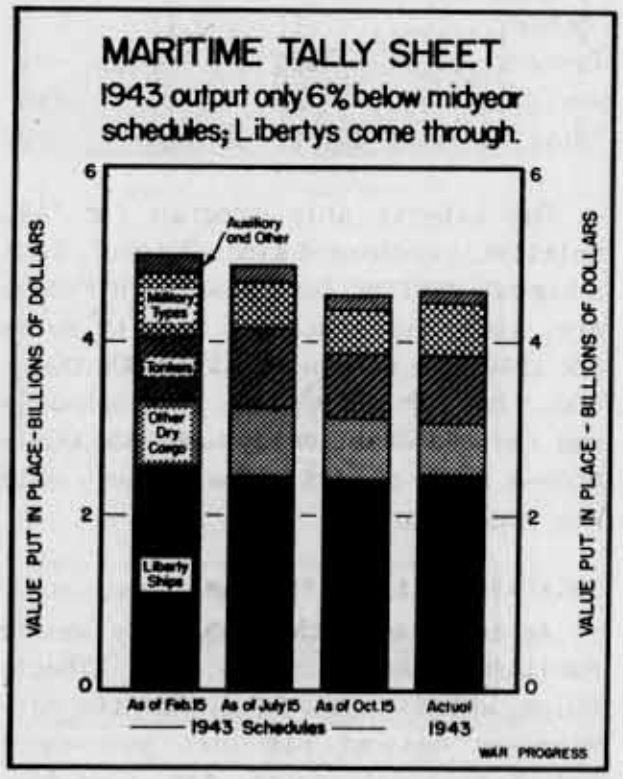
Earlier in the war, when cargo ships were needed to carry goods to our Allies and to our armed forces abroad, the job was to get merchant tonnage afloat quickly and to replace the huge losses due to submarines. Hence the birth of the mass-produced Liberty ship.

Now, however, the United Nations merchant fleet is more than 15,000,000 deadweight tons ahead of what it was at Pearl Harbor; and with the United States fleet over two and a half times what it was then, more emphasis can be placed—despite longer building periods—on military-type ships and on vessels which also have a postwar future (the Victory ship, for example).

BUILDING TIMETABLE

Currently, the Liberty ship requires about one and one-half months from keel laying to delivery; the first Victory ships are expected to take some three months, while the first combat-loaded cargo ships and transports are estimated to take from four to four and one-half months.

The combat-loaded transport and cargo ships are designed especially for assault operations. The Navy fits them with special equipment to speed unload-



ing, repair weapons, etc. In addition, they are more heavily armed and have greater speed than the ordinary cargo and transport vessels.

The schedule for cargo-attack vessels this year has gone up from $101,000,000 in the October program to $286,000,000; similarly, troop transports tripled—from $364,000,000 to $1,073,000,000. On the other hand, merchant-type Victory ships dropped to less than half, from $1,033,000,000 to $498,000,000, viz.:

	'44 Program as of: Oct.	Dec.	% Change
	(millions)		
Military type..	$606	$1,495	+147%
Transport.....	364	1,073	+195
Cargo-attack..	101	286	+183
AC escort.....	110	94	-15
Other military	31	42	+35
Dry cargo.....	3,430	2,589	-25
Liberty.....	1,391	1,394	nil
Victory.....	1,033	498	-52
Standard.....	995	686	-31
Other.....	11	11	0
Tankers.....	906	719	-21
Auxiliary, etc.	35	51	+46
Total Maritime	$4,977	$4,854	-2%

The Liberty ship program for '44, relatively unchanged since October, took a big cut earlier last year. In February, 1943, for instance, Liberty ships for 1944 were scheduled at $2,600,000,000. But by July, the 1944 schedule was reduced drastically to $1,500,000,000—a drop of 42%. The Victory ship was coming in.

INCREASE OVER '43 PROGRAM

As compared with 1943, this year's Maritime program is up 6%. Liberty ships, which account for 29% of the program—as against 54% last year—were cut the most dollarwise—44%—from $2,470,000,000 to $1,394,000,000. Transports scored the biggest dollar gain—286%—from $278,000,000 to $1,073,000,000. But this figure is an overstatement of the job ahead.

The December, 1943, rate of work done is actually above the average required to meet the Maritime program for 1944. But there are wide variations between types. Liberty ship production, for instance, is scheduled to drop 46% below the December rate; tankers 18%. On the other hand, transports are scheduled for a 65% rise over the December rate; cargo-attack vessels, 380%, viz.:

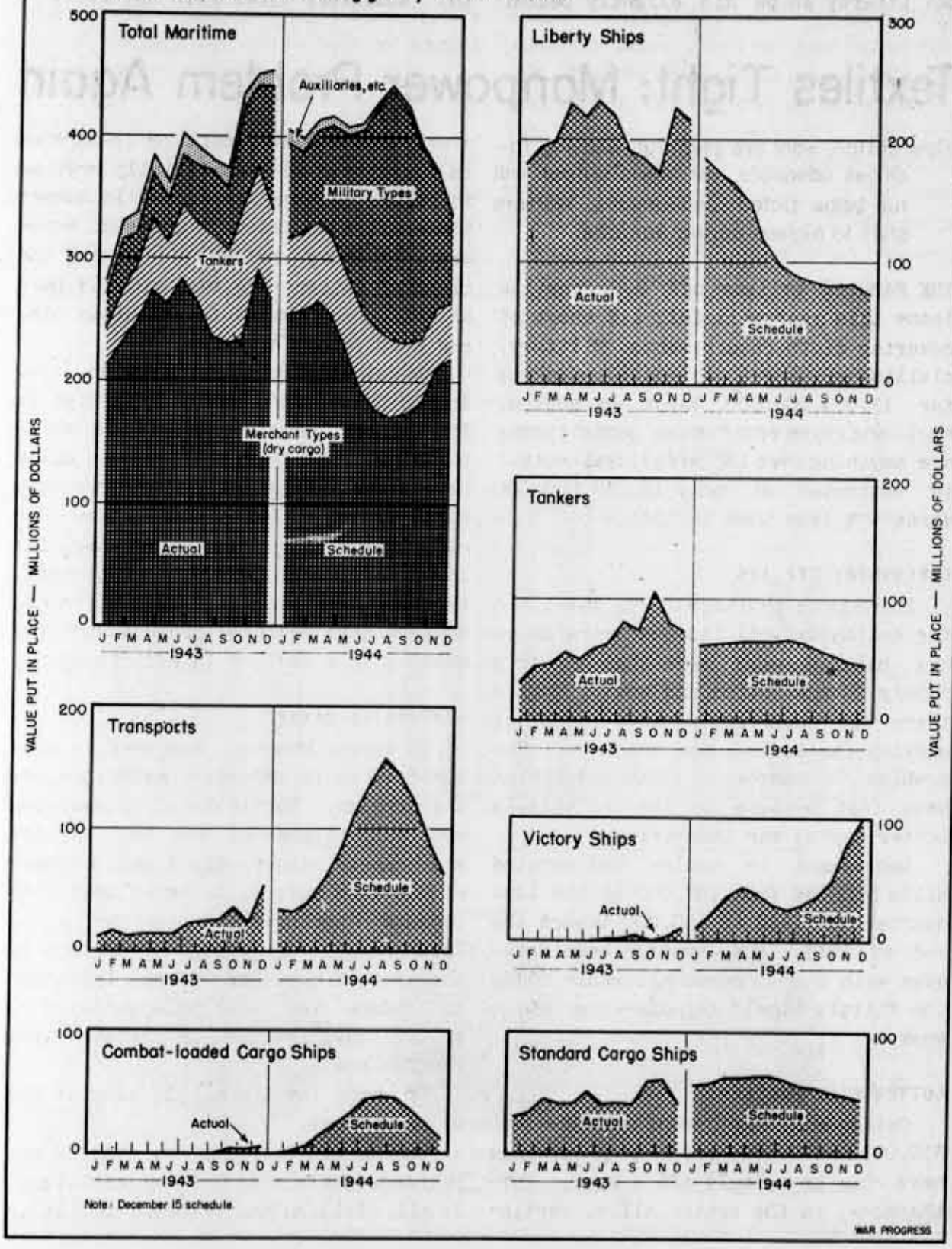
	1943 Actual	1944* Over 1943	% Change 1944 Over Dec. 1943 Ann. Rate
	(millions)		
Military type..	$623	+140%	+23%
Transport.....	278	+286	+65
Cargo-attack..	10	+2760	+380
AC escort.....	173	-46	-72
Other military	162	-74	-71
Dry cargo.....	3,047	-15	-19
Liberty.....	2,470	-44	-46
Victory.....	21	+2271	+320
Standard.....	534	+28	+39
Other.....	22	-50	0
Tankers.....	769	-7	-18
Auxiliary, etc.	153	-67	-64
Total Maritime	$4,592	+6%	-11%

*December 15 schedule

Although difficulties will be met in getting new-type ships into mass production, the magnitude of the task—as suggested above—is not imposing. Despite shortages of steel from time to time, the Maritime Commission has always been able to meet rising schedules fairly consistently. Last year, for instance, gains required were much greater than this year, yet production of all Maritime vessels missed schedule by only 6%—using the midyear (July 15) schedule as

HIGHLIGHTS OF THE MARITIME PROGRAM

Liberty ship schedules drop sharply this year. Combat-loaded cargo ships, transports, and Victorys are due for big gains; tankers down.



Note: December 15 schedule

WAR PROGRESS

CONFIDENTIAL

the gauge. Tankers exceeded the schedule set in February by 4% but lagged 18% behind the July 15 schedule. Dry cargo ships fell below the midyear goal by 6%, but Liberty ships did slightly better than expected—up 1%—while standard cargo ships fell 29% behind. Military vessels wound up the year 19% ahead of what was expected July 15 (chart, page 5). Auxiliary types fell 23% below.

Textiles Tight: Manpower Problem Again

Raw cotton, wool are plentiful, weaving facilities adequate, yet fabric output will run below stated requirements. Workers shift to higher-paying war jobs.

THE FABRICS rolling off U.S. textile looms this year will fall 14% short of covering cloth requirements. Military, civilian and export claimants are asking for 13,969,000,000 yards of cotton, wool, and rayon broad woven goods (these are anything over 12" wide); yet output is estimated at only 12,037,000,000 yards—7% less than in 1943.

EMPLOYMENT OFF 14%

There is no shortage of raw materials for cotton and wool fabrics; warehouses are bulging with more than a year's supply of raw cotton and wool. Nor is there any shortage of loom capacity; weaving facilities are adequate. The problem is manpower. Both industries have lost workers to the relatively better-paying war industries.

