

WAR PROGRESS

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WAR PROGRESS

C. F.
War Production Board

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x Evansville: Test-Tube Town
Aluminum--No Place To Go?
Petroleum Progress

X1050
X56
X4735

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WAR PROGRESS

Prepared in the War Production Board

Donald M. Nelson, Chairman

War Progress is a confidential report designed to provide a coordinated and continuing picture of the overall war program for the various war agencies. To this end, it presents, analyzes, and interprets basic statistical and economic information, and from time to time examines the pros and cons of controversial questions.

Although War Progress is an official publication of the War Production Board, statements in it are not to be construed as expressing official attitudes of the Board as a whole, or even of individual members. Conclusions, whenever reached, should be considered editorial conclusions.

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Evansville: Test-Tube Town

Recent large-scale cutbacks and more inoffering point up reconversion, postwar problems of a typical war-congested community with 50,000 extra workers.

EVANSVILLE, Ind., might serve as the Middletown of wartime America. At the start of the war it became a national test case for "priority unemployment": the first L and M orders cost 20% of its factory workers their jobs. Then it got into war work with a vengeance, boosted its industrial labor force from 18,000 to 67,000. Now it has already had a taste of large-scale cutbacks and faces the prospect of more—a preview of the postwar problem of what to do about its 50,000 additional workers. It makes a good laboratory for studying a war-boom town: the growing pains of yesterday; the mixed, shifting manpower problems of today; the reconversion problems of tomorrow.

PREWAR STATUS

Before Pearl Harbor, Evansville's main industry was mechanical refrigeration. Three big plants employed up to 8,000 workers altogether: Servel (makers of the Electrolux), Sunbeam (the Cold-spot), and Hoosier Lamp and Stamping (refrigerator accessories). Also important were the Chrysler and Briggs automotive plants. Miscellaneous industries included wood-working shops: the Evansville area accounted for 30% of U.S. wooden office-furniture production.

Now all its major plants are making chiefly munitions; they got nation-wide publicity for their enterprise in going

out after war contracts, training their relatively unskilled workers. In addition, big new war plants have gone up. Where there was a mudbank on the Ohio River there is now the Missouri Valley Bridge and Iron Company shipyard, the country's biggest builder of tank landing ships, employing 18,000 workers. A government-built, Chrysler-operated ordnance plant with a peak employment of 12,500 has a capacity for turning out more .45 ammunition in a week than the U.S. produced in a year before the war. A Republic Aircraft plant employs 7,000 workers, is turning out better than 250 Thunderbolts a month.

Most of the new workers were recruited from the surrounding country; some com-

AIRPLANES CUT AGAIN

THE PLANE PROGRAM has been reduced again—4% in weight for the rest of 1944, 9% for 1945. Lower-than-expected battle losses are paying off, and now the program virtually levels out. Outstanding drop is in Liberators; from the current level of nearly 1,000 monthly, output is cut to 208 a month in the last half of '45. Ford, Willow Run, is slashed 50%; North American, Dallas, goes out of the program next March. The decline in fighters is 6% for the final six months and 7% in 1945. The A-20 Boston leaves the program in September. This makes possible a sharp rise in the Skymaster at Douglas, Santa Monica—almost offsets cuts in the Commando at Higgins, and the R2Y at Consolidated Vultee, San Diego.

mute as much as 100 miles. But Evansville's own population jumped from 100,000 to 125,000. It became a typical war-congested community, with inadequate housing, transportation, and other community facilities. It also picked up, incidentally, a racial problem: there's serious tension between Negroes (about 10% of the population) and in-migrants from Kentucky.

FROM TIGHT TO LOOSE AREA

Last December Evansville was a Group I, or critical, labor area. But then the big cutbacks began at Chrysler Ordnance and at Sunbeam, which made tools and shell cases for Chrysler; the ordnance plant is now being held as a stand-by. As a result, more than 10,000 workers were laid off over the next few months. By March 1, Evansville was dropped to a Group III, or loose, labor area—but it was not finding its situation easy.

At first, the U.S. Employment Service and the War Manpower Commission had no trouble in referring workers to new war jobs (WP-June 3 '44, p7). Republic Aircraft, for example, hired 900 of Chrysler's workers on the spot; the Missouri Valley shipyard needed thousands more to meet its stepped-up LST schedules. Altogether, an estimated 90%, or 9,000, of the laid-off workers remained in the area,

and of these probably 6,000 found jobs. The rest—chiefly women—either stayed home or are still looking for work. (The War Production Board has arranged for questionnaires to be sent to a sampling of the original 10,000 in order to get more information on the pertinent question: What happens to released war workers?)

Statistically, therefore, Evansville has a labor surplus. Nevertheless local WMC officials report that it's harder to fill jobs now than when Evansville was a tight labor area. Missouri Valley had trouble all along in getting enough men. When Sunbeam recently got a new contract to make rifle-grenades, it had to go outside the city again to recruit workers.

UNBALANCED SURPLUS

Immediate reason for this anomaly is that Evansville's surplus is unbalanced, consisting mostly of women and "problem" males; there's still a shortage of men workers, especially skilled ones. But the underlying reason is that jobs now available are generally less desirable, pay less money. The USES has practically given up its referral system because workers have been shying away from immediate referral, preferring to shop around first. And women, especially housewives, are rejecting jobs in less essential industries offering only 38 or 40 cents an hour—or little more than unemployment compensation, which pays up to \$18 a week for 18 weeks.

Under Social Security regulations, such benefits can be denied if a worker refuses to accept "suitable employment." This, however, raises a question that's going to trouble a lot of communities: Just what is "suitable"? Numerous appeals have been filed by Evansville workers who were penalized for turning down disagreeable jobs or jobs paying

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KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program-Checks paid (millions of dollars) -----	1,685	1,601	1,826	1,675	1,616
War bond sales - E, F, G, (millions of dollars) -----	217	274	169	199	229
Money in circulation (millions of dollars) -----	22,333	22,112	21,725	20,135	17,237
Wholesale prices (1926=100)					
All commodities -----	104.0 ^p	103.9 ^p	103.7 ^p	102.9	104.0
Farm products -----	125.0 ^p	123.9 ^p	122.4 ^p	122.0	127.6
Foods -----	105.4	105.2	104.6	105.9	110.9
All other -----	98.7 ^p	98.7 ^p	98.6 ^p	97.8	96.9
Petroleum:					
Total U.S. stocks* (thousands of barrels) -----	412,600	410,434	410,610	429,621	432,669
Total East Coast stocks* (thousands of barrels) -----	61,217	59,537	57,308	67,166	46,786
East Coast receipts (thousands of barrels, daily average) -----	1,825	1,786	1,606	1,711	1,357
Bituminous coal production (thousands of short tons, daily average) -----	2,082	2,096	2,025	2,122	524
Steel operations (% of capacity) -----	97.1%	97.8%	99.4%	99.3%	97.8%
Freight cars unloaded for export, excluding grain (daily average)					
Atlantic Coast ports -----	3,032	3,200	3,234	2,924	2,308
Gulf Coast ports -----	433	543	381	558	326
Pacific Coast ports -----	1,556	1,666	1,609	1,260	1,377
Department store sales (% change from a year ago) -----	* 2%	7%	+ 31%	0	+ 29%

p. Preliminary *Excludes military-owned stocks

considerably less than they had been making. The Indiana Employment Security Division has been studying the question, but has not yet come out with a formula.

Nor do the jobless want to pull up stakes and leave: when another ordnance plant at La Porte, Ind., tried to recruit workers in the Evansville area, only a dozen or so responded. In short, Evansville illustrates why it's hard to match manpower supply and demand at this shifting stage of the game.

NEW PHASE IN PROSPECT

Soon, however, it may enter a new phase. More cutbacks are in prospect for Evansville—in particular, for a subcontractor in the Corsair program (from which Brewster was dropped). This alone might mean the release of some 2,200 workers. And other war plants in Evansville can no longer absorb them. Republic doesn't need its present force

of 7,000 workers to meet its Thunderbolt schedules, currently stabilized at 250 planes a month; it won't replace quits until its force has fallen to 6,000. Likewise Missouri Valley shipyard isn't likely to enlarge its force now that the pressure is off the landing-vessel program.

Hence, unless new war contracts are sent into the area, Evansville may be one of the first war-boom towns to face a serious unemployment problem, to look for more civilian business—to force the issues of reconversion. Since its wood-working industry can hardly take up the slack while lumber is tight, its chief resources remain its refrigerator and automotive plants. But the reconversion of these must await decisions in Washington on policy for the industries as a whole.

Some temporary unemployment would be unavoidable: it would take some months

for these plants to tool up and rebuild assembly lines. Servel is in the best shape for a quick start. Its gas refrigerator requires no freon, fractional horsepower motors, or any other components now critical except controls; it estimates that it could start turning out up to 30% of its prewar output as soon as it stops war work, up to 65% within three or four months. It's also all set to go with a new air-conditioning unit for homes.

CUTBACKS WILL HIT HARD

In any event, Evansville is pretty sure to be hit hard when cutbacks come on a large scale. Almost half of its workers are engaged in shipbuilding, aircraft, and ordnance—industries whose postwar prospects aren't bright. Republic Aircraft hopes to keep on making planes after the war, but at best would have to drop half of its present force; the Missouri Valley shipyard might make ships for foreign countries but more likely will become a mudbank again; Chrysler believes that no use can be made of the new ordnance plant, except possibly as a temporary hospital for returning service men. Townspeople—especially labor leaders—are trying to find work for these facilities, but they can't count on it.

QUESTIONNAIRE SHOWS TREND

To size up the employment problem, the Evansville Postwar Planning Council—made up of representatives of business, labor, agriculture, and leaders of civic organizations—has sent questionnaires to workers and received 18,000 answers. These indicate that three-fourths want to continue working in Evansville; most of the rest are undecided, and only 6% want to leave. More than half want to work in factories. (Out of 1,750 women who had been engaged in housework before

the war, only 450 wanted to return to the home; 1,100 want factory jobs.) Including returning soldiers, the council figures that over 40,000 workers will want factory jobs—against the prewar factory employment of 18,000.

The council is counting on an expansion in all local industry, aiming at an increase of 30% in total employment in stores, offices, factories, etc. This would still leave out in the cold at least 10,000 war workers. However, the case may not be so bad as it looks. Many workers now attracted to factories by high wages, overtime, and the novelty of war work may change their minds when factories go back to a 40-hour week at regular hourly rates. Moreover, some 45% of Evansville's present factory workers live outside the city. Although the city would be affected by unemployment in surrounding towns—it's the main shopping center for a large area—presumably many of these commuters could return to farms or find jobs in other places.

COMMUNITY PLANNING

Meanwhile Evansville is not being simply a guinea pig. It is making plans; it has set aside money for a public-works program to relieve unemployment; it talks of housing projects. Altogether, it is fairly confident that it can handle its laid-off war workers—if it gets sufficient advance warning of cutbacks, and if they don't all come at once.

But it may be overconfident, at least about the inevitable dislocations of the transition period. To what extent these dislocations can be minimized will finally depend on the coordination between the armed services, WPB, and WMC in the handling of cutbacks, the dovetailing of increased civilian and decreased military production.

The Case of the Surplus Aluminum

Despite production cutbacks, relaxations, metal still piles up. Big headache is aircraft—stocks enough for six months' output if European war ends this year.

ALUMINUM is in a paradoxical position. Despite the closing of potlines, despite the end of restrictions on military use, and despite expanded uses in industrial and essential civilian products, new supply has been running ahead of consumption for more than a year and stocks of aluminum ingot have been built up to one peak level after another (chart, page 6). So today's big problem in aluminum—once among the nation's tightest materials—is what to do about the surplus.

This is no sudden problem; it has been developing since the early months of 1943, when statistics first showed a surplus of aluminum ingot in the hands of producers: 35,000,000 pounds at the end of March. Today, the privately held surplus has grown to approximately 140,000,000 pounds; and the government stockpile of roughly 360,000,000 pounds (primary plus secondary aluminum) is 10% higher than called for. In all, current stocks of ingot aluminum, in the neighborhood of 500,000,000 pounds, are equal to more than two months' consumption.

BASIC ORDER RELAXED

In keeping with the transition of aluminum from a tight to an easy metal, the basic aluminum order (M-1-i) was amended in July, 1943, to permit the Army, Navy, and Maritime Commission to use aluminum in benches, bulkheads, lockers, mess tables, kitchenware, ammunition chests, powder cans, deck lights, hand wheels for guns, etc. Later in the year, aluminum was permitted in indus-

trial items such as foundry equipment, bus bodies, internal combustion engines, electric transmission lines, anodizing equipment, instruction plates, miners' lamps, and industrial cooling fans. Even consumers' goods came in for a show; 8,000,000 pounds were authorized to manufacture 400,000 pressure canners.

PRODUCTION CUTBACK

But supply continued to outpace consumption, so production was cut back. Since December, 1943, output of primary aluminum has been cut 25%—from a rate of 2,250,000,000 pounds a year to an estimated 1,700,000,000 pounds. Even after this reduction, however, output is more than four times the industry's top peacetime rate. And though the aluminum order has been liberalized further, the metal continues to pile up.

Oddly enough—at first glance—aluminum is not being given to all who ask for it. Over the past several months, requests for the metal for fence posts, lipstick holders, permanent-wave pads, candy wrappers, advertising signs, percolator baskets, novelty jewelry, etc. have been denied.

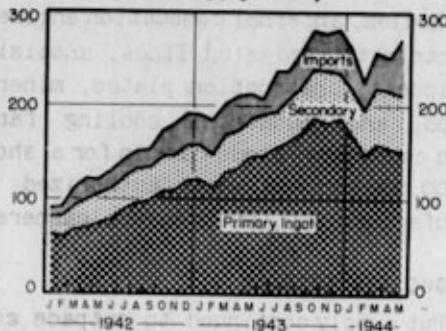
RESUBSTITUTION YARDSTICK

The reason is not that some of these items don't meet current tests for resubstitution: permanent-wave pads of aluminum instead of parchment would yield a better product; percolator baskets of aluminum instead of porcelain-enameled steel would save man-hours; candy wrappers of aluminum foil instead of paper would conserve a critical material. But it is also a question of relative essentiality.

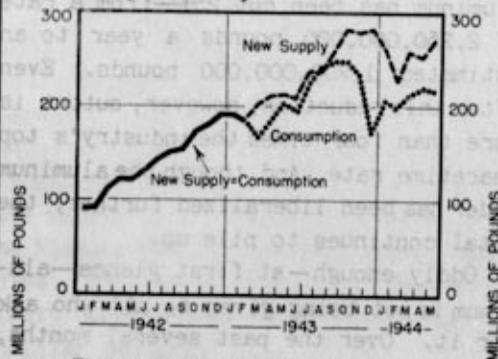
It takes no acumen to determine that aluminum for advertising novelties, let

ALUMINUM STOCKS UP

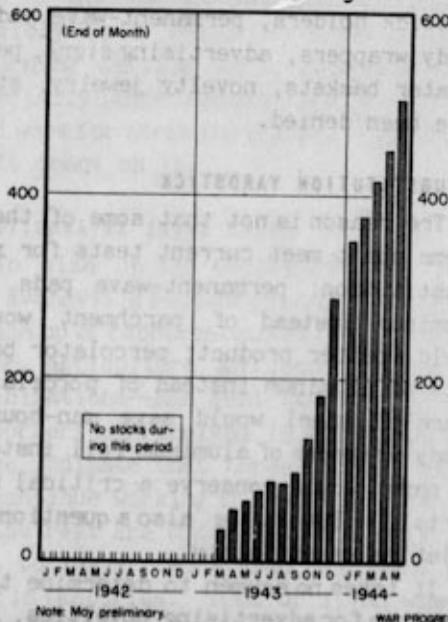
Despite cutbacks in primary ingot output, new supply rises,



And has been outrunning consumption persistently.



Result: Stocks continue to grow.



Note: May preliminary.

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us say, is a nonessential use. But decisions as easy as that are the exception rather than the rule.

Right now, for example, the War Production Board's Aluminum and Magnesium Division is puzzling over a proposal to grant aluminum for closures for cosmetics, oils, bleaches, beverages, and wines, and for cans to package lard, baking powder, cocoa, coffee, spices, tobacco, etc.

On the one hand, this would save critical paper, black plate, and lumber. On the other, it would mean that aluminum—a subsidized metal—would be used to relieve a shortage in paper, while pulp is still being allocated to punchboards; a shortage in black plate, while that metal is still being used for one-quart motor-oil containers; a shortage in lumber, while wood is still going into Venetian blinds.

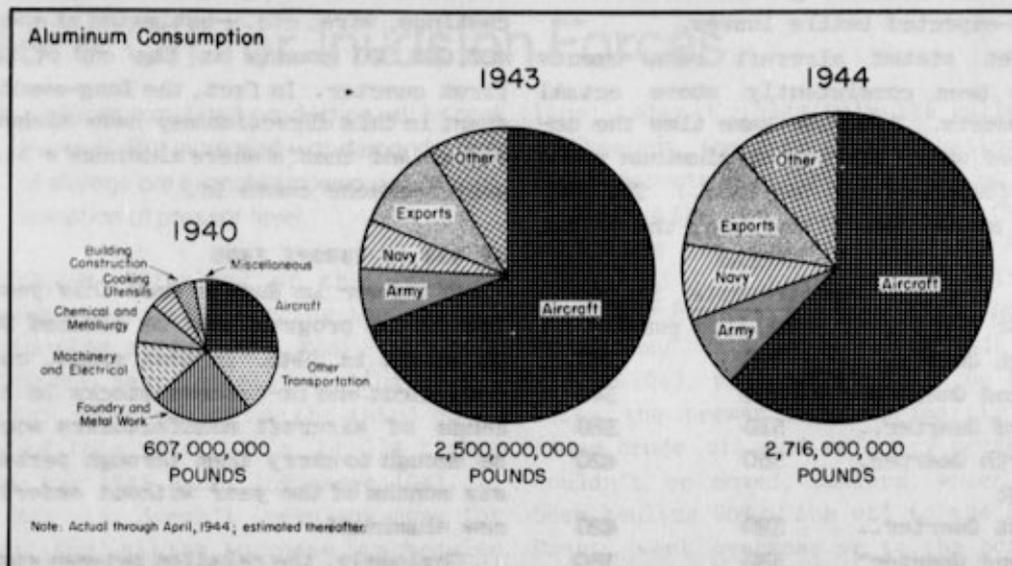
It is also contended that since the war hasn't ended, "surplus" aluminum should go only into "essential" civilian items. But if aluminum closures for cosmetics are okayed, why not aluminum for permanent-wave pads? If aluminum is allowed for coffee cans, why not aluminum for percolator baskets?

NEED FOR CAUTION

Moreover, there is always the possibility of new and unexpected military uses, hence the need for caution in liberalizing controls. The Aluminum and Magnesium Division can speak from experience. About a year ago, it was all set to let cigarette companies use some of the aluminum foil that was frozen back in 1941; no war use had been found for this particular product. Then almost overnight, the Army and Navy came through with a brand-new demand for this foil as an antiradar device (WP-Apr 15 '44, p10). It would have taken several weeks to get foil mills started

PATTERNS IN ALUMINUM CONSUMPTION

Aircraft will still take major portion of this year's total, although less than last year. Army and Navy due to rise; total up 9% over 1943.



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to meet this requirement. But by using idle stocks, the services were able to meet part of their program immediately.

Later in the year, a program was developed to use 25,000,000 pounds of aluminum for aircraft landing mats; about one-third lighter than steel, the mats are for transportation by plane. Right now, the Army and WPB are studying the possibility of substituting aluminum rod for brass rod—critical because of manpower shortages in the brass mills—for shell fuses and boosters. Because of new demands for heavy-gun ammunition, fourth-quarter requirements for the program jump to 120,000,000 pounds of brass rod, 50% above the third quarter. If ballistics problems are solved, some 3,000,000 pounds of aluminum rod (equal, because of its lighter weight, to about 10,000,000 pounds of brass rod) would lift the program out of the danger zone.

But even if there weren't such problems as relative essentiality and unexpected new uses to contend with, the problem of how much will be needed for aircraft—biggest single outlet for aluminum—would remain (chart, above).

Aluminum capacity was built up with an eye to the aircraft program. But back in 1941 and 1942, when aluminum facilities were being expanded rapidly, it was not possible to foresee what would happen in 1943 and 1944.

DECLINE IN WASTAGE

Wastage, or the difference between the amount of aluminum purchased by a given plant and the amount actually used in its finished planes, has gone down to about 10% today as against possibly 25% to 30% two years ago. Estimated requirements for airframe and engine spare parts have been revised downward by more than 25% since 1942. The amount

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of work in process has dropped, and will drop further still, now that the program has leveled off. And, most important of all, original goals have been cut back repeatedly because of lower-than-expected battle losses.

Yet stated aircraft requirements have been consistently above actual shipments. (At the same time the unfilled order backlog at aluminum mills and foundries has declined.) The record since 1943 illustrates the point:

	Stated Requirements	Shipments
	(million pounds)	
1943:		
First Quarter..	370	340
Second Quarter.	490	340
Third Quarter..	510	380
Fourth Quarter.	550	420
1944:		
First Quarter..	520	420
Second Quarter*	530	380

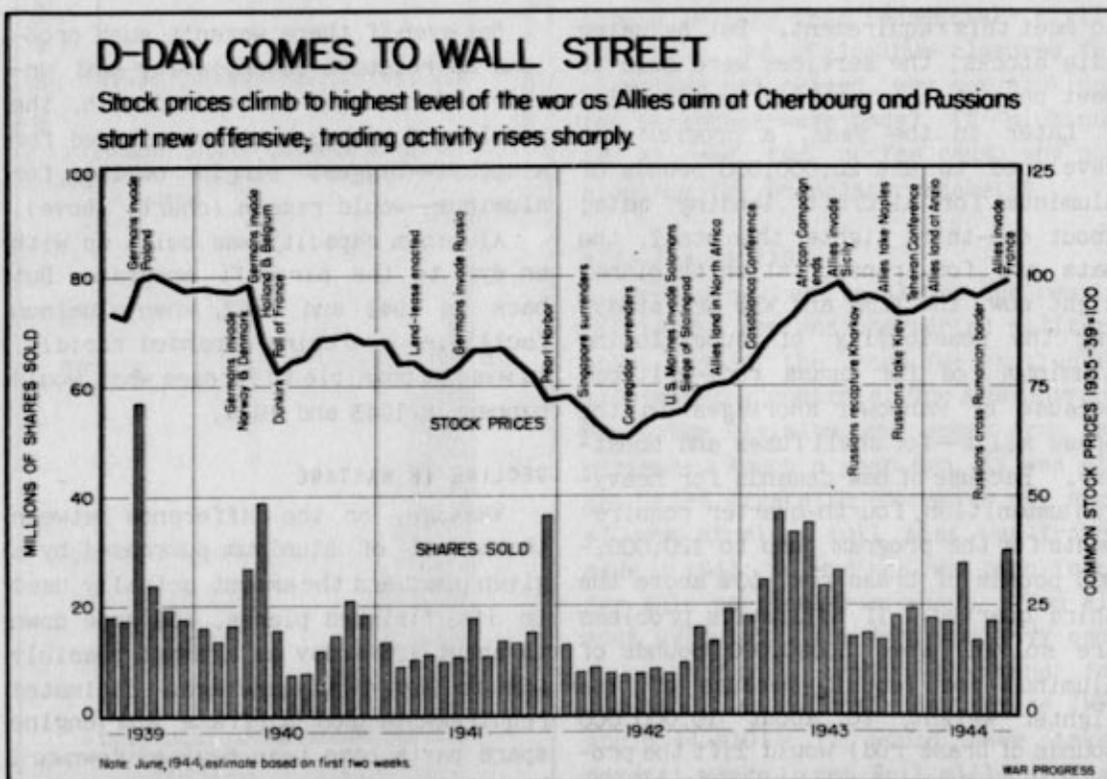
*Estimated.

This divergence is likely to continue. For with further cutbacks ahead, aircraft manufacturers may soon draw heavily on their own stocks of uncut aluminum—sheet, strip, forgings, tubing, rod, castings, wire, etc.—estimated at about 400,000,000 pounds at the end of the first quarter. In fact, the long-awaited start in this direction may have already begun. And that's where aluminum's biggest headache comes in.

IF WAR IN EUROPE ENDS

If the war in Europe ends this year, the plane program may be slashed 35% by weight in 1945. In that event, current uncut and in-process stocks in the hands of aircraft manufacturers would be enough to carry them through perhaps six months of the year without ordering new aluminum!

Obviously, the relation between stated aluminum requirements and real needs



must be a continuing question mark while inventories are high and the plane program subject to change. And under such circumstances, the Aluminum and Magne-

sium Division can never be too sure about how far it can go in closing potlines or in expanding the use of aluminum for nonwar products.

More Oil for Invasion Forces

With pipelines completed, production will hit peak this year. But increased war demands, lack of storage are expected to keep civilian consumption at present level.

PETROLEUM—lifeblood of the invasion forces—is rapidly nearing the all-out production stage. The peak, at about 5,000,000 barrels daily (including imports), is scheduled for the third quarter of this year. This is 11% higher than the 1943 peak, 15% above 1941.

But it doesn't mean any more for civilians; all the increase is scheduled to be absorbed by rising military requirements. The armed forces will take about 32% of the total supply this year, as against 27% in 1943.

Total production of gasoline—the major petroleum product—is scheduled to reach a new high of 1,955,000 barrels daily in the third quarter. But of this the military will take about 37%, as against 33% last year. The civilian allocation for the second quarter of this year was upped 10% over the first quarter to 1,257,000 barrels a day, to meet seasonal requirements of farmers, truckers, construction companies, etc. But this is still 500,000 barrels a day below peacetime use; passenger-car drivers are getting only 43% as much as they consumed in 1941.

The point is that a larger portion of petroleum is now going into aviation gasoline, butadiene for synthetic rubber, and toluene for explosives, at the expense of automotive gasoline. Before Pearl Harbor, a 42-gallon barrel of crude yielded 18 gallons of automotive gaso-

line; today it yields only 11½ gallons.

However, the petroleum situation in most respects is better now than at any time since the outset of the war. Chief reason is the completion of the huge network of pipelines—Big Inch, Little Big Inch, Plantation (from Baton Rouge to Richmond, Va.), etc. During 1942 and part of 1943, production had to be held below the prewar level, primarily because crude oil and refinery products couldn't be moved; tankers, which had been hauling 95% of the oil to the East Coast, went overseas or to the bottom of the sea, and railroad cars couldn't make up the deficit.

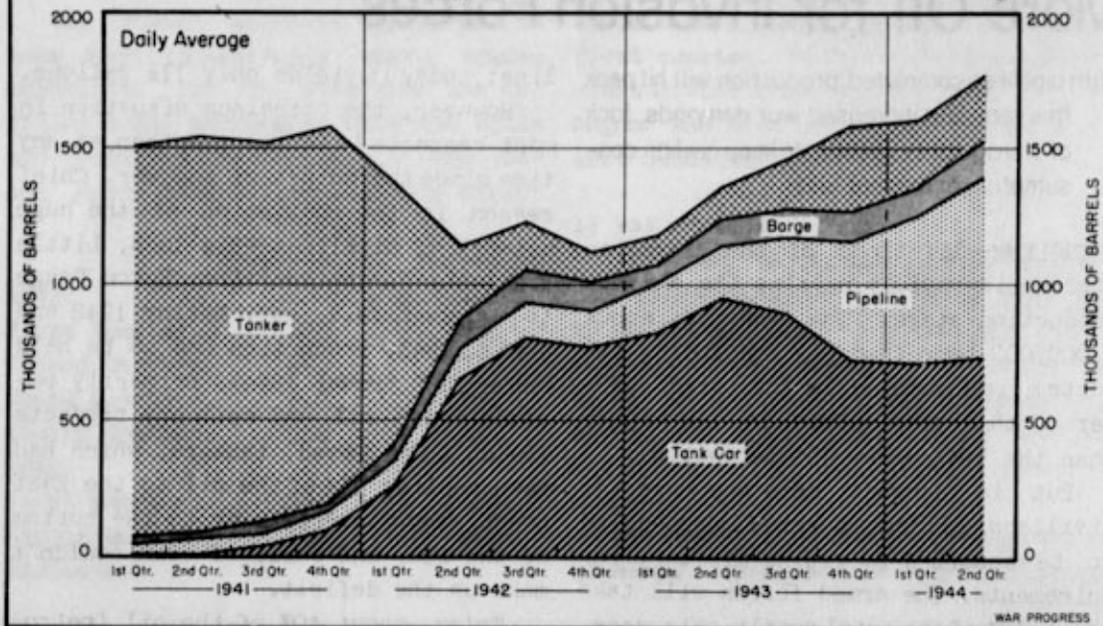
Today, about 40% of the oil (petroleum and petroleum products) delivered to the Eastern Seaboard comes by pipeline. Total deliveries, including tank car, barge, and tanker, have jumped 25% over a year ago to an all-time high of 1,750,000 barrels daily, are scheduled to rise to more than 1,820,000 barrels by the third quarter. As a result, expanded refinery facilities are operating at near capacity, and total U.S. production of the four major petroleum products—gasoline, kerosene, distillate, and residual fuel oil—is at a new high:

	<u>Gasoline</u>	<u>Kerosene</u>	<u>Distillate</u>	<u>Residual</u>
	(000 barrels daily average)			
1941...	1,922	199	518	938
1942...	1,663	185	539	983
1943...	1,672	198	580	1,044
1st. qtr:				
1944...	1,925	224	637	1,255

Now, however, the problem is lack of civilian storage. Reserve stocks,

BY RAIL, BY PIPE, BY SHIP

Second-quarter shipments of petroleum to the East Coast increase 11% over first quarter's. Tank cars haul 41%; piped proportion rises to 38%. Total at new high



particularly of fuel oils, must be built up in slack periods to meet peak seasonal demands and to provide a cushion against transportation difficulties which would cut supply. During 1942 and the early part of 1943, consumption far exceeded production and stocks declined. Now, though output has increased, much of the storage formerly available for civilians has been taken over by the military. On the East Coast, available storage provides such a narrow margin over minimum working levels that the total supply is sufficient to meet only essential, rationed requirements.

WEST COAST CRITICAL AREA

But the situation on the West Coast is even more critical. Stepped-up activities in the Pacific theater have sharply increased military needs for both oil and tankers. Residual fuel-oil stocks in Washington, Oregon, and

western Idaho are near exhaustion, and a campaign has been launched to get large industrial users to convert to coal, even though coal is tight too.

Much of the oil for the fighting forces in the Pacific is supplied from the Caribbean area and goes direct by tanker. The shorter haul from California would save tankers, but California production is short of demand. Moreover, increased shipments to the West Coast from other areas—from a prewar 4,000 barrels daily to more than 40,000—are still comparatively small, though expected to more than double by the third quarter. In addition, new wells are boosting California output of petroleum; the expected rate for June is 897,000 barrels daily, compared to 886,500 barrels last month, and 822,000 in June, 1943. And increased drilling at the Elk Hills Naval Reserve, starting in July, is expected to add another 5,000

barrels daily by the third quarter, and 50,000 barrels by mid-1945.

Another problem is a falling off in the supply of sweet crudes from which come light products—gasoline, kerosene, light fuel oils, and special diesel oil used in submarines, bulldozers, etc. Recent production increases have been mainly in sour crudes, which have a high sulphur content. These now account for about 16% of the total U.S. supply of crude. But refining of sour crudes requires alloy (corrosion-resisting) equipment which is expensive and scarce; it constitutes less than 5% of the refining facilities in the country. The problem has been partially solved by a few small refineries in the Midwest; by adjusting facilities, they have been able to blend sour crudes up to 10% with sweet crudes.

40% FOR GASOLINE

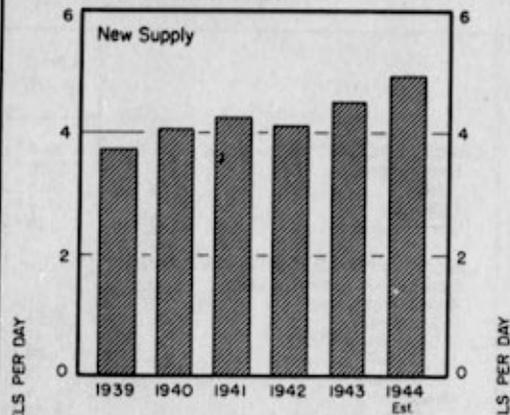
About 57% of the total supply of crude petroleum is now being converted to light products; gasoline alone accounts for two-fifths:

	% Yield From Petroleum
Gasoline (all grades)....	40%
Residual fuel oil.....	27
Distillate fuel oil.....	13
Kerosene.....	4
Lubricants.....	2
Asphalt.....	3
Butadiene, coke, toluene, wax, & other by-products	4
Loss in production.....	7
Total.....	100%

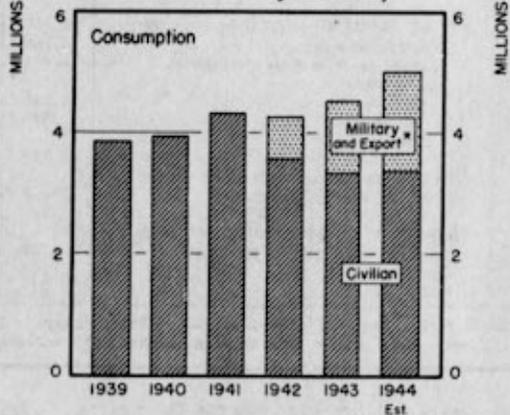
The all-important 100-octane gasoline was being produced in May at the rate of about 400,000 barrels daily; by July 1, it will be stepped up to 500,000 barrels (21,000,000 gallons) — enough to send 12,000 big bombers from

PETROLEUM PEAKS

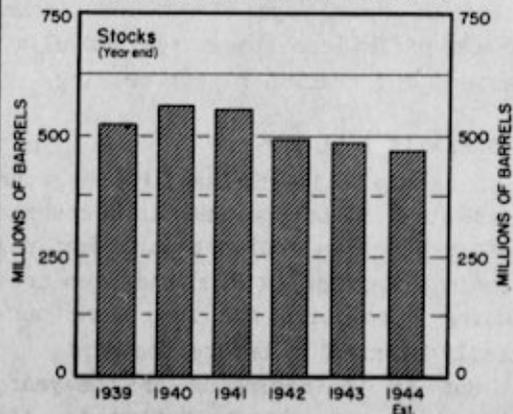
This year's output is estimated to reach a new high;



But consumption will rise higher, due to increased military demand,



And stocks will continue to decline.



* No breakdown available prior to 1942; military proportion in 1939 nil.

SELECTED MONTHLY STATISTICS

Labor Force—Labor Turnover—Income Payments—Transportation

	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Some Month 1939	Some Month 1937
LABOR FORCE—TOTAL (millions)	52.8 P	52.1*	51.4	52.6	53.6	n.a.	n.a.
Employment	52.0 P	51.3	50.5	51.7	52.6	—	—
Male	34.5 P	34.4	34.0	34.6	35.7	—	—
Female	17.5 P	16.9*	16.5	17.0	16.9	—	—
Unemployment	.9 P	.8	.9	.9	.9	n.a.	n.a.
LABOR TURNOVER IN MFG. INDUSTRIES[†] (rate per hundred employees)							
All manufacturing							
Accessions	5.51 P	5.76*	5.46	7.17	7.43	2.93	4.04
Separations—Total	6.77 P	7.33*	6.52	7.02	7.54	3.46	3.09
Quits	4.89 P	5.00*	4.56	5.19	5.36	.76	1.38
Military	.64 P	.73	.49	.61	.87	n.a.	n.a.
Aircraft							
Quits	4.32 P	4.57*	3.93	4.86	4.62	1.41	2.04
Military	.97 P	.88	.55	.71	.84	n.a.	n.a.
Shipbuilding							
Quits	5.66 P	5.93*	5.52	6.25	6.30	.72	1.32
Military	.88 P	.94	.69	1.00	1.45	n.a.	n.a.
INCOME PAYMENTS—TOTAL (million dollars)	12,489 P	12,871*	12,114*	12,690	11,395	5,724	6,081
Salaries and wages	8,966 P	8,980*	9,020*	8,775	8,198	3,688	3,903
Comm., distr., and serv. industries	6,801 P	6,858*	6,937	6,867	6,447	2,979	3,261
Government	2,165 P	2,122	2,083	1,908	1,751	570	486
Military	1,191 P	1,154*	1,119	973	819	35	33
Nonmilitary	974 P	968	964	935	932	495	453
Other	—	—	—	—	—	179	156
Other income payments	3,523 P	3,891	3,094	3,915	3,197	2,036	2,178
Income payments, annual rate (adjusted for seasonal, billion dollars)	154.2 P	154.7*	155.2*	146.1	139.9	68.3	73.4
TRANSPORTATION—COMMODITY AND PASSENGER (1935-39=100)^{††}							
Commodity	221	220	219	226	208	89	112
Passenger	205	207	206	215	196	87	114
Passenger	271	266	260	263	246	98	107

*Labor Force, May; all other, April. P Preliminary. * Revised. n.a. Not available. † Rates beginning 1943 refer to all employment rather than to wage earners only and are not strictly comparable with earlier data. †† Unadjusted.

Britain to Berlin every 24 hours. And it is an improved product over the 100-octane of prewar days: it enables planes to take off in less space, fly and climb faster, and reach a higher ceiling.

OLD PLANTS FILL GAP

Directly following Pearl Harbor, the need for 100-octane was so desperate that production couldn't wait for new plants. Refineries which had been producing automotive gasoline were hurriedly adapted to bridge the gap.

But by the beginning of the year, 163 plants were contributing to the output of the 100-octane. Completion

of 23 more major refinery units this year will conclude the \$900,000,000 building program launched in the spring of 1942 by the Petroleum Administration for War in cooperation with the oil industry.

The petroleum situation sums up to about this: with crude production nearing capacity, transportation greatly improved, and planned expansion of refining facilities near completion, the industry is approaching such a delicate balance that any change in the character of demands may shift the bottleneck from tankers to either crude production or refining facilities.

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PEC Staff - Mobilizing for X Day

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WAR PROGRESS

Prepared in the War Production Board

Donald M. Nelson, Chairman

War Progress is a confidential report designed to provide a coordinated and continuing picture of the overall war program for the various war agencies. To this end, it presents, analyzes, and interprets basic statistical and economic information, and from time to time examines the pros and cons of controversial questions.

Although War Progress is an official publication of the War Production Board, statements in it are not to be construed as expressing official attitudes of the Board as a whole, or even of individual members. Conclusions, whenever reached, should be considered editorial conclusions.

War Progress is prepared in the Bureau of Planning and Statistics (Stacy May, Director) by the Munitions Branch (Morris A. Copeland, Chief).

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PEC Staff: Mobilizing for X Day

Main function is to dovetail cutbacks with increases in civilian production. Data is being assembled on plants, manpower, etc. to insure prompt action when time comes.

IT IS X DAY—Germany has been defeated. As munitions programs are cut, millions of workers must be shifted from making war goods to turning out nonmilitary items such as washing machines, refrigerators, vacuum cleaners, lawn mowers. That epitomizes the job cut out for the month-old Production Executive Committee Staff.

The staff consists of representatives of the Army, Navy, Maritime Commission, War Production Board, and War Manpower Commission. Although it is not yet entirely off the drawing board, the PEC Staff is being designed primarily as a governor to synchronize cutbacks in war production with increases in civilian programs. This is how it is expected to work:

Suppose, on X Day, the Army wants to reduce rifle and carbine output by 50%. The Army Service Forces inform the PEC Staff immediately, supply it with a list of plants making rifles and carbines, and, as far as possible, the list of subcontractors. Meanwhile, the PEC Staff—drawing on plans already prepared—is making its own study of the proposed cutback, with an eye to reconversion possibilities. ASF then follows up its "preliminary notice" with its own idea of how the cut might be distributed among manufacturers.

For example, it may have suggested reducing a certain gun an equal amount at Plants A and B. But when the PEC

Staff learns that Plant A is a government arsenal and that Plant B is a former maker of electric refrigerators, it might prefer to leave Plant A operating and concentrate the cut in Plant B, so as to free facilities for the manufacture of refrigerators.

In the case of the Browning automatic rifle, manufactured around Providence, the PEC Staff might be interested in lifting restrictions on stainless steel flatware, manufactured in the neighborhood, so as to help absorb released labor. And as for carbines, it might give General Motors' Inland Division at Dayton a green light to use part of its facilities to manufacture truck parts.

WHEN PLAN IS APPROVED

When the PEC Staff completes its plan for dovetailing the cutback with increases in approved civilian programs, a vote is taken. If the plan is adopted unanimously, the procurement agency—in this case the Army—notifies its contractors. At the same time, WPB takes steps to revise L and M orders if necessary, and WMC's U.S. Employment Service takes over any placement job.

In the event that a member dissents, the Director of the PEC Staff—who is also Vice Chairman of the Production Executive Committee—makes the decision. The case is then closed, unless one or more of the represented agencies want to carry an appeal to the Production Executive Committee itself for final determination.

Not all cutbacks will be reviewed by the PEC Staff. Some may be too small to influence either manpower or facili-

ties; others may turn out to be introductions to new military contracts, such as a switch from tanks to self-propelled artillery.

Moreover, while the two-front war continues, reconversion possibilities will be limited. Thus, the new body will be concerned chiefly with filling in cut-back facilities with war production. This will be done on a case-by-case basis. An ordnance plant may be switched over to radar manufacture, a trainer-plane plant to fighter subassemblies. First cases to clear through the staff were of this kind, as illustrated a few weeks ago when the Navy slashed the RB-1 stainless-steel Conestoga cargo plane at Budd Manufacturing, Philadelphia; a PEC Staff member came right up with a plan to fill in with heavy-gun ammunition.

SYNCHRONIZING JOB

So far, cutbacks have been relatively small, but the lack of orderly procedures has magnified the problem (WP-June 3 '44, p7). Advance notice has often been inadequate; coordination among the services, WPB, and WMC has been faulty; and only now has a central body been set up to pull together all the information that must be at hand to do a synchronizing job.

