AVIOLION BUSSES OCTOBER 4, 1943 50 CENTS

CAB Opens Feeder Line Hearing

More than 100 airline representatives, route applicants and officials attend opening session in Washington.



Navy Steps in at Brewster

Government intervenes again in attempt to increase production; Bermuda contracts cancelled.



Number of Plane Types Cut

Military commentator reports progress on limiting types of warplanes, and says all evidence to date shows at least one super-bomber is being rushed.



Airlines Facing Uncertainties

Though great expansion looms in long-term future, airlines face more uncertainties than at any time in industry's history; U. S. contracts being negotiated downward.



Trend Toward Heavier Planes

Expansion of the attack phase of the air war is seen in the continued rise in airframe weight, production reports indicate.



Industry Sets Teamwork Example

Chamber committee conference establishes foundation for development of strong aeronautical trade organization, executives declare.

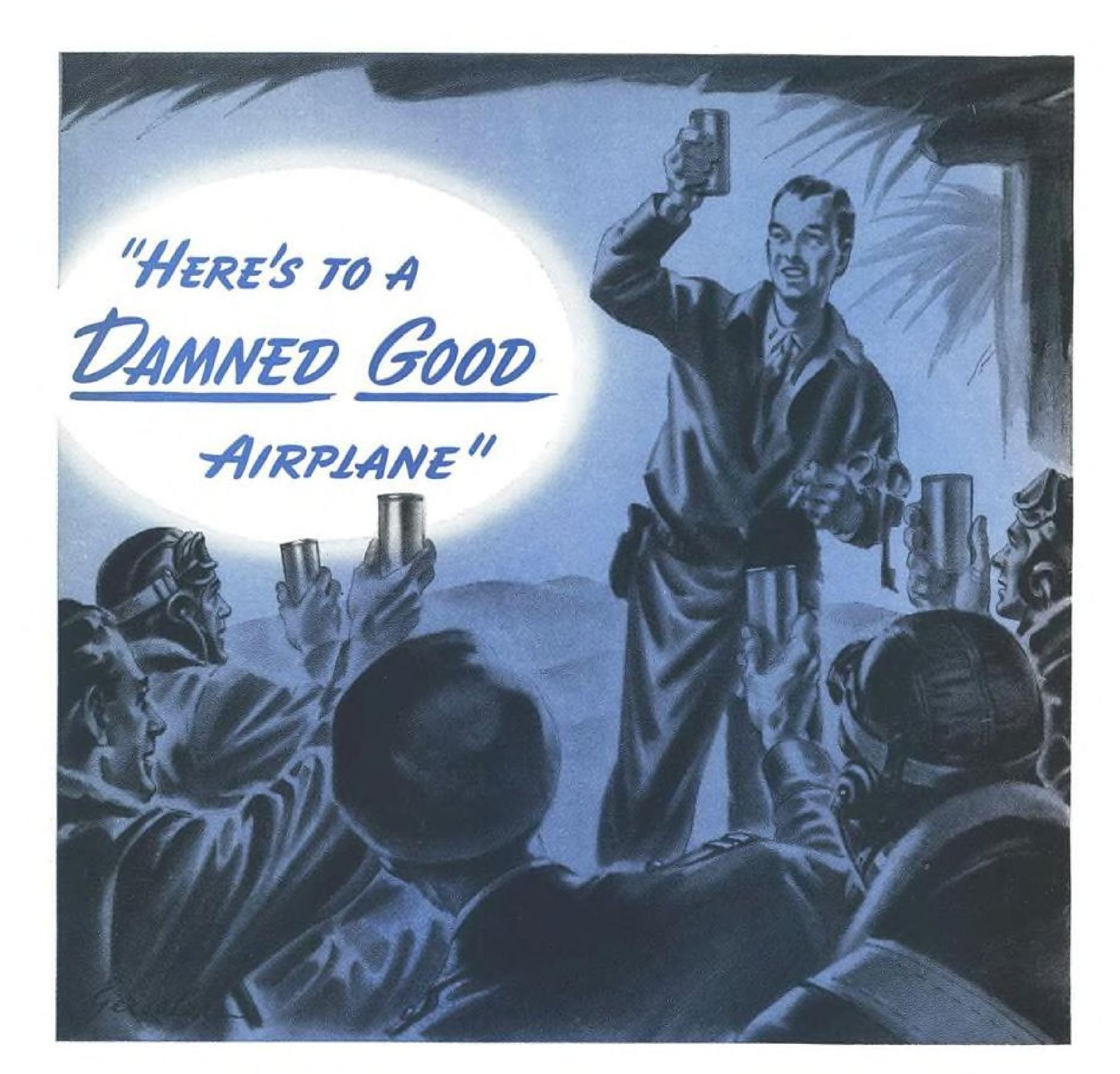


EAL Seeks Latin-American Routes

Files for extension of lines to Montreal, Mexico, Cuba and other Latin-American points; Colonial maps Canada-Nassau service.



Frank F. Russell, general manager of the National Aircraft War Production Council, who was host to top executives of the nation's major aircraft companies during last week's special business meeting in Washington.



This toast (and others like it) is frequently heard when American pilots and their crews return from difficult missions. It results from the stubborn dependability and unexcelled fighting qualities of American planes. This ability to absorb terrific punishment and continue to "dish it out" is told in daily news reports from all our fighting fronts.

These reports are a tribute to the entire American Aviation Industry as well as to the brave men who fly the planes. We at Vickers are proud of the dependable performance of the Vickers Hydraulic Equipment that is used on the great majority of our country's combat planes.

VICKERS Incorporated

1404 OAKMAN BLVD. • DETROIT 32, MICHIGAN

VICKERS HYDRAULIC EQUIPMENT

Engineers and Builders of Oil Hydraulic Equipment Since 1921 THE AVIATION NEWS

Washington Observer

GEORGE MARSHALL—All soldier, Gen. Marshall has never been known particularly as a speaker, but reports from the closed sessions of the War Department Conference of Industry, Labor and Press Leaders say the General was sensational in his forthright, down-to-earth remarks. He was given a rising ovation by the ordinarily unemotional top executives of the aircraft and other industries. Because of his self-effacing nature, it is sometimes forgotten that our air forces have made their tremendous strides under his command as Chief-of-Staff.

MILITARY AND HOME FRONT LIAISON—We observed a couple of weeks ago that it was a dull week in Washington when a new agency wasn't established. This week we give you the Joint Production Survey Committee, of four ranking Army and Navy officers. They will provide machinery for coordination of the military and civilian branches of the government. The establishment of such a committee indicates, in part at least, that this sought-for coordination has not been present in the past or if it has been that it was not particularly effective. James F. Byrnes, war mobilization director, explained that "there must be closer cooperation between the military front and the home front."

INDUSTRY, LABOR, PRESS LEADERS—Byrnes' comment may be the tip-off on this conference which brought aircraft and other executives to Washington to hear top-ranking military men outline their problems. Observers here looking for the real reason for the conference see a desire on the part of the government to cooperate more fully with industry. At the same time, it was emphasized that the purpose was not to give the leaders a pep-talk, not to exhort, but simply to give them a picture of what's ahead. Then the visitors got a pep-talk.

PRODUCTION AGAIN—The conferees heard that production was good, but had to be better. The aircraft manufacturers know this; they know that production is not as high as the government would like to have it, and, as a matter of fact, it is not as high as the industry would like to see it. It is still good, however, and last reports had it that it was still getting better and that September plane production would top August's all-time high.

PLANE INSIGNIA—The new announcement that the red border enclosing the insignia for our warplanes has been replaced with a blue border, following by only a few weeks the adoption of the new insignia, set some Washington observers to making small bets on which would be changed next—the aircraft insignia, or naval regulations regarding uniforms. Both seem to be more or less in a state of flux.

DESIGN CHANGES—This bugaboo of the aircraft producer which runs a close second to manpower in causes of production delay will ever be with the industry. Some changes in design are reported to be radical even in accepted and established types. And there will be still more design changes when we really go after Japan, because of different operating conditions. For example, short-range bombers and fighters will have to give way to long-range types.

NATIONAL SERVICE ACT—This issue still is not dead, despite other programs designed to help solve the manpower situation. While most officials are hopeful that the problem can be solved without a National Service Act, many of them admit privately that such an act a year ago would have been a good thing and would have advanced our production. Most military men want it, of course. Most manpower officials hesitate to advocate it and say that the request for such legislation must come from the White House.

WEST COAST MANPOWER PROGRAM—Privately, neither labor nor management is very happy about the new program. Both groups would like to have been consulted on the plan. Management doesn't like it because they see possibilities of contract cancellations. Labor doesn't like it because they fear many people will be demoted from high to low rate jobs under the labor priority set-up. Matter of fact, nobody was too enthusiastic. Manpower officials have tried to assure both groups their fears are groundless. Both groups have said in effect—all right, but—.

GERMAN BOMBERS—Germany is said by military men to have somewhere between 1,000 and 2,000 bombers, but the question is—where are they? Our air offensive in Germany has forced the Nazis to reduce drastically the current production of bombers, it's true. And this step is encouraging because to military men it has only one meaning—Germany has given up hope of winning the war and is turning her every effort to keep from losing the war.

JAP REPLACEMENTS—You have only to read the daily dispatches from the Pacific to know that the Nips are losing plenty of air-

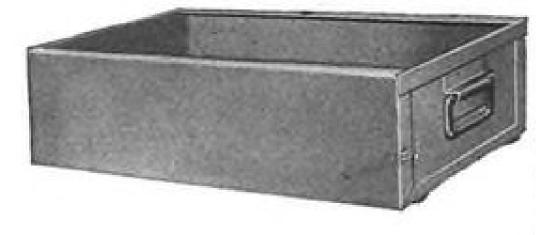
IMMEDIATE SHIPMENT!

STEELBOXES

for your Production Needs

STYLE 300 STACKING BOX. Just right for your small parts. Light in weight, easy to handle each end.

> Runners save wear on bottom of box and act as positive stacking lock.

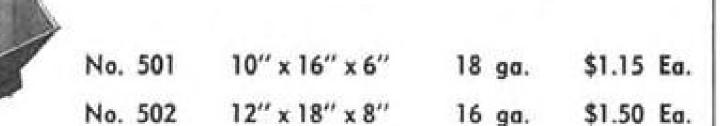


No. 301	6" x 9" x 31/2"	20 ga.	\$.55 Ea.
No. 302	8" x 12" x 4"	20 ga.	\$.60 Ea.
No. 303	9" x 131/2" x 41/2"	19 ga.	\$.75 Ea.

STYLE 600 STACKING BOX. An ideal all-purpose shop box. Sturdy allwelded construction. Heavy skids act as positive stacking lock and re-inforce box at point of maximum wear.

No.	601	10" x 16" x 6"	18 ga.	\$.95	Ea.
No.	602	12" x 18" x 8"	16 ga.	\$1.25	Ea.

STYLE 500 STACKING BOX. Open front makes contents easily accessible when boxes are stacked. Will stack with Style 600 Boxes.



STYLE 100 TAPER PAN. One piece, all-welded construction. Hook handle at each end. Will nest perfectly when empty.

No.	101	10" x 18" x 6"	18 ga.	\$.75 Ea.
No.	102	12" x 20" x 6"	16 ga.	\$.90 Ea.

PRICES F.O.B. FACTORY, PHILA. - ANY QUANTITY. ORDER TODAY WRITE, WIRE OR PHONE

1534 Germantown Ave. AMERICAN METAL WORKS, INC. Philadelphia 22, Pa.

AVIATION NEWS

October 4, 1943

NOT 1 1				1	-																						
Washing																											- 2
Headline	1	V	e	V	V 5	;	5	e	C	ti	0	Π								×	÷					ě.	7
Air War	4		4						÷	+		4	+	i.	×	4			+	¥.		4	+	4	+		13
Aircraft .	P	r	00	dı	u	Ċt	i	bi	n		+	+	+	÷	4	+	÷	+	+				+	4			16
Personnel			*			*			30						00	+	+										22
Transport	t										+														+		26
Financial					*		+					+							+				+	+			32
Editorial				1		1									1	-											34

THE PHOTOS

	Harris and Ewing	8
	Army Air Forces	
ì	Aeronca Aircraft Corp	10
	U. S. Navy	13
1	American Airlines	28
	British Information Services	
1	Consolidated Vultee Aircraft Corp16,	
ı	Fairchild Engine & Airplane Corp	20
	AAF Materiel Command21,	31
ı	Continental Air Lines	22
	Allison Division, General Motors	23
	Civil Aeronautics Administration 23, 27,	30

THE STAFF

GEORGE W. PFEIL	.Publisher
ROBERT H. WOOD	Editor
C. SCOTT HERSHEYManage	ing Editor
MERLIN H. MICKEL Transp	ort Editor
MARY PAULINE PERRY Was	Agencies
BLAINE STUBBLEFIELD Special A.	ssignments
SCHOLER BANGS Pacific Co	oast Editor
BARBARA FREDERICK Editorial	
DALLAS MALLARD	t Director

Editorial Headquarters, 1252 National Press Building, Washington, D. C.

Copyright 1943 by McGraw-Hill Publishing Co., Inc. Published weekly, price 50c a copy. Allow ten days for change of address. Subscription rates—United States, Mexico and Central and South American countries, \$5.00 a year, \$8.00 for two years, \$10 for three years. Canada, \$7.00 a year, \$12.00 for two years, \$16.00 for three years. All other countries \$9.00 a year, \$14.00 for two years, \$18.00 for three years. Application for second class mail pending at Post Office, New York, N. Y. Printed in U.S.A. Cable Address "McGrawhill, New York."

James H. McGraw, Founder and Honorary Chairman; James H. McGraw, Jr., President; Howard Ehrlich, Executive Vice-President; Curtis W. McGraw, Vice-President and Treasurer; Joseph A. Gerardi, Secretary; J. E. Blackburn, Jr., Director of Circulation, 330 West 42nd Street, New York, 18, N. Y. Branch offices: Chicago, 520 North Michigan Ave.; San Francisco, 68 Post Street; Los Angeles, 601 W. Fifth Street; Aldwych House, Aldwych, London, W. C. 2; Washington; Philadelphia; Cleveland; Detroit; St. Louis; Boston; Arlenge, Posture Posture Constanted Atlanta. Return Postage Guaranteed.

Advertisers Index

American Metal Works, Inc 4	
Continental Diamond Fibre Co 6	
Cook Industries, Henry 29	
General Aircraft Corp 14	8
General Tire & Rubber Co3rd Cover	ď
Invincible Tool Co	
Texas Company, The4th Cover	4
Vickers, Incorporated 2nd Cover	

Washington Observer

craft. They always seem to come back with more. Just how they are replacing them is a question, but some airmen returning from the Pacific are of the opinion the Japs are scraping the bottom of the reserve barrel.

JAP AIR STRENGTH ON UPGRADE-Reports that Jap air strength isn't what it used to be doesn't jibe with reports given the conference of industry leaders who were told that "in the air, Japanese strength is on the upgrade," and that "both numerically and in quality of planes, the Jap air force is improving." In addition, the industry leaders were told, Japan's pilot training program has been stepped up to keep pace with the accelerated production schedule which accounts for the replacements.

LABOR HOARDING?—Yes, says the Baruch report on manpower; some, say high WPB officials. Look at the record says the West Coast aircraft industry, pointing to a 44 percent increase in production with only a 4 percent increase in employees during the first seven months of 1943, and, in addition, says the West Coast, "that's a record of labor utilization, not hoarding or loafing. It's a record of which aircraft employees can be and are proud." The debate probably will continue to rage on this moot point.

DESIGN CHANGES AGAIN-WPB Chief Donald Nelson recently asked all aircraft plants to give him a report on definite reasons for any production lags. In the majority of cases, industry executives were able to provide unit figures on design changes that had held back the output of planes.

KEY PERSONNEL-The Baruch manpower report, among other authorities, advocated the release from the Army of key aircraft plant personnel. Thus far, nothing has been done along this line and action probably will be delayed further pending a clearing up of the whole manpower picture.

COST PLUS FIXED FEE-It has been disclosed that various procurement agencies have largely abandoned cost-plus fixed fee contracts in favor of plans which provide manufacturers with an incentive to reduce costs. It has been necessary, however, to retain the cost-plus contracting for some aircraft manufacturers where contractors don't have sufficient capital to operate on another basis.

Council sees a possible 33 percent reduction in necessary travel by business men to and from Washington, and, in addition, a drastic cut in their routine paper work as a result of a decentralization program under which thousands of application forms, formerly routed to WPB in Washington, will be processed in the field.

NEW PUBLICATION—The War Production Board is going to issue a new publication—every four weeks-designed to aid business men and government officials in obtaining information on all products, materials and service handled by WPB. The publication, first issue of which will appear the first week in October, is titled "Products and Priorities." It will include, incidentally, all information formerly contained in "Priorities" and in "Product Assignments," both of which will be discontinued.

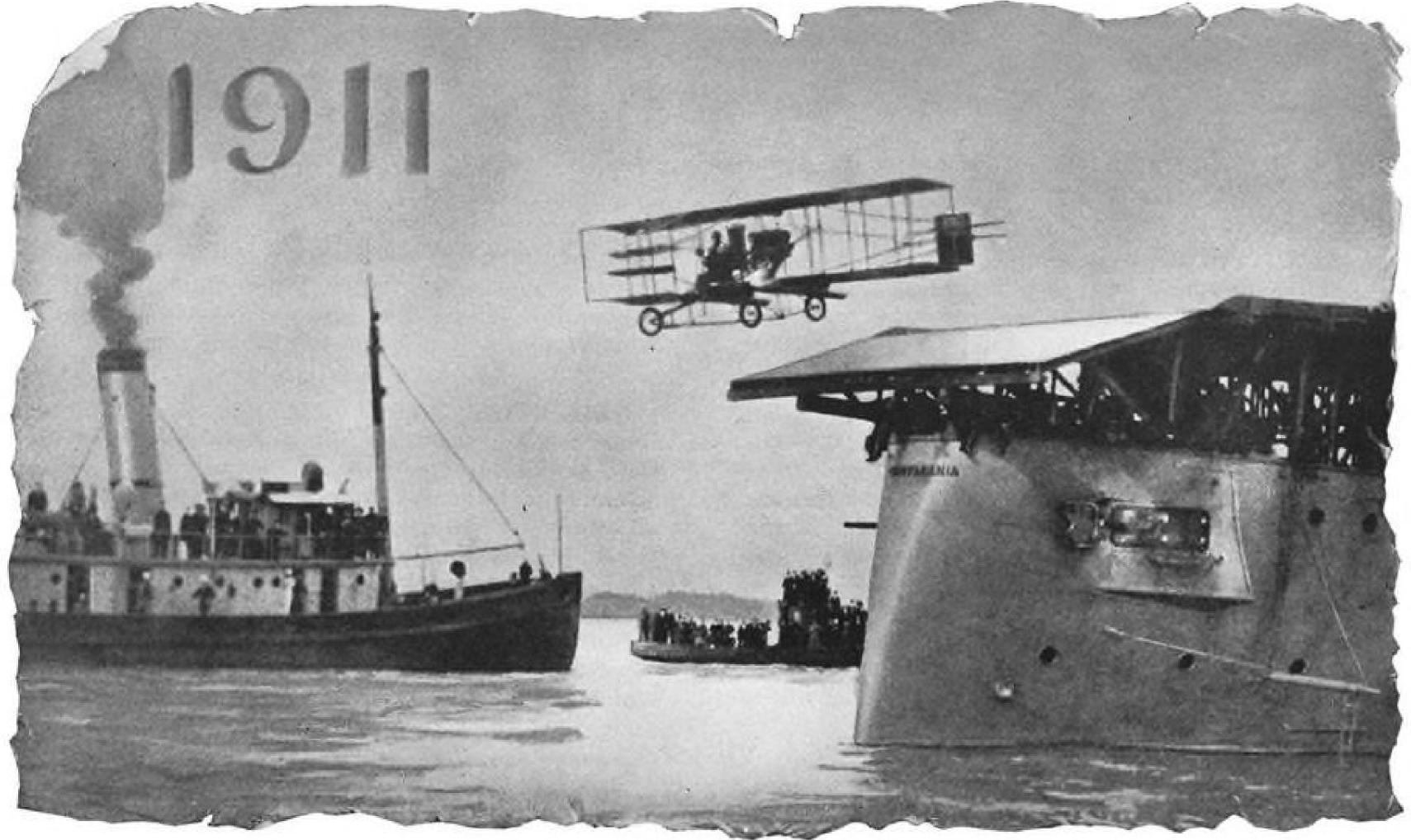
CANADIAN CARGO-There definitely are cargo airplanes in the Canadian aircraft production picture. Little can be said of them now except that a Canadian four-engine transport plane is being designed and that later this year production is to be started on a transoceanic cargo plane. The Observer will keep in touch with developments.