Employment in woolen and worsted mills fell 14% from 187,000 in the last quarter of 1942 to 160,000 toward the end of 1943. And average earnings—even with the increase allowable under the "Little Steel" formula—are $34 a week.

COTTON-MILL PROBLEMS

Cotton-mill employment fell 7%—from 510,000 to 472,000—and average earnings have come up to only $25 a week. Furthermore, in the cotton mills, particularly in the South, employees must work in humidity of 65—artificially created to reduce machine static—while summer temperature runs above 90 degrees. Moreover, primary processes—picking and cleaning cotton—are particularly hard on sufferers from hay fever, sinusitis, and respiratory ailments.

Absenteeism has been a problem, too. In the South, it's estimated as high as 15%—almost double the rate in shipbuilding. That's largely because mills have drawn increasingly on workers from rural areas; but these have taken time off for plowing, sowing, harvesting, and farm and home chores. Furthermore, turnover has been high and untrained workers have replaced trained ones, resulting in a decline in efficiency.

REVERSE IN RAYON

In rayon, however, manpower is adequate and so is capacity; materials are the problem. Supplies of dissolving wood pulp—necessary for both viscose and acetate rayons—are tight; a number of old-line pulp mills have closed down because logs have not been coming in. Furthermore, diversion of alcohol to the synthetic rubber program threatens to reduce the available supplies of acetic anhydride used in acetate rayon manufacture.

So much for the supply side of the balance sheet.

Unlike steel or copper, fabrics are preponderantly consumed by civilians. In all, civilian requirements constitute

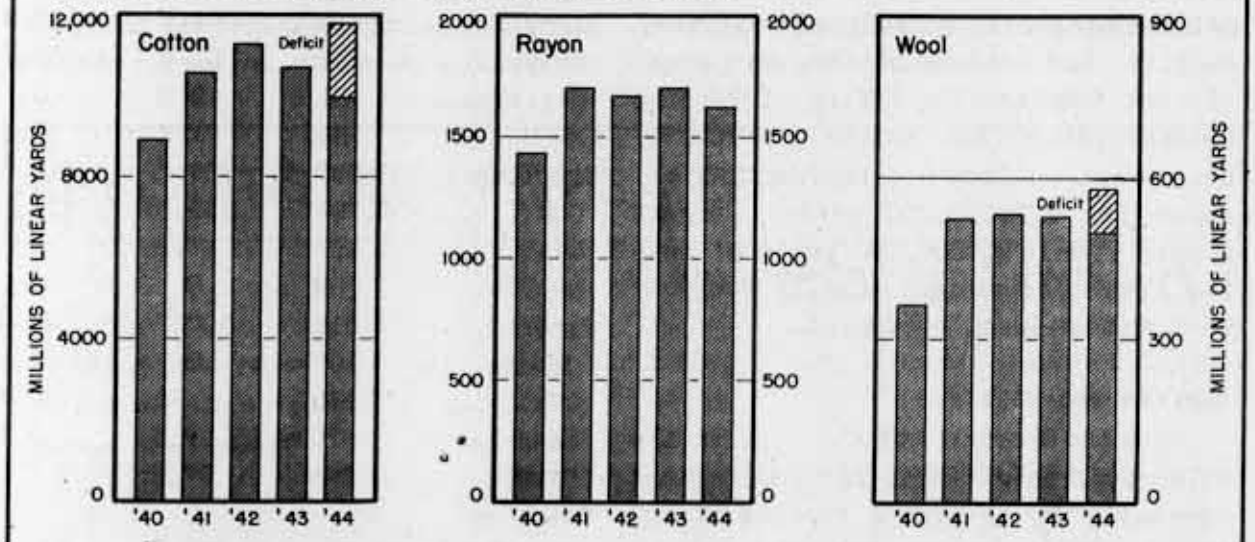
about 72% of total requirements; the armed services have put in 16% of all requests; and the export agencies, 12%. But the military demands are fairly firm and urgent; thus cuts will have to be taken largely out of civilian or export requirements or both.

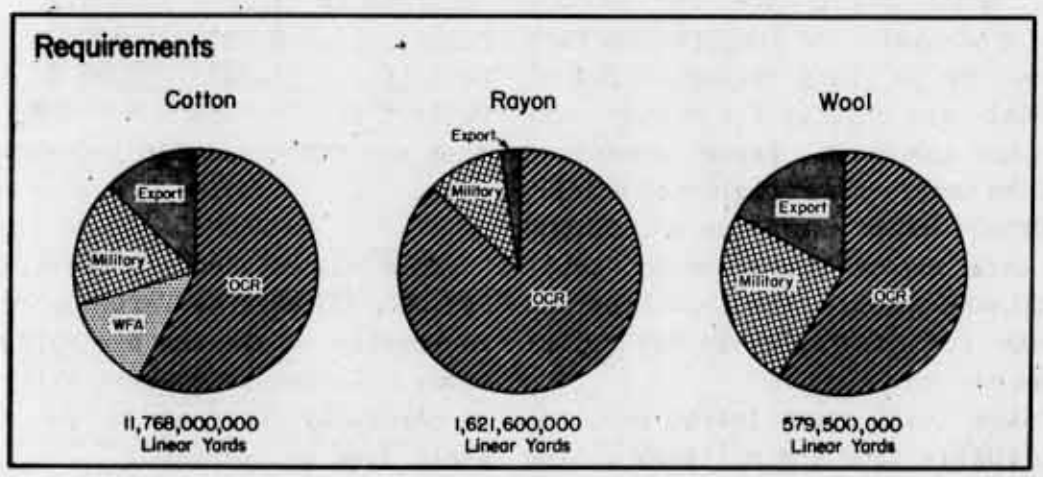
MOST CRITICAL: COTTONS

By all odds, cottons are the most critical of textiles, chiefly because they bulk so large—11,768,000,000 yards, or 85% of the total requirements. Of this yardage, civilian requests now tote up to 8,290,000,000 yards—of which 5,139,000,000 yards are for the Office of Civilian Requirements for apparel and house furnishings, and 1,655,000,000 yards for other civilian and industrial use. The War Food Administration's request for 1,487,000,000 yards is chiefly for sheetings for bags and plant and seed-bed coverings. Only other civilian request for cottons is from the National Housing Agency; it wants 9,000,000 yards —a very small fraction of total requests

TEXTILE SUMMARY

Supply of cotton and wool fabrics for 1944 is estimated to run 16% below requirements. Rayon supply-demand balances.





WAR PROGRESS

CONFIDENTIAL

—largely bed tickings for its furnished housing projects.

Though military requirements constitute only 17% of the cotton total, they are concentrated in certain constructions: two-thirds of the twills and gabardines (for uniform clothing), one-half of the marquisettes (for mosquito netting), one-third of the surgical and bandage cloths, one-third of the ducks (for tents, tarpaulins, etc.) one-fourth of the bed sheetings.

COTTON COMMITMENTS

Export claimant requests for cottons are 13% of the total. Requirements of Canada, Office of Economic Warfare, and Office of Lend-Lease Administration are mainly for the staple constructions—bag sheetings, print fabrics for apparel, surgical and bandage cloths, and work-clothes fabrics. The Office of Foreign Rehabilitation and Relief Operations, before it underwent reorganization, asked for 273,000,000 yards; largest single item is 80,000,000 yards of outing flannel to be used chiefly for women's and children's apparel.

WOOLENS AND WORSTEDS

With the exception of WFA, OCR is the sole civilian claimant for woolens and worsteds; it is asking for 59% of the total. WFA's needs are for 200,000 yards for blankets for inmigrating farm workers. The military requests—24% of the total—are chiefly for winter uniforms and blankets. Export demands—17% of the total—have originated chiefly from OFRRO, which asked for 97,600,000 yards (all export requirements total 100,700,000 yards) for clothing and blankets for its cold-weather relief program abroad.

Of the total rayon fabric requirements, 10% are from the military claimants—chiefly for non-man-bearing parachutes—and only 3% from the export claimants. The remainder—87%—are from OCR. OCR waited until all other requirements were determined, then asked for the rest of the estimated supply; if civilians were not to get all the cottons and woolens asked for, they'd at least get rayons.

DEFICITS IN FABRICS

Thus the supply-demand position for all broad woven goods for 1944, excluding a possible increase in Navy requirements, is as follows:

	Cotton	Woolens & Worsteds	Rayon
	(millions	of linear	yards)
Military...	1,963	139.1	165.7
Army.....	1,416	84.5	110.9
Navy.....	486	51.4	33.2
Maritime..	31	2.0	0
ARCO.....	30	1.2	21.6
Civilian...	8,290	339.7	1,415.5
OCR.....	6,794*	339.5	1,415.5
WFA.....	1,487	.2	0
NHA.....	9	0	0
Export.....	1,515	100.7	40.4
Canada....	307	0	5.6
OEW.....	265	.6	27.6
Lend-lease	670	2.5	7.2
OFRRO.....	273	97.6	0
Total requirements	11,768	579.5	1,621.6
Supply.....	9,925	490.0	1,621.6
Deficit....	1,843	89.5	nil
Deficit %..	16%	15%	nil

*Not all OCR: includes industrial fabrics.

This balance sheet—indicating a 1,843,000,000-yard deficit in cottons—is really only the beginning of the story. Claimant requests will have to be carefully screened to get requirements down to bedrock.

But even drastic screening of requests

won't eliminate deficits in some constructions—cotton chambrays, denims, and bed sheetings, for example. Price ceilings enter the equation. Mills that made the 3.90 chambray (a staple work-shirt fabric measuring 3.90 yards to the pound) have found it more profitable to make lighter chambrays for dress goods (WP-Jan22'44,p9). And to encourage production of the three critical fabrics, the War Production Board has certified them to the OPA for ceiling-price revision.

EMPHASIS ON ESSENTIALS

WPB has already acted to increase yardage of essential fabrics. As early as April, 1942, it moved (via Order L-99) to get more sheetings and osnaburgs; specified percentages of looms turning out less essential goods were converted to these fabrics. Later this order was amended to freeze the output of 60% of the industry's looms to (1) the fastest weaving constructions, or (2) new constructions specially designed to get maximum yardage from the looms weaving those fabrics which could be readily redesigned. This resulted in increasing the output of other fabrics—drills, twills, and print cloths (dress goods), for example—as well as sheetings and osnaburgs.

Roughly, 70% of woven cotton-textile yardage will be sold under preference ratings; 30% will remain free to be bought and used for any purpose. The Textile Division's policy is not to increase the number of preference ratings, but to leave at least this quantity free to be bought and used according to normal market demands.