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20-DAY PLANE TALLY

AIRCRAFT PRODUCTION was lagging in the first 20 days of June. Though scheduled to drop 2% below May on an airframe-weight basis, it was running 12% behind; by number, 4,883 planes were delivered, as against 5,732 in the same period last month.

Navy fighters were well behind May—764 planes compared with 932; the full-month schedule calls for 1,353. Navy light bombers and patrol bombers were also lagging.

However, standard heavy bombers and Army fighters were close to schedule: Mustangs in particular seem headed for a good month. And 60 Superfortresses came through, as against 50 in the first 20 days of May and the full-month goal of 94.

Prospects are that aircraft will miss schedule this month, but not by as much as the 20-day tally indicates.

This is no overnight task. Through its Army, Navy, and Maritime Commission members, the PEC Staff has already begun to develop a comprehensive picture of the programs which will be eliminated or reduced on X Day, together with plants involved—their floor space, labor force, machinery, subcontractors, etc.

RELATIVE URGENCY

Through its members who are concerned with civilian production, it must develop lists of wanted nonmilitary items, arranged in order of urgency. Refrigerators may be considered more important than vacuum cleaners, washing machines than radios, sewing machines than electric fans, and so on.

Through its manpower representatives—from WMC, Office of Manpower Requirements, and Office of Labor Production—the PEC Staff must make recommendations

and prepare plans for the orderly transfer of labor, as men and women are released from munitions production.

All this information must be translated into terms of materials, machinery, components, and manpower. And then programs must match up. Electric refrigerators may be more important than vacuum cleaners, but if freon isn't available it wouldn't make sense to set a resumption of electric refrigerator output, say, against a decline in small-arms ammunition. Brunswick, Ga., may have a surplus of labor because of a cut in the shipbuilding program, but it's scarcely firm ground for reconversion; shipways are unlikely to have other peacetime uses. If precision instruments are cut long before typewriters can be increased, some office machinery firms may lose skilled labor.

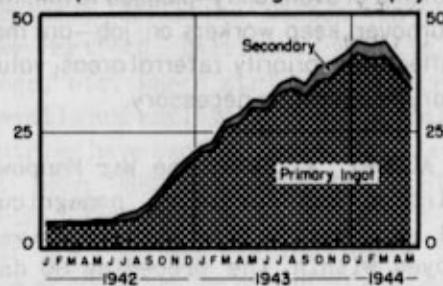
FIELD-OFFICE FUNCTION

In carrying out its plans, the PEC Staff will draw constantly on field organizations of the War Production Board and the War Manpower Commission. In fact, it will keep WPB and WMC regional offices posted on every important termination or revision of delivery schedules in their areas. Thus, in any cutback, local manpower officials can be on the spot to channel released workers; and in any reconversion, local WPB officials can assist manufacturers in filing appeals for special authorizations for materials, equipment, etc.

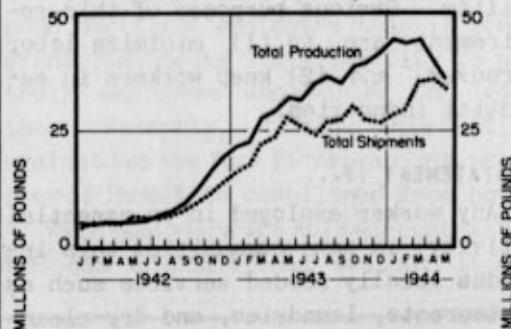
In addition to all this, the PEC Staff is interested in high-speed operation. Once a procurement agency submits details on a proposed cutback, the staff hopes to deliver its decision within 72 hours. But that should be considered a goal to shoot at. The speed with which it's attained will depend chiefly on how fast long-range program and plant data can be built up.

REASON FOR RELAXATION

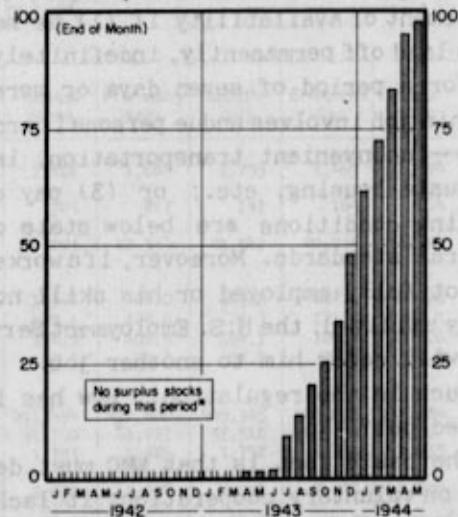
Despite cutbacks in magnesium output,



Production still exceeds shipments;



And surplus stocks soar to record high.



* Until April, 1943, excess of production over shipments went into the pipeline. May, 1944, preliminary.

WAR PROGRESS

In addition to the growth of magnesium stocks to record levels, fabricating capacity has also been expanded. For instance, sand-casting capacity in March was five times as large as at Pearl Harbor, and 25 times as large as in 1940.

For War Workers: A Ticket or 60 Days

Statements of availability—planned to minimize turnover, keep workers on job—are most effective in priority referral areas; voluntary cooperation necessary.

FOR ALMOST A YEAR, the War Manpower Commission has forbidden nonagricultural employers to hire workers who were employed within the preceding 60 days in an essential industry unless the workers presented statements of availability. Obvious purposes of this requirement are to (1) minimize labor turnover, and (2) keep workers in essential industries.

A STATEMENT IF...

Any worker employed in an essential activity—in some communities this includes locally needed services such as restaurants, laundries, and dry-cleaning establishments—is entitled to a statement of availability if (1) he has been laid off permanently, indefinitely, or for a period of seven days or more; (2) his job involves undue personal hardship—inconvenient transportation, inadequate housing, etc.; or (3) pay or working conditions are below state or federal standards. Moreover, if a worker is not fully employed or his skill not fully utilized, the U.S. Employment Service will refer him to another job.

Such is the regulation. How has it worked out?

The basic fact is that WMC must depend on voluntary cooperation: it lacks the machinery and the authority to enforce its regulations directly. It has been getting cooperation—but not 100%. Too many employers need workers, too many workers want to move on.

Some employers grant statements free-

ly; they may have more workers than they need, or they may not want disgruntled workers on their hands. Others refuse statements as regularly; they may be hard up for workers, or may simply not want the responsibility of deciding whether a worker is eligible for one. Workers who are denied may then apply to the U.S. Employment Service for statements of availability. USES offices have been receiving applications at the rate of nearly 1,000,000 a month—and the great majority are granted.

SOME LOOPHOLES

Many of these, however, are filed by workers who don't need statements: newcomers to the labor market, those coming out of nonessential industries, etc. And others, of course, have proved that they were suffering undue hardship or could be more useful to the war effort in another job. But the flexibility necessary for intelligent administration of the regulation naturally leaves loopholes; a worker can usually make out a good case that a higher-paying or a more agreeable job elsewhere would make fuller use of his skill.

And about 10% of the applications are denied. For example, from September, 1943, through April, 1944, the USES has denied an average of about 90,000 applications a month. About as many more are otherwise disposed of, chiefly by persuading workers to return to their jobs.

POLICING IMPRACTICAL

Workers whose applications are denied are theoretically supposed to remain unemployed for the 60-day period (until last August it was 30 days, but

WMC found that this short period made too convenient a vacation). However, it doesn't always work out that way. Many employers—especially in small establishments or nonessential industries—are willing to take workers without statements. And USES can hardly police all restaurants, bars, small retail and service establishments, etc.

SYSTEMATIC CHECKING

But WMC can and does take measures to compel compliance. Directors of some labor areas—Portland, Oreg., Charlotte, N.C., for example—make systematic checks on large employers to see that they possess statements of availability for all recent employees on their payrolls who needed them. If an employer has hired a worker without requiring a statement, USES compels him to release the worker, who is then sent back to his previous

employer or referred to another job.

The USES stops referring workers to chronic violators. This has been a particularly effective weapon in areas like Hartford, Baltimore, Seattle, San Diego, etc. where strict labor control prevails and employers in essential industries have become increasingly dependent upon USES referrals for replacements. For example, in January of last year the USES was placing 19% of total hire of 20,000 major essential employers; by the end of the year it was placing 34%. As a last resort, WMC has notified some negligent employers that it would grant statements of availability to all their employees who wanted to leave them. Recently, it took this action against two New York firms—and got promises of immediate compliance from both.

With employers who hold war contracts, WMC has an additional weapon: it can

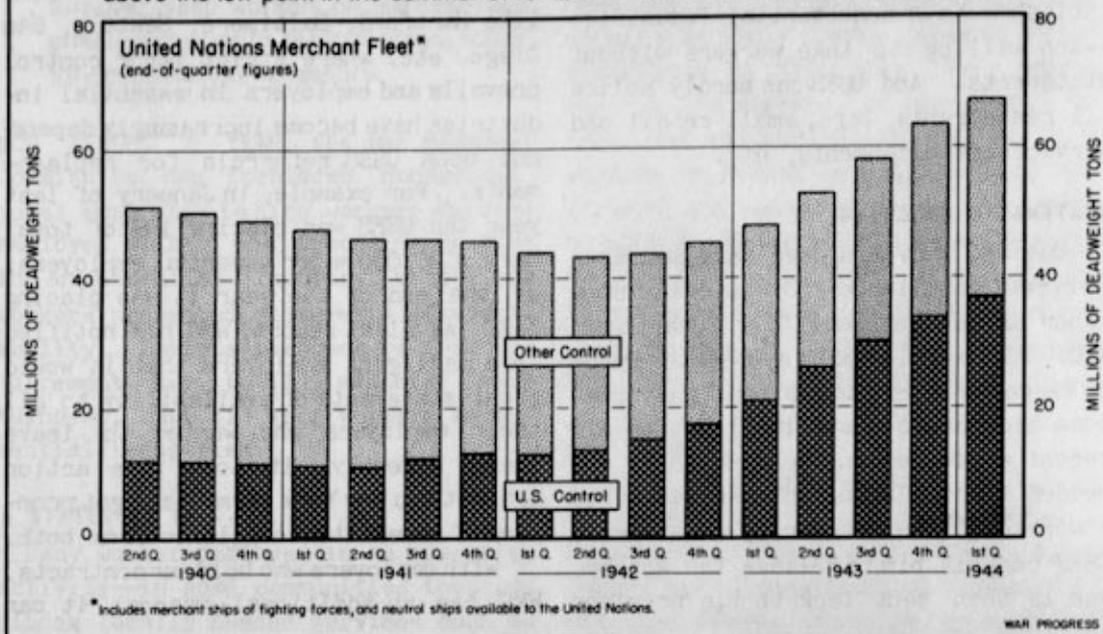
KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program-Checks paid (millions of dollars) -----	1,888	1,685	1,755	1,469	1,580
War bond sales-E, F, G, (millions of dollars) -----	325	217	147	165	164
Money in circulation (millions of dollars) -----	22,293	22,333	21,847	20,235	17,189
Wholesale prices (1926 = 100)					
All commodities -----	103.7 ^p	104.0	103.8	102.9	103.5
Farm products -----	122.1 ^p	125.0	123.3	121.8	127.0
Foods -----	104.9	105.4	104.7	105.7	109.0
All other -----	98.9 ^p	98.7	98.7	97.8	96.9
Petroleum:					
Total U. S. stocks* (thousands of barrels) -----	411,494	412,600	409,385	428,035	432,874
Total East Coast stocks* (thousands of barrels) -----	61,700	61,217	57,518	66,753	47,707
East Coast receipts (thousands of barrels, daily average) ..	1,703	1,825	1,758	1,560	1,535
Bituminous coal production (thousands of short tons, daily average)	2,077	2,082	2,093	2,175	1,956
Steel operations (% of capacity) -----	97.3%	97.1%	99.2%	99.3%	97.6%
Freight cars unloaded for export, excluding grain (daily average)					
Atlantic Coast ports -----	3,038	3,032	3,446	2,570	2,233
Gulf Coast ports -----	465	433	461	399	333
Pacific Coast ports -----	1,482	1,556	1,589	1,225	1,424
Department store sales (% change from a year ago) -----	+3%	+2%	+15%	-4%	+28%

p. Preliminary * Excludes military-owned stocks

THE FLEET'S UP

United Nations merchant fleet reaches one peak after another and is more than 50% above the low point in the summer of 1942. United States controls more than half.



The growth of the United Nations merchant fleet is due almost entirely to U. S. construction. Nearly 98% of the rise in the fleet since the low-water mark in 1942 has been in U.S.-controlled vessels. Indeed, the merchant ships

of the other United Nations only began their upswing in the third quarter of last year. Thus while the U.S.-controlled fleet has tripled since the fall of France, the other United Nations are 23% below.

exact compliance through the contracting agency—Army, Navy, Maritime Commission, etc. It has never had to use this weapon; knowledge that it exists has been sufficient to keep contractors in line.

EXTENDING REFERRAL PLAN

In general, the system has worked best in the 100 communities—San Francisco, Buffalo, Pittsburgh, Minneapolis, St. Paul, Mobile, etc.—where controlled referral has been in effect, since it enables USES to keep a closer check on the movement of workers. But the system could not effectively prevent the movement of workers out of these war centers

into loose labor areas or nonessential industries, where controls were less strict. Accordingly, WMC is now extending its new priority referral plan to the entire country beginning July 1.

Statements of availability will still be an integral part of this plan. Under it, no employer in essential or nonessential industries may hire any male worker over the age of 17 years for full-time employment except by USES referral. Hence, if a worker is referred to a job, the employer may assume his availability. Nevertheless, in order to obtain employment—through USES referral—the workers must still qualify for a statement of availability.

U.S. Imports: Back to Prewar Level

Offshore tonnage is expected to reach three-year high. Shipping available now to meet quotas of most essential commodities. Geographical pattern of world markets shifts.

new ship construction was running well ahead of sharply reduced sinkings, imports began to rise again:

AS AN IMPORTER, the U.S. is getting back to its prewar stride. This year, ocean-borne imports are expected to reach 36,000,000 long tons—16% over 1943 and 9% over 1939.

In 1941, the U.S. was stockpiling strategic materials—rubber, manganese, bauxite, copper, etc.—and sea-borne imports soared to an all-time high of nearly 46,000,000 long tons. Then in 1942 merchant ship losses were heavy, Far Eastern markets were shut off, and imports fell almost 50%—to the lowest level in a decade. But in 1943, when

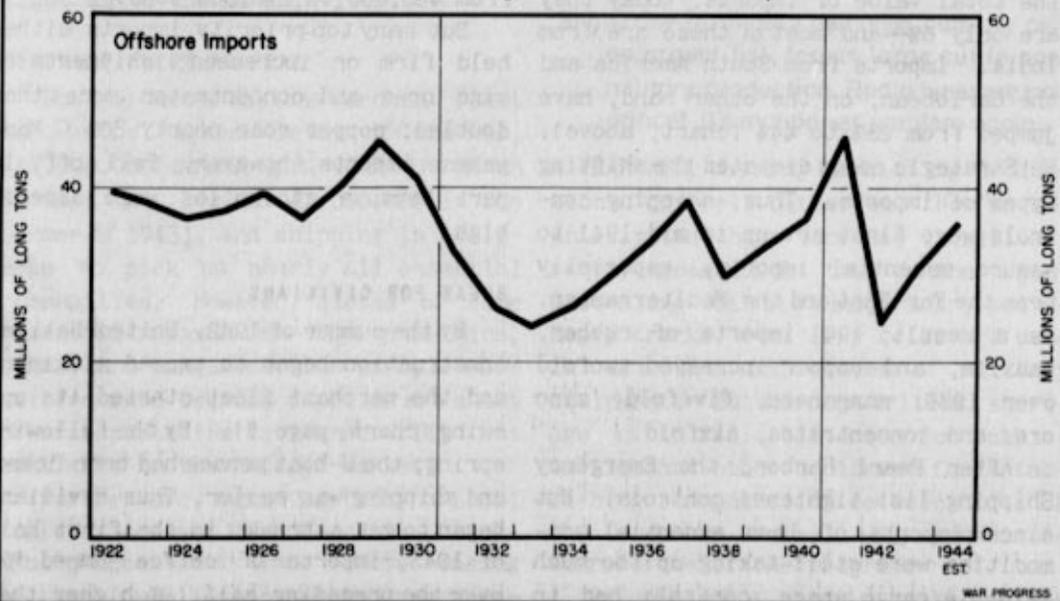
Offshore Imports
(millions of long tons)

1939.....	33.1
1940.....	36.1
1941.....	45.7
1942.....	24.2
1943.....	31.0
1944.....	36.0

On a dollar-value basis, the gain is even greater. So far this year, the value of imports has been running at a rate more than 50% higher than in 1939. But this is explained by higher commodity prices and by the shift from bulky low-value goods to small high-

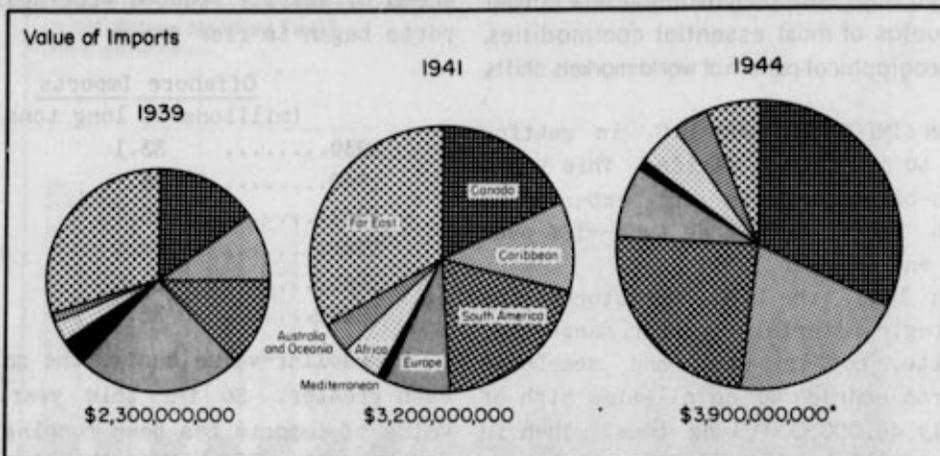
COMEBACK IN IMPORTS

After a 10-year low in 1942, offshore tonnage imports are expected to be 9% higher this year than in 1939, although still below the 1941 peak.



SHAKE-UP IN IMPORT MARKETS

Imports from Canada and Latin America now account for 76% of the total value, as against 38% in 1939. Proportion from Europe and Far East drops sharply.



*Based on first-quarter rate.

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value items—from, for example, iron ore and bananas to industrial diamonds and mica.

The geographical pattern of imports has also changed. In 1939, for instance, imports from the Far East were 30% of the total value of imports; today they are only 6%—and most of these are from India. Imports from South America and the Caribbean, on the other hand, have jumped from 23% to 44% (chart, above).

Strategic needs dictated the shifting types of imports. Thus, shipping controls were first set up in mid-1941 to assure essential imports, especially from the Far East and the Mediterranean. As a result, 1941 imports of rubber, bauxite, and copper increased twofold over 1939; manganese, fivefold; zinc ores and concentrates, sixfold.

After Pearl Harbor, the Emergency Shipping list tightened controls. But since imports of less essential commodities were still taking up too much valuable cargo space, controls had to be tightened further; General Imports

Order M-63 was put into effect. This cut sharply into less essential imports. For example, from the first to the second half of 1942, imports of bananas fell from 350,000 to 140,000 tons; iron ore from 430,000 to 45,000 tons; coffee from 480,000 to 270,000 tons.

But many top-priority imports either held firm or increased; shipments of zinc ores and concentrates more than doubled; copper rose nearly 30%. Manganese imports, however, fell off, in part because stockpiles were already high.

BREAK FOR CIVILIANS

By the summer of 1942, United Nations construction began to exceed sinkings, and the merchant fleet started its upswing (chart, page 6). By the following spring, the U-boat menace had been licked, and shipping was easier. Thus civilians began to get a break; in the first half of 1943, imports of coffee jumped 77% over the preceding half (8% higher than the 1939 rate), bananas about 15% and

sugar 30%. Shipping was still not easy enough, however, to permit importing of other less essential items, such as linseed and tapioca.

The following table outlines the story of the early wartime period:

	1942		1943
	1st half	2nd half	1st half
	(thousands of long tons)		
Copper.....	350	450	410
Zinc ores & concentrates	70	160	200
Bauxite.....	500	340	690
Tin.....	60	60	30
Manganese....	740	400	520
Rubber.....	250	20	30
Coffee.....	480	270	470
Sugar.....	1,650	1,480	1,960
Bananas.....	350	140	160
Iron ore.....	430	50	80
Linseed.....	190	50	0
Tapioca.....	40	nil	nil

Last year, actual imports not only met the year's quota but exceeded it by 6%. And whereas most commodities fell behind the quotas in 1942, most came right up to the mark in 1943.

MERCHANT FLEET AT PEAK

Now the United Nations merchant fleet is at the highest level of the war, (67,000,000 deadweight tons in March against the low of 43,000,000 in the summer of 1943), and shipping is available to pick up nearly all essential commodities. However, quotas of some essential commodities—high-grade mica, sisal, and manganese, for example—are still missed because supplies are short or transportation is temporarily not available in the foreign market.

Furthermore, importing today is still limited because it's largely a back-haul proposition. Thus ships taking military supplies to the Mediterranean and Australia may have to return home

only partially loaded because there isn't enough cargo to fill them. And ships can't always be spared to make diversion trips to ports on the West, East, and South coasts of Africa—for example, to pick up manganese from the port of Takoradi in West Africa. (When the Mediterranean was closed to Allied shipping, calls at the South and East coast ports could be made easily because ships carrying goods for our armed forces had to take the long way around Africa.)

Altogether, while the overall import situation is easier, shipping from certain areas still presents problems. In addition, various commodities such as bananas, linseed, and tapioca are still arriving in smaller quantities than in prewar times. Moreover, increased demands of the military could make shipping tight again temporarily. But there is good reason to believe that this year's quota will be met or even surpassed.

Battery Trouble

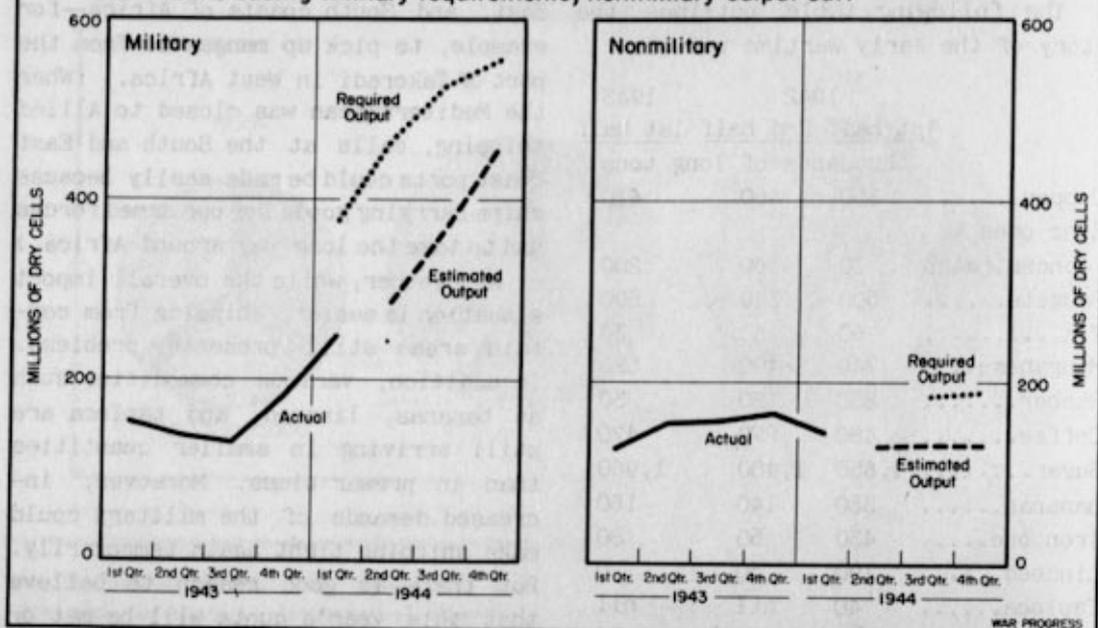
Sharp rise in military demands puts dry cells on urgent list, forces large cut in non-military production. Radio types are most critical. It's manpower problem again.

A YEAR AGO, the Army was cutting production of dry-cell batteries. Now an unanticipated sharp increase in military requirements has put them on the urgent list along with big guns, radar, heavy-heavy trucks, etc. Dry cells are used in more than 550 pieces of military equipment. But the most critical shortage is in radio batteries for walkie-talkies and other equipment for establishing communication between units of the invading armies; they constitute four-fifths of the program.

Production of battery cells for the armed forces has nearly doubled in the

STEPUP NEEDED IN DRY-CELL BATTERIES

Although production is rising sharply after last year's cutbacks, it is still far behind increasing military requirements; nonmilitary output cut.



last six months; deliveries in the first quarter of this year reached an all-time high of 251,000,000 cells, as against 131,000,000 in the third quarter of 1943. Yet this still fell 33% short of stated military production requirements. And though output is scheduled to rise sharply to 456,000,000 cells in the fourth quarter, requirements climb to 554,000,000 cells:

1944	Military		% Short
	Production	Needs	
	(millions)		
1st qtr.	251	375	33%
2nd qtr.	285*	467	39
3rd qtr.	364*	526	31
4th qtr.	456*	554	18

*Estimated

Setting up the necessary additional facilities is comparatively easy; the

problem is again manpower. When production was cut last year, battery manufacturers had to lay off a lot of their workers. Now they need only 5,000 more, but they're having trouble finding them. It's the familiar story: most of the plants are in tight labor areas; pay is notoriously low—as little as 55 cents an hour; and battery-making involves some unpleasant jobs.

FACILITIES EXPANDED

Accordingly, several new facilities have been established in loose labor areas, and facilities expanded in some less-tight ones. Moreover, pay increases have been obtained for some of the workers, are being sought for others. But the labor force is still inadequate to boost output to the higher scheduled levels. The industry is depending chiefly upon women to fill the gap; they now

comprise about three-fourths of the total labor force.

A further complication is the current lack of facilities for turning out the zinc shells which enclose the dry cells. This shortage is also traceable to the cutback last year; the facilities which had been shaping the shells were diverted to other war work. However, additional facilities now being set up are expected to solve this problem. In the meantime, the shells (ranging in size from a thimble to a 12-ounce drinking glass) are being allocated where they're needed most; radio batteries, of course, have top priority.

As the situation shapes up now, bat-

tery production for the armed forces is scheduled to catch up with requirements in the second quarter of 1945—provided requirements don't rise above present estimates.

Meanwhile, the sudden heavy military demand has eaten into the supply of dry cells formerly allotted to essential civilian needs (railroad signal equipment, industrial testing devices, farm radios, flashlights, etc.), and to lend-lease, Maritime, and other purposes. Nonmilitary production in the second quarter of this year will drop to 130,-000,000 cells—22% below the last quarter of '43. And civilians will get only about half of estimated essential needs.

SELECTED MONTHLY STATISTICS

Hours and Earnings—Labor Disputes—Production

	Latest* Month	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Some Month 1939	Some Month 1937
AVERAGE WEEKLY EARNINGS (dollars)							
All manufacturing industries	45.56	45.62	45.44	44.86	42.48	23.18	25.01
Durable goods	51.66	51.52	51.37	51.26	48.67	25.68	28.58
Nondurable goods	36.17	36.55	36.37	35.18	33.58	21.25	21.90
Bituminous coal mining	50.62	52.24	52.99	45.08	41.39	18.10	19.06
Metalliferous mining	44.62	44.99	44.04	45.19	42.57	27.03	32.06
AVERAGE HOURLY EARNINGS (cents)							
All manufacturing industries	101.2	100.6	100.3	98.8	94.4	63.0	61.9
Durable goods	110.9	110.2	110.0	108.6	104.0	69.6	67.4
Nondurable goods	85.0	84.6	84.1	82.4	79.0	57.9	56.6
Bituminous coal mining	118.4	117.6	117.8	116.5	112.0	88.4	87.8
Metalliferous mining	101.2	99.9	99.2	99.7	96.2	69.5	72.0
AVERAGE HOURS PER WEEK							
All manufacturing industries	45.0	45.3	45.3	45.4	45.0	36.8	40.4
Durable goods	46.6	46.7	46.7	47.2	46.8	36.9	42.4
Nondurable goods	42.5	43.2	43.2	42.7	42.5	36.7	38.7
Bituminous coal mining	42.8	44.5	45.2	38.8	36.9	21.4	21.7
Metalliferous mining	44.0	44.5	44.3	45.3	43.9	39.1	44.5
LABOR DISPUTES							
Number of strikes in progress	475	390	370	320	416	431	785
Workers involved (thousands)	167	125	130	264	228	426	394
Number of strikes beginning during month	435	360	330	287	384	281	535
Workers involved	155	115	115	121	219	396	222
Man-days idle (thousands)	580	415	470	1,012	662	4,902	3,377
PRODUCTION OF CLOTHING AND SHOES, FOR CIVILIANS (1935-39=100)†							
Clothing and shoes combined	107	112	107	103	112	121	n.a.
Clothing	112	117	112	105	115	121	n.a.
Shoes	90	89	88	93	98	119	n.a.

*Production of Clothing and Shoes, Merch; all other, April. †Unadjusted. n.a. Not available.

War Progress Notes...

WORK GLOVES AGAIN

AFTER a short-lived rise, output of work gloves has fallen back again.

Monthly output of 1,790,000 dozen pairs in the peak year of 1941 fell to 1,360,000 in 1943. In January, 1944, it was still headed downward—1,125,000 dozen pairs; but in February, the downward trend was temporarily reversed, and by March output went up to 1,250,000. Then April manufacture dropped below January output to 1,110,000. Thus output for the first four months has averaged 1,170,000—well under the 1,670,000 dozen pairs a month needed to meet 1944 estimated requirements of 20,000,000.

EMPLOYMENT DROPS 50%

Declining output has been primarily a wage problem. With a minimum wage of 40¢ an hour, work-glove manufacture has not been able to compete against other industries. Increases permitted under the Little Steel formula could not keep workers on the job. Employment fell more than 50%, from 10,000 workers in 1941 to fewer than 5,000 at the close of 1943.

But now glove output should rise again; workers are staying on their jobs, and some who left are coming back. Increased wages are in prospect. Manufacturers have asked the War Labor Board for higher piece rates and an increase in the minimum wage to 50¢ an hour; and WLB has been approving their applications. Although they must wait for the Office of Price Administration to raise ceiling prices before they can put the new wage rates into effect, OPA has agreed to do this as soon as WLB approves applications representing 60%

or more of the industry's output.

Meanwhile WPB is assigning preference ratings to industrial employers who want to order gloves for their workers. And it is allocating gloves for hot mill work.

GLIDERS NEAR GOAL

TROOP-CARRYING GLIDERS—used in Burma and Normandy—are highly expendable; but we have plenty to expend. More than 9,000 have been built so far, or enough to carry about 135,000 men. Indeed, the program reached its peak a year ago and is due to wind up by January of next year.

The standard model has been the 15-place glider, weighing 3,800 pounds and having a wing span of 83 feet. The fuselage is a steel tubing framework covered with fabric; the wings are mostly plywood. It was designed by Waco of Troy, O., but is made by nine other companies as well. Biggest producer is Ford, at Iron Mountain, Mich., which has turned out over 2,000.

TWO JEEPS, 30 MEN

But now a new model is beginning to come into volume production: a big 42-place glider that can hold two jeeps, or a howitzer and a jeep, as well as 30 fully equipped men. Although only a dozen or so have been built so far—the program has been slow in getting under way—about 600 are scheduled to be delivered by the end of the year. Meanwhile the 15-place glider will go out of production in October.

Glider are usually towed by C-47 transports, sometimes by combat planes. One or two can be hooked to a tow-plane—two only when flying weather is good.

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A Tale of Two Cities—More Power
to W-10—Of Tanks and Trucks and
Hand Grenades

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WAR PROGRESS

Prepared in the War Production Board
Donald M. Nelson, Chairman

War Progress is a confidential report designed to provide a coordinated and continuing picture of the overall war program for the various war agencies. To this end, it presents, analyzes, and interprets basic statistical and economic information, and from time to time examines the pros and cons of controversial questions.

Although War Progress is an official publication of the War Production Board, statements in it are not to be construed as expressing official attitudes of the Board as a whole, or even of individual members. Conclusions, whenever reached, should be considered editorial conclusions.

War Progress is prepared in the Bureau of Planning and Statistics (Stacy May, Director) by the Munitions Branch (Morris A. Copeland, Chief).

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A Wartime Tale of Twin Cities

^X
 X Minneapolis and St. Paul present problem of
 X idle facilities, manpower in loose labor
area. Offer test case for question of ex-
anding civilian production now.

THE TWIN CITIES—Minneapolis and St. Paul—are a good test case for the question now before the War Production Board: when, where, and how to expand civilian production. They illustrate why it's a pressing question—and also why, as usual, the answer isn't easy. And they afford a better illustration simply because their story is neither novel nor sensational; it could be the story of St. Louis, Salt Lake City, or other communities.

Like all big cities, they've gone into war work. Biggest war plant is the new Twin Cities Ordnance, which had a peak employment of 27,000. Other large plants which got war contracts include Honeywell, making Norden bombsights; Minneapolis-Moline, making jeeps and large-caliber shells; and Northern Pump, making Navy pumps. Altogether, factory employment in the area has more than doubled since 1940, from 75,000 to 160,000. Total employment has gone up 15%, from 355,000 to 410,000.

NOT WAR-BOOM CITIES

Nevertheless the Twin Cities are not war-boom cities, their problems are different from those of Evansville (WP-June 17'44, p1). Population has declined more than 20,000; in the early days of the war they lost skilled workers to the boom towns. And they got proportionately less war work than most large cities. They had many small plants but few big

ones readily convertible to war production; their major industry was the processing of food and kindred products, which accounted for 25% of their prewar factory employment and 45% of the value of their manufactured products.

IN LOOSE LABOR AREA

Thus the Twin Cities have been a loose labor area from the beginning: their 15% increase in employment didn't exhaust their supply of unemployed and women workers. Then last August cut-backs in small-arms ammunition began to hit Twin Cities Ordnance, and by May employment at the plant had dropped more than 15,000. Small plants working on subcontracts also suffered. Moreover, the other big war plants—Honeywell, Minneapolis-Moline, Northern Pump, etc.—are no longer hiring. About 15,000 workers are now looking for jobs or are readily available, and it is estimated that as many more could be attracted back to the labor market by good jobs.

LOOKING FOR WORK

Likewise many plants are looking for work. A recent survey by the WPB regional office indicated, for example, that 83 machine and metalworking shops, with an average employment of 90 workers, have from 25% to 100% open capacity: they have a reputation for high-quality work. In particular, radio and radar plants now have enough open capacity to boost current output by one-third, or \$2,000,000 a month. By September this figure will rise to \$3,500,000—unless they get more contracts.

So far, however, the Twin Cities have

failed to get the additional war work they'd like; there's never been a procurement office in the area. And failing, they naturally want to use their surplus labor and facilities for civilian production. An obvious guide would be the new Office of Civilian Requirements list of essential consumers' durable goods, production of which has been limited or prohibited entirely; they might pick out the items which they could make, and for which materials and components are available. Thus they could help to ease civilian shortages, presumably without direct interference to war production. Almost all the plants concerned are small, and they produce primarily for a restricted market—Minnesota and the Dakotas. (High freight rates have kept most firms from competing on the national market.)

TYPICAL COMPLICATIONS

However, there remain the typical complications of this mixed, shifting phase of war production. The Twin Cities have about 15,000 workers in the market for jobs; but they also have about 10,000 job openings—and a hard time filling them. While there's a surplus of women and white-collar workers, there's a shortage of unskilled labor for heavy work. Most of the available jobs call

for heavy work in foundries, food-processing plants, meat-packing plants, grain elevators, etc.

Furthermore, most of these jobs pay only 40 cents or 50 cents an hour. Similarly with textile plants, which also have open capacity.—Workers accustomed to considerably higher pay for more attractive work in war plants are not interested in these jobs. The general practice in the Twin Cities has been to deny unemployment compensation to a worker who turns down a job paying 25% more than the maximum benefits for which he is eligible, but this has led to many appeals from workers, protests from unions.

So here is the problem: The machine shops, sheet-metal shops, and radio plants that want or need more work could get the workers; they're already well manned with skilled craftsmen, and they pay high enough wages to attract the additional semiskilled help they'd need. But the Twin Cities foundries, which are vitally needed for war production right now, are undermanned by as much as 35%. And though most of the unemployed aren't nussy enough to work in foundries, it might look bad to start up civilian production while war plants are still short of workers.

SETTLED RESIDENTS

Similarly it might hamper interregional recruitment. Few of the surplus workers in the Twin Cities are disposed to move to other areas where they are needed; they're mostly settled residents, not the migrant type. Still, it can be—and is—argued that workers should not be diverted to civilian production in one area before the needs of other areas for war workers have been met.

Still another complication is illustrated by the Twin Cities manufacturer who wanted to make 175,000 of the elec-

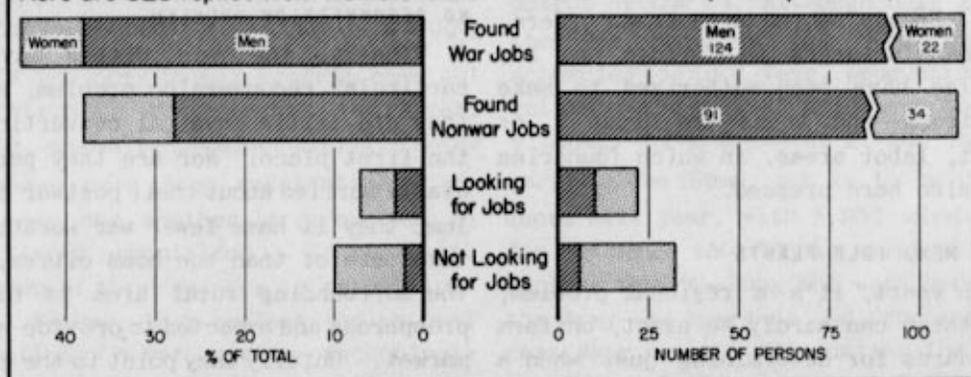
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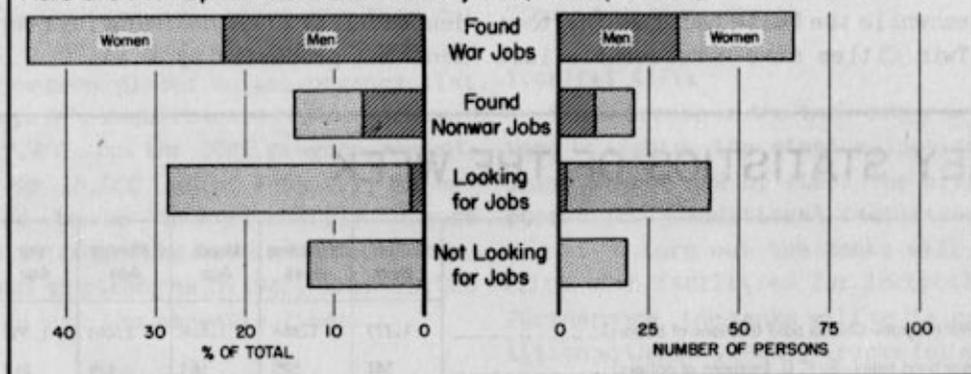
THREE CITIES-ONE STORY OF EVAPORATION

Surveys of war workers released because of cutbacks in Group I, II, and IV areas show that less than half found other war jobs. One in four women was not looking.

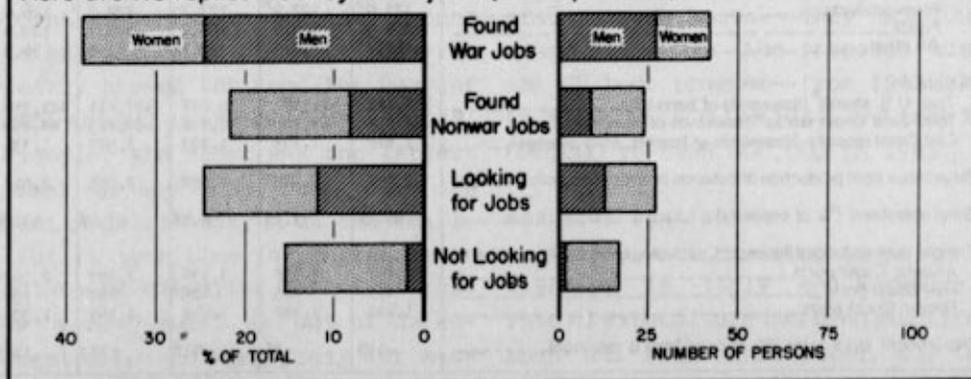
Here are 325 replies from workers laid off in the Twin Cities (a Group IV area):



Here are 147 replies from South Bend, Ind. (a Group I area):



Here are 110 replies from Syracuse, N.Y. (a Group II area):



tric flatirons that WPB is trying to get produced. The WPB regional office in the Twin Cities turned down his application, even though he had the necessary labor and facilities. The main reason was that he'd need aluminum and iron castings, and the local foundries were already behind on their war orders. Yet manufacturers in Chicago and Los Angeles have been authorized to make flatirons—and these are Group I, or tight, labor areas, in which foundries are also hard pressed.

IDLE MEN, IDLE PLANTS

In short, it's a regional problem; but there can hardly be exact, uniform standards for determining just when a given region or manufacturer can expand civilian production without impeding the war effort.

Meanwhile the basic fact remains that the Twin Cities have considerable idle

manpower and plant. As yet there is no real unemployment problem, nor is local business in a desperate plight. But there might be a serious problem before long unless they get either more war work or more civilian production.

