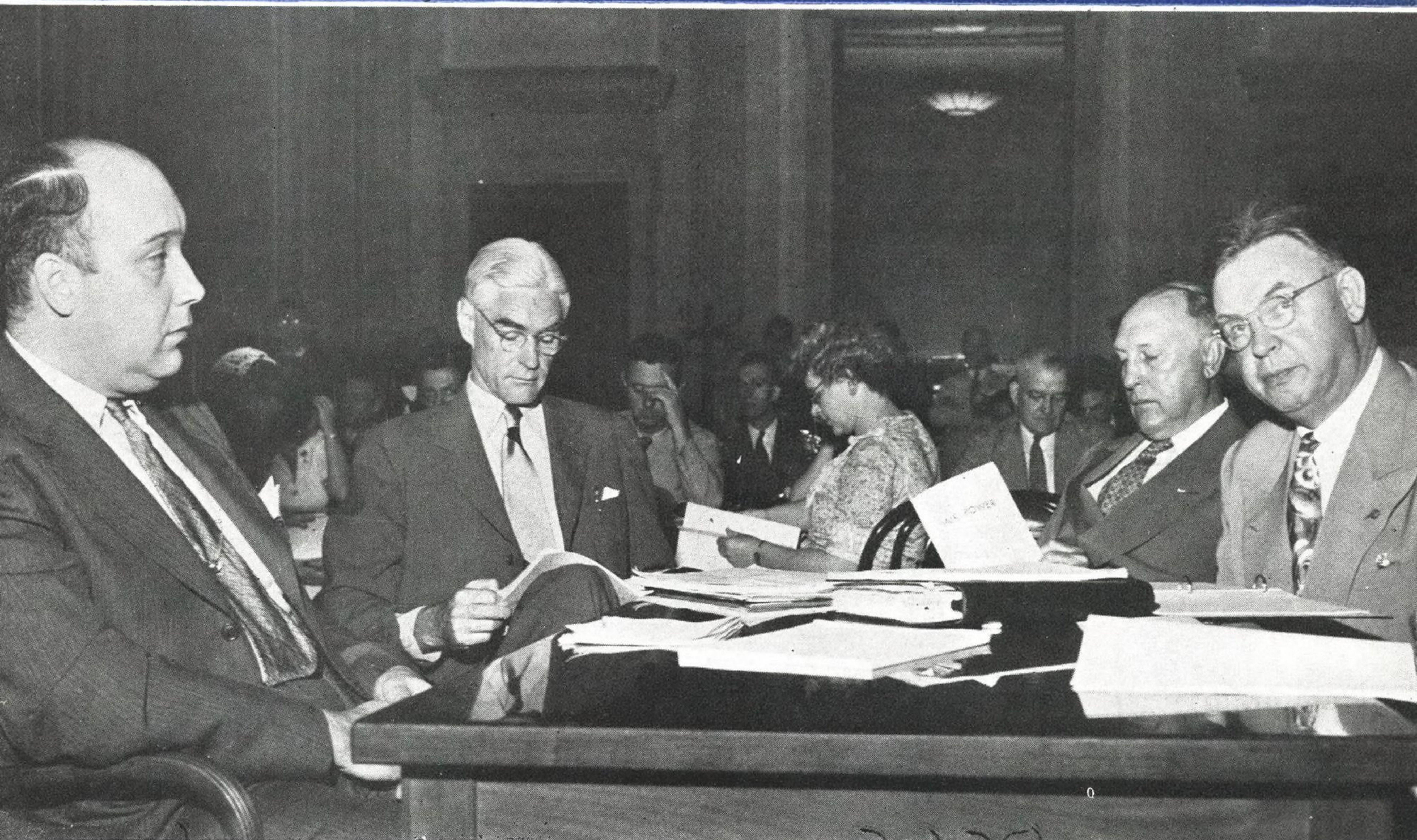


Aviation News

McGRAW-HILL PUBLISHING COMPANY, INC.

JULY 17, 1944



Aircraft Spokesmen Look to the Future: While preparing for peace, the aircraft industry is intensifying military production and these industry leaders, speaking for the Aeronautical Chamber of Commerce, presented the aviation point of view of the future at a Senate committee hearing last week. Left to right, Joseph T. Geuting, Jr., General Aircraft; J. Carlton Ward, Jr., Fairchild; Eugene E. Wilson, United Aircraft and Harry B. Woodhead, Consolidated Vultee.

Patterson Urges Preservation of Plane Plant

Under-Secretary of War tells Senate group that only a large scale operation will preserve our world air leadership.....Page 11

See Strong Air Industry As Answer to Problems

Manufacturers' report to Murray Committee cites need of constant research and preparedness and urges broad aviation policy.....Page 7

Port Executives Stress Small Operator Importance

Comprehensive program formulated for development of private flying, local airport construction standardization of practices.....Page 13

Manufacturers Council Gets Major Role in ACCA

Group, with Personal Aircraft body, emerges as main operating unit of Chamber as a result of revitalization program.....Page 15

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Test Plan to Absorb Loss on Company-Owned Surplus

Materials may be sold to the government for \$1 and adjustments made in renegotiation and tax proceedings.....Page 34

ODT Asks Air Priorities Cut in Move to Ease Congestion

Also suggests complete review of airline advertising with view to deterring rather than encouraging plane travel.....Page 39

Industry Asks Cutbacks First in Converted Plants

Spokesmen suggest that cancellations become effective first among temporary manufacturers with post-war markets.....Page 30



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THE AVIATION NEWS

Washington Observer

THE P-47—There were recurrent strong rumors only a month ago that the Army Air Forces was swinging back to the use of only liquid-cooled engines for its fighters. But the new increased schedule for P-47's at least delays the swing. The P-47 has proved virtually incomparable as an all-purpose fighter and has won at least a partial victory for air-cooled engines.

★ ★ ★

LABOR BEFORE CONGRESS—There was an interesting contrast between the presentation made by executives of the aircraft industry and labor leaders before the Murray Committee. Senator Murray is known widely as a good friend of labor, and most observers felt that labor would receive an extremely sympathetic hearing. But Richard Frankenstein, UAW-CIO vice-president, saw fit to criticize roundly the Senator and Congress and drew a stinging rebuke for his pains. The day before, Murray and J. Carlton Ward, Jr., got into a serious discussion of the role played by labor in the French debacle, and by contrast Ward's handling of himself was considered statesmanlike.

★ ★ ★

FORD PRODUCTION—The recent announcement by Ford that 5,000 "Liberators" have been produced by that company and that a high daily output rate is being maintained puts Ford in a position which many said about two years ago he would not be able to attain. It is true that many ill-advised production claims were made for Ford when the Willow Run project started. But the fact remains that difficult obstacles were overcome, that Ford is building bombers at a record-breaking rate, that his output is a highly important factor in over-all aircraft production and that the efficiency rate at Willow

Run has risen to a point reported well above that of many old-line aircraft manufacturers.

★ ★ ★

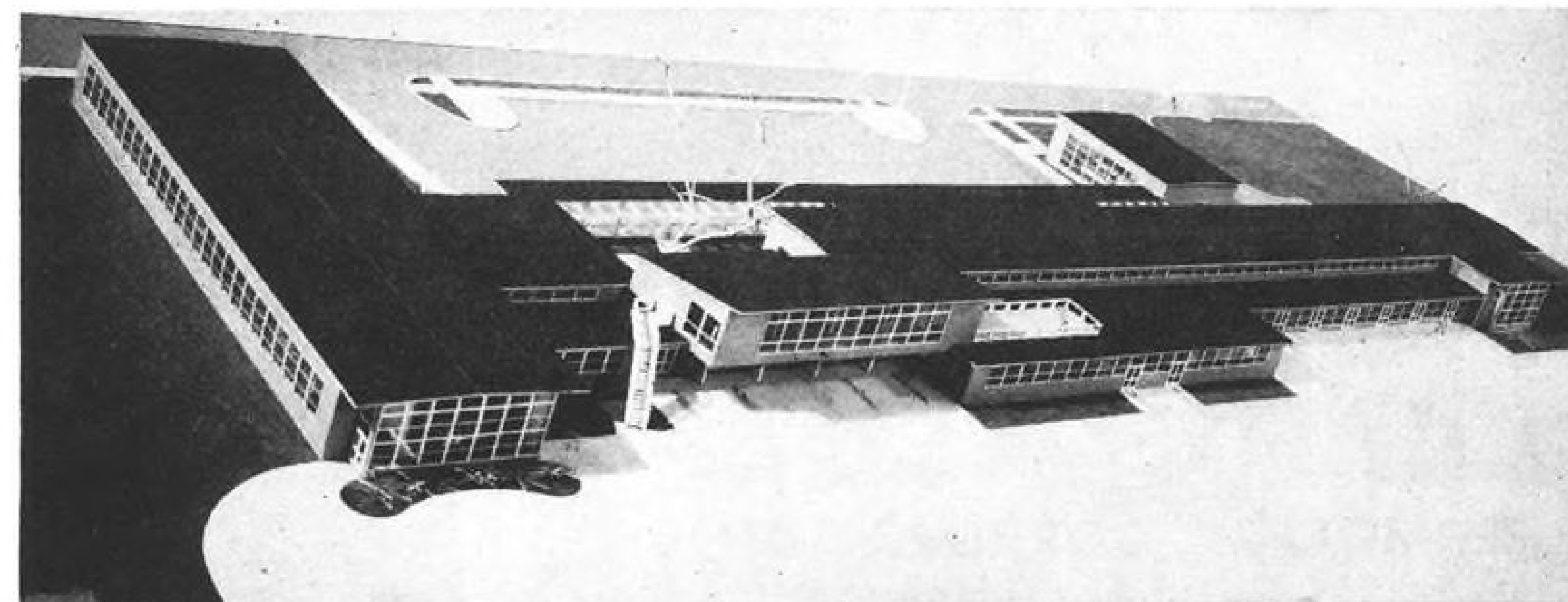
LAGS ACKNOWLEDGED—Lags in the production of some weapons of war are acknowledged by War Production Board officials and the important reasons for the slackening are difficult to identify. For once, manpower shortage is not blamed. There are reports that some subcontractors are easing out of war production work to get into a better position for civilian production and that prime contractors have taken over projects formerly handled by sub-contractors. Meanwhile, military leaders warn against overoptimism, while the Foreign Economic Administration said Germany will be in a nearly hopeless position economically by the end of this year and that her defeat in 1945, if not in 1944, is a certainty.

★ ★ ★

MISFIRE—Although it doesn't affect the aviation industry directly, criticism in some Army circles about the distribution of expensive miniature models by a radio manufacturer should be heeded. This company makes a highly effective mobile unit, but even the excellence of his product did not save him when he handed out miniature models of the truck unit to many high-ranking officers. The sets probably cost a minimum of \$30 each. It was a nice gesture, but it misfired. Even in the Pentagon some people are getting economy-minded.

★ ★ ★

DISARMAMENT AGAIN?—Even today, with the war furiously underway, aviation spokesmen before Congressional committees are finding that the pre-war theory of disarming as an example to the rest of the world is gaining



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AVIATION NEWS

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ALEXANDER MCSURELY	Mid-West Editor
DALLAS MALLARD	Art Director
ANDREW B. MARTIN	Sales Manager

Editorial Headquarters,
1357-63 National Press Building,
Washington 4, D. C.

Publication and Executive Offices,
330 W. 42nd St., N. Y. 18, N. Y.

Mid-West Office, 955 Reibold Bldg., Dayton, O.
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popularity. Platitudes about a "real peace" making maintenance of a strong air force unnecessary are putting in their appearance and it becomes more obvious that a challenging job of education lies ahead.

★ ★ ★

PRODUCTION SIDELIGHTS—These industry reports are the topic of discussion in Washington:

TWA and Lockheed are considering construction of a belly-blister on the production models of the "Constellation" to increase cargo space.

Northrop is now studying possibility of re-vamping its military "Black Widow" as a feeder line transport for about 24 passengers, among other commercial uses.

Culver Aircraft officials are poring over paper plans for a small, single-place, high-speed executive plane for post-war production.

Douglas Aircraft is preparing for the day, expected soon, when much additional information can be released to the press on its A-26.

Republican Aviation is studying possible market for a single-engined amphibian for the private flying field.

Foreign sources report that during the invasion of France two Waco gliders were sometimes attached to each Douglas C-47 instead of one.

Henry Kaiser has been among those dickering for purchase of the American President steamship line from the government.

Maritime officials say no helicopters will be placed on board ships as sub-detectors, despite previous reports. Other devices in the submarine campaign are more effective.

Because of the anticipated growth of international aviation and the need for gasoline, the post-war world will see more tankers plying the seas than ever before, shipping officials here say.

The decision to put Rolls-Royce Merlin engines on the Canadian-built DC-4s puzzled engineers since the Merlin is not as efficient at low-speed, low-power conditions inherent in transport flying, and Trans-Canada Air Lines has had difficulties with the Merlin on the trans-Atlantic work recently. In addition, some re-designing of the DC-4 will be necessary. Canadian observers say the decision was political, to give a British touch to the aircraft, since Britain may be a Canadian customer for this model.

★ ★ ★

SERVICES VS. WPB—The struggle between WPB and the Army and Navy over extent of civilian production to be permitted in the next few months was not settled last week, announcements to the contrary. The subject will pop up again within a few weeks. Army was about 30 percent off in some of its estimates for certain

Washington Observer

types of weapons required in North Africa and put through immediate changes in orders, canceling some, greatly increasing others. The latest orders for artillery shells and other heavy stuff indicates revisions made necessary after the invasion of France. Army wants industry able to take on new jobs immediately, and feels that conversion to civilian production would prevent quick action.

★ ★ ★

PILOT "CONVERSION"—Control and re-education of military pilots, whether they are on leave, discharged, or facing eventual return to civilian life, is causing much concern in Washington, despite the Army's recent crack-down on careless pilots. CAA officials point out that private plane owners, eager to welcome the hometown ace, urge him to fly their planes. The pilot, eager to fly, takes off with perhaps limited ability to handle the slower and lower-powered civilian plane. CAA regulations have been prepared in an attempt to curb the increasing number of accidents to returned service pilots.

★ ★ ★

AIR AMBULANCES—Virtually all wounded from the Normandy Peninsula are being evacuated by air to hospitals in England, and the mortality rate among these men is less than one percent. In the first days of the Normandy landings, wounded were evacuated in LSTs and transports, but after about 10 days the task was taken over by the air evacuation units and, generally speaking, all are being flown back to England.