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program—Checks paid (millions of dollars)	1,477	1,787	1,203	1,474	1,123
War bond sales (millions of dollars)	322	265	124	199	279
Wholesale prices (1926=100)					
All commodities	103.0 p	103.0 p	102.9 p	102.9	101.7
Farm products	121.9	122.1	122.0	124.8	117.2
Foods	104.6	104.8	105.7	107.0	104.7
All other than farm products and foods	97.9 p	97.9 p	97.8 p	97.1	96.3
Petroleum:					
Total carloadings	48,442	49,552	48,123	57,344	53,631
Movement of cars into the East	21,811	21,265	21,099	32,239	26,520
Total stocks of residual fuel oil (thousands of barrels)	53,431	54,327 r	57,596	66,992	71,216
East coast stocks for civilian use (1940-41=100 Seas. Adj.)					
Gasoline	41.9	42.0	43.2	N.A.	N.A.
Kerosene	45.3	47.5	52.9	|	|
Distillate fuel oil	87.3	86.2	80.0	|	|
Residual fuel oil	67.9	67.9	66.9	N.A.	N.A.
Bituminous Coal:					
Production (thousands of short tons, daily average)	2,125 p	2,042	2,035	1,967	1,929
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	3,183	3,051	2,592	2,551	1,212
Gulf Coast ports	438	369	497	431	328
Pacific Coast ports	1,382	1,292	1,169	1,244	848
Steel operations (% of capacity)	99.4	99.0	86.3	97.4	98.6
Department store sales (% change from a year ago)	+14	+4	+22	+19	+1

p. preliminary n.a. not available r. revised

SELECTED MONTHLY STATISTICS

Industrial Production - Cost of Living - Hours and Earnings

	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
PRODUCTION INDEX-INDUSTRIAL (1935-39=100)†	243 p	247	249	238	221	122	86
Total Manufactures	263 p	268	269	259	239	124	82
Durable	373 p	377	376 r	359	327	135	79
Nondurable	174 p	180	182 r	177	168	115	85
Minerals	132 p	131	140	121	119	112	104
COST OF LIVING-ALL ITEMS (1935-39=100)	124.4	124.2 r	124.4	124.8	120.4	99.6	103.0
Food	137.1	137.3	138.2	141.9	132.7	94.9	102.7
Other than food	118.1	117.6 r	117.5 r	116.1	114.0	101.9	103.1
AVERAGE WEEKLY EARNINGS (Dollars)							
All Manufacturing Industries	45.27 p	44.90 p	44.39	43.08	39.78	24.85	n.a.
Durable Goods	51.68 p	51.42 p	51.01	49.25	46.27	27.98	n.a.
Nondurable Goods	36.65 p	35.18 p	34.73	34.07	31.25	22.17	n.a.
Bituminous Coal Mining	32.55 p	45.08 p	45.96	39.12	36.71	27.59	24.00
Metalliferous Mining	44.09 p	45.17 p	44.76	43.43	41.16	30.36	30.05
AVERAGE HOURLY EARNINGS (Cents)							
All Manufacturing Industries	99.5 p	98.9 p	99.3	95.3	90.5	64.2	n.a.
Durable Goods	109.5 p	108.7 p	109.7	105.0	100.5	70.3	n.a.
Nondurable Goods	82.9 p	82.4 p	82.3	79.6	75.6	58.8	n.a.
Bituminous Coal Mining	115.0 p	116.5 p	116.8	112.0	107.3	88.8	87.8
Metalliferous Mining	99.3 p	99.4 p	99.5	98.4	92.6	73.6	69.9
AVERAGE HOURS PER WEEK							
All Manufacturing Industries	45.5 p	45.4 p	44.7	45.2	44.0	38.7	n.a.
Durable Goods	47.2 p	47.3 p	46.5	46.9	46.1	39.8	n.a.
Nondurable Goods	43.0 p	42.7 p	42.2	42.8	41.3	37.7	n.a.
Bituminous Coal Mining	28.6 p	38.8 p	39.4	35.2	34.4	31.4	26.9
Metalliferous Mining	44.1 p	45.4 p	44.8	44.3	44.2	41.5	43.1

*Industrial Production, Cost of Living, December; all other, November. †Unadjusted. p Preliminary. r Revised. n.a. Not Available.

REPORTS ON REPORTS

Two Ends of an Axis

German propaganda explained Italy's unconditional surrender as a political conspiracy by reactionaries rather than a military defeat, according to *The Effect of the Italian Surrender upon Germany* (restricted; pp. 7). In Hitler's speeches and in his move to strengthen police control were warnings to those who, impressed by Mussolini's overthrow, might attempt similar action against him. (Office of Strategic Services, Research and Analysis Branch)

Tire Cord and Yarn

Production of rayon tire cord is expected to increase from 72,000,000 pounds in 1943 to 146,000,000 in 1944, but cotton will still be used for many purposes for which rayon is preferable, so that total tire cord requirements of 367,000,000 pounds may be met. *Manpower Situation in the Tire Yarn and Tire Cord Industry, November, 1943* (confidential; pp.6) reports that nearly half of the plants are in tight labor areas, and recruiting problems stemming from low wages are intensified by the low productivity of new workers.
(War Manpower Commission, Reports and Analysis Service)

[This record is an attempt to select from the many documents coming to the attention of WAR PROGRESS those studies which would be of most interest to readers. The list is by no means comprehensive, and no attempt has been made to evaluate reports for accuracy. Whether reports are available depends on the policy of each individual agency.]

PSF: WPB

The President

1

WAR PROGRESS

~~Confidential~~

Reconversion:
Planning for Tomorrow Today

Number 177

February 5, 1944

Reconversion, No; Planning for It, Yes

Immediate task: To hold war production line while laying foundation for a deliberate resumption of civilian output. But fall of Hitler must come first.

ONE DEFINITE STATEMENT can be made today about reconversion: It's not here yet.

And that statement goes despite the relaxation of some L and M orders, despite the easier supply-demand position of steel, aluminum, copper, and other once-critical materials, despite the authorization of 2,000,000 flatirons, and despite the increased use of steel for baby carriages, bobby pins, razors and blades, and miscellaneous other civilian items.

Right now the American economy is in a state of pre-reconversion. The country is preparing for reconversion, is laying plans for the gradual transition to somewhat larger production of consumers' goods; but it is far from ready for the large-scale manufacture of such complex, labor-consuming durable goods as washing machines, refrigerators, or nonwar industrial machinery.

BRIDGEHEAD COMES FIRST

Reconversion won't get under way until either powerful bridgeheads are established in western Europe, suggesting the near-term defeat of Germany, or Germany is defeated. That would be the first phase of reconversion. After that would come the second and all-out phase: after Japan is defeated.

But the United States—if newspaper accounts are to be credited, if the inside dope sheets mean anything—has got ahead of itself. Manufacturers and workers alike are convinced that reconversion is here. In the last few weeks, various industrial groups have come to the War Production Board seeking aluminum or copper for lipstick holders, tobacco moisteners, and a machine to daub marshmallow on cookies. This anticipation—this rush to get on the peace wagon—is understandable.

Cutbacks of military programs—especially Army programs—have been coming with increasing frequency. And these cutbacks create an impression that the

RECONVERSION SPECIAL

THIS issue of WAR PROGRESS is almost entirely devoted to one subject: reconversion. This is the scheme:

1. The reconversion problem today.
2. What has been done so far.
3. The magnitude of reconversion after Germany falls.
4. Plant cutbacks—how shall we plan them?
5. The problem of competition between companies.
6. Surpluses—raw materials, manufactured goods, plant.
7. The indispensability of coordination.
8. Where do we want to get off?

The analysis presents the pros of oncoming reconversion problems in full realization that the pros and cons themselves will change along with the problems. If any moral is to be drawn, it's that reconversion is fluid; that what seems entirely in the public interest today may be entirely against the public interest tomorrow.

war is almost over. After all, if the Army doesn't need so many carbines as formerly, doesn't that mean that we've already produced enough to lick Hitler? Therefore, why can't we make electric toasters or lipstick holders?

The pressure for civilian resumption comes from labor and management alike. Labor leaders want to hold their unions together; businessmen want to keep their companies going. And they argue that early resumption of peacetime products, to fill in when war contracts terminate, will maintain "full employment."

Well aware of the reconversion pressures cutbacks set up, the armed services have maintained a fixed and understandable opposition to increased output of civilian goods. As WAR PROGRESS noted in the flatiron case, the Army and Navy objected "not because of the materials (only 1,600 tons of steel and relatively small amounts of copper, nickel, and chrome), nor components (which are getting easier), nor yet because of labor requirements (600 workers will suffice for the whole program), but because of possible psychological repercussions."

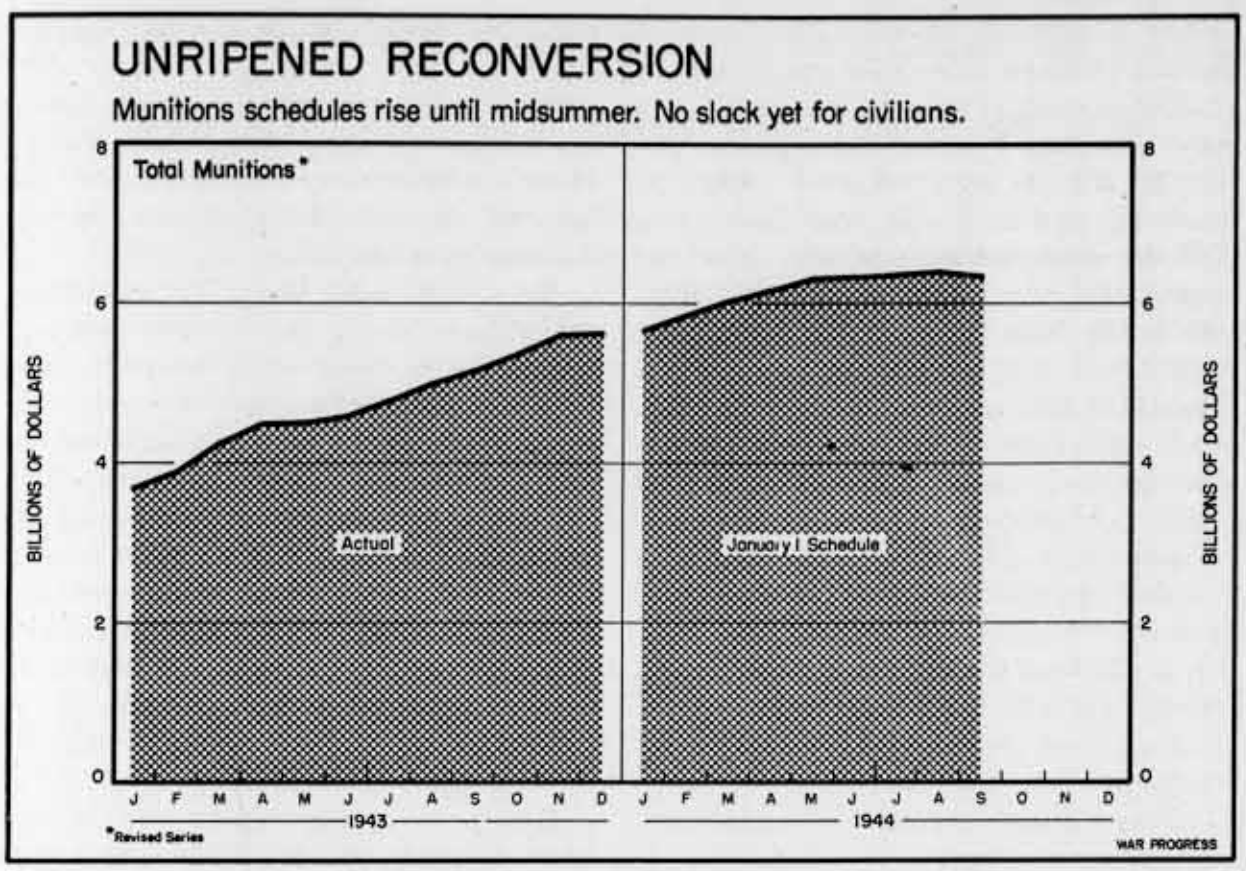
The military case was simple and direct. "Once civilian production resumes, no matter on how small a scale, it might provoke a rush out of war industries. Workers would try to find jobs in companies which may be able to convert early. Management might be reluctant to take on new war contracts, might devote more and more time to tooling up and experimentation on peacetime products and less to pushing war production."