NO RECONVERSION PROBLEM

Finally, the Twin Cities have no particular reconversion problem, since they did little physical converting in the first place. Nor are they particularly worried about their postwar problem; they'll have fewer war workers to take care of than the boom cities, and the surrounding rural area is highly prosperous and expected to provide a big market. Chiefly they point to the problems of the immediate future: the difficult adjustment between the necessity of maintaining war production and the desirability of maintaining full employment and productivity.

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program—Checks paid (millions of dollars).....	1,777	1,868	1,664	1,203	1,850
War bond sales—E, F, G, (millions of dollars).....	581	325	163	124	217
Money in circulation (millions of dollars).....	22,421	22,293	21,911	20,382	17,194
Wholesale prices (1926=100)					
All commodities.....	103.7*	103.7	103.9	102.9	103.1
Farm products.....	123.0*	122.9*	123.7	122.0	126.0
Foods.....	104.9	104.9	104.9	105.7	108.0
All other.....	98.7*	98.9	98.7	97.8	96.9
Petroleum:					
Total U. S. stocks* (thousands of barrels).....	411,011	411,494	410,078	427,411	429,356
Total East Coast stocks* (thousands of barrels).....	62,055	61,700	57,831	65,263	48,854
East Coast receipts (thousands of barrels, daily average).....	1,810	1,703	1,777	1,543	1,336
Bituminous coal production (thousands of short tons, daily average)	2,050	2,088*	2,050	2,035	2,017
Steel operations (% of capacity).....	95.7%	97.3%	98.4%	93.0%	97.8%
Freight cars unloaded for export, excluding grain (daily average)					
Atlantic Coast ports.....	2,897	3,038	3,436	2,592	2,162
Gulf Coast ports.....	461	465	425	497	354
Pacific Coast ports.....	1,640	1,482	1,648	1,169	1,305
Department store sales (% change from a year ago).....	+15%	+3%	+11%	+23%	+19%

* Preliminary * Excludes military-owned stocks. † Revised

More Tanks, Bombs, Smoke Grenades

Recent changes in requirements are due to improved equipment, battle experience, etc. Small-arms ammunition to take another cut. Heavy-heavy trucks at critical stage.

SINCE the Army Supply Program came out in February, requirements for tanks, bombs, and white-phosphorous rifle smoke grenades have been substantially increased; and another large cutback in small-arms ammunition is in prospect. But none of these changes is revolutionary. Rather, they reflect the natural evolution of a war program—technological improvements, adjustments to inventories, battle experience, re-evaluation of future contingencies, etc.

The tank program, which has been cut back steadily for the past 18 months, has now been placed on the urgency list. This year's requirements remain unchanged at 17,487, but the 1945 program, amounting to 15,000 as of February, is expected to be boosted sharply to more than 19,000. Thus tanks are coming back, yet not so strong as in 1943, when 29,000 rolled off the assembly lines.

PLANNED DEVELOPMENT

The proposed revisions are the result of long-planned technological development of tanks, rather than recent battle experience in Normandy. Experience early proved the need for heavier armament as well as armor. Back in 1942, for example, the 75mm. was the largest gun used on any U.S. tank, even the heaviest models; today it is the smallest. But it took time for engineers to perfect a tank embodying these features.

Now a new model is out of the development stage and about ready for mass production. This is the medium T26, which is larger than the M4 and the

heaviest tank to go into mass production. Just as the M4 made the M3 obsolete, so the T26 is beginning to cut into the output of the M4. Although only 115 of the T26s mounting the 90mm. gun are scheduled for this year, production requirements for 1945 have been boosted slightly—from 2,645 to 2,750. The T26 carrying the 105mm. gun is to be introduced next year, with 3,200 scheduled. And although the T26 is eventually to replace the M4—long the work horse of the Army—an increase is proposed for next year in the M4 mounting the 105: from 911 to 3,000, as against 2,258 this year. At the same time, a sharp cutback is planned for M4s mounting the lighter 76mm. and 75mm. guns.

TIGHTENS STEEL

The increase in the tank program will tend to tighten the steel situation and delay the release of steel for civilian production. Additional facilities required to turn out the tanks will conflict with facilities for locomotives. Furthermore, the tanks will be in competition with heavy-heavy trucks for axles.

Probably the most urgent of the recent changes in ordnance requirements is the planned increase in lighter general-purpose bombs. They are largely responsible for the proposed rise in the GP bomb program—from \$243,000,000 to \$303,000,000 for 1944, and from \$316,000,000 to \$428,000,000 in 1945.

FOR DIVE BOMBING

With the increasing tempo of land fighting in Italy and Normandy, the rate of expenditure has been much greater than had been anticipated, due to the mass use of fighter planes as dive bombers. The same is true of fragmentation

bombs used against personnel and vehicles. Since February, requirements for all aerial bombs are up from \$1,112,000,000 to \$1,391,000,000 for 1944, and from \$700,000,000 to more than \$1,000,000,000 for next year.

SMOKING OUT THE ENEMY

Battle experience is also responsible for a 3,000% increase in required production of white-phosphorous rifle smoke grenades—from \$1,700,000, to \$12,000,000 for this year, and from \$250,000 to \$48,000,000 in 1945. Because white phosphorous takes fire spontaneously, it is valuable as an incendiary agent, and it produces a dense white smoke for screening operations. Rifle grenades cover the gap between the maximum range of hand grenades and the minimum range of light-mortar fire. They have proved particularly effective in jungle warfare against Jap pillboxes and fox holes.

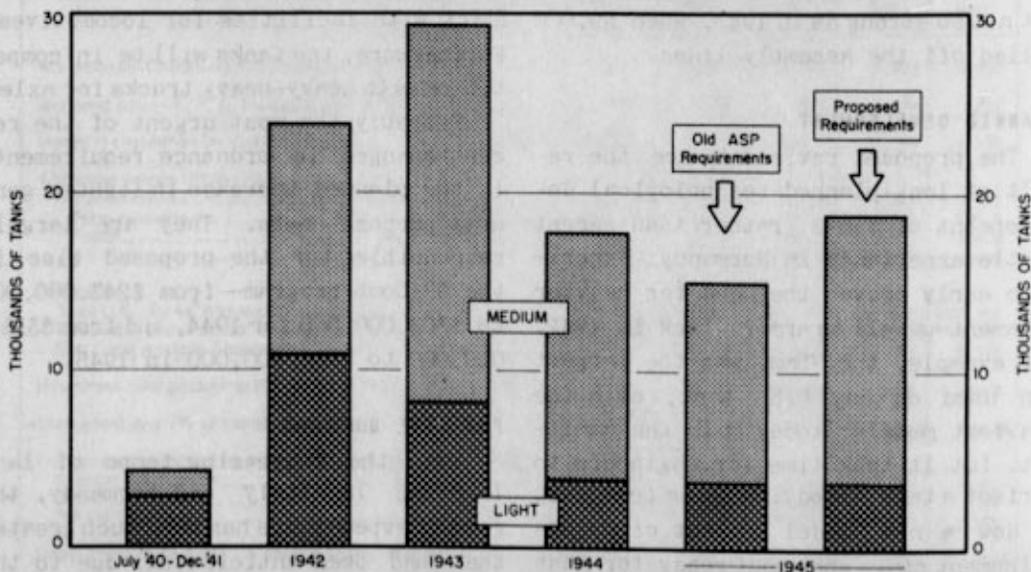
The reduction in requirements for small-arms ammunition is due primarily to a cutback in .30-caliber ammunition, the result of the decision of the Air Forces to use .50-caliber ammunition for training purposes instead of the .30-caliber. Consequently, the reserve stocks of the .30-caliber ammunition are sufficient to take care of future exigencies, and lower production schedules will provide enough for current needs.

TREATMENT FOR TRUCKS

Requirements for heavy-heavy trucks have been cut in the past for feasibility reasons, and indications are that they may have to be reduced further, even though the large trucks are now slated to receive the special treatment which has been accorded landing craft and heavy artillery. Heavy-heavies have failed by a wide margin to meet

MORE TANKS FOR NEXT YEAR

In the February ASP, tanks were due to decline in 1945. But proposed requirements boost next year's figure 6% ahead of 1944. Entire increase is in medium tanks.



WAR PROGRESS

the rapidly accelerating schedule, principally because of shortages of castings as well as certain components and forgings. Schedules have been rising sharply

since April and are now in the critical stage. It just isn't feasible to give the armed forces and lend-lease all the big trucks they would like to have.

Matching Up Engines With Planes

WE-10 schedule cuts requirements 5% by number this year, 20% in first 9 months of '45; value reduced 5% and 15% for same period. Jet-propelled makes debut.

HEAVIER PLANES take costlier engines. And the new WE-10 schedule matches the W-10 trend toward greater airframe weight (WP-Apr29'44, p10) with more expensive motors. For the first nine months of next year, the number of engines has been cut 20%, the value only 15%. The 1944 revisions are moderate—5% in numbers and value:

	WE-9	WE-10	% Change
	(thousands of engines)		
1944....	293	278	-5%
1945*...	241	194	-20
	(millions of dollars)		
1944....	\$4,469	\$4,264	-5%
1945*...	4,255	3,633	-15

*First nine months.

Despite the overall cut for next year, some types of engines have been increased sharply. Thus, the 2-stage R-1830 C9G Twin Wasp (for high altitudes) is stepped up 121%, largely to meet the higher schedules of, for instance, the PE4Y-2—Navy version of the B-24 Liberator, used as a land-based patrol bomber—and the Navy transports RY-3 and R2Y-1. Similarly the R-3350 EA-type Cyclone goes up 21% to take care of the boost in the P-29 Superfortress and B-32 superbomber.

On the other hand, the 1-stage R-1830 Twin Wasp is down 68%, chiefly because of cutbacks in the Liberator and the 2-

engined Budd stainless-steel RB-1 Conestoga transport. The R-2600 B-type Cyclone drops 60%, largely because of cutbacks in the B-25 Mitchell, A-20 Boston, and A-30 Baltimore.

The following table shows the number of major engines scheduled for 1944 and the first nine months of 1945, and the percentage change from the earlier WE-9 engine schedule based on the W-9 plane schedule:

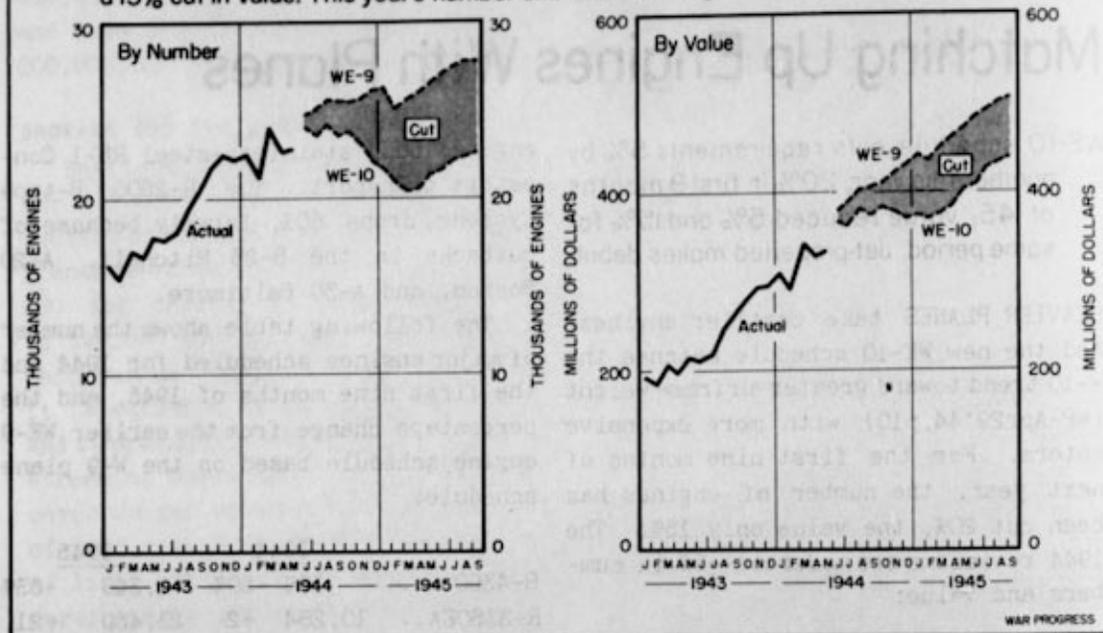
	1944		1945	
R-4360....	166	-50%	1,340	-63%
R-3350EA..	10,284	+2	23,450	+21
R-2800				
1-stage..	29,760	-3	35,550	+3
B-type..	26,295	-3	21,100	-21
C-type..	3,465	-2	14,450	+85
R-2800....				
2-stage..	17,402	-11	9,221	-20
R-2600B...	27,083	-12	8,200	-60
R-2000....	3,582	-19	6,225	+12
R-1830				
1-stage..	68,331	+3	16,250	-68
2-stage..	5,155	nil	12,475	+121
R-1820....	35,673	-3	15,970	nil
V-1710				
1-stage..	19,164	nil	13,600	-4

Making its debut in the schedules is the jet-propulsion engine—the I-16. This will power the Bell P-59 Aircomet and will be produced by General Electric at West Lynn, Mass.; 313 are scheduled for 1944, and 237 for the first nine months of 1945. Through May, 41 had been shipped.

Changes in schedules also bring about shifts in production among plants. For

NEW ENGINE SCHEDULES FOR OLD

WE-10 cuts number of engines 20% in the first nine months of next year, as against a 15% cut in value. This year's number and value off 5%.



example, the cut in requirements of the R-2600 E-type engine made by Wright, Lockland, means that the new schedule is 60% lower for the first nine months of 1945, a drop from 20,550 to 8,200 engines. Put in January, Lockland—in spite of past production difficulties (WP-Mar25'44, p10)—will start making the high-powered R-3350 FA-type Cyclone. This is a 2,200hp, 18-cylinder engine which powers the B-29 Superfortress, B-32 superbomber, and C-69 Constellation. At the end of May, production of these engines was 900 below requirements. Although enough are being produced to meet installation needs, there is a shortage of spares. Lockland is scheduled to get up to 1,200 a month by October, 1945, and turn out 4,700 in the first nine months.

Wright, Paterson, and Dodge, Chicago, will continue to make this engine. Wright's new schedule is slightly higher

in 1944 but unchanged in 1945. The new Dodge schedule, on the other hand, remains the same for 1944, but is lower for 1945. Producing since January, this plant has consistently been ahead of schedule; in May, for instance, it turned out 205 engines against a scheduled 150.

PRODUCTION SHIFT

Production of the 1,200hp, 1-stage R-1830 Twin Wasp is also shifted. Pratt & Whitney, East Hartford, will complete its schedule in September as originally planned. The other two producers—Buick, Melrose Park, and Chevrolet, Tonawanda—had identical earlier schedules, but now Chevrolet's schedule declines from the current 2,550 to 100 a month after March, and Buick will become the major producer.

To fill the place of the R-1830, Chevrolet will start producing the 2,100hp, 1-stage R-2800 C-type Double

Wasp (with water injection device to step up the engine to 2,800hp for emergencies); this will partly replace the regular R-2800 B-type now going into the Thunderbolt, Black Widow, F7F Grumman Navy fighter, and P8F development of the Grumman Hellcat, etc. Beginning in August, Chevrolet production will rise to 1,000 a month by March, 1945.

STEPUP AT BUICK

Besides its increased schedule for the 1-stage R-1830—from a May actual of 2,900 to 3,100 a month from July through October—Buick in February will start making the 2-stage type, moving from 50 a month to a peak of 1,100 a month in June. In addition, Buick will start producing the Pratt & Whitney R-2000, used primarily in the C-54 Sky-master.

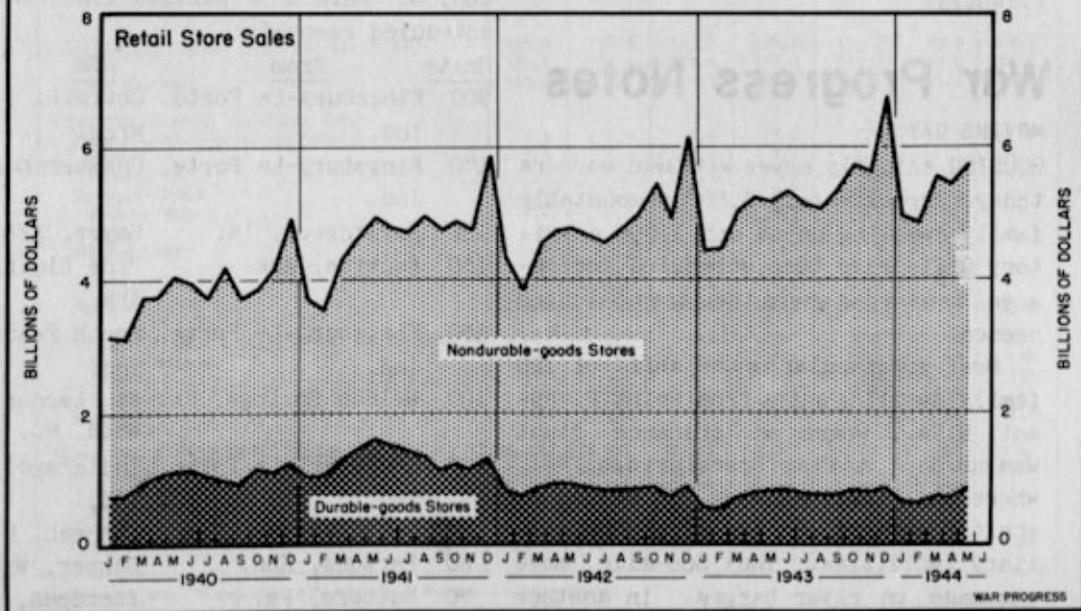
Purpose of this shift is to free some of the Pratt & Whitney, East Hartford,

capacity so it can step up work on the biggest engine in the program—its 3,000hp, 28-cylinder R-4360 X Wasp. This will go, for example, into the P-72 Republic fighter, 4-engined B-35 Flying Wing Superbomber, 6-engined B-36 super-superbomber, and the huge transports C-74, XC-97, and XC-99. The engine still requires further development, but it is being pushed. To date, Pratt & Whitney has turned out 26, but it is scheduled to produce 166 in 1944 and to get up to 350 a month by October, 1945.

Since Pratt & Whitney completed in May its program for the 1-stage R-2800 Double Wasp B-type engine, Ford now becomes the sole producer of this engine. But the new schedule cuts its output. Ford, Dearborn, finally got up to 2,324 engines in May (actual) after running steadily behind schedule for many months (WP-Apr22'44,p10). Under WE-9 it was slated to step up production to 3,100

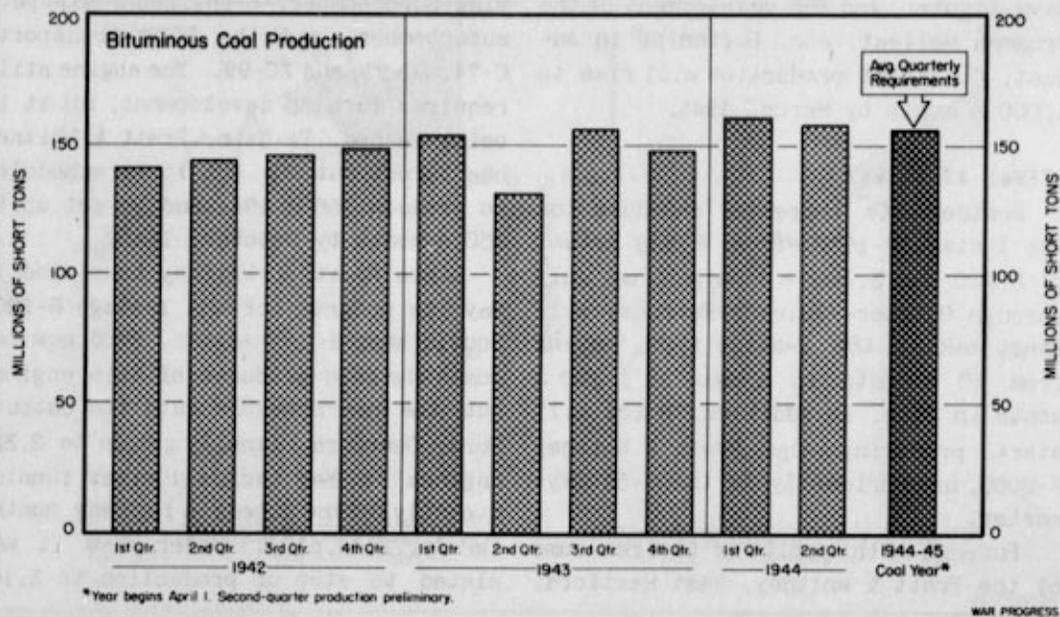
OVER THE RETAIL COUNTER

May dollar volume at highest level since the Christmas rush—10% ahead of last May. Durable- and nondurable-goods stores share in the gain.



BITUMINOUS BALANCE SHEET

Although second-quarter production drops 2% below the first, it remains slightly above average quarterly rate needed to meet 1944-45 coal-year demands.



a month by June, 1945, but the WF-10 schedule levels off at 2,350 a month through August, 1945, then declines slightly.

War Progress Notes

MOVING DAY

HOUSING actually moves with war workers today. Approximately 3,500 demountable family dwelling units and 1,600 dormitory units have been scheduled for removal from areas where they are no longer needed.

Most spectacular is the shift of 120 family dwelling units from Point Pleasant, W.Va., where an ordnance plant was cut back, to Camp Breckinridge, Ky., where additional housing is needed to shelter workers who are expanding military facilities. The 500-mile move was made on river barges. In another case, 200 demountable houses were taken

200 miles by trailer trucks from the Kingsbury-La Porte, Ind., ordnance plant to another ordnance plant at Port Clinton, O. Here's a partial list of the scheduled removals:

Units	From	To
900	Kingsbury-La Porte, Ind.	Detroit, Mich.
170	Kingsbury-La Porte, Ind.	Chambersburg, Pa.
150	Purlington, Ia.	Sayre, Ala.
150	Bauxite, Ark.	Pine Bluff, Ark.
150	Kingsbury-La Porte, Ind.	South Bend, Ind.
100	Weldon Springs, Mo.	Ft. Leonard Wood, Mo.
100	Kingsbury-La Porte, Ind.	Indianapolis, Ind.
80	Gabbs Valley, Nev.	Tonopah, Nev.
60	Parsons, Kan.	Casper, Wyo.
50	Hatboro, Pa.	Aberdeen, Md.

Now under way is the first major ef-

fort—under the National Housing Agency program for re-using publicly financed war housing wherever possible—to move a nondemountable house. Two structures, consisting of 12 family dwelling units in all, are being moved from shipyards in Wilmington, Del., to Front Royal, Va., where military installations are being built up. The houses have already been cut in sections and will soon be on their way via trailer trucks.

LIBERTY SHIP SAGA

THE LIBERTY SHIP is only three years old, but it's seen—and made—a lot of history.

Todd California Shipbuilding Corporation (now Permanente) laid the keel of the first Liberty on April 4, 1941: it was the "Ocean Vanguard," built for

the British. Since then almost 2,300 have been built, totaling more than 24,000,000 dead-weight tons. And whereas the first one took 196 days to complete, the average time from keel laying to delivery is now 65 days. Some yards consistently finish them within four or five weeks.

Permanente has remained the chief builder; it has turned out some 500 Libertys. Pacific Coast shipyards altogether have accounted for more than half of total construction. But two of the biggest yards have already switched to Victory cargo and transport ships, and Permanente is due to follow suit.

The Liberty program reached its peak in May, 1943, with 120 deliveries, and then fell off sharply at the beginning of this year. Only 300 more are sched-

SELECTED MONTHLY STATISTICS

Cost of Living—Federal Finance—Production—Employment

	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)	125.0	124.5	123.8	124.2	125.1	98.8	102.7
Foods	135.5	134.6	134.1	137.3	143.0	94.0	106.1
Other than food	119.5	119.3	118.5	117.1	115.1	101.2	100.9
FEDERAL FINANCE (GENERAL FUND)							
Expenditures—Total (billion dollars)	8.3	7.9	8.5	7.8	7.4	.7	-.7
War	7.9	7.3	7.7	7.5	7.1	.1	-
Nonwar	.4	.5	.8	.3	.3	.6	.7
Revenues—Total	3.0	3.1	6.6	2.1	1.5	.3	-
Income Taxes	2.2	2.5	5.9	1.5	.9	-	-
Other	.8	.6	.7	.6	.5	.3	-
War bond sales	.8	.7	.7	.8	1.3	-	-
E	.6	.6	.6	.7	1.0	-	-
F and G	.2	.1	.1	.1	.3	-	-
Net debt	179.5	172.7	168.1	151.2	123.2	37.4	33.5
PRODUCTION INDEX—INDUSTRIAL (1935-39=100)[†]	237 [‡]	237 [‡]	238	247	239	99	123
Total Manufactures	253 [‡]	254 [‡]	257	268	258	99	124
Durable	357 [‡]	361 [‡]	363	376	360	99	139
Nondurable	169 [‡]	169 [‡]	170	181	175	103	113
Minerals	146 [‡]	138	133	132	97	97	114
NONAGRIC. EMPLOYMENT—TOTAL	38,200 [‡]	38,493	38,681	39,847	39,674	29,842	N.A.
Manufacturing—Total	16,023 [‡]	16,223	16,509	17,238	16,753	9,732	—
Durable goods	9,624 [‡]	9,769	9,949	10,354	9,914	4,192	—
Nondurable goods	6,399 [‡]	6,454	6,560	6,884	6,839	5,540	—
Government	5,931 [‡]	5,905	5,871	5,822	5,995	1,966	—
Other	16,246 [‡]	16,365	16,301	16,747	16,926	16,144	N.A.

* Entire Series, May. † Unadjusted. ‡ Preliminary. § Revised. N.A. Not available.

uled for the last half of the year, 100 for 1945. In its decline it has come in for criticism; some would put an end to it right now, as an emergency program that has outlived the emergency. Nevertheless the fact remains that the Liberty has made construction history, and helped to make military history by carrying a large proportion of the U.S. munitions sent overseas. Liberty's account for 85% of the cargo dead-weight tonnage built by the Maritime Commission, add up to more than twice the tonnage of the American-controlled merchant fleet before Pearl Harbor.

COAL-YEAR QUESTION

WHETHER or not bituminous coal will be in short supply this year depends largely on manpower. Currently there are about enough miners to produce the 626,000,000 tons of bituminous coal needed for the 1944-45 coal year. But as of April there were some 30,000 miners between the ages of 18 and 26. (In tight coal areas, men over 21 are eligible for deferment until August if they have had three years' experience.) An average of 10,000 fewer miners for the balance of the coal year would mean an estimated output of 610,000,000 tons, which would necessitate reducing domestic requirements, further drains on stocks. Additional manpower losses could create serious shortages.

For the first quarter of the coal year (second quarter, 1944), output is estimated at 158,000,000 tons—slightly above the required rate—as against 160,000,000 in the previous quarter (chart, page 10).

REPORTS ON REPORTS

Cutbacks and Postwar Planning

Views on Cutbacks and Labor Withdrawals (restricted; pp. 16) analyzes opinions on cutbacks and layoffs. Small businessmen maintain that workers show

little anxiety about the future, are more interested in their current pay envelopes. Labor editors claim that employees have "cutback jitters," fear sudden layoffs even though now they may have little difficulty in finding other jobs. Businessmen and labor leaders also reveal divergent attitudes in *Views on Planning for Transition to a Peacetime Economy* (restricted; pp. 16). The former report that people have confidence in the postwar plans now being made. Labor editors, on the other hand, say that workers are so skeptical of postwar plans and so fearful of widespread unemployment that war production is suffering. But both groups are agreed that "management and labor must hang together or hang apart."

(Office of War Information, Bureau of Special Services)

Building Costs

Total expenditures for new construction during the first quarter of 1944 fell 60% below expenditures for the same period in 1943. Though private building jumped 18%, according to *Construction* (confidential; pp. 13), public building dropped 73%. While concrete and reinforcing steel are available and some construction workers are unemployed, contractors may soon be forced to curtail or end their businesses because of shortages of lumber and other materials. Once closed, prompt resumption after the war would be a problem. Building costs—the highest in history—are still rising and may rise even higher when private construction starts full tilt.

(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.]

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X Day and the Automobile Scorecard on Merchant Shipping

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X99
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Number 199

July 8, 1944

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WAR PROGRESS

Prepared in the War Production Board
Donald M. Nelson, Chairman

War Progress is a confidential report designed to provide a coordinated and continuing picture of the overall war program for the various war agencies. To this end, it presents, analyzes, and interprets basic statistical and economic information, and from time to time examines the pros and cons of controversial questions.

Although War Progress is an official publication of the War Production Board, statements in it are not to be construed as expressing official attitudes of the Board as a whole, or even of individual members. Conclusions, whenever reached, should be considered editorial conclusions.

War Progress is prepared in the Bureau of Planning and Statistics (Stacy May, Director) by the Munitions Branch (Morris A. Copeland, Chief).

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X Day and the Automobile

Automotive industry is biggest reconversion problem. Annual rate of 2,000,000 cars within year after Nazi defeat believed feasible if preparations could be made now.

THE FIRST NEW passenger car that rolls off the assembly line will mark a major turning point. The automotive industry will be the biggest industry to reconvert; its reconversion will be the most complex and difficult. Nevertheless there are two good reasons for believing that that car might come sooner than has been commonly supposed:

(1) Detailed estimates of the facilities, materials, and manpower to be released after X Day, marking the fall of Germany, indicate that it would be feasible then to start working towards an output of more than 2,000,000 automobiles a year.

(2) A detailed plan has been drawn up by the War Production Board's Automotive Division for translating that possibility into a concrete program.

POINTING UP THE PROBLEM

This program has yet to be formally approved, and might not be. But meanwhile the automotive industry offers the best example of the major problems of reconversion, and of what might be done about them.

In 1939, the output of the industry was \$2,300,000,000. Today the same plants are producing at the rate of about \$10,000,000,000 a year, of which all but 9% is in direct munitions—about half in motorized equipment, a third in aircraft. In addition, the industry is operating new government-owned plants with an annual output of about \$5,000,000,000.

Hence the big cutbacks due after X Day will make a big difference in the automotive industry. If the munitions program is reduced in the neighborhood of 50%—the current estimate—the pre-war plants, including wartime additions, would almost certainly have a potential capacity well in excess of 1939 output of 2,900,000 passenger cars and 700,000 trucks. But even assuming a 30% reduction—the original conservative estimate for planning purposes—a cut across the board would release capacity amounting to about \$2,500,000,000 in terms of the 1939 business dollar. After allowing for lack of balance in released facilities, the industry could still come close to the 1939 level of production.

AVAILABLE CAPACITY

Released capacity might amount to \$3,500,000,000 if cutbacks were deliberately concentrated in the automotive industry. It could also be reduced, though not so appreciably, by a deliberate effort to keep the industry in war work; much of its capacity is bound to be released if only because it is the major producer of motorized equipment, which is due to be cut back sharply.

Either way, a 30% reduction would also release an adequate supply of the basic materials needed for a sizeable automobile program—steel, rubber, copper, lead, plate glass, etc. About 20,000,000 tons of ingot steel would be available, for example; less than half of this would be enough to turn out 1,000,000 trucks and 2,500,000 passenger cars.

Likewise, there should be manpower to spare. Including suppliers of equipment, the industry might need up to

400,000 workers to make the new cars and trucks, perhaps 300,000 more to market them; but this would mean less than a fifth of the additional labor force available. Indeed, the real problem at that stage—at least in the Great Lakes region—will be not to find enough manpower but to find work for the jobless. Cutbacks in ground army munitions will inevitably be concentrated in this metalworking area.

As for components, it's hard to estimate future supplies of electric motors, bearings, storage batteries, generators, forgings, castings, etc. But they will naturally grow easier as military demands are reduced. All indications are that there will be no insuperable obstacles to reconversion on this score.

INEVITABLE DIFFICULTIES

Nevertheless there are pretty sure to be temporary shortages in some items. The problem will be to maintain a steady flow of all the required parts and components, to get them to the assembly lines in good time. And this brings up the inevitable difficulties of reconverting such a big, intricate, delicately balanced industry with so many interdependent plants.

It would be relatively simple to reconvert the main assembly plants. But

meanwhile you have to make all the things to be assembled: bodies, frames, engines, countless parts and types of equipment. Frame builders, for instance, may cause some delay because many of their plants have been drastically rearranged for war production; steering gears may cause difficulties because of the heavy requirements for machining. In general it will be a major problem to re-establish all the automotive machine shops which feed the various subassemblies.

CALL FOR CAREFUL PLANNING

All this points to the necessity for careful preparation beforehand in Washington: for prompt termination of contracts and removal of government-owned materials and equipment; for making available the necessary materials and tools for approved civilian programs; above all, for integrating cutbacks as far as possible in order that one or two vital segments of an industry won't be tied up in war work while all the rest are set to go. Otherwise a big assembly plant may stand idle for lack of key parts; a manufacturer of bumpers may turn to making fence posts for lack of orders.

Here a possible guide for the Production Executive Staff in coordinating cutbacks is the Automotive Division's program. It proposes to assign all manufacturers a definite number of cars which they could start producing when they get the green light, and for which they could start making definite preparations now.

HALF OF 1941 OUTPUT

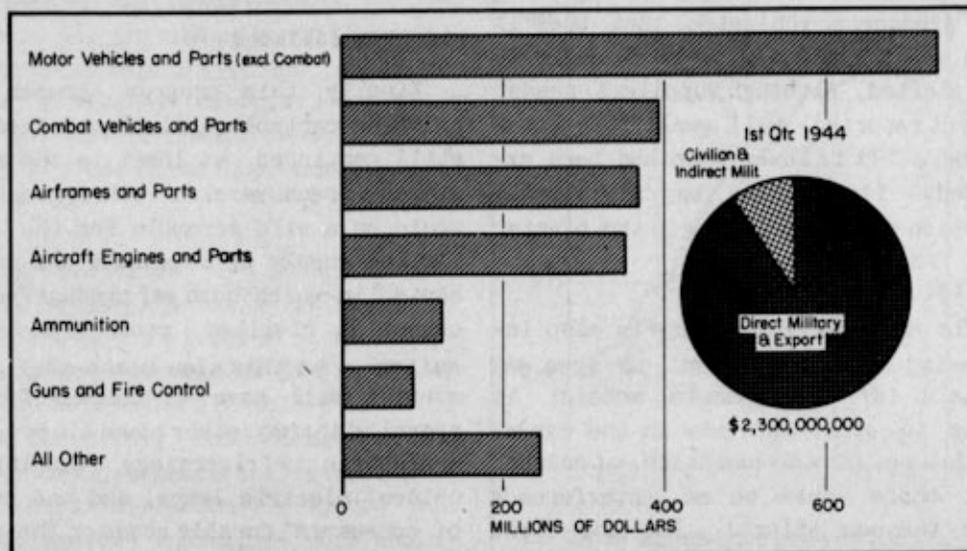
Specifically, the program calls for preparations for turning out 2,150,000 passenger cars. (Trucks must be considered in figuring available capacity but they present no particular reconversion problem in themselves; the industry has been making them all along.)

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TRADING PASSENGER CARS FOR PLANES, TANKS, ET AL.

About half of the automotive industry's output is in motorized equipment, one-third in aircraft. Direct military and export claimants get 91% of total production.



WAR PROGRESS

This was the going-out rate of the industry in 1942, and is close to what it considers the minimum efficiency rate. Quotas for individual manufacturers would be half of their output in 1941 (peak year for the industry), with 4% deducted from those of the big three—General Motors, Chrysler, Ford—and 38% thereby added to those of the other companies. This adjustment is designed to carry all of them close to their break-even point; further adjustments could be made for some small companies that had abnormally low output in 1941.

TO PRIME THE PUMP

At any rate, the quota is only a means to the main end, which is to prime the pump, enable the industry to get set for a specific job instead of planning in the blue. Each manufacturer could tell his suppliers in advance exactly what he will order from them; the

latter in turn could pass along their future orders to their own suppliers. The entire industry, from the biggest assembly plant to the smallest parts producer, could accordingly spell out their needs for floor space, machinery, materials, etc.

PROLOGUE TO EARLY START

Then on X Day the go-ahead signal could be flashed at once to all suppliers. By the time the main plants had cleared out government equipment and rebuilt their assembly lines, the flow of parts would have started, the subassemblies would be rolling. The first cars might then come off the assembly line within three months; whereas if the industry had suddenly to start from scratch, on a catch-as-catch-can basis, they would probably take six or nine months.

All this assumes, however, that the

CONFIDENTIAL

industry will be able to place in advance orders for new machine tools—a relaxation that was recently approved in principle by WPB but has not yet been put into effect. A survey covering all car producers indicates that they'll need about 7,500 new tools in order to get started. Although suppliers' needs, not yet reported, will swell this total somewhat, it is lower than had been expected. It amounts to only a small fraction of the tools now in the plants.

BASICALLY 1942 MODELS

The automotive industry is also interested in the proposal to free materials for experimental models; it wants to start work now on the car of the future. (On the condition, of course, that there would be no interference with the war effort.) But the first cars to be turned out would be basically 1942 models, with perhaps a few simple

changes. Although the industry doesn't want an absolute restriction to old models, it would stick to them at first for the sake of getting off to a quick start.

MODIFIED CONTROLS

Finally, this program assumes that existing controls will be modified but still continued, at least in the early stages of reconversion; otherwise there would be a wild scramble for the still limited supply of materials and components, in which both war production and essential civilian production would suffer. But this also means that automobiles will have to compete for approval with many other possible programs—electric refrigerators, washing machines, electric lamps, and the scores of consumers' durable goods on the preference list of the Office of Civilian Requirements.

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program—Checks paid (millions of dollars) -----	1,634	1,777	1,601	1,499	1,637
War bond sales—E, F, G, (millions of dollars) -----	641	581	274	297	209
Money in circulation (millions of dollars) -----	22,598	22,421	22,112	20,428	17,421
Wholesale prices (1926=100)					
All commodities -----	104.1 ^p	103.7	103.9	101.2	103.0
Form products -----	125.5 ^p	123.0	123.9	122.1	125.9
Foods -----	106.7	104.9	105.2	105.1	107.6
All Other -----	98.7 ^p	98.7	98.7	97.8	96.9
Petroleum:					
Total U.S. stocks* (thousands of barrels) -----	411,612	411,011	410,926	426,850	429,006
Total East Coast stocks* (thousands of barrels) -----	62,642	62,055	59,537	63,942	49,797
East Coast receipts (thousands of barrels, daily average) -----	1,607	1,810	1,786	1,524	1,466
Bituminous coal production (thousands of short tons, daily average)	2,000	2,050	2,096	1,904	768
Steel operations (% of capacity) -----	94.3%	95.7%	97.5%	86.3%	95.0%
Freight cars unloaded for export, excluding grain (daily average)					
Atlantic Coast ports -----	3,053	2,897	3,200	2,029	2,192
Gulf Coast ports -----	465	461	543	327	350
Pacific Coast ports -----	1,740	1,640	1,666	1,002	1,260
Department store sales (% change from a year ago) -----	N.A.	+15%	+7%	-7%	+39%

^p Preliminary * Excludes military-owned stocks. N.A. Not available.

The arguments for choosing automobiles are (1) they're the people's first choice, according to polls; (2) by the middle of next year there'll be 7,000,000 fewer on the roads than at the end of 1941; (3) the industry will have a great deal of idle plant; and (4) as the country's biggest employer, it could ease the severe unemployment problem likely to arise in the Great Lakes region after X Day.

BASIS OF OBJECTION

Here is also the basis for the chief objection: so big a program might interfere with war production. It is argued, however, that meanwhile this plan would aid the war effort. Both management and labor would know where they stood, have less uncertainty about the future, and so could devote themselves more wholeheartedly to war production. The industry and union leaders have already approved the plan informally.

In any event, reconversion of the automotive industry won't be smooth or easy. Manufacturers don't know yet just how much war work they will continue to have after X Day, or just when they will know. Some will be tied up more than others, have trouble keeping up with their competitors. (At least one already has open capacity and would like to start making cars right now.)

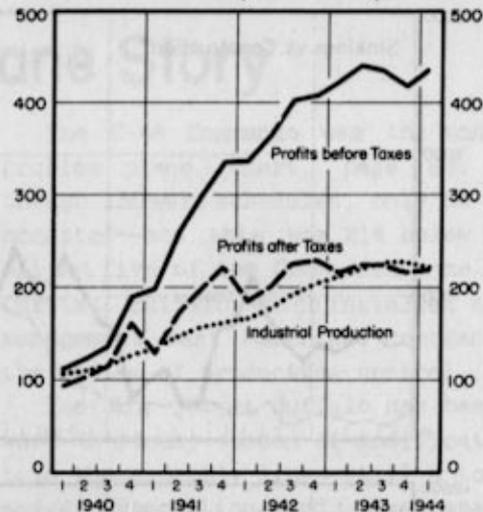
NEED FOR CONCRETE PLAN

Likewise many of their customary suppliers will have trouble in filling their orders. All can count on having to do considerable shopping around, improvising, readjusting of their plant layouts and production procedures. And there would also be plenty of work for the Production Executive Committee Staff in trying to allocate cutbacks so as to release all the necessary facilities.

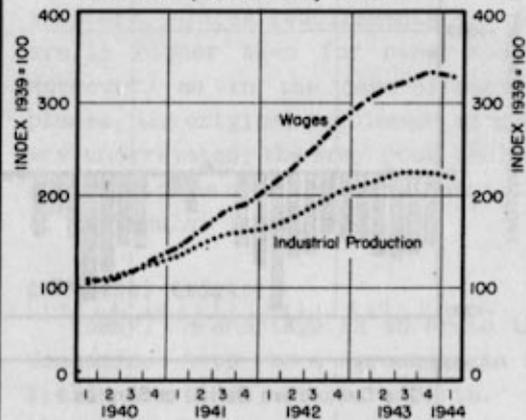
Nevertheless this much seems clear:

PROFITS, WAGES, OUTPUT

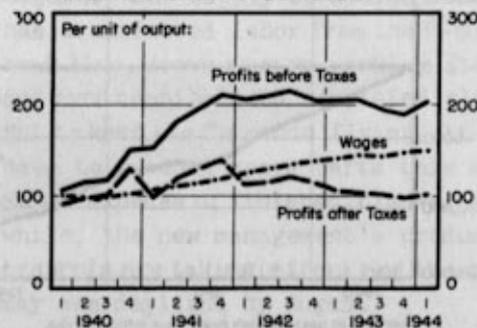
Profits before taxes have risen 337% since '39; after taxes, 117%.