★ ★ ★

BOMBS AWAY—Increasing difficulty is being encountered in obtaining greater expansion of production of heavy ammunition and bombs to meet the heavy expenditures of our forces. Record-breaking air attacks on Europe and a stepped up tempo in the Pacific will make it necessary to increase our bomb program during 1944 by 50,000 tons a month. Shortages in steel plate and sheet, and shortages in malleable castings, all resulting from lack of sufficient manpower, are directly contributing to the production difficulties.

★ ★ ★

DOUGLAS ANSWER—Immediately after the Lockheed Constellation's record-breaking West-East non-stop flight, Douglas engineers let it be known to airlines and friendly foreign government officials that they had plans for the DC-6 for post-war airlines. The DC-6 is an improved DC-4 with a fuselage about seven feet longer, a better door arrangement, a pressurized cabin, and four Pratt & Whitney 2,000 hp. engines contrasting with the 1,450 takeoff horsepower proposed for the DC-4.

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ACCA Sees Strong Air Industry Answer to Defense, Job Problems

Manufacturers' report to Murray Committee cites need of constant research and preparedness as well as trade and cultural benefits resulting from broad aviation policy.

By WILLIAM G. KEY

The aircraft industry made its most effective presentation in years before a Congressional body last week, a program for the future of aviation and its relation to the economy of the nation offered in such detail as to make its contents virtually irrefutable.

In substance, leading spokesmen for the industry contended that the American people and the aircraft industry have a long-range partnership in planning the future of domestic and international air transport—and this investment in air power will pay rich dividends in future security, economic progress, employment and in the broad advance of civilization through relative military security and the elimination of frontiers and promotion of international understanding.

Presented by ACCA Spokesmen—The industry's viewpoint to Congress was submitted through the War Contracts Subcommittee of the Senate Military Affairs Committee. Four spokesmen for the Aeronautical Chamber of Commerce pictured the future of the industry in broad strokes before the subcommittee headed by Senator Murray (D-Mont.)

The master need, Eugene E. Wilson, vice chairman of United Aircraft and chairman of the board of governors of the ACCA, told the Murray body, is the maintenance of air power as the aircraft industry is moved from war to peace. Technological development through competitive industry is the key to air power, Wilson said, asking that new legislation be drawn to restate as national policy the principle of advancing technological development of aviation through competitive private industry.

Employment Problem—The problem of employment and the avoidance of a violent economic adjustment for the majority of the 2,100,000 workers in the aircraft industry is uppermost in the minds of the industry, the committee was told, and the ACCA supports the principle of unemployment compensation, transportation of workers to home areas or other jobs and in-work retraining of workers for jobs in other industries.

The industry does oppose the payment of severance wages to war workers as an unfair burden upon the industries and people of the country and the projected compensation bill makes termination pay unnecessary, the Murray group was told. This viewpoint was sharply rejected by Richard Frankenstein, UAW-CIO vice president, who warned that aircraft workers were seeking

severance pay provisions through reopening of labor agreements in the industry, and would insist on National War Labor Board concurrence.

The spokesmen stressed that the industry represents a large share of the general problem of the reallocation of labor and that the problem is not that alone of the aircraft industry but of the national economy as a whole. The industry, Mr. Wilson warned, may have difficulty in meeting its present obligations, to say nothing of assuming additional burdens.

Aircraft Workers' Demands—On the other hand, Frankenstein said that aircraft workers would demand not only severance pay—eight weeks pay for all services of longer than a year, four weeks for service between six months and a year—but also seniority provisions that offer in some measure an orderly procedure for reabsorbing the returned servicemen, and increased wage rates to compensate for reduction in overtime and hours worked per week.

Frankenstein maintained that the aircraft industry is too concerned with reconversion problems and not enough with postwar planning; that labor is not being consulted on reconversion problems of all industry; that the armed services in asking a con-



Woodhead Explains Industry's Viewpoint: Harry Woodhead, president of Consolidated Vultee, is shown testifying at a hearing of the War Contracts subcommittee of the Senate Military Affairs committee. Others, left to right, who also appeared before the committee, are J. Carlton Ward, Jr., Fairchild; Eugene E. Wilson, United Aircraft, and back to camera, Joseph T. Geuting, General Aircraft.



Aircraft Hearing Draws Crowd: Leading spokesmen for the aircraft industry testified last week before a war contracts subcommittee of the Senate Military Affairs committee, drawing a large crowd of spectators, part of which is shown above.

tinued high level of production are attempting to throw "discredit on war workers"; that Congress is not acting fast enough to provide "adequate unemployment compensation"; that air transport must reduce its rates; that a National Aircraft Development Council should be formed and that labor must have a voice on this council; and that wage rates should be increased sufficiently to a high enough level of consumer purchasing power to expand private flying.

► **Northrop Plan** — The Northrop Plan for post-war employee relocation was outlined to the committee by LaMotte T. Cohu, chairman of the board and general manager of Northrop. Through the Northrop Plan he said, it is hoped to channel skilled employees back into industries for which the employees are fitted by previous experience. The Northrop Plan first was outlined in the March issue of *Aviation* magazine.

In order that the nation may have a strong and virile post-war aircraft industry, Harry Woodhead, president of Consolidated Vultee, told the Murray body that the government should now permit the aircraft industry to use a part of its engineering, tooling and manufacturing facilities for development of civilian aircraft, and should make available to each cost-plus-fixed-fee, as well as fixed-price manufacturers, at a nominal cost the design and engineering data, tooling and other facilities developed for his own military aircraft which might be adaptable,

at least in part, to his civilian aircraft.

► **Employment Program** — As long as there is no interference with the war effort, Mr. Woodhead said, it is undoubtedly to the benefit of the country as a whole to have all opportunities for post-war employment prepared for in advance, so that production and employment

may start promptly when the war ends.

Mr. Woodhead also urged that the government immediately formulate policies in regard to transport airlines with emphasis on development of a planned and integrated feeder line system; increased use of airmail; immediate release of more planes to the airlines and further development of main lines, both foreign and domestic.

► **Technical Development** — The fact that technical development is the key to air power was expounded by J. Carlton Ward, Jr., president of Fairchild Engine and Airplane Corp., who pointed to British development of radar and German use of the robot bomb, both of which first were utilized in this country. Mr. Ward developed the lesson of France, to which country he headed a production mission when that country's aircraft industry virtually collapsed under the war tempo strains. The nationalized engine factory was the worst example, Mr. Ward said, and the entire industry had become a political football. France, he pointed out, was not given time to work herself out of her inferior position.

Even the Germans made the mis-

take of superimposing government direction of basic policies on private management of aircraft companies. This resulted in near fatal mistakes stemming from governmental direction, said Mr. Ward, such as the freezing of models to produce in quantity and lack of any emphasis on aircraft as defensive as well as offensive weapons.

► **Cites Need of Research** — Mr. Ward then detailed the enormous and complex problems of bringing planes from design to combat stages and the length of time it takes to perfect combat aircraft in support of his contention that constant research and development will be vital to the maintenance of American air power. He cited the more than 2,000 changes made in the Boeing *Flying Fortress* to bring it to its present stage as a first-class fighting airplane.

Our country cannot expect to

hold its position in world affairs if the principles of air power are not grasped and implemented by a wise policy for continued development, Mr. Ward told the Murray subcommittee.

► **Ask Foresighted Policy** — Had the present war been delayed a few years, the United States would have been a third rate air power, Mr. Ward pointed out, as totalitarian governments continued heavy subsidies for aircraft industries while this country neglected that phase of air power. The aircraft manufacturers of this country do not want a national subsidy but, he said, they do suggest a national air policy that will allow the aircraft industry to maintain leadership in design and preparedness to resume large scale military production at any time if it should be necessary.

In addition, such a policy contemplates an air force maintained at such a level as to assure the nation of adequate air defense, he said. The suggestions outline a program for minimum preparedness compatible with full security and one which will permit rapid expansion in time of emergency.

Air power, he said, presupposed several elements, among them airplanes, trained personnel, technical staffs, management and productive capacity. All are essential, Mr. Ward said, adding that a strong industry must be maintained with operating productive capacity at least equal to the current needs of the armed services. Additional capacity, he declared, preferably through stand-by plants should be available and ready as the necessity arises.

► **Seeks to Guard Markets** — Undersecretary of War Patterson told the Committee the expected large numbers of surplus military aircraft must be sold "in a way that will not have a bad effect on the markets of the aircraft industry." He added that he regarded it as vitally necessary for the Government to retain the eight Government-owned aircraft assembly plants as a reserve for any future emergency. It might be desirable, he said, to add several DPC aircraft and aircraft engine plants to the list, but he did not specify which ones.

Artemus L. Gates, assistant Secretary of the Navy for Air, agreed with Patterson that certain war plants should be maintained for future reserve production. He listed the following post-war program acceptable to the Navy:

► Maintaining adequate airforces at such strength and in such state of readiness as to preclude a successful assault upon our country or its possessions.

► Acquiring and maintaining air bases essential to our security and overseas trade.

► Facilitating the orderly and economic expansion of domestic and international air transport and private flying.

► Preserving a strong aircraft manufacturing industry.

This program agrees, in substance, with that advanced by the spokesmen for the aircraft industry who testified earlier.

ACCA Gives Views On Plane Disposal

Agrees in general with Harvard report but presents several objections to Murray Committee.

Aeronautical Chamber of Commerce agrees generally with the surplus airplane disposal report of the Harvard School of Business Administration, but presented to the War Contracts Subcommittee of the Senate Military Affairs Committee several objections to the plan. It also outlined its views as expressed to the Pogue Surplus Aircraft Advisory subcommittee on the general policies to be followed in disposing of surplus craft.

With Harry Woodhead, president of Consolidated Vultee, as spokesman, the ACCA also covered the field of government-owned plants and airfields, urging that each company operating a government factory be given an opportunity to buy or lease at reasonable terms for use, and if aircraft factories cannot be used by either the original occupant or others, the factories should be kept under private management as stand-by plants for defense purposes. Under no circumstances should the plants be operated by the government, Mr. Woodhead said.

► **Central Agency Urged** — All policies regarding disposal of surpluses should be made by one central government agency created by legislation, the Murray Committee was told.

Military planes maintained by foreign nations should be scrapped, the Chamber believes, and useable planes should be sold, leased or bartered to friendly foreign nations under control of the War, Navy and State Departments.

Wherever possible, Mr. Wood-

Industry's Problem

To illustrate the complex problem of building a combat aircraft and the need for continued technical development, J. Carlton Ward, Jr., president of Fairchild, used the following information for the Murray Committee about the *Flying Fortress* supplied by W. E. Beall, Boeing vice president in charge of engineering.

The Boeing 299 was conceived in 1934 and first flown in the summer of 1935. It was the first of the four-engined, long-range, heavy bombardment airplanes. The basic design was good, yet between the prototype and the current model, the B-17G, there has been an enormous expenditure of engineering manhours in re-design, development and research.

In the YB-17 series, 120,860 engineering manhours were expended, primarily on the turbo-supercharger for high-altitude performance. An additional 268,478 manhours were invested in the B-17B (first production series) smoothing out bugs, improving overall performance. In

the B-17C and D series, 263,368 manhours were required to improve the armament, install more powerful engines, and build in self-sealing fuel tanks and improved armor.

At the time war was declared on Japan in 1941, B-17Es were ready at a cost of 344,778 additional engineering manhours, with the new dorsal fin and enlarged stabilizers for better stability and the tail turret. The upper and lower gun turrets and automatic flight control equipment giving control to the bombardier during bombing runs also were added at this time. In the F and G series, many detail improvements were incorporated, with a staggering total of 3,038,039 manhours. Changes dictated by technological advances and combat experience were engineered at the rate of three or more a day, with total changes of the E, F and G series running 2,036 to date. The total number of engineering manhours on improvements in the entire series was 4,172,875, as of June 1.

Aviation's 'Musts'

Some of the things the aircraft industry must do during and after the adjustment of the reconversion period as outlined by Eugene E. Wilson, vice-chairman of United Aircraft and chairman of the board of governors of the Aeronautical Chamber:

► We must not only maintain adequate air forces if we are to achieve air power, but we must advance the design of all aircraft and produce new designs.

► We must train combat crews and ground personnel, extend meteorological and navigational knowledge and facilities, improve our engines and our instruments.

► We must increase landing facilities and extend airways.

► We must provide for research.

► We must improve our materials and simplify our manufacturing procedures.

► We must maintain our jigs and tools and keep adequate facilities in readiness, employing as many as possible of our thousands upon thousands of skilled workers so that our nation will not lose their contribution to air power.

In addition, Wilson said, we have our own honest interest in staying in business on a sound basis, to make a reasonable profit while efficiently serving the post-war aircraft needs of the nation.

head said, plane sales should be made through manufacturers who originated the design, and overhaul and reconversion should be done only by qualified manufacturers.

The ACCA document asks that care be taken to avoid wholesale disposal of smaller planes to brokers or speculators who might hold them over the market for several years.

► **Trainers**—Mr. Woodhead pointed out that primary, basic and advanced trainers are built for military use only and are not suitable for civilian use. The ACCA disagrees with the Harvard report that these planes should be sold for a nominal price and urged that they be given to schools and colleges for military training use only. The program for their use in schools and colleges should be in the nature of an ROTC program, and personal flying training should not be influenced by higher requirements of the suggested ROTC program, Mr. Woodhead said.

ACCA also disagreed with the Harvard report suggestion that major components be stripped from planes abandoned overseas and reconditioned for use in this country, contending that these instruments are complex and designed for use in particular ships and that their reuse would be as dangerous as reuse of planes maintained by foreign nations.

Airfields should be made available promptly for commercial or personal flying at nominal cost to states, counties or cities, with the upkeep and operating costs to be assumed by the local political subdivision with assistance from the government where necessary.

Fairchild Contract

Fairchild Aircraft at Hagerstown, Md., has signed a contract with Curtiss-Wright for production of forward and aft center fuselage sections for the C-46 *Commando*, twin-engine transport.

Glen Evins, head of the Contracts and Service Department, said production will begin in two months and that preliminary tooling and engineering work already have been started.

Stecker Heads Unit

The Ninth U. S. Air Force *Thunderbolt* group is now under the command of Col. Ray J. Stecker. He succeeds Col. Lance Call who has received another Ninth Air Force assignment.

Coast Plants Face Termination Puzzle

Manufacturers, with ten billion in orders and investments on books, are confronted simultaneously with warnings of long war and of imminent mass cancellations.

West Coast warplane builders, with more than ten billion dollars on their books in orders and plant investments, face the dilemma of prolonged war production while being prodded by the Army to prepare immediately for mass contract cancellations.

Army Air Forces Materiel Command chiefs who brought their nation-touring "termination school" to Los Angeles and San Francisco last week found a chaotic variety of interpretation and lack of understanding of termination procedures. They warned of the inevitability of a day of total terminations, and cautioned prime and sub-contractors alike to set up termination departments that will be prepared to expedite with a minimum of delay and confusion terminations as they are ordered.