The very act of permitting increased civilian-goods production tends to create the feeling that reconversion is here. Psychologically the war isn't so close or so urgent to the man who makes flatirons as to the man who makes a carbine. That's a risk the nation runs in this current preparation-for-reconversion period.

MANPOWER THE ISSUE

Inevitably, it toughens the job of recruiting manpower for war industries. Already, unplanned reconversion is taking place in the United States. It's hidden. Each time a munitions plant shuts down, a reshuffle of workers occurs. Some go to other war plants, sure; but some married women return to their household chores rather than make adjustments to a new factory or a new type of work, and some workers consider it prudent to get into an occupation with a peacetime future, such as a laundry, a public utility, a restaurant, or a retail store. (This is particularly true if taking a war job means moving out of a community.) As a result, services to civilians improve, but the munitions industries, as a whole, lose workers. And, of course, any extension of civilian production—through relaxation of L, M, and other controls—tends to aggravate this reshuffling: it creates

IN THIS ISSUE:



just that many more peacetime job opportunities to attract laid-off munitions workers.

Yet munitions industries cannot afford to lose workers. Production schedules rise during the next five or six months or so (chart, above). And even prospective cutbacks—though they will cut down the steepness of the incline—will not alter the basic uptrend during the first half of the year. And that means that some labor will have to be drawn into, not released from, war industries—especially if reshuffling is taken into account. Moreover, the armed services will call in some 600,000 men between now and July, more than offsetting the normal increase in the labor force. Some of these will come from war industries; they too will have to be replaced. Thus the country, far from facing disemployment, will have to scratch to find workers to make the planes, guns, ships, and ammunition called for in the schedules. And the schedules might be stepped up again if the invasion of Europe meets with serious reverses, or even costly victories.

This manpower problem is the all-controlling fact for the pre-reconversion period. Even though materials and facilities are available, manpower requirements must govern decisions on which L and M orders can be relaxed, which materials can be released for expansion of civilian products, and which types of products can be made.

TWO PARTS TO SAME JOB

And not only must quantities be taken into account (how many men, how much steel, what plants), but also the psychological effects must be reckoned with.

Thus, though the period immediately ahead demands planning for reconversion, it also demands—and most emphatically

—the avoidance of all appearance of actual reconversion. Decisions must be judged accordingly. In a sense, war agencies must hold the line against labor or industrial pressure to start up civilian products. At the same time, the war agencies must assure labor and industrial groups that careful plans are being made to ease the transition from a full wartime economy to a partial peacetime economy when the time is ripe. That, in itself, will relieve the reconversion pressure. But it can be done only by real plans, not by promises of plans.

Thus the immediate task ahead in this, the pre-reconversion period, is:

1. To hold the war production lines, materially and psychologically.

2. To prepare—realistically—for reconversion.

They are both parts of the same job.

Present Is Prologue

TO DATE, the road toward reconversion has been paved with practicality. Aluminum has been released for industrial cooling fans to save man-hours; brass is being used in oxyacetylene equipment to relieve a critical shortage of malleable castings; zinc is being used instead of steel in shoe eyelets to eliminate corrosion; alloy steel is being resubstituted for carbon steel in locomotive parts to save weight and improve performance; aluminum pressure canners are being produced to facilitate home canning; and so forth.

Such readjustments have been going on since last summer, when military programs were first undergoing cutbacks. And they stem from three main causes: the easier supply-demand position in steel, copper, aluminum, etc.; the release of facilities from war work; the layoffs of munitions workers. No single cause determines which L and M orders shall be changed, which resubstitutions shall be allowed, what civilian production shall be expanded or resumed. Rather, all the elements—materials, facilities, manpower—are weighed in the balance against their effect on the economy as a whole.

Take the case of baby carriages. Early last month, the L order limiting the amount of steel which could be used in their manufacture was revoked; upwards of 25 pounds of steel will now be used per carriage, as against nine pounds for the Victory model. The industry was never shut down. Nor was a ceiling ever placed on output. In this case we have gone back to the prewar steel model and will save an estimated 9,000,000 board feet of critical lumber to boot.

CLOCKS, BATTERIES, CANNERS

In some consumers' goods, output has been resumed—alarm clocks, pressure canners, electric flatirons, and electric ranges. But in each of these cases, unrestricted production has not been allowed. In electric flatirons, for example, 2,000,000 are slated for 1944, 43% of the 1940 rate (WP-Jan1'44,p1); and about 90,000 electric ranges are on the docket this year, roughly 15% of the prewar average.

Automotive batteries illustrate the expansion now taking place. A fortnight ago, the War Production Board authorized the production of 19,300,000 batteries this year, 5% more than were sold in 1943. In this case, the idea is to keep essential war transportation in operation, including passenger automobiles.

The second-quarter program proposed by the Office of Civilian Requirements foreshadows how reconversion will unfold:

It asks for greater quantities of the easy-to-make items in which production was never suspended—hairpins, bobby pins, cutlery, dry-cell batteries, etc.

PLANES BEAT SCHEDULE FIRST TIME SINCE '42

AIRPLANE output last month ran to 8,-789 planes, a shade below December. However, only 8,584 planes were called for by the new W-9 schedule, and the accent was on heavier types. Result: airframe weight was up 5% over December. Moreover, both in weight and number the schedule was beaten by 2%. It was the first time a monthly goal had been exceeded since December, 1942; and then it took a year-end cleanup to turn the trick.

Heavy bombers again dominated the month's showing, all plants meeting or exceeding schedule with the exception of Douglas, Tulsa. Acceptances of 54 B-29 Superfortresses compared with 35 in December and a schedule of 44; this was three planes ahead of the former goal under W-8. Boeing at Renton came through with initial acceptances of two B-29s, two months ahead of schedule. Another new high was set by Flying Fortresses and Liberators; the 1,286 accepted were 8% above December and 3% ahead of the plan.

The laggard plant last month was Curtiss, Buffalo. Acceptances of 275 Warhawks, though well ahead of December's 200, were far below the 400-per-month-rate during most of 1943. The schedule called for 350. Output of 37 Commandos also fell short of the goal (60). This plane is in great demand for combat transport. A change in inspection procedures delayed acceptances of Warhawks both in December and January.

Acceptances of the 2-engined P-38 Lightning totaled 317, one plane above December and five better than called for. The high-preference P-51 Mustang made a new peak at 370 planes, exceeding December by 11% and schedule by 3%. At Grumman, Bethpage, the Navy's F6F Hellcat hit the 500 mark, 12 planes over schedule; best previous month was December, with 458. Though four jet-propelled P-59s were slated at Bell, Buffalo, none came through.

It asks for increased amounts of steel per bedspring, a return to steel springs in upholstered furniture, the use of brass for safety razors.

It asks for resumption of civilian production of items in which neither manpower nor components nor facilities are a limiting factor; these include electric water heaters, electric room heaters, steel heating boilers, registers, and grills.

ANTICIPATING TROUBLE

It lists a number of civilian durables—mechanical refrigerators, domestic washing machines, vacuum cleaners, aluminum cooking utensils—in which there is a manpower-components-facilities problem but in which OCR wants industry divisions to "begin considering" the prospect of limited production.

To the same end, the Program Vice Chairman has asked all claimant agencies to submit plans for expansion of civilian output. The idea is to anticipate production and administrative difficulties that may be encountered. And that's when reconversion becomes a puzzle. For, in reconversion, things are not always what they seem on the surface.

Though there is enough aluminum in sight for civilian pots and pans, foundries are busy on aircraft parts, and stamping mills will soon be up to their books on airplane-landing-mat production; though there is a surplus of raw copper

that could be used for weather stripping in residential construction, every worker in brass mills is needed to take care of present and prospective military needs; though there is plenty of steel to make mechanical refrigerators, each refrigerator needs a fractional-horsepower motor and all such motor capacity is now devoted to the aircraft, ship, and other war programs.

Again, suppose Order L-5-c, which cut off the production of mechanical refrigerators in April, 1942, were amended to permit resumption of manufacture. It would then become necessary to amend a number of other orders controlling materials needed in the production of mechanical refrigerators (and some of these materials, such as freon and cadmium, are tight):

Aluminum.....M-1-i
Cadmium.....M-65
Freon.....M-28
Iron & steel.....M-126
Nickel.....M-6-b
Rubber.....R-1
Tin..... .....M-43-b
Zinc.....M-11-b

This interlocking of limitations and materials orders is not confined to mechanical refrigerators. It extends to washing machines, vacuum cleaners, automatic phonographs, automatic vending machines, toasters, roasters, waffle irons, and numerous other products. Even today, relaxations are often held up while overlapping L, M, and similar orders are sought out and corrected. In any large-scale return to peacetime production, such delays will be multiplied—unless plans are made now to coordinate the lifting of restrictions.

Once limitations and materials orders are properly synchronized, there's the matter of trade relationships to think about, especially if reconversion is a piecemeal process.