While wages have gone up 228%, industrial production, 120%.



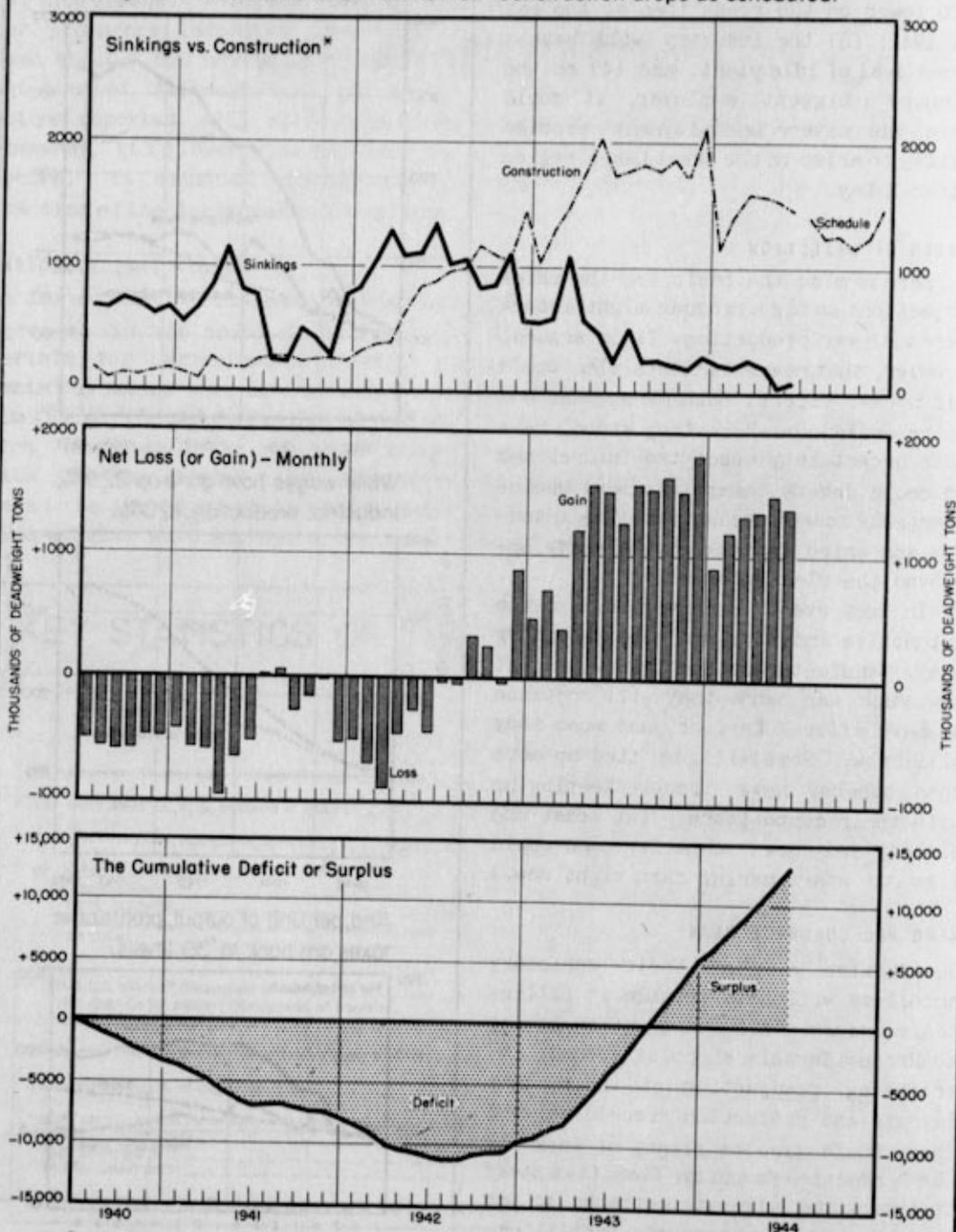
And, per unit of output, profits after taxes are back to '39 levels.



WAR PROGRESS

SCORECARD ON MERCHANT SHIPPING

Though sinkings in June of United Nations vessels exceeded May's record low, they were the second lowest of the war. Construction drops as scheduled.



if reconversion planning is designed to aid industry in making a quick change-over, so as to maintain a high level of employment and productivity, then plans must be spelled out in some such concrete detail as is this one, and must enable industry to make some such definite preparations now.

Figures Don't Tell Plane Story

June acceptances run 500 behind schedule; airframe weight, 6%. Yet nearly all win-the-war models come through. Superforts off, but Commando is big worry.

ON THE FACE of things, June was a jolt to the airplane program. Although airframe weight was slated to drop about 1%, the decline ran to 5%; and whereas acceptances of 8,547 airplanes (including Targets and Drones) were scheduled, the final count was 8,049. But it was one of those months in which figures alone can't tell the real story.

Bombers such as the B-17 Flying Fortress, B-24 Liberator, and A-26 Invader; fighters such as the P-38 Lightning, P-47 Thunderbolt, P-51 Mustang, and P-6F Hellcat; transports such as the C-47 Skytrain and the C-54 Skymaster were all on or ahead of schedule. As a matter of fact, the planes needed to win the war came through in smart style except for two models—the B-29 Superfortress and the C-46 Commando.

SUPERFORTS SHORT BY 10

Boeing, Wichita, was four B-29s ahead of its schedule of 60; the Boeing plant at Renton was on the mark with five; and Martin, Omaha, came up with three, against one scheduled. But Bell, Atlanta, was still having difficulty feeding modifications into the assembly line, and only 10 B-29s were accepted out of a schedule of 26. As a result, June acceptances of Superfortresses totaled up to 82, compared with a schedule of 92; the May figure was 88.

The C-46 Commando was the month's problem plane (chart, page 8). Although 130 were scheduled, only 64 were accepted—and this was 21% below May. All but five of the Commandos came from Curtiss, Buffalo, which installed a new management last March and reorganized the system of production control.

The big job at Buffalo has been to work a steady stream of modifications into the assembly line—still a touch-and-go proposition—and to meet special orders for spare parts. Because the Commando has been spread over so many theaters, spares requirements are generally higher than for other models. Moreover, as in the case of many new planes, the original complement of spares was understated; the Army just couldn't anticipate the need for exact quantities of particular items.

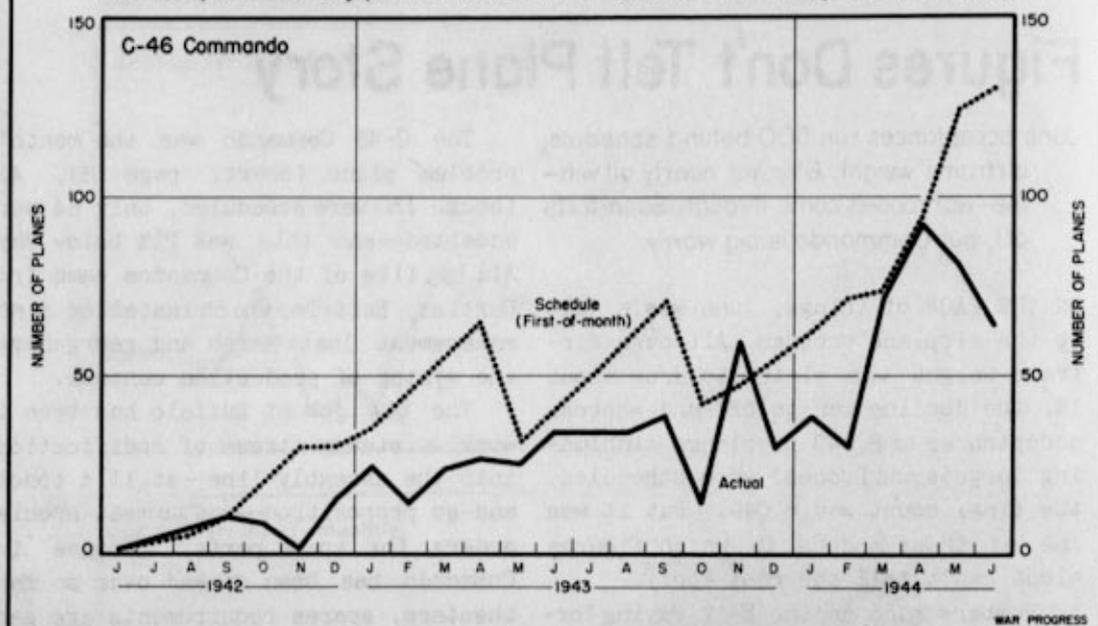
COMMANDOS GROUNDED

Today, the shortage is so acute that Commandos have been grounded in the field for lack of spare parts. And though spares requirements went up in June, they will skyrocket in July. To augment the supply of spares, Curtiss has transferred labor from the P-40 Warhawk line, drawn down on working stocks, and even cannibalized completed planes. But to keep the Commando flying, it will have to produce spare parts this month at the expense of finished planes. Meanwhile, the new management's production controls are taking effect and the plant may see daylight by August.

Of all major tactical groups, patrol

DIFFICULTIES DOG THE COMMANDO

First management, then modifications, then diversion to production of spares hold down output of this key plane. First-of-month schedule beaten only once in 21 starts.



bombers showed the greatest deficit from schedule—40%; here it was largely a case of model changes in three plants. Transports and superbombers were next. The changes in major groups follow (air-frame-weight basis):

	June Acceptances as % of	
	May	W-10
All military planes	94%	95%
Army procured...	95	97
Navy procured...	87	85
Combat planes....	95	97
Superbombers....	93	88
Heavy bombers...	98	102
Patrol bombers...	62	60
Medium bombers...	100	104
Light bombers...	86	97
Fighters (incl. naval reconn.)..	95	94
Transports.....	95	85
Trainers.....	51	68
Communications....	109	101

Trainers made the poorest showing of the year, schedule being missed by 32%. This was accounted for almost entirely by the AT-6 Texan at North American, Dallas; 110 were accepted out of a ticket of 312. The scheduled number of AT-6s was produced, but outer-wing panels from the Waco, Texas, feeder plant didn't fit. These 200-odd "delayed" planes should come through in the next few months.

RECORD AT FORD

Fords and Liberators made their usual gratifying showing; the 1,455 turned out were 2% ahead of the plan. Incidentally, acceptances of Liberators at Ford, Willow Run, were on schedule at 383, the largest number of planes ever turned out by a heavy-bomber plant. And Ford's goal this month steps up to 413.

For the first time this year, Chance Vought, Stratford, and Goodyear, Akron, failed to meet or exceed their schedules

on the Corsair, one of the Navy's top-notch fighters. At 169 planes, Chance Vought was 31% below expectations; and with 160, Goodyear was 20% short.

ACCEPTANCES DELAYED

In both cases, the scheduled number of planes was completed. Acceptances were held up because tail stabilizers and elevators had to be reworked; they represented first deliveries from a new subcontractor. Chance Vought is expected to make up its deficit this month, Goodyear by August. Meanwhile, current acceptances are still above requirements for this plane; when the Corsair program was cut in May, rescheduling was graduated to permit the remaining manufactur-

ers to taper output to the lower level.

The Navy has changed its mind on the BTD dive bomber. (Two came through for the first time last month.) Under W-10, Douglas, El Segundo, was originally slated to turn out 190 this year, 1,400 next; now, the total has been cut to 50.

FILL-IN AT EL SEGUNDO

The BTD will continue to fill in at El Segundo, which winds up the Dauntless this month. In addition, the plant will modify PB4Ys, the Navy version of the Liberator, build parts for Douglas Santa Monica's C-54 Skymaster program, and continue to work on the Navy's XTB2D, an experimental torpedo bomber. This, however, won't keep all of the present

SELECTED MONTHLY STATISTICS

Food Production - Income Payments - Labor Disputes

	Latest Month*	Preceding Month	2 months Ago	6 months Ago	Year Ago	Some Month 1939	Some Month 1937
FOOD PRODUCTION							
Dairy products (million pounds)							
Butter, creamery	172.7	130.8	124.8	93.0	190.5	197.1	182.0
Cheese	94.8	87.9	77.0	73.2	109.4	80.4	73.3
Evaporated milk	417.5	318.2	267.8	156.0	376.0	263.2	239.1
Meats-total (incl. lard, million pounds)							
Beef and veal	1,836	1,746	1,989	2,014	1,544	1,127	813
Lamb and mutton	566.6	546.9	609.7	676.0	459.3	466.3	412.1
Pork, incl. lard	88.3	58.7	66.6	94.4	69.9	55.4	54.2
Lard	1,200.9	1,140.1	1,312.7	1,243.4	1,015.2	605.5	346.4
Poultry and eggs							
Eggs (millions)	240.8	221.8	249.0	210.9	177.7	106.7	52.6
Poultry (receipts of 5 principal markets, million pounds)	6,704	6,978	6,763	2,707	6,506	4,763	4,905
	29.0	21.8	18.7	71.1	9.5	24.9	20.3
INCOME PAYMENTS - TOTAL (million dollars)							
Salaries and wages	12,277*	12,493*	12,871	12,311	11,252	5,520	5,772
Comm., distr., and serv. industries	9,045*	8,985*	8,980	8,848	8,300	3,756	3,969
Government	6,858*	6,820*	6,858*	6,895	6,522	3,046	3,324
Military	2,187*	2,165	2,122	1,953	1,774	535	492
Nonmilitary	1,206*	1,191	1,154	1,030	834	35	33
Work relief wages	981*	974	968	923	940	500	459
Other income payments†	0	0	0	0	4	175	153
Income payments, annual rate (adjusted for seasonal, billion dollars)	3,232*	3,508*	3,891	3,463	2,952	1,764	1,803
	155.0*	154.1*	154.7	148.3	140.6	69.5	73.9
LABOR DISPUTES							
Number of strikes in progress	560	475	390	348	458	434	677
Workers involved (thousands)	312	167	125	537	662	457	445
Number of strikes beginning during month	610	435	360	325	412	258	604
Workers involved	290	155	115	136	558	95	325
Man-days idle (thousands)	1,400	580	415	2,863	1,468	3,548	2,983

* Entire Series, May. † Preliminary. ‡ Revised. † Social Security benefits, direct and other relief, dividends and interest, entrepreneurial income.

labor force busy; stated requirements decline to 8,600 by the end of the year.

Incidentally, the 7% deficit from

schedule in Army 1-engined fighters was all caused by a sharp drop in the P-40 Warhawk, now used largely for training.

Shifts in Signal Equipment

Though Army revision doesn't radically alter overall picture, it brings sharp changes in some items. Airborne radar and radio programs now larger for '45 than for '44.

DURING the past five months, the Army Service Forces' communication and electronic program for this year and next has been overhauled. Though current changes have not radically altered the overall picture, they have brought extensive revisions within the program.

Most conspicuous changes are in airborne radar and airborne radio. In February, both programs were scheduled to decline next year. Now both will be larger than this year. Airborne radar drops this year from \$657,000,000 to \$565,000,000, but in 1945 jumps from \$534,000,000 to \$712,000,000. Airborne radio rises 6% this year, but next year more than doubles—from \$202,000,000 to \$461,000,000.

Here is how the ASF communication and electronic requirements as of June 27 compare with the February Army Supply Program (in millions of dollars):

	1944		1945	
	As of	%	As of	%
	<u>Feb. 1</u>	<u>Change</u>	<u>Feb. 1</u>	<u>Change</u>
Total.....	\$3,243	-2%	\$2,251	+16%
Radar....	1,007	-14	772	+22
Airborne	657	-14	534	+33
Ground..	350	-15	238	-3
Radio....	1,555	nil	972	+25
Airborne	420	+6	202	+128
Ground..	1,135	-1	820	-8
Wire com.				
& misc..	681	+11	457	nil

As usual the revisions are due to a variety of reasons. Feasibility was the primary consideration in the 2% reduction in the program for this year. It just hasn't been possible to expand production of some needed items so rapidly as desired. Consequently, some of the equipment originally scheduled for this year has been pushed over into 1945.

However, this is not the only reason for the 14% increase in 1945 requirements. With half of 1944 gone and Allied forces actually engaged in invasion, it is possible now to get a much clearer conception of next year's needs.

TECHNOLOGICAL DEVELOPMENT

Technological development, which causes a high rate of obsolescence in radar equipment (WP-Apr15'44,p10), is the major reason for revisions in the rapidly accelerating airborne radar program. This program has been subject to almost constant revision, due to intensive research. Often as many as three or four types of equipment are being tested simultaneously to do the same job. When one type proves superior, the others are dropped. Thus, two types of gun-laying equipment (AN/APG-14 and AN/APG-5) have been canceled out since February—before they got into production—resulting in a reduction of \$123,000,000 in requirements. Similarly, two countermeasure sets (designed to interfere with enemy radar) were eliminated before they were out of the developmental stage, bringing a reduction of another \$14,000,000.

The AN/APQ-10 bombing set, formerly in the program for \$19,000,000, has been replaced by the AN/APQ-13 and the AN/APQ-7 (bombing equipment for the B-29 Superfortress). Requirements for the AN/APQ-13 have been increased by \$31,000,000, those for the AN/APQ-7 by \$42,000,000.

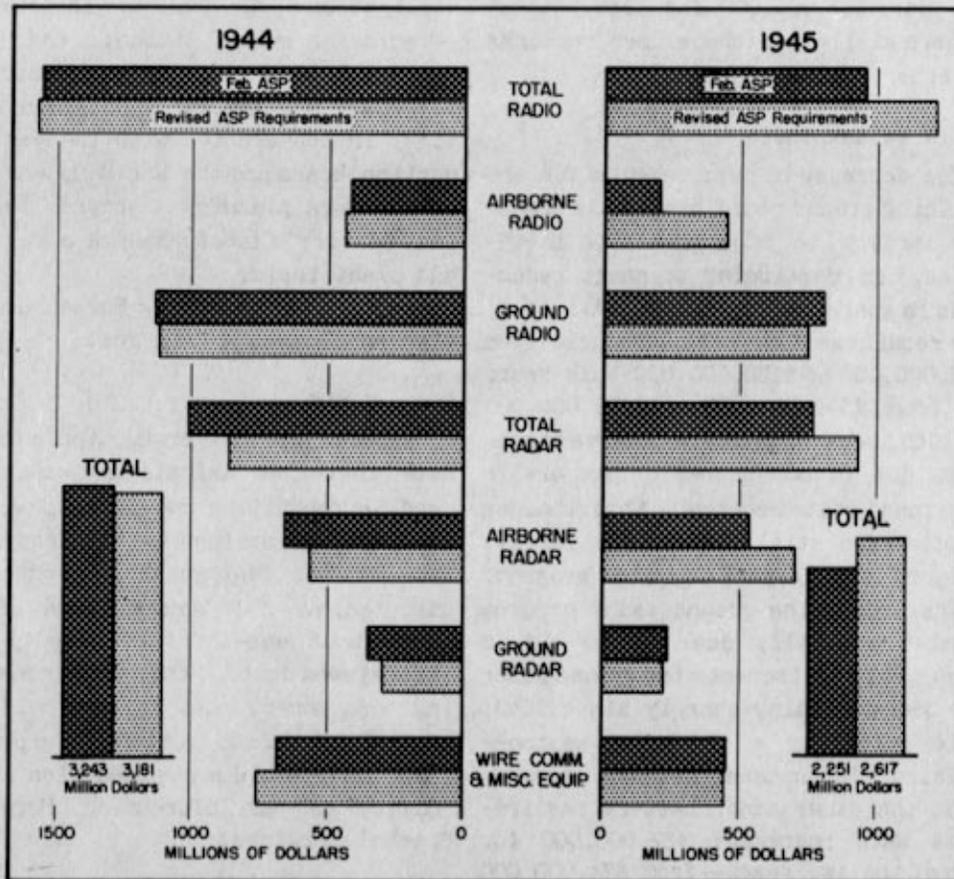
Though radio was more mature than radar at the outbreak of the war, technological developments are still taking place. Thus, introduction of the new

AN/ARC-9 very high frequency command set to replace the SCR-522 alone accounts for \$142,000,000 of the \$259,000,000 increase in 1945 airborne radio requirements. Nevertheless, production of the SCR-522 will be boosted by \$7,000,000 this year and \$20,000,000 in 1945. Here the reason is an increase in international aid requirements; our Allies want the set.

Many of the revisions, of course, are due to battle experience. Thus 1944

OUT OF 1944, INTO 1945

Revised ASP requirements reduce this year's signal equipment program 2% from February ASP, boost next year's total 16%. But '45 is still below '44.



WAR PROGRESS

requirements for wire communication and miscellaneous equipment have been stepped up 11%—from \$681,000,000 to \$753,000,000. Needs for tactical (double copper) wire for telephone communication on the invasion fronts have increased this year from 67,000 miles to 112,000 miles, next year from 78,000 miles to 171,000 miles. Likewise, field-wire requirements for this year have risen from 750,000 miles to 1,090,000 miles.

Numerous other items for which requirements have been boosted include mine-detector equipment, teletype machines, and vehicular ground radio sets SCR-508 and SCR-528 for landing craft—the latter to the extent of \$19,000,000 this year, \$37,000,000 for 1945. These sets are similar to those used on tanks and other combat vehicles.

CUT IN VACUUM TUBES

The decrease in requirements for the declining ground radio program is traceable largely to adjustments to inventories, in particular to sharp reductions in spare vacuum tubes. All told, tube requirements have been reduced from \$273,000,000 to \$158,000,000 this year, and from \$396,000,000 to \$271,000,000 for 1945, because of large reserve stocks. About 60% of these reductions are in the ground radio program. Nevertheless ground radio still remains the largest category in the signal equipment program.

The drop in the ground radar program is also partially due to the cut in tubes. But requirements for ground radar have been declining sharply since 1943; it is primarily a defensive weapon—antiaircraft, coastal defense, etc.

On the other hand, battery requirements have increased \$27,000,000 for each of the two years—from \$74,000,000 to \$101,000,000 for 1944, and from \$71,000,000 to \$98,000,000 for 1945. Batteries have become one of the tight spots in the munitions program (WP-June

24'44,p9). And they are essential equipment for the stepped-up airborne radio and airborne radar programs.

REPORTS ON REPORTS

It's Manpower Again

Next year's high production goals for all fertilizers are seriously threatened by manpower difficulties, according to *Fertilizers* (confidential; pp. 15). In addition to output expected from new facilities, existing plants must increase production 28% to meet the War Production Board's superphosphate goal of 9,464,000 tons for 1944-45. And, in spite of the industry's utilization of all available labor sources—including women, Indians, and prisoners of war—labor problems continue to grow. Now the War Food Administration, in cooperation with the War Production Board and the War Manpower Commission, is planning a program to meet the industry's labor needs on a regional and plant basis.

(Department of Commerce, Bureau of Foreign and Domestic Commerce)

Women At Work

Layoffs due to production cutbacks have increased skepticism about the need for recruiting more womanpower for industry, according to *Opinions About the Wartime Employment of Women* (restricted; pp. 39). A recent study showed that about one-third of the persons interviewed doubted the need for employing more women, most of them believing that efficient utilization of the present labor force would meet production needs. (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.]

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Production: A Twice-Told Tale

Metals, Men, and Models

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WAR PROGRESS

Prepared in the War Production Board
Donald M. Nelson, Chairman

War Progress is a confidential report designed to provide a coordinated and continuing picture of the overall war program for the various war agencies. To this end, it presents, analyzes, and interprets basic statistical and economic information, and from time to time examines the pros and cons of controversial questions.

Although War Progress is an official publication of the War Production Board, statements in it are not to be construed as expressing official attitudes of the Board as a whole, or even of individual members. Conclusions, whenever reached, should be considered editorial conclusions.

War Progress is prepared in the Bureau of Planning and Statistics (Stacy May, Director) by the Munitions Branch (Morris A. Copeland, Chief).

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Production—As You Like It

Munitions output fell 1%, missed schedule by 3%. Yet most of must programs—high-preference planes, big guns and ammunition, heavy trucks, tractors—came through.

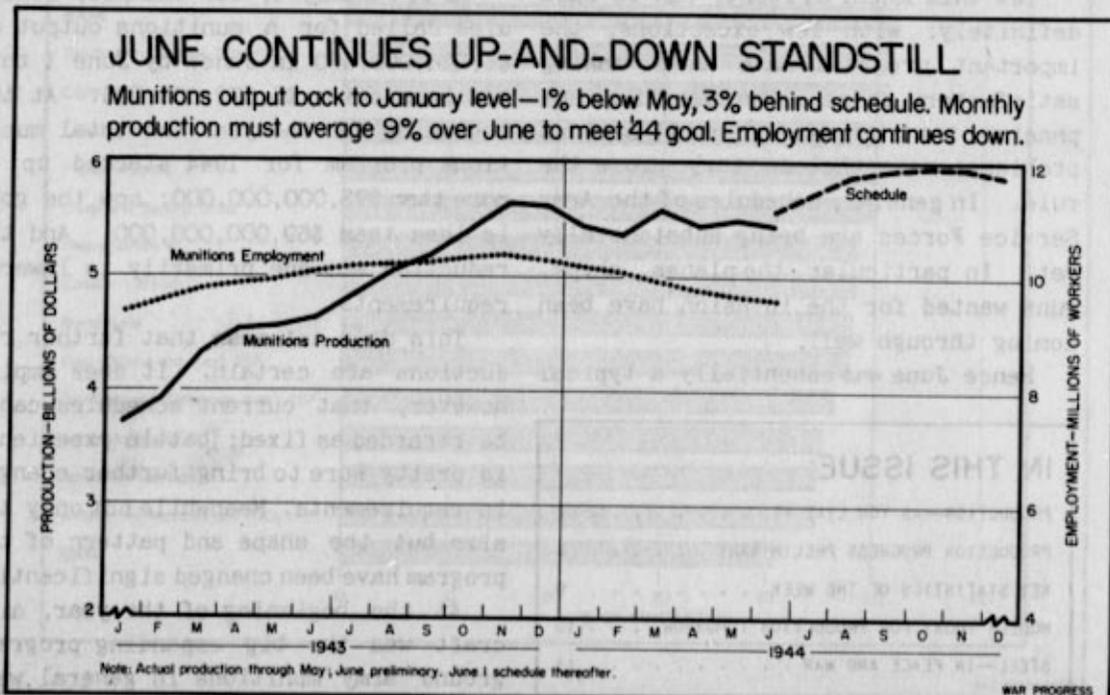
THE BASIC facts about munitions production in June are that total output is estimated at \$5,420,000,000 (preliminary), that this was 1% less than in May, and that it missed schedule by 3%. But as usual the facts don't speak for themselves. They can be viewed with alarm or with satisfaction—depending on the spokesman.

Thus it might be emphasized that June production continued the 1944 record of erratic ups and downs, consistent only in remaining below the level reached at the end of 1943; the inference is that the munitions program is in the

doldrums. Or it might be pointed out that this erratic performance was largely in accordance with plan, since first-of-the-month schedules have also gone up and down, have yet to call for a rise above the 1943 peak; and lags were characteristic of the program in its heyday. (A year ago June the rising program was 9% behind schedule.)

DIVERGENT VIEWPOINTS

One might dwell on the fact that major deficits came in programs of major importance: aircraft missed the goal by 4%, airborne radar by 8%. Or one might dwell instead on the fact that within the aircraft program almost all the high-preference models came through smartly (WP-July 8 '44, p7), and that most of the must programs—big guns, big-gun



ammunition, heavy-heavy trucks, tractors, etc.—were right on schedule or well ahead.

Similarly with the reasons for the apparent slump. It might be attributed to fundamental causes that threaten the war effort: the manpower shortage in a few basic industries, such as forge-and-foundry, that holds up critical components. Or one might observe that relatively few war plants are short of manpower, and point to transitory or fortuitous causes, such as the coming of hot weather, the shorter work month, the temporary delays in acceptances of finished planes.

NOT CONTRADICTIONARY

And all these different statements are true—or at least none is positively untrue. They are not flat contradictions but shifts in emphasis. The basic truth about war production today is that it calls for just this kind of tiresome on-the-other-hand thinking.

Yet this much, at least, can be said definitely: with few exceptions, the important programs have been making satisfactory gains. The exceptions emphasize that there are still serious problems; nevertheless they prove the rule. In general, schedules of the Army Service Forces are being substantially met. In particular, the planes, ships, guns wanted for the invasion have been coming through well.

Hence June was essentially a typical

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month in the current phase of war production. Munitions output was only slightly below the 1944 monthly average of \$5,447,000,000. Likewise total munitions employment fell off about 1%, continuing the downward trend that set in last November (chart, page 1). It now stands about where it did at the beginning of 1943—though production remains on a considerably higher level.

At first glance, moreover, the job ahead looks familiar. Current schedules call for a rise to a peak in October 11% over the June level, or gains of better than 2% a month. This would mean a different curve from that of the year to date (chart, page 1). Yet it's the kind of curve that has been projected at any given date; schedules have regularly called for a rise in the months ahead. The reason why it hasn't materialized so far is that the 1944 program has steadily been whittled down.

CHANGING PATTERNS

As of January 1, for example, schedules called for a munitions output of \$6,214,000,000 in June; by June 1 this had been cut to \$5,572,000,000. At the beginning of the year the total munitions program for 1944 stacked up to more than \$73,000,000,000; now the goal is less than \$69,000,000,000. And the reduction was due primarily to lowered requirements.

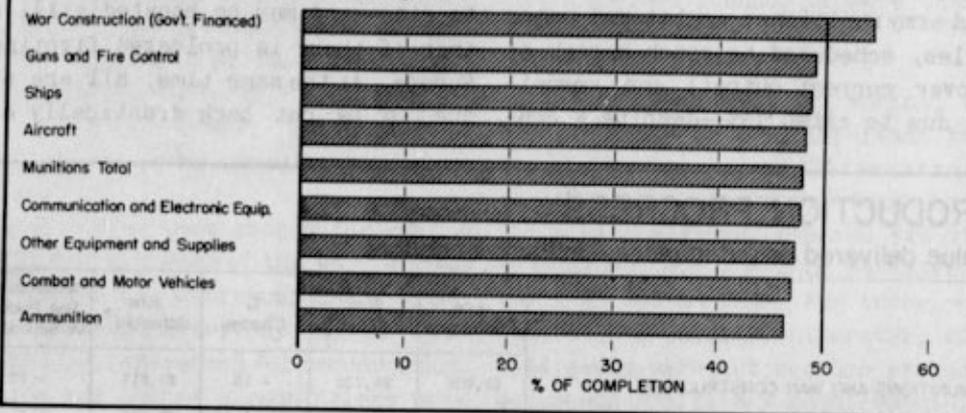
This does not mean that further reductions are certain. It does imply, however, that current schedules can't be regarded as fixed; battle experience is pretty sure to bring further changes in requirements. Meanwhile not only the size but the shape and pattern of the program have been changed significantly.

At the beginning of the year, aircraft was the big expanding program; ground army munitions in general were declining programs. Today the aircraft

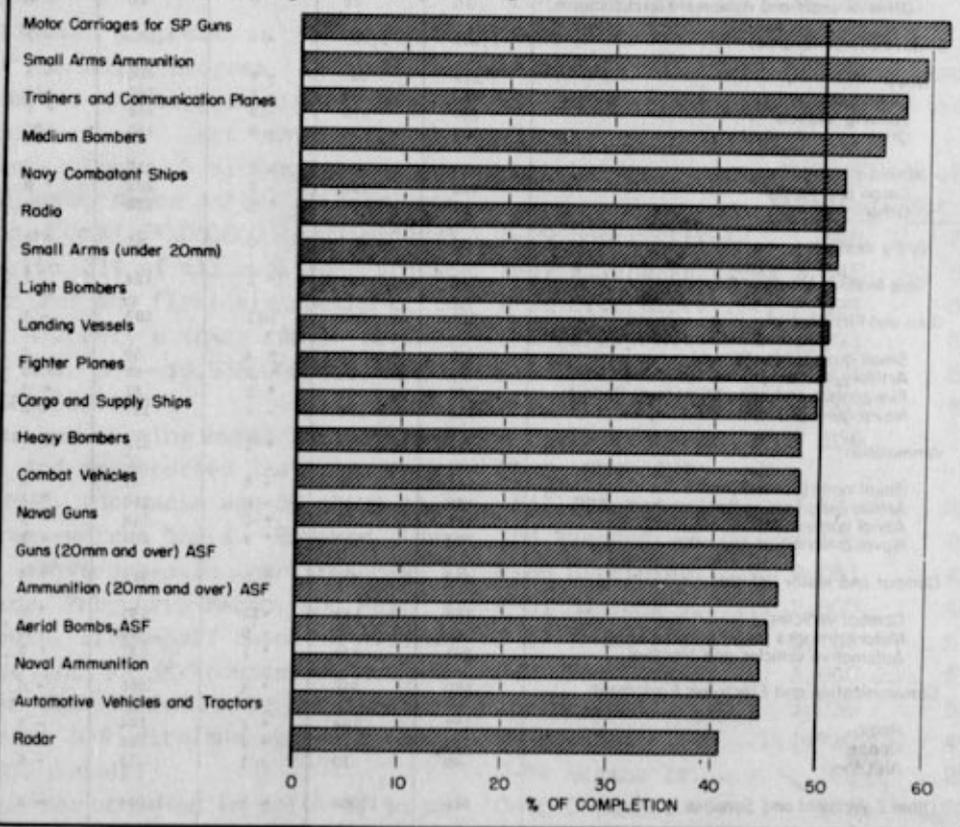
MIDWAY IN MUNITIONS

With half the year gone, 48% of the current 1944 program has been completed.

All major groups are over the 46% mark:



Individual programs range from 41% to 62%:



WAR PROGRESS

program is still rising, with a scheduled peak of 8% over the June level; but this is the smallest percentage gain called for among the major programs. The big expanding programs now are in ground army munitions: combat and motor vehicles, scheduled to reach a peak of 22% over current output; and ammunition, due to climb 16%—despite a con-

tinued decline in small-arms ammunition. Next come communication and electronic equipment, up 14%; ships, up 12%; and guns and fire control, up 9%.

Thus all major programs are now slated to rise—and may be boosted still further if there is prolonged fighting in Europe. At the same time, all are still due to be cut back drastically after

PRODUCTION PROGRESS – Preliminary

Value delivered or put in place – millions of dollars

	June Preliminary	May Actual	% Change	June Schedule *	% Deviation June Prelim. vs. Schedule
MUNITIONS AND WAR CONSTRUCTION	\$5,665	\$5,739	- 1%	\$5,817	- 3%
TOTAL MUNITIONS	5,420	5,498	- 1	5,672	- 3
Aircraft	1,670	1,706	- 2	1,739	- 4
Total airframes, engines, propellers	1,307	1,350	- 2	1,361	- 4
Airplane spare parts	337	350	- 4	352	- 4
Other aircraft and equipment (excl. commun.)	26	26	0	26	0
Ships (incl. maintenance)	1,150	1,207	- 5	1,180	- 3
Navy	579	637	- 9	600	- 3
Combatant	234	248	- 6	233	n11
Landing Vessels	240	275	-13	226	+ 7
Other	105	114	- 8	142	-26
Maritime	384	386	- 1	395	- 3
Cargo and supply	285	293	- 3	265	+ 8
Other	99	93	+ 6	130	-24
Army Vessels	53	53	0	51	+ 4
Ship Maintenance and Repair	134	131	+ 2	134	†
Guns and Fire Control	290	289	n11	293	- 1
Small arms (under 20mm.)	50	48	+ 4	50	0
Artillery, mortars, rocket launchers - ASF	55	54	+ 2	55	0
Fire control and searchlight (excl. Radar)	62	61	+ 2	61	+ 2
Naval guns and other	123	126	- 2	127	- 3
Ammunition	535	523	+ 2	529	+ 1
Small arms (under 20mm.)	47	50	- 6	47	0
Artillery, mortars, rocket launchers - ASF	163	166	- 2	156	+ 4
Aerial bombs - ASF	121	119	+ 2	118	+ 3
Naval ammunition and other	204	188	+ 9	208	- 2
Combat and Motor Vehicles	430	409	+ 5	415	+ 4
Combat vehicles	154	138	+12	143	+ 8
Motor carriages for SP guns	35	32	+ 9	35	0
Automotive vehicles and tractors	241	239	+ 1	237	+ 2
Communication and Electronic Equipment	360	346	+ 4	382	- 6
Radio	177	164	+ 8	184	- 4
Radar	114	112	+ 2	125	- 9
All Other	69	70	- 1	73	- 5
Other Equipment and Supplies	985	1,008	- 2	1,034	- 5
WAR CONSTRUCTION (GOV'T. FINANCED)	245	251	- 2	245	†

* As of May 1 for Construction; as of June 1 for all others.

† Schedule used for preliminary actual.

victory in Europe. So here is again the two-sided problem.

There is good reason to fear over-confidence among civilians, an itch to get back to life and business as usual; although everybody agrees that preparations for reconversion "must not interfere with war production," this may become an empty phrase, perfunctorily tagged on to every appeal to let down the bars.

There is also good reason for confidence in the progress of the war, a need of preparing now to prevent chaos after X Day; although everybody agrees that we must plan beforehand for reconversion, this too may become a meaningless preamble to arguments against every proposal for concrete preparation now.

Aircraft

Although aircraft is no longer the major expanding program, it still accounts for the biggest single share of war production. Last month, for instance, output of airframes, engines, propellers, spare parts, gliders, etc. amounted to \$1,670,000,000 (preliminary), close to 31% of all munitions production. For the first six months of the year, aircraft's share ran to slightly more than 30%—\$9,933,000,000 out of \$32,685,000,000.

The June showing was 4% behind schedule. And as reported last week in WAR PROGRESS, the month was 5% short on an airframe-weight basis. However, there were above-schedule performances in January, February, March, and May. As a result, first-half output of airframe weight (505,108,000 pounds) was actually higher than called for by the first-of-the-year W-9 airplane schedule (500,-223,000 pounds).

This was achieved in spite of an uninterrupted decline in employment at airframe plants. Between January and June 1, employment at airframe plants

dropped almost 10%—from 928,500 to an estimated 840,000. Yet in the first six months, output of airframe weight actually increased from 78,800,000 pounds to 84,400,000 pounds, or more than 7%.

SIX-MONTHS' SUMMARY

During the first six months, total acceptances of several important tactical planes were already better than half way to the year's goal. Thus the B-25 Billy Mitchell had cleared 54% of the W-10 schedule, the B-26 Marauder 58%, the A-20 Boston 73%. For these, as for others—the Corsair, Liberator, etc.—1944 goals were cut because production got ahead of military requirements. By contrast, the production job still lies ahead for such models as the B-29 Superfortress, which made 29% of W-10 in the first half; the C-46 Commando, which made 25%; and the A-26 Invader, which made only 14%. Here's the six-months' record of acceptances for 18 top tactical planes:

	Number Accepted	% of W-10 for 1944
B-29 Superfortress..	392	29%
B-17 Flying Fortress	3,045	55
B-24 Liberator.....	5,397	51
B-25 Billy Mitchell.	1,991	54
B-26 Marauder.....	1,004	58
A-20 Boston.....	1,690	73
A-26 Invader.....	104	14
SB2C (SBW, SBF)		
Helldiver.....	1,541	38
TEM Avenger.....	1,596	48
P-38 Lightning.....	2,031	45
P-51 Mustang.....	2,800	40
P-47 Thunderbolt...	3,756	51
F4U (FG) Corsair....	3,060	57
F6F Hellcat.....	3,036	52
FM Wildcat.....	1,720	49
C-54 Skymaster.....	109	25
C-46 Commando.....	376	25
C-47 Skytrain.....	2,842	57

First-half acceptances of more than one high-preference plane would have

been higher except for a new modification procedure. During 1943, plane output trailed military requirements. And when the inevitable modifications in basic design came through—a new turret for one model, a bigger gas tank for another, a more powerful engine for a third—they were almost always made at a modification center.

IN RETROSPECT

This method kept assembly lines clear, thus achieving the important objective—to keep production rolling. But it didn't make for the most efficient use of labor and facilities. Most centers were far from the main plant; for example, planes from Ford were assembled at Willow Run and modified in Alabama. Also, it was often necessary to do the same job twice. In the case of one model, after production had gotten under way it was found that a removable panel in the wing was needed to facilitate inspection; after completion of the plane at one point, it was sent to another where a workman cut out the panel with a hacksaw.

Now, however, the program has gone far beyond the point where quality need be sacrificed to quantity. So the Army Air Forces' policy is to make modifications right in the assembly line wherever possible. As might be expected, the changeover tends to throw a plant off schedule. Boeing, Wichita, pioneer producer of the B-29 Superfortress, is illustrative. In the first three months of 1944, while modifications were still being made at Bell, Atlanta, schedules were exceeded. But in April, when modifications were fed into the line at Wichita, the schedule was missed by 27%.

Incidentally, the Wichita plant is now making up its April deficit: the rising schedule was exceeded by 7% in May and 8% in June. Meanwhile, because

changes are being made right on the assembly line, B-29s are getting into combat faster than they would if they first had to be shipped to a center for modification.

This doesn't mean that modification centers are being discontinued. They still fill an important—and continuing—need. After a plane leaves the assembly line it may need special equipment, such as a de-icer to fit it for the Alaskan theater. Or it may be found necessary to incorporate some of the innovations of the B-17G Flying Fortress—characterized by a chin turret—in an earlier B-17F model. And so on.

STRIKING CONTRAST

Aside from the new procedure, modifications of themselves held up production only here and there during the first six months. The A-26 Invader at Douglas, Long Beach, and the C-46 Commando at Curtiss, Buffalo, are the outstanding examples. This is in contrast to a year ago, when modifications—or design changes—were a dominant influence in the program's off-schedule performances.