PLANT DISPOSAL—Jesse Jones believes local business should get the first chance after the war to purchase the war plants now owned by the government throughout the nation. Jones definitely is of the opinion that the government should not manufacture products for civilian use. At the same time, he does not believe these plants should be sacrificed or junked.

BRITISH AIRPORTS-Anybody who has been in England will tell you that it's pretty hard to look far from 5,000 feet altitude without seeing four or five airports—they literally dot the English countryside. Some far-thinking Englishmen are beginning to wonder how they will dispose of the fighter and bomber bases with their installations when peace comes. Most of them have permanent concrete runways.

NAVY INCENTIVE—The Navy is working out a new type of contract which provides a ceiling price and in addition a method for sharing cost savings between the contractor and the Navy. Its sponsors believe that it will ease renegotiation in many cases and permit earlier calculation of final reports on war business. The Navy is said to have tried it out in a few cases and may soon extend it to its other contractors.

WPB HEADACHE-WPB, like several other TRAVEL TROUBLE?-The WPB Operations government agencies, is wrestling with the nation's manpower problem, but unlike some of the others. WPB is having manpower trouble of its own. It has had scores of resignations.



A CURTIS first . . . FIRST Airplane to land and take off from a Battleship. Photo Courtesy Curtis-Wright Corp.

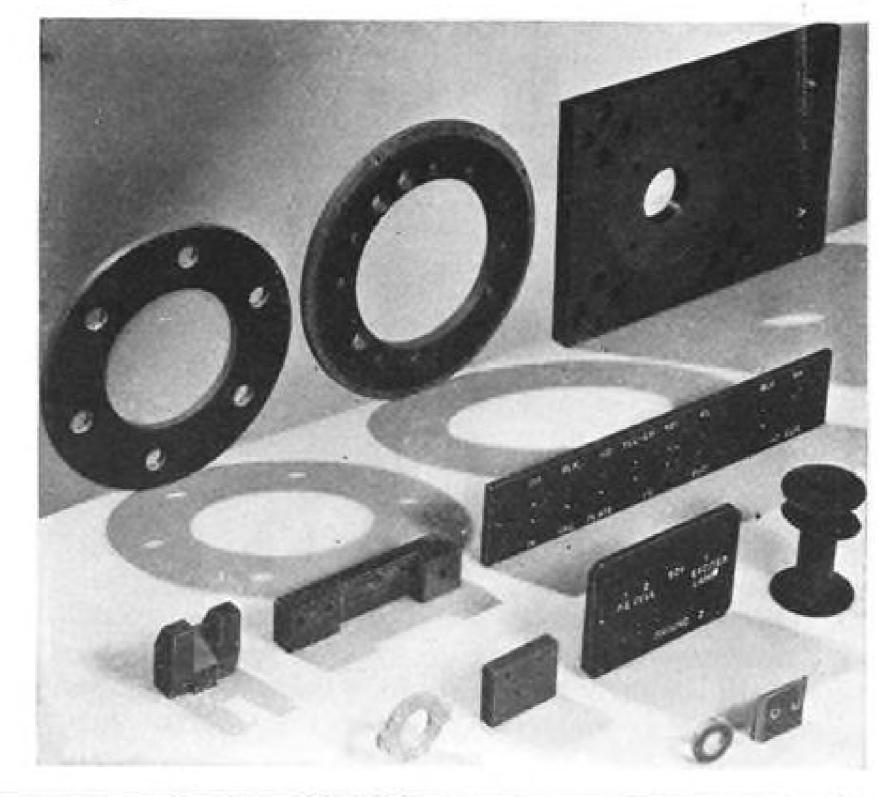
When the not so "Flat Top" launched a Box Kite, CONTINENTAL-DIAMOND was a "baby" too

It was in 1911 that C-D made its first sheet of laminated plastics. Today C-D products are vital parts of both the airplanes and the flat tops that carry them. Illustrated are parts fabricated from DILECTO sheets, rods and tubes. These parts are used in communication systems, radios, control instruments, generating and lighting systems, fuel systems and in a host of other vital points.

The "know how" accumulated by C-D engineers and technicians in applying C-D NON-metallics to problems of Peace & War is at your disposal to help solve your "What Material?" problem.

C-D products include THE PLASTICS . . . DILECTO—a laminated phenolic: CELORON-a molded phenolic: DILECTENEa pure resin plastic especially suited to U-H-F insulation . . . THE NON-METALLICS, DIAMOND Vulcanized Fibre: VULCOID -resin impregnated vulcanized fibre: and MICABONDbuilt-up mica insulation. Folder GF describes all these products and gives standard sizes and specifications.

DISTRICT OFFICES: New York • Cleveland • Chicago • Spartansburg, S. C. West Coast Representative, Marwood, Ltd., San Francisco Sales Offices in principal cities



Established 1895 . . Manufacturers of Laminated Plastics since 1911 — NEWARK • DELAWARE



McGraw-Hill Publishing Co., Inc.

Air Industry Leaders Thresh Out Problems in Washington Meeting

Conference most vital four days for aircraft manufacturers since Pearl Harbor, Glenn L. Martin declares.

By SCOTT HERSHEY

industry met in Washington last week to attack and solve their mutual problems at a series of meetings so vital that they were described by Glenn L. Martin as encompassing the four most important days for the industry since Pearl Harbor.

It was significant and impressive that the executive heads of the companies themselves participated in the sessions-two days at the War Department's conference of industry, labor and press leaders and two days' meetings of the National Aircraft War Production council.

Outlook-There was a general feeling, expressed by several of the conferees, that the industry concluded its meetings with a more specific understanding of their problems and what the industry has to do to meet these problems.

Most of the executives who attended the War Department meetings were strongly impressed with the seriousness and the size of the task which lies ahead and a realization that the government has a difficult task in convincing the home front that the war is not yet won and that the nation may have some severe set-backs and heavy losses in men and materiel before final victory is achieved. Some said there was evidence of socalled "Peace-Jitters" among some of their employees and cited this as one of the causes of labor turnover.

▶ News Conference—With Lawrence D. Bell, head of Bell Aircraft, and president of both the National Aircraft War Production Council and the East Coast Council, presiding, the company heads sat together at a table and laid themselves open in a free-for-all questioning at a unique news conference.

Seldom, if ever, has any industry

Leaders of the nation's aircraft presented such a united front of the men who actually make policy and operate the industry. There was not an industry leader who had not expressed himself in answer to newsmen's questions before the conference was over.

> Manpower Problem—T. Claude Ryan, head of Ryan Aeronautical, and president of the West Coast Council, said that unless steps are taken to meet mutual problems, the industry cannot meet the staggering production schedules set for it. The industry needs between 400,000 and 500,000 new employees to meet this schedule and at the present rate of turnover it means that 1,700,000 persons will have to be hired.

Manpower, of course, is the No. 1 problem. West Coast executives said the government's new program

for the Pacific Coast had not been in operation long enough to judge its effectiveness. Bell commented that a similar plan in Buffalo was of no particular aid to the aircraft industry, although it did pull heavy industry out of a bad hole.

Labor Hoarding-Commenting on charges of labor hoarding leveled against the industry, J. Carleton Ward, Jr., of Fairchild, pointed out that design changes and changes in models resulted in periods of readjustment of labor and that there might be some substance to the allegations, not as hoarding, but as to utilization caused by design changes and other factors coincident with wartime production.

Donald Douglas, head of Douglas Aircraft, in commenting on labor hoarding, noted that since January, 1940, there had been an increase in production on the West Coast of 4.260 percent by weight and that during the same period there had been a personnel increase of 933

Comparisons-On a basis of 100 workers, Douglas made these comparisons between October, 1940, and July, 1943. In 1940, he said, it took 100 men to build an attack bomber;

OWI to Report Airlines' War Work

The Office of War Information has approved a proposal to report fully, for the first time, the domestic airlines' war contract work. Washington observers believe this will result in easing the drastic censorship which the Air Transport Command has clamped on airline activities.

An editorial in AVIATION NEWS Aug. 16 brought about OWI's decision. Titled "Let the People Know," the editorial cited ATC's persistent unwillingness to allow any individual line to be mentioned in connection with any war contract. It urged that OWI "prepare a complete and factual summary of what the airlines have done, line by line, and bring the people up to date."

In a letter to the presidents of

the domestic lines, announcing the decision, a representative of the OWI News Bureau wrote:

"The Office of War Information proposes to report on contributions of commercial airlines to the war. Robert Wood of Aviation News tells me that you can supply details of your own line's activities. We would like to have as much as you can give us.

"We believe that enough can be told to give an adequate idea of the part the airlines are playing. After the report is finished, we shall check with you. All material will clear through the armed services before publications. Could I expect to hear from you within two

It is understood that photographs will be released with the report.

now nine workers build it; in 1940, 100 men built an interceptor; now five build it; in 1940, 100 men built a medium bomber; now 10 build

The question of incentive payments was discussed, with the general opinion being that such plans were difficult to apply to the aircraft industry, that while production probably could be increased, it was first necessary—and almost impossible—to find a sound yardstick for measuring and to work out a

plan fair and equitable to all and acceptable to labor as well.

▶ Post-War Plans—Bell was asked what the industry is doing about post-war plans. He replied: "I don't know what the other companies are doing, but we're not doing a damn thing. It's all we can do to build the airplanes we have to build now."

On the basis of present production scheduling, the industry in 1944 will be producing at an annual dollar volume rate of \$40,000,000,000.

Board Opens Feeder Hearings; Stanton Sees Mass Air Transport

CAB is seen as first government regulatory body to control a transportation system still in development stage.

The Civil Aeronautics Board started last week to dig for the facts on which it will base its consideration of the need for local, feeder and pickup services.

First to testify was Charles I. Stanton, Civil Aeronautics Adminabout the ability of airlines to pro- haps by multiple airports at such vide mass short distance service at costs comparable to intermediate and long distance service, he said he was concerned about their ability to provide short distance service with sufficient time ad- in making a stop. He was skeptical

vantage over other service to attract patrons in large volume.

Forecasts Shorter Runs—He forecast new stops, a large increase in short distance services, and intensive development of the market for mass short distance travel between istrator. Admittedly optimistic large metropolitan populations, percenters.

There is need, Stanton asserted, for a plane designed specifically for short range operation, with particular attention to minimize time lost of the helicopter as a mass transport plane, and predicted many years would be required to obtain large machines of this type.

The administrator dwelt largely on air passenger traffic, assuming that population, distance and service factors will affect mail, express and freight traffic in the same general way. Foreseeing development of the pickup system for mail, especially, he said postal policy should aim at transmission of every letter by air without surcharge whenever delivery can be advanced thereby.

▶ Three-Way Classification—He suggested consideration of a three-way classification of air services: Major transcontinental services, those designed for smaller cities between large cities, and third class service extending spoke-wise from a large city to serve one or a series of small cities, without a large terminal city. Stanton estimated that for an air transportation system to serve over 80,000,000 people, including more than 90 percent of the urban population, cost for airport construction and improvement would run \$215,-000,000, and installations another \$12,000,000.

Raymond W. Stough, director of the board's Economic Bureau, presented a detailed statement in which he made the points that no clear cut distinction exists between feeder and trunk line services, and that the real issues are whether the public





CAB OPENS FEEDER LINE INVESTIGATION:

More than 100 airline representatives, route applicants, aeronautical association officials and manufacturers' agents were present as the Civil Aeronautics Board opened its investigation of the local, feeder and pickup service situation in Washington last week. First witness, extreme right in crowd picture, was Charles I. Stanton, Civil Aeronautics Administrator. On hand at the starting session (group picture) were (left to right): C. Edward Leasure, chief examiner; William J. Madden, examiner; L. Welch Pogue, chairman of the board; V. R. Grundman (standing) public counsel, and Albert F. Beitel, examiner who, with Madden, is conducting the investigation. The hearings are continuing.

convenience and necessity requires service and how that requirement will be satisfied.

Need for a broad proceeding to consider those matters, he said, arose out of the numerous proposals for new services presented to the board, and the "substantial increase necessary in government aid for the operation of those services."

> Safety Regulations-Manufacturers and other technicians, Stough said, have the responsibility of effecting improvements to enhance the economic position of air transportation. John M. Chamberlain, assistant director of the Safety Bureau, presented an outline of safety regulations. Representatives of state aviation groups in Tennessee, West Virginia and Alabama testified. In launching the investigation, Chairman L. Welch Pogue described it as a general exchange of views and data. Additional significance was seen by some, however, in the board's unique position as a government agency controlling a mode of transportation yet in its early development.

This circumstance led some observers to express hope that the board will reserve its conclusions until it has fully developed a general policy toward this type of service. Others in official CAB circles, however, hoped for early findings to permit rapid consideration of pending applications.

Airlines Decide on Post-War Ad Theme

ATA members convene, meet with CAB, study adoption of mechanics' wage scale.

A new note in airline advertising is about to be sounded by Air Transport Association members, as the result of the latest meeting of the board of directors.

The need for acquainting the public in detail with what the present commercial operators think they will be able to do for post-war America was brought up by Capt. Eddie Rickenbacker of Eastern, and the other members of the boardonly W. A. Patterson of United was absent—agreed something should be done along lines of an educational program. The matter was discussed in connection with ATA's advertising budget.

After the session, the directors met as a group with the Civil Aeronautics Board, to discuss general aviation problems. Later some of them went to New York to talk over the dissolution of the Airlines War Training Institute, now in prospect.

As a result of the ATA board meeting, further sessions were held last week to discuss mechanics' wages. A recent application by twelve airlines to increase the pay

of their mechanics was rejected on grounds it would be contrary to the President's hold-the-line order. Without the increase, airline spokesmen say, mechanics are being lost to other industry, particularly in the New York area.

Eastern Seeks To Extend Routes to Montreal, Mexico, South America

Rickenbacker also files application for extensive expansion of domestic lines; Colonial maps Canada-Nassau air link.

Eastern Air Lines, encouraged by the recent welcome given by the Civil Aeronautics Board to applications for routes between the Americas, has applied for extension of its facilities from Montreal to Mexico, Cuba, and on into South America. At the same time, it asked for an extensive expansion of its domestic routes.

Eddie Rickenbacker, Eastern's president, told the board in a letter accompanying the applications that EAL's purpose was "to bring the people in the great cities in North America, Central America, South America and the Caribbean within 24 hours or less travel time of each other.

Through Heart of Continent-The proposed South American routes would go "straight through the heart" of the continent, avoiding the "roundabout traditional shore line routes."

Rickenbacker said he saw no reason why the war should stand in the way of a "complete and immediate overhauling" of commercial air transport arrangements in and between the Americas. On the contrary, he suggested, the war has drawn the people of the Americas together.

Post-war Plans-Furthermore, he emphasized that aviation's peacetime program must be "ushered in and well under way" at war's end, if the public is to benefit to the highest extent from military expenditures for aviation and opportunities are to be provided for air-trained young men.

"We propose," Rickenbacker wrote the board, "to develop to the limit in both our domestic and international operations all forms of traffic —passengers, mail and cargo—in all types of service, from local or socalled feeder service to the fast indestiny and the industry meet its after the war.

public obligations."

▶ Nassau-Canada Route — Colonial Airways' President, Sigmund Janas, announced at Miami that the line was filing for a new route to connect Nassau and Canada. Colonial, which operates between New York and Montreal, would use four-engine planes and go south to Nassau via Atlantic City, Norfolk, Wilmington, N. C., Savannah, Jacksonville and

Meanwhile United Air Lines announced plans to add St. Louis, Indianapolis, Detroit and other midwest industrial cities to its network. It proposed to operate from the coterminals of Detroit and Cleveland to Toledo, Fort Wayne, Muncie, Anderson, Indianapolis, Terre Haute and St. Louis, and from there to Omaha. St. Louis to Omaha flights would be non-stop, and one service would be non-stop from Toledo to St. Louis. The company previously requested an operation from Chicago to Detroit and Newark-New York directly and by way of intermediate

Matson Line Files—A new note was injected in the most recent group of applications submitted when the Matson Navigation Co. filed for four air transport services over its steamship routes, between Honolulu and Seattle, Portland, San Francisco and Los Angeles. William P. Roth, president, said the proposal was a departure from the question of ownership or operation of "air companies" by other means.

No subsidy was requested, and no limitation suggested on the issuance of certificates. Roth described it as plea for the right to serve the public and shippers "with the best possible means through an integrated transport operation."

Cunard White Star-He cited this company as an example of foreign ternational express. Only by such a steamship companies intending to program can aviation achieve its utilize aircraft in international trade

Navy Intervenes Again at Brewster In Attempt To Boost Production

Company ordered to concentrate on Corsair production and drop all work on ill-fated Bermuda dive bomber.

All Brewster Aeronautical Corporation contracts for all its versions of the SB2A (Bermuda) divebomber have been canceled and the company is directed by the Navy to concentrate on the Corsair shipboard fighter, which it calls F3A. Vought's symbol is F4U and Goodyear's is FG-1.

Informed quarters said without reservation that the Navy is placing its own management in the Brewster plants. Senator Truman, head of the special war investigating committee which bears his name, had just threatened to expose the company's Johnsville (Pa.) plant for inefficiency. He said conditions there were "extremely bad"; that the plant was producing "practically nothing."