Typewriters are now being turned out on a small scale by every manufacturer except one—Royal Typewriter Company (WP-Oct9'43,p12). Royal has about $1,-500,000 of parts which could be utilized in the assembly of typewriters in its Hartford plant, which is located in a Group I (top critical) labor area. The company argues that its workers are willing to put in special overtime, and that it could recruit housewives for a few hours daily to make typewriters. Nevertheless, the War Production Board has ruled that even this use of manpower in a tight labor area is a diversion from the war effort—workers putting in extra hours may be too tired to do their regular jobs efficiently; women now in the home who are willing to work should go into war industry.

Another problem is what to do with industries making products common to the war and peacetime economies when (1) war orders fall off, (2) prospects for additional war business are remote, and (3) materials and facilities are sufficient to undertake essential civilian production.

The problem has already appeared in the scales-and-balances industry. Orders from war plants, the principal outlet for almost two years, have declined so sharply that the largest producer, after having operated on a three-shift basis, is now hard put to maintain one shift.

SCALES IN THE BALANCE

The War Production Board's Service Equipment Division has proposed a limited resumption of production of essential retail scales, in which production has been cut off since May, 1942. The division points out that food rationing has increased the need for new retail scales, particularly the cylinder computing type, which gives price, weight, and number of ration points at a glance. Moreover, many scales condemned by the

weights-and-measures commissions of the various states cannot be replaced since the stockpile is now virtually exhausted. And repair-shop manpower is inadequate.

The request does not involve additional facilities, short materials, critical components—or even manpower. The largest producer can turn out 785 retail scales a month with 19 skilled workers who are now being used for odd jobs around the plant. So far, however, the request has not been granted because of a blanket policy on reopening this kind of civilian production. But no blanket policy can take account of special factors. Meanwhile, a similar problem has developed in commercial laundry and dry-cleaning machinery; others will follow as war orders in civilian-type industries hit the toboggan.

There is at least one instance, however, in which a product common to both war and peace will be released to civilians as a result of a cut in demand: small-arms ammunition. This year, 650,000,000 shotgun shells—about two-thirds of 1941 output—are to be diverted to civilians for hunting and for the destruction of animals and birds preying on food crops. This program is considered an investment in standby plant; the industry can be returned to military production overnight.

Hence the transition to peacetime production has so far been on a bits-and-pieces basis, with practical considerations uppermost—resubstitution here, saving man-hours there, resuming production at this point, expanding output at that. And it will continue so until production cutbacks, after the defeat of Germany, make it necessary to adopt broader policies for real reconversion.

Even After Germany Surrenders...

Pace of reconversion will be modest. War with Japan may keep U.S. munitions plants going at 70% to 75% clip. But estimates need testing against realistic schedules.

PLANNING for reconversion means a variety of things. It means setting up machinery to coordinate the operations and policies of numerous government agencies—the Army, Navy, Maritime Commission, War Production Board, Office of Price Administration, Petroleum Administration for War, Office of Defense Transportation, Foreign Economic Administration, and in some cases the State Department, Treasury, etc. (page 18).

It means synchronizing the resumption of large-scale civilian production with reductions in munitions output (page 12); also determining on a priority list of civilian items; also tiding over manufacturers temporarily embarrassed by contract terminations. It means, too, establishing a policy on reconversion competition: Shall firms retain their prewar status? Shall all companies in an industry start up simultaneously? Or shall each industry's problem be judged as it arises (page 14)?

FULL EMPLOYMENT vs. SLACK

Likewise, planning for reconversion means determining whether full employment and full utilization of all resources at peak wartime levels are cardinal objectives, as opposed to letting some slack—with its attendant flexibility—into the economy.

It means mapping out a policy on government surpluses: How shall plants be disposed of? Should they be used during the reconversion period, and by whom (page 16)?

Similarly, it means formulating pol-

icies on stockpiles of raw materials so as to avoid large postwar surpluses; yet at the same time, contingent requirements to meet military needs must be in hand (page 15).

Finally—and above all—planning for reconversion means measuring the magnitude of the reconversion job itself—measuring it in specific economic terms: How much steel, copper, aluminum, and other materials will be released when Germany falls? How much manpower? What types of facilities and what can they be used for?

For only by means of a quantitative appraisal of what the end of the war in Germany means can we plan the utilization and distribution of the country's resources so as to (1) prosecute the war in the Pacific expeditiously and (2) simultaneously prepare for the full transition to all-out peace.

DIFFERENT WITH A VIOLENCE

It makes a violent difference whether we have to plan for the release of 5,000,000 or 10,000,000 workers from industry. In the first case, the problem of absorption into civilian pursuits would be comparatively easy. In the second case, it would become a major economic problem and perhaps an actual threat to the conduct of the war in the Pacific; political pressures could force the adoption of policies to put men to work in such a way as to interfere with war production.

Obviously, at this time no official data on munitions cutbacks are available. Schedules of the armed forces to date have been based on a two-front war, not on a one-front war (though much recent thought has been directed toward outlining potential cutbacks in the event of Germany's fall).

To bring the problem down to cases, WPB's Planning Division has prepared a set of unofficial and tentative estimates on what may happen productionwise if Germany capitulates some time this year (along about the fall) and the war with Japan continues throughout 1945. On that basis, it is figured that munitions output will drop 25% to 30% from, say, September, 1944, to September, 1945. The drop is gradual and is far more modest than some other estimates, which have ranged as high as 50% and 60%.

Translated into tangible economic terms, that 25%-to-30% decline signifies:

1. An increase in the nonmilitary supply of finished steel from current levels of 17,000,000 tons to a rate of about 35,000,000 tons a year. That would compare with the 1939 volume of 38,000,000 tons and the peacetime high of 45,000,000 tons in 1929. Similarly, the supplies of copper and aluminum will rise sharply from current civilian allowances. The release of other materials will be much smaller—notably in textiles and leather; indeed, lumber and gasoline may become tighter.

2. Manpower released from war industries will range anywhere from 2,100,000 to 3,000,000; men demobilized from the armed forces may number from 2,100,000 to 2,800,000. At the same time, the total labor force will shrink—perhaps by 1,300,000—as women go back to household duties, students to school, and as elderly workers re-retire. Also, unemployment is likely to rise by about 500,000, thus giving some flexibility to the labor market. The net result is that employment in nonwar industries might increase by as much as 2,400,000 to 4,000,000. This represents an increase of from 8% to 13% in workers available for the production of nonwar goods and services.

3. About one-fifth of all industrial capacity engaged in war production will be released. Of that fifth, about half

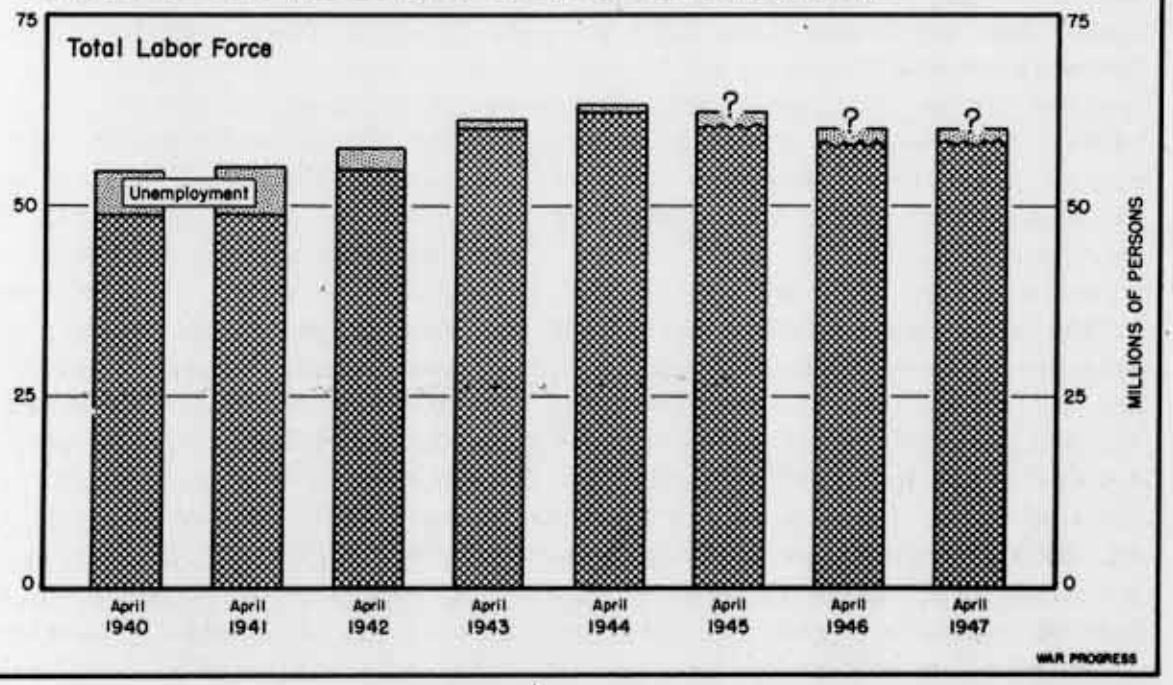
can be successfully used in civilian production, with a capacity to make about $8,000,000,000 of nonmilitary goods. In addition, facilities in nonmunitions industries, now idle or underutilized, are likely to get materials and labor to produce about $5,000,000,000 of civilian goods. Thus civilian manufactured goods output based on facilities could rise as much as $13,000,000,000, or one-third as much again as civilian output in 1943.

4. However, the labor force imposes rather rigid limits on any great expansion in the output of civilian goods and services in the year following the capitulation of Germany. Furthermore, all facilities released will not complement one another, and some materials will be short. In other words, men won't be able to work because the release of resources after Hitler's capitulation will not be in perfect balance. Taking this imbalance into account, the Planning Division estimates that the volume of nonmilitary output will rise only about 10% within a year.

5. Part of this increase will be exported to Europe for relief and rehabilitation; part will be used to make up for the undermaintenance of capital equipment during wartime, with emphasis on transportation equipment, public utilities, and machinery. And the estimated increase in the supply of goods and services available to domestic consumers will be only about 5%. But since most of this rise will be concentrated in consumers' durable goods, and since this area of the civilian economy has undergone greatest contraction, the increase here will be substantial—about 33 1/3%. Though some increase in auto parts is figured on, expansion in production of passenger automobiles for civilian use is considered unlikely;

PREVIEW OF THE POSTWAR LABOR FORCE

Here is an estimate of how it may look after victory. Note how much bigger it is than in 1940. It raises a question: What about unemployment?



it is assumed that passenger-car manufacturers will be inextricably tied up in war work for the full duration.