Today, know-how has piled up: workers are better trained, management has greater control over production, etc. Thus, more often than not, design changes are likely to be taken in stride, as was recently the case with the SB2C Helldiver at Curtiss, Columbus, and the P-47 Thunderbolt at Republic's Farmingdale and Evansville plants.

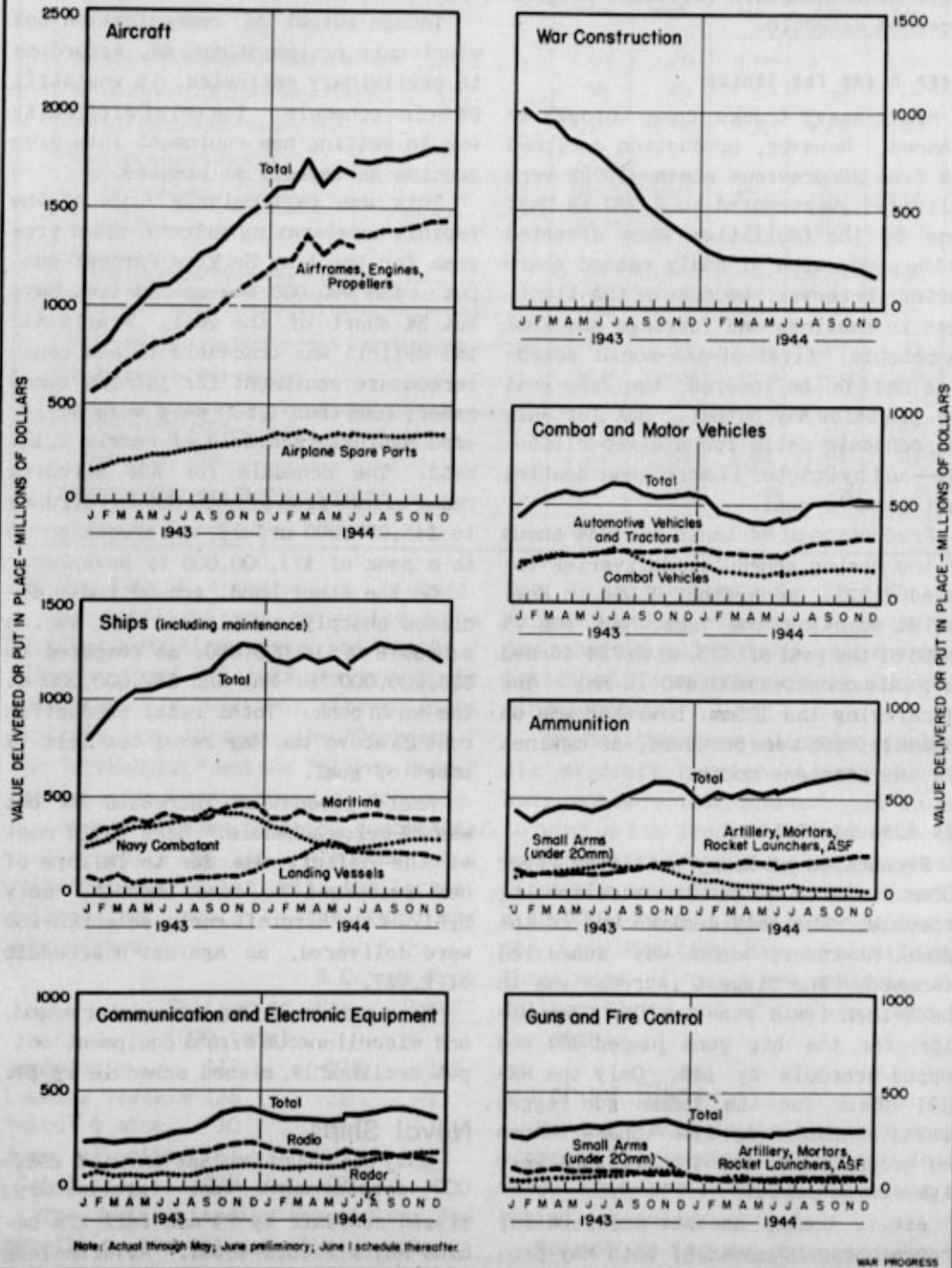
Army Ordnance

June production of ground army munitions, on the basis of preliminary figures, was uniformly good. Output rose 2% and equaled or beat schedule in every major category. Furthermore, all critically needed items came through.

Outstanding performance was in com-

FLUCTUATIONS IN MUNITIONS PROGRAMS

Airplane output in June drops 2%, is 4% behind schedule; ships also down. Most ground army items come through as planned. Signal equipment rises but misses schedule.



WAR PROGRESS

bat and motor vehicles; they beat May by 5%, schedule by 4%. Output of tractors in particular rose 9% and was 11% ahead of the goal. It was the second consecutive month that this difficult program exceeded schedule.

STEEP CLIMB FOR TRUCKS

Heavy-heavy trucks came through as planned. However, production declined 11% from the previous month—3,732 were delivered, as compared to 3,970 in May. Some of the facilities were diverted to the production of badly needed spare parts. Moreover, because of the tightness in castings and forgings and some components, first-of-the-month schedules had to be lowered; the June goal was 14% below May output. But for July the schedule calls for a steep climb—51%—and by October it more than doubles last month's goal.

Production of M4 tanks ran 24% ahead of the rising schedule; deliveries totaled 1,320, as against 1,060 in May. The M4 mounting the 76mm. gun was 7% ahead of the goal of 675, with 724 turned out; this compares with 470 in May. The M4 carrying the 105mm. howitzer was on schedule; 266 were produced, as against 179 the previous month.

BIG GUNS ON SCHEDULE

Production of heavy artillery (over 105mm.) rose 5% and met the accelerating schedule. The only decline was in the 240mm. howitzer, which was scheduled downward. The biggest increase was in the 8-inch field gun—up 67%. Ammunition for the big guns jumped 18% and topped schedule by 14%. Only the HE-M101 shell for the 155mm. gun lagged behind schedule—by 11%. Spare cannon and prime movers for the big guns were right on schedule.

Aerial bombs, another accelerating program, ran 2% ahead of both May production and June schedule.

Output of small arms rose 4% and was on schedule. Ammunition for small arms declined 6%, was right on the mark.

Signal Equipment

Though output of communication and electronic equipment rose 4%, according to preliminary estimates, it was still 6% below schedule. The chief difficulty was in getting new equipment into production as rapidly as planned.

This was particularly true of the rapidly accelerating airborne-radar program for the Army Service Forces; output of \$36,000,000 was up 20% from May, but 3% short of the goal. Nearly all the deficit was traceable to new countermeasure equipment for jamming enemy radar; less than 1,500 sets were delivered against a schedule of nearly 2,100 sets. The schedule for ASF airborne radar climbs from \$18,000,000 in February to \$45,000,000 in July, and shoots on up to a peak of \$71,000,000 by November.

On the other hand, ground radar declined sharply as planned and was on schedule at \$17,000,000, as compared to \$26,000,000 in May and \$42,000,000 at the March peak. Total radar production rose 2% above the May level but fell 9% short of goal.

Radio production increased 8% but was 4% below schedule. Here again most of the deficit was due to failure of new equipment to come through; only 2,617 of the aircraft radio sets SCR-269 were delivered, as against a schedule of 2,937.

Wire communication, underwater sound, and miscellaneous signal equipment output declined 1%, missed schedule by 5%.

Naval Ships

Navy construction last month of 298,000 displacement tons (preliminary) missed schedule by 7% and fell 27% behind May's record total. Nevertheless it was a big month—third from the top

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program—Checks paid (millions of dollars)-----	1,635	1,634	1,685	1,701	1,390
War bond sales—E, F, G, (millions of dollars)-----	505	611	217	309	186
Money in circulation (millions of dollars)-----	22,561	22,598	22,333	20,436	17,607
Wholesale prices (1926=100)					
All commodities-----	103.9*	104.1	104.0	102.9	103.0
Farm products-----	124.1*	125.5	125.0	121.9	126.0
Foods-----	106.0	105.7	105.4	104.6	107.3
All Other-----	98.7*	98.7	98.7	97.8	96.9
Petroleum:					
Total U.S. stocks* (thousands of barrels)-----	415,671	411,612	410,434	425,129	424,585
Total East Coast stocks* (thousands of barrels)-----	63,684	62,642	61,217	62,918	51,585
East Coast receipts (thousands of barrels, daily average)-----	1,832	1,607	1,825	1,485	1,429
Bituminous coal production (thousands of short tons, daily average)	2,008	2,000	2,082	1,842	1,725
Steel operations (% of capacity)-----	95.7%	94.3%	97.8%	93.1%	96.4%
Freight cars unloaded for export, excluding grain (daily average)					
Atlantic Coast ports-----	2,839	3,053	3,032	2,173	2,288
Gulf Coast ports-----	392	465	433	430	360
Pacific Coast ports-----	1,638	1,740	1,556	1,215	1,268
Department store sales (% change from a year ago)-----	N. A.	+12%	+2%	-3%	-1%

* Preliminary * Excludes military-owned stocks.

in the Navy's construction history.

The spotlight was on cruisers. A 27,500-ton battle cruiser, the "Alaska," was the first of this new type to be completed. In addition, three light cruisers came through: the "Pasadena," the "Vicksburg," and the "Wilkes Barre"—the latter a month ahead of schedule.

Largely because of this, combatants beat schedule by 14%. All other main categories ran behind, with the largest deficit, as usual, in auxiliary and minor types:

	Deliveries (000 tons)	% Change From	
		May	Sched.
Combatants.....	112	-21%	+14%
Landing vessels	135	-32	-11
Patrol & mine..	10	-33	-17
Aux., all other	41	-24	-32
Total.....	298	-27	-7

The lag in landing vessels was due chiefly to the all-out closing rush in May, when everything in sight was cleaned

up. In particular, only 37 LSTs were finished in June, compared to 82 in May; the schedule called for 45. All the yards building LSTs were one or more ships behind schedule.

The Maritime Commission also completed six aircraft carrier escorts for the Navy, one more than planned. It is due to wind up its program this month. But by October the Navy plans to finish the first of a new type of carrier escort—a 12,000-tonner, almost twice as big as the type Maritime has been building. Three more of these are scheduled for delivery by the end of the year, and 13 for 1945.

Merchant Ships

Merchant ship deliveries last month dropped 11% below May to 1,284,000 dead-weight tons (preliminary). This was 5% behind schedule.

Most of the lag was accounted for by the declining Liberty ship program; only

55 were completed, as against 61 scheduled and 67 built in May. Victories, with 15 completed, failed by two to meet the goal.

Maritime deliveries of military-type ships were likewise 5% off schedule but 6% ahead of May. In addition to the six carrier escorts and 13 frigates built for the Navy, they included five trans-

ports and two cargo-attack vessels.

Total Maritime construction in June amounted to 1,391,000 deadweight tons. Current schedules call for about 1,450,000 tons a month from now on until December, when they jump to 1,650,000. At that point the Victory ship, which is due to decline in the months ahead, comes into volume production.

Models Today for Production Tomorrow

Plan would let manufacturers get products out of blueprint stage in readiness for X Day. But experiment must not divert manpower, skills, etc. from war work.

RIGHT NOW, hundreds of new products—designed to meet postwar civilian demand—are in the blueprint stage. But it is going to take time to get them out. Now the War Production Board is acting to shorten the time by permitting manufacturers to build working models for experimental purposes.

Before a manufacturer starts producing a new refrigerator, washing machine, automobile, or vacuum cleaner, he uses a working model to uncover bugs, test efficiency, find out whether it is a better or cheaper product than current models. And here he has been running into the welter of L and M orders which might or might not permit him to build his model, depending as much on chance as on logic.

EXISTING INCONSISTENCIES

Production of some civilian items—passenger cars, washing machines, vacuum cleaners, refrigerators, etc.—has been stopped entirely; output of others—gas ranges, for instance—is limited to certain specified types. Thus no experimental models of these items could be built.

However, the manufacture of other

civilian items—such as cooking stoves—is permitted in limited quantities; thus manufacturers could make experimental models of these within their production quotas.

Again, the use of steel, for instance, is prohibited in a long list of end products—clothes trees, desk equipment, hedge shears, lawn sprinklers, ornamental hardware, reducing machines, cash registers, merry-go-rounds, etc. Hence, experimental models of these items were ruled out if they called for steel.

IRONING OUT INCONGRUITIES

On the other hand, aluminum, copper, magnesium, and zinc were recently freed for research and experimental use, for building working models and making test runs. This relaxation reflected the generally easier situation in metals; but copper, at least, is in a class with steel.

Accordingly, WPB now proposes to iron out these incongruities and give all manufacturers alike an opportunity to prepare for the postwar market. Effective soon, an overriding priority regulation cutting across all L and M orders will waive any restrictions which would otherwise prohibit the making of experimental models or the use of materials needed to make them. Thus models could be made of vacuum cleaners and attach-

ments, for example, even though order L-18-b prohibits the production or assembly of any of these items.

Certain limitations will be imposed to prevent interference with the war effort: (1) only the minimum number of models needed to determine suitability for commercial production will be permitted; (2) experimentation must not divert manpower, technical skill, or facilities from war production; and (3) models cannot be used for samples, public display, or sales promotion. These restrictions have already been incorporated in the recent orders freeing aluminum, copper, and zinc for experimental use.

Moreover, if the proposed expenditure in a single plant exceeds a certain amount, probably \$5,000, for any one month, the manufacturer will have to file manpower data with the WPB field office. And where estimated expenditure

is much higher—say, \$10,000 or \$25,000—the field office will send the application to Washington for careful screening.

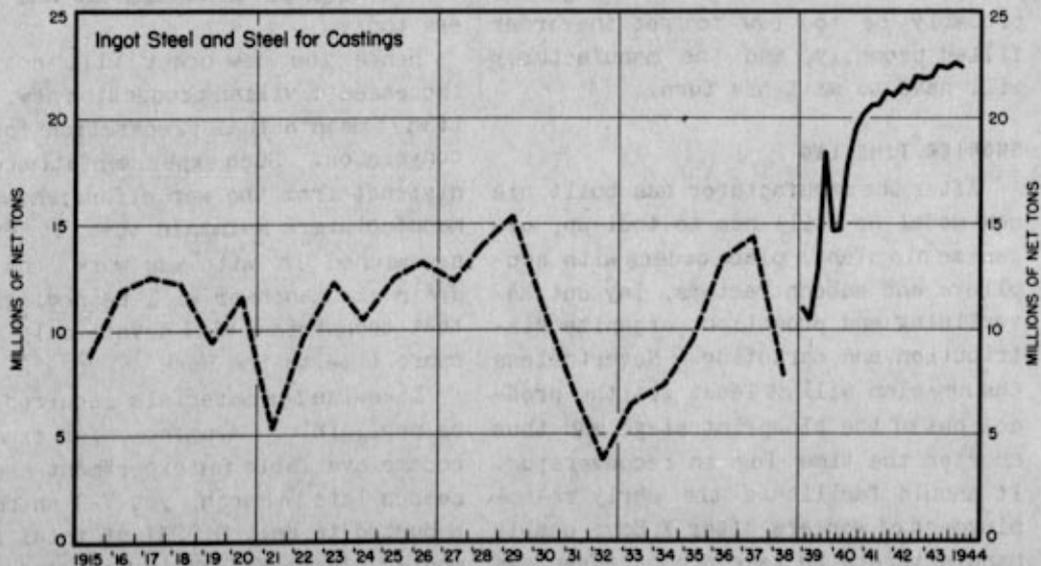
But if a manufacturer is to be allowed to prepare for resuming civilian production, he needs more than authorization to experiment; he must have real access to materials and components.

PRIORITIES ASSISTANCE

To get these, the manufacturer will be provided with priorities assistance. A manufacturer who wants to build an experimental model of, say, a washing machine or vacuum cleaner will get controlled materials—steel, copper, and aluminum—by placing the CMP allotment symbol V-9 on his orders to his suppliers. To get other materials and components, he will be authorized to place an AA-2 preference rating on his order. However, in the case of high-priority items—some types of motors and bear-

STEEL—IN PEACE AND WAR

So far this year, production of ingots and steel for castings is at an all-time high, nearly 50% above the 1929 peacetime peak, and 80% above the last war's.



Note: Quarterly average through 1938. Quarterly production thereafter.

WAR PROGRESS

SELECTED MONTHLY STATISTICS

Labor Force - Labor Turnover - Expenditures - Sales - Inventories

	Latest* Month	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Some Month 1939	Some Month 1937
LABOR FORCE - TOTAL (millions)	54.2 ^P	52.8	52.1	51.9	55.2	N. A.	N. A.
Employment	53.2 ^P	52.0	51.3	51.0	54.0		
Male	35.0 ^P	34.5	34.4	34.2	36.2		
Female	18.2 ^P	17.5	16.9	16.8	17.8	N. A.	N. A.
Unemployment	1.0 ^P	.9	.8	.9	1.2	N. A.	N. A.
LABOR TURNOVER IN MFG. INDUSTRIES (rate per hundred employees)							
All manufacturing							
Accessions	6.20 ^P	5.53 ^R	5.76	6.62	7.18	3.29	3.56
Separations - Total	6.97 ^P	6.78 ^R	7.33	6.37	6.57	3.48	3.37
Quits	5.20 ^P	4.90 ^R	5.00	4.46	4.81	.68	1.37
Military	.60 ^P	.64	.73	.52	.69	N. A.	N. A.
Aircraft							
Quits	4.64 ^P	4.31	4.57	4.22	4.23	1.55	1.83
Military	1.21 ^P	.97	.88	.52	.63	N. A.	N. A.
Shipbuilding							
Quits	6.16 ^P	5.68 ^R	5.93	5.35	6.20	.64	1.72
Military	.92 ^P	.88	.94	.80	1.10	N. A.	N. A.
CONSUMER EXPENDITURES (million dollars)							
Goods	7.787 ^P	7.958	7,272	8,038	7,438	5,068	5,266
Services	5,272 ^P	5,432	4,742	5,592	5,010	3,199	3,430
Total	2,515 ^P	2,526	2,530	2,446	2,428	1,869	1,836
RETAIL STORE SALES - TOTAL (million dollars)							
Durable goods stores	5,726 ^P	5,439 ^R	5,601 ^R	5,639	5,222	3,634	3,846
Nondurable goods stores	874 ^P	767 ^R	793 ^R	827	823	983	1,148
Total	4,852 ^P	4,672 ^R	4,808 ^R	4,812	4,399	2,651	2,698
INVENTORIES - TOTAL (million dollars)							
Manufacturers	27,828 ^P	27,883	28,039	28,568	27,453	18,551	N. A.
Wholesalers	17,292 ^P	17,414	17,562	17,858	17,460	9,734	
Retailers	4,146 ^P	4,121	4,096	4,117	4,002	3,439	
Total	6,390 ^P	6,348	6,381	6,593	5,991	5,378	N. A.

* Labor Force, June; Consumer Expenditures, April; all other, May. ^P Preliminary. N. A. Not available. ^R Revised.

ings, for instance—an AA-2 rating will probably be too low to get the order filled promptly, and the manufacturer will have to wait his turn.

SHORTER TIME LAG

After the manufacturer has built his new model he still has to tool up, organize his plant, place orders with suppliers and subcontractors, lay out advertising and promotion, organize distribution and marketing. Nevertheless the new plan will at least get the product out of the blueprint stage and thus shorten the time lag in reconversion. It should facilitate the early re-employment of workers after X Day, enable manufacturers to take prompt advantage of technological improvements developed during the war, lessen the uncertainties

that confront both management and workers today.

Hence the new order will not mean increased civilian production now. But it will mean actual preparation for reconversion. Such experimentation might distract from the war effort; however, manufacturers maintain that it can be sandwiched in with war work, that the drain on manpower will be negligible, that technicians will devote only their spare time to the work.

Likewise the materials required will be negligible. Aluminum, for example, became available for experiment and research late in March; yet V-9 shipments amounted to only 0.023% of total shipments in April, 0.036% in May. And these include experiments for direct and indirect military purposes.

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WAR PROGRESS

Prepared in the War Production Board
Donald M. Nelson, Chairman

War Progress is a confidential report designed to provide a coordinated and continuing picture of the overall war program for the various war agencies. To this end, it presents, analyzes, and interprets basic statistical and economic information, and from time to time examines the pros and cons of controversial questions.

Although War Progress is an official publication of the War Production Board, statements in it are not to be construed as expressing official attitudes of the Board as a whole, or even of individual members. Conclusions, whenever reached, should be considered editorial conclusions.

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Construction After Hitler Day

Projects must be engineered now and L and M orders relaxed early if building industry is to pull itself together in time to be the "white hope" of postwar re-employment.

CONSTRUCTION has long been talked of as the white hope of re-employment in the immediate postwar period. At first glance, the idea is comparatively simple. While the automobile, refrigerator, and other industries are tooling up for peacetime production, the building industry could get under way employing people. And hopes rise high. It is postulated that overall construction activity—public and private, residential and nonresidential—might run to some \$16,000,000,000, or 20% above the 1942 peak (chart, below). At that level, about 3,000,000 persons would be em-

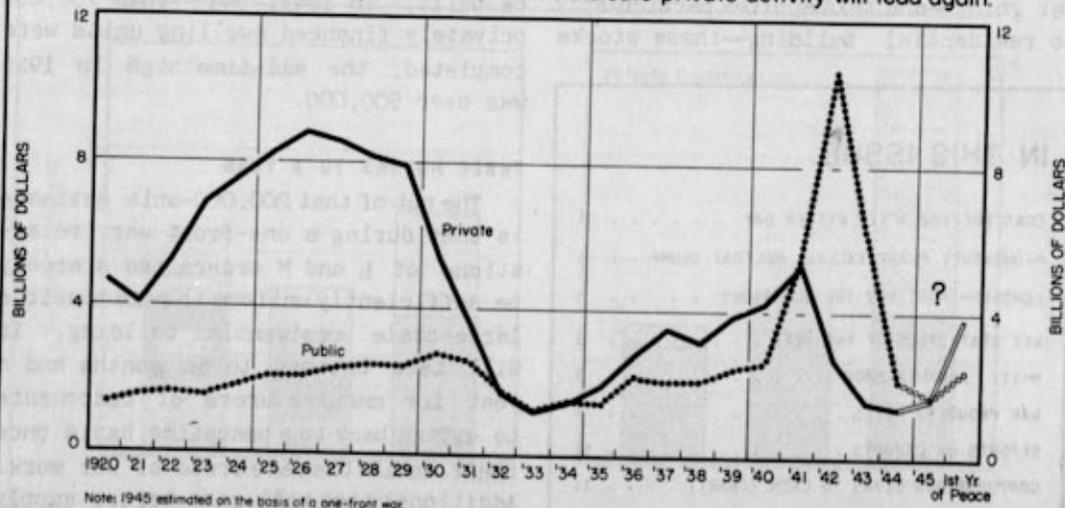
ployed, or five times the estimated 600,000 on construction today.

But a \$16,000,000,000-construction year will be long in coming. Construction, like everything else, must be reconverted from war to peace. Not only must plans be drawn for public roads and buildings, for schools and hospitals, for commercial buildings and apartment houses, for utilities and sewer and water systems, but limitations orders must be amended so as to permit the unrestricted manufacture of builders' hardware, plumbing fixtures, bathtubs, space heaters, thermostats, etc. Moreover, the construction industry itself must be pulled together.

At the peak of construction, some 2,600,000 carpenters, bricklayers, plumbers, laborers, painters, technicians,

PUBLIC vs. PRIVATE CONSTRUCTION

In normal times, private construction runs ahead of public; in depression and war, the reverse is true. And postwar estimates indicate private activity will lead again.



and general helpers were employed on construction projects of one type or another—with war work dominating—but 2,000,000 have disappeared. Some of those 2,000,000 may be unemployed, but most have gone into the armed forces, war plants, or peacetime pursuits. And they have to be redeveloped into working organizations before construction can rise to its white-hope assignment.

SLOW SPEED AHEAD

In a sense, in reconverting the construction industry, the nation must reverse the slow process of its earlier conversion to war work. Months after Pearl Harbor, nonwar construction continued even though priorities restricted the use of critical materials for window frames, plumbing pipe, flashings, gutters, spouts, fixtures, etc. But building materials dealers and contractors had supplies on hand with which to operate.

Indeed, the construction industry operates out of inventories. Contractors are accustomed to run on low stocks and to call on their supply houses when in need. Today supply houses' stocks are low. Before construction can really get going—and this applies particularly to residential building—these stocks

must be rebuilt. Logically, a start on the large task of reconverting the construction industry can be undertaken once Germany falls. But plans for it must be laid now.

After Hitler Day, there will be surpluses of manpower and materials here, construction equipment and transportation there. This is likely to widen discretion in administering L-41, the basic construction order. Whereas a request to build a school, hospital, bridge, or underpass might be considered nonessential now, it might be considered essential then. But the mere fact of greater administrative discretion isn't going to bring real peacetime volume to the construction industry.

EXAMPLE: HOUSING

Take the case of housing. In contrast to the 175,000 privately financed dwelling units scheduled for completion this year, demand could support an annual volume of from 500,000 to 1,000,000 dwelling units, depending on price. But even if we fight a one-front war in 1945 and even assuming the relatively low average cost of \$4,000 per unit, it is estimated that no more than 200,000 will be built. In 1941, more than 700,000 privately financed dwelling units were completed; the all-time high in 1925 was over 900,000.

THREE MONTHS TO A YEAR

The nub of that 200,000-unit estimate is that during a one-front war, relaxations of L and M orders can scarcely be sufficiently uniform to make possible large-scale residential building. It will take between three months and a year for manufacturers of components to switch back to a peacetime basis once their facilities are freed of war work. Additional time will pass before supply houses' stocks are in balance. Refrig-

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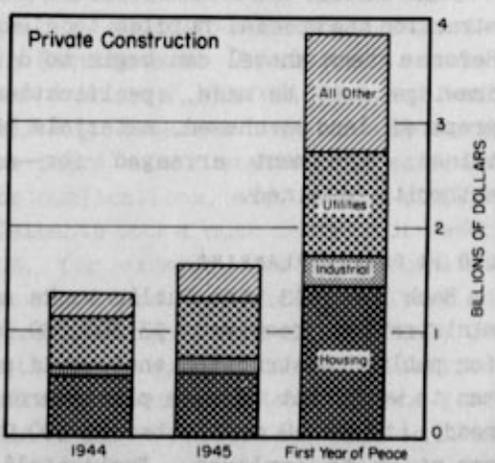
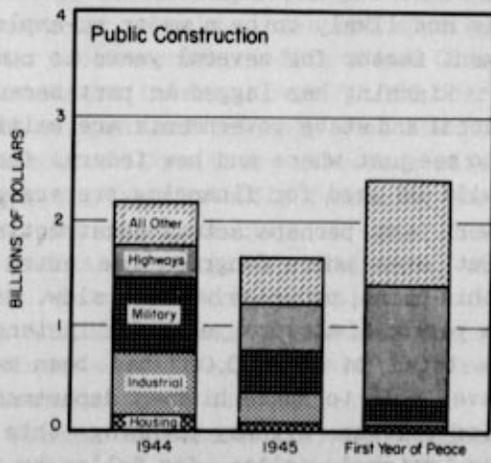
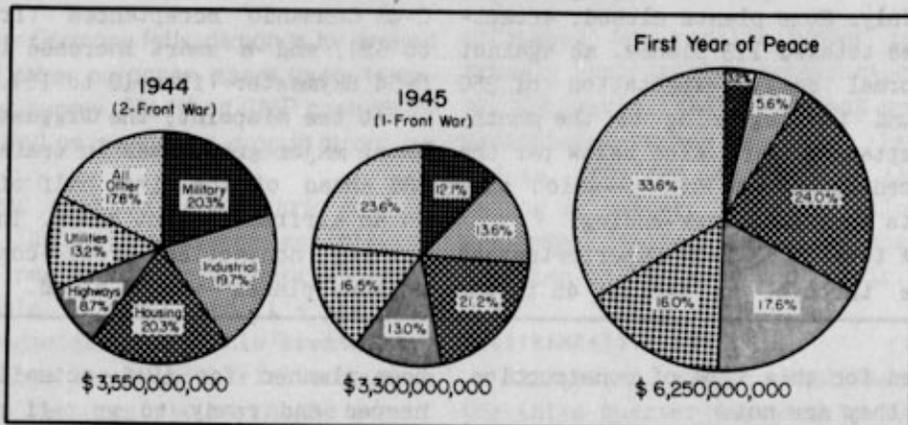
erator manufacturers may be in production months before makers of builders' hardware; similarly with manufacturers of bathtubs as against plumbing fixtures; and ditto for manufacturers of space heaters versus thermostats.

Then there's the question of lumber. It is today's most critical material and is likely to stay that way for some time. For example, the estimated 17,-000,000,000 board feet needed for boxing, crating, and dunnage this year—about half of estimated production—

isn't going to go down much, if at all. Military shipments to the Pacific theater generally take more lumber because of greater distance, frequent transshipment, rougher handling; besides, relief and rehabilitation demands in Europe are going to expand. At the end of the year lumber stocks will be down to approximately 6,400,000,000 board feet, a record low (page 5). That would be virtually wiped out if as many as 500,-000 dwelling units were to be built—assuming that stocks were perfectly

POSTWAR PATTERNS IN CONSTRUCTION?

In the first year of peace, building activity is estimated to rise 76% over '44 levels; public construction to rise moderately, private almost triple.



WAR PROGRESS

MIDMONTHLY PLANE TALLY: HOLIDAY SLUMP

AIRPLANE OUTPUT in the first 15 days of July was running far behind schedule. Although the program for the month calls for a 5% increase over June, acceptances at the halfway mark lagged 13% behind in airframe weight. Numerically, 3,257 planes came through, 451 behind the first 15 days of June.

The month's final tally will probably be much closer to schedule than the 15-day total indicates. June traced a similar pattern. After lagging 12% at the midpoint, acceptances finished the month only 5% short of schedule.

Factor this month was the Fourth of July. Some plants closed; acceptances totaled 113 planes, as against a normal daily expectation of 250 around the beginning of the month. Acceptances were also below par the preceding day—a Monday—which suggests some long week-ending.

A total of 33 B-29 Superfortresses came through, as against 45 in the

first half of June; the full-month schedule calls for 111. Bell, Atlanta, which has been having trouble working modifications into its assembly line (WP-July 8'44,p7), continued to lag in this group.

Acceptances of Fords and Liberators, medium bombers, light bombers, and Army and Navy fighters ranged from 3% to more than 30% lower than in the first 15 days of June. In fact, all major tactical groups were behind with the exception of transports, which were 18% ahead on an airframe-weight basis. This was almost entirely accounted for by a sharp improvement in C-46 Commando acceptances (from 21 to 62), and a smart increase in the C-54 Skymaster (from 10 to 15).

At the midpoint, the biggest gain among major groups was in trainers—38% ahead of the first half of June on an airframe-weight basis. The remaining nontactical group—communications planes—was 5% ahead.

matched for this type of construction, which they are not.

What's more, the field of public construction has special hurdles to clear. Before a steam shovel can begin to dig, drawings must be made, specifications prepared, land purchased, materials obtained, equipment arranged for—and authority obtained.

LAG IN PUBLIC PLANNING

Back in 1933, the Public Works Administration received \$3,300,000,000 for public construction that would put men to work. But because plans weren't ready, it took 18 months before 100,000 men could be employed. Incidentally, less than 15% of that amount has already

been planned for 1946—actually engineered and ready to go. If planning goes no faster than this, construction is not likely to be a major re-employment factor for several years to come.

Planning has lagged in part because local and state governments are waiting to see just where and how federal funds will be used for financing preparatory work and perhaps actual construction. But even where Congress has acted on this point, progress has been slow. Over a period of about a year, for instance, a total of \$60,000,000 has been made available to state highway departments for postwar highway planning—this to be matched dollar for dollar by the states. But it is doubtful if as much

as 10% of this amount has already been drawn on to develop completed plans.

This lack of planning also extends to privately financed construction. A WPB survey indicates that the amount of work reaching the boards of engineering and architectural firms has picked up in the past six months; however, it is still far behind the volume needed if it is to act as an unemployment cushion in the first complete peace year, say 1946.

In short, if the construction industry is to reconvert swiftly and efficiently, these steps are necessary: (1)

Projects must be put on the drawing boards and engineered now—this means private as well as federal, state, and local government projects; (2) L and M orders must be relaxed early enough so that building materials and supplies will be available in balanced quantities after X Day and then in heavy volume after V Day.

Unless this is done, the construction industry will not be able to do its share in cutting down transitional unemployment—nor will it be able to attain the new peaks hoped for in subsequent peacetime years.

Lumber—Short for the Duration?

Even after Germany falls, demands for crating and other purposes seem likely to exceed supply. Modified CMP controls instituted as inventories drop to record low.

JUST WHEN most materials are getting easier, lumber has become so critical that it has been placed under controls comparable to CMP. And it's the only major nonmetal to get this treatment.

Hitherto large industrial consumers have not been restricted in the use of whatever lumber they could get hold of, except for certain grades and species. Under the new order, L-335, these Class I consumers (users of over 50,000 board feet a quarter) get only what the Requirements Committee allocates after screening their specific requests; they are controlled exactly as under CMP. In addition, military claimants, War Food Administration, and National Housing Administration submit master applications—overall estimates of their requirements for a quarter.

Further allotments are made to Class II industrial consumers (users of less than 50,000 board feet per quarter) and

consumers who require lumber for expressly authorized construction jobs or for serialized mining and smelting operations; these certify their own orders, provided they have an AA-4 MRO rating or better. Finally, allotments are made for farm dwellings and other civilian maintenance and repair.

REQUIREMENTS SLASHED

Altogether, stated requirements for the third quarter amounted to 10,570,000,000 board feet. But lumber supplies are too short to meet these requests; the Requirements Committee screened them down to 9,150,000,000 board feet. Military requests were cut 6% across the board after statistical screening for duplications, etc. Most civilian claimants took a much deeper cut—about 30%, for example, for major furniture manufacturers. And though military and export claimants were allotted only 18% of the total supply, direct and indirect military uses will take up the great bulk of the 58% slice that went to Class I industrial consumers. Here is how the pie was cut:

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program—Checks paid (millions of dollars)-----	1,504	1,635	1,888	1,787	1,600
War bond sales—E, F, G, (millions of dollars)-----	588	505	325	265	212
Money in circulation (millions of dollars)-----	22,531	22,561	22,293	20,404	17,658
Wholesale prices (1926=100)					
All commodities-----	103.9 ^P	103.9	103.7	103.0	102.9
Farm products-----	124.2 ^P	124.1	122.9	122.1	125.0
Foods-----	105.6	106.0	104.9	104.8	106.5
All Other-----	98.6 ^P	98.7	98.7	97.9	97.0
Petroleum:					
Total U.S. stocks* (thousands of barrels)-----	409,945	415,671	412,600	420,948	423,906
Total East Coast stocks* (thousands of barrels)-----	64,793	63,684	61,700	60,278	52,890
East Coast receipts (thousands of barrels, daily average)-----	1,742	1,832	1,703	1,490	1,483
Bituminous coal production (thousands of short tons, daily average)	1,731	2,008	2,088	2,042	1,960
Steel operations (% of capacity)-----	97.2%	95.7%	97.1%	96.7%	97.7%
Freight cars unloaded for export, excluding grain (daily average)					
Atlantic Coast ports-----	3,148	2,839	3,038	3,051	2,343
Gulf Coast ports-----	452	392	465	369	381
Pacific Coast ports-----	1,612	1,638	1,482	1,292	1,327
Department store sales (% change from a year ago)-----	+14%	+3%	+3%	+4%	+20%

^P Preliminary * Excludes military-owned stocks

	Allotment (millions bd. ft.)	% of Total
Class I Ind. Cons....	5,271	57.6%
War Department.....	658	7.2
Navy Department.....	572	6.2
ARCO.....	115	1.3
Maritime Commission..	105	1.1
FEA & Canada.....	163	1.8
NHA.....	318	3.5
WFA.....	1,016	11.1
Reserve for self- certified orders:		
Mining.....	150	1.6
OCR.....	132	1.4
Class II Ind. Cons..	283	3.1
Other (ODT, ORD, etc.)	126	1.4
Farm dwelling MRO....	72	.8
Other civilian MRO...	157	1.7
General reserve.....	14	.2
Total	9,152*	100.0%

*In addition, 430,000,000 feet were allowed for railroad and mine ties.

The allotments for the many small and miscellaneous consumers are necessarily rough estimates; it's hard to keep track of all the little fellows who use some 80 different species of lumber for countless different purposes and who may get it from the 26,000 small mills which account for about 5,000,000,000 board feet a year, or 15% of the total supply. This is the reason why CMP procedures could not be used consistently—and why controls can't be airtight.

Lumber consumption has been running ahead of production ever since the beginning of 1942. Allocations for the third quarter, though 11% short of stated requirements, will still exceed new supplies; total consumption in 1944 is estimated at nearly 36,000,000,000 board feet, as against a total new supply of 35,000,000,000. And so the deficit will have to come out of dwindling inven-

tories. At the end of 1942, stocks amounted to 17,300,000,000 board feet; by the end of this year they are expected to be down to 6,400,000,000—lowest on record (billions of board feet):

	Consumption (incl.exp.)	Production (incl.imp.)	Stocks (year end)
1941...	37.4	37.9	17.3
1942...	43.2	37.9	11.2
1943...	38.8	35.5	7.3
1944*..	35.9	34.9	6.4

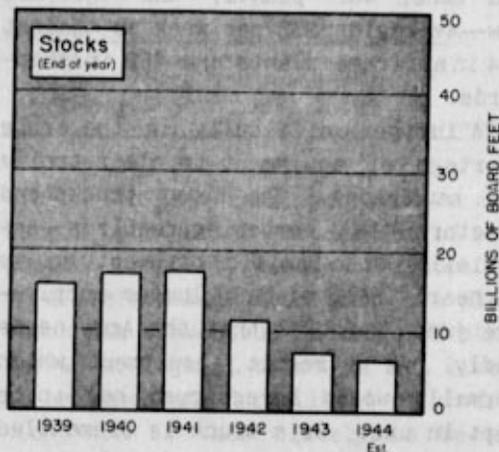
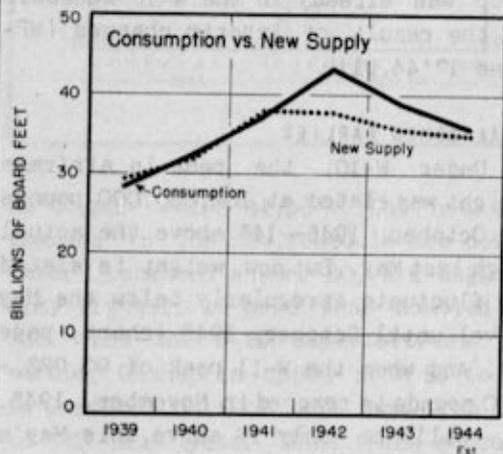
* Estimated.

Moreover, stocks are badly unbalanced with respect to species, grades, and sizes. Cutting the finished lumber to meet the demand for smaller thicknesses makes for waste of time and lumber.

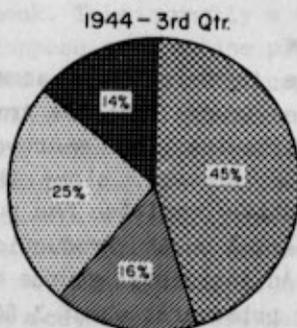
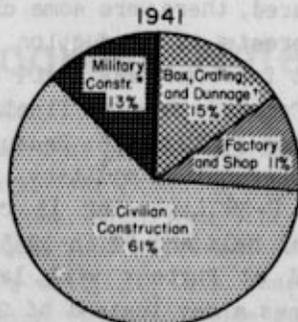
Boxing, crating, and dunnage continue to take the largest portion of lumber—45% as against 15% in 1941—mostly for military shipments. Some crates—particularly those used in shipping aircraft—are so large and sturdy that they are used for houses by our armed forces overseas; others are used

LUMBER—A THRICE-TOLD TALE

Consumption is down, but still exceeds new supply; and stocks are scheduled to drop to a new record low.



Here's where the lumber has gone:



* Includes military and non-military.

* Includes lend-lease and other exports.

WAR PROGRESS

for building all sorts of items. Hence, not much of this lumber finds its way back to the United States.

THE OLD, OLD STORY

The major difficulty in boosting production comes down to the old story—manpower. In May, 1943, there were 263,000 workers in sawmills and logging camps; at the beginning of this year there were 236,000. And though the drain has been almost stopped—in May employment stood at 233,000—the chances of making up the losses are slim. The armed forces get first whack at the young men who normally are the chief recruits for the lumber industry; working conditions are less attractive than in aircraft and other war plants; and wages are low—averaging \$33 per week as against \$54 in airframe plants and \$62 in shipyards.

A further difficulty is the acute shortage of equipment to clear trails and haul logs. The heavy trucks and tractors that lumbering requires—especially in the Pacific Northwest, source of nearly half of U.S. lumber supply—are just the type that the Army needs badly. As a result, equipment which normally would be scrapped has to be kept in use. Or a truck is dismantled simply for the parts needed to keep the rest of the fleet going.

FOR THE DURATION

This shortage is being eased somewhat by the used trucks that the Army is releasing. Likewise the manpower situation may be improved, since the Production Executive Committee has put logging and lumbering on the Production Urgency List. An incidental source of manpower is war prisoners; about 3,500 of them are already working in the woods on lumber, and the War Department is expected to make more available. Never-

theless the prospects are that the Requirements Committee will have the job of dividing scarcity for the duration of the war.

W-11: Another Drop

Latest quarterly revision in plane schedule indicates peak may have been hit in May. Decline in weight from original W-10 is 6% for last half of year, 12% for 1945.

W-11, LATEST quarterly revision of the airplane schedule, suggests that the plane program has seen its peak. Compared with W-10, the program declines 6% in airframe weight over the last half of 1944 and 12% in 1945. Most of this drop was already in the W-10 schedule as the result of interim changes (WP-June 17'44, p1).