Labor and WLB Blamed-Production troubles at Brewster are attributed to organized labor, and the National War Labor Board for failure to pass on a proposed new labor contract. The management charges CIO in reality was operating the Johnsville plant for its own political ambitions. Labor troubles have

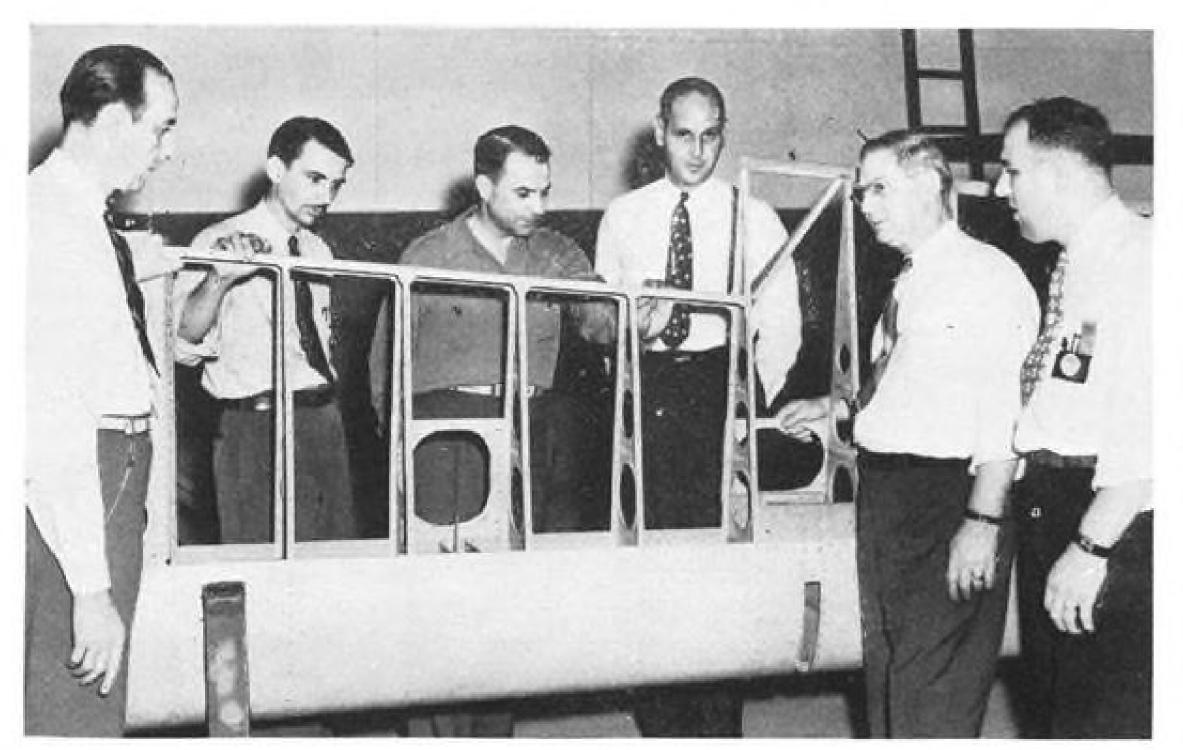
figured largely in Brewster's difficulties for several years.

Navy will lay out and command the production program. No official statement was made on the Brewster situation. All information came from Capitol Hill and private sources.

Navy Commands Production—It was reported the management by Henry J. Kaiser, Chairman of the Board, and Frederick Riebel, Jr., President, was not removed but the Navy will lay out and command the production program. An official statement by the Navy Department reported only the switch to the Corsair.

Production at Low Level-Official records, examined by AVIATION News, show Brewster production amazingly low in 1941, 1942, and 1943. The company manufactured the Buffalo until April, 1942.

The SB2A dive-bomber, made in three slightly varying versions for the Army, Navy, and the British, is cut out because Navy feels the Grumman Wildcat is much better and wants all the Corsairs it can get. Army's version of the Brewster



AERONCA ENTERS FORTRESS PROGRAM:

Aeronca Aircraft Corp., lightplane company, has joined the subcontractors' list for the Boeing Flying Fortress and industry officials are shown inspecting the first elevator to come off the new line. Left to right: Victor Seeley. general supervisor of outside inspection at Bell Aircraft; Val Baltz, plant superintendent at Aeronca; E. Schmidt, aircraft tool inspector at Bell; John tion by 75 percent. Radio engineers Friedlander, executive vice-president of Aeronca; C. R. Likins, district supervisor of outside inspection for Bell, and Russell Ebert, tool erection manager, Bell Aircraft.

dive-bomber, called the A-34, is very little used.

Radio on Life Rafts

Set on planes making water flights transmits SOS signals automatically for flyers lost at sea.

The Army's "Gibson Girl" radio has been adopted as standard equipment on all Air Force planes making water flights. It is an automatic transmitter, pre-tuned to the international distress frequency, and an SOS can be sent out by merely turn-



ing a crank. When more than one receiving station picks up the call for help, the position of the survivor can be determined by triangulation. The set weighs about 35 lb., is unsinkable, and is packed in a bright yellow bag which can be identified readily on the water sur-

Two methods of raising the 300ft. wire aerial are available-a collapsible box kite for use in windy weather, and two rubber balloons filled from hydrogen generators to be used when there is no wind.

Morse Code on Set-Regular messages can be sent by means of a button on the face of the set, and for those who are not familiar with radio dots and dashes, the Morse Code is printed on top of the set. A lamp, which can be powered by turning a crank, is also part of the equipment.

The keying mechanism is an important development; the antennaraising devices (the kite and balloons) give much greater range; and the hydrogen generators cut down the time required for balloon inflahave declared this device greatly superior to similar apparatus in use by the Axis Nations.

DPC Issues New Air Plant Contracts

Brewster, Bendix, United and Reynolds arrangements for expansion reported.

Defense Plant Corp. has announced execution of a contract with Bendix Aviation Corp. for equipment and machinery at a plant in New York at a cost of about \$250,-000, while contracts with Brewster Aeronautical Corp. provided for additional facilities at a plant in Pennsylvania to cost \$160,000, and with United Aircraft Corp. for additional equipment at a plant in Connecticut to cost \$880,000. This results in an over-all commitment with the former of approximately \$8,200,000 and with the latter of about \$12,350,000.

Defense Plant Corp. has authorized construction and equipment of a plant in Tennessee to proceed at a cost of approximately \$16,500,000. Reynolds Metals Co., Richmond, Va., will operate the facilities, with the title remaining in DPC.

War Department awarded contracts for construction of apron. taxiway and temporary frame building at a field in St. Clair Co., Ill., to cost about \$20,000; for drainage for runways and taxiways in Jefferson Co., Ala., to cost about \$200,000; for drainage for additional taxi strips at a field in Montgomery Co., Ala., to cost around \$20,000; and for the sealing of runways at a field in New Hanover Co., N. C., to cost \$20,000. WPB's General Limitation Order L-313 provides that after March 1, 1944, production of aircraft plumbing fittings will be completely standardized in accordance with directives issued by the armed services. Only exceptions to the order standard-

izing the fittings, which are used for the connection of tubing, hose or pipe installed in the assembly of aircraft and aircraft components for the purpose of making a fluid-tight joint, are: (1) direct purchases by the AAF or the Navy Bureau of Aeronautics; (2) authorization from the Aircraft Scheduling Unit, in quantities and specifications set forth in the authorization; (3) non-metallic aircraft plumbing fixtures; and (4) for maintenance in planes delivered prior to the order and not standardized.

▶ Brewster Aeronautical Corp. and Local 365 of the CIO United Automobile Workers have been ordered by National War Labor Board to sign a collective bargaining agreement for the four Brewster plants on points to which they have agreed and to negotiate a separate agreement covering plant guards.

The order sets up a separate bargaining unit for the guards and provides that the guards, who are voluntary members of the Coast Guard, shall be subject to orders of the Navy Department for the duration.

William H. Davis, NWLB chairman, said the order supersedes the provisions of any other contract between the company and the union with respect to seniority rights of the guards.

Streett Transferred

The AAF's heavy bombardment groups of the Second Air Force will be under the command of Maj. Gen. St. Clair Streett, who formerly commanded the Third Air Force at Tampa , Fla. General Streett's new assignment puts him in charge of the Colorado Springs, Colo., base succeeding Maj. Gen. Davenport Johnson, who was transferred to the Alaskan theater.

TELLING THE WORLD

The life story of Tom M. Girdler, board chairman of Consolidated Vultee Aircraft Corp., will be published this month by Chas. Scribner's Sons. Boyden Sparks has collaborated on the story, which will be called "Boot-

▶ Bellanca Aircraft Corp. resumes advertising with the first of a series of advertisements to run in aviation papers appearing this month. Designed to put the Bellanca name before the flying and buying public, the company is eyeing the post-war market. In the first ad, attention is brought to the fact that the first non-stop flight to Berlin was in 1927 when Clarence Chamberlain flew a Bellanca cabin monoplane from Long Island to Germany. "Today, the Bellanca tradition marches on in the production of the AT-21-BL gunnery crew trainer [for the AAF]," says the ad.

Continuing on emotional appeal from incidents in the 30-odd plants of Bendix Corp., the second of this new series of ads portrayed the intensity of a Bendix worker's interest in making emergency transmitters for life rafts. Entitled "Identification of American Anger," the ad appears in 38 major newspapers of 25 cities. This newspaper series supplements the current national magazine campaign on "The Invisible Crew" of Bendix, plus additional campaigns in a sizeable list of trade and technical papers. Paul Munroe and George Enzinger are handling the account for Buchanan & Co., New York.

Edith Juell, member of the public relations staff of Transcontinental & Western Air for the past two years, has been promoted to cooperative advertising manager, in charge of advertising, promotion and tie-ups. Miss Juell was the first woman employed by TWA as a reservations representative in 1940.



U. S. FLIES WOUNDED BACK HOME:

Air transportation of battle casualties has assumed proportions believed impossible before the war began. Both the Army and Navy are using planes for this purpose on all battle fronts and have thus cut deaths from

wounds to a low rate. Many wounded soldiers are being flown back to the U.S. by the Air Transport Command for hospitalization regularly. Shown is a Navy Douglas transport at a South Pacific island.

Manpower Turnover Hits New High Mark

Quit rate for industry 3.94 per 100 for men, 7.26 for women.

Labor turnover, a prime problem in the aircraft industry's manpower troubles, hit a new high in war industries in July.

Bureau of Labor Statistics showed quit rate in the aircraft industry for the month was 3.94 per 100 workers among men and 7.26 among women. In aircraft parts, the rate for men was 3.14; for women 6.00.

The figures were not broken down on a geographical basis and it was not possible to determine whether the turnover rate was larger in congested areas compared with less congested sections.

Lower in War Industries—The guit rate was generally lower in war industries than in others and as high as the rate was among women in the aircraft industry, the rate was still higher in such industries as small arms and ammunition, firearms, aluminum and magnesium smelting and refining, non-ferrous metals and shipbuilding and repairs.

The quit rate for men in the aircraft industry was exceeded by the rate in small arms and ammunition, guns, howitzers, mortars, tanks. aluminum and magnesium smelting and refining, non-ferrous metals and shipbuilding and repairs, the latter 6.62 per hundred for men workers.

Workers' Morale GroupSetUpinCanada

Nation-wide organization to tackle aircraft employee problems.

The Canadian government has set up an Aircraft Industry Relations Committee "to build up and maintain morale of all workers in the industry."

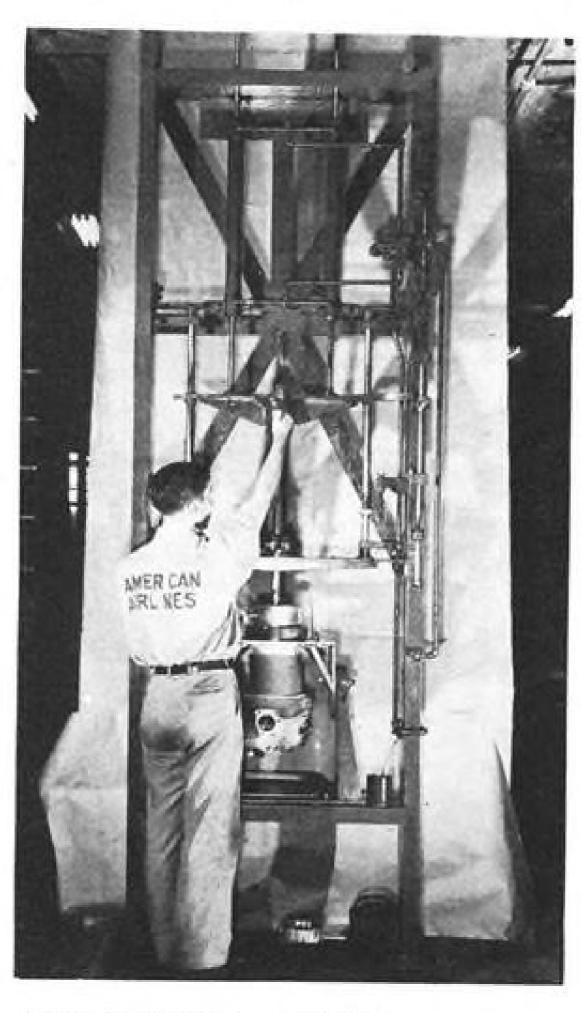
This nation-wide personnel organization for the Canadian aircraft industry is tackling such problems as employee relations, women's work clothes, suggestion boxes and award plans, war and instructional film distribution, public relations and other related subjects.

Headed by Labell—J. Edouard Labell, president of Canadian Vickers, Ltd., is head of the committee, whose directors are W. L. Bayer, president, Noorduyn Aviation, Ltd.: dian Pratt & Whitney Aircraft Co. The committee has 32 company

members, and interest in the organization in the United States is evidenced by the number of inquiries received at headquarters in Toronto.

New Airport Work

WPB announces reinstatement of the CAA airport project at Olney, Tex., to cost \$846,000. The project was requested by the Army or Navy. Three flight strips, to be built by the Public Roads Administration alongside highways also have been continued. They are: Churchill, Nev., to cost \$462,000; Amedee, Calif., to cost \$490,000; and Battle Mountain, Nev., to cost \$492,000.



CYLINDER LAPPER:

Louis Trainor, American Airlines' machine shop foreman at Washington National Airport, built this cylinder lapping machine to give a high polish to cylinder walls. Small bench models are in operation elsewhere, American says. Trainor made his machine from material available in his shop. It requires about 3 min. for the lapping operation; an extra 3 min., the airline feels, gives improvement in maintenance methods and added strength and durability. (After the cylinder has been thoroughly inspected for flaws, it is fixed David Boyd, general manager, Vic- to the stand, the switch turned on, tory Aircraft Ltd.; H. M. Pasmore, and the round lapper moves up and president, Fairchild Aircraft, Ltd.; down inside the cylinder, giving it and James Young, president. Cana- a highly polished, smooth surface.)

Crawford Warns Need To Up Output 45%

NAM chief blames absenteeism, strikes, inefficiency for war production lag.

Sharp increases in monthly production of war goods including aircraft are necessary to meet commitments to the armed forces for this year, according to Frederick C. Crawford, president of the National Association of Manufacturers.

Crawford, who is head of Thompson Products, of Cleveland, manufacturers of airplane parts, said aircraft production must be stepped up 45 percent "over what we've been turning out."

Production Handicaps—He listed four factors which he said were hampering war production—"too much individual inefficiency and failure to do the fullest possible day's work; too much labor turnover; absenteeism; altogether too many-and I say one is too manystrikes and slowdowns."

No Buck Passing-Crawford emphasized that he was "not trying to pass the buck to labor," and added that "management has got to do a better job and government has got to do a better job than it has been doing."

He said that "what we must do is produce more with what we have and that's up to the workingman. It's up to management to use every minute of every man's day where it will be most effective in turning out the goods that we must have."

Teletype Selector

CAA developing device which sorts messages for various centers.

An automatic reader which sorts teletype messages to a given air traffic control center, saving manpower and paper, is being developed by the Civil Aeronautics Administration.

Relays Do Work-Suggested by George S. Porter, senior airway controller at CAA's Washington center, the mechanism consists of a series of relays which select messages at their destination, eliminating the necessity of assigning a man to watch the teletype and throw away communications to other centers on the same circuit.

Eighty-four percent of the messages passing over the two teletype circuits into the Washington center, it is said, have no bearing on flights in and out of the capital.

THE AIR WAR

COMMENTARY

Number of Plane Types Cut; One Super-Bomber Is Rushed

Specially preferred warplane models comprise more than half of August production weight; various groupings get priorities.

Recent official aircraft production reports have emphasized the fact that types of planes "most urgently needed by the armed forces" are gaining in the overall picture. Output of such types has been doubled within the past five months. Put another way, the specially preferred types made up one-half of the total monthly weight of aircraft production in August, as compared with one quarter a year ago. Units totaled 7,612, 3 percent above July as against a scheduled 8,000.

This means that at last, after battle experience of practically all models, the armed forces have been able to cut down the number of types of planes to be turned out by the aircraft industry, concentrating on the best types and the ones most suitable for the strategy and tactics that lie ahead. This is most important from a materials allocation point of view, and the fact that for some time our planes have been divided into groups with varying degrees of priority has been a definite help in getting out the most needed stuff. The list is flexible, and items with top priority six months ago, may be dropped farther down as the situation changes.

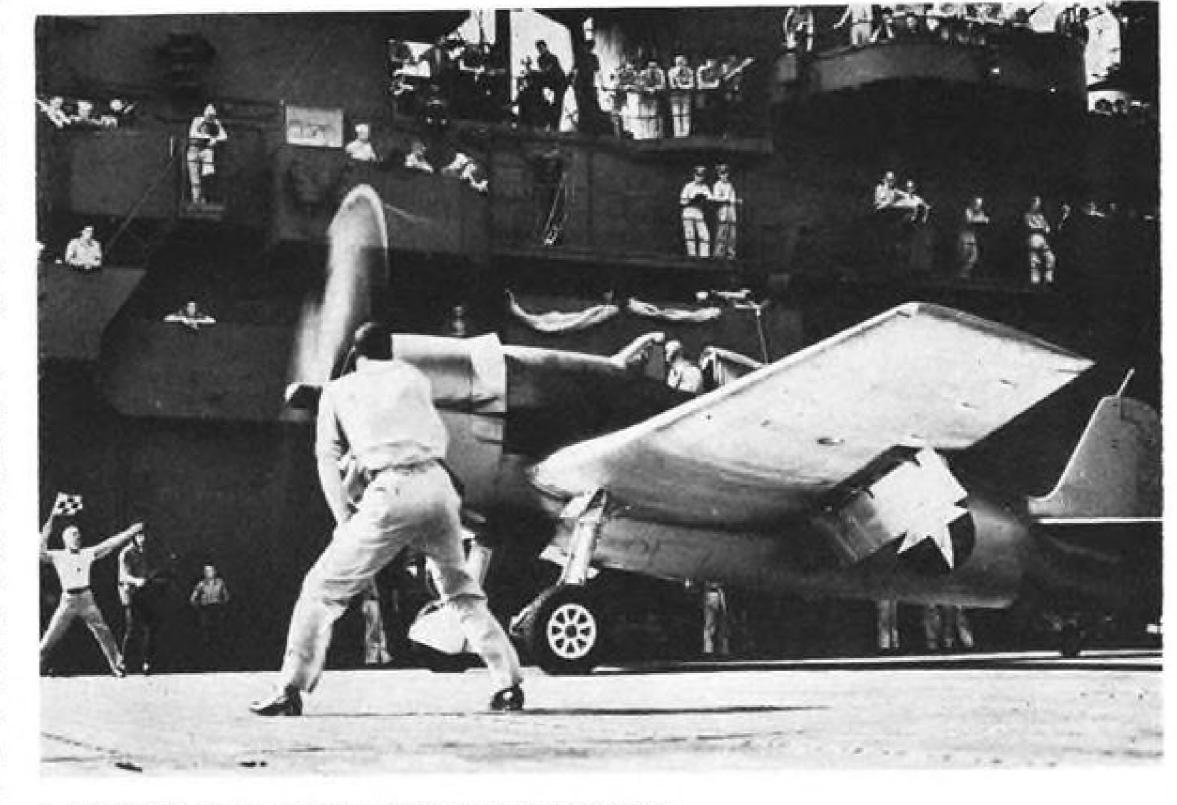
▶ Top Preference Groups—It is well understood that the top-preference groups, in addition to a few experimental models, which while highly important do not require large quantities of materials, include the Fortress and Liberator heavy bombers now in pooled production, a super-bomber which has been referred to in general terms by various officials during the past few months, a couple of crack Army Air fighters, and Naval fighters and bombers.