► **Warning**—Warning to manufacturers was that they dispose of surplus materials immediately "to speed the coming reconversion program".

Complexion of West Coast termination procedures will be heightened by the existence of approximately 1,300 individual prime contracts in western plants and the participation of an estimated 50,000 subcontracts. Brig. Gen. F. M. Hopkins, chief of the Resource Division, AAF, Washington, is confident, however, that critical aspects of West Coast cancellations will be softened by the creation of proposed termination departments throughout the industry and their close watch upon termination procedure policies stemming from Washington.

► **Manpower Factor**—He told AVIATION NEWS that the AAF and manufacturers "worked like hell to set up this war production machine, and now we've got to work just as hard unwinding it." Concerned over the reaction of 400,000 West Coast aircraft workers to termination talk and Washington announcements of the green light being given for the production of many commercial products was evidenced throughout "school" sessions by Brig. Gen. Donald F. Stace, AAF district procurement supervisor in Los Angeles. He re-

AVIATION CALENDAR

July 18-19—Air Traffic Conference of America, Annual Meeting, Denver.
July 24-25—Joint Airport Users Conference, National Aeronautic Association, Washington.
July 26—Central Information Council Meeting, Aeronautical Training Society, Dallas, Tex.
July 27-28—Institute of the Aeronautical Sciences, Summer Annual Meeting, the University of Southern California, Hancock Auditorium, Los Angeles.
Aug. 2-3—Cancelled—National Business Meeting, National Aeronautic Association.
Aug. 14-20—North Carolina State Aviation Week, Charlotte.
Oct. 5-7—SAE National Aircraft Engineering and Production Meeting, Los Angeles.
Nov. 13-14—National Association of State Aviation Officials, Annual Meeting, Oklahoma City.
Nov. 15-18—National Clinic of Domestic Aviation Planning, Oklahoma City.
Dec. 4-6—SAE National Air Cargo Meeting, Chicago.
Dec. 5-7—Second Annual Meeting, Aviation Distributors and Manufacturers Association, Jefferson Hotel, St. Louis, Mo.

iterated the warning that western war production manpower must be maintained to supply the Pacific war, the end of which is not yet in sight.—S. B.

Jet Sailplane

Out of the Germans' murderous jet-propelled robot bombs may come one of the most popular of peacetime aviation sport craft, the jet-assisted sailplane.

A well known engineer of the Civil Aeronautics Administration expresses the belief that single-place sailplanes after the war can be equipped with simple, light-weight, inexpensive jet engines in the tail, without affecting the aerodynamic efficiency which is so necessary in this type craft.

The sports-pilot would use the engine only a matter of minutes to get his sailplane off the ground and into sky areas offering desirable thermals, or rising air currents, which keep the ship soaring.

If the few gallons of fuel have not been expended in the takeoff and initial climb, the pilot can use his simple reaction engine for short "spurts" about the sky seeking better air currents. He can glide easily to a landing at any time he desires without need of the engine.

Heretofore, sailplanes have had to be towed into the air by a motor car, winch, or other device, making at least one other person on the ground necessary to launch a plane.

Industry Blueprint

By ROBERT H. WOOD

Stressing that all the planning underway by the War Department to maintain a stronger post-war aircraft industry and air force than before the war will be useless unless Congress approves sufficient funds, Robert P. Patterson, Under-Secretary of War, in a statement of major importance to aviation, told a Senate group last week that only through preservation of our plane plants can we be assured of maintaining world leadership in aviation.

Patterson's statement, before the War Contracts Subcommittee of Senate Military Affairs Committee, was wholly concerned with aircraft. It said:

► The industry should be set up on as large a scale as possible, with reserve capacity and a plan for quick emergency expansion.
► Surplus planes must be disposed of so as not to hurt the industry's market.

► Greatest encouragement should be given commercial and civil aviation.

► Funds must be sufficient to keep the industry well beyond its pre-war size and maintain a corresponding output of planes developed and sold through normal competitive methods.

► The AAF should retain at least the eight government-owned bomber assembly plants at Willow Run, Marietta, Omaha, Fort Worth, Dallas, Tulsa, Oklahoma City, and Wichita.

► Pilot-line production must continue in some cases as new designs are developed.

► AAF Materiel Command is planning a comprehensive post-war research and development program for military aircraft.

► Remaining cutbacks will be coordinated by the Joint Aircraft Committee representing Army, Navy, British, and Aircraft Resources Control Office and submitted to Aircraft Production Board, with clearance by the new Production Executive Committee of WPB.

► Contractors retained until the end of the war must be those best qualified.

► As between qualified contractors, privately-owned plants not normally in military production will be given first priority releases.

► U. S.-owned plants will be kept in operation or standby until no longer required.

► If possible, release to civilian production of competing units of the industry will be simultaneous.

► Where possible cutbacks will be made first in tight labor areas.

► Licensee manufacturers will be released before firms which develop and engineer specialized products.

► The Department favors unemployment compensation for wartime workers released from jobs due to cutbacks and terminations.

► A subcommittee is being established within WPB and its Pro-

duction Executive Committee to attempt inter-service exchange of facilities released through cutbacks. Civilian production will be approved for plants not required by any war agencies.

► The government seeks to promote rapid development of civilian aircraft production by encouraging experimentation and new production by the industry, as soon as possible.

► Every effort must be made to encourage civilian air transport development and civilian flying. Army will make flying available to reserve officers, and will be aided by CAP.

► A comprehensive research program is in preparation by the Army which would also aid in stabilizing the industry and putting it on a sound competitive basis in world markets.

► The aircraft industry's plants should not be allowed, for defense reasons, to drift back entirely to pre-war locations. Widely scattered plants, many in the interior, are favored.

► The industry should be encouraged to take over DPC facilities now in use. Those not taken over should be considered for possible emergency standby plants.

► Government-owned airfields should be turned back to private use wherever possible, depending on result of studies now being made as to the size recommended for the post-war air force and facilities needed for its operation and training.

FEDERAL DIGEST

DPC Sells Surplus Plane Parts Plant

Binghamton unit of Kollsman Instrument Division disposed of for \$175,000; summary of week's activities in U. S. and war agencies.

By MARY PAULINE PERRY

Defense Plant Corp. has sold surplus real estate consisting of 3.34 acres of land located in Binghamton, N. Y., together with improvements comprising six buildings, to Ansco Division, General Aniline and Film Corp., for \$175,000, Jesse H. Jones, Secretary of Commerce announced.

The property, owned by DPC

since July, 1942, has been operated by Kollsman Instrument Division of Square D Co., to manufacture aeronautical products for the Navy Department Bureau of Aeronautics. Only the land and buildings were sold. All machinery and equipment will be disposed of separately.

► **War Surplus**—According to Mr. Jones the property was recently declared surplus to the war effort. The purchaser was one of several bidders and the price represents present day replacement cost of the property, less depreciation.

DPC's contract with Consolidated Vultee Aircraft Corp., has been increased to provide additional equipment at a plant in San Diego to cost approximately \$350,000, resulting in an over-all commitment of about \$23,000,000.

The contract with General Mo-

tors Corp. has been increased by approximately \$10,000,000 to provide additional equipment at plants in Detroit, as well as Indianapolis and Anderson, Ind. General Motors over-all commitment is now approximately \$82,000,000.

► **Military Construction**—Military construction, including camps and air fields, and other public construction is declining according to schedule, War Production Board said. Private construction throughout the U. S. is continuing a slow seasonal rise begun in the spring, which will continue through the summer, the Board estimates.

WPB released totals of \$64,000,000 for military construction in May, compared with \$65,000,000 in June.

► **Auto Conversion**—The Automotive Industry Advisory Committee met Friday to discuss problems of clearing the plants for resumption of civilian production when the time comes, the securing of machine tools (both new and government-owned ones in

the plants), providing of new tools, dies and other equipment and the rehabilitation of the old, and the possible forward placing of tentative requirements for materials and components.

U. S. Army Engineers have approved a \$2,238,999 facilities expansion program for Consolidated Vultee's Fort Worth Division in addition to a recently announced \$2,478,148 expansion program already under way.

Willow Run May Turn Out Tractors

Ford officials deny plant will be taken over by government for use as warehouse.

Ford's huge Willow Run plant, which probably has had more publicity of both kinds than any similar plant in the country, probably will be taken over by the Ford Motor Co., whose officials made sharp and prompt retort to unofficial reports that the sprawling establishment might be utilized by the government for warehouse purposes during the reconversion period.

Ford officials indicated that the company might use the plant, or part of it, for manufacture of aircraft, most likely cargo planes. The plant is so large, however, that there would be ample space for the production of tractors or other farm equipment.

► **Farm Equipment**—It appeared

that farm equipment was a much more probable product from Willow Run after the war than aircraft, although aircraft was not entirely eliminated in the opinion of some Ford officials.

The Fordson tractor was a familiar sight in many American farms before the war and there are indications that Henry Ford would like to put his tractor in the same category as his automobile—a low-priced vehicle which almost anybody could own.

► **First Choice on Plant**—Ford officials vigorously defended their interpretation of the contract with the government, stating that "if we understood our contract with the government correctly, we have first opportunity on purchasing Willow Run after the war. Our plans, as they can be made during these changing times, do not call for making Willow Run into a huge warehouse or storage facility as recent Washington reports intimated. The government built the plant and Ford operates it. Willow Run was constructed under the most specialized of plans—it is our plan to manufacture some sort of product at Willow Run."

A hint that the plant might be used for purposes other than aircraft production was seen in a final phrase of the statement that "the needs of the post-war world, and the growing realization that almost everything we need in manufac-

turing or food lines can be grown on the farm, places increased emphasis on tractors."

Saipan Air Umbrella Cited by Forrestal

Secretary Forrestal, in reviewing the significance of Saipan, noted that the role of the Naval air arm as involved in the Saipan operation demonstrated for the first time the ability of carrier-based aircraft to hold "an ironclad air umbrella over a land invasion for a sustained period of time."

For a month, carrier based aircraft exercised air control over the Marianas Islands. Our carriers held up this air umbrella at a distance of more than 1,200 miles from their bases in the Marshalls and 3,250 miles from their major base at Pearl Harbor.

► **Nullified Jap Raids**—The umbrella so completely smothered enemy air activity at 13 air bases in the Marianas and Bonins that, although the Japs sent bombing attacks daily against Saipan. All of them were too weak to be of any military significance.

The Navy Secretary said this achievement was without precedent in naval warfare and that never before have carrier based planes sustained a continuous, unbroken cover over an invasion for so long a time.

Importance of Small Operator Stressed by Port Executives

Comprehensive program for development of private flying, local airport construction and beautification, standardization of practices and legislation formulated at Chicago convention.

By ALEXANDER MCSURELY

Importance of the small airport and the fixed base operator in the aviation picture gained increased recognition at the American Association of Airport Executives convention last week at Chicago.

Forum sessions drew 150 delegates and gave opportunity for vigorous expressions by such spokesmen as Oliver Parks of Parks Air College, East St. Louis; W. T. Piper, president of Piper Aircraft Corp., Lockhaven, Pa., and the convention banquet speaker, Col. Roscoe Turner, Indianapolis fixed base operator and president of National Aviation Trades Association.

► **Recommendations** —In closed session, small airport men drafted a recommendation for a separate division for private flying operators within the association, called for an association program to plan recreation facilities and beautification of small airports, investigation of possibility of Federal aid for private airport development, standardization of accounting procedures and exchange of monthly operating statements through the association, exchange of curricula between flying schools, and investigation of rent-a-car service for

private airports. The recommendations were not acted on by the convention, but turned over to the board of directors.

► **Fees Studied**—Probably the most significant single accomplishment of the convention, as far as larger airports and airlines are concerned, was establishment of a committee to study schedules of fees for airlines, headed by Howard Crush, Cincinnati, Lunken Airport manager. Study was undertaken, responding to repeated demands from the floor, for a formula on which airports could set up a standard fee basis for airline flights, taking into consideration service and facilities at airport, weight of planes, frequency of schedules, population served by the airport, and other criteria.

Resolutions at the closing session called for:

CAA operation of all control towers governing interstate traffic.

Rental payments from Federal agencies using airport space, equal to payments from other tenants for similar space.

Transferring authority for rationing aviation gasoline from OPWA to CAA.

Study by CAA to standardize airport terminology.

Authorization for CAA to pool surplus military equipment usable by airports for disposal.

Appointment by the board of directors of an executive director of the association and establishment of several classes of membership.

Furtherance of university education programs training airport managers.

Revision of CAA specifications on airport lighting equipment, to lower cost without increasing maintenance, and providing when possible for continuing use of existing equipment.

Recognizing the leadership of Senator Pat McCarran and Representative Jennings Randolph, in national aviation legislation, the association named both men honorary life members.

► **Legislation**—Requests for association endorsement of the Randolph-sponsored HR 5024, which would provide joint Federal-State aid for airport development, were referred to the board of directors for future action.