PEAK COMES EARLIER

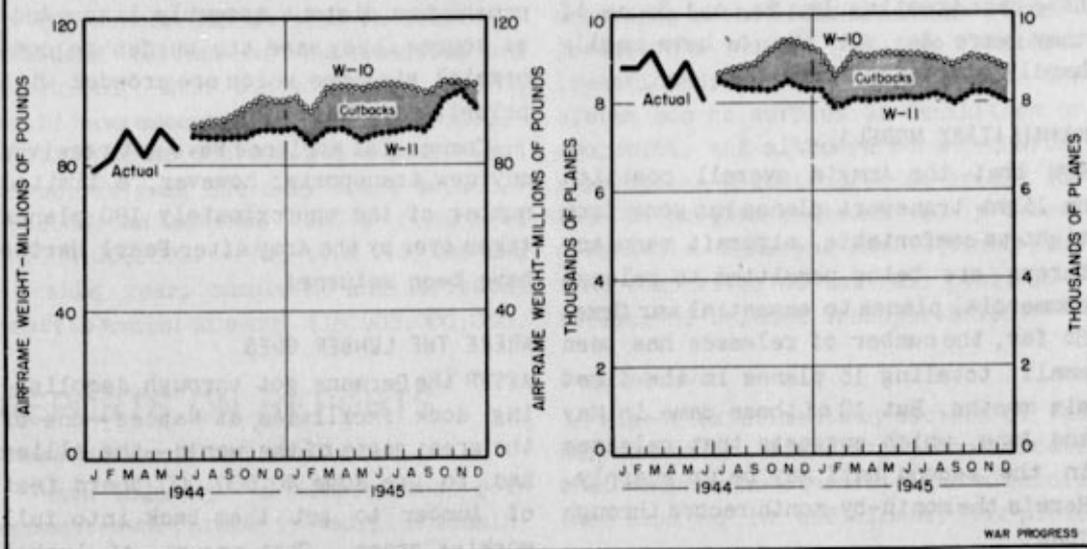
Under W-10, the peak in airframe weight was slated at 102,650,000 pounds in October, 1945—14% above the actual high last May. But now, weight is slated to fluctuate irregularly below the May level until October, 1945 (chart, page 9). And when the W-11 peak of 90,983,000 pounds is reached in November, 1945, it will be only 1% above this May's high.

Although the program has long since matured, there were some changes in the interests of production feasibility. Most important was a 10% cut in the C-46 Commando over the final half of 1944—from 1,072 to 966. Because production is outrunning military requirements, the P-38 Lightning is cut 10% in the final half and 8% in 1945. Thus, Lockheed at Burbank will level out at 16 planes a day instead of 20.

As noted previously in WAR PROGRESS, the RB-1 Conestoga and the BTD dive bomber are virtually eliminated (WP-June

W-11—STILL ANOTHER CUTBACK

New plane schedule calls for a 6% cut in airframe weight for the balance of this year, 12% next year. Number of planes is down 8% and 10%.



24'44,p2; July8'44,p8). But not all changes in the new schedule are downward. Lockheed's new P-80, a 1-engined Army fighter, is more than doubled to 634. And the B-29 Superfortress at Martin, Omaha, is upped from 80 to 92 in the final half of 1944, and from 633 to 640 next year. This takes account of the fact that Martin got under way sooner than anticipated.

War Progress Notes

FOR THE RECORD...

CUTBACK is a word of parts. As used in the Army, Navy, War Production Board, War Manpower Commission, and other war agencies, it has four different connotations. It's well, at this stage of pre-reconversion, to keep these connotations straight; they are:

1. Terminating a contract in a plant, at the same time replacing it with an-

other. In that case, you have a cutback without a real curtailment of production or a net release of labor.

2. Terminating a contract in a plant which has tremendous backlogs of other war work. Again, there is not likely to be immediate curtailment of production, nor is there likely to be any large release of workers.

3. Cutting down a contract from its peak. This is really a "paper cutback." Suppose an airplane plant is producing 300 planes a month; suppose its schedule calls for 500 planes in December. And now suppose the peak is reduced to 350. Though the contract has been reduced, immediate production hasn't; nor is there an immediate net release of workers.

4. Finally, there is the cutback that is a cutback. A contract is terminated or reduced without replacement, and the company has no offsetting backlog of other work. Production goes down, so

does employment. And workers are released.

But the main point is that cutbacks of the Number 4 type have been comparatively rare; most cutbacks have been of Types 1, 2, and 3. But the newspapers have been treating 1s, 2s, and 3s as if they were 4s; yet the 4s have really hardly started to come.

NONMILITARY MODELS

NOW that the Army's overall position on light transport planes has gone from tight to comfortable, aircraft manufacturers are being permitted to release commercial planes to essential war firms. So far, the number of releases has been small, totaling 15 planes in the first six months. But 10 of these came in May and June, which suggests that releases in the second half may be up sharply. Here's the month-by-month record through June:

January	1
February	0
March	2
April	2
May	5
June	5
Total	15

Eleven of the 15 planes are C-45s, 2-engined jobs built by Beech Aircraft to carry five or six passengers. Three are C-43s, another Beech model—biplanes, incidentally—designed for four persons. The remaining ship is a C-60 Lockheed Lodestar, a 2-engined transport built to carry 12 persons. Formerly used by some of the airlines, the Lodestar is now an "obsolete" model. This particular plane went to Consolidated Vultee. The other 14 went to companies such as Ford Motor, Phillips Petroleum, Brown Shipbuilding, Firestone Tire & Rubber,

Bell Aircraft, Standard Oil Company of Indiana, Salem Engineering, and Chance Vought.

These planes are for the use of company executives, though they sometimes do special jobs, such as rushing a component to a distant assembly line. And, of course, they ease the burden on commercial airlines which are crowded with priority traffic.

Commercial airlines have not received any new transports; however, a limited number of the approximately 180 planes taken over by the Army after Pearl Harbor have been returned.

WHERE THE LUMBER GOES

AFTER the Germans got through demolishing dock facilities at Naples—one of the great ports of the world—the Allies had to use some 40,000,000 board feet of lumber to get them back into full working order. That amount of lumber is equal to around 6% of the Army's third-quarter allocation (page 5).

UNCUT MELONS

AMERICAN CORPORATIONS, despite a doubling of profits after taxes since 1939, have not lavished these earnings on their shareholders (chart, page 11). For this there are reasons: (1) It would be poor public and labor relations to split large melons during wartime. (2) Company officers have been anxious to conserve liquid assets to meet re-conversion expenses. (3) Furthermore, directors hesitate to raise rates or resume dividends on impermanent wartime earnings if, in peacetime, they might have to cut. Wall Street doesn't recommend unstable dividend-payers as investments for widows and orphans. (4) High personal taxes also play a part. Why pay big dividends if the Collector of Internal Revenue takes a good share?

Why not wait for lower personal taxes after the war?

Recent annual earnings of corporations (after taxes) have been running around \$9,000,000,000—a new high—as against a little over \$4,000,000,000 in 1939 and \$8,000,000,000 in 1929. If dividend customs of the twenties had prevailed, then stockholders' checks would have amounted to around \$5,500,000,000 to \$6,500,000,000 a year. But directors paid out only about \$4,000,000,000, as against 1939's figure of \$3,900,000,000. From 1939 to the end of this year, cumulated undistributed profits amount to nearly \$18,000,000,000.

ery, tools, etc. and goods in process and finished—will have to be moved from privately owned plants to places where they can be used or stored. The transfer of these goods is one of the problems ahead for the transportation system, according to the Office of Defense Transportation's *Report to the President* (restricted; pp. 92). At present the system has no surplus of facilities or equipment, and although second-quarter allocations of controlled materials for the ODT program exceeded all previous allotments, manpower shortages may prevent completion of the full program. (Office of Defense Transportation)

REPORTS ON REPORTS

Transportation After Demobilization

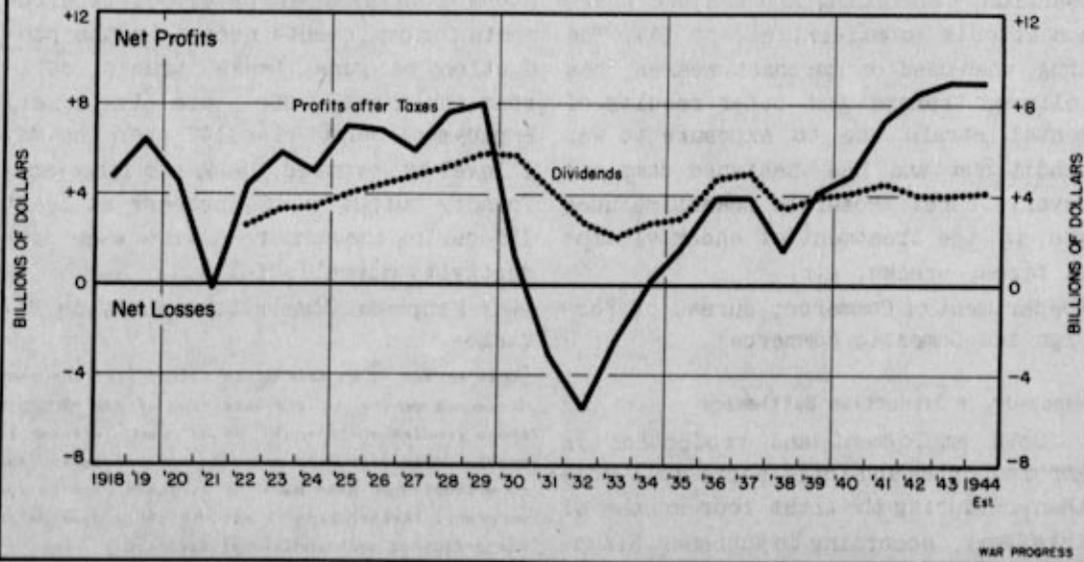
When industry is demobilized, government-owned property—surplus machin-

Drug Pointers

Recent experiments by doctors of the War Shipping Administration indicate that ergotamine tartrate, an alkaloid once limited in usefulness, may prove

CORPORATIONS CLING TO CASH

Though corporate profits since 1939 are up 120%, dividends barely hold their own, up only 5%. Companies keep 54% of earnings, versus 30% to 40% in 1920s.



SELECTED MONTHLY STATISTICS

Employment—Federal Finance—Transportation—Production

	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
NONAGRIC EMPLOYMENT—TOTAL	38,627 ^P	38,598 ^R	38,692 ^R	40,197	39,859	30,326	N.A.
Manufacturing—Total	16,109 ^P	16,159 ^R	16,312 ^R	17,080	16,908	9,775	N.A.
Durable goods	9,778	9,724	9,949	10,293	10,018	4,320	N.A.
Nondurable goods	6,331	6,435	6,363	6,787	6,890	5,455	N.A.
Mining	835 ^P	837 ^R	844	857	889	842	N.A.
Trade	6,957 ^P	6,961	6,968	7,554	6,982	6,599	N.A.
Government	5,893 ^P	5,932 ^R	5,905	6,071	5,962	3,958	N.A.
Other	8,833 ^P	8,709	8,663	8,625	9,118	9,152	N.A.
FEDERAL FINANCE (GENERAL FUND)							
Expenditures—Total (million dollars)	8,625	8,292	7,859	7,452	8,327	895	N.A.
War	7,967	7,879	7,346	6,718	7,469	112	N.A.
Nonwar	1,058	413	513	734	858	783	N.A.
Revenues—Total	6,247	2,950	3,087	5,736	4,569	557	N.A.
Income Taxes	5,241	2,167	2,475	5,040	3,803	356	N.A.
Other [†]	1,006	783	612	696	766	201	N.A.
War bond sales—Total	1,802	751	739	853	876	-	N.A.
"E"	1,350	624	606	728	696	-	N.A.
"F" and "G"	452	127	133	125	180	-	N.A.
Net debt	180.8	177.8 ^R	172.7	153.6	127.2	37.6	33.9
TRANSPORTATION—COMMODITY AND PASSENGER (1935-39=100)^{††}							
Commodity	226	222 ^R	220	221	210	95	113
Passenger	274	276 ^R	265	265	247	100	104
PRODUCTION OF CLOTHING AND SHOES FOR CIVILIANS (1935-39=100)^{††}							
Clothing and shoes combined	98	98	107	103	105	95	N.A.
Clothing	102	100	112	107	108	96	N.A.
Shoes	85	89	90	88	95	94	N.A.

*Employment, Federal Finance, June; all other, May. ^P Preliminary. ^R Revised. N.A. Not available.
[†]Transportation, contract construction and federal force account. ^{††}Unadjusted.

effective in treating victims of "battle reaction," according to *Druë's and Pharmaceuticals* (confidential; pp 15). The drug, when used on merchant seamen, has relieved tremors and other results of mental strain due to exposure to war conditions and has hastened complete psychic cure. Possible peacetime uses are in the treatment of shock victims of fires, wrecks, etc.

(Department of Commerce, Bureau of Foreign and Domestic Commerce)

Manpower, a Production Bottleneck

Both employment and production in 256 foundries and forge shops fell more than 2% during the first four months of this year, according to *Manpower Situa-*

tion in Certified Foundries and Forge Shops (confidential; pp.4). If requirements for components needed in the production of guns, tanks, trucks, railroad equipment, etc. are to be met, employment must rise 14% over the May 1 level by November, 1944, and forge-and-foundry output must increase at least 15% during the summer—a time when productivity normally falls.

(War Manpower Commission, Analysis 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.]

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Selling War Surpluses: Plants, Consumers' Goods

M-293 Pruning Problems

Number 202

July 29, 1944

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WAR PROGRESS

Prepared in the War Production Board

Donald M. Nelson, Chairman

War Progress is a confidential report designed to provide a coordinated and continuing picture of the overall war program for the various war agencies. To this end, it presents, analyzes, and interprets basic statistical and economic information, and from time to time examines the pros and cons of controversial questions.

Although War Progress is an official publication of the War Production Board, statements in it are not to be construed as expressing official attitudes of the Board as a whole, or even of individual members. Conclusions, whenever reached, should be considered editorial conclusions.

War Progress is prepared in the Bureau of Planning and Statistics (Stacy May, Director) by the Munitions Branch (Morris A. Copeland, Chief).

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DPC Surveys the Job Ahead

Disposal of \$15,000,000,000 of government-financed plant calls for detailed study of postwar possibilities. Bigness is bar to easy sale of most facilities.

A FEW MONTHS AGO, the Reconstruction Finance Corporation's Defense Plant Corporation was given the job of disposing of the biggest block of industrial property on record—more than \$15,000,000,000 of government-financed war construction, machinery, and equipment (chart, page 3).

To date, sales have been negligible, about \$40,000,000, or 0.3% of the total. And of this \$40,000,000, the sale of a group of properties to Bethlehem Steel at \$25,000,000 constitutes more than half. Here was a case of the operator taking up its option when the plants were still in active use on war work. The facilities never got on the so-called "surplus list," and hence open to general bidding.

BAPTIZING THE SURPLUSES

But the Bethlehem case cannot be described as typical. Before a government-financed plant can be offered on the open market it must first be declared "surplus" by the Army, Navy, War Production Board, Maritime Commission, etc. The Square D-operated plant at Binghamton, N.Y., followed this course. It was making altimeters for the Navy. When its contract ran out, land and buildings were put on the surplus list and bought by General Aniline & Film Corporation at an estimated replacement cost of \$175,000. That's the biggest single sale of surplus plant so far. But General Aniline hardly had this facility on its books when the Navy

SELLING THE SURPLUSES

AMONG THE MAJOR issues of reconversion will be how, when, and where to dispose of government-owned goods, from tenpenny nails to hundred-million-dollar plants.

In this issue WAR PROGRESS analyzes (1) industrial facilities and (2) consumers' goods: What problems have already come up? What steps have been taken to meet them?

wanted it back in production, so the new owner has leased it to the Navy. It is a clear example of the uncertainties of war production: the idle plant of yesterday may be pouring smoke tomorrow, and vice versa.

TEMPORARY STAND-BY

Before a plant is declared surplus, it may be put into stand-by. So far, approximately \$430,000,000 of government-financed construction, machinery, and equipment has been put into stand-by. This includes facilities such as American Steel Foundries, East Chicago, Ind., formerly making steel castings; Koppers' Bartlett-Hayward Division, Baltimore (antiaircraft gun carriages); Timken Ordnance, Canton, O. (seamless tube castings); Permanente Metals Corporation, Manteca, Calif. (magnesium metal and alloys).

Presumably, most plant put in stand-by is only a step removed from being designated "surplus." (Frequently it is.) Right now, for example, that's the case with Benjamin Franklin Graphite, Chester Springs, Pa.; Krome Corporation, Marshfield, Ore. (chrome concentrates); and Warner Company, Philadelphia (mag-

nesite). But no broad rule holds. A plant can move out of stand-by on a moment's notice. Many powder-bag loading facilities, held in reserve for the past year or so, are now being rushed back into production to meet demands for heavy ammunition. Moreover, some of today's stand-by will undoubtedly go into the Army and Navy's permanent reserve.

As of July 15, only \$18,290,600 of land, buildings, and machinery and equipment had been declared "surplus." Practically all of this, \$18,230,100, is DPC owned; a mere \$60,500 represents facilities owned by the Army, Navy, and other agencies. Clearly, the big job is yet to come. And DPC is preparing for it now.

PRELIMINARY SURVEYS

It is compiling detailed engineering and inventory surveys showing cost, plot plans, layout, taxes, housing, power, transportation, sanitary facilities, photographs, type of construction, etc. for each DPC-owned plant, together with the age, cost, location, drive, attachments, special features, etc. of each DPC-owned piece of machinery and equipment. The Army and Navy are compiling similar surveys of their own plant and equipment; eventually, this information will be made available to DPC, as disposal agency for government-owned industrial facilities.

Logically enough, DPC is giving first attention to plants which have obvious postwar possibilities. This means, to a large extent, DPC-financed plant. Whereas the Army, Navy, and Maritime Commission sponsored chiefly special-purpose end-product facilities, DPC financed 78% of all government-built iron and steel facilities, 80% of aircraft, 100% of aluminum, magnesium, synthetic rubber. On the other hand, only 6% is in ordnance facilities, less than 2% in shipways:

Type of Government-Built Plant:	% Financed by DPC
Aircraft.....	79.6%
Shipways.....	1.7
Ordnance.....	6.1
Iron & steel.....	78.4
Chemicals.....	22.6
Nonferrous metals.....	99.6
Synthetic rubber.....	100.0
100-octane gasoline.....	100.0
Machinery & machine tools.	66.7
Other industrial plants...	40.2

In all, DPC financed some \$7000,000,000, or 44%, of total government-built plant. Between \$5,000,000,000 and \$6,000,000,000 of these facilities carry purchase options to the present operators. Perhaps \$1,500,000,000 of Army, Navy, and Maritime Commission facilities are under option. Thus about 80% of all optioned plant is DPC financed.

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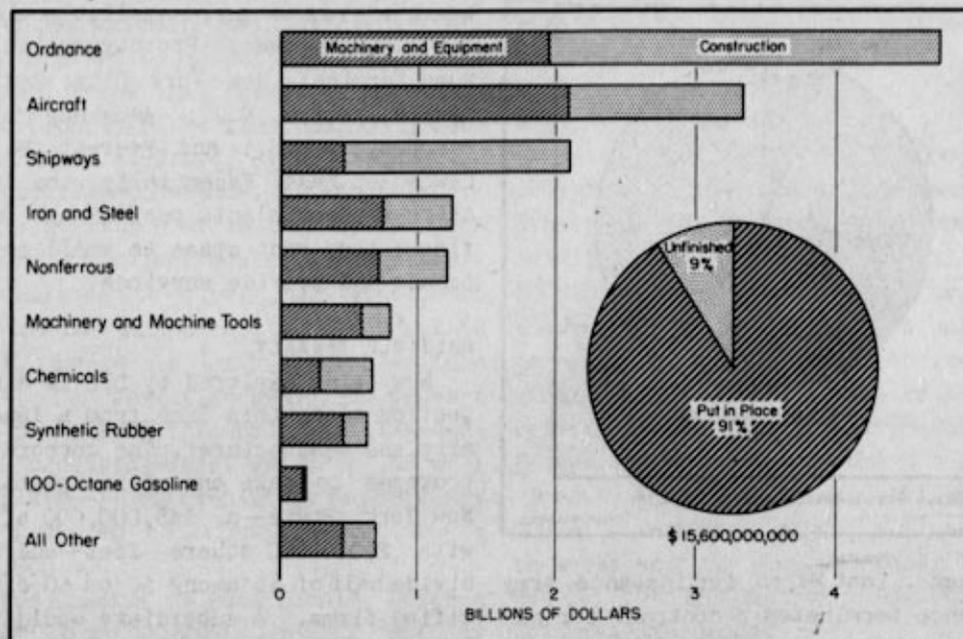
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SALES CIRCULARS

As part of its selling job, DPC is preparing circulars of its properties. These are digests of the detailed engineering and inventory surveys, and indicate location, type of construction, site, building, machinery, equipment, etc.; in addition, they carry a sketch of the floor plan and a photo of the plant interior and the exterior. The aim is to summarize 500 to 700 of the

PLANT PROBLEM IN PERSPECTIVE

Here are the types of government-owned facilities that must be sold, scrapped, or held as stand-by. Ordnance plants make up nearly one-third; aircraft, one-fifth.



WAR PROGRESS

detailed surveys—the ones covering industrial properties that are most likely to sell—and place them in RFC offices, in local banks, chambers of commerce, etc. These circulars will form a catalogue for potential buyers to thumb through.

CATALOGUES FOR CUSTOMERS

Thus, if a company in New York, say, writes to RFC's Defense Plant Corporation in Washington—a daily occurrence—asking for a factory with 100,000 square feet of floor space in the vicinity of Dallas, near railroad facilities, and equipped with two cranes, the company would be referred to RFC's local office in New York. There it could go through the catalogue of what's for sale or lease. If such a factory is available the company could examine a copy of the detailed engineering and inventory sur-

vey. Then it could visit the plant and make an offer.

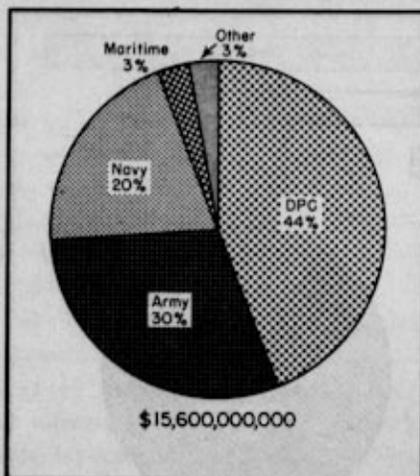
But, the operator has first choice. After lease termination, he generally has 90 days in which to exercise his purchase option, which must be for the entire factory, for all the plant and all the equipment. Price is generally based on either (1) cost plus interest less rentals plus interest; or (2) cost less stated depreciation, with a specified residual value—whichever is higher. Furthermore, even after expiration of his option the operator has the "right of first refusal"—usually 90 days in which to meet the best offer received by the government. (However, the government is under no obligation to sell.)

As a result of program cutbacks, many leases have already been terminated. In most cases, however, new leases have been entered into for additional war

CONFIDENTIAL

CHECKUP ON U.S. PLANT

Defense Plant Corporation accounts for 44% of government-owned facilities; Army, 30%.



Note: Over 90% of plant has already been put in place.

WAR PROGRESS

business. Last March, for instance, Army Ordnance terminated a contract for machine tools at a DPC-owned plant in Fond du Lac, Wis., leased to Giddings & Lewis. Soon after, the greatly expanded heavy-shell program came through; before the 90-day option ran out, the plant was again filled with war work and the lease reinstated.

EXPENSIVE PROPOSITIONS

Under such circumstances, only a few options have been exercised to date. There's a further point. As shown in WAR PROGRESS early this year, most of the government-financed plants are big (WP-Jan 1'44, p4). The average cost is \$6,000,000; and \$70 out of every \$100 invested has gone into projects costing more than \$10,000,000. There are relatively few companies that can afford to buy into this class. So the apparent choice is between fostering undue economic concentration or running a "fire sale." The government is interested in neither.

It has been suggested that larger facilities be subdivided so that smaller firms could participate in disposal either through purchase or lease. The basic idea is to put many little plants into the big ones. Prototypes include Bush Terminal, New York City; Port of Newark, Newark, N.J.; Amoskeag Mills, Manchester, N.H.; and Everett Mills, Lawrence, Mass. Essentially, the operators of these plants perform two functions: they rent space to small enterprises and provide services.

MULTIPLE TENANCY

Now being explored by DPC is a suggestion along this line from a leading airplane manufacturer. The corporation proposes to take one of its plants in New York State—a \$45,000,000 affair with 2,000,000 square feet—and subdivide half of it among 50 or 60 diversified firms. A subsidiary would then provide trucking, warehousing, cafeteria, medical, accounting, marketing, engineering, legal, etc. services for the tenants. Profits would be split 50-50 with the government.

However, it is a question whether multiple tenancy is as practical as it sounds. It will often call for more government money; estimated cost of the aforementioned conversion is \$500,000. Also, if a plant is distant from an industrial center—and many of them are—partitioning is unlikely to get very far. But DPC is interested and may give the idea a trial in a limited number of selected locations.

As for the largest and most expensive government-owned plants, they're special problems. Basic Magnesium, Las Vegas, cost \$130,000,000; its 3,300,000 square feet of floor space is enough for about 50 football fields. Alone, it can turn out 125,000,000 pounds of magnesium a year, enough to supply the

estimated postwar demand. Just prior to the 40% cut in operations last spring, Basic had gotten its production costs down to about 18 cents a pound. But other companies in the industry can turn out substantial quantities of magnesium at well below that level.

Or consider the \$190,000,000 Geneva Steel plant at Provo, Utah. With an eye to possible air attack, it was deliberately built 800 miles inland, far from the nation's steel center. It was largely designed to supply the West Coast shipbuilding industry; its 132-inch plate mill, for example, would never have been built for peacetime use. To convert the plant to a balanced line of peacetime products—sheet and strip, as well as plate—it may eventually be necessary to spend an additional \$5,000,000 to \$30,000,000.

For a number of such plants, Defense Plant Corporation is making special

studies on how to cut costs, develop byproducts, improve production methods, stimulate research, etc. But it still hasn't got the answer as to how such giants will finally justify themselves in the postwar market.

SOME HELD IN RESERVE

Patently, not all of the \$15,000,000,-000-plus of government-owned war construction, machinery, and equipment will actually be sold. Approximately \$1,500,-000,000 of government-operated arsenals and Navy yards, for example, is unlikely to be disturbed. Besides, an indeterminate amount of plant will be held in reserve by the Army and Navy against a future emergency. And some of the government-owned facilities, particularly the single-purpose stuff, will have to be scrapped. As for the rest, DPC is out to put as much of it as possible into private hands.

KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War program—Checks paid (millions of dollars)-----	1,628	1,504	1,777	1,477	1,474
War bond sales—E, F, G, (millions of dollars)-----	317	588	581	322	199
Money in circulation (millions of dollars)-----	22,584	22,531	22,421	20,408	17,706
Wholesale prices (1926=100)					
All commodities-----	103.9*	103.9	103.7	103.0	102.9
Farm products-----	124.1*	124.2	123.0	121.9	124.6
Foods-----	106.0	105.6	104.9	104.6	107.0
All Other-----	98.7*	98.6	98.7	97.9	97.1
Petroleum:					
Total U.S. stocks* (thousands of barrels)-----	410,845	409,945	411,494	418,464	421,845
Total East Coast stocks* (thousands of barrels)-----	65,260	64,793	62,055	59,491	52,870
East Coast receipts (thousands of barrels, daily average)-----	1,767	1,742	1,810	1,440	1,453
Bituminous coal production (thousands of short tons, daily average)	2,043	1,731	2,050	2,125	1,967
Steel operations (% of capacity)-----	95.9%	97.2%	97.3%	96.1%	97.4%
Freight cars unloaded for export, excluding grain (daily average)					
Atlantic Coast ports-----	3,295	3,148	2,897	3,183	2,551
Gulf Coast ports-----	399	452	461	438	431
Pacific Coast ports-----	1,635	1,612	1,640	1,328	1,244
Department store sales (% change from a year ago)-----	+11%	-14%	-14%	-15%	-19%

* Preliminary * Excludes military-owned stocks.

For Sale: Shoes, Spurs, Sandbags

While Treasury must give government buyers first refusal, bulk of quartermaster items will go to public. Problems: Protecting civilian markets, making quick sales.

WHEN, on May 15, the Surplus War Property Administrator designated the Treasury's Procurement Division as the agency for disposing of all the government's surplus consumers' goods stored in this country, the Treasury took on a big job; for years its Procurement Division has been an official government buyer, and now it has become an official selling agency.

So far this year, it has realized \$60,000,000 from the sale of surpluses—textiles, shoes, horses, iceboxes, spurs, sandbags, sheepskin shearlings, etc. Some of the material was prewar stuff—indeed, some was left over from 1918; World War II surpluses are only starting to come in.

INTERAGENCY SALES

As in the past, the Treasury will continue to make disposal, wherever feasible, among government agencies; the idea is to make sure the government doesn't buy with one hand what it is selling with the other. Recently, it sold 390 surplus Army passenger cars to the Department of the Interior, 250 to the Department of Agriculture. And it sold 230,000 WAC jackets and skirts to the Foreign Economic Administration to be debuttoned, dyed, and distributed abroad; using goods for foreign relief is one way of keeping unwieldy surpluses off the domestic market.

Indeed, surplus property must first be made available to all government agencies. But SWPA would like to modify this procedure, to by-pass agencies

which obviously would have no interest—especially since the great bulk of sales arising out of the war will be to the public, rather than among federal agencies.

Treasury sales are easing civilian shortages; 160,000 used kerosene drums have been sold to farmer cooperatives and oil dealers; new filter felt is being offered to shoe manufacturers as a substitute for leather; and the Treasury is seeking to arrange the reprocessing of gasoline cans into paint containers.

NO DUMPING ALLOWED

The broad policy to guide the Treasury (as well as other disposal agencies) has already been determined by the Surplus War Property Administrator; surpluses will be sold for the highest return consistent with maintaining and encouraging a healthy competitive economy.

There will be no dumping—no breaking of civilian markets. Where disposal involves quantities that threaten to put an established concern out of business or cripple a company's operations, the Treasury will consult with representatives of the business. To that end, it will use industry advisory committees similar to those of the War Production Board.

This is not entirely a future problem; it is already here. Right now, for example, the Treasury has available 13,300 platform trucks for moving airplane engines on airfields. This is equal to three years' output of this type, and more will come into the market. Huge supplies of other civilian-type items—surgical instruments, bandage gauze, and gasoline hose—will eventually come to the Treasury for disposal.

Most problems will have to be decided

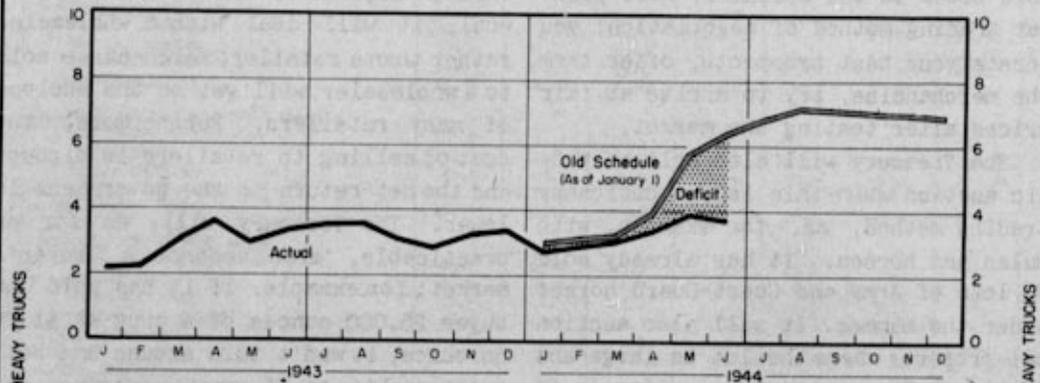
as they come up. Disposal procedures have to fit the product being disposed of. Three general methods are open:

1. Sealed bids.
2. Negotiation.
3. Public auction.

Up to now, the Treasury has relied most often on sealed bids; this is the traditional method by which the government buys and sells. It gives everybody a fair opportunity to bid. But it is cumbersome and time consuming; disposal

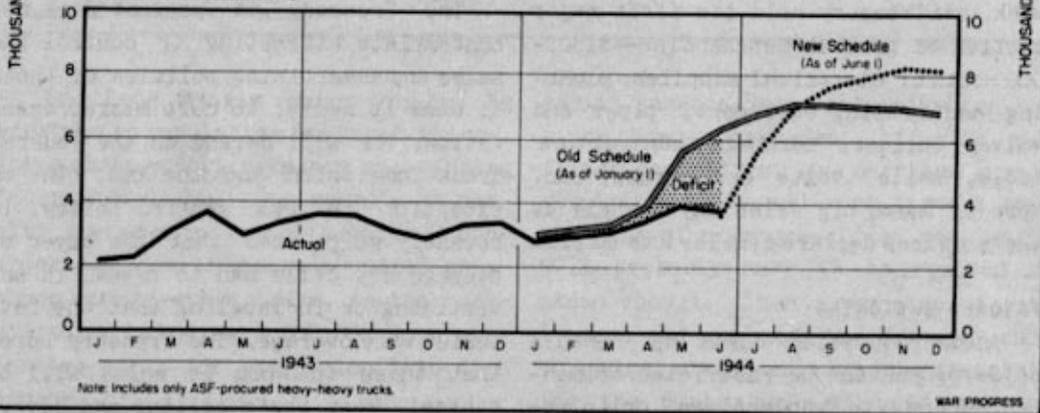
LONG, TOUGH HAUL FOR HEAVY-HEAVY TRUCKS

Output has fallen consistently behind production plan set up at the beginning of the year.



AS A RESULT...

Production schedules for coming months have been boosted sharply to pick up some of the slippage.



The story of heavy-heavy trucks is largely a story of manpower: getting workers in foundries and forge shops to provide the necessary castings and forgings for axles, transmissions, etc. (WP-Mar 4'44, p9). But manpower has not been found; as a result, production has lagged. Back in January, the schedules for 1944 called for 6,400 heavy-heavies for last month (upper

chart). But only some 3,700 were accepted. Repeatedly, the Army Service Forces have cut first-of-the-month forecasts for heavy-heavy trucks to accord with production realities, and a substantial production deficit has been piled up. This explains in part why schedules have had to be pushed up so sharply (lower chart) in the last half of the year.

of an item takes weeks. And in this period of short supply, time is important. Sometimes, if large buyers are not attracted, sealed bids may result in lower prices. Moreover, this method is contrary to the customary way of trading; businessmen don't like it—they prefer negotiation.

NEGOTIATION PREFERRED

From now on, the Treasury will resort more often to the speedier, more popular trading method of negotiation; you locate your best prospects, offer them the merchandise, try to arrive at fair prices after testing the market.

The Treasury will also sell at public auction where this is the customary trading method, as, for example, with mules and horses. It has already sold 30 lots of Army and Coast Guard horses under the hammer. It will also auction off property where the lot is large and consists of items in wide variety or in small quantities; it is not feasible to dispose of such merchandise by sealed bids or negotiation. At St. Louis last week, the Treasury held its first major auction of general merchandise—\$150,000 worth of electrical supplies, plumbing and heating equipment, pipes and valves, builders' hardware, contractors' tools, nails, bolts and screws, etc. More of these big sales may be held as the services declare similar lots surplus.

FAVORED CUSTOMERS

Another question comes up. Should sales of an item be restricted to manufacturers, to wholesalers, or to retailers? Treasury practice will vary with the nature of the item, the quantity to be sold. In certain instances, policy has already been established. For instance, in the case of used or damaged trade-marked products, the Treasury will first offer them back to their manu-

facturers; this will give the producers an opportunity to protect their good will, but they will receive no price preference. Then again, where the value of merchandise lies chiefly in its ingredients—as in chemicals—the producer will receive the first offer of sale, since he as the manufacturer would be best equipped to extract the desired ingredients.

As a rule, the Treasury will sell through regular trade channels. In general, it will deal with a wholesaler rather than a retailer; merchandise sold to a wholesaler will get on the shelves of many retailers. Furthermore, the cost of selling to retailers is higher, and the net return to the government is lower. The Treasury will, as far as practicable, also protect a buyer's market; for example, if it has sold one buyer 25,000 ounces of a drug at \$1.00 an ounce, it won't turn around and sell another lot at 75 cents an ounce and thus ruin the market for the first buyer.

HOPING FOR THE BEST

The Treasury at present does not contemplate attempting to control the sales and advertising policies of those to whom it sells; to curb misrepresentation, it will depend on the Federal Trade Commission and the law. In an exception to its general policy, it recently stipulated that the buyer of overage dry cells had to reveal in advertising or in labeling that the batteries were overage. The Treasury hopes that those to whom it sells will be ethical, keep their selling and advertising claims honest and in good taste, and refrain from fire-sale ballyhoo which might give the public the idea that surplus goods were being disposed of for a song.

In its job, the Treasury has become a merchandiser. It has just sold spurs

SELECTED MONTHLY STATISTICS

Production—Hours and Earnings—Labor Disputes

	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Same Month 1939	Same Month 1937
PRODUCTION INDEX-INDUSTRIAL (1935-39=100)†							
Total Manufactures	236 ^P	237	237	239	238	103	119
Durable	252 ^P	253	255	258	259	103	120
Nondurable	353 ^P	358 ^R	361	364	359	99	131
Minerals	170 ^P	168 ^R	169	171	177	105	111
	147 ^P	146	138	132	121	103	115
AVERAGE WEEKLY EARNINGS (dollars)							
All manufacturing industries	46.13	45.56	45.62	45.32	43.08	23.32	25.18
Durable goods	52.05	51.68 ^R	51.54 ^R	51.67	49.25	25.75	28.52
Nondurable goods	37.04	36.17	36.56 ^R	35.73	34.07	21.45	22.08
Bituminous coal mining	51.67	50.62	52.24	32.40	39.12	11.32	22.20
Metalliferous mining	44.59	44.62	44.59	44.12	43.43	27.50	32.24
AVERAGE HOURLY EARNINGS (cents)							
All manufacturing industries	101.7	101.3 ^R	100.6	99.6	95.3	63.2	63.1
Durable goods	111.3	111.0 ^R	110.3 ^R	109.7	105.0	69.4	68.4
Nondurable goods	85.8	85.0	84.6	82.9	79.6	58.3	57.8
Bituminous coal mining	117.7	118.4	117.6	114.4	112.0	86.0	90.1
Metalliferous mining	100.1	101.2	99.9	99.7	98.4	69.1	72.6
AVERAGE HOURS PER WEEK							
All manufacturing industries	45.4	45.0	45.3	45.5	45.2	36.9	39.9
Durable goods	46.8	46.6	46.7	47.1	46.9	37.1	41.7
Nondurable goods	43.2	42.5	43.2	43.1	42.8	36.8	38.2
Bituminous coal mining	43.8	42.8	44.5	28.4	35.2	14.1	24.9
Metalliferous mining	44.4	44.0	44.5	44.0	44.3	40.0	44.6
LABOR DISPUTES							
Number of strikes in progress	560	660	475	395	475	407	940
Workers involved (thousands)	183	312	167	274	585	127	475
Number of strikes beginning during month	500	610	435	355	433	245	610
Workers involved (thousands)	155	290	155	263	187	63	281
Man-days idle (thousands)	680	1,400	580	787	4,699	958	4,998

* Production Index, Labor Disputes, June; Hours and Earnings, May.

† Unadjusted. ^P Preliminary. ^R Revised.

to the Lone Ranger radio program as premiums to popularize the horse Silver. Three radio advertisers are negotiating for web cartridge clip pockets as novelty give-aways. A manufacturer is considering converting paratroopers' snowshoes into beverage trays. Another manufacturer is buying 1,200,000 jute protective socks for conversion into dish cloths.

RUMMAGE SALES

As a merchandiser, the Treasury has its problems. Much of the present surplus consists of used, damaged, obsolete, special-purpose or nonstandard items—old-style dental instruments; outmoded

aerial cameras; burn ointment which has since been superseded; off-size oil filter cartridges; gun carriage wheels requiring a special-size tire; a 360-ton mass of moisture-ridden soap which will probably have to be removed by steam shovel. Then in the case of mattresses and pillows, the Treasury runs up against state sanitary laws restricting the public sale of used ones and requiring full descriptive labeling of the new ones.

The Treasury is only one of seven surplus-war-property disposal agencies. Capital and producers' goods—plants, equipment, scrap, etc.—will be disposed of by the Reconstruction Finance Cor-

poration; food by the War Food Administration; ships and supplies by the Maritime Commission; housing property by the National Housing Agency; community facilities by the Federal Works Agency. All surplus property outside the United States and its territories and possessions, where the FEA has offices, will be disposed of by it. However, in active theaters of military operations, the military and naval commanders may sell

or otherwise dispose of any surplus property within their control. And in general, pending further regulations, owning agencies may sell surplus property in localities outside the United States, its territories and possessions, where FEA has no local representative, and in localities in the territories and possessions where the appropriate disposal agency has no local representative.

M-293 - Pruning the Paper Work

Scheduling order is due for overhauling now that components, like materials, are in easier supply. But—controls relaxed may be controls lost.

EARLY IN 1943—just when war production really began to roll—components displaced steel, aluminum, and copper as the Nation's Number 1 production problem. Result: General Scheduling Order M-293, which put the production and distribution of components under central supervision and allocation from Washington. It was to components what the Controlled Materials Plan was to materials.

And as with so many orders, M-293 has grown and spawned. Today it covers 85 groups of components, from ball bearings to turbines, embracing more than 200 individual items. Moreover, some 200 related products are covered by similar scheduling orders—L-192 for construction machinery, for instance. Yet today most of these 400-odd scheduled products—as with many materials—are in fair supply. Indeed, only 30 are now on the critical list (table, page 11).