In numbers, according to the strategy of greatly accelerated action in the Pacific, the Naval combat planes are in the fastest growing class of all. The heavy bombers, despite Boeing's difficulties in Seattle, continue their monthly overall

gains as newer units in the B-17 and B-24 pools hit their stride. The Lockheed Lightnings, with more

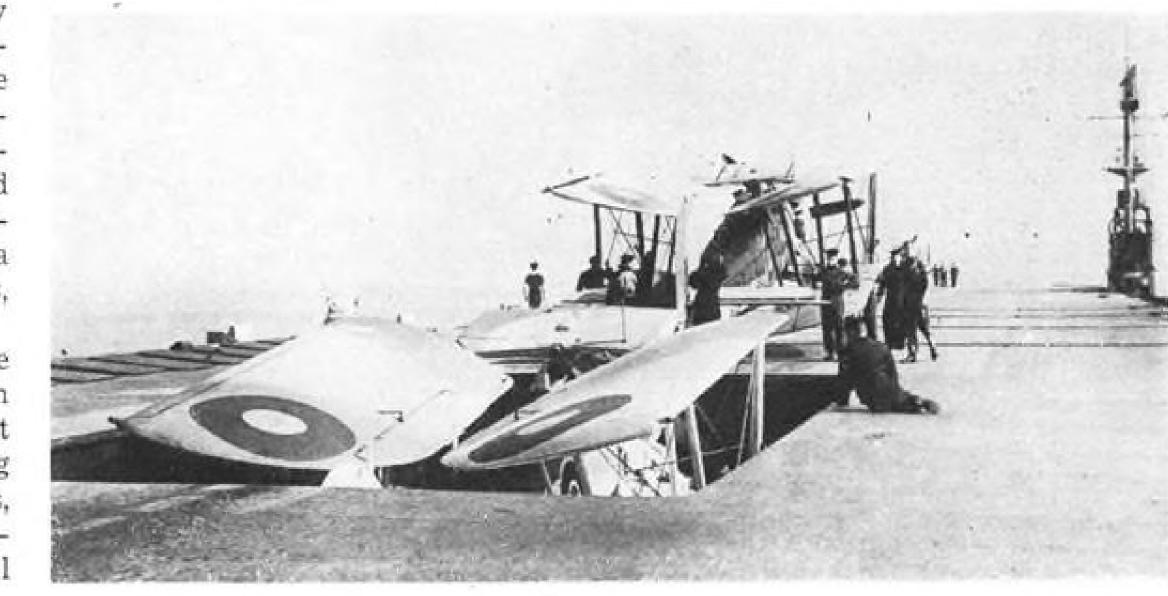
powerful Allison engines, giving faster climb, and longer range for bomber escort missions, are coming off faster than ever from the mechanized assembly lines set up last spring, and the Mustang P-51B, with the new Packard Merlin engines coming along in quantity, has also shown a substantial gain in the past few weeks.

Fewer Models Used-As to fewer types the picture seems to look like this: For many reasons at the outset of the Air Force expansion program, at least two and sometimes three or four models of each major type were rushed through the testing period and thrown into operations as rapidly as possible. One exception was the light or attack bomber class. The Douglas DB-7, improved as the



LATEST CARRIER NEWS PHOTOS:

From the British and U.S. Navies come these news photos from aboard aircraft carriers. The action shot shows a Grumman Hellcat pilot getting the flag for a takeoff, while the carrier's crew watch from above. The British photo, showing an old Swordfish going down the "lift" while another craft and its crew wait, is believed to be the first picture taken on the deck of one of the scores of new escort or pocket carriers. Narrow width of these platforms can be noted.



NOT ONLY THAT ... GAC'S GOT TWO REVOLU-TIONARY NEW SKYFARER PLANES READY TO SHOOT THE MINUTE WAR'S OVER. THEY'VE GOT SAFETY AND SPEED NEVER REACHED BEFORE IN THEIR CLASS, AND ONE'S ROADABLE, TOO.*

GENERAL AIRCRAFT IS ONE OF THE LEADING MANU-FACTURERS OF BIG CARGO, TROOP-CARRYING, MILITARY GLIDERS.

UNDERSTAND



To hear more about it, write to . . .

The General Aircraft Corporation, Long Island City (5) N. Y.

AVIATION NEWS • October 4, 1943

Licensors to the industry of two-control flight under Weick & Koppen patents

RUMORS FOUR CAN GIROULATE!

A-20B and later variations, turned out to be such a widely successful and versatile airplane, a great favorite on many fronts, that it became standard for the class, though eventually it will be replaced by an improved version, the A-26.

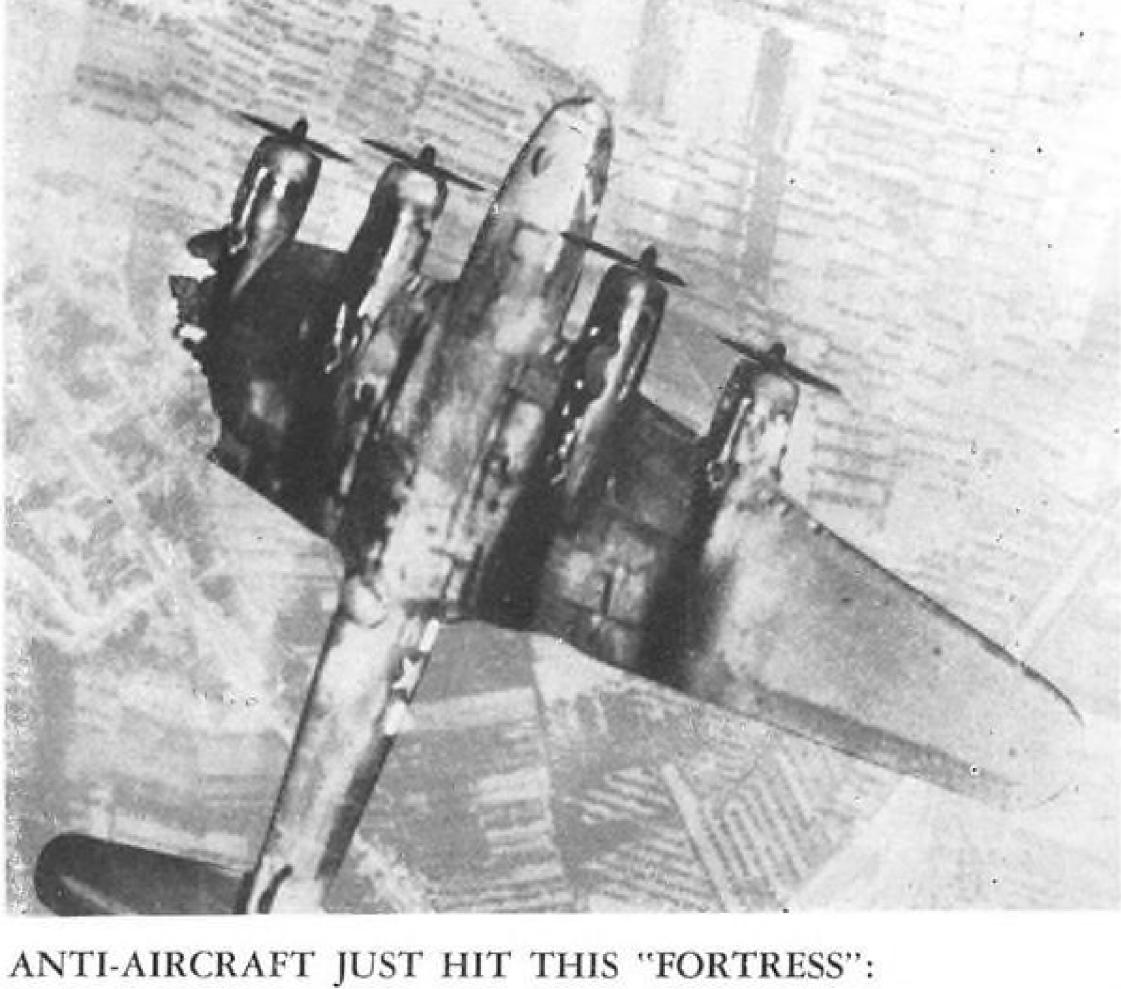
For medium bombers the B-25 Mitchell and B-26 Marauder were outstanding in their class, their only real rival anywhere being the improved Dornier 217 E2, a machine, however, which has only seen limited service, as contrasted with the Mitchell, for example, which has been in successful operation on every fighting front, including Russia. With peak production at North American-Kansas City approaching, this factory alone will soon be producing more medium bombers than any other factory in the world.

The Marauder has proved a fast, hard-hitting ship in New Guinea, Africa and England, and its pilots swear by it. However, production is likely to be tapered off so that the important facilities in Baltimore and Omaha may be used for urgently required items in the top-preference group, in which no medium bombers have a place.

Heavy Bombers Improved-In the heavy bomber class especially has the wisdom of two first-class entries been justified. The Fortress and Liberator are easily the world's best long-range day bombers, and we need all we can get of both of them. The Fortress is being concentrated in England, and the Liberator in the Mediterranean, Asia and the Pacific, its extra few hundred miles' range giving it an advantage in those areas.

It is too early to be certain, but present evidence indicates that allout efforts are being made to get one super-bomber into operation as rapidly as possible, rather than two. A substantial pool of several factories, most of them inland, is beginning to click. Gen. Arnold's recent description of the bomber of the "near future" is certainly intriguing. Half a carload of bombs; multiple-gun power turrets controllable from sighting stations; compensating sights for firing at fast-moving aerial targets; "eyes" to guide it to its target at night or in any kind of weather, and to detect the approach and follow the course of interceptor fighters; and possible use of new types of bombs, and cannon which will operate on a new principle. This will be Air Power.

AIR WAR REVIEW-In one of the greatest operations of the crushing Allied air offensive, clouds of bomb-



This remarkable picture released by the AAF shows a B-17 which has just been hit by flak after dropping its bombs on Naples. "A portion of the wing has been blown off, and concussion from the flak burst has turned the ship completely over," the AAF says. "Despite the serious destruction suffered, the sturdy plane managed to level off 1,500 ft. lower, and five parachutes were seen to open."

ers and fighters swarmed over the east-west rail line and site of Ger-English channel to strike at widelyseparated targets. Layer upon layer of warplanes took part in the attack. at altitudes from 1,000 to 30,000 ft.

Indications that Germany may be facing a winter aerial assault from the Mediterranean area, surpassing perhaps the blows from Britain, were seen in the transfer of Liberator bomber squadrons from England to the North African theater.

Previously operating with the British-based U. S. Eighth Air Force, the B-24's joined the Northwest African Air Forces and immediately moved to the attack on the Corsican harbor of Bastia and the Italian mainland city of Leghorn, leaving troop-crowded German vessels and other small craft aflame. Giant Air Pincers-Lieut. Gen. Carl A. Spaatz now has in his Northwest African Air Forces a heavy bomber force unequaled in any theater except the home-based Royal Air Force fleets in England. With fall weather beginning to hamper operations from Britain, new blows, from the Mediterranean

Hanover Pounded-Hanover, on the key Berlin-Cologne four-track,

many's largest rubber works and big locomotive and tank plants, was on the list as was Emden, North Sea port and naval base; Oldenburg, important military and communications center; Nantes, French Atlantic port and key submarine base; Cannes-Leucon, coastal air base; Beauvais, French air base; Brest, air base; Conches, air base 60 miles west of Paris, and other air bases in northwest Germany and France.

▶ Supply Road Blasted—Main target in the Madang sector, northwest of Finschhafen, was the Nip's coastal supply road. These planes, bombers with fighter escorts, met no enemy air opposition, attesting to the effectiveness of recent raids on enemy airdromes around Wewak.

▶ Burma Bases Raided—Operations against the Japs in Burma have been stepped up since the end of the monsoon season and the R.A.F. and the U.S. 10th Air Force with two main objectives, both achieved: to prevent the Japs from using bases in Burma for attacks on India and to prevent mightier than ever, may hit the Axis them from exploiting Burma for the benefit of their general war effort.

The entire raid was concentrated on trackage and terminals.

AIRCRAFT PRODUCTION

Canada Reveals Air Developments Long on Military Secrets List

Comment on molded plywood's adaptation to plane fuselages and tests of Anson twin-engine bomber trainer released by National Research Council.

By JAMES MONTAGNES

Long on the military secrets list, some of the experiments which have been carried on at the Canadian government-owned National Research Council at Ottawa, are now disclosed.

Many aeronautical problems have been solved and others are under investigation at the council where wartime research problems have centered in Canada since war began.

Molded plywood for aircraft has been one of the major topics of research and investigations and tests include the design and construction in molded plywood of the Anson twin-engine bomber, employed widely in the British Commonwealth Air Training Plan.

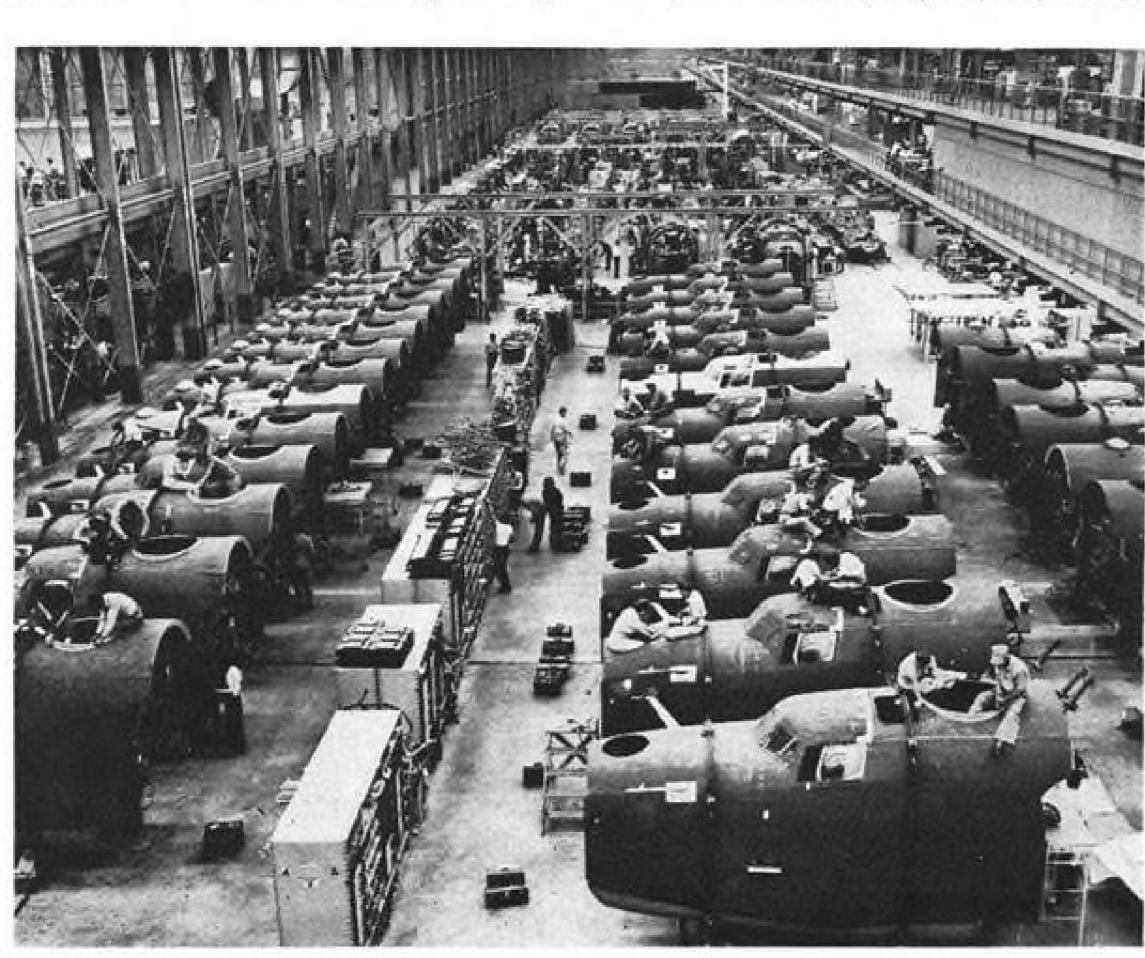
Results in Production—Results of the experiments are now being translated into production of the Anson V by the aircraft subsidiary of an old farm implement company, Cockshutt Moulded Aircraft, Ltd., subsidiary of the Cockshutt Plow Co., of Brantford, Ont.

The company makes Anson fuselages under contract for the government-owned Federal Aircraft, Ltd., using Canadian red pine and imported poplar veneers. The re-design of the Anson fuselage to molded plywood has been an important factor in Canada's aircraft program, reducing time of construction of the fuselage as well as final assembly of the aircraft.

(Cockshutt Moulded Aircraft, Ltd., was established in the summer of 1942, after the parent company had done subcontracting for Federal Aircraft. New buildings were constructed alongside the farm implement plant and now occupy about 100,000 sq. ft. of floor space, while the aircraft plant employs approximately 1,000 men and women. C. Gordon Cockshutt is president and Stuart S. Lee, general manager.

are under investigation by the council in the field of aircraft engines, relating to cracked aviation gas.

In the past it has been considered that only straight-run aviation gasoline could be used in aircraft and that thermally cracked gasoline, similar in many respects to that used in automobiles was unsuitable for aircraft engines. As a result of the tests made, the council has decided that for many training aircraft, fuels of this type are satisfactory, and a specification has been prepared. Canada is leading the way



CONVAIR TRANSPORT LINE:

This new photo of the fuselage nose department at Consolidated-Vultee's Fort Worth plant explains why the Air Transport Command is adding Consolidated C-87 transports daily to world-wide military air routes. The modern plant, designed and built by the Austin Co., is larger than Willow New Projects—Several projects Run, and is the world's largest air conditioned building.

AVIATION NEWS . October 4, 1943

in this investigation.

De-Icing Tests—De-icing projects undergoing development and testing include propeller de-icing, windshield de-icing and defrosting to ensure vision under all weather conditions, and wing de-icing employing heat from the engine exhaust. Many compounds have been investigated under the research program, and some found promising in seeking means to diminish frost deposition and adherence on grounded aircraft.

Many experiments have been conducted, too, on using wheat in production of synthetic rubber for aircraft and other wartime uses. A fermentation process has been developed for production of butylene glycol from wheat. Investigations have been initiated to obtain information as to production costs. A novel method has been developed for curing resins, and is said to show much promise of speeding output.

Aircraft Contracts Total 39 Billion

WPB figures show industry gets 25 percent of major war orders.

Placement of aircraft supply contracts cumulative through July, 1943, totaled \$39,455,769,000, which



FLYING JEEP TAKES OFF:

The L-5, popularly called the Flying Jeep, built by the Stinson Division (Wayne, Mich.) of Consolidated Vultee Aircraft Corp., climbs almost vertically after a short run. This small, rugged and highly maneuverable craft, designed to be the "eyes upstairs" of Army ground forces, can operate from cow pastures, highways or other improvised landing fields. It is said to hover at speeds less than 45 miles an hour while directing artillery fire or movement of tanks or troops below.

represented approximately 25 percent of all major war supply contracts placed through that date.

A War Production Board compilation showed California was far out in front in aircraft contract placements with \$7,968,606,000.