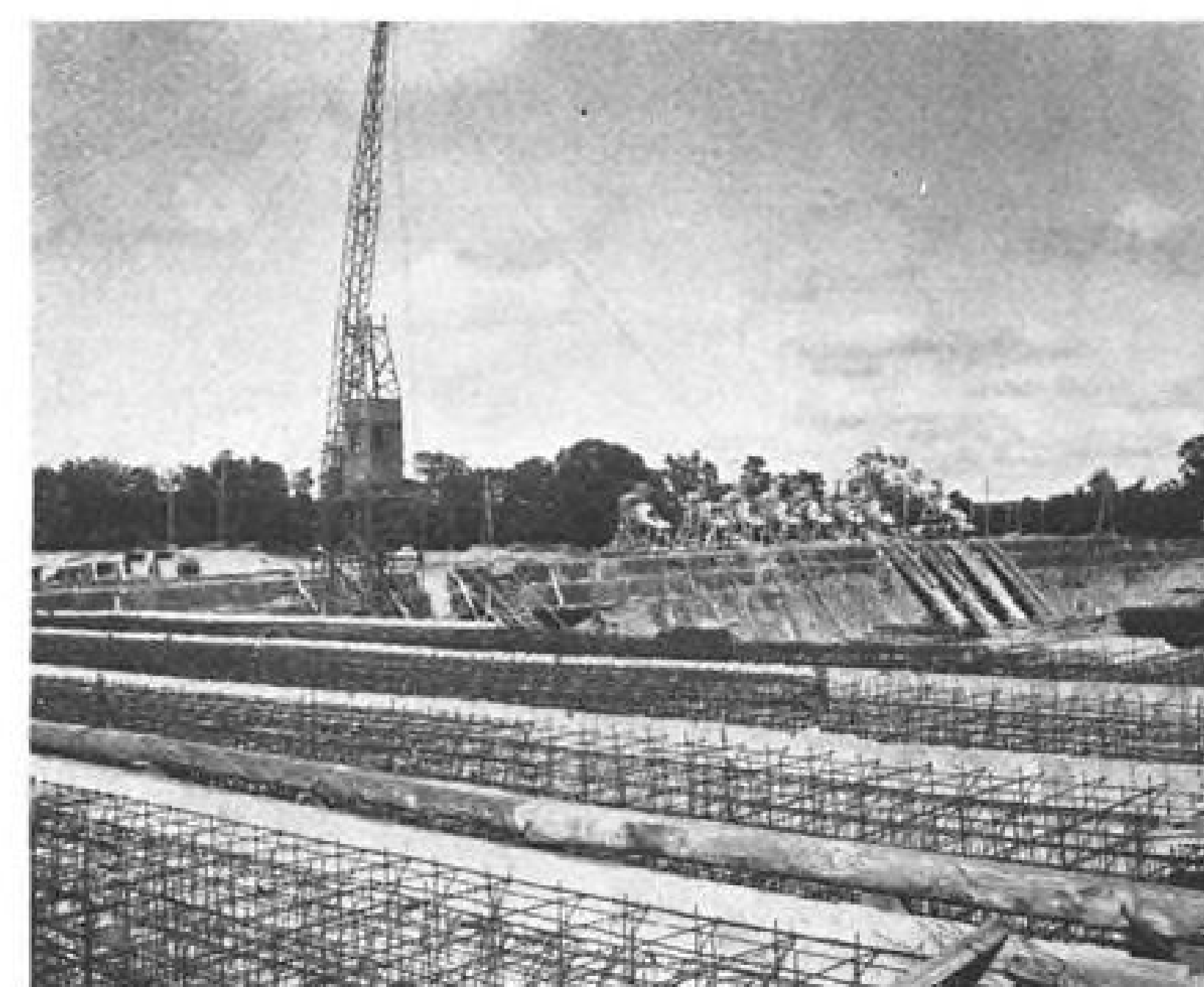
Maj. Charles E. Hanst, president, formerly Dallas, Tex., airport manager now with the ATC at Kansas City, and George Moore, secretary-treasurer, Peoria, Ill., were re-elected. Other officers named are Woodruff DeSilva, Los Angeles airport manager, first vice-president; Neil Brackstone, Lansing (Mich.) Airport manager, second vice-president; Crush, third vice-president; Clyde Trager, Peoria, legal counsel; and the following directors: Francis Geng,



SKYMASTER PRODUCTION:

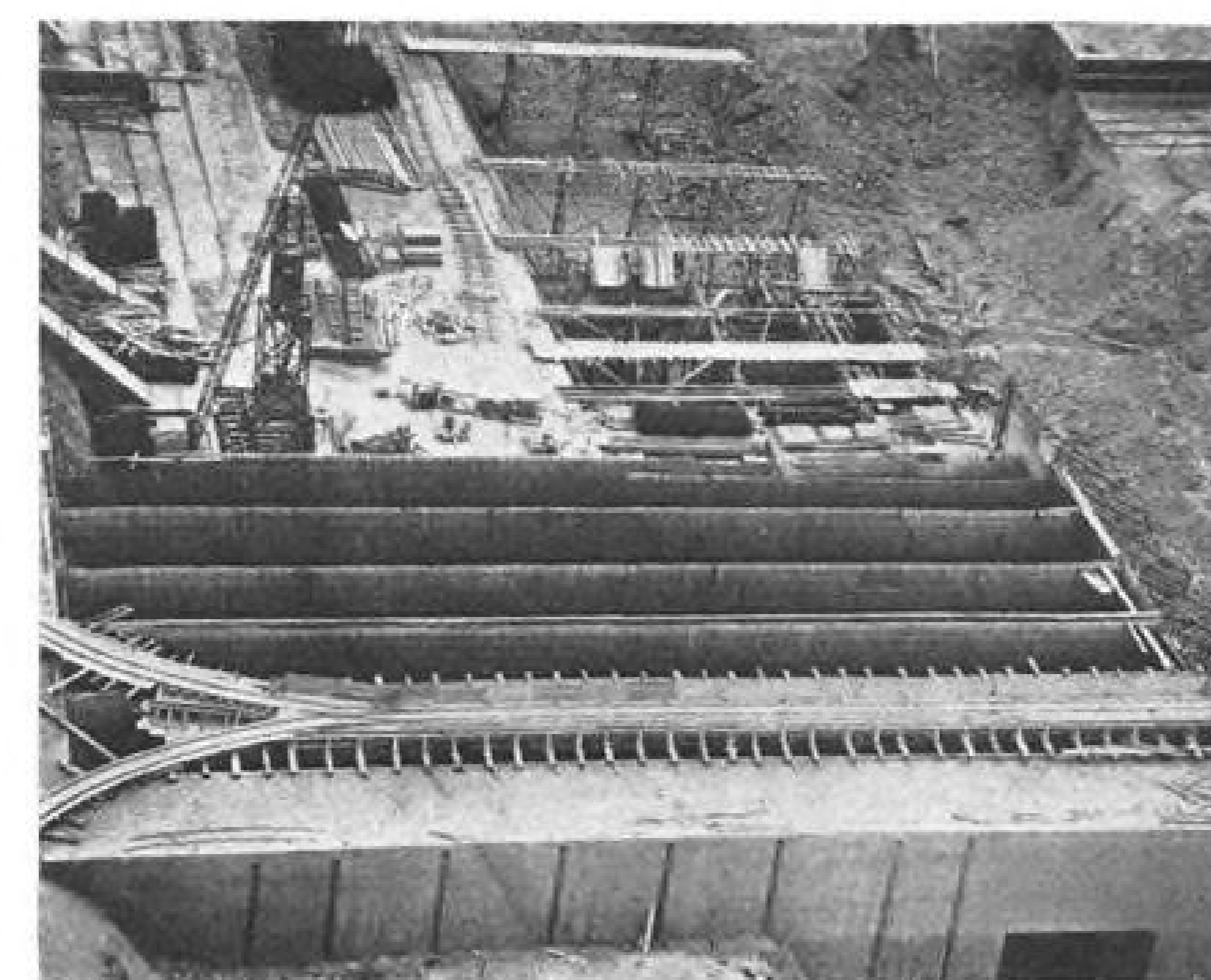
The extent to which the Douglas C-54 Skymaster is being turned out at the Chicago plant is indicated by this view of the assembly line where the wings are

attached to the fuselage. This plant was 15 percent above its production schedule last month, according to the company's reports.



PROBABLE ROCKET PLANE LAUNCHING SITE:

Photo on left, looking northeast, shows construction of what is believed to be a launching platform for Hitler's rocket planes used against England. Photo



on right, taken from the air, shows a probable rocket launching site found by the Allies a mile southeast of Cherbourg.

St. Paul; Fred Alley, Charleston, W. Va.; Paul Koonce, Houston, Tex.; Melvin Nuss, Reading, Pa.; and Louis Gross, Toledo, O.

► **Observations**—Significant statements by convention speakers: W. T. Piper: There's too much talk about Federal air. After the war the government won't have enough money to pay the Congressmen, let alone finance airports. We had better pay our own way.

Robert Aldrich, St. Paul: We need studies on hangars for private flyers and facilities to beautify the airport.

Roscoe Turner: Aviation control should be cooperative between state and Federal governments. There's no reason why we can't have cooperation if we sit in with both groups.

Charles Donaldson, CAA: Later runways built by the CAA to military specifications will take 74,000 pounds gross loading, but some earlier ones will take only 30,000 pounds. On most airports we believe 74,000 pounds will do the job for some time to come, but some key airports for trans-Atlantic flight will take heavier loads. As planes get bigger the designer will have to spread the load. About 120,000 pounds may be the top load.

Hart Bowman, Dallas: We ought to change the name "air terminal." That means "the end of the line" and only a few of our airports are at the end of a line. We have to be thinking about feeder airlines in planning landing fee rates, so that our schedules will be equitable for them, too.

Dudley Steele, Burbank: We have to be thinking about servicing big planes with gas. Recently it took me nine trucks to service a *Constellation*. It calls for a big tank with pipelines and portable units or pits.

Dr. John Frederick, University of Texas: I am appalled that you don't already have a formula for airline fees. We want to set up university training in airport management, and we look to you for help.

Oliver Parks, East St. Louis: Eighty-five per cent of mechanical difficulties with private planes have been eliminated. Air transport can multiply 10 times, from 22,000 to 220,000 persons employed and from 300 to 3,000 planes but that is small compared to the potential of private flying if utility is provided. We can develop the aviation industry to a size one



NEW TEST PILOT INSIGNE:

Pilots of the AAF Materiel Command test section, fighter branch, are flying behind a new insignia, indicated above on the nose of a North American P-51 Mustang by Capt. Darrell L. Sims. The insignia depicts a rooster, symbolizing a "cocky" pilot with a cigar at a jaunty angle, riding the cockpit of a rakish fighter plane.

third of the automobile industry in 1941.

Sheldon Steers, Michigan Director of Aeronautics: Realizing the fallacy of attempting to expand airport facilities beyond reasonable limits, we maintain that the day is here when the manufacturer must build into his airplane characteristics that will fit the average airport. Too often we become concerned about the big airplane that lands four or five times a day and overlook the 900 to 1000 traffic movements by the small fry.

Electronic Autopilot For Planes Revealed

Device, built around two gyroscopes, is said to be capable of 300 flight corrections a minute.

Details of an electronic autopilot—a wartime improvement of the automatic pilot—have been disclosed, although our four-engine bombers have used them as standard equipment for some time.

The autopilot is an electronic device built around two gyroscopes and it is capable of making more than 300 flight corrections a minute. The gyroscopes are fixed to the plane with the spinning rotors free to move in any direc-

tion. The movement of the airplane around the rotors is picked up by electronics and translated into control of the operation of the rudders, elevators and ailerons with the aid of electric motors strategically located in the aircraft.

► **Makes Flying Easy**—Minneapolis-Honeywell, in cooperation with the AAF Materiel Command, developed the autopilot and W. J. McGoldrick, vice-president in charge of aeronautical engineering for the company, said he saw the possibility that the device would make it possible for anyone who can drive an automobile to pilot an airplane.

Development thus far made it easy for persons with no flight experience to handle a plane in the air and experiments being conducted by Minneapolis-Honeywell and other companies indicate progress toward its use in take-offs and landings.

Arms Order to Budd

A large heavy-ammunition contract has been received by Edward G. Budd Manufacturing Co., whose order for Conestoga all-steel cargo airplanes recently was canceled.

C. Jared Ingersoll, chief of the Philadelphia Ordnance District, estimated that at peak production the artillery shell contract would employ 3,000 to 3,500 persons.

Manufacturers Council Gets Major Role in ACCA Revitalization

Group, with Personal Aircraft body, emerges as main operating unit of Chamber, Harry Woodhead, chairman of Western Executive Committee of Manufacturers Council reveals.

The pattern of the new Aeronautical Chamber set-up has emerged along preliminary lines reported in AVIATION NEWS June 19 with the completion of the first phase of the reorganization program which points up the dominant position of the Aircraft Manufacturers Council which, with the Personal Aircraft Council, will be the major operating units.

Announcement that the first phase had been completed was made by Harry Woodhead, president of Consolidated Vultee and chairman of the Western Regional Executive Committee of the Manufacturers Aircraft Council after a meeting of the West Coast group in Los Angeles which followed a similar meeting in New York of the Eastern group. R. E. Gillmor, president of Sperry Gyroscope, is chairman of the Eastern body.

► **Pattern**—The operating pattern of the Aircraft Manufacturers Council is similar to that of the Aircraft War Production Councils and points up regional action of the company presidents who make up the two executive committees, as well as advisory committees in specialized fields of manufacture.

Under the program, each regional executive committee meets monthly and action on which the two groups agree becomes the national action of the Aircraft Manufacturers Council. The emergence of this council as a major operating unit is seen by some observers as a means of gradually subordinating the name of the Aeronautical Chamber to that of the council and avoids the difficulties involved in a change in the name of the Aeronautical Chamber, which had been proposed.

► **Personal Aircraft**—The Personal Aircraft Council is a development of the Personal Aircraft Committee which has an extensive program for increasing the utility of light airplanes, as outlined in another story in this issue.

The Aircraft Manufacturers Council has as its immediate concern the development of efficient and orderly termination and re-conversion processes and to that end a contract termination unit

has been formed to act as liaison between the manufacturers and various government agencies.

► **Other Committees Authorized**—In addition to a contract termination committee, the council has authorized the formation of committees dealing with surplus aircraft, aircraft engines and components, national defense, commercial aviation, research and statistics, public relations and industrial relations.

Separate from the committees of the council, the Chamber set-up will include committees on airplane technical, engine technical, propeller technical, accessory and equipment technical, traffic and finance.

► **Members**—The Aircraft Manufacturers Council consists of Boeing, Consolidated, Vultee, Douglas, Lockheed, North American, Northrop, Ryan, Aviation Corp., Bell, Curtiss-Wright, Fairchild, Glenn L. Martin Co., Republic, Bendix

Aviation, Waco, Sperry and United Aircraft.