Meanwhile the scheduled products are generating some 15,000 reports and applications a month, all of which have to be reviewed by the appropriate in-

dustry divisions of the War Production Board to see to it that urgent programs get first call. Thus last month the Radio and Radar Division issued 750 directives to the 40 manufacturers of vacuum tubes. But with many components, the supply-demand position is so well-balanced that the War Production Board serves merely as a rubber stamp for manufacturers' production schedules. For instance, a month may go by without a single directive to the 30 companies submitting order boards on pressure vessels.

WEEDING OUT THE ORDERS

In line with its policy of shaking down the elaborate structure of L and M orders in preparation for wholesale readjustments that will be necessary after the fall of Germany (WP-Apr8'44, p1), WPB is examining its M-293 and similar scheduling lists to see on which products controls can be relaxed. Any eliminations would permit WPB to concentrate to better advantage on the products that are still critical. Under consideration right now is an amendment to L-97-d, which would suspend the filing of schedules on all but five of 55 items of railroad equipment.

Readjustments, however, take time. Once a system of scheduling gets set and is working, there is a natural reluctance to change or eliminate it. Thus the armed services are anxious to avoid any wholesale changes in M-293 or related orders. The theory is that even though supply-demand positions are in balance now, they might not be a few months from now. And by that time, if scheduling is dropped, control may be lost.

RED TAPE IS POPULAR

Furthermore, many of the manufacturers themselves have no great yen to get rid of scheduling orders—they've grown accustomed to them and like the way they work. (Originally they looked on them as just so much more red tape.) The

point is that they now build up production schedules, get these schedules approved by WPB, and then the schedules are frozen. This protects them against importunate customers and expeditors.

Before M-293, manufacturers were constantly having to reshuffle their shipping dates and rearrange their production lines; a high-priority order would suddenly have to be fitted into an already crowded schedule, or an expeditor from some claimant agency would show up with a demand that its order be leapfrogged over those of other claimants. Now such interruptions or interferences with production are held to a minimum. Manufacturers can simply say: "Sorry, you'll have to go to WPB; we're under orders." Frozen schedules mean increased output, efficiency, profits,

CRITICAL COMPONENTS

OF SOME 400 scheduled products under M-293 and related orders, only 30 are now on the critical list. Not all items in these categories are critical, however. With antifriction bearings, for example, tightness is chiefly

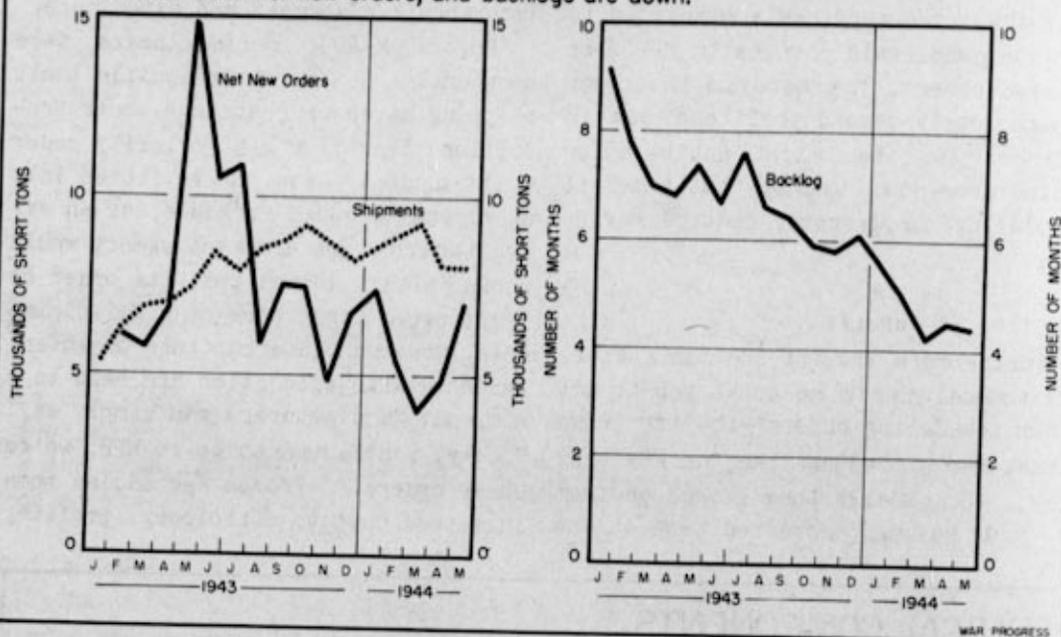
in ball bearings 30mm. to 170mm. in outside diameter, and in taper roller bearings and cylindrical roller bearings over four inches in outside diameter. And AC fractional-horsepower motors are more critical than the DCs.

Antifriction bearings
Asbestos clutch facings
Automotive axles
Automotive transmissions
Automotive wheels & rims: malleable & pressed disk
Circuit breakers: aircraft & Navy hi-shock
Electrical relays
Electrical resistors
Electrical test equipment
Electrical transformers
Engine accessories: carburetors, magnetos, fuel injection equipment (diesel engines)

Fractional-horsepower motors
Integral-horsepower generators & motors
Internal-combustion engines
Metallic precision bellows
Miniature vacuum tubes & microwave electron tubes
Power-lift trucks
Power-transmission chains (except silent)
Precision snap switches, microtype
Pressure gauges
Track-laying tractors
Valves: special purpose, such as turbine, safety & relief, etc.

RELEASING THE PRESSURE ON VALVES

General-purpose steel valves are an example of most items under M-293; shipments exceed net new orders, and backlogs are down.



and—perhaps even more important—unimpaired customer and public relations. WPB takes the rap on the "noes."

COMES THE DAWN

In time, of course, today's hesitancy to get out from under control will give way to an anxiety to be rid of the fetters. Once backlogs begin to fall off sharply, once high-rated orders begin to drop, then manufacturers may seek freedom-of-selling opportunities.

Ordinary steel valves suggest the trend. A year ago, supplies were so tight that the War Production Board had to put on a special drive to make the best use of them (WP-Sept 18 '43, p1); backlogs of manufacturers amounted to 60,000 tons. But by now they have fallen to 35,000 tons, or about four months' production. Similarly with reciprocating compressors: unfilled orders dropped

steadily from almost \$100,000,000 in March, 1943, to less than \$65,000,000 today, with delivery requests so spaced that there are open spots in the schedules a few months hence. And backlogs on turbines, pipe fittings, heat exchangers, fluid-power systems, and other products have been rapidly dwindling.

THE PENALTY OF SUCCESS

One reason for the easier situation in components is the steady decline in war construction—from a peak of \$1,450,000,000 in August, 1942, to \$245,000,000 last month. But the underlying reason is that the scheduling orders—the freezing of shipping schedules—have succeeded in eliminating nonessential orders and in boosting output. The very success, paradoxically enough, is a reason for both (a) eliminating the control and (b) keeping it.

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WAR PROGRESS

Prepared in the War Production Board

Donald M. Nelson, Chairman

War Progress is a confidential report designed to provide a coordinated and continuing picture of the overall war program for the various war agencies. To this end, it presents, analyzes, and interprets basic statistical and economic information, and from time to time examines the pros and cons of controversial questions.

Although War Progress is an official publication of the War Production Board, statements in it are not to be construed as expressing official attitudes of the Board as a whole, or even of individual members. Conclusions, whenever reached, should be considered editorial conclusions.

War Progress is prepared in the Bureau of Planning and Statistics (Stacy May, Director) by the Munitions Branch (Morris A. Copeland, Chief).

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Geographic Jolts Due on X Day

Single-war-industry boom towns will be hard hit by cutbacks; Detroit, other industrial cities will also feel immediate impact. West Coast's problem will come later.

WHEN THE UNITED STATES tooled up for war, the geographical impacts were gradual. It took time for new plants in outlying areas to be built; likewise, it took time to convert plants in old-established industrial areas. But when demobilization starts—when Germany falls—the process of unwinding will be abrupt, and geographic impacts will be both sudden and violent. Yet certain consequences are foregone:

1. Few areas can hope to escape the jolt.
2. Some areas are going to be hit much harder than others.
3. Under proper planning, some that are hard hit can hope to recover quickly because they can readily convert their released facilities.
4. Others that are hard hit can expect to be deflated indefinitely.

Towns and areas which have boomed because of a single war industry will usually be hard hit when the blow comes. Moreover, since the new plants will not have had a peacetime past and hence a ready-made peacetime future, their chances of starting up promptly into peacetime pursuits will be limited. Among such places are Orange, Tex., with its shipyards; Wichita, Kan., with its aircraft plants; Milan, Tenn., with its shell-loading plant.

States throughout the entire Southeast face this same problem on a broad scale. War activity has boosted pay

rolls as a result of shipbuilding, shell loading, and military camps. But most of these operations will be discontinued when peace comes. And reconversion prospects are slim; hence some permanent deflation seems inevitable.

Most large manufacturing cities, such as those which dominate the Great Lakes and Northeastern states, will be immediately affected by X Day cutbacks. For in these states—Michigan, Illinois, Indiana, Wisconsin, Ohio, Pennsylvania, New York, New Jersey, Massachusetts, Connecticut—production covers a broad band of munitions output, embracing ammunition, guns and fire control, airplanes, aircraft parts, aircraft engines, combat and motor vehicles, signal equipment, steel—indeed, almost anything you can think of. Therefore, as soon as reductions come, contracts will be terminated in these areas.

RECONVERSION OPPORTUNITIES

However, potential civilian production of old-line industries—refrigerators, washing machines, radios, general industrial equipment, electrical equipment, automobiles, etc.—opens large opportunities for re-employment. Moreover, the very diversification of productive facilities in such large cities as Detroit, Chicago, Philadelphia, New York, Cleveland, and Milwaukee introduces the possibility of the conversion of war-built plants to peacetime pursuits. The management, engineering skill, and labor are at hand for new industrial ventures.

In such cities, then, the problem after X Day is one of timing: Will re-

sumption of civilian output be synchronized with—be meshed into—cutbacks in war output?

Some obvious difficulties come to mind: Detroit, for instance. War production there is at once diversified yet highly concentrated. Detroit makes about 10% of all combat materiel, covering a wide range of products—large and small ammunition, large and small guns, tanks, armored cars, navigation instruments, radio and radar equipment, screw-machine products, bearings, marine, automobile, and airplane engines, aircraft parts, airplanes, machine tools, tractors, and so on.

THE PRICE OF SPECIALIZATION

But two programs constitute more than half of its output—aircraft and tanks. When tanks are cut the whole state of Michigan will feel it. During the first three months of this year, Detroit shipped 26% of all tanks and parts; Flint, 20%. The rest of tank production is widely scattered among 37 areas, of which the Gary-Hammond-South Chicago areas, and Berwick, Pa., had 6% each, and 35 others, only 3% or less each. So Detroit and Flint can't help bearing the brunt of tank cancellations.

Detroit also will be set back when airplane cuts occur on X Day. The planes and engines which are dominant in Detroit will not be needed in present

volume. And since the policy generally will be to keep old-line plants in their old-line businesses wherever possible, airplane companies will be continued on post-X-Day contracts. Automobile companies—hence Detroit—will feel the plane cuts early.

Detroit's unemployment problem will depend on how fast automobile plants can be released from war production, for after all, its immediate future hinges on automobiles. But it will also depend on whether the Army, the Navy, and the War Production Board take economic incidence into account in arranging cutbacks. Clearly, there are some cutbacks which are not optional. If the Army or the Navy decides to do away with a certain type of plane or tank, and it is made in only one or two plants, then those plants, and the cities they are in, must take it. There is no out.

SCATTER AND SPRAWL

On the other hand, certain types of products are made right across the country—without any high degree of concentration. For example, large-sized ammunition (20mm. and up) is produced in 77 different cities. No one city dominates production, though Detroit is the largest—about 7% of the total. Therefore, if it doesn't interfere with Detroit's reconversion, it would seem logical to keep some ammunition production there, while cutting elsewhere; this would tend to ease the plane-tank impact while plants released from war work get tooled up for civilian output. That same policy suggests itself for other cities, especially smaller ones, in which cutbacks on particular products will be heavily concentrated.

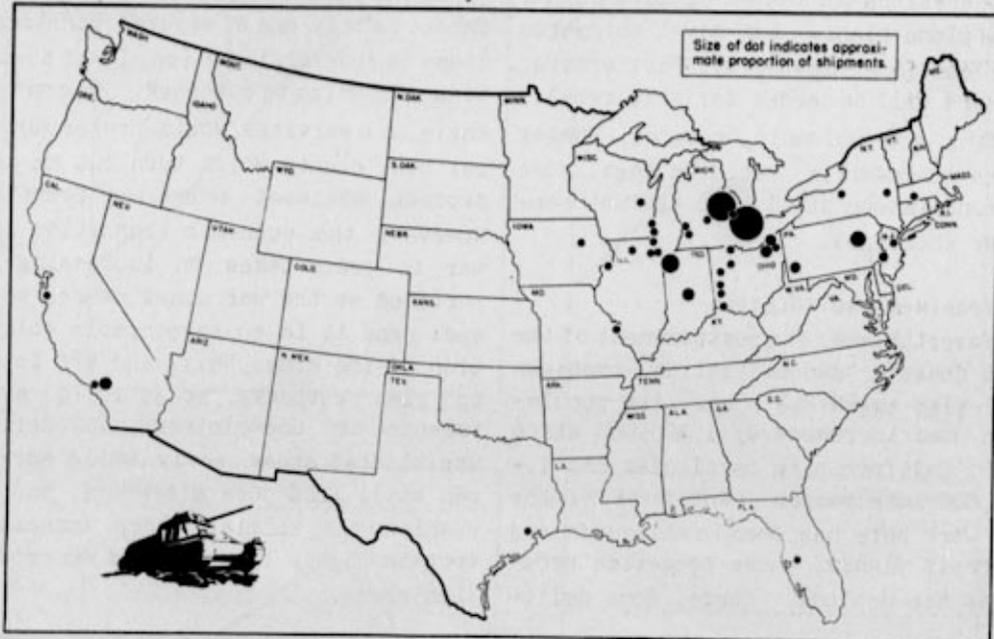
Some areas will be temporarily insulated against sharp cutbacks, and in that case you have the Detroit problem in reverse. Consider the West Coast:

IN THIS ISSUE:

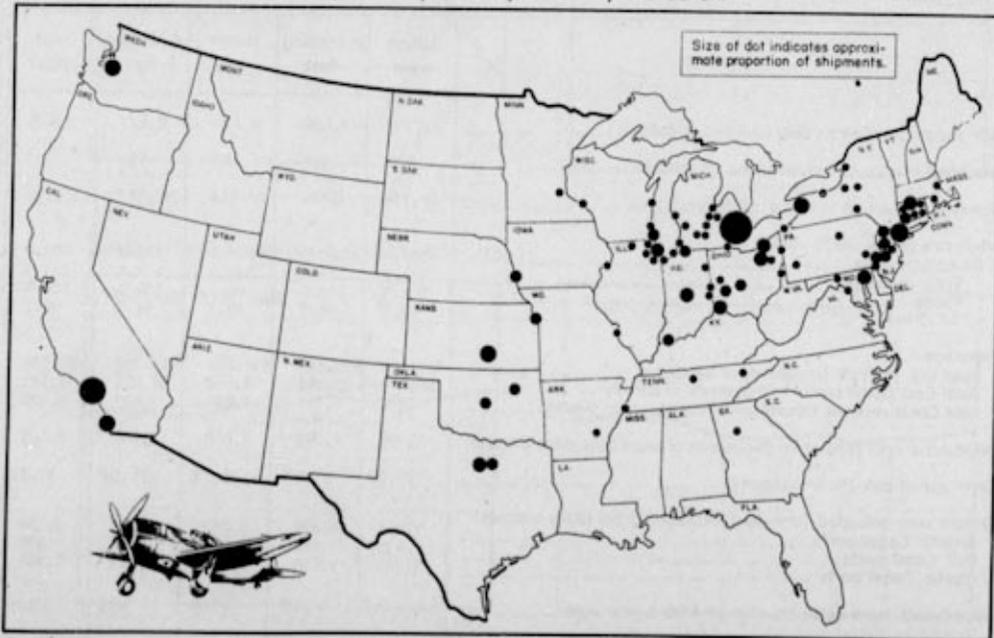
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CUTBACK CONTRAST

Tanks are made in 39 cities, but production is highly concentrated. Two cities—Detroit and Flint—make about half, will bear brunt after X-Day.



Airframes, engines, parts, etc. are made in 83 cities and production is fairly widely scattered—Detroit, Los Angeles, New York, Buffalo, Seattle, Hartford, and so on.



WAR PROGRESS

Although a large number of its war workers will be laid off, chiefly in merchant shipyards, the region will still be humming with work as the main base of operations for the war against Japan. Most plane plants and naval shipyards will continue at capacity. Furthermore, workers will be needed for ship repair, loading and unloading cargoes, lumber camps and sawmills, etc. In fact, some communities may still be up against manpower shortages.

POSTPONEMENT NO SOLUTION

Nevertheless, the postponement of the West Coast's demobilization problems will also aggravate them. Its population has increased by 1,300,000 since 1940; California in particular has 1,000,000 more people. And most of the war work here has been in shipyards and aircraft plants, whose peacetime prospects are dubious. Hence, some delib-

erate cutting back of programs on the Pacific Coast may be in order during the Japanese war—so as to minimize the deflation once peace comes.

In the final analysis, the geographic impact is only one of several considerations in determining which plants to continue and which to cut back. For one example, the services would prefer not to cut back plants which turn out an AA-1 product and meet schedules promptly. However, the economic transition from war to peace takes on increasing importance as the war draws nearer to an end. And it is an inescapable obligation of the Army, Navy, and WPE to try to plan cutbacks so as to (1) avert islands of unemployment, (2) deflate war-bloated areas early while workers can still find jobs elsewhere, and (3) cushion the initial sharp impacts in certain highly concentrated war production areas.

KEY STATISTICS OF THE WEEK

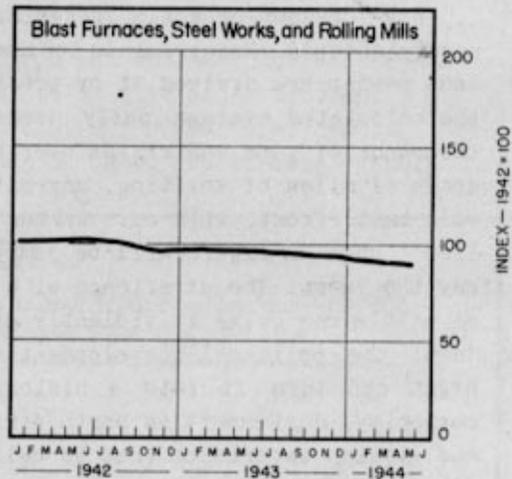
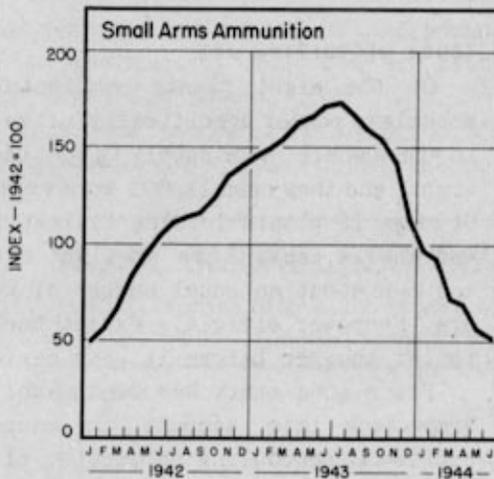
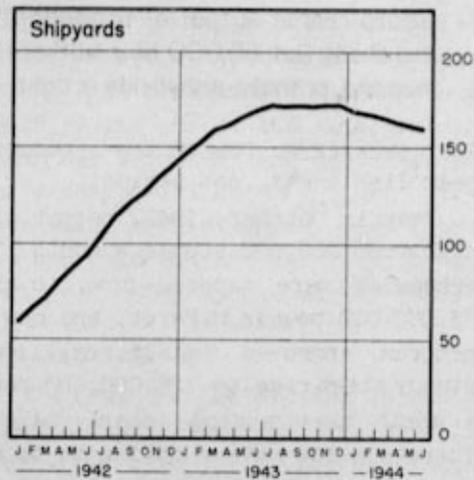
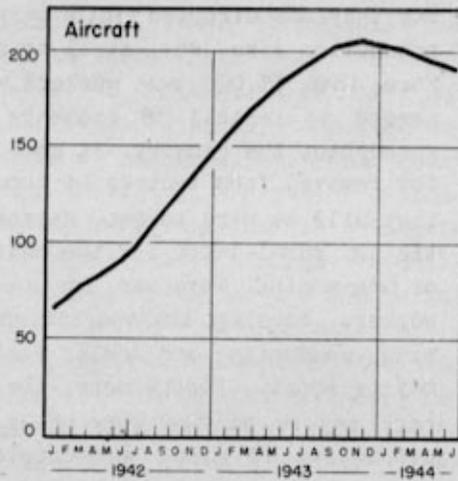
	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War Program — Checks paid (millions of dollars) —————	1,707	1,628	1,634	1,627	1,425
War bond sales — E, F, G, (millions of dollars) —————	424	317	641	651	275
Money in circulation (millions of dollars) —————	22,734	22,584	22,598	20,387	17,799
Wholesale prices (1926 = 100)					
All commodities —————	103.9*	103.9	104.1	103.1	102.8
Farm products —————	124.1	124.1	125.5	122.8	124.3
Foods —————	105.3	106.0	106.7	104.7	106.4
All Other —————	98.7*	98.7	98.7	98.0	97.1
Petroleum:					
Total U. S. stocks* (thousands of barrels) —————	411,357	410,845	411,011	414,352	421,590
Total East Coast stocks* (thousands of barrels) —————	66,209	65,260	62,642	57,876	53,121
East Coast receipts (thousands of barrels, daily average) ———	1,748	1,767	1,607	1,535	1,426
Bituminous coal production (thousands of short tons, daily average)	1,998	2,043	2,000	2,108	2,025
Steel operations (% of capacity) —————	96.9%	95.9%	95.7%	96.5%	97.7%
Freight cars unloaded for export, excluding grain (daily average)					
Atlantic Coast ports —————	3,267	3,295	3,053	3,020	2,580
Gulf Coast ports —————	430	399	465	397	335
Pacific Coast ports —————	1,720	1,635	1,740	1,284	1,304
Department store sales (% change from a year ago) —————	+11%	+11%	+11%	+8%	+11%

* Preliminary

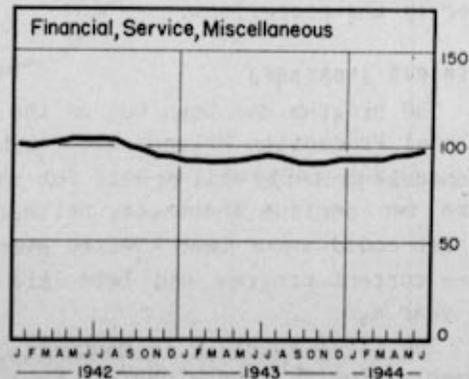
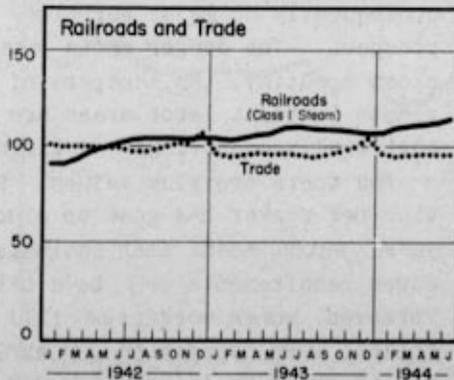
* Excludes military-owned stocks.

HIDDEN RECONVERSION?

As employment falls in these munitions industries,



Employment rises (or holds steady) here:



WAR PROGRESS

Smokeless Powder To Shoot Up

North African, Italian experiences dictate sharp rise in output of propellant for big shells. But 65,000 new workers are needed, phthalic anhydride is tight.

FOR SMOKELESS POWDER the production peak lies ahead, not behind.

Back in October, 1943, output hit a high of 80,000,000 pounds a month. Then schedules were tapered down to about 72,000,000 pounds in March, and now the program, approved May 15, calls for a steady steep rise to 126,000,000 pounds a month next spring (chart, page 7). There's a lot more shooting to be done than was anticipated earlier in the year.

This up-down-up-again behavior is understandable. Requirements for smokeless powder are arrived at by totaling the calculated average daily needs of thousands of guns and rifles over hundreds of miles of shifting, unpredictable battlefront, both ours and our allies'; such a figure will be jumpy to say the least. The experience of a day of battle can drive it violently up or down; the political development of a night can turn it into a historical curiosity. Just now it is North African and Italian experience that is calling for more heavy artillery and more of the big shells for which smokeless powder is the propellant.

SERIOUS SHORTAGES

The program has been put on the National Production Urgency list, and the schedule probably will be met. But there are two serious shortages, neither of which could have been averted even if the current program had been laid out a year ago.

The first shortage is manpower, the supply of which always resists planning: men can't be stored up against a sudden

need because they won't stay put, nor can they be directed into particular production like, say, steel or copper. More than 65,000 new workers will be needed to restaff 56 ordnance plants throughout the country. At some plants far removed from centers of population they will be hard to get. Harvest will tie up rural labor for the next three or four months. Moreover, for in-migrant workers, housing, transportation, shopping, community, and health facilities may be short. Furthermore, the temporary nature of the work makes it unattractive to minds preoccupied with personal postwar planning.

TOUGH RECRUITING JOB

Of the eight plants manufacturing smokeless powder specifically, five are in areas where labor supply is considered tight, and they need 13,000 more workers. Of the 15 plants loading it into bags and shells, seven are in tight areas, and need about an equal number of workers. Manpower officials expect the job to get tougher before it gets easier.

But a good start has been made; the Army took into account the manpower problem in scheduling production of individual plants (a precaution that has not been taken in all programs), and consequently no major surprises are in prospect. The danger spots are under close scrutiny; the managers of the 18 plants in tight labor areas are to report weekly on hirings and firings.

And there are plus values. Production per worker has gone up since last year, which means that estimated manpower requirements may be a bit high. Moreover, women workers may fill in the breach; the proportion in explosives plants could be lifted from 26%, as at present, to around 40%; and in the lead-

ing plants (where the work is lighter), from 52% to perhaps as high as 65% to 75%. But if labor cannot be brought to the plants, then the Army states that new plants will have to be built and brought to labor.

The second shortage is phthalic anhydride; it could hardly have been anticipated or prepared for. This chemical is necessary for making dibutyl phthalate, the plasticizer in smokeless powder; at the same time it is virtually irreplaceable in paints and dyestuffs. However, the big and unexpected drain on the supply is into dimethyl phthalate, the Army's new antimalarial insect repellent (WP-Mar25'44,p8). Supplies of phthalic anhydride don't even come close to meeting current demands. The British have recently requested 7,587,000 pounds of the insecticide, which they are probably not going to get.

Smokeless powder is taking 3,300,000 pounds a month of phthalic anhydride out

of a total of around 10,000,000 pounds. An additional 400,000 pounds a month will be needed—at the peak of the program. A plant of the Monsanto Chemical Corporation now being built at Everett, Mass., will go into production in August and will be producing 500,000 pounds a month by the end of the year; but this is for all purposes, and smokeless powder's share will not be enough. If all goes well, however, three other plants, now approved but not yet located, will meet peak needs around March, 1945.

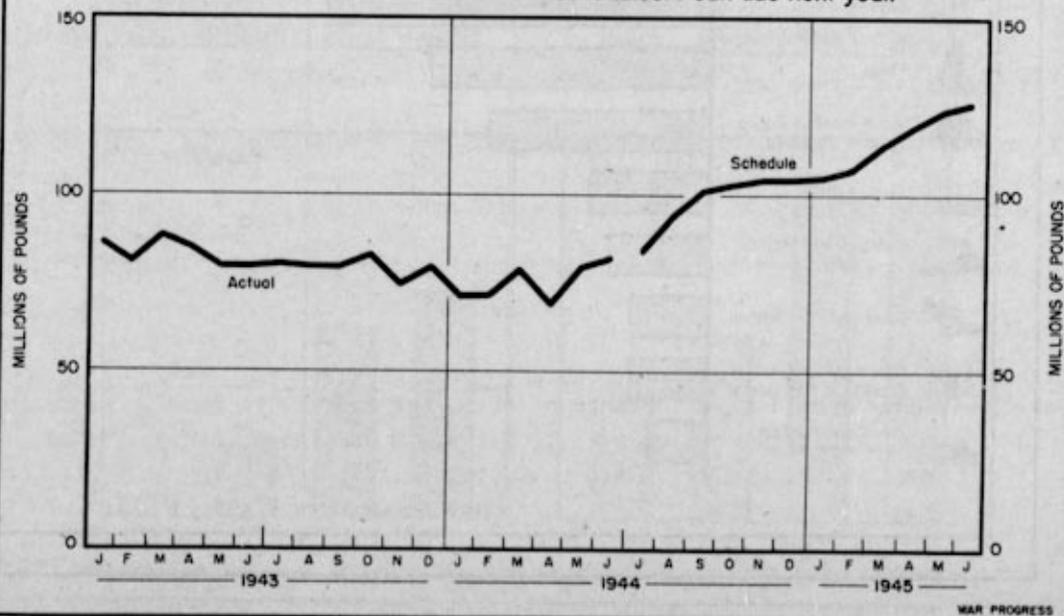
TRIFLING TROUBLES

The rest of the program is easier. A shortage of cotton linters for cellulose will have to be made up by using high-grade wood pulp; this will be mainly at the expense of the rayon industry. Nitric and sulphuric acids are not expected to give major trouble.

Contrary to newspaper reports, alcohol is okay. Explosives manufacture

MORE SMOKELESS POWDER

Production rises after slump in April. Monthly output from now on must average 21% above the June level to meet 1944 schedules. Peak due next year.



uses very little of the nation's alcohol supply—only 7% of the total in 1943. The alcohol which will be taken by the August liquor holiday alone would be enough to supply the increased explosives requirements for two years.

All in all, smokeless-powder plant capacity will just about do the job as now laid out; new construction, it is hoped, will be limited to the expansion and adjustment of existing facilities.

As for the future, it is obvious that developments in Germany could revise this program downward overnight. But it is just as true that the revision might be in the other direction. With the Germans dug in along shortened lines, the expenditure of heavy ammunition next year might make the current estimates look moderate.

The War in 4 Figures

THE FINANCIAL HISTORY of the U.S. war effort can be summed up in four key figures:

1. From July 1, 1940 (just after France fell) through July 1, 1944, Congress appropriated or authorized \$393,000,000,000 for war.

2. A little more than half—about \$200,000,000,000—had been spent through June 30.

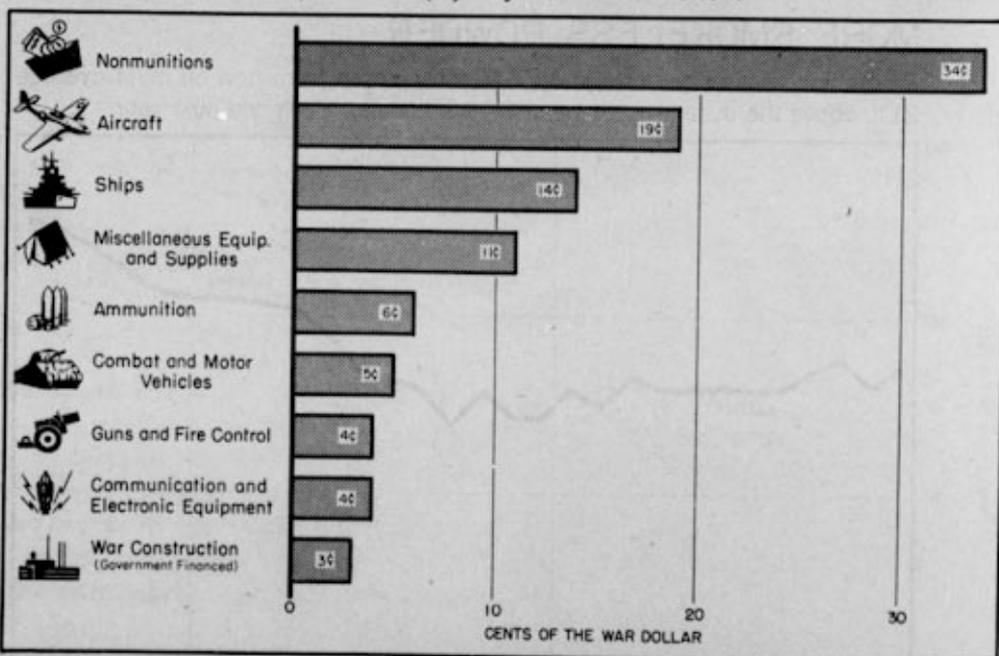
3. Another \$94,000,000,000 had been committed by the Army, Navy, Maritime Commission, etc.

4. That leaves about \$100,000,000,000 still uncommitted.

The big year for appropriations (\$137,600,000,000) was fiscal 1942, which takes in the six months immediately after

WHERE THE WAR DOLLAR GOES

So far this year, 34¢ went for nonmunitions (pay, subsistence, travel of armed forces, and so on); 19¢ to aircraft; 14¢ to ships; only 3¢ to construction.



WAR PROGRESS

Pearl Harbor. The big year for commitments (\$102,600,000,000) was fiscal 1943; and the big year for actual expenditures (\$89,900,000,000) was fiscal 1944, which takes in the 12 months from July 1, 1943, through June 30, 1944 (chart, below).

WHERE THE MONEY GOES

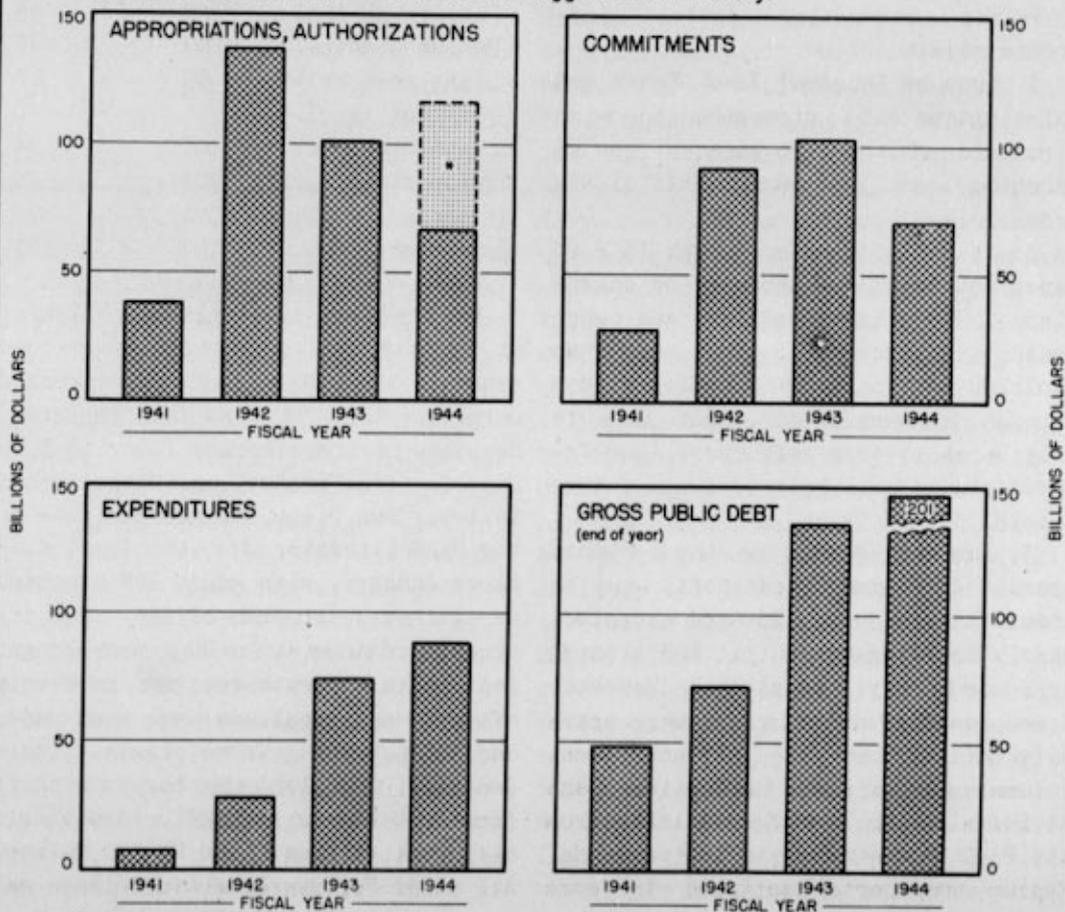
Of the nearly \$200,000,000,000 spent through June, \$104,500,000,000, or 52%, was on Army account; \$56,000,000,000, or 28%, for Navy; \$19,500,000,000, or 10%, for lend-lease; \$7,800,000,000, or

4%, Maritime Commission and War Shipping Administration; \$8,400,000,000, or 4%, RFC and subsidiaries, and \$3,700,000,000, or 2%, on miscellaneous government agencies.

Out of every dollar spent by the government during the first six months of this year, 7 cents went for nonwar functions, and 93 cents for war. And for every war dollar spent, 34 cents went for nonmunitions—pay, subsistence, travel, etc. Aircraft came next—19 cents (chart, page 8).

HIGH SPOTS IN U.S. WAR FINANCE

Biggest appropriation year: fiscal '42. Biggest commitment year: fiscal '43. Biggest expenditure year: fiscal '44. Net result: Biggest debt in history.



*\$49,200,000,000 become available July 1, 1944.

WAR PROGRESS

July Planes Lag—With Reason

Airframe weight off 5% from June, 8% from schedule, due to model changes, new acceptance procedures, etc. Transports make best showing among major tactical groups

SPECIAL INFLUENCES—model changes and new acceptance procedures—pervaded airplane production last month, accounting in the main for the 5%-below-June and 8%-below-schedule performance on an airframe-weight basis. In all, 8,000 planes came through and the deficit for the month was the worst of the year.

POOR BOMBER SHOWING

Points worth noting about top-preference models follow:

1. Because Douglas' Long Beach and Tulsa plants had to strengthen the wing structure of the A-26 Invader, the 26 accepted were just about half of the schedule.

2. At Bell, Atlanta, though 33 B-29 Superfortresses were produced as scheduled, 32 hadn't been modified and hence couldn't be accepted. That more than explains why only 75 Superforts came through instead of 105. But this is only a short-term influence. The delayed planes are likely to swell future totals.

3. June's problem plane, the 2-engined heavy C-46 Commando transport, did an about-face in July; 125 were accepted, nearly doubling June output and missing schedule by only four planes. However, some planes produced in June were actually carried into the July acceptance column; on top of that, the Curtiss plant at Buffalo again transferred labor from its P-40 Warhawk line to the Commando. Medium transports continued to come through nicely, the 471 C-47 Skytrains,

etc. exceeding schedule by 5% last month.

Transports made the best showing of all major tactical groups on an airframe-weight basis; all classes of bombers, the worst:

	July Acceptances as % of	
	June	W-11
All military planes.	95%	92%
Army procured....	94	93
Navy procured....	101	87
Combat planes.....	93	90
Superbombers.....	91	71
Forts & Liberators	92	93
Patrol bombers....	128	65
Medium bombers....	80	96
Light bombers.....	90	87
Fighters (incl. naval reconn.)... 100		94
Transports.....	104	99
Trainers.....	173	96
Communications.....	102	103

For the first time this year, Boeing at Seattle failed to make or exceed schedule; 260 B-17 Flying Fortresses were accepted, 7% less than expected. Seattle is transferring labor to B-29 Superfortress production. Consolidated Vultee, San Diego, missed schedule on the B-24 Liberator for the first time since January, with only 169 accepted as against a program of 260. But the acceptance rules at San Diego were changed last month—acceptances are good only after all modifications have been made, and this held up some planes. Incidentally, this plant also began the shift from a B-24J to a B-24L, involving a different version of the R-1830 engine. All other Fort and Liberator plants exceeded schedule, with Ford, Willow Run,

making another new high with 415 Liberators. In all, 1,333 Forts and Liberators were accepted.

EXIT AIRACOBRA, BREWSTER

At 1,589 planes, Army 1-engined fighters were slightly ahead of June but 7% behind schedule. The deficit was concentrated in the low-priority P-40 Warhawk at Curtiss, Buffalo (97 planes, versus 200 scheduled). The high-priority P-51 Mustang at North American, Inglewood, was also behind schedule (318 vs. 349); here again a decision to accept planes only after modification was the factor. But the other P-51 producer, North American at Dallas, was on the target with 251. Republic's Evansville and Farmingdale plants hit the mark with 600 P-47 Thunderbolts; and Bell, Buffalo, did likewise with 210 P-53 Kingcobras. Bell also turned out 112 P-39 Airacobras, 12% better than called for; but it was the spurt before the sputter—the P-39 program winds up this month.

Navy 1-engined fighter production was 3% ahead of June and only 2% below the month's schedule of 1,290 Corsairs, Wildcats, and Hellcats. Goodyear at Akron was entirely responsible for the deficit: its 170 Corsairs, though 6% more than June, didn't clean up the June shortage (WP-July 8'44, p9). On the other hand, Chance Vought at Stratford made up all of its June arrearage, clearing schedule with 300 Corsairs. And Brewster at Johnsville bowed out of the program on schedule with 17 Corsairs.

FAULTY HYDRAULIC SYSTEM

Navy light bombers made their poorest showing of the year, acceptances of 636 planes running 12% behind June, 13% behind schedule. General Motors' Eastern Aircraft Division at Trenton slowed the group because some minor reworking of

completed TBM Avengers was necessary; acceptances of 256 were 9% below June and 7% below schedule. Another slow spot was U.S.-financed Canadian Car & Foundry, Montreal, making the Helldiver; the 21 accepted compared with 36 in June and a docket of 55. Almost all of the scheduled planes were built, but the hydraulic system was faulty.