The aircraft category includes contracts for airframes, airplane engines, propellers and other parts and certain related equpiment such as parachutes and aircraft pontoons. Armament, instruments and communication equipment are excluded. New York Second-New York is second among the states with contracts amounting to \$4,341,747,000; Michigan third with \$3,909,037,000, and New Jersey fourth with \$2,822,-131,000.

Other leading aircraft production states include Connecticut with \$2,-571,975,000, Ohio \$2,388,756,000 and Kansas \$2,194,748,000.

States with contracts totaling more than a billion dollars are Indiana, \$1,674,982,000; Maryland, \$1,605,972,000; Illinois, \$1,443,120,-000; Washington, \$1,351,216,000 and Texas, \$1,261,515,000.

Aircraft Accessories Studies Auto Field

Plans post-war output of valves, equipment for other industries.

Aircraft Accessories Corp., Burbank, Calif., has started a research program for application of aircraft and engineering and construction practices, and materials to the auto-

motive and other industries.

The company sees this as an important part in the reconversion of production facilities to peacetime manufacture. In pursuing its program, involving manufacture of air and hydraulic valves and associated equipment for buses, trucks and trailers, the company is utilizing its experience as one of the largest producers of hydraulic brake control valves for aircraft and other aircraft hydraulic equipment.

Uses Aircraft Features-Aircraft Accessories reported the best features of aircraft construction, such as light weight, minimum bulk, great strength and durability, maximum efficiency and dependability are being incorporated in plans for the new automotive brake equipment.

AAF Streamlines Procurement Practice

New setups expedite changeover from one contract to another.

A new system is now being put into operation by the Army Air Forces Materiel Command designed to speed procurement procedures.

Because changing battle conditions demand revised or even new equipment, manufacturers are constantly asked to discontinue one contract and substitute another, a situation which the new setup proposes to change.

Procedure Streamlined—As a result of this frequent changing over. the Procurement Division of the Materiel Command, following a conference at Wright Field of District Procurement representatives, has initiated a streamlined procedure by which contractors, upon winding up one contract, will start immediately upon another.

This, obviously, requires fast action by those responsible for settling the case, since long, drawnout negotiations and over-meticulous examination of each item of each claim could easily turn war production into a battle of lawyers and account-

It is natural for a contractor to adopt what may be, perhaps, an over-cautious attitude when one contract is terminated and another substituted and the new system will endeavor to expedite a fair and quick settlement without red tape.

Alternative—The alternative is a contractor with his capital frozen, his plant tied up with semi-processed items and unused inventories. and his attention diverted by extensive settlement negotiations.

INVINCIBLE ANGLE DRILL ATTACHMENTS Reach that "Hard-to-Get" Spot



★ Speed your Drilling and Reaming.

Motor Nor Angle

Drill Can Reach.

* Cut Your **Production Costs**

Send us your inquiries on Angle Drill Attachments for use in any operation!

90° Single Attachment

Wire-Write-Phone

DELIVERIES FROM STOCK

INVINCIBLE TOOL COMPANY

Angle Tool Attachment Manufacturers

6119 Empire Bldg., Pittsburgh 22, Pa.

Free Enterprise WE MUST ACT TO PRESERVE IT

TIKE a leaf floating downstream, we are being carried A along toward a new and uncharted economy. What this new economy will be like will depend, to no small extent, upon what industry does or fails to do during the coming months. Time is short; in fact, we may suddenly find ourselves standing on the threshold of a peace economy with our war boots still on our feet.

While bending every effort to win the war, we cannot afford to be caught unprepared for the peace. As Prime Minister Churchill said at Harvard, we are "bound, so far as life and strength allow and without prejudice to our dominating military task, to look ahead to those days which will surely come, when we shall have finally beaten down Satan under our feet and find ourselves with other great Allies at once the masters and the servants of the future." Unless we do look ahead, there is danger that we may become neither the masters nor the servants, but merely the victims, of the future.

The war has quickened our ailing economy and opened our eyes again to the possibilities of peace-time plenty. But it has also brought great dislocations of labor and capital; it has led to abnormal patterns in prices and income distribution; and it has created inflationary pressures with enormous potential powers to injure or to help us in the transition from war to peace.

The pattern of life in postwar America will be just what we make it. All of us will have a hand in shaping that pattern, but business men will have a special responsibility in the reconstruction. As employers of labor and capital and as enterprisers assuming the risks of new ventures, they will have to plan and carry out the conversion from war work to full peace-time production. Because of their key role, business men have a special opportunity to discover, and to help others to understand, the conditions which are necessary if they are to do their job satisfactorily.

18

This is a narrow view of postwar problems but it is a central view, because no one condition is more vital to the health of the world than a high level of production and employment in the United States. We cannot hope to lead the world out of economic chaos if we fail to put our own house in order. If we fail to adjust our domestic economy, we may destroy Adolf Hitler; but we will not destroy the germ that breeds "Hitlers." If we do not maintain the production necessary for supporting a large volume of imports and exports, then the plans for international monetary stabilization, for good relations with our neighbors, for rehabilitation of stricken countries, and for strengthening the democratic bulwarks against dictatorship are all likely to come to grief. We must demonstrate our capacity for world leadership, or be content to follow the leadership of others.

The prospects for achieving a sound and vigorous economy in the United States are not so good as to warrant complacency on the part of men genuinely interested in free enterprise and the political freedoms incident to it. We have yet to find means to utilize our vast and abundant resources for the good of all. We have yet to learn how to keep men from the terrible experience of unemployment and the fear of want which makes them willing to sacrifice freedom and opportunity for almost any promise of security. We have yet to reconcile the conflicting interests of labor, agriculture, and business so that they can work together effectively. We have yet to learn how to check the fever of inflation and cure the palsy of depression.

When we were attacked at Pearl Harbor, we realized our physical peril immediately and united in a tremendous common effort against the enemy. The onset of economic perils is less obvious. No bombs will signal the deterioration of the private enterprise system, the extension of regimentation, the further control of business by government, and the concentration of political power in less and less responsible hands. If these things should befall us, they will come insidiously while we are' preoccupied with self interests and oriented by popular misconceptions. If the freedoms of the individual shrivel as the state grows in power, it will be because the individual is too indifferent or complacent to concern himself seriously with economic problems. If our people are misled by false prophets and demagogues, it will be because business men did not understand economics, because scholars were too ignorant of practical affairs, and because we failed to produce economic statesmen of sufficient stature for the task in hand.

Thinking is hard work. Thinking about things outside our personal experience, about economic processes that are broader and in some fundamental respects different from buying and selling or running a business - is strenuous mental labor. Thinking straight about problems that are beyond our personal and immediate status and our pocketbooks, thinking about problems that involve nation-wide production, nation-wide employment and nation-wide buying power - in other words the operation of our entire economic system — involves real self-discipline. Yet there is no other way to safeguard our freedoms. We cannot rely on trial and error; tinkering takes too long; social experiments which turn out wrong can be undone only at great cost - if at all. If we proceed blindly, we shall flounder into an economic and political morass from which we cannot escape.

We floundered badly all through the Thirties, until the war lifted us temporarily to higher ground. When the war boom is over, we shall be back floundering worse than ever unless we find a solid road along which to proceed.

America has grown rich and strong under a system of political and economic freedom. Opportunity and the necessity of self-reliance have brought forth great accomplishments. The hope of profit and the spur of competition have urged men on to find new and better products, new and better methods, and to risk their savings in pioneer investment. Never has a country achieved so high a standard of living and afforded so large an opportunity for the individual man and woman. It is not surprising that some distinguished business leaders, looking back over their own experience, tell us that everything will be all right if only there is "less government in business."

I wish the solution were as simple as that. However this is only part of the answer. It is becoming in-

creasingly clear that industrial capitalism as we know it contains within itself certain fundamental weaknesses which can lead to its destruction if they are not counteracted. No democracy can survive when twenty to thirty per cent of its workers cannot get jobs. That happened here in the Thirties. For years on end, despite fumbling efforts at recovery one out of every five workers was denied a chance to earn a living in private business. We shall never again have such mass unemployment as occurred in the bottom of the Depression, because the government will take it upon itself to create jobs if business cannot offer them. Whenever that happens, however, the area of private enterprise will be reduced and that of government will be expanded – and the concentration of political power will be increased. This is the challenge we business men face today, and ours is the first opportunity at finding the solution.

The crux of our economic problem is unemployment. Unless there are jobs for ninety to ninety-five per cent of those who are able and willing to work, there will be widespread fear and lack of opportunity, which will drive labor unions, agricultural groups, and business interests to take self-protective measures. Such measures are certain to restrict production, stifle progress, and imperil our democratic way of life. Not all our problems will automatically be solved if we learn how to avoid mass unemployment, but they will at least then have a good chance of solution.

And so American businessmen face a great responsibility! We will have to find the answer to a great many momentous questions. We will have to delve into problems that cannot be solved by precedent.

Looking backward to these times, future historians are likely to say that here we Americans stood at the crossroads and, consciously or not, made our choice between a system of private enterprise and personal freedom and a system of collectivism and regimentation.

It is particularly appropriate, therefore, as the problems of our time take shape and as events rearrange their order and importance, to appraise the steps we are taking and point the way we are going. It is my plan to present such analyses from time to time to the one-and-a-half million readers of McGraw-Hill publications.

Mul H. M. haw. N.

President, McGraw-Hill Publishing Company, Inc.

\$1,400,000 U.S. Tools Bring \$76,500 as Scrap

Plane machinery obsoleted by design changes, AAF officer explains.

This is the story of the sale of \$1,400,000 worth of governmentowned machine tools for scrap at \$76,500.

There was a news story out of Detroit the other day that the tools had been sold by the Army Air Forces Materiel Command, central procurement district, on orders from WPB and Washington.

These tools were a part of a \$36,-000,000 tool order and the government is said to have found substitute uses for the rest of the order. Lt. Robert Ludvik, who handled the sale, was quoted as saying that some of the articles sold were standard tools that could be resold immediately at much higher prices. He contended that about 40 percent of the 110 tons of machine tools involved could be reclaimed after minor adjustments.

Made Obsolete by Changes-A new, and that they had been occupymanufacturer who purchased some of the "scrap" to fill, he said, government orders, commented that "many of the tools the Army sold at such ridiculously low prices are the very kind that we are making for the government now."

Out at Wright Field, Materiel Command Headquarters, Col. Turner A. Simms, Jr., technical executive, speaking in the absence of Maj. Gen. Charles E. Branshaw, said that "a large part of the tools were specialized cutting tools intended for use on an aircraft engine which the Studebaker company was going to build. Design changes on the engine about 20 months ago made them

Col. Simms said the "tools which were scrapped were part of a \$36,-000,000 tool order and we managed to find alternative uses for all except those."

Held Critical Materials-He said their records showed that 30 percent of the tools sold were used, about 20 percent unfinished and the rest ing valuable warehouse space for

"We couldn't find anybody who wanted them," he added. "Many of them were made of critical materials, and could be converted into useful tools if they were scrapped. So, we junked them,"

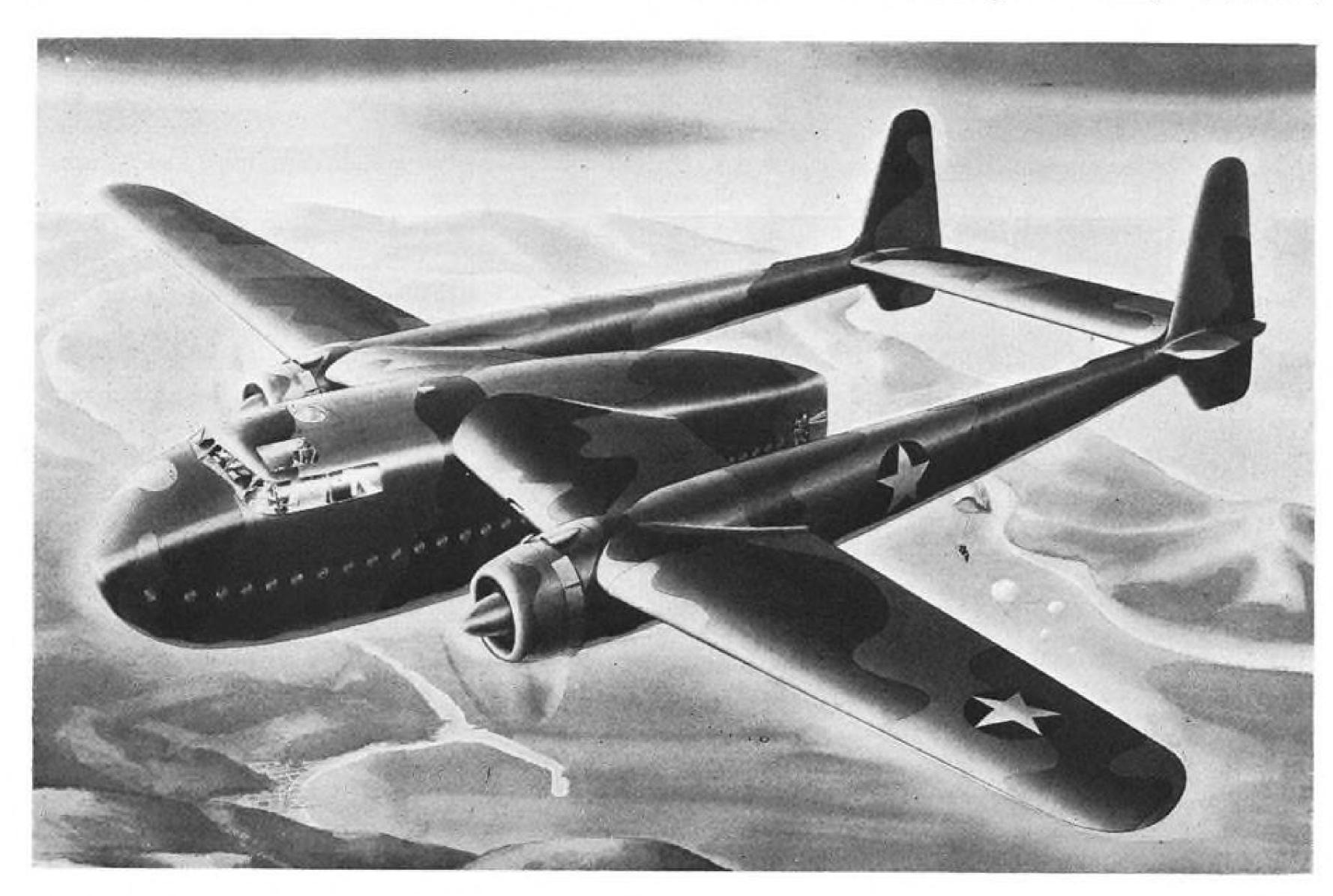
He added that the sale was made under instructions from the redistributing and salvage officer at AAF Headquarters, Washington, and coordinated with WPB's tool branch.

Largest Radial Engine

18-cylinder Duplex Cyclone in volume production at Wright plant.

The largest and most powerful radial engine which can be reported under manufacture in the United States, the 2,200-hp Wright 18-cylinder Duplex Cyclone (R-3350), is ready for volume output at Wright's big Paterson, N. J., plant.

Chicago Plant Ready—In addition,



FIRST VIEW OF NEW CARGO TRANSPORT:

Artist's drawing of new all-purpose cargo transport plane, "previewed" in the NEWS Sept. 6, and which Fairchild engineers say was engineered specifically to meet present needs for carrying guns, tanks, ammunition, supplies, troops or paratroops to distant points of

combat or operation. Although details of design, etc., are kept secret, it is known that the plane is of metal and built to operate on airfields of limited size. It has a range of 3,500 miles and is said to be easily adaptable to peace-time service.

AVIATION NEWS . October 4, 1943

the great new Dodge factory near Chicago is reported ready to go into production on this engine within the next few weeks, with peak output expected late next year. The Dodge plant is said to be the world's largest, able to swallow up Ford's famous Willow Run, with room enough left for 30 full baseball diamonds.

This new engine was first used in the Consolidated model 31 longrange flying boat, then in the Douglas B-19, and in the Martin Mars and the Lockheed Constellation. After some adjustments, volume construction was started. Several types of large airplanes included in the 1943-44 program will use this power plant.

Output Figures Show Bomber Trend

August total gains 3 percent, value and airframe weight rises 7 percent.

The trend toward heavier models in aircraft, especially bombers, was dramatized in WPB's most recent production report which showed that, while the increase in units of airplanes in August over July was only 3 percent, the value and air- the flow of planes to the fighting frame weight rose to 7 percent.

Fighters as a group increased 5 The average airframe weight of each plane accepted in August was 7,800 lb. as against 5,600 lb. a year ago and 3,800 lb. in August 1941.

By next August the WPB said the average weight per plane is scheduled to rise to 10,000 lb. The report said that not only was August's airplane gain the best since May, but production would have climbed even higher but for the inevitable design changes.

Delays Not So Vital-It was regarded as significant that the report said our plane production has now reached a point where we can afford to take slight temporary losses in production in order to get a more effective model.

This is something of a departure from the time when the instructions were to get the planes out and get them out fast and in quantity, that being a dominating factor in production. However, since the combat efficiency of a plane can be determined only through actual fighting experience, design changes will always be necessary if we are to continue to refine and develop our warplanes to obtain ultimate in fighting efficiency.

Our production rate has now grown to the point where interruptions for design changes can be



HINT OF GIANT PLANES:

Tip off to long-range plans for the Materiel Command at Wright Field is this big Static Test Laboratory, now under construction. It will be able to accommodate aircraft with wing spans up to 250 ft. and with gross loaded weight of 150 tons. The building, of poured concrete with steel truss members, will be 130 ft. high, equivalent to nearly ten stories. It will be completed next June. The largest aircraft ever built or designed in this country, the Douglas B-19, has a wing span of 212 ft., understood to be longer than the span even of the new super-bombers of the AAF.

made without seriously threatening front. It is obvious that when the performance in battle indicates weaknesses in the design of an engine cowl, for example, or a control system, or reveals some flaw impairing maneuverability, it is far better to adjust the design and take a temporary loss in production than continue to produce planes with known defects.

Quality Improved-While equipment shortages and a difficult manpower situation, especially on the West Coast, continued to hamper production, we have obtained what is of paramount importance to the fighting forces—improved quality.

Production of combat models, which have been accorded highest preference ratings based on experience, almost doubled in volume in the past five months. These are the models which actual battle experience has demonstrated to be the types most urgently needed now by the Army and Navy.

August production of preferred models amounted to more than half the total, while production of these models last summer constituted approximately one fourth of the total airframe weight.

August Sets Record-During August, output of top preference models increased 4,500,000 lb., the largest monthly increase yet recorded. Moreover, production of each of the top preference models, including all

types of heavy bombers, increased during the month.

The WPB report said the "steep increases in airplane production this year have been stimulated in part by the efforts of the Army, Navy and War Production Board in cooperation with the airplane manufacturers and labor unions.

"These agencies strive continuously to increase the flow of resources to the airplane industry and to increase the efficiency of their use," the report added. "It should also be pointed out that during the past eight months there has been a 25 percent increase in labor productivity in the airplane industry."

While production gains have been sharp, it should not be overlooked that demand has increased even more as the result of the opening of new combat areas and the intensification of aerial warfare by the Allied Air Forces.

Convair Discontinues Modification Center

Fort Worth plant acts to devote all attention to bomber output.

Consolidated Vultee's Fort Worth Division, operators for a year of the nation's largest modification center for B-24 Liberator bombers, has announced discontinuance of the center in order to accelerate further its bomber and transport schedule.