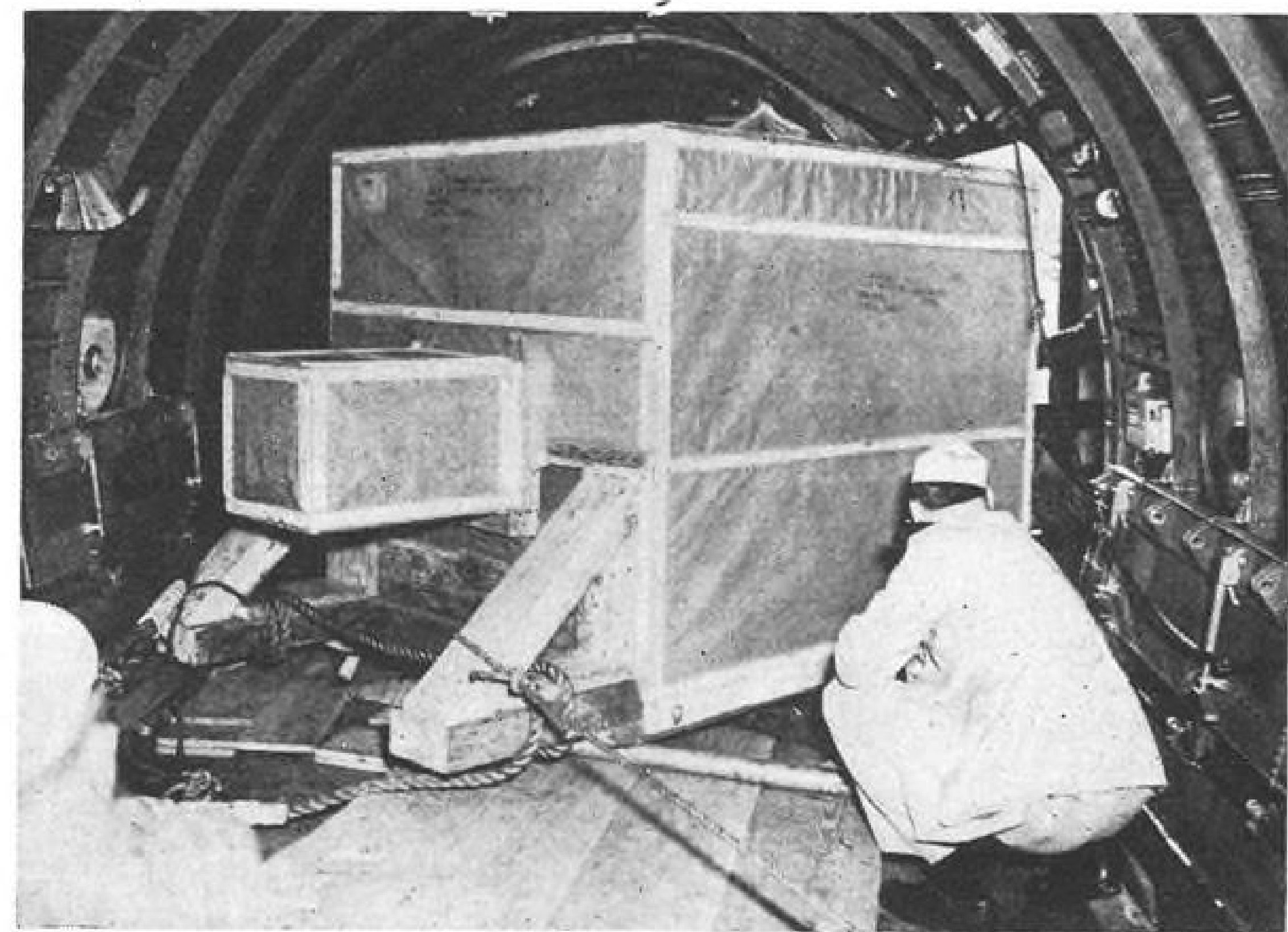
Former departments of the Aeronautical Chamber at Washington headquarters have been reorganized as service bureaus, as previously reported here, in the following fields: Industrial relations, technical, traffic, and public relations. The Economic Bureau embraces the former departments of economic development, research and statistics, legislation and information. These bureaus serve the Aircraft Manufacturers Council and the Personal Aircraft Council, as well as the membership of the Chamber not identified with either council.

The reorganization program was approved after John C. Lee, acting general manager of the Chamber, submitted his progress report on the program since he took over June 1, to the East and West regional meetings.

New Spitfire

Disclosure is now permitted of a new Spitfire, the PR Mark XI, an all-metal, single-seat, low wing monoplane used for photographic reconnaissance duties, with cameras fitted in the fuselage.

► **Has 1,650 Hp. Engine**—As reported by the British Information Service, the plane is powered by a



NATS CARGO TO CANAL BREAKS RECORD:

Douglas Skymaster cargo planes of the Naval Air Transport Service, flew, according to the Navy, the two heaviest single items ever carried by air to the Panama Canal Zone recently—turbine engine rotors sent to replace damaged rotors on a tanker carrying fuel oil to the famous Task Force 58. One weighed 8,900 pounds. Photo shows a replacement, weighing more than 10,000 pounds, being secured in the hold of the airplane.

Rolls-Royce Merlin 61, 63 or 63A engine of more than 1,650 hp. and has rotor four-blade constant speed propeller. Later Mark XI *Spitfires* have a hydraulically operated retractable tail wheel unit.

There are two main fuel tanks in the fuselage and long-range tanks are fitted in the leading edges. The Mark XI's dimensions are: span 36 feet, 10 inches; length 31 feet, one-half inch; height, tail up, one blade vertical, 11 feet eight inches.

Packard Builds Test Division at Toledo

New unit is designed for development of high altitude engines.

Establishment of a separate Toledo division to handle advanced aircraft engine development is disclosed by Packard Motor Co. officials, who stress the fact that the new establishment is designed to aid in giving the United States an edge in improved power-plants for high altitude functions.

George T. Christopher, Packard head, said the division was being established at the specific request of the AAF Materiel Command, and that the company expected the new program would yield power-plants which will go beyond present-day limits.

► **Makes Liquid-Cooled Engines**—Packard manufactures liquid-cooled engines for which the Army has always shown some leaning, only one of the AAF high-altitude fighters, Republic's P-47 *Thunderbolt* being powered by an air-cooled engine, although the B-24, B-17 and B-29 are all powered by air-cooled engines.

Packard has received an additional \$1,350,000 from the Defense Plant Corp., bringing the total to \$8,750,000 for the project. Equipment will include propeller test stands, dynamometer cells and other special machinery not specified to simulate high altitude conditions.

► **Major Test Center**—Company officials say the Toledo division will be one of the few fully-equipped engine test centers in the country. It will be under supervision of C. R. Paton, former chief engineer for Packard.

Production of Rolls-Royce engine parts at the Toledo plant will not be affected by the program, which calls for manufacturing and assembly, tear-down and re-assembly work.

WEST COAST REPORT

200-Ton Flying Boat May Fly by Jan. 1

Huge Howard Hughes' craft rapidly taking shape; expected to be tested by year-end.

By SCHOLER BANGS

Hull, wing and tail of Howard Hughes' 400,000-pound eight-engine flying boat rapidly are assuming shape. It may be flying by Jan. 1. Final assembly of major components by late-fall seems assured.

Assurance of year-end test flights will be predicated on progress of the war and the ability of Aircraft Resources Control to release to the project engines and accessories currently assignable only to high-priority warplane production.

► **320-Foot Spread**—Enlarged beyond specifications for the original design, the big boat will have a 218-foot hull and a 320-foot wing carrying radial engines of a horsepower rating still under military restriction.

Arrangements already have been made with public utility companies for temporary removal of power lines for trucking hull and wing from the Hughes factory at Culver City to Los Angeles Harbor, where test flights will be conducted.

► **Contract Revised**—Revision of the Hughes contract to specify production of a single flying boat (The original contract with Defense Plant Corp. called for construction of three boats at a cost of \$18,000,000.) will create a radical departure from established engineering procedure in the development of a prototype aircraft of massive proportions.

Under the original contract, specifications called for detailed static load testing of the first boat and finally imposition of destruction loads.

The design now approaching final assembly will be test flown without extensive static testing. However, the world's biggest flying boat, and biggest aircraft employing wood and plastic construction throughout, will be launched with the builder in possession of voluminous assurance of overall strength gained from thorough progress testing of all materials going into the final assembly.

► **POST-WAR FIGHTERS**—Look for a limited post-war modification

of outstanding fighters as personal airplanes for civilian pilots—who have big bank accounts. They will be in the \$50,000 to \$100,000 price range. Warplanes potentially attractive to such owners are Northrop's *Black Widow* and Lockheed's P-38.

Engineers toying with the idea already have spent casual moments contemplating a P-38 stripped of heavy armament and outfitted luxuriously for pilot and passenger, and with ample luggage room in the nose now crowded with guns.

Luxury plane planners believe, however, that such modifications will be only stop-gaps; that wealthy owners will have their eyes turned to the day when they can buy faster jet-propulsion aircraft.

► **WIND TUNNEL**—Boeing Aircraft Co.'s E. T. Allen Memorial high-speed wind tunnel in Seattle has satisfied its designation with a showing of 708 miles per hour at 13,000 of its maximum 18,000 hp.

Whether the tunnel will retain its hold on the claim of being the fastest large tunnel in the world may be tested soon, however, following completion of California Institute of Technology's new wind tunnel, jointly financed by Southern California aircraft factories.

While they admittedly are high, performance anticipations of the Caltech project have never been made public.

Outside Groups to Attend NAA Talks

Associations and civic groups that heretofore have not participated in aviation discussions will attend the National Aeronautical Association's Joint Airport Users' Conference at the Statler Hotel in Washington, July 24 and 25.

► **50 Groups Accept**—Lowell Swenson, NAA manager, said last week that of 71 national organizations invited to participate, more than 50 already had accepted. Invitations were issued to many organizations that may enter the airport picture after the war, as well as those already interested.

Among those who will have representatives are government agencies, national organizations of mayors, law officials and others, college organizations, construction groups, including road builders organizations, highway users and planning officials as well as aviation specialists in various fields.

B-29 Guns Fired By Remote Control

System is said to make *Superfortress* the best protected plane in the world.

A revolutionary gunfire control system is the secret of the great firepower of Boeing's B-29 *Superfortress*, disclosure of which was permitted by the War Department with the announcement of the second B-29 attack on the Japanese homeland.

Armament consists of power turrets with multiple gun-installations and with guns sighted and fired by remote control. The system includes computing gun sights which automatically correct for various factors such as wind and plane velocity while putting sights directly on the target.

► **Greatest Firepower**—Because of its supercharged cabin and because it can shoot more lead concentrated more accurately at a more distant target than any other plane yet built, the claim was made that the B-29 is virtually immunized from attack by enemy planes.

The system was designed by General Electric engineers, requires some 20,000 persons in virtually every G-E plant to manufacture and constitutes the largest apparatus contract in the company history. G-E also contributed to the turbo-supercharger developments which take the plane and crew to new altitudes.

► **Operation Automatic**—Under this arrangement, the sight and the gun are separated and the gunners are able to direct gun turrets from comfortable sighting positions. Details of the system were shown to a selected group of writers, including a representative of AVIATION NEWS, at Boeing's Wichita plant last May.

Because of the separation of the sight and gun, a wide choice of locations for both guns and gunners is possible and this arrangement gives a wider arc of fire and makes possible in addition a heavy concentration of firepower on any selected target. Visibility for the gunners for the areas assigned to them is vastly increased by the remote control set-up.

► **Pressurized Cabins**—The remote fire control and the pressurized cabins of the B-29 work together. The heated cabins, supercharged to a pressure of about 8,000 feet altitude, maintain that pressure even though the *Superfortress* may be greatly in excess of that alti-

tude. Location of the gun turrets outside the cabin simplifies to a great extent the pressurization problem.

During a flight in the B-29, writers were permitted to station themselves at the gunners' positions, seated comfortably at the side of a large semi-spherical blisters which provide at least 180 degrees of vision. Instead of working through open hatches as waist gunners had to do in early bomber models, the gunner on the B-29 works only a light, easily-handled, self-computing sight which controls the guns in the remote turrets. Locations of the multiple 50-calibre machine gun turrets or the 20 mm. cannon have not been disclosed.

—C. S. H.

Bellanca Holds 25% Of Voting Stock

G. M. Bellanca, chairman of the board of Bellanca Aircraft Corp., New Castle, Del., is listed as controlling 25.1 percent of the company's voting stock through ownership of 59,900 common as of Dec. 31, 1943, according to the company's report for 1943, filed with the Securities and Exchange Commission.

John H. Jouett, president of Bellanca Aircraft Corp., was paid \$11,082 in salary for 1943, the report discloses.

► **Milburn Gets \$19,413**—L. C. Milburn, vice-president and general manager, got \$19,413 during the same period, while S. Samuel Arsht, treasurer and assistant to the president, was paid \$10,022.

Compensation paid Jouett and Arsht was for the period from March 23, 1943, when they were elected to their present positions. Jouett's salary is \$12,000, plus 1 percent of the company's net earnings after taxes, and Mr. Arsht's salary is also \$12,000.

► **Sales**—Gross sales totaled \$6,222,492. Costs were \$5,211,066, leaving profit of \$1,011,425. Deductions of \$192,709 for selling and administrative expenses reduced this figure to \$818,716.

Giving effect to \$154,015 representing other income from various sources, gross income of the company was \$972,731. Interest of \$132 on notes payable brought net income before payment of income taxes to \$972,598.

After making provision for Federal income tax and excess profits taxes of \$730,000, net income for 1943 was \$242,598.

Northeast Airlines Operates at Loss

Northeast Airlines, Inc., paid its president, Samuel J. Solomon, \$12,310 salary for 1943, the company's report to the SEC shows.

Milton H. Anderson, vice-president, was paid \$13,200 for the same period, and Robert S. Swain, treasurer and director, got \$12,300.

The eleven directors received \$29,050, and \$6,000 was paid to the law firm of Ely, Bradford, Thompson & Brown, for services. ► **Revenues**—Total operating revenues for the year were \$3,480,300. Expenses totaled \$3,544,938, showing an operating loss of \$64,638. After other deductions such as extension and development costs, interest expense, loss on Canadian exchange and on disposal of capital assets, total loss for 1943 was \$127,801.

There was a claim of \$30,856 for refund of 1942 Federal income taxes based on the carry-back of 1943 loss, which brought net loss for 1943 to \$96,944. Earned surplus at the beginning of the year was \$43,393, which left a deficit in earned surplus at the end of the year of \$53,551. Capital surplus at Dec. 31, 1943, was \$1,498,547.

30 Million V Loan For Minn.-Honeywell

Minneapolis - Honeywell Regulator Co. has negotiated a new \$30,000,000 Regulation V loan to finance the company's expanded war production program. The new loan is in the "VT" form and will take the place of the company's existing \$15,000,000 V loan with the new credit available at any time and from time to time until June 30, 1947, subject to earlier reduction or termination at the option of the company. Interest rate is 2¾ percent on the amount of moneys from time to time borrowed and there is a commitment commission of one fourth of one percent on the portion of the credit from time to time unused.

► **Syndicate**—Banks participating are Northwestern National Bank, of Minneapolis; First National Bank of Minneapolis, The First National Bank of St. Paul, Continental Illinois National Bank and Trust Co., Chicago, and four affiliated banks of Northwestern National Bank of Minneapolis. The loan carries a 90 percent guarantee by the War Department.

Survey Lists Airline Stockholders Owning More than 5% of Shares

Reports to CAB reveal equities of large companies are widely distributed, whereas ownership of smaller firms is concentrated in hands of few.

General wide distribution of the securities of the large domestic airlines and concentration of control among the smaller lines are the highlights of a survey of stock-ownership reports filed with the Civil Aeronautics Board.