The quantitative estimates based on the Planning Division's 25%-to-30% assumption lead to these conclusions:

That military production will continue to dominate the American economy after Germany falls. That the possibilities of returning to business-as-usual are definitely limited. That controls on civilian production will have to be maintained. The problem will be to withstand pressures from special interests to release controls.

That actual reconversion—declines in war output—will be accomplished in a series of stepdowns or terraces (chart, page 11).

That the volume of contracts terminated during this period will not be so large as to cause serious financial embarrassment—particularly if termination settlements are prompt.

That American industry, as a whole, will be in excellent financial position to meet the cost of reconversion. Because American manufacturers have been unable to purchase capital equipment during the war period they have been forced to convert virtually all of their profits (after dividends) and their depreciation reserves into cash or government securities. Result: industry is probably more liquid than at any time in history.

And finally, this assumption leads to the inescapable conclusion that the main job of reconversion—of demobilizing the war industries, of settling large volumes of contracts, of taking care of returning soldiers, and of finding jobs for some 54,000,000 workers (as against 45,000,000 employed in 1940)—will be postponed until Japan is defeated, and can be approached with deliberation.

But—as the members of the Planning Division are the quickest to declare—their basic assumption may prove to be wrong. Cuts in munitions programs may be much sharper than allowed for. And it makes a fundamental difference whether munitions output drops 25% to 30% in 12 months or whether that same drop is squeezed into six months. In one case, you get easy stepdowns; in the other, hard-to-handle disemployment.

And there is always the possibility that after Germany falls cuts in the munitions program will run much higher than the Planning Division estimates—perhaps to 50% or 60%. Then the problem would be of an entirely different order. Whereas, under the 25% to 30% assumption, war production would still dominate the nation's industrial framework, under the 50% to 60% cut, civilian industries would have to bear the major burden of providing employment.

SPINNING UNEMPLOYMENT

Continuing war production, however, would cushion the economy during such a period of rapid readjustment; munitions orders would be the bread-and-butter which would enable manufacturers to hold their organizations together while tooling up for peacetime output. Yet there is this danger: Such a rapid drop in munitions output would precipitate spinning unemployment; individual workers might not be out of jobs long, but as many as 5,000,000 or more might be out of jobs at one time. And the pressures to start up peacetime work at once—as a re-employment measure—might actually interfere with meeting munitions production schedules. Holding on to controls—unless careful plans are laid in advance—would be especially difficult under the higher-cut assumption.

In planning for reconversion, therefore, it is of immediate importance to develop a statement of military require-

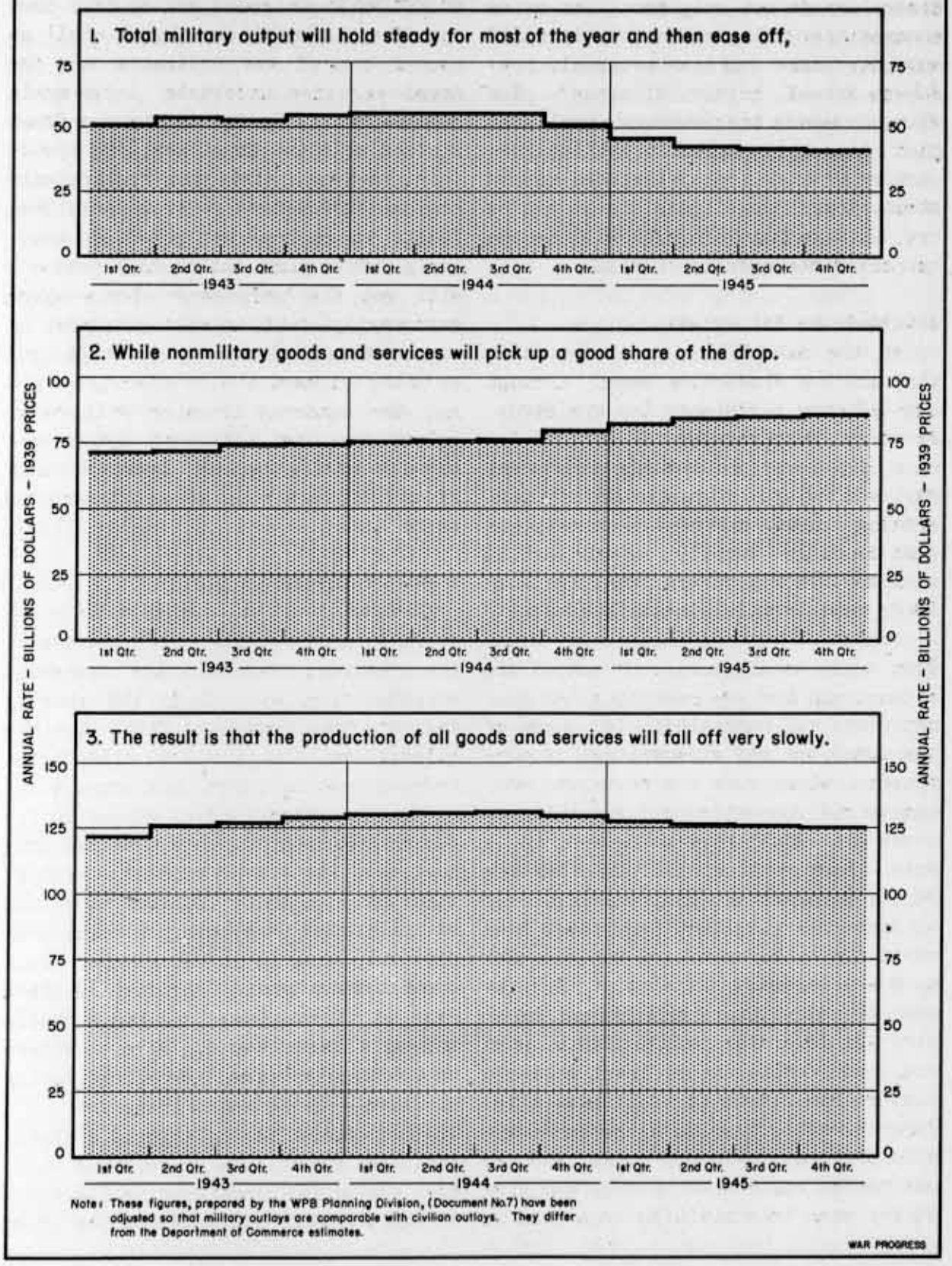
LOG OF RECONVERSION

Even if Germany is defeated in the fall . . .

1. Total military output will hold steady for most of the year and then ease off,

2. While nonmilitary goods and services will pick up a good share of the drop.

3. The result is that the production of all goods and services will fall off very slowly.



Note: These figures, prepared by the WPB Planning Division, (Document No.7) have been adjusted so that military outlays are comparable with civilian outlays. They differ from the Department of Commerce estimates.

WAR PROGRESS

ments after the war in Europe ends so as to avoid, if possible, sudden cutbacks in production—with consequent disemployment not only among the prime contractors but also in the plants of subcontractors and raw materials producers (steel, copper, aluminum). For if requirements are reasonably realistic, then reasonably realistic civilian production schedules can be terraced against them. Thus, the firmer the schedules are, the more firmly founded will be the country's reconversion plans.

BLUEPRINTING THE FUTURE

At the same time, it is important that the War Production Board, through its industry divisions, lay out stage-by-stage reconversion blueprints for such key items as textile machinery, railroad equipment, public utility generating units, business machines, and such consumers' durable goods as washing machines, refrigerators, and, for much later consideration, passenger cars.

Such a reconversion blueprint would list each manufacturer of a specific product and his war contracts and subcontracts (if possible); also, each of the suppliers and subsuppliers of components, along with his prime war contracts and subcontracts. And this contract data would have to be kept up to date. Such a blueprint would serve a double purpose: not only would it help to dovetail civilian resumption into munitions cutbacks after the cutbacks have been ordered, but also it might be used by the military procurement agencies to determine which plants, when cut back, would cause least economic dislocation. Thus it would have a before-and-after bearing on the reconversion pattern. It would point to which war plants could most readily and fittingly come into civilian production.

Which Plants First?

NO SET RULE or rules can be laid down for determining which plants shall be closed out of war contracts once the armed services undertake large-scale readjustments of programs to a one-front instead of a two-front war. As heretofore, however, strategic requirements can be expected to control decisions. Plants which have met schedules regularly, which turn out an AA-1 product, will get the call over plants which customarily fail to meet schedules or plants whose products do not always come up to the highest of high specifications. And the tendency likewise will be to select the most efficient producers—those requiring the least labor per unit of output, hence those whose prices tend to be low.

A NEW CRITERION

However, there will be exceptions to every rule. For a new criterion enters the equation. Formerly the paramount consideration was: Could the company deliver the goods—and fast? Now the effects on the civilian side of the economy must be taken into account.

Thus, suppose a plant is not an efficient producer; suppose also that production of its prewar product is prohibited by an L order; suppose also that it is the major plant in a particular city and that if it closed down acute unemployment would result. In that case, if the armed services had a choice between this company and several others on a particular item, the effect on the civilian economy might govern.

Then there is the case of a highly efficient plant in an overcrowded area. Even though its labor cost is low, even though it meets schedules on the nose,

it might be more helpful to the war effort as a whole to shut it down and let its workers drift into less-crowded areas.

Or there's the case of government plants and nongovernment plants making the same product. If there is a choice, presumably the private plant will be released so that it could re-engage in civilian production as soon as possible —unless here again it could not reconvert because of limitation orders and its closing would cause a labor problem.

FULL OR PARTIAL RESUMPTION?

Sometimes the release of plants may be indicated by civilian needs—especially after reconversion is well on its way. Thus, suppose it seems reasonably safe to embark on the commercial production of refrigerators. In that case, in making cutbacks the procurement agencies might try to release facilities of companies which are prime manufacturers of refrigerators or which make parts and components (assuming always, of course, that officially approved munitions schedules are not endangered).

This will be particularly important if the civilian agencies decide that it is better to start up one civilian industry full tilt rather than several industries. Suppose, for example, there are sufficient materials, components, and manpower to permit either (1) full resumption of refrigerator output or (2) partial resumption of refrigerators, washing machines, electric ironers, and miscellaneous electric appliances on a quota basis.

Letting one industry start up full would be simpler from an administrative standpoint. Rationing problems—how to dispose of the finished products—would be less pronounced. Allotting materials to each manufacturer would also be less difficult—you'd have to schedule the flow of materials and parts to manufacturers if refrigerators, washing machines, etc. started up on a limited basis. That would hardly be necessary if provision were made for unlimited production—then all manufacturers would be on their own to get while the getting's good. Moreover, full-scale production of one item would result in lower per unit costs than limited production of many items.