George J. Newman, division manager, said Liberators produced at the Fort Worth plant would hereafter take on their camouflage and other "fighting extras" at Convair modification centers at Louisville, Ky., and Tucson, Ariz. The Tucson plant has been modifying San Diego Liberator production for some time, while the B-24 program at Louisville is just getting under way.

Exceeded High Schedule—"For the year, during which we have modified almost 1,000 Liberators, the Fort Worth plant has met or exceeded its modification schedule each month," Newman said. "However, due to an acceleration in our production schedule even more rapid than recent stiff quotas, we must discontinue modification work in order to devote our full attention to expanded production."

The Fort Worth plant also has met or exceeded its production schedules each month for the past twelve and the discontinuance of the modification center work is seen as another step in the production program, which is emphasizing output of big bombers.

PERSONNEL

Clarence K. Bros has been named system plant superintendent in charge of maintenance of all buildings, hangars, grounds and equipment at Northwest Airlines stations from Chicago to Seattle.

J. I. Hamilton, former administrative engineer of the Propeller Division of



Curtiss - Wright Caldwell, N. J., has been named assistant to R. Elmer Minton, manager of military programs for the division Hamilton joined Curtiss-Wright in 1938 at Buffalo and was trans-

ferred to the New Jersey propeller headquarters, where he held posts as assistant project engineer and project engineer. His new work will include coordinating Curtiss electric propeller output meeting warplane manufacturers' schedules.

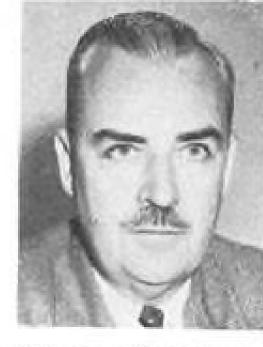
Frank A. Rudolph has been appointed eastern sales manager of Aircraft Ac-

cessories Corp., in charge of sales in Dayton and Washington of fices. As eastern regional manager. he has been in charge of the New York office and will maintain headquarters there. Before join-



ing Aircraft Accessories, Rudolph was with General Electric's radio, television and electronic division.

Adrien T. von Schmid has been appointed special field representative to the aircraft in-



22

dustry for Titeflex Metal Hose Co., which he joined in November, 1942. Previously he was with Wolf's Head Oil Refining Co., as marketing head of the New York division and in

charge of research and development for the aircraft industry. During the World War, von Schmid was stationed at Wilbur Wright Field.

A hearty farewell was given by Terrell C. Drinkwater (right), Continental Air Lines' executive vice-president, to Jess E. Hart, when he completed his last



run for the airline for the duration. Since joining CAL in 1934, he has flown 10,779 hours and 14 minutes. Hart has accepted a commission as major in the AAF.

John Splain, former New York Commissioner of Motor Vehicles, has been

appointed director of purchases for Hub Industries, Inc., Long Island City, producers of hydraulic aircraft equipment, according to Alec E. Ulmann, president. For 30 years Mr. Splain was actively associat-



ed with the automotive industry. Prior to his activities in the Bureau of Motor Vehicles, Splain was production, publishing, advertising and business counsel for Class Journal Co. publications, was general manager of the R.I.V. Co., ball bearing importers, and three years with Martin V. Kelly, advertising agency.

Justin A. Fitz, connected with Sperry Gyroscope Co. for the past 26 years. has been named advertising director, and will make his headquarters in Brooklyn. In connection with the company's marine overseas activities, Fitz was supervisor of the Navy gyrocompass test room for the Russian government in Leningrad in 1929.

United Air Lines has named three new air cargo department area managers, according to C. P. Graddick, department director. Burton C. Koenitzer (left), formerly with Firestone Tire and Rubber Co., Ampco Metal, Inc.,



and C. R. Daniels, Inc., all in Milwaukee, has become area manager in Philadelphia. Glenn W. Evers (center). recently with Firestone Tire and Rubber Co. in Dubuque, Iowa, has become United's area manager for northern Chicago to supplement the work being done by M. T. Brockman, United's area manager for southern Chicago. Clarence H. Bennett (right), formerly with United's air cargo department in Portland and prior to that with the National Carloading Co. there, has been appointed Oakland area manager to take over the duties in that city handled by Fred F. Dawson, San Francisco air cargo manager.

Capt. C. W. Weiblen, chief pilot of Pennsylvania-Central Airlines' west-

ern region, was honored recently in recognition of ten years with the company. He first joined PCA in Washington and was shortly transferred to Detroit. He was once an automobile racing driver.



Capt. Charles J. Maguire, USN, has reported for duty in the Lighter-than-Air Section.

Capt. Homer C. Wick, USN, has been recalled for duty in the Air Technical Analysis Division.

Edward G. Clark, Jr. of the Navy Dept., on leave of absence from Union Securities Corp., has been transferred from the Dodge Chicago plant to the Bureau of Yards & Docks at Joliet,

William L. Schrader, production assistant to vice-president R. G. Kellett, has been named

general factory manager of Kellett Aircraft Corp. He will continue also in his former capacity and will be responsible for production control, plant engineering, planning and tooling, meth-



ods and time study, and manufacturing. Before joining Kellett, Schrader was factory manager of P. R. Mallory & Co.

Major Stafford F. Robertson, Army Air Force contracting officer with Vega, has gone to Lockheed in the same capacity. Robertson who recently was promoted from a captaincy, was closely associated with aviation from 1926 until 1939, during part of which time he held a transport license. He is a lawyer and joined the Army three days before Pearl HarThe responsibilities of Comdr. Frank A. Leamy's position as chief of the



Aviation Section, Office of Operations, U. S. Coast Guard headquarters, have increased manyfold recently, especially since anti-submarine patrols replaced the sea rescue work formerly done by

Coast Guard aviators. Last summer the Navy announced the first patrol bomber squadron entirely manned by U. S. Coast Guard aviation personnel was in operation overseas. Comdr. Leamy, an active pilot and co-pilot of Vice-Adm. R. R. Waesche's plane is credited with doing most of the development in the new technical patrol work. He received his flying training at the Naval Air Station Training School in Hampton Roads, Va., and at the Naval Air Station in Pensacola, Fla. Among his decorations is the Distinguished Flying Cross.

Charles J. Hodge is new assistant director of industrial relations at Re-

public Aviation's Indiana division, Evansville. He has recently been personnel relations manager at Republic, was formerly regional director of the civilian personnel division in the office of the Secre-

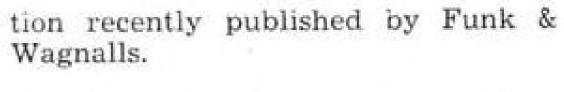


tary of War, and before that assistant personnel director for United Air Lines.

Joseph W. Frazer, president and general manager of Willys-Overland Motors, has announced his resignation, effective Sept. 30. During his management Willys developed the jeep and expanded its organization for the production of aircraft subassemblies, aluminum forgings, artillery shells, gun parts, etc. Before joining Willys, Frazer was vice-president and general sales manager of Chrysler Corp. and with General Motors and other automotive companies in executive capacities.

Henry Morton, for many years a labor relations executive with Henry J. Kaiser's enterprises, has been appointed vice-president in charge of labor and industrial relations of Brewster Aeronautical Corp.

Harry C. Karcher (left) and John Dolza, of the Allison Division, General Motors Corp., received the 1942 Manly Memorial Reward from the Society of Automotive Engineers, recognizing the excellence of a technical paper on Correlation of Ground and Altitude Performance of Oil Systems, of



Clay Brown has been named assistant to president Lawrence Ottinger of the U. S. Plywood Corp. An expert on aircraft woods, spar material and plywood, Brown was formerly vicepresident and manager of the plywood division of Smith Wood Products, general sales manager of the M. & M. Woodworking Co., and with the Long-Bell Lumber Co. His headquarters will be in New York.

N. F. Vanderlipp, for the past two years assisting in the manufacture of Curtiss (SB2C-1)

Helldiver divebombers in Canada under contracts held by Fairchild Aircraft, Ltd. of Quebec, has been named factory manager of the Columbus,



Ohio, plant of R. A. Merkle, for the past eight years Curtiss - Wright assistant district traffic manager in New York for Corp. Vanderlipp, a veteran produc-United Air Lines, tion expert, was employed by the has been appointed Standard Aircraft Co. in World War district traffic I as designer, building the J-1 trainer. manager of Colo-

Dolza

Karcher

Angeles last week.

nial Airlines in

the same city.

Previously he was

in the traffic de-

partment of the

New York Central

Railroad. He is

which they were co-authors. The

medal, first to be awarded since 1939,

was conferred at the SAE National

Aircraft & Production Meeting in Los

Aircraft Co., Fokker Aircraft Corp., Bellanca Aircraft Corp. and from 1923 to 1938, he was with Wright Aeronautical Corp., as an engineer. He succeeds C. W. Hunter, now on special assignment for the U.S. Army Air

He has since worked with Witteman

co-author of a book on air transporta-Forces.



MORE THAN A CENTURY OF EXPERIENCE:

These men, supervisory personnel of the Civil Aeronautics Administration Sixth Regional office at Santa Monica, Calif., total their experience at 116 years. Left to right, they are (standing) James E. Read, superintendent of safety regulation, 26 years; Art Johnson, superintendent of airways, 23; A. Harold Bromley, superintendent of war training, 22; George Hammond, administrative officer, 16; (seated) R. W. F. "Bob" Schmidt, superintendent of airports, 14: and H. Arthur Hook, regional manager, 15.

Jury of Advertising Men in Industrial Marketing Competition for Editorial Achievement votes:

| Iniple Recognition of AVIATION'S Editorial Leadership

W. S. Leech, Vice-President.



"For an outstanding article published during the twelve months ending July 31, 1943 in the Sixth Annual Competition conducted by INDUSTRIAL MARKETING."

"Design Analysis of the Bell Airacobra from Cannon to Tail" in the May, 1943 issue of Aviation was one of the most comprehensive articles ever published in a single issue of a trade publication. Editors of Aviation devoted months of intensive study and work in collaboration with Bell Aircraft engineers in the preparation of this veritable aircraft engineers' handbook. The thirty-page story contained 70 illustrations, including 42 three-dimensional perspective sketches treating each of the principal subassemblies of the P-39 in detail. 28,000 requested reprints were distributed and Aviation's editorial offices were swamped with letters of appreciation from aircraft executives.



"For a single issue of special purpose published during the twelve months ending July 31, 1943 in the Sixth Annual Competition conducted by IN-DUSTRIAL MARKETING."

The Tenth Annual Yearbook Number of Aviation met a greatly increased need for basic aeronautical working information. Within its covers was published a comprehensive exhibit of U.S. and foreign aircraft and engines, with specifications - directories of key personnel of aircraft, glider, and engine manufacturers, U.S. airlines, aviation schools and a list of some 2200 suppliers to the industry - plus an important and valuable section on aircraft recognition.

The important nature of the information in this issue was fully reviewed and approved for publication by U.S. military authorities.



"For improvement in format and appearance made during the twelve months ending July 31, 1943 in the Sixth Annual Competition conducted by INDUSTRIAL MARKET-ING."

The year's improvements in appearance and format recognized by Industrial Marketing judges, were but part of a long-range program of improvement in the presentation of Aviation's subject matter to its readers. Clarity and simplification for speed of reading become especially important in a magazine which has the executive readership of Aviation. To serve busy aeronautical executives, Aviation's editors and designers constantly strive to simplify and improve the visual presentation of its important working information. To readers and advertisers alike, this achieves a definite advantage in the use and value of the magazine.

ORITICAL JUDGES of magazine editorial value are the Seven men pictured above . . . the Jury in Industrial Marketing's Sixth Annual Competition for Editorial Achievement open to all business papers of U.S. and Canada.

Editorial substance is of paramount consideration in their daily work-for in the last analysis, it is the prime yardstick of the value of a magazine to its readers, and thus of course to its advertisers.

It is significant that with 290 entries competing for 19 awards, Aviation was selected for three separate Awards of Merit. (In the history of this competition only once before has a single magazine won three awards in the same year.) It is also significant that Aviation was the only aeronautical publication cited.

To present this kind of editorial material, Aviation's editors traveled in the last 12 months over 125,000 miles to uncover stories, go to their sources and dig them out. Aviation spares neither time, nor men, nor money to keep its editors in the places and on the projects where aeronautical progress is being made. To implement this editorial policy, Aviation maintains the largest full-time editorial staff of aeronautical specialists in the field-maintains editorial offices in seven key cities from Los Angeles to Long Island, with editors and correspondents located in strategic centers throughout the world.

As a result of this month-in-and-month-out high editorial standard and its value to Aviation's influential buying audience, advertisers invest more dollars in Aviation than in any other aeronautical magazine.

AVIATION NEWS . October 4, 1943



Companion magazine to **Aviation News and Air Transport**

McGRAW-HILL PUBLISHING CO., INC., 330 West 42d Street, New York 18, New York.



Branch Offices . BOSTON-1427 Statler Bldg. . PHILADELPHIA-16 S. Broad Street . CLEVELAND-1510 Hanna Bldg. . DETROIT-2-144 General Motors Bldg. * CHICAGO - 520 N. Michigan Ave. * ST. LOUIS - Continental Bldg. * ATLANTA - 1011 Rhodes-Haverty Bldg. * LOS ANGELES - 601 W. Fifth St. . SAN FRANCISCO - 68 Post Street

TRANSPORT

Airlines Facing Uncertainties Before Big Expansion Era Opens

Investors' income returns will be smaller, government contracts sliced. U.S. policies on routes and rates are big questions.

By BLAINE STUBBLEFIELD

Though air transport enjoys the prospect of great expansion, extensive employment and important service, it never before has faced such uncertainty and so many hard knots to untie.

Returns to investors will be smaller than they have been. Some important military transport contracts have been negotiated downward and the lower rates were made retroactive to Jan. 1 last. Adjustments on this account are beginning to show up in monthly revenue statements. Four Big Cuts—Revision of military contract rates is the fourth cut into airline receipts this year. First was the .3 mil pound-mile mail rate applied to perhaps 90 percent of the system load last December and January. Next came the approximately 8 percent cut in passenger rates in response to the Civil Aeronautics Board's call for a 10 percent reduction. Simultaneously came the 11 percent slice into air express revenue.

Taxes nick huge wedges out of the airmen's pie. Top assessment in normal and surtaxes is 40 percent but excess profits taxes come on top of that. Until net profit from all operations exceeds air mail revenue, there is no excess profits.

Staking Claims—The big cloud on the air investor's horizon is the oncoming era of expansion which will call for more years of plowing revenue back in. Established operators must scramble for every possible mainline and jerkwater in sight, whether they want to or not, to keep the other fellow from staking out everything, and to meet the public expectation of all mail overnight with parcels and rides to every crossroad.

The oversea and foreign pattern is pretty much the same thing, farther removed, and on a bigger scale, complicated by international politics instead of our own home-made stuff.

▶ Big Investments Ahead—All of this will cost money for a long time to come. The amount depends upon (1) how much the government will furnish in the form of rates, and (2) to what extent Washington will restrain the ship, rail, and bus line people who are intervening for a cut-in or for protection against the newer, faster, and just-possibly cheaper medium.

There is no doubt that the government, under pressure if for no other reason, will try to equalize all four forms of transportation. Just as certainly, the government will not the war; and now whatever you see view the airlines as an investor's opportunity for large profits. There is no reason to think, however, that aviation will not get at least as much liberty to earn as the maritime and interstate commerce agencies have allowed in the past.

Lines Aid War Effort-Management is looking 360 directions at once to see what's coming to the airlines. The war brought some good aircraft utilization, in brought good enough earnings so far, brought an opportunity for the domestic system to go abroad, and a chance to be the nucleus of military air transport and of military air navigation. That nucleus thing was a sock on the enemy's chin, only partly appreciated by the country

Most disconcerting is the long wait for a revised civil air law at home, for establishment of a foreign policy on oversea operations, and for the return of those borrowed airplanes—or something better. All three should come along this winter or sooner.

Took Hard Knocks-There is no industry better qualified to endure uncertainty and waiting. It pulled out its pioneering period right into the quick-change regulations of the late 1920's; took on the air mail contract cancellation; staggered up from the mat and went into its mountaincrashing days; immediately came a long dizzy spell ending finally in the civil aeronautics law of 1938; then in your crystal ball.

▶ Watch Hemisphere Applications— If aviation is taking a big part in making the future, you can also read the signs of the times in aviation. The other day CAB tabled the "seaboard" consolidation of airline ap-



PAN AMERICAN CARRIES SOLDIER LETTERS:

An estimated 112,000 letters for fighting men across the ocean are contained in this 3,500-pound mail cargo about to be loaded on a transatlantic Pan American Airways Clipper at LaGuardia Field, New York City.

AVIATION NEWS • October 4, 1943

plications, because it included one (Colonial for a line to Nassau, Bahamas) which was judged to come under the head of "foreign" business. CAB is not acting on any transocean cases. But, with the President's approval, the board invited applications for routes to the Caribbean, Mexico and South America. This means that Western Hemisphere aviation is not regarded as subject to outside negotiations.

Approval of United's Purchase Of Mexican Line Sets Precedent

Board's opinion, first to permit U. S. carrier to acquire foreign operator, opens up new possibilities for international expansion.

By MERLIN MICKEL

Approval by the Civil Aeronautics Board of United Air Lines' acquisition of control of Lamsa of Mexico may open the door to separate foreign operations by domestic companies.

The opinion by the board last week marked the first time it has approved acquisition of a foreign company by a domestic operatorthe first time it has been called upon to decide this exact question. The action suggested the interesting possibility that some lines, ambitious for overseas international routes, if they are unsuccessful in realizing those ambitions, may turn to control in foreign fields as an alternative.

• Officials Agree—Even in official circles it was admitted that the decision no doubt will cause other domestic operators, whatever their immediate plans, to cast a speculative eye over the foreign picture.

United applied for approval of purchase of 3,750 of the 5,000 shares of capital stock of Lineas Aereas Minereas, S. A. (Lamsa) of Mexico, for \$145,750 from Gordon S. Barry, a native Californian, who organized Lamsa in 1934 and has been its chief executive officer.

Price Reduced-The original purchase price was \$150,000, but was reduced because of "certain adjustments."

United, which does not go into Mexico, has stated that it would spend about \$1,000,000 for Lamsa's development if its application was granted. The money was earmarked for more modern equipment, improved airports, meteorological service and radio facilities. Another like amount, it said, might be spent to acquire properties, airports, radio ranges and other new equipment, although there was no immediate need or plan for these additional expenditures.

May Seek Link-W. A. Patterson, United's president, said during hearings that in the future United might apply for a route connecting its domestic operations with those of Lamsa, probably at Nogales, but that this was not a consideration in the transaction.

Lamsa carries persons, property and mail on Mexico .City-Ciudad Juarez, Mazatlan-Terreon, and Mazatlan-Tayoltita routes, and persons and property on a Chihuahua-Nogales route, a total of 1,675 route miles, giving direct air service to twelve cities.

pointed out that United is an air carrier within the meaning of the Civil Aeronautics Act, while Lamsa, being a corporation organized under the laws of Mexico, is not a citizen of the United States and therefore not an air carrier under terms of the Act. Therefore CAB decided it had jurisdiction. It also found that the proposed purchase by United of 75 percent of Lamsa's stock was prohibited by the act unless approved by the board.

United's control of Lamsa, the CAB decided, will not be inconsistent with the public interest, provided certain terms in the order be complied with. These were that the approval will cease to be effective if Lamsa extends operations beyond the borders of Mexico, unless with board consent, and that United submit semi-annual financial and operations reports on the Mexican line in prescribed form.