Records submitted to the CAB, showing holders of 5 percent or more of domestic airline securities at Dec. 31, 1943, disclose that two of the "Big Four" companies—Eastern Air Lines, Inc. and United Air Lines Transport Corp.—were the only two domestic airlines that did not have at least one stockholder owning more than 5 percent of their securities. American Airlines, Inc., had a stockholder with 25 percent of the company's securities, but the shares have no voting rights. Among the smaller domestic airlines, however, the securities were generally closely held, with officials, in many instances, holding the largest stock interest.

► **Cross Ownership Absent**—The study shows the absence of cross-

ownership among the airlines, and with the exception of Northeast Air Lines, Inc., and Hawaiian Airlines Limited, there were no holdings of 5 percent or more by other transportation interests.

The accompanying tabulation shows for each of the domestic airlines the holders of 5 percent or more of the companies' securities at Dec. 31, 1943, as filed with the CAB.

Financial Reports

► **Solar Aircraft Co.** reports for fiscal year ended Apr. 30 net profit of \$849,988, equal to \$2.57 a common share, compared with \$515,116 or \$1.52 a share for the previous twelve months. Profit was after federal taxes and renegotiation refund of \$3,917,507, less a post-war refund of \$207,253 in the 1944 year while net for previous year is after \$3,671,178 federal taxes less post-war refund of \$101,706.

Boeing Aircraft Co. Reports on Income

P. G. Johnson, president and general manager of Boeing Aircraft Co., was paid \$50,000 during 1943, the annual report of the parent Boeing Airplane Co. to the SEC shows.

Claire L. Egtvedt, chairman, and H. O. West, executive vice-president, of Boeing Aircraft Co., were paid \$35,000 and \$32,500, in 1943.

► **Legal Fees**—The report shows payment to the law firm of Holman, Sprague & Allen of \$57,350 for legal services. Mr. Allen, partner in the firm, is a director of Boeing Airplane Co. Six officers including Johnson, Egtvedt and West, got \$172,764.

Gross sales totaled \$493,188,160. Other income, such as interest earned, royalty and license fee income, etc., amounted to \$188,041, bringing the total income to \$493,376,202.

► **Expenses**—Cost of sales and other corporate expenses, including depreciation of \$987,569 and \$1,388,697 for amortization of facilities acquired during the emergency period, totaled \$460,528,332. After setting aside \$2,000,000 as provision for contract adjustments, etc., there was a balance before provision for taxes of \$30,847,870.

Taxes amounted to \$26,365,000, including \$890,000 for federal normal income tax and surtax, \$25,450,000 for federal excess profits tax, and \$25,000 for state income tax, leaving a profit transferred to earned surplus of \$4,482,870.

Airline	Shares Held	Percent of Total Outstanding	Airline	Shares Held	Percent of Total Outstanding
All American					
Common Stock					
Arthur P. Davis (Dir).....	50,024	19.08	Hawaiian Airlines		
A. Felix DuPont.....	33,000	12.59	Inter-Island Steam Navigation Co...	29,790	88.58
Laird & Company.....	113,435.5	43.26	Inland Air Lines		
Preferred Stock					
Blyth & Co.....	10,781	38.84	R. Leferink (Pres).....	76,317	46.47
A. Felix DuPont.....	3,000	10.81	M. W. Landes (Vice Pres).....	38,216	23.27
Equitable Securities Corp.....	1,773	6.39	Mid-Continent Airlines		
Lake & Co.....	4,000	14.41	T. F. Ryan III.....	104,597.3	26.86
American Airlines					
Aviation Corp. (a).....	143,769	25.01	Ince & Co.....	38,000	9.76
Braniff Airways			Zink & Co.....	35,773	9.19
T. E. Braniff (Pres).....	341,304	34.13	National Airlines		
Chicago & Southern			G. T. Baker (Pres).....	108,442	40.16
Carleton Putnam (Pres).....	54,184	18.59	Lehman Brothers.....	28,503	10.56
Colonial Airlines			Frank Gould.....	21,000	7.78
Sigmund Janas (Pres).....	20,110	7.7	Northeast Airlines		
Continental Air Lines			Boston & Maine R. R.....	25,000	5.09
Common Stock					
Lawrence C. Ames (Dir).....	19,872	7.75	Lake & Co. (c).....	90,000	18.00
L. B. and J. F. Daniels.....	13,950	5.44	Maine Central R. R.....	25,000	5.00
Estate of W. H. Erhart, Thomas H. Roberts, Executor (Dir).....	62,050	24.21	Pennroad Corp.....	25,000	5.00
Louis H. Mueller (Dir).....	31,850	12.42	Northwest Airlines		
Preferred Stock					
Phillips Petroleum Co.....	3,196	100.00	Incorporated Investors.....	16,000	6.8
Delta Air Corp.			Pennsylvania-Central		
Clarence E. Faulk (Pres).....	23,291	11.74	Carl M. Loeb, Rhoades and Co. (d) ..	22,003	6.61
Richard J. Reynolds.....	60,600	30.55	Pittsburgh Aviation Industries Corp.	31,500	8.76
Collett E. Woolman (Vice-pres).....	21,338	10.76	Transcontinental & Western Air		
Biedenharn Realty Company (b).....	11,760	5.93	Hughes Tool Company (e).....	440,050	45.6
Eastern Air Lines		NONE	United Air Lines		NONE
			Western Air Lines		
			Smith and Sanford (f).....	193,565	47.22
			(a) Shares do not vote.		
			(b) M. S. Biedenharn is vice-president and director of Delta.		
			(c) Atlas Corp. is beneficial owner.		
			(d) John L. Loeb is director of PCA.		
			(e) At Jan. 27, 1944.		
			(f) Shares held by Smith and Sanford as nominee for William A. Coulter president of Western.		

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THE AIR WAR

COMMENTARY

Nazis Feeling Effect of Battle Against Strategic War Materials

Concentrated raids on oil sources expected to be reflected in further sharp curtailment within next few months of *Luftwaffe* and mechanized army activities.

Fighter aircraft, roller bearings, petroleum and synthetic gasoline and synthetic rubber. Here are prime targets for strategic bombardment.

During the past few weeks the campaign to cripple Germany's striking power by knocking out the production of oil reached a new high. Oil is the lifeblood of the *Wehrmacht* as well as the *Luftwaffe*. It runs airplane engines, tanks, mobile guns, supply and personnel trucks. Without it German *panzer* divisions would be immobilized, aircraft grounded, and troop movements stalled.

As a result of an all-out drive during the week ended July 1, the best Allied estimates indicate that Nazi oil production has been cut down to between 30 and 35 percent of the normal output, and that production of gasoline, including aviation and motor fuel, is running at less than 50 percent of the amount needed by the German forces.

► **Sources of Oil**—Fortunately for the Allies the world's important oil fields are out of reach of the Nazis. It is this fact, coupled with the very high requirements of the German armed forces, which makes the oil industry of such critical importance from the standpoint of strategic air power.

German sources include natural petroleum, mostly in Rumania; synthetic oil derived from coal and from such processes as alcohol from wood, benzol from coke, etc.

Before the big daylight bombing attack on Ploesti about a year ago (Aug. 1, 1943), it was estimated that the Nazis had at the most from two to three months' oil supply in reserve. From the total supply of crude oils and synthetic processes available at any one time, about one-tenth of the final product would be aviation gasoline, about one-third motor gasoline, about

one-fourth Diesel and light oils, less than a fifth would be heavy fuel, less than one-tenth lubricants, and the balance lost in the refining processes.

► **Ploesti the First Blow**—The brilliantly planned and daringly executed low-level mass attack by more than 150 *Liberators* against the oil refineries at Ploesti was a major blow. Some 27 percent of all German petroleum products were produced here, with more than one-third of the output going directly to the eastern front.

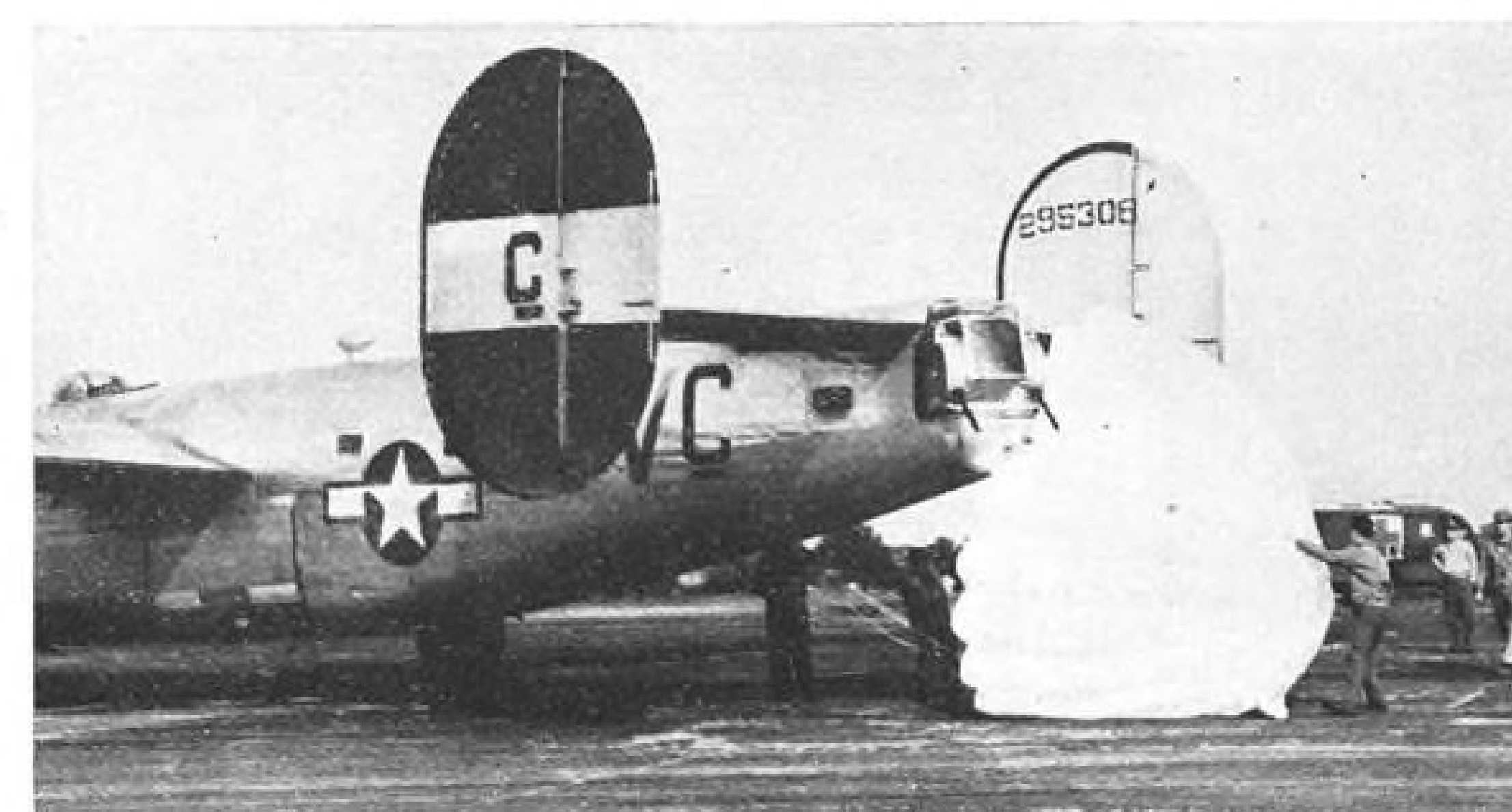
Among the refineries heavily damaged were Astra-Romana, Creditul Minier, and Colombia-Aquila, with a combined total of 1,500,000 tons of petroleum products per year. There is no doubt that production was sharply curtailed for several months, while our strategic bombardment forces developed their campaign against fighter aircraft and ball bearing production.

Owing to their geographic location in the Balkans, northern Italy, Austria, Hungary and Poland, it was evident that when the battle against oil was resumed it would fall largely to the Fifteenth Air Force of General Eaker's Mediterranean Allied Air Forces.

► **New Blows in the Spring**—As the Russian southern drive across Bessarabia and into Rumania progressed, another reason for attacking Ploesti came into the picture. Ploesti was an extremely important transportation center. Thus on Apr. 5 some 225 *Fortresses* and *Liberators* dropped over 550 tons of high explosives and incendiaries on both the marshalling yards and the oil refineries at Ploesti. On Apr. 29, in a blow of an entirely different character, some 500 *Liberators* and *Fortresses* dropped over 1200 tons on military objectives around Toulon, including huge oil stores.

On May 5, another blow against Ploesti oil was struck, this time a heavy attack on the oil pumping station. In addition to distribution by railroad tank car, oil from the Ploesti refineries is carried by pipeline from Ploesti to the Danube, whence it is transported to Germany by barge. May 18 saw one of the heaviest attacks of all, with nearly 1000 tons of bombs dropped on the Ploesti oil refineries alone.

► **Synthetic Oil Plants Attacked**—During this same week (May 12) the Eighth Air Force based in England carried out its first major attack on six synthetic oil factories in the Leipzig area which turns out some 40 percent of Germany's total production—Merseberg, Lutzendorf (600 tons of bombs), Zwickau, Brux (470 tons), Zeitz,



B-24 USES PARACHUTE FOR BRAKE:

When its hydraulic system was shot out during an air attack on Germany, this *Liberator* crew used parachutes for brakes to land at its base in England. Fastened to the interior of the plane, the chutes were let out the waist window just before the wheels touched.

Ham and Eggs

THOUSANDS of deadly "eggs" have been laid at Adolph Hitler's doorstep by the American Air Forces—"eggs" that made possible our invasion of Europe. And now these "eggs" are falling again on Japan. In this advertisement we pay tribute to the Air Forces' personnel who operate the communication equipment of these aerial battleships—to the radio operators, many of them pre-war "hams."