But essentially, two factors would prevail in any such decision:

1. Could the decks be cleared for a single industry to start up?

2. Would civilians be better off with limited production of several items or with large-scale resumption in only one item?

Thus, cutting back war production so as to ease the transition requires the combined efforts of the procurement agencies and civilian war agencies, primarily WPB. The war agencies, naturally, will determine which programs they want to reduce or eliminate; from that, they will pick the plants to be cut back. At that point, however, WPB —with local economic conditions or reconversion possibilities in mind—would be able to indicate which plant cutbacks would be most desirable from the civilian standpoint.

WANTED: SOME SLACK

There is a danger that industry, labor, and local community groups may insist that all plants, as soon as they are cut back, should be permitted to embark on a civilian career. The plea will be "full employment": Why shouldn't we make refrigerators or washing machines if we have the manpower and the facilities?

Such arguments, however, should be judged by their effects on the economy generally, not solely on local conditions. Right now, the United States

is operating above its normal capacity —long hours, two and three shifts, Sunday work; housewives are in industry, students have left school, and so on. As war production drops off, it would seem more desirable to let some slack creep into the economy—to let housewives return to their sinks, to let workers knock off Sunday work, to cut down on overtime and thus spread the remaining work. This would result in some production loss, but it would certainly tend to increase the efficiency of workers. Furthermore, it would lower workers' incomes in gradual stepdowns toward the wages they are likely to get after the war, when overtime pay will not be so abundant.

Competition's Fluctuating Focus

Theory of equality—let all companies start at once—has acceptance now. But changing conditions—idle men and machines—may break it down later.

RIGHT NOW, it is generally taken for granted that when reconversion begins all competitors should be put on an equal footing. The principle seems altogether reasonable: it would be unfair to permit Company A to go into civilian production of electric refrigerators while Company B, a strong competitor, was working on munitions. The effect would be to penalize the war plant.

This philosophy was used in the flatiron case (WP-Jan1'44,p1). Production of the authorized 2,000,000 electric flatirons was divided among all the firms in the industry, with each getting a quota based on its prewar share of the market. A firm still tied up in war work could subcontract its quota to another company. No newcomers were allowed in.

But this formula, which seems altogether reasonable today when applied to flatirons, may prove to be altogether unreasonable in other instances. Consider the case of such a complicated product as washing machines, in which leading companies have their own models with their own special sales attributes. Would Bendix, say, be willing to allow some smaller company to make a washing machine to be marketed under the Bendix label? And, unlike flatirons, it would hardly be practical to ship the jigs, dies, and fixtures for such a large and complex item as a washing machine to some smaller company for duplication of the Bendix product.

WITHOUT BENEFIT OF CONTRACT

Moreover, the start-all-at-once formula will lose its most ardent supporters as those supporters lose war contracts. Today most big companies in major trade-name industries are prepared to fight for the prewar-status formula. But there could be a breaking of ranks when some of these companies have idle manpower and idle plant. If at that point components are easily obtainable without disrupting war work, the companies concerned might think it wasteful to keep a plant down just because other companies in the industry aren't able to start up. And these companies will be supported by their local chambers of commerce, their mayors, and their Congressmen. Labor, too, will join in the assault on the formula.

Such pressures will be intensified by new firms wishing to enter an industry. If the prewar status is to be frozen, it follows logically that newcomers must be kept out—at least until

full and unrestricted production is possible. However, industrial capacity has been enormously expanded in the last four years, and when these newborn companies run out of war contracts, they are bound to explore prewar products—refrigerators, washing machines, air conditioning, automobiles, etc.

The metal-working equipment of airplane plants is particularly adaptable. And if a big plant in an isolated area runs out of war work, the pressure to get into prewar production will come not only from the management but also from labor and the community. And if it so happens that it wants to get into the refrigerator industry, say, and it also so happens that an old-line refrigerator company is out of war contracts too and wants to get back into refrigerators, then it is not unlikely that the old company will align with the newcomer to break the status-quo formula.

SMALL-BUSINESS DILEMMA

Again, rigid adherence to the status-quo principle, with its assignment of quotas, can work a great hardship on some of the small companies. Suppose only 20% of prewar production is to be permitted. Large companies, especially if cushioned with war contracts, probably could afford to take on this limited amount of business. But small companies might not. This was strikingly brought out when small truck companies protested that their recently allotted quotas of civilian trucks were below the break-even point.

Furthermore, a year or so from now the competitive problem will take on a different hue. Today, most companies are swamped with war orders and can't see getting back to prewar products for a year or more; so naturally they are against resumption of civilian production. But later on—after the war with Germany is won, after more materials, labor, and facilities are released from munitions output—they will see that they, too, will be able to get going on peacetime products at a not too distant date. Hence they will not be too averse to letting other companies get started, particularly if those other companies are the smaller ones in the field.

Dealing out Surpluses

THREE TYPES of government-owned property will have to be disposed of after the war: stockpiles of raw materials, surpluses of manufactured goods (blankets, shoes, jeeps, etc.), and industrial facilities. Each will present its own peculiar problems.

The magnitude of the government-plant disposal problem has already been determined. Most of the plants have been built. What remains is to decide how and to whom to dispose of them. Not so in the case of raw materials. Raw materials stockpiles are still in the development stage, and how high they will be at the end of the war depends on decisions made currently (WP-Jan8'44,p1).

Raw Materials

In the case of aluminum, for example, WPB has been curtailing production so as to keep the stockpile from becoming overlarge. In the case of copper and zinc, import priority ratings have been lowered. Still to be decided is whether premium payments on domestically mined ores—copper, zinc, lead, etc.—are to be continued and for how long.

Essentially, the problem then revolves around these alternative questions: What represents a safe stockpile to meet military needs? What are the risks of having a burdensome store of materials on hand when the war ends?

As they stand today, most stockpiles

of raw materials are relatively small—for lead, for example, only 200,000 tons compared to a 1939 consumption of 667,000; for molybdenum, 4,000,000 pounds against a 1939 consumption of about 25,000,000; for nickel, 1,000,000 pounds against 100,000,000.

Even where stockpiles are large—as in manganese ore, of which the government today nolds 1,000,000 tons as compared to a 1939 consumption of 600,000; or in industrial diamonds, 5,000,000 carats against a 1939 consumption of less than 2,000,000; or, most strikingly, in quartz crystals, of which we consumed only 67,000 pounds in 1939, but own 4,600,000 today—the situation is not so serious as it may superficially appear.

Postwar demands for most materials will probably be much greater than in 1939. The country will be producing and consuming at a higher level. In some critical commodities, moreover, the prospect is that permanent stockpiles may be maintained—especially of imported materials, such as tin and manganese ore—just in case of another war.

Finished Goods

The size of surpluses of manufactured goods and equipment which will be held by the armed services is similarly indeterminable. From now on, that will be decided by the rate of procurement versus the rate of consumption.

After the last war, the government sold nearly $5,000,000,000 of manufactured goods; it seems safe to assume that disposable surpluses will be several times as large after this war. And they will include everything from heavy trucks, and maybe even aircraft, to woolen gloves and aspirin tablets.

A very large part of such surplus goods will be in Europe and the Far East at the end of hostilities. Most of this will probably be used for relief and rehabilitation abroad; indeed, a considerable part of the stocks still in warehouses at home will probably be sent abroad too.

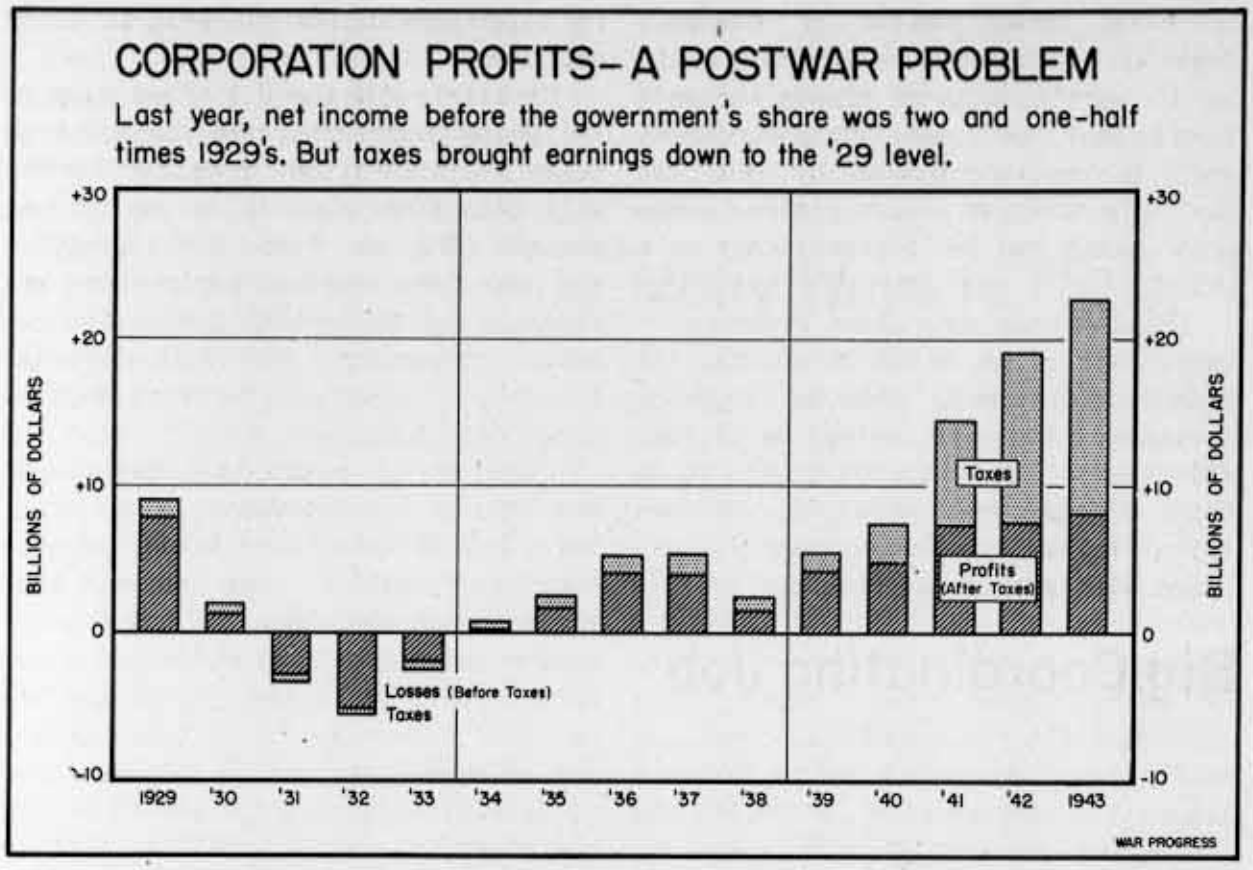
What remains can be sold either to middlemen for redistribution or directly to the ultimate consumer through government stores. But since the latter would mean government competition with private business, this would probably be politically unacceptable.