▶ Comment on Price—The board also found that the purchase price, of which \$32,000 was for physical assets (Lamsa operates Lockheed Vega single-engine planes) and \$113,750 for Lamsa's franchises and good will, was "not disproportionate."

None of United's flying equipment, the record showed, will be transferred to Lamsa, at least in the spend \$15,000,000, Chicago \$30,000,immediate future. Supervisory officials will be the only personnel who



RADIO CONTROL BUOY:

Civil Aeronautics Administration engineers have developed a new radio control for lights on these black and yellow buoys, used to mark seadrome landing "lanes." Thus a shore attendant, with a flick of a switch, can turn on the offshore lights that guide a seaplane pilot to the landing channel. Installation of the new control equipment just started.

may be made available, and "pre-▶ Jurisdiction Ruled — The board sumably (they) could be recalled to the United States on short notice."

L. A. Airport Plan

Commission proposes expansion to keep abreast of other cities.

Reaction of Los Angeles civic leaders to plans for a five-phase expansion of Los Angeles airport to 1,897 acres with eight major runways and 20 hangars was sought Sept. 29 by the Los Angeles Airport Commission.

The city's airport today is a 640acre field with the longest runway, 5,100 ft. Contracting major airlines are unable to move in, because of lack of facilities.

Woodruff DeSilva, airport director, and M. Tommy Tucker, engineer, are parents of the five-step plan as one that will spread the cost of total development over the extended period of post-war growth.

No price tags were pinned on the expansion maps, but the civic leaders were told they must "think big" to have their city on the route maps of global aviation. New York's La-Guardia and Idlewild fields will represent a total airport investment of \$62,000,000, expansion advocates pointed out, while Detroit plans to 000, and Kansas City, St. Louis and San Francisco \$10,000,000 each.

All American Lists Short-Haul Profits

Country's only pickup operator nets \$27,689 for year.

The country's only air pickup operator, All American Aviation, Inc., having a net profit of \$27,689 for the year ended June 30, finds its financial position "materially improved" and is looking ahead to retention of "a pre-eminent position in the development of short-haul service."

Profit in the 1943 fiscal year compared with \$22,407 net loss in the previous 12 months.

The company's financial report was issued about the same time the Civil Aeronautics Board began its investigation of local, feeder and pickup services.

New Areas Studied-Halsey R. Bazley, president, said the success of All American's operations had shown the need for expanded service. Plans for development of such service in new areas and possible use of new types of aircraft, such as helicopters, gliders and other new equipment are being considered, Bazley added.

The company reported that its Manufacturing Division concentrated on equipment for military use, but "widespread interest" in pickup equipment and other special aviation products indicated a "worthwhile post-war market" for company products. All American, which serves a fourth of the nation's individual airline points, planned on assisting the CAB in the latter's investigation "because of our practical experience in the field."

▶ Operating Rate High—Bazley said traffic had increased, and a "very high operating percentage" was maintained without injury to per-



NEW TIRE CHANGER:

American Airlines' Luther Mead has devised what the company terms a revolutionary device that reduces the task of changing the 580-lb. tires on transport planes from a job performed by six men working three 8-hr. shifts to a system enabling two men to change both the giant tires in 1 hr.

sonnel or serious damage to cargo or equipment. The company's commercial air transport division completed 943,627 revenue miles or 90.8 percent of its scheduled mileage during the fiscal year, made 58,640 pickups and deliveries and carried 394,369 pounds of mail and 122,185 pounds of air express, compared with 231,026 and 60,626, respectively, the previous year.

On June 30, the report showed, All American had an earned surplus balance of \$11,409. The company has obtained \$655,450 in additional

capital since that time through sale of 26,218 shares of preferred stock. Files for New Routes—It has filed applications to add 1,362 miles to its present route mileage of 1,386, and notice of intention to apply for a route in the New England-Middle Atlantic area covering about 2,252 miles.

Bazley reported the company serves 117 communities in Pennsylvania, Ohio, West Virginia, Kentucky, New York and Delaware, representing a third of the nation's airline points. CAB records show 364 individual airline points, and 91 of these served by All American. Some of these, however, also provide service for nearby cities.

Douglas Backs Airlines On Free Competition

Wires Solomon in support of policy for reasonable regulation.

Donald W. Douglas, president of Douglas Aircraft Co., and world's largest transport manufacturer, has come out in favor of the declaration of policy by 16 domestic airlines advocating free competition in postwar international aviation.

Favors Regulation—In a telegram to S. J. Solomon, chairman of the Airlines Committee on United States Air Policy, Douglas expressed the belief that "the basic policy involving free competition under reasonable governmental regulation will be necessary to insure the development of a sound and efficient post-



JOIN WAR BOND DRIVE:

American Airlines' flagships are helping advertise the need for War Bond purchases with a slogan painted on the tail of each ship. Will tails become aerial billboards after the war?

war foreign airline system.

"I pledge my active support," he told Solomon, "to the over-all effort now being put forth to assure American supremacy in international airline operation through the American principle of competition."

CAB Studies Signs On Airliner Exits

Auxiliary doors on transports may be marked by new lights.

Chicago and Southern Air Lines announces that it will mark auxiliary exits on its planes more conspicuously, with illuminated signs, and make further effort to tell passengers how to use them in event of emergency.

▶ Flashers—Electric signs will flash over the doors at each takeoff and landing, and during rough weather. Flight kits in seat pockets will contain pamphlets on their use.

New Idea—The action is being taken, the airline said, at the suggestion of a recent editorial in a Memphis newspaper, pointing out that passengers are not aware of the auxiliary exits and are unfamiliar with their operation.

> Emphasis on Exits—The fact is that this matter has been under study for some time in official quarters, and there is a strong possibility that safety regulations may be promulgated by the Civil Aeronautics Board to draw more attention to the safety exits.

▶ Rules Prescribed—Regulations now require that for every five to 15 passengers in a plane there be an emergency exit opposite the regular entrance door. Above 15, there must be such an exit for every additional seven passengers or fraction thereof, not to include four doors, including the main one. Because the pilot's compartment is separate from the passenger cabin, exit thereby is not considered, although the pilot has his own entrance to the plane.

Markings—Thus the usual Douglas passenger transport has three emergency exits in addition to the main door. These, however, are small—usually below a window and are marked unobtrusively by a small sign and an arrow or other device. There is no regulation as to marking, but suggestions recently have been made that larger signs might call attention to them, or they might be painted with a contrasting color.

Special lights are looked upon with disfavor by some, who say that failure of the plane's electrical sys-

tem, which might occur in a mishap, obviously would put the lights out of action.

Automatic Safety-Most safety doors have a small catch at the bottom, and the suggestion has been made that this might be eliminated and a mechanism installed so a flick of a single latch would open them

Those studying the problem feel that one of the most effective measures that can be taken is education of the public, either by pamphlet as Chicago and Southern propose, or by instruction on the plane.

PAA Owns 20% Stock Of Guatemala Line

CAB rules U.S. company does not control Latin American link.

Civil Aeronautics Board has accepted its examiner's recommendations and found that Pan American Airways does not control Aerovias de Guatemala, S. A.

The board found that changes in relationship between the two have effectively eliminated "means and methods by which Pan American might or could control Aerovias." The wording in many parts of the opinion was that used by J. Francis Reilly, now assistant to Chairman L. Welch Pogue, in his supplemental report as examiner last July.

▶ Holdings Reduced—An earlier report in April, 1942, recommended the board find that Pan American had acquired control of the Guatemalan line, and that the acquisition be approved. Pan American, taking exception, then asked that the record be reopened with respect to sale of 150 of Pan American's 300 shares of Aerovias' authorized stock to Alfred E. Denby, president, manager and director and owner of 300 shares (40 percent) of Aerovias' stock. This left Pan American owning 20 percent of Aerovias' authorized stock.

Further hearing was held, and Reilly's supplemental report concluded that "the mere ownership of 20 percent" of the stock does not enable Pan American to control Aerovias. The board so found, and dismissed Pan American's application for approval of acquisition of control, if it be found to exist. The opinion stated that Pan American had controlled Aerovias, however, from formation of the latter in August, 1940, until approximately April, 1942.

Another similar case awaits board action. Reilly has recommended

that the board find Pan American has acquired control of Aeronaves de Mexico, S. A., and hold public hearings to determine whether the acquisition satisfies requirements of the Civil Aeronautics Act.

Matson Navigation Co. Asks Pacific Air Routes

Files application with CAB for West Coast-Honolulu service.

Matson Navigation Co. announces it is filing application with the Civil Aeronautics Board for four air transport services over its steamship routes between Honolulu and Seattle, Portland, San Francisco and Los Angeles.

William P. Roth, president, described the proposal as a departure from the question of ownership or operation of "air companies" by other modes of transportation, and said no limitation was suggested by Matson "on issuance of certificates to strictly air carriers or to other common carriers which the CAB might feel also to be in the public interest." Integrated Operation—An "integrated transport operation employing aircraft," he said, would be a "progressive development." Matson, who has been expected for some

Experienced Manufacturer of Aircraft Parts and Assemblies

OFFERS ADDITIONAL FACILITIES

for production of other precision parts and assemblies



Although we are now busy producing vital precision parts and assemblies for aircraft - tanks - and guns, we have available additional production facilities for the manufacture of other precision parts or assemblies.

Immediate Engineering Service on Process Engineering, Manufacturing Methods, Tool, Die, Fixture and Machine Designing, Designing and Build-

Consult us NOW. Write - Wireor Phone for interview.

HENRY COOK

21526 Houver Road - P. O. Box 95 Harper Sta. DETROIT, MICHIGAN

- ★ COOK ENGINEERING CO. ★
 ★ SQUARE TOOL DIE & MFG. CO. ★
- * AMERICAN TOOL & MFG. CO. *

"Air Service for Every Town"

Consolidated Vultee Aircraft Corp., war "everybody will discover that and Republic Steel Corp., sees air- mass production has accomplished mail pickup service for every mu- an even more dramatic lowering nicipality in the United States, of prices for aircraft." after the war.

Girdler scoffs, however, at the idea that the airplane will make the railroads obsolete. He describes suggestions that bulk freight may be transported by air, even in glider trains, as "sheer nonsense."

Feeder and mail lines will grow, he says, pointing out that "we contribution to the post-war econhave created an astonishing num- omy," he writes in his new autober of new airports and this devel-

Tom M. Girdler, chairman of opment will go on." And after the

Collapse menaces the aviation industry after the war, however, Girdler finds. "It had no fat when the war began and it is being prevented from accumulating any fat. If it were permitted the means to bridge the post-war conversion, obviously it could make a tremendous biography, "Boot Straps."



LARGEST MODIFICATION CENTER FOR B-17'S:

Continental Air Lines will start operation of a 90-acre, \$5,000,000 heavy bomber modification center at Denver Oct. 1. Functioning under Army Air Forces contract, the center is described by CAL as the largest in the country for B-17 Flying Fortresses. The hangars are 600 ft. long and 400 wide. At capacity, the center is expected to employ 3,000 persons, 70 percent women. Construction started in May.

time to file such an application, was said to receive no government aid or subsidy in any form as a steamship company and "it does not ask for subsidy in operation of air transport equipment."

Roth said many foreign steamship companies, among them Cunard White Star, Bank, Peninsular and Oriental lines, had "announced their intention" to use aircraft in international trade after the war, in conjunction with the steamship services, and "Matson cannot lag behind."

Air Service Changes

Airline service changes reported to Civil Aeronautics Board include Braniff Airways' suspension of service to Fort Worth.

Probably effective until November or after, the suspension was necessitated by airport construction work. American Airlines and Delta Air also serve Fort Worth.

Lines resumed service on Route 5 between Houston and San Antonio, Oct. 1, after new facilities became available. Braniff's route 50 between those points remains suspended due to lack of equipment.

Oct. 1 also saw the opening of TWA's recently authorized service to Phoenix, Ariz., on Route 2.

CAA Asks Mechanic Certificate Plan

Circulates request for recommendations to modernize system.

Civil Aeronautics Administration wants a modernized version of Section 24 of the Civil Air Regulations on certification of aircraft and engine mechanics, but first it desires comment from the aviation industry on a proposed redraft prepared in

preparation for a post-war influx of mechanics.

The suggested rewrite by Fred M. Lanter, Director of Safety Regulation for the CAA, was circulated late last year, but comment was scattered, and the agency is renewing its request for criticism.

License—Mechanics still carry the same kind of license they had in 1927 to repair the equipment flown in those days, and the CAA feels that the time has come to change the basis for certification, without waiting until after the war. Pilot certificates have been revised as airplanes become more complex.

Experience—Now, it is said, the complexity of aircraft is so great that it is impossible to certify a mechanic's competency through the whole range unless he has had many



Fred M. Lanter, the director of Safety Regulation for Civil Aeronautics Administration, who has revised aircraft and engine mechanic regulations and is circularizing the industry for comment.

years of experience with various types. Furthermore, it is unreasonable to require such experience before a certificate can be granted to permit work on types on which he has adequate background. Beginners and specialists deserve several narrower fields in which to qualify, CAA says. Aircraft have increased in number and so has the variety of mechanics' jobs.

Lanter predicts there will come a time when CAA inspectors will find it physically impossible to check all major repair jobs, and the proposed change would decentralize the authority for such inspection to aid the plane owner.

ter says, "that with the expansion of the industry in the post-war period it cannot have, nor does it desire to have, the number of inspectors necessary to carry on the actual physical inspection of all repairs. Proper certification of mechanics in the categories in which they are especially skilled will result in great convenience to the owners of aircraft, and obviate the delays often encountered heretofore owing to lack of government-employed inspectors or their unavailability."

The proposed breakdown on mechanics' certificates would put them in three categories—Aircraft Technicians, Aircraft Engine Technicians, and Specialist Technicians—some with multiple ratings.

The CAA reports that a majority of the older mechanics will benefit by the extension of privileges and be given all ratings for which experience fits them.

"The CAA is not so much concerned," it was stated, "over the problem of rating these men as it is over the new mechanics who are certain to apply for certificates after the war. The nature of war training will produce men well trained in a limited field, and the CAA believes this skill should be recognized."

UAL Lists ATC Jobs

Denver unit provides intensified course in flight and ground work.

A new review by United Air Lines of its contract training activities shows what one of the nation's airlines is doing to instruct flight and ground personnel for the Army Air Transport Command.

United's ATC pilot training is done at Denver, where Capt. George I. Myers is in charge of the center. The captain, an early pilot in the air mail service, has been supervising flight training for United since 1929.

▶ Two Phases—The Denver ATC transition pilot training program has two phases. Students spend a month in ground and flight instruction there, then another month as copilots and observers on ATC domestic cargo routes for practical instruction in transport operation under UAL contract pilots.

Classrooms and Link trainer rooms in a downtown office building are augmented by flight training facilities at Denver municipal airport. Eight ground school instructors, 18 Link operators and 28 flight operators are on the training staff.

Training for Mechanics—Mechanics' training is given at New York, Chicago, Denver, San Francisco and Seattle. All graduates of Army technical schools, these mechanics receive supervision by full-time company personnel, on the job, to equip them to become crew chiefs, flight engineers and line mechanics on ATC routes. The enrollment period is three months.

UAL pictures its Denver center as an outgrowth of a specialized training school for its own new pilots, established at Tracy, Calif., in 1940. The school moved to Cheyenne in 1942 and thence to Denver early this year.

United describes it as "the first move of its kind taken by any airline toward controlled airline instructions of future co-pilots by veteran personnel."

Midwest Air Terminal

Oklahoma City starts \$25,000,000 passenger and freight station, with seaplane base.

A \$25,000,000 air freight and passenger terminal at Oklahoma City is already under way, according to Mayor R. E. Hefner, in announcing plans for this program last week. "While others have been talking... we already own more than half of the land for the terminal. We have ample cash on hand and have reason to believe that the airlines and industry are wholeheartedly behind the program."

Features—Plans call for a terminal covering 6 sq. mi. within 9 mi. of the city's business district, and a seaplane base on a 2,500 acre lake near by. Other features outlined by the Austin Co., aircraft plant and airport designers, call for two 11,000 ft. runways, 500 ft. wide, to serve glider tow-trains and planes carrying up to 400 passengers or 160,000 lb. of freight; four runways for commercial planes; a civilian flying field; a helicopter base; a passenger ter-

minal with 100-room hotel; and hangars. Railroads and truck lines will enter the terminal on a level below the apron. Motor cars will have direct access to the passenger terminal through traffic arteries.

NAA To Map Policies InOklahomaCityTalks

Program for U. S. as well as private interests to be considered.

National Aeronautic Association's national aviation conference, Nov. 11-13, at Oklahoma City, will seek clarification of policies of the government and private interests in aviation, including private flying, the domestic airlines and aircraft production.

Gill Robb Wilson, president of NAA, said "the conference was being held for the benefit of the industry as a whole and the various related groups."

"The conference will include the directing individuals in the manufacturing, operating and servicing organizations of the industry, and the national, state and municipal officers carrying responsibilities in this connection," Wilson said.

Gives Scholarships

United Air Lines has announced the granting to 22 colleges and universities throughout the country of scholarships to enable teachers of aviation subjects to conduct aviation research or follow special aviation education courses.



SUPER TOWER:

Dayton Municipal Airport's double-deck, CAA-operated control tower, just completed, is believed to be one of the largest in the country, 28 ft. by 28 ft. It adjoins four hangars used by the Accelerated Service Test Branch of Wright Field.

SHORTLINES

American Airlines continues to report gains in express and mail. Of the former, 2,043,958 lb. were carried during August, 67.3 percent over August a year ago. The figures on mail were 2,484,601 lb., a 92.1 percent increase. Average payload of 4,688 lb. per airplane mile in August was 13.8 percent above August 1942. Load factor was 92.6 percent.

b Braniff hit a new high in passenger traffic during August. Revenue passenger miles were 6,673,508, compared with 3,855,174 in the same month last year. Number of passengers went up 54 percent, from 10,968 in August, 1942, to 16,891. Braniff said its 78,-773,995 express pound miles in August this year was a 227 percent increase, or more than three times last year's figure for August. Mail was well up, pound miles being 201,532,-107, compared with 78,639,000. Poundage was up 138 percent to 515,686.

Pennsylvania-Central has opened reservations offices in the Field building in Chicago.

▶ Braniff announces cash purchase of \$4,500,000 in War Bonds, divided among the 21 communities it serves in Texas, Oklahoma, Missouri, Kansas, Iowa, Illinois and Colorado. The money came from the line's recent financing program, in which 400,000 additional shares of capital stock were sold in anticipation of post-war equipment needs.

Railway Express Agency's air express cargo handled in May by the nation's commercial airlines was 44.1 percent above May, 1942. Gross revenue increased 32.1 percent in the same comparison. Shipments last May numbered 118,699, carrying 2,344,861 lb. compared with 1,626,202 lb. in May a year ago.

Pan American Airways has been unable to obtain equipment to rebuild its motor overhaul shop at Brownsville, Tex., destroyed by fire last November. The Civil Aeronautics Board disclosed that Pan American does not control Aerovias de Guatemala, S. A. The board learned that Aerovias' motor overhaul is done at Curtiss-Wright Service Station, Caldwell, N. J.

▶ The Canadian government has earmarked \$560,000 to open two new services by publicly owned Trans-Canada Air Lines, the first from Montreal via Blissville and Halifax to Sydney, N. S., and the second from Winnipeg via Saskatoon to Edmonton. The eastern service will operate in addition to the present service from Montreal via Moncton to Halifax. The western service will cost about \$360,000 to put into operation, and is part of the TCA inter-city improvement service to give direct service to the important supply base of Exmonton, in addition to the present service via Regina, Lethbridge and Calgary.