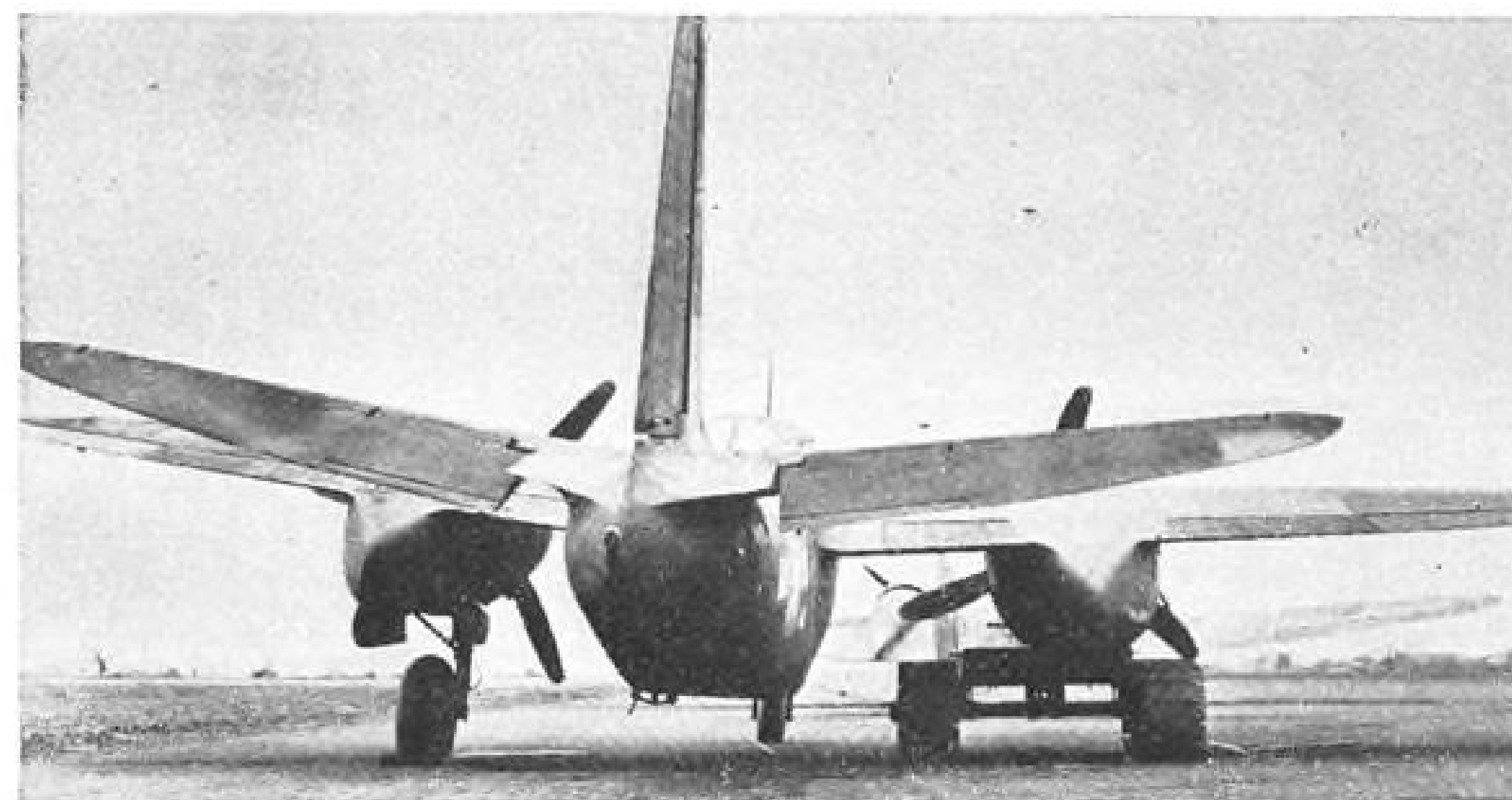
Without radio—without these gallant flying "hams"—the daring coordination of thousands of planes would be impossible. These men are risking their lives daily so that American formations may communicate with each other, with the ground forces, and with their home bases.

We at Titeflex like to think that we are playing our part in making radio communication possible in aircraft. For high frequency signals from the ignition would completely

blot out radio communication if the ignition systems of aircraft engines were not efficiently shielded. We are proud that the Titeflex RADIO SHIELDED IGNITION HARNESS has met and passed the most severe test for electrical and mechanical durability—that of service on America's war planes.

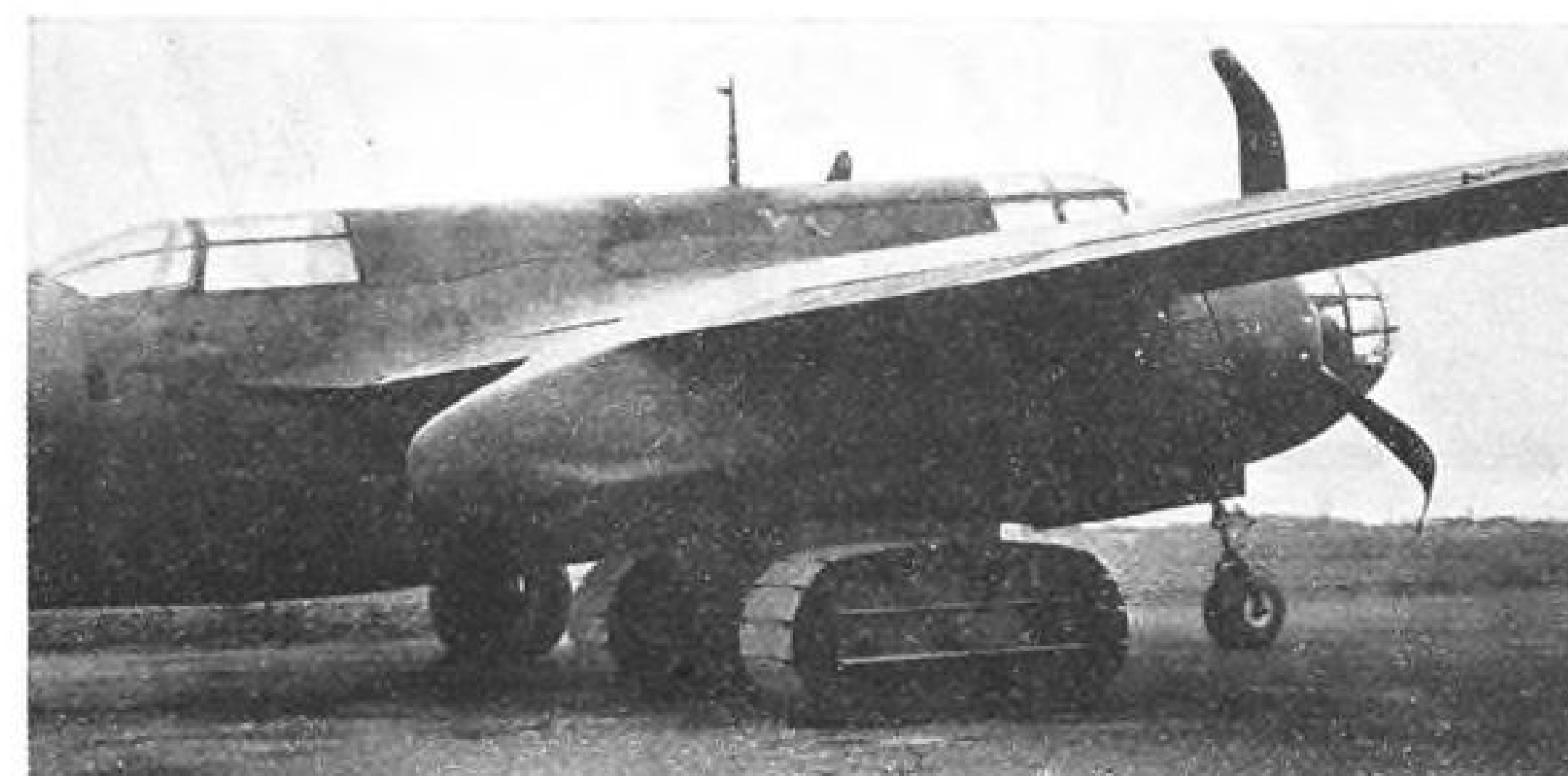
But in the aviation business, today's best is not good enough for tomorrow. That is why the Titeflex research staff is testing, testing, testing to improve Titeflex products. To meet the need for shielding and flexible tubing of even wider usefulness in postwar aviation is the goal of Titeflex engineers. If you have any problems which these engineers may help you solve, you are invited to consult them now.

TITEFLEX, INC.
508 Frelinghuysen Avenue,
Newark 5, New Jersey



CRUTCH FOR CRACKED-UP PLANES:

Planes that make unceremonious belly landings in England are given a "crutch" to get them off runways and on the way back into the air. This British-made caterpillar tread device makes handling of wrecked planes simple and speeds clearing of runways on busy fields.



Bohlen (475 tons); results, from fair to excellent.

Some of the bomber formations met the most aggressive enemy fighter attacks encountered in weeks, indicating the High Command's estimate of the importance of the targets.

A return engagement was played on May 28 when four of the above plants (including 450 tons on Zeitz alone) and two additional synthetic oil factories, Ruhland and Magdeburg, were attacked by more than 850 U. S. heavy bombers, with more than 300 determined "bandits" in the Magdeburg area.

These two widespread attacks evidently took care of the synthetic production capacity for the time being, the next such blow being on June 20 when Russian-based bombers of the Eastern Command (USSTAF) struck the synthetic oil plant at Drohobycz, deep in southeastern Poland.

► **Climax in June**—June 6 saw another smashing attack on Ploesti oil refineries (840 tons), while the 10th brought a brilliant and dar-

ing attack by 50 *Lightning* fighter-bombers carrying 1000-pounders, with 50 *Lightnings* as top-cover. Direct hits were reported on the Romana-Americana oil refinery, Ploesti, a 1200-mile round trip from Foggia being flown.

The same week recorded heavy attacks on oil stores and refineries at Porto Marghera (twice) and oil refineries at Trieste, both in northern Italy. The following week the 15th Air Force really went after the refineries in Hungary and northern Yugoslavia, with particularly heavy attacks on two refineries at Budapest, on one at Petfurdo (believed destroyed), Szony, Osijek and Sisak; this was all on June 14. Two days later a series of attacks was carried out against the oil refineries in Austria and Czechoslovakia, with results from good to excellent. The targets included Floridsdorf, Kagraan, Lobeau, Schwechat and the Vienna Winterhafen refineries.

During the same week, in nicely coordinated action, the Eighth Air Force and RAF Bomber Command

added to the destruction. The 8th struck the Missburg refinery near Hanover on the 14th and 18th and four refineries in Hamburg, besides one at Emmerich in northwestern Germany. The RAF dropped nearly 1,600 tons of bombs on the great synthetic oil plant at Gelsenkirchen in the Ruhr on the night of the 11/12, and nearly 1,600 more on a big refinery near Duisburg on the 15/16.

► **Shuttle Bases Pay Dividends**—On many of these attacks fairly heavy opposition was met, another indication of the necessity for the *Luftwaffe* to spread even thinner its waning fighter defenses to take care of these widely scattered targets, now so readily accessible as a result of the 3-way shuttle bombing runs—Italy-Russia, Russia-Italy, England-Russia, and other combinations.

During the last week of June and first week of July, bombers from all these bases had another whirl at the crippled system of refineries and synthetic oil plants.

Heavy attacks were made on Ploesti three times within ten days, other refineries at Bucharest, Trieste and Vienna were struck, and (as we have seen) a synthetic plant in Poland was bombed from Russian bases. Besides this, numerous oil dumps were set ablaze.

This is what air power has been able to accomplish against a highly strategic industry, and it will not be at all surprising if the Nazi war machine finds itself running out of gas within the next two or three months.

NAVIGATOR



NEW SAFETY DEVICE:

Photo illustrates a simple device for adjusting AAF safety harness, lap and shoulder belts, which was designed to meet the request of flyers for a harness that operates with a minimum of effort.



FLYING HORSEPOWER

**TODAY, FLYING HORSEPOWER
IS 100% WAR POWER!**

*But think what this kind of
performance will mean in Peace!*

ALREADY tests have shown that a two-motored transport, using new superfuel "boosted" by "Flying Horsepower," can achieve amazing performance records over the same plane using 100-octane gasoline. Here are several comparisons:

TAKEOFF: The transport can leave the ground in less than 1,800 feet, compared to 2,000 feet with 100-octane gasoline in the fuel tank.

CLIMB: The plane can climb over 1,800 feet per minute, compared with 1,400 feet per minute with 100-octane gasoline.

CEILING: The plane can climb to 34,000 feet, compared to a ceiling of 28,000 with 100-octane gasoline.

LOAD: The plane can carry a pay-load of over 9,000 pounds. This compares with only 7,400 pounds with 100-octane gasoline.

...FUEL OF THE FUTURE

A SENSATIONAL new superfuel, "Flying Horsepower," is providing new power ingredients for America's 100-octane aviation gasolines...boosting the performance of U.S. planes.

This greatest gasoline news of the war is the result of development after development by Socony-Vacuum in Catalytic Cracking. It's the product of 11 years pioneering work...a \$90,000,000 investment in new refining equipment and facilities...the greatest Catalytic Cracking program in the world.

No "dream," no fantastic promise, "Flying Horsepower" is a war-proved reality. Today, Socony-Vacuum is producing enough of this new superfuel every day to provide 100-octane gasoline for 1,200 4-engine bombers flying from England to Germany and return.

After Victory, this "fuel of the future" will power the mightiest air fleets the world has ever known—

FOR TOMORROW'S PEACETIME PLANES!

America's commercial planes. For Socony-Vacuum refineries are ready—the day after all military needs have been met—to start producing for the peacetime requirements of the aviation industry.

Watch for announcements of "Flying Horsepower" in new Mobilgas for aircraft!

NEW SUPER AVIATION OIL HELPS KEEP ENGINES CLEAN!

Drawing upon 78 years' lubrication experience, Socony-Vacuum has developed a new super Mobiloil Aero for aircraft use, to serve as a running-mate for the new Mobilgas. In operational flights covering thousands of air-hours, this new oil has proved its exceptional wear-resisting qualities. The outstanding feature is its resistance to ring-clogging deposits.