Boost in Asbestos

Navy wants additional 300,000 pounds of insulation material monthly, but recruitment hasn't produced 500 needed workers. Reasons: Working conditions, pay, etc.

FOR OVER TWO YEARS, asbestos textiles—essential for insulation covering in planes, ships, tanks, etc.—have been decently but not desperately tight. Production has held steady at about 4,750,000 pounds a month; by close screening and allocation, all essential requirements have been met. But now the Navy has boosted its requirements for shipbuilding by 300,000 pounds per month and may increase them further. Substitutes, such as canvas and fiber glass, are now considered unsatisfactory for certain uses.

However, asbestos cloth cannot readily be diverted to the Navy by squeezing other consumers. Since April, 1943, it has been under allocation, and almost all of it goes into direct or indirect military use. (The Navy alone gets about two-thirds of the supply for its cables, ships, etc.) All civilian fat has long since been sweated off. Industrial safety clothing, for example, takes only 1% of total production; and if this were cut out, forge-and-foundry shops would be even more hard put to get workers than they already are (WP-Jun 3'44, p11).

Neither is there any immediate pros-

SELECTED MONTHLY STATISTICS

Cost of Living-Food Production-Expenditures-Sales

	Latest Month*	Preceding Month	2 Months Ago	6 Months Ago	Year Ago	Some Month 1939	Some Month 1937
COST OF LIVING-ALL ITEMS (1935-39=100)	125.4	125.1 ^a	124.6 ^a	124.4	124.8	98.6	102.8
Foods	135.7	135.5	134.6	137.1	141.9	93.6	106.0
Other than food	120.0	119.7 ^a	119.4 ^a	117.7	115.3	101.2	101.2
FOOD PRODUCTION							
Dairy products (million pounds)							
Butter, creamery	177.6	174.5 ^a	130.8	97.6	201.0	202.5	198.2
Cheese	122.5	94.8	87.9	58.4	116.3	88.8	82.1
Evaporated milk	412.5	417.5	318.2	168.1	385.0	268.8	252.5
Meats-total (incl. lard, million pounds)	1,754	1,836	1,746	2,130	1,603	1,083	880
Beef and veal	556.2	565.6	545.9	646.0	421.2	444.3	456.7
Lamb and mutton	69.0	68.3	58.7	93.6	65.9	53.2	54.3
Pork, incl. lard	1,128.6	1,200.9	1,140.1	1,390.4	1,115.9	585.8	362.5
Lard	231.9	240.8	221.8	260.1	191.0	103.5	52.2
Poultry and eggs							
Eggs (millions)	5,437	6,704	6,978	3,232	5,356	3,865	3,887
Poultry (receipt of 5 principal markets, million pounds)	39.2	29.0	21.8	64.2	14.7	28.5	21.9
CONSUMER EXPENDITURES (million dollars)	7,990	7,787	7,958	7,957	7,441	5,191	5,380
Goods	5,453	5,272	5,432	5,501	5,014	3,320	3,558
Services	2,531	2,515	2,526	2,456	2,427	1,870	1,822
RETAIL STORE SALES-TOTAL (million dollars)	5,592	5,721 ^a	5,439	6,698	5,365	3,574	3,668
Durable goods stores	862	873 ^a	767	939	836	956	1,069
Nondurable goods stores	4,729	4,848 ^a	4,672	5,759	4,528	2,618	2,599

* Expenditures, May, all other, June. ^a Revised.

pect of increasing production. Here it's the old story—manpower. With employment falling slightly over the past year, the nine major plants have been meeting production goals by working overtime. An additional 500 workers, or a 5% increase over present employment, would get the Navy its extra 300,000 pounds monthly. But a recruitment drive has failed to produce them.

AND ASBESTOSIS, TOO

The reasons for this failure are also a familiar story: (1) most of the plants are located in tight labor areas; (2) with one or two exceptions, they pay relatively low entry wages—an average of 55 cents an hour to men, 45 cents an hour to women; (3) working conditions are generally unattractive, in some of the plants bad. Because of dust, asbestos workers run the risk of a disease

all their own—asbestosis, similar to silicosis.

Since output in some plants has been held down by outmoded machinery, \$800,000 of improved machinery has been ordered for delivery within the next 10 months. Also under consideration is the erection of a new plant in a loose labor area. For the near future, however, the chief hope for easing the situation is another substitute—a mixture of asbestos and fiber glass weighing half as much as asbestos cloth—which is now being tested. If it proves serviceable for pipe lagging (covering), it will take care of 60% to 70% of the Navy's increased requirements.

In any event, the Navy will probably have to continue to get along with some substitute, for a while at least. The immediate supply-demand position is unresilient.

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Steel Brake on Reconversion Buffalo Again a Laboratory

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WAR PROGRESS

Prepared in the War Production Board
Donald M. Nelson, Chairman

War Progress is a confidential report designed to provide a coordinated and continuing picture of the overall war program for the various war agencies. To this end, it presents, analyzes, and interprets basic statistical and economic information, and from time to time examines the pros and cons of controversial questions.

Although War Progress is an official publication of the War Production Board, statements in it are not to be construed as expressing official attitudes of the Board as a whole, or even of individual members. Conclusions, whenever reached, should be considered editorial conclusions.

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Steel Brake on Reconversion

Heavy ammunition, bomb programs boost Army's share of fourth-quarter carbon steel to record 24%. But total supply is down and carryover of orders is at a peak.

THE SPOT-AUTHORIZATION program starts off with one strike on it. No fourth-quarter steel reserve has been set aside for it—though one may be made later. As predicted in WAR PROGRESS in the spring (WP-Apr22'44,p4), steel is far from easy. Aggregate allotments, other than direct munitions, are at the lowest level since CMP began. As a result, reconversion opportunities—for the time being—are few and far between. There are three reasons for this: (1) rapidly mounting military demand, (2) sluggish supply, (3) and a debt in the form of unfilled commitments made in the past.

ARMY'S BIG SLICE

Pressure on the demand side of carbon steel comes from the Army—specifically from the heavy ammunition and bomb program. The Army's new allotment is the highest on record—3,780,000 tons, or 24% of the finished carbon steel available to all claimants. This big piece of the pie is cut at a time when the total pie allotted—15,756,390 tons—is less than at any time since the third quarter of 1943. In consequence, the shares of all but one of the other claimants have been cut below third-quarter levels. The exception is Canadian exports, up 3%, also because of munitions manufacture.

The Army's original request came to 3,995,706 tons. CMP screening reduced this by 200,000 tons partly because of the nonfeasibility of some programs

(thus, 50,000 tons were removed from heavy ammunition) and partly because the sampling method of estimation as used by some of the procurement divisions was judged to yield overgenerous claims. Another 95,000 tons were removed in an attempt to bring the request within the limits of what was considered a safe total allotment to all claimants. On the basis of later discussions with the Army, however, the Requirements Committee returned 80,000 of this, slicing half the amount from the shares of other claimants and reluctantly adding 40,000 tons to the allotment total. In reaching its scheduled peak early next year, the heavy ammunition program is expected to push the Army's request to an even higher level in CMP's eighth round—assuming, of course, that the Germans are still fighting and that recent expenditure rates prevail.

IMPORTANT 700,000

In the face of this heavy demand, the Steel Division continued to be pessimistic about fourth-quarter production. It is figuring on 14,285,000 tons of finished carbon steel, or only about 1% better than the third quarter's low for the year—this despite the fact that third-quarter production customarily suffers from hot weather. The division, as in the third quarter, deducted 5% from total effective furnace capacity to take into account the labor shortage. This comes to over 700,000 tons of finished steel, enough to make all the difference between a tight and an easy situation.

Present employment in the steel industry is 481,800, down from the June,

1942, peak by 67,000 workers. But this net loss does not tell the whole story. The draft has taken around 200,000 steel workers, and the men taken away had two qualities priceless in the industry: youth and experience. Steel needs men who are young and strong. (It has made relatively little use of women.) And steel needs men who know the job. Plans to increase output per worker are purely visionary where strong, experienced men are being drained away and replaced by not-so-strong, untried substitutes. The work week had already reached its practicable upper limit by April, 1944. And furthermore, as the war goes on, a larger and larger proportion of workers' time has to be devoted to repair and maintenance of facilities, often by inexperienced hands.

SPECIFIC SHORTAGES

But the supply story cannot be told in terms of overall manpower shortage or gross weight of production. Tanks, ships, and guns aren't built of ingots. Steel allotments to claimants are for specific types and shapes of finished material, and it is in these same specific terms that shortages are felt. The overall picture is a composite of many interrelated stresses and strains too numerous to itemize. Right now, for instance, the supply of steel rope

and strand is nearly a month behind demand. And the most serious shortage at the moment is in steel of forging quality, a shortage directly traceable to the high-vaulting ammunition program. Large shell casings take the same kind of steel or facilities as do rails, tube rounds, seamless pipe, and many structural shapes. This is one reason for the 30% downward screening of the allotment of the Office of Defense Transportation.

SHEETS, PLATES EASIER

Last spring's shortage of sheets, plates, and strips, on the other hand, has eased. New rolling-mill facilities have come into operation; cutbacks in landing barges and shipbuilding have reduced the demand for plate; and the Army is found to have overstated its need for sheet steel for ammunition containers. But this is scant help.

In addition, fourth-quarter supply has already been mortgaged. That explains why in the fourth quarter, with the production estimate up 1%, the allotment is smaller than in the third quarter by around 2%, or 340,000 tons. Past allotments have been too high, and claimants have not been able to get all their orders filled at the steel mills. Orders have carried over. This carry-over has been jumping up and down from period to period ever since the beginning of CMP; but now it is at a peak—around 1,700,000 tons. With carryover at this figure, the steel mills of the country, statistically speaking, work the first 11 or 12 days of a CMP period to take care of unfilled orders of the previous period.

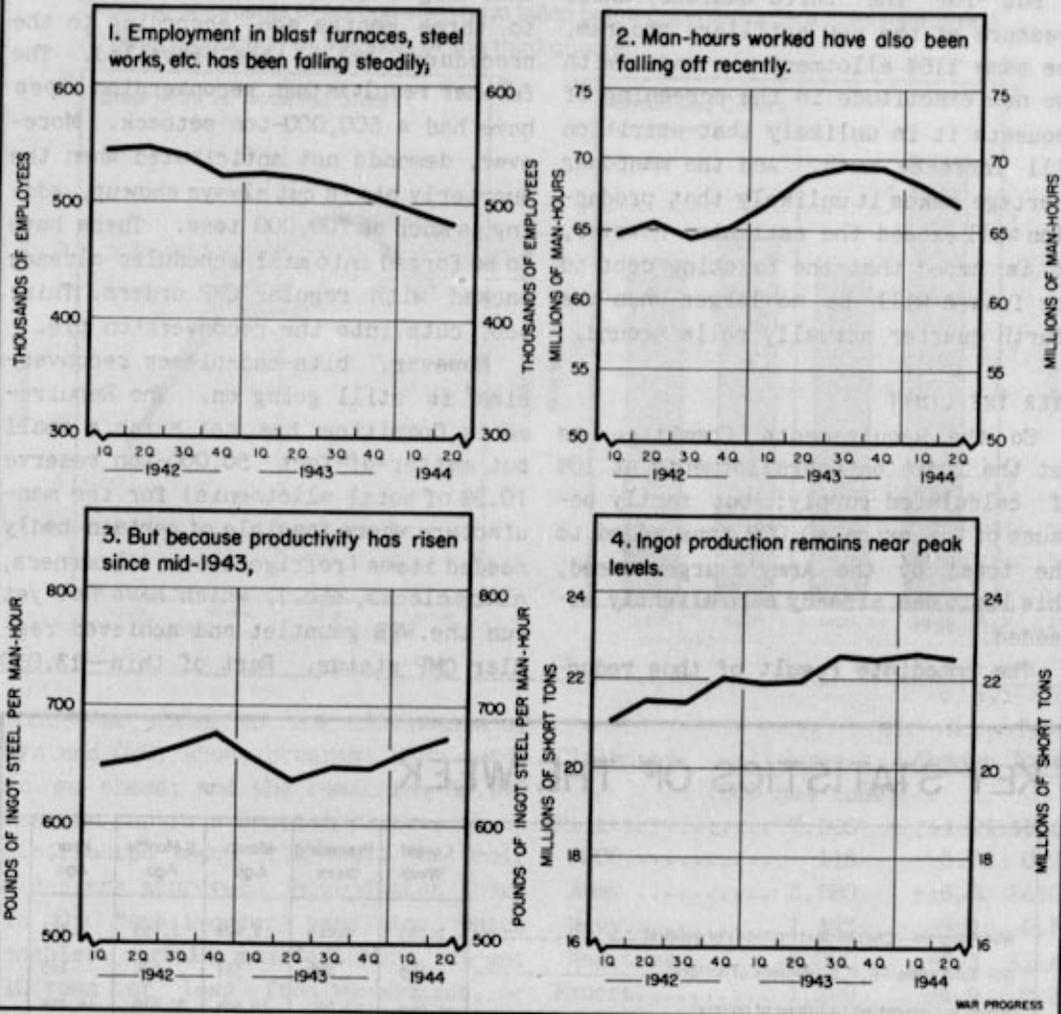
ALLOWANCE FOR ATTRITION

This accumulated debt is attributable to that hard-to-understand word "attrition." Because programs are con-

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THE SUPPLY SIDE OF STEEL



stantly changing—being cut back or even eliminated—some paper issued by the Program Vice Chairman to buy steel never reaches the mills. To guard against such an insufficiency of orders, steel has been overallocated, so as to keep the mills operating at capacity. For example, in the first quarter of 1944, original allotment was 112% of expected supply. This proved a good guess. Actual demand, because of attrition, fell a little below actual supply; and the carryover (which in the previous round

had been increased by about 150,000 tons) was reduced by around 50,000—going into the second quarter at 1,300,000 tons. In consequence, a larger overallotment was made in the second quarter: 115% of anticipated supply. But here an unpleasant surprise was in store. Mainly because of better screening, requests proved to be "firmer" than ever before. Attrition was at a new low in CMP history: around 11%. Orders accepted exceeded shipments by a record 375,000 tons, and carryover orders going into

the third quarter approached 1,700,000 tons.

But for the third quarter, under pressure of the new artillery program, the same 115% allotment was made. With the new exactitude in the screening of requests it is unlikely that attrition will increase much. And the manpower shortage makes it unlikely that production will exceed the estimate. However, it is hoped that the existing debt to the future will be no larger when the fourth quarter actually rolls around.

OVER THE LIMIT

So the Requirements Committee has set the limit on overallotments at 10% of calculated supply; but partly because of the extra 40,000 tons added to the total by the Army's urgent need, this limit has already been slightly exceeded.

The immediate result of thus reduc-

ing overallotments is to cut fourth-quarter allotments 500,000 tons below what might have been anticipated two to three months ago, according to the procedures which then prevailed. The further result is that reconversion hopes have had a 500,000-ton setback. Moreover, demands not anticipated when the quarterly pie is cut always show up, adding as much as 700,000 tons. These have to be forced into mill schedules already packed with regular CMP orders. This, too, cuts into the reconversion pie.

However, bits-and-pieces reconversion is still going on. The Requirements Committee has set aside a small but matter-of-fact 50,000-ton reserve (0.3% of total allotments) for the manufacture where feasible of certain badly needed items (refrigerators, oil burners, alarm clocks, etc.), which have not yet run the WPB gauntlet and achieved regular CMP status. Part of this—13,030

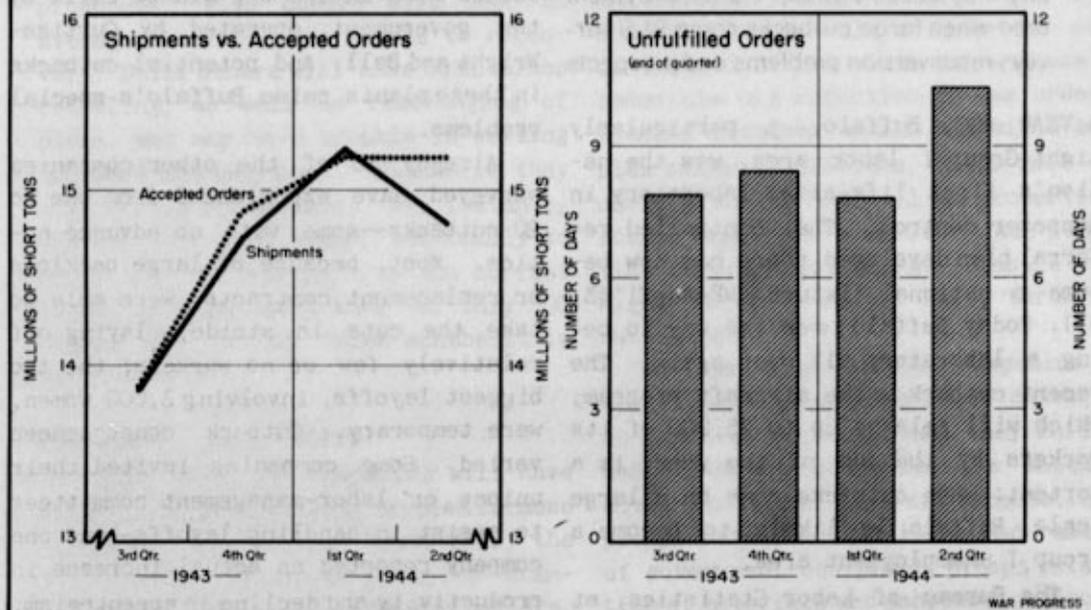
KEY STATISTICS OF THE WEEK

	Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
War Program—Checks paid (millions of dollars)-----	1,785	1,615	1,628	1,653	1,777
War bond sales—E, F, G, (millions of dollars)-----	145	106	317	676	165
Money in circulation (millions of dollars)-----	23,047	23,020	22,584	20,610	18,214
Wholesale prices (1926=100)					
All commodities-----	103.8 ^p	104.0 ^p	103.9	103.3	102.8
Farm products-----	122.3 ^p	124.8	124.1	123.4	123.8
Foods-----	104.5	106.1	106.0	104.1	105.8
All Other-----	98.7 ^p	98.7 ^p	98.7	98.2	97.3
Petroleum:					
Total U.S. stocks*(thousands of barrels)-----	413,688	411,514	409,945	414,480	418,760
Total East Coast stocks*(thousands of barrels)-----	69,849	67,698	65,260	55,067	56,161
East Coast receipts (thousands of barrels, daily average)-----	1,670	1,842	1,767	1,551	1,432
Bituminous coal production (thousands of short tons, daily average)	2,018	2,000	2,043	2,158	2,005
Steel operations (% of capacity)-----	94.5%	96.0%	97.2%	97.7%	98.2%
Freight cars unloaded for export, excluding grain (daily average)					
Atlantic Coast ports-----	2,787	2,652	3,295	2,540	2,584
Gulf Coast ports-----	341	371	399	358	353
Pacific Coast ports-----	1,770	1,783	1,635	1,348	1,444
Department store sales (% change from a year ago)-----	-1%	+1%	+11%	-9%	+15%

Preliminary. *Excludes military-owned stocks.

MORTGAGE ON STEEL PRODUCTION

Because shipments of carbon steel have fallen below accepted orders, steel mills "owed" 10 days production at the start of the third quarter.



tons—was added to the allotments of WFA and OWJ, whose programs were ready to go ahead; and the remaining 36,970 was set up in a special reserve to be distributed among claimants as their plans are approved. Beyond that there is the "small-order" provision, which enables certain manufacturers to get 10 tons or less from warehouses, or three tons from mills. And this does not necessarily close the gate. There is a remote possibility that attrition—ever erratic—may rise, and that steel orders may not reach the mills. In that event, some supply may be released for the spot-authorization plan in coming months.

FOURTH-QUARTER ALLOTMENTS

Here is the list of fourth-quarter allotments to claimants, showing for each the change from third quarter and share of new allotment total:

Claimants	Allotments (000 net tons)	% Change	% of Total
Military.....	7,188	+4.0%	45.6%
ARCO.....	115	-5.7	0.7
Army.....	3,780	+16.0	24.0
Navy.....	1,493	-8.6	9.5
Maritime.....	1,800	-5.3	11.4
Export.....	1,299	-4.0	8.3
FEA (OLLA, OEW)	956	-6.3	6.1
Canada.....	343	+3.0	2.2
Nonmilitary.....	5,629	-9.2	35.7
WFA.....	841	-19.2	5.3
NHA.....	17	-34.6	0.1
PAW.....	353	-5.1	2.3
ORD.....	34	-5.6	0.2
ODT.....	1,039	-17.7	6.6
OWJ.....	148	-39.6	0.9
OCR.....	215	-8.9	1.4
OVC.....	2,945	-1.2	18.7
Special reserve	37	nil	0.2
Other reserves..	1,640	+1.4	10.4
Total.....	15,756		

Buffalo Again a Labor Laboratory

From a Group I tight labor area, war-boom city may become Group I unemployment area when large cutbacks come. BLS surveys reconversion problems and prospects.

A YEAR AGO, Buffalo, a particularly tight Group I labor area, was the nation's first life-sized laboratory in manpower control. The controlled referral plan developed there has now become a national fixture (WP-Aug21'43, p1). Today Buffalo is on the way to being a laboratory all over again. The recent cutback in the aircraft program, which will release up to 25,000 of its workers by the end of the year, is a portent: when cutbacks come on a large scale, Buffalo is likely to become a Group I unemployment area.

The Bureau of Labor Statistics, at the request of the War Production Board, has made a comprehensive survey of Buffalo and vicinity to analyze the reconversion problems and prospects, both typical and special, of a big war center. Out of such an analysis might come the basis for plans to alleviate the problems and improve the prospects. The survey covered 40 companies, representing all major industries in the area and half of the area's factory force.

X DAY TARGET

Buffalo was chosen as a war-boom city, destined to be hard hit on X Day. Since 1940, its employment has jumped from 330,000 to a 1943 peak of about 470,000, including some 30,000 in-migrant workers. All but 10,000 of this expansion was in manufacturing—all told, factory employment has almost doubled, from 135,000 to 260,000. About 85,000, or 30% of the factory force, are working in aircraft plants. Less than a

quarter of these are in converted plants; 65,000 work in two big plants built by the government, operated by Curtiss-Wright and Bell. And potential cutbacks in these plants raise Buffalo's special problems.

Already 16 of the other companies surveyed have experienced from one to 20 cutbacks—some with no advance notice. Most, because of large backlogs or replacement contracts, were able to take the cuts in stride, laying off relatively few or no workers; the two biggest layoffs, involving 3,000 women, were temporary. Cutback consequences varied. Some companies invited their unions or labor-management committees to assist in handling layoffs—and one company reported an actual increase in productivity and decline in absenteeism. Others gave discharged workers only a day's notice or less.

SO FAR, SO GOOD

So far almost all the companies have had plenty of war work and the laid-off workers found plenty of other jobs they could take. As a result, Buffalo has still had little preparation for the problems it will face after X Day.

Most obvious candidates for unemployment are the aircraft workers. Curtiss-Wright, for example, now employs 42,000. It is thinking, among other things, of making streamlined aluminum bodies for passenger trains and busses. But it would take 15 months to complete the engineering development and the retooling for this project—and then it would need only 8,000 to 10,000 workers. Even if civilian plane manufacture comes up to the most optimistic forecasts, there'd be a large unemployment gap.

Other plants included in the survey

will likewise be able to carry on only limited operations, if any, for a while. Three, which now employ 8,000, have no immediate peacetime use, and doubtful prospects. Five others will need an average of six to nine months to reconvert. Still others will have to do minor retooling, as well as rearranging of plant, and may have trouble in getting the new tools they need. Meanwhile they will all lay off workers. For instance, one company that hopes eventually to boost its employment from the current 2,000 to 2,200 will keep on only 700 during the two or three months it is reconverting.

WAR GOODS = PEACE GOODS

About half the companies will have no physical reconversion problem because their war products are essentially the same as their peacetime products—chemicals, steel, engines, chains, boilers, etc. They are unlikely to take on more workers at once, however. Some have to clear government equipment out of plants. Most of them supply other industries and fear that they may be held up, at least temporarily, for lack of orders. Thus eight which manufacture automobile parts or accessories are dependent upon the reconversion of the whole automotive industry. And of course all companies depend on the quick release of materials and components.

Most of the companies plan to cushion the initial impact of cutbacks by first eliminating their subcontractors. The subs—and these are usually the smaller companies—will have to get along without such a cushion; though they will, by the same token, be freed early for peacetime work.

A few plants, for technical reasons, won't be able to reconvert short of a 100% cutback. Others couldn't go back to civilian production profitably unless

they were released from 50% to 75% of their war work (though two or three express a willingness to take a loss for a while if necessary). Most could take on civilian orders at once after even a small cutback—10% or less—but most of these in turn would not welcome an immediate big reduction in war orders. Gradual cutbacks would alleviate surplus material problems, allow more orderly planning for civilian production, enable suppliers to wait for their peacetime buyers to get going. Drastic cuts might force a sudden halt, throw men out of jobs.

However, most of the companies do not expect such well-tailored cutbacks. As might be guessed, what they chiefly want from the government is adequate advance notice of contract terminations, prompt settlement of claims and removal of government equipment, prompt relaxation of materials and manpower controls. What their unions want is planning for full employment and adequate unemployment insurance in the interim.

EXIT WOMEN

Meanwhile the Buffalo manufacturers agree pretty much upon their own immediate plans. With one exception, they propose to reduce hours before laying off men, and sooner or later to go back to a 40-hour week. Likewise most expect to lay off on the basis of seniority, usually in accordance with a union agreement.

On this basis, women workers would generally be the first to go, but half the companies intend to keep few or none anyway. (Several have separate seniority lists for women.) The survey indicates that the proportion of women in the factory force—now about 33%—will drop close to the prewar figure of 11%. The companies give various reasons for finding women less satisfactory: the work

is too heavy or dirty for them; they can't be shifted easily from job to job; they are more likely to take a day off or quit; the union is against them.

In particular, the Buffalo plants will replace women with returning veterans. They anticipate little or no difficulty in finding jobs for all their former employees. (Though those that have already had considerable experience agree that careful placement, retraining, and follow-up are essential, since most veterans are jumpy for the first few months.) At least five of the companies, however, have as many employees in the armed services as they did on their payrolls before the war. And only one seems aware of or concerned about the possible conflicts arising from the present interpretation of the Selective Service Act: that veterans are entitled to absolute priority and should get their jobs back even if this means discharging other workers with greater seniority (WP-Aug12'44, p8).

AREA SETS ITS GOAL

For the postwar period, finally, Buffalo, has high hopes but mixed and uncertain expectations. The Niagara Frontier Post-War Planning Council has set a total employment goal of 430,000, only 40,000 under the area's employment peak. This represents the natural expectations of industries in the area if full employment is maintained nationally, and provides for 15,000 in-migrant workers—chiefly from the anthracite regions of Pennsylvania—who are expected to settle down in Buffalo. For manufacturing the goal is 175,000; this is 85,000 under the wartime peak but 50% above the 1939 level. Upon the attainment of this 50% rise largely depends the sharp expansion in employment in trade, service, and other industries necessary to achieve the council's overall goal for

Buffalo. Spokesmen for the local Chamber of Commerce and other business groups are very optimistic about Buffalo's chances of making the goal.

The companies surveyed, however, are considerably less optimistic. Of the 31 willing to make a rough estimate of their postwar business, a few expect to double their prewar output, more expect moderate-to-substantial gains, and about half expect to do about the same business as before the war. The planning council figures on a 66% rise in employment in metal and chemical industries to make the overall goal, but the manufacturers' estimates add up to only 31% over the 1939 level. If they're right, Buffalo may have at least 50,000 unemployed—unless new firms or industries come into the area.

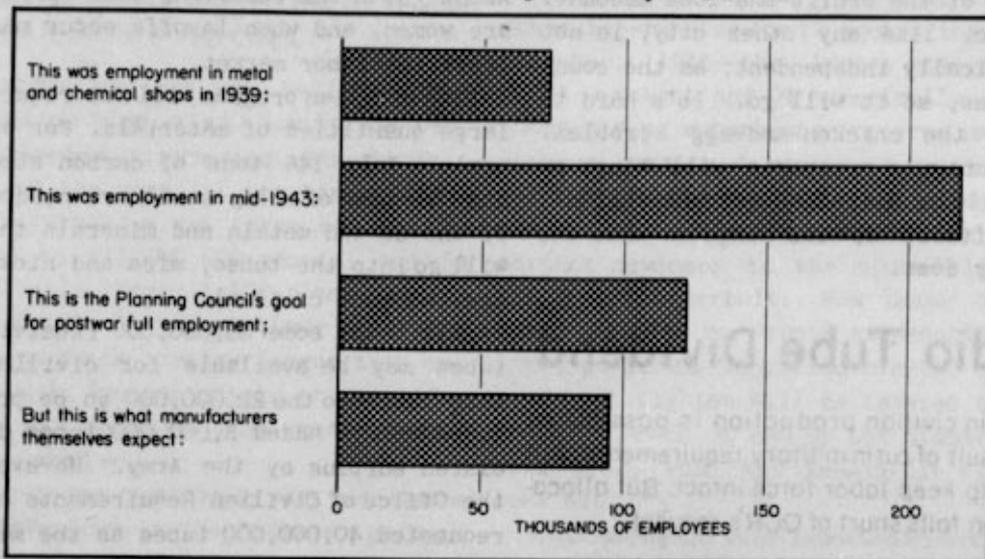
Such estimates are necessarily provisional, and were usually hedged by the manufacturers themselves. (In particular, the management of subsidiary plants—of Bethlehem Steel, Socony-Vacuum, General Motors, National Battery, etc.—tended to be vague about their plans; the parent company would decide for them.) By and large, companies which were most optimistic about their postwar prospects—especially the manufacturers of automobile accessories—were most willing to furnish employment estimates.

NEED EQUIPMENT, NOT PLANT

Very few companies intend to expand their plant space. About half expect to buy some new machinery and equipment, but only two definitely indicated ambitious plans. At least six are interested in purchasing some of the government-owned equipment now in their plants—if the terms are satisfactory. Others fear that terms will be too satisfactory and thus give their competitors an unfair advantage.

TWO VIEWS ON POSTWAR EMPLOYMENT

Buffalo area's Planning Council puts full-employment goal at 66% above 1939 for metal and chemical industries. But manufacturers figure on only 31% rise.



WAR PROGRESS

About a third have taken definite steps to develop new or improved products. Some of these products are outgrowths of war work—for example, a new type of diesel engine. Others are being developed independently by research departments: air-conditioning equipment, an automatic window raiser for automobiles, a new line of pleasure boats, etc.

MORE OF THE SAME

Only six companies, however, expect to make brand-new products, and none is changing completely its prewar line. In these reports there is little suggestion of the streamlined wonder-world of the future as pictured in advertisements. In general, the companies hope to do a little more business but at pretty much the same old stand.

Nevertheless most report technological progress during the war, especially in metalworking: improved alloys, cut-

ting tools, foundry and welding techniques, electronic devices, etc. For example, one company which is making its prewar product has increased output per man-hour by 15%.

At the same time, all but four companies take for granted that production costs will be above prewar levels, chiefly because of higher wage rates. But hardly any are prepared to make specific estimates. Some guess that costs will rise even above the present level, because of reduced volume of production; more guess that they will go down somewhat because of the elimination of overtime pay. And very few relate improved techniques and labor-saving devices to estimates of either their production costs or their probable employment.

Altogether, the predictions and plans of these companies are indecisive. They have to be. They are representative of

the general uncertainty throughout the country. When first X Day and then V Day come, the best-laid reconversion plans are apt to give way to the reflex action of the profit-and-loss account. Buffalo, like any other city, is not economically independent; as the country goes, so it will go. It's hard to escape the chicken-and-egg problem. The country's prospects will hinge on what all the Buffalos do; and what all the Buffalos do will hinge on what the country does.

Radio Tube Dividend

Boost in civilian production is possible as result of cut in military requirements; will help keep labor force intact. But allocation falls short of OCR's request.

TO MEET pent-up civilian demand and to keep radio-tube manufacturers going in case of any sudden boost in war requirements, the War Production Board's Radio and Radar Division has approved an increase in production of receiving tubes for civilians: 15,000,000 in the last half of the year, as against 7,000,000 in the first six months. A 12% reduction in military requirements for this type of tube—from 58,000,000 in the first half to 51,000,000 in the second—has freed manpower and facilities.

STANDBY BUT BUSY

The increased civilian allocation doesn't call for any substantial hiring; indeed, 8,000,000 of the 15,000,000 tubes will be military rejects. The 4,000 workers required are already on the job, turning out, alternately, tubes for the armed services and civilians. WPB officials wanted to keep this labor force intact and thus avoid a recurrence of what happened in dry-cell batteries. Battery manufacturers laid off many work-

ers when a cutback was ordered last year, and now when production is being stepped up sharply they are having trouble getting them back (WP-June 24 '44, p9). About 75% of the receiving-tube workers are women, and when layoffs occur many leave the labor market.

The civilian program will not require large quantities of materials. For example, only 146 tons of carbon steel and four tons of alloy steel are needed. Of the 50-odd metals and minerals that will go into the tubes, mica and nickel are the most critical.

All told, some 25,000,000 receiving tubes may be available for civilians this year—to the 22,000,000 to be produced must be added 3,000,000 tubes declared surplus by the Army. However, the Office of Civilian Requirements has requested 40,000,000 tubes as the minimum need, and has estimated that 66,000,000 tubes are required annually to keep civilian radios in good working order.

MAINTENANCE FOR MIDGETS

Replacement tube demands are high because no new radios have been produced since April, 1942. About 180 unconventional types of receiving tubes aren't being made at all. But the most critical shortage is in the series-heater tubes used, for example, in midget sets. These burn out faster because such sets have no transformers. In recent months it has been almost impossible for the 3,500,000 owners of midget sets to get new tubes, because nearly all of the production has been for military requirements. Hence the new allocation includes more of this type.

All tubes released by manufacturers for civilian use are marked "MR" for maintenance and repair. They may be sold for replacement only on a tube-for-tube basis.

Drop by Drop

Downward revision of W-11 cuts weight 6%, numbers 5% for rest of '44. Rising superbomber program is unchanged, but Thunderbolt joins list of reducees.

SIX WEEKS AGO the new W-11 airplane program was formulated. Now it has been revised—down as expected. For the balance of the year, it has been reduced 6% in airframe weight (from 440,000,000 pounds to 413,000,000 pounds) and 5% numerically (from 41,500 planes to 39,600). Battle losses continue to decline and planes are lasting longer than anticipated. Another cut in the near future, and for the same reason, would be no surprise.

To gain perspective on what successive cuts have done to the program, go back to the beginning of the year. Then, 47,200 planes with an airframe weight

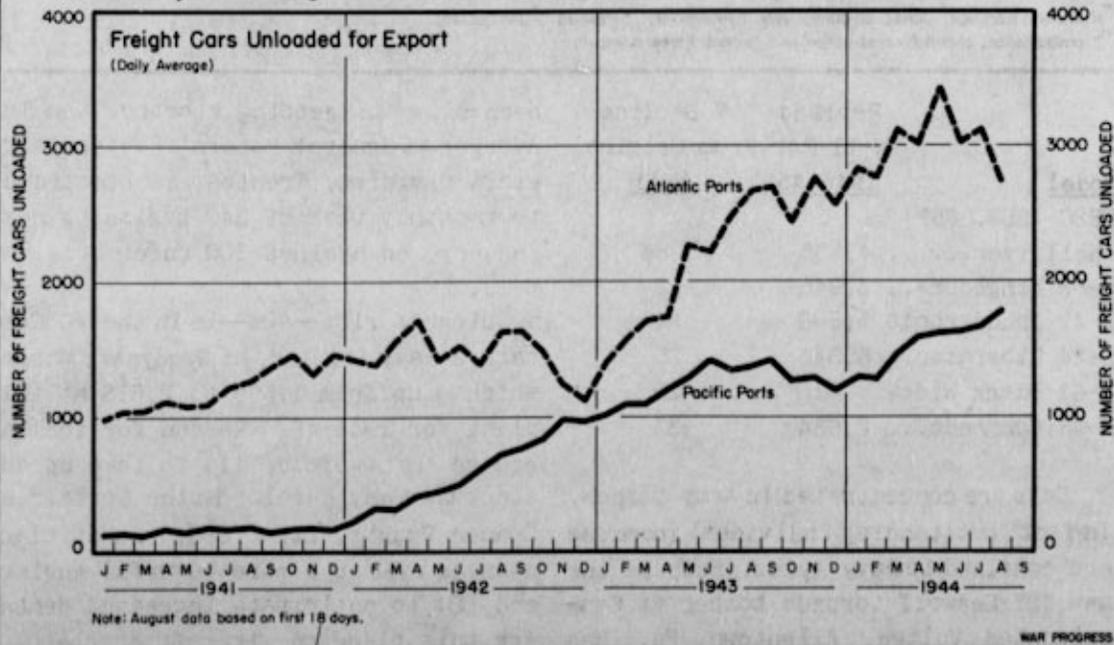
of 485,000,000 pounds were slated for the last five months of this year; present goals are down 15% in weight and 16% in number from that level.

For the full length of the W-11 plane schedule—running for 17 months through December, 1945—the latest reduction is 7% in weight and 9% numerically. The sharp-rising superbomber program is unchanged, but such prominent models as the B-24 Liberator and the C-46 Commando are reduced again. And there's an important newcomer to the cutback list: the P-47 Thunderbolt. Now being produced at 600 per month at Republic's Farmingdale and Evansville plants, this top-notch fighter will be tapered to a monthly level of 250 by the middle of next year, when the Evansville plant bows out.

Cuts among the more important tactical models affected are large, ranging from 8% (Helldiver) to 33% (Commando):

ACTION ON THE PACIFIC COAST

Cars unloaded for export on the West Coast reflect peak shipments to Pacific theater, contrasting with lull at Atlantic ports.



SELECTED MONTHLY STATISTICS

Production—Hours and Earnings—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)[†]	235 [†]	236	236 [†]	240	241	103	118
Total Manufactures	251 [†]	252	253	259	260	102	118
Durable	351 [†]	355 [†]	357 [†]	367	361	98	130
Nondurable	169 [†]	170	168	172	178	106	109
Minerals	144 [†]	146 [†]	146	133	140	106	115
AVERAGE WEEKLY EARNINGS (dollars)							
All manufacturing industries	46.28	46.03 [†]	45.55 [†]	44.58	43.25	23.60	24.92
Durable goods	52.16	51.90 [†]	51.67 [†]	50.50	49.33	26.17	28.11
Nondurable goods	37.36	37.03 [†]	36.16 [†]	35.61	34.29	21.67	22.05
Bituminous coal mining	52.13	51.66 [†]	50.69 [†]	52.72	52.14	22.75	23.19
Metalliferous mining	45.09	44.71 [†]	44.63 [†]	44.01	44.42	27.26	31.11
AVERAGE HOURLY EARNINGS (cents)							
All manufacturing industries	101.8	101.7	101.3	99.5	95.9	63.1	63.4
Durable goods	111.3	111.2 [†]	111.0	109.3	105.4	69.6	68.4
Nondurable goods	85.2	85.8	85.0	83.2	80.3	58.1	58.5
Bituminous coal mining	118.8	117.5 [†]	118.2 [†]	118.8	112.4	88.6	88.6
Metalliferous mining	100.8	100.4 [†]	101.2	99.2	98.2	69.5	71.7
AVERAGE HOURS PER WEEK							
All manufacturing industries	45.5	45.3	45.0	44.8	45.1	37.4	39.3
Durable goods	46.9	46.7 [†]	46.5 [†]	46.2	46.8	37.6	41.1
Nondurable goods	43.4	43.1 [†]	42.5	42.8	42.7	37.3	37.7
Bituminous coal mining	44.1	44.0 [†]	43.0 [†]	44.7	28.4	25.2	25.7
Metalliferous mining	44.6	44.4	44.0	44.2	45.0	39.4	43.5
NONAGRIC. EMPLOYMENT—TOTAL	38,607 [†]	38,743 [†]	38,684 [†]	38,965	39,921	30,349	N.A.
Manufacturing—Total	16,025 [†]	16,087 [†]	16,128 [†]	16,825	17,059	9,817	
Durable goods	9,583 [†]	9,699 [†]	9,757 [†]	10,213	10,167	4,251	
Nondurable goods	6,442 [†]	6,388 [†]	6,371 [†]	6,612	6,892	5,566	
Mining	835 [†]	840 [†]	839 [†]	858	888	836	
Trade	6,918 [†]	6,974 [†]	6,961	6,919	6,920	6,524	
Government (Federal, State, and Local)	5,821 [†]	5,896 [†]	5,932	5,807	5,913	3,934	
Other ^{††}	9,008 [†]	8,946 [†]	8,824 [†]	8,556	9,141	9,238	N.A.

* Hours and Earnings, June; all other, July. [†] Preliminary. ^{††} Revised. ^{†††} Unadjusted.

^{††††} Transportation, contract construction and Federal Force account.

Model	Revised 1944-45	% Decline From Original W-11
SB2C (SBW, SBF)		
Helldiver.....	4,535	8%
P-63 Kingcobra..	3,940	22
P-47 Thunderbolt	7,800	24
B-24 Liberator..	6,313	25
P-61 Black Widow	610	28
C-46 Commando...	2,634	33

Cuts are concentrated in Army planes. In fact, outstanding individual increases are confined to Navy types. Because the new TBY Seawolf torpedo bomber at Consolidated Vultee, Allentown, Pa., has

been slow in getting started, the TBM Avenger at General Motors' Eastern Aircraft Division, Trenton, is stepped up to a monthly peak of 340 beginning next January, as against 300 under original W-11.

Biggest rise—60%—is in the FG Corsair, a Navy fighter, at Goodyear, Akron, which is up from 1,575 to 2,515 at this plant for 1944-45. Reason for the increase is twofold: (1) To take up any slack that may develop in the Corsair at Chance Vought, Stratford, as that plant changes over to a more powerful engine; and (2) to anticipate increased demand for this plane on aircraft carriers.

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