FINANCIAL

Wide Divergence Continuing In Airline and Plane Price Trends

Financial commentator points out that aircraft industry leads "war" group, while air carriers are in "peace" category.

By ROGER WILCO

The wide divergence in the price trends of aircraft and air transport stocks continues to attract consid-Interestingly attention. erable enough, the aircraft industry has come to represent the leading "war" group in the market and the air carriers have advanced as the leading candidate in the "peace" category. Aircraft Preferred—Shortly prior to the outbreak of war, investment circles showed a decided preference for aircraft shares. When the United States became an active belligerent, however, the prices of these cline and have never been the same since. Airline prices, while very nervous at the time of our entry into the war—on fears that the industry would be nationalized—recovered sharply and started a long upward trend.

These trends are highlighted by the accompanying tables. It can be seen that from the time of the European war to pre-Pearl Harbor day, there was very little change in the over-all course of both groups. However, since Sept. 5, 1939, and up to a recent date—Sept. 25, 1943—the aircrafts declined on an average of about 25 percent while the air transports gained an average of 144 per-

Airlines Kept Entity—During this period it was found that taxes and other concomitants of a war economy did not permit the aircraft industry to realize the enormous profits previously anticipated. The airlines, instead of going out of business as individual entities, retained their independence and prospered as never before.

The major reason for the price disparities of the two aviation groups, however, is in the prospects of the future. The basic reasoning appears to maintain that once the war is over, the airlines will be able to obtain adequate equipment, facilities and personnel to launch a tremendous expansion program. On

the other hand, the aircraft builders are expected—according to this reasoning—to experience a sharp curtailment in production.

ber of fallacies present in this type of curb-stone analysis. In fact, it is no analysis whatsoever, but superfi-

At the present time, the price level of aircraft shares is lower than at the time when war started, yet the most pessimistic observer must agree that the aircraft industry will do more business in the post-war shares started on a downward de- period than prior to September, 1939. A modern, well-equipped air force most certainly can be expected as part of an American program. And further, if the airlines are going to have this tremendous expansion—as the market seems to think—the aircraft industry will be favored with a good deal of busi-

Growth with Uncertainty—As has been noted in this space before, while the air carriers will unquesgrowth and characteristics, the industry has no assurance of sustained profitable operations and will not be without many problems and complications.

There is also a fundamental fallacy that peace is bad for business.

Fallacies Cited—There are a numcial guesswork.

tionably experience important

Price Trends of Representative Aviation Stocks Eng- Pre- Current %

	at war Sept. 5, 1939	Harbor day,		Change Sept. 5, 1939, to Sept. 25, 1943
Aircrafts				
Curtiss-Wright		8 70	7	none
Douglas Lockheed	27	28	60 17	
United	39	34	32	
AVERAGE .			******	25
Air Transports				
American		33	64	
Eastern		32	36	
United		13	3 mm 1 mm	+170
Pan American AVERAGE		18	34	$^{+208}_{\dots +144}$
NOTE:-All fr	actions	eilmina	ted.	

Peace is constructive for all industry and in broad terms is harmful to no single group. As the war continues, more regimentation, greater restraints and higher taxes are piled on the nation's industrial machine. With the conclusion of hostilities, the prospects for free enterprise are greatly strengthened. Further, the possibilities favor less onerous taxation and hence better opportunities for profitable operation. In a world that needs to be reconstructed and rebuilt, it is difficult to see how a great industrial mechanism such as the aircraft manufacturing group will want for lack of activity.

▶ Too Much Selling?—In viewing all of these factors, many market observers are taking heart in the belief that the selling of the aircraft shares may have been overcome just as much as the buying of airline securities may have over-anticipated near-term possibilities.

Aviation Corp. Sales Up 100% for 9 Months

Reports \$57,234,555 against \$29,-635,211; net 49c a share.

Aviation Corp.'s consolidated net sales of aircraft engines, propellers, precision parts and other war materials amounted to \$57,234,555 for the nine months ended Aug. 31, almost doubling the \$29,635,211 figure for the same period last year.

Victor Emanuel, president, said net income before federal taxes amounted to \$9,727,486 compared with \$8,371,716 for the 1942 period. Consolidated net income after all charges and taxes was \$2,810,486, or 49 cents a share, against \$3,671,716 or 64 cents a share for the nine months period last year.

Tax 21/2 Times Net Income—The federal tax provision, he reported, was \$6,917,000, or \$1.19 a share, almost two and one half times net earnings. Taxes for the same period a year ago were \$4,700,000, or 81 cents a share.

"Despite voluntary reduction in contract prices to the government," said Emanuel, "earnings from manufacturing operations alone showed some improvement."

Investment Income Off—"In addition to the larger tax provision," he added, "other factors contributing to lowered net earnings included a decrease of \$96,166 in dividend income from investments; non-recurrence of profit on sale of securities during the past nine months as compared with \$1,318,308 from that source last year; also income deduc-

tion for the current period as a provision for post-war readjustment amounting to \$855,000, compared with \$495,000 for the period ended a year ago."

Aviation Corporation's consolidated earnings, which for 1942 and 1943 are subject to change from contract negotiation, do not include its equity in the earnings of subsidiaries not consolidated, New York Shipbuilding Corp. and American Central Manufacturing Corp. or of other companies in which it has investments, Consolidated Vultee Aircraft Corp., American Airlines, Inc., Pan American Airways and Roosevelt Field, Inc.

Curtiss Renegotiation

Conclusion of a renegotiation agreement between the government and Curtiss-Wright Corp. for 1942, disclosed that the settlement was the same as indicated in the preliminary report made by Curtiss-Wright Aug. 16. which showed that voluntary price reductions plus renegotiation would result in a saving to the government of \$175,139,379.

West Coast Labor Plan Studied for Other Areas

Program for manpower utilization to be adapted to critical sections.

General application of the West Coast Manpower Plan to all labor shortage areas is being planned by the War Manpower Commission.

Better utilization of available manpower is now the primary aim of getting the necessary workers for aircraft and other war plants, according to Lawrence A. Appley, executive director of the WMC, who says the manufacturers must give the same "careful planning and consideration to the human elements in their plants as they do the production elements."

Most aircraft executives contend that they are doing exactly that, but Jack Skelly, assistant director of the WMC's bureau of utilization, estimated that if full utilization of manpower could be obtained, war production would be increased by 25 percent.

Conferences Held — Several conferences held during the past few days have given a clearer outline of the War Manpower Commission's policies including certain phases of the problem of vital interest to management.

Skelly and other WMC officials

feel that many employers think their job is production and the government's job is to supply workers and community facilities. WMC officials feel that management must accept a responsibility on both scores. WMC contends further that the relative inefficiency of some war plants is not so much a result of deliberate labor hoarding, but is a result rather of lack of knowledge on the part of the employer as to how to use the manpower he has.

WMC suggests that if large numbers of workers are sent to a plant and a number almost as large quit because of poor working conditions, there is no reason to continue to refer workers to the plant until the circumstances causing the turnover have been corrected.

Consultants Tackle Problem—The WMC now has 135 consultants in the field and ten in Washington to help employers get better utilization from their working force.

Management has pointed out that working conditions are only one reason for labor turnover and that many other factors enter into the turnover problem—crux of the manpower situation particularly in the West Coast aircraft plants.

Committees to improve utilization of manpower in the West Coast area, as part of the West Coast manpower program, will be set up within a month, and the procedure will be followed soon in all other labor shortage areas.

Revised for Other Areas - The West Coast plan will be adapted and modified to meet the particular circumstances of each shortage area.

1944 Program

The government's official airplane objective in 1944 is said by informed sources to be 115,-000 units, although schedules are presently being made on a 10,-000-a-month basis.

Average unit weight next year will be about one-third more than that of this year. The trainer program, these sources say, will be replacements only, and the spotter plane program will be greatly curtailed. If we move into the Pacific in the near future, spotters might be cut out entirely.

This year's production of approximately 85,000 planes will cost about \$12,000,000,000. The 1944 program sets the estimate at proportionately more by number, plus one-third approximately for additional weight.

Meanwhile, what started out in Congress to be a discussion of the advisability of drafting fathers, turned into a full-blown debate on the entire manpower situation, with the drafting of fathers only one of many elements involved.

Some officials hold that it is a question of drafting fathers or drafting key men in industry and it seems fairly well established in official circles now that fathers will be drafted unless they are involved in the production of aircraft or other critical war equipment.

Short Shifts for Women - The adoption of a much wider scale of part-time or split shift for women workers, already being undertaken in some aircraft plants with satisfactory results, is recommended by the WMC's Women's Advisory Com-

The committee emphasized that careful selection and placement of part-time workers is essential to their effective utilization and that the success of the program depends on acceptance by the employer; (2) on the cooperation and acceptance by full-time employees and (3) on the satisfaction that the part-time worker takes in contributing to the war effort.

Bendix Plants Boost Magnesium Output

Last month's record of four foundries more than in all of 1939.

Four New Jersey foundries of Bendix Aviation Corp. last month produced more magnesium castings for the aircraft industry than their entire 1939 output.

Anthony Cristello, foundry manager of the corporation's Eclipse-Pioneer Division, said monthly production in New Jersey alone now averages nearly 400,000 lbs. and that increased facilities to be available shortly, will boost this total to more than 8,500,000 lbs. annually.

Cristello said a single day's production now exceeds the total yearly output for 1931.

New Border Port

Work has been started on a new international commercial airport at Fort William, Ont., at the head of the Great Lakes. The new 300-acre airport is being constructed by the Department of Transport, Ottawa, and will be equipped for customs and immigration clearance.

Letting the People Know

A VIATION NEWS in its third week of existence appeared with an editorial which has resulted in formal approval by OWI of a report on the airlines' war contracts.

Ever since Pearl Harbor, the Air Transport Industry has been subjected to an unreasonable censorship by the Air Transport Command under the excuse of military secrecy. Many details must remain secret, of course, but even publication of the broad outlines of the industry's war program have been quashed.

In the meantime, the more liberal Bureau of Public Relations of the War Department has permitted just about every other industry in the country to tell the public how it has converted to war. All news by ATC contractors must first be cleared with ATC's press officer who has usually killed the releases before they could reach the bureau.

Even government officials are beginning to wonder in public. Mr. Grover Loening, consultant on aircraft to WPB, for example, told the Traffic Club of New York last week:

"Of course, even during this war, there have been some private initiative transoceanic airline operations that are most remarkable and a tremendous tribute to those who engineered them. The Consolidated Aircraft Corp., for example, has for several years now been operating a magnificent airline to Australia from California, purely for company purposes, done by private initiative and as a private enterprise, and not under the government.

"This airline has halved the time schedule that we have had heretofore, and there has been only the scarcest mention in the press of how it is conducting a daily service on a six-day turn-around over this tremendous stretch."

This is exactly what we mean. The aviation magazines and the nation's newspapers would have been delighted to let the people know of such accomplishments long ago. Army forbade it. Consolidated's Consairways has been under strict secrecy ever since it started. So has United Air Lines' trans-Pacific operation. So have all other airline accomplishments for the war effort.

OWI should be commended for its decision to prepare a report to the public. We hope it will win its fight to tell what it believes should be told, because, although ATC has given reluctant approval to the project, it will probably wish to continue blue penciling copy—even that of OWI.

Excellent Public Relations

THE WAR DEPARTMENT'S two-day conference with industry, labor and the press last week stands out as one of its most intelligent public relations feats of recent years.

Although the nation's aircraft executives are much closer to the war, and what it means, than the management group of most other industries, the plane builders were unanimous in their praise for the conference. An example of the interest manifest was that of Mr. Donald Douglas, who broke a record of years of non-Washington attendance in order to hear what the War Department had to say.

There is apparent a turn-about in the department's entire philosophy of public relations which is encouraging to experienced press people in Washington. It is also apparent in the increased willingness of the services to cooperate with the Office of War Information.

Aviation has everything to gain from an enlightened policy of publicity, for the public has always been enthusiastic for all flying and as the Gallup Poll has shown on various occasions, the public has been ahead of its government in air development for several years.

Those Future Shortlines

In the past it has frequently been the semi-informed enthusiasts who have made the headlines by forecasting fabulous development of the airlines. Too often, too, these forecasts have dwelt exclusively on foreign operations.

Last week, however, conservative and cautious Charlie Stanton, CAA's administrator, released "An exhaustive and well-documented statement," as CAB described it, which turned the spotlight on the

future of truly local air service. Another well known airman, Grover Loening, pictures transports leaving New York and Washington like trolley cars, every few minutes. Tom Girdler believes every town will have air mail pickup service. These and many other statements, by men who have the backing of experience and statistics, are telling the public what aviation will be after the war. Men like Stanton, Loening, and Girdler cannot be discounted.

ROBERT H. WOOD

THE GENERAL WAY*



The Old Way... tires, tubes, wheels bought as separate units require extra warehousing space, extra inventory and stock records.

The Old Way . . . means lost time in obtaining needed tail wheel units from separate storage spaces.



The Old Way...necessitated assembly of tail wheel units —waste motion I

General's tire-tube-wheel combination eliminates wastel Can be stored in one place...is ready for installation!





IN ONE PACKAGE! When you buy GENERAL's tire-tube-wheel combination you eliminate need for extra storage space ... avoid unnecessary inventory ... save production and maintenance time, cut costs and at the same time get the quality design that counts!



GENERAL Military and Commercial type tail wheels are fabricated from aluminum or magnesium alloy castings. Precision machined... fitted with tapered roller bearings. Both tapered and straight axles. Designed and built to A.A.F. Spec. No. 25272. (Easily removable dust-proof cover equipment.)

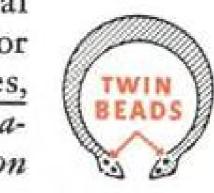
The General Tire & Rubber Company's complete ahead-of-the-field line of military and commercial type tail wheels is backed by General's long, practical experience in the manufacture of aircraft wheels, brakes, tires and allied aviation products . . .

General tail wheels are rugged, built to take as much abuse as main landing wheels . . . yet they're light—for increased payload!

Designed to meet Army, Navy and C. A. A. specifications . . . General tail wheels and tires alike have *proved* their superiority in action on every type of aircraft and in tests run at General's own completely equipped laboratories as well as in extensive tests by leading users.

A case in point was the way the General Twin-Bead tail wheel tire stood up . . . where single bead tires failed . . . in sideload tests run by a large, eastern aircraft company. General's Twin-Bead feature provides extra-grip on the wheel rim!

So it's good news that today General has production facilities available for immediate delivery on General tires, tubes and wheels. For further information write or wire—Aviation Division



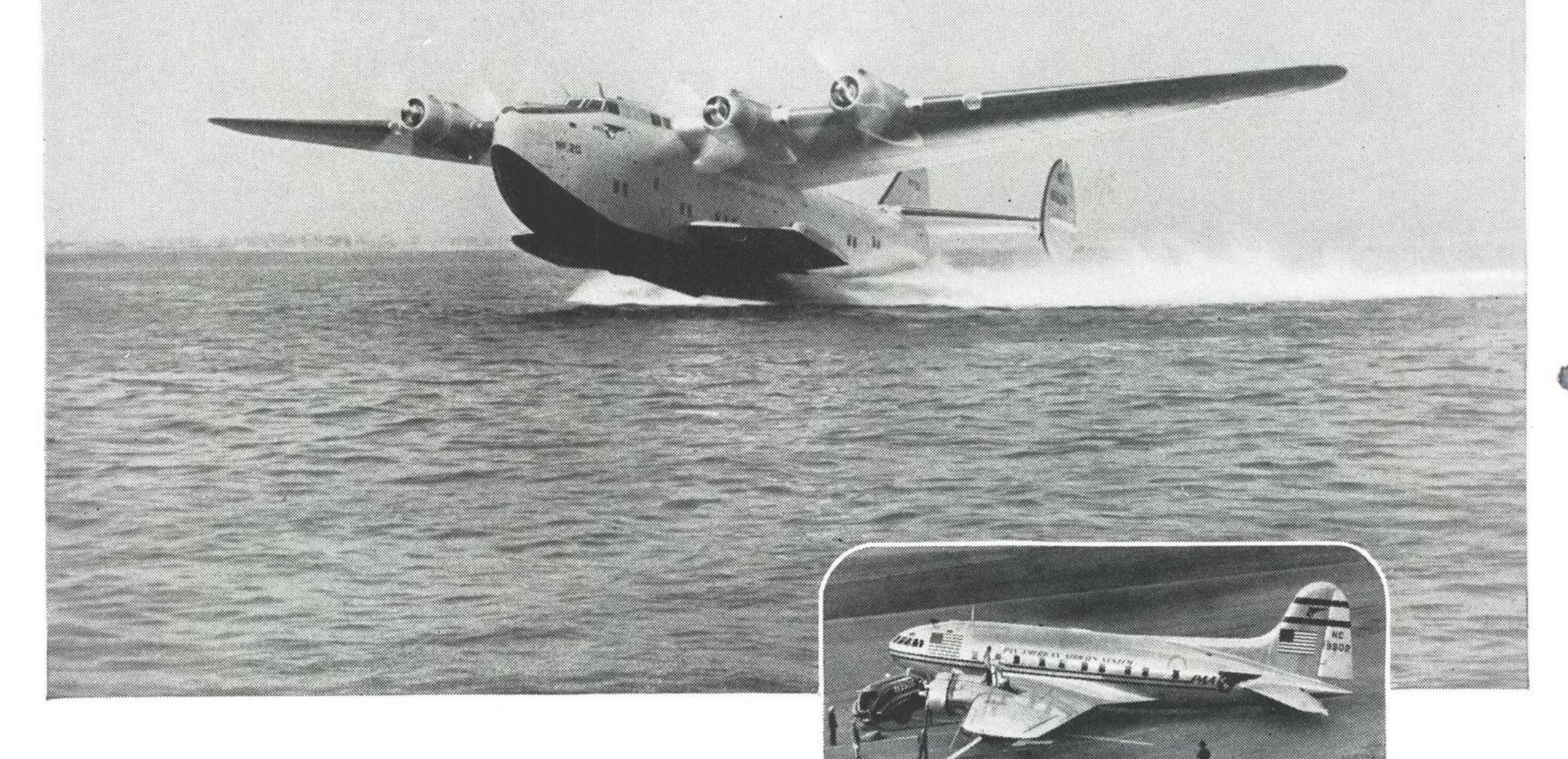
THE GENERAL TIRE & RUBBER COMPANY . AKRON, OHIO





34

America's International Airways Pioneer



American Airways, has expanded from a 100-mile Key West-to-Havana run in 1927 to a 100,000 mile global network today, serving far more routes and nations than any other international airline.

The international air routes pioneered by Pan American Airways as well as its vast airport facilities, are making vital contributions to the United Nations' war effort.

Texaco is proud of the part it has played in furnishing Aviation Gasoline to important sections of this great airline. It is proud, too, that—

More revenue airline miles in the U.S. are flown with Texaco than with any other brand.

PAA CLIPPER AT NEW ORLEANS

A Texaco Aviation Engineer will gladly cooperate in the selection of the most suitable Texaco Aviation Products for your requirements. Texaco Aviation Products are available at leading airports in the 48 States. Phone the nearest of more than 2300 Texaco distributing points, or write to:

The Texas Company, Aviation Division, 135 East 42nd Street, New York 17, N. Y.



TEXACO Lubricants and Fuels

FOR THE AVIATION INDUSTRY