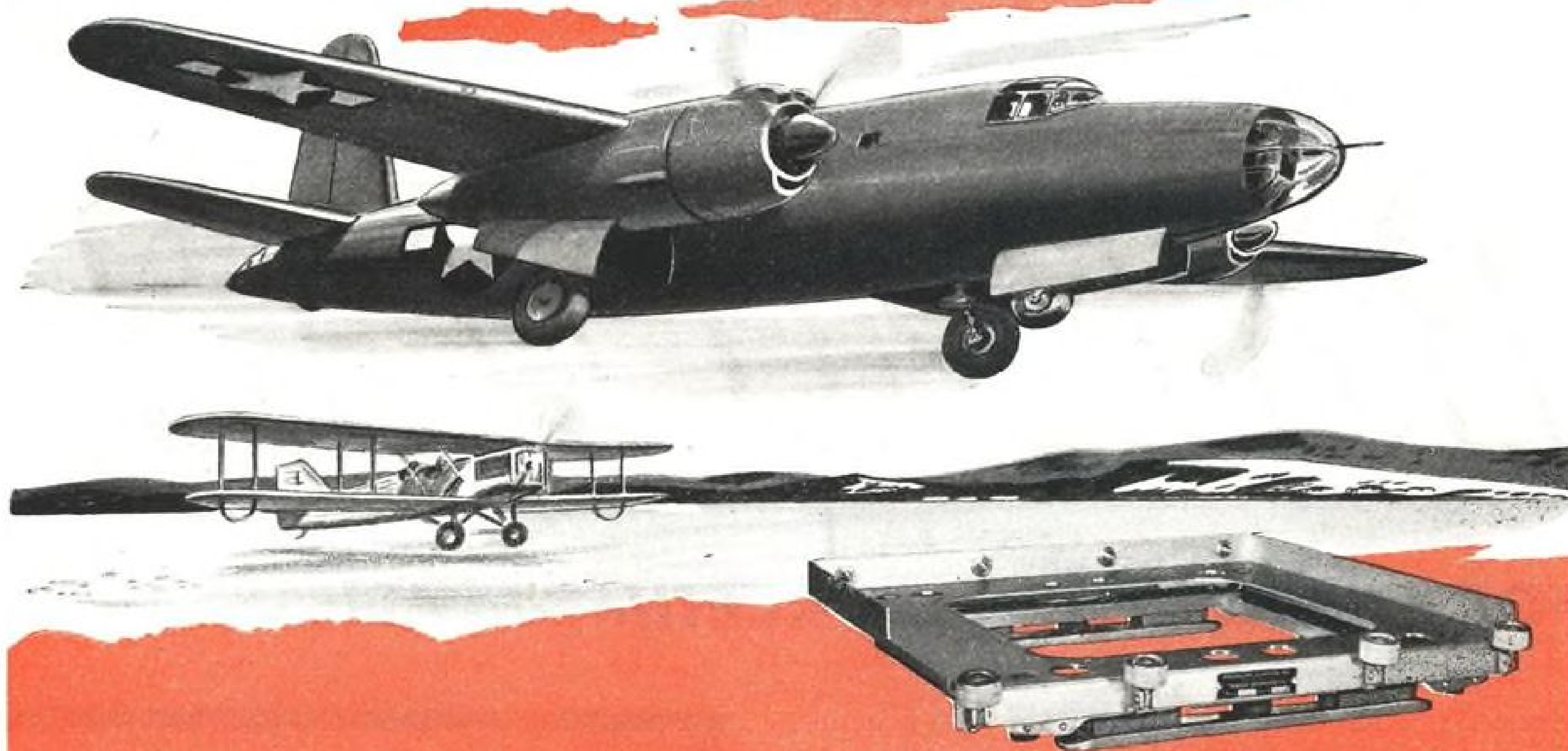
SOCONY-VACUUM OIL COMPANY, INC.
26 Broadway, N. Y. C., and Affiliates: Magnolia Petroleum Co., General Petroleum Corp. of Calif.



Get the Facts on **Mobilgas · Mobiloil Aero**

Vibrashock

what does it mean?



For years engineers have specified "shock mounts." These were designed to protect airborne equipment against the shocks of take-off and landing. Conditions have changed, and suspensions which will adequately absorb shock plus vibration, are necessary.

Long sustained flight, blistering speed, continuous vibration from high-powered engines, plus new complex instruments have raised a problem. To meet this problem Robinson engineers have perfected VIBRA-SHOCK Suspension. This new suspension consistently absorbs better than 90% of the engine and propeller vibration in addition to cushioning shock more than ever before.

Here is one of the many types of Robinson VIBRA-SHOCK Suspensions. Today the wide use of this new suspension on our military aircraft protects aerial cameras, radio equipment, delicate flight instruments, and many electronic devices, against shock and vibration—this is VIBRASHOCK!



ROBINSON AVIATION INC.
730 FIFTH AVENUE • NEW YORK 19, N. Y.



Converted DC-3's, above, with narrow doors, had to be loaded the hard way. Not built for cargo use, they were pressed into service out of desperation in the early days of the ATC. Right: Lift trucks and a Curtiss C-46 Commando engineered for cargo-carrying have simplified the task and skyrocketed the volume of traffic.



Life in the ATC was often rugged. A soldier on Ascension Island boils out some clothes on a makeshift stove in a makeshift pot.



Air Transport Command: *World-Girdler*



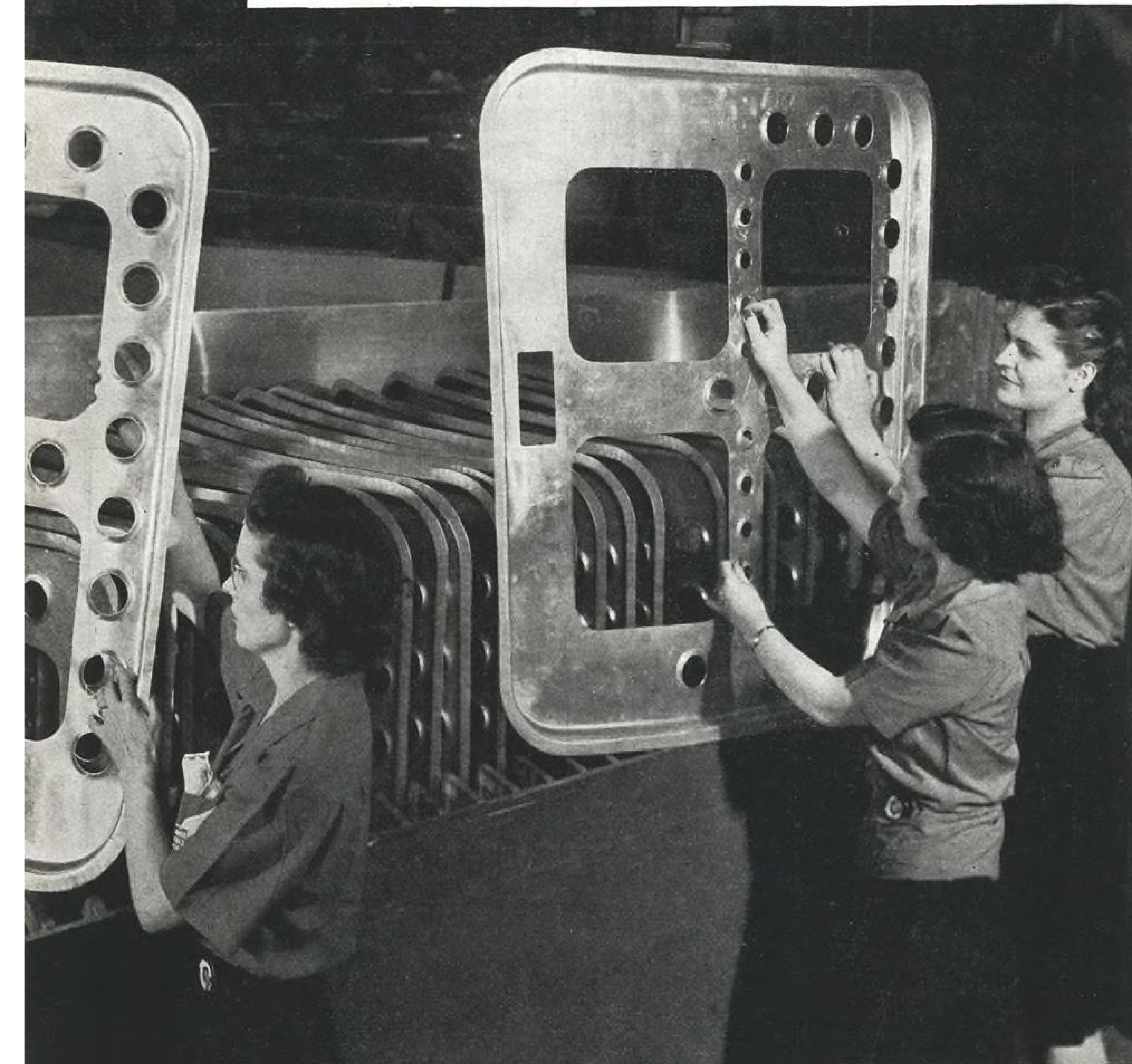
No palatial administration building greeted pilots in Iceland. A buried Nissen hut is the briefing room for ATC crews flying the once-wide Atlantic.



The work wasn't done as fast as it would be in the United States. Native workers mix concrete the old way at an ATC base in Brazil.

REYNOLDS

...can supply vitally
needed parts **NOW**



No part is too small or too large for the complete Reynolds facilities. All parts are subjected to rigid inspection as a normal routine of manufacture and stamped with the customer's as-

sembly code numbers. Carefully compiled tally sheets systematically record the shipment of all parts. There is no confusion or delay in assembling Reynolds parts.

FORWARD-LOOKING MANUFACTURERS recognize their acute need of thoroughly dependable sources of supply in the midst of today's uncertainties and changing conditions. Reynolds is just such a supplier, where aluminum parts are concerned . . . whether the order calls for the speedy delivery of a few hundred or a million.

These past few years have given Reynolds a post-graduate course in fast, economical parts manufacture. The lash of war "must" orders produced aluminum parts by the hundreds of thousands . . . parts of every conceivable size and shape—from small angle brackets and sub-panels to complete wing and cabin segments. Reynolds pre-fabricated aluminum parts lowered the cost and speeded the manufacture of planes, tanks, ships and the thousand-and-one devices that go into these weapons.

Reynolds facilities are complete in every respect . . . from the bauxite mines to finished aluminum parts. Batteries of

modern high-speed machines, manned by skilled operators, are now available to manufacturers with suitable allocations.

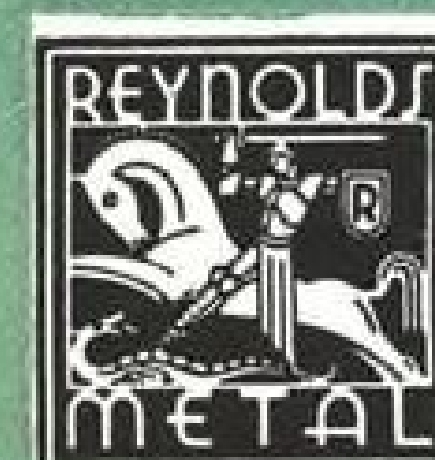
Parts can be fabricated to the most strict specification, or when desirable, Reynolds engineers are ready to work with manufacturers to determine the best application of the new Reynolds-developed aluminum alloys to the specific job at hand. No part is too large or too small for the Reynolds production facilities.

Why not investigate what Reynolds can do for you *now*? Reynolds Metals Co., Aluminum and Parts Div., Louisville, Kentucky.

* * *

SALES OFFICES IN THE FOLLOWING CITIES: Akron, Ohio. Atlanta, Ga. Baltimore, Md. Beverly Hills, Calif. Boston, Mass. Buffalo, N. Y. Chicago, Ill. Cincinnati, Ohio. Cleveland, Ohio. Dallas, Texas. Dayton, Ohio. Detroit, Michigan. Kansas City, Mo. Milwaukee, Wisc. Minneapolis, Minn. New Orleans, La. New York, N. Y. Philadelphia, Pa. Pittsburgh, Pa. St. Louis, Mo. San Francisco, Calif. Toledo, Ohio. Washington, D. C. Wichita, Kansas.

Instrument cases, panels, inspection plates, cowlings and many kinds of similar parts are being produced by Reynolds in large or small quantities.



REYNOLDS

The Great New Source of

ALUMINUM

INGOT • SHEET • EXTRUSIONS • WIRE • ROD • FORGINGS • TUBING • FOIL • POWDER

PERSONNEL

Jack Frost has been named assistant to Lowell H. Swenson, manager of the National Aeronautic Association.



Jack Frost

Frost was formerly a public relations director for several large companies before joining NAA.

V. L. Follo (photo), replaced A. C. Michaels as superintendent of Good-



year Aircraft Corp.'s plant D, where Navy Corsair fighters are produced. Follo has been assistant superintendent of the plant and was formerly at the Arizona plant. Michaels has been sent to

the Goodyear subsidiary at Litchfield Park, Ariz., where he becomes plant manager. The Arizona plant has been producing parts for Consolidated B-24's and Venturas and is an important modification center.

Capt. Arthur E. (Mike) LaPorte, chief flight officer of Pan American Airways' trans-Atlantic operations, has been awarded a fifteen-year gold service pin. LaPorte was the pilot of the first commercial airliner to cross the Atlantic from New York to Lisbon and Mar-

seilles in 1939. He has served in the Navy at the flight training school at Pensacola.

R. Todd Crutchfield has been appointed personnel director of Chicago and

Southern Air Lines succeeding Joseph J. Acree. A former OPA district rationing chief, Crutchfield has been general manager of Chicago and Southern's modification center since last Sept. 1. He has been associated with Spartan Aircraft Co., Century Pacific Airlines and the Aeronautics Division of the government.

Howard E. Hallas, formerly with Carl Byoir and Associates, has been appointed associated director of public relations for Nash-Kelvinator Corp.

John P. Loughnane has been assigned assistant city traffic manager at Milwaukee for Pennsylvania-Central Airlines, succeeding Ellis Saxton who resigned. Loughnane has been a member of the Chicago sales staff of United Air Lines. He is a graduate of the Freight Traffic Institute of Loyola University.



H. W. Clough, vice-president of Belden Manufacturing Co., Chicago, has been appointed a vice-chairman of the newly formed Aircraft Electrical Council, made up of more than 50



AAF HONORS U. S. RUBBER CO. EXPERT:

D. D. Dayton, of U. S. Rubber Co.'s tire division, was awarded the AAF new Civilian Merit Award, given to civilians for outstanding contribution to the war effort. Dayton was attached to Wright Field, AAF Materiel Command headquarters, as airplane tire specialist. Presenting the award are Capt. N. A. Glantz, chief of the rubber unit, Wright Field, and Ensign F. J. Matousek, Navy representative.



AA OFFICIAL DIES:

Hollis Thompson, 45, a vice-president of American Airlines, Inc., died July 6 in Cleveland. Thompson joined American in 1942 as regional vice-president. He was sent to Mexico later to be vice-president and general manager of American Airlines de Mexico, ultimately becoming president in 1943. This year he returned to the United States to head American's route development program. He was formerly city manager of Berkeley, Calif.

member companies of the National Electrical Manufacturers Association. Purpose of the Council is to make available to the aircraft industry and the combat aviation forces, the facilities of the electrical industry, including information on



'CLEARING all Wires!'

Breeze Flexible Conduit Shields and Protects Communications and Wiring Systems

Any current-carrying wire in an aircraft electrical system is a potential source of interference with radio communications unless properly shielded. Breeze Flexible Shielding Conduit, produced in a wide range of diameters, can be used in conjunction with Breeze Conduit Fittings and Multiple Electrical Connectors to meet practically any shielding requirement.

The custom design of complete radio ignition shielding harnesses is a Breeze specialty, based on years of pioneering experience in the field.

Breeze Flexible Shielding Conduit is