The rate of disposal of surpluses, whether of manufactured goods or of raw materials, presents more serious problems. If surpluses are sold at once for whatever they will fetch, they would cause falling prices and perhaps unemployment. Even if they are doled out piecemeal over a period of years, that would exert a permanently depressive effect on the market, much like the Federal Farm Board's holdings of wheat during the twenties. There are two ways of minimizing these dangers. First, holding stockpiles as reserves for another war. Or, secondly, setting them up as part of an "ever-normal" inventory plan for stabilizing prices of basic commodities: building government stocks when prices are falling, putting them on the market when prices are too high. If either policy is settled on, it follows that current purchasing programs would have to be guided accordingly.

Government-Owned Plants

How government-owned plant is disposed of will have an even profounder effect on the U.S. economy than stockpiling policies.

The government has invested more than $15,000,000,000 in about 2,500 industrial projects; it owns almost one-quarter of our industrial plant, including 90% of all aircraft capacity, about 98% of the synthetic rubber plants, almost all of the magnesium plants, and the bulk of



all shipbuilding and aluminum capacity. It will have an important position too in steel, chemicals, machine tools, machinery and electric equipment, and other industries. Considerably more than one-third of all facilities in our metal and metal-working industries will be government owned.

However, as WAR PROGRESS noted recently, some 40% of the government-owned capacity will not be convertible to civilian production (WP-Janl'44,p4). Most of this—shell-loading and ammunition plants, many shipways, etc.—will either be kept as standby for the next war or for storage, or be scrapped or boarded up as inconvertible. The armed services will probably decide to keep some of the convertible plant as well—aircraft, especially. Attempts will be made to sell the rest to private industry.

This raises serious issues.

About $7,000,000,000 of government-owned facilities is under purchase options to the operators. But 70% of the government's investment is in plants costing $10,000,000 or more. Besides, option prices were based on wartime costs and are likely to be high relative to the postwar earning capacity of most facilities. It seems doubtful, therefore, that many options will be taken up, and even then only by the largest companies. If, as a consequence, plants are sold at auction or at negotiated prices, government may recapture only a fraction of its investment.

For these reasons, the Defense Plant Corporation is considering a lease arrangement for a trial period. The lessee would be granted an option to buy at a price based on the demonstrated earning capacity of the facility during its trial run.

There is also a monopoly problem. If only large companies can buy plants,

increased concentration of economic power will result. An alternative would be to partition large plants and sell them in small sections. This would give small business a chance to buy. But this has only limited possibilities, since most plants can be operated only as a unit.

Until we know more about government-owned facilities, we cannot effectively plan their disposal. Once an inventory is taken, clear policies can be adopted and some of the uncertainties about their disposal will be removed. Industry will then be able to make its own plans with greater confidence.

Big Coordinating Job

THOUGH WPB's Requirements Committee authorized the resumption of flatiron production, a number of producers may be unable to get started on their quotas; they contend that OPA's price ceilings are too low to cover their costs. Officials of WPB and OPA now are trying to work out a price scale which will be fair to manufacturers and consumers. Such problems—of overlapping responsibility—will arise with increasing frequency as the United States moves into the reconversion and postwar periods. Today the necessity for winning the war facilitates coordination—the objective is clear. Later on objectives may be more dispersed, and the need for a coordinated and established policy will then be greater.

The needs for coordination run the gamut of almost every war activity. At some future date it may be possible to revise the rationing rules on gasoline or fuel oil. Numerous agencies will be involved: OPA to administer the rationing; PAW to determine the supply; ODT to say whether tank-car space is available; WSA to figure out tanker shipments; WPB to fix allotments of steel for pipe lines and for oil-well drilling equipment.

Similarly with the U.S. food supply. The State Department, the Foreign Economic Administration, possibly UNRRA, will determine what is to be shipped abroad. The War Food Administration and the Department of Agriculture are directly concerned with quotas for domestic production. WPB must make allotments of materials for farm machinery. And so it goes.

Manpower is a critical example of overlapping jurisdictions. The Army, Navy, and Maritime Commission, to protect their programs, must see to it that the manpower they need is not drained away by industries that resume civilian production. It is the job of the War Manpower Commission to see that workers are on hand in war production areas and to determine which areas are tight and therefore not open to civilian production. And it is the War Production Board's job to see that civilian production is not resumed in such tight labor areas. Coordination of policies and procedures in this field is crystallizing in the Manpower Priorities Committee, on which the procurement agencies, WPB and WMC are represented. That is the problem today.

SHIFTING PROBLEM

Later on the manpower problem will cut in two different directions at once. After the war with Germany, for example, the coordinating job will be to see that sufficient workers are available to keep war production on schedule; yet at the same time, some diversion of workers from war industries to civilian-type products will be inevitable as munitions programs are cut back.

At a still later stage—probably toward the end of the war with Japan—the problem will change radically. War production presumably will not be the dom-

inant force in the U.S. economy. Civilian production will have to take over an increasingly large share of the job of providing employment. At that time, demobilization of both troops and workers in war industries will raise the problem of finding jobs, of re-educating workers and soldiers for peacetime employment, of tiding workers and soldiers over the interim period of joblessness. All of which will involve the Federal Security Agency, the United States Employment Service, and the Veterans Administration and would call for advanced planning with WPB, WMC, Selective Service, and the armed forces.

As part of this same problem—of providing jobs when demobilization comes—the speedy termination of war contracts on a clear, uniform basis is urgent. Already the Baruch Joint Contract Termination Board, on which the Army, Navy, Maritime Commission, Treasury, and WPB are represented, has developed a uniform termination clause for use by all war procurement agencies. The committee is now working on uniform cost determination procedures, etc., so that contractors will know where they stand in settling claims.

BUSINESS, LABOR, CONGRESS, ALL

Since delays in the settlement of claims will still be unavoidable, some firms, especially small ones, will be short of working capital. And this will bring the Federal Reserve Board, the Reconstruction Finance Corporation, and possibly the Smaller War Plants Corporation into the problem. Already the Reserve Board is backing commercial banks in making V-T loans to war contractors.

The overriding postwar job will be to keep the economy on an even keel; it will require the broadest coordination and planning by all major government agencies—Congress, the Treasury, OWM, WPB, WMC, the Department of Commerce, Foreign Economic Administration, OPA, Federal Reserve Board, Reconstruction Finance Corporation, State Department, and so on. And business, labor, and other groups too. There's hardly a limit.

Many Ways to There

THE UNITED STATES is a big country—3,000,000 square miles, 135,000,000 people, 48 states, and more than 1,000 towns and cities of 10,000 inhabitants or more. Such a heterogeneous collection of persons and communities—with various cultures, various backgrounds, and various social and economic aims—is bound to produce a variety of social and economic philosophies. Yet on one goal the nation seems fairly well agreed: The postwar world must produce a fairly high level of employment and a fairly satisfactory standard of living for all. Usually a level of 54,000,000 persons actually employed is talked of—as against some 45,000,000 in 1940; also a gain of about 50% in the national income.

But there is very little agreement on how those goals are to be achieved. Labor groups will take one approach, businessmen another, farmers a third. And wheat farmers will take a different view of things from cotton farmers; auto manufacturers will have a different idea of what's right from railroad executives or retailers; and the leader of the coal miners won't always take the same means to an end as the leader of the auto workers.

Yet all of these groups will participate in framing the decisions which will shape and precondition postwar America. They will participate not only through their representatives and senators but also as members of the government. And this can be of critical consequence.

As members of a government agency,

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program—Checks paid (millions of dollars)	1,627	1,477	1,499	1,425	1,531
War bond sales (millions of dollars)	651	322	272	275	378
Wholesale prices (1926=100)					
All commodities	103.1p	103.0p	103.0p	102.8	101.8
Farm products	122.6	121.9	122.1	124.3	117.7
Foods	104.7	104.6	105.1	106.4	105.0
All other than farm products and foods	98.0p	97.9p	97.8p	97.1	96.3
Petroleum:					
Total carloadings	51,499	48,442	43,740	57,729	50,631
Movement of cars into the East	22,187	21,811	18,513	31,066	25,879
Total stocks of residual fuel oil (thousands of barrels)	52,857	53,431	57,330	66,877	71,454
East coast stocks for civilian use (1940-41=100 Seas. Adj.)					
Gasoline	43.2	41.9	42.5	n.a.	n.a.
Kerosene	47.7	45.3	50.8	|	|
Distillate fuel oil	89.8	87.3	84.1	|	|
Residual fuel oil	65.9	67.9	68.0	n.a.	n.a.
Bituminous Coal:					
Production (thousands of short tons, daily average)	2,108p	2,125	1,904	2,025	1,867
Exports (no. of freight cars unloaded for export Friday, excl. grain)					
Atlantic Coast ports	3,020	3,183	2,029	2,580	1,306
Gulf Coast ports	397	438	327	335	330
Pacific Coast ports	1,284	1,328r	1,002	1,304	769
Steel operations (% of capacity)	99.8	99.4	95.9	97.7	99.5
Department store sales (% change from a year ago)	+8	+15r	-7	+11	0

p preliminary n. a. not available r. revised

they may not always have a clear-cut conception of what the policy of that particular agency is. Indeed, the agency may have no well-defined policy. After all, during wartime, the government organization mushroomed. Persons from all walks of life were thrown together, and there has not been time to fuse organizations with common viewpoints.

END OR MEANS

In dealing with reconversion problems persons in OWM, WPB, the armed services, OPA, ODT, and even the old-line agencies will have to handle matters on which no policies have been worked out, no established points of view developed. Inevitably they will fall back on their particular ideas of how to attain the overall goal of high postwar employment. For example, a person with a labor background will favor a different policy on aluminum cutbacks, say, than a manufacturer. The labor man tends to want full employment all the time; the manufacturer is conditioned against large stockpiles. Yet both try to act in the public interest.

Therefore it is important, during the crucial reconversion period, to screen out policies and practices which further a particular means to the end, rather than the end itself. As a corollary, actions that seem desirable in the short run may have to be ruled out as totally undesirable in the long run.

It follows that all policies, decisions, and regulations must be examined from the broad viewpoint: Do they seem to be in the public interest? Do they seem to be directed toward achieving a high level of postwar employment and a workable level of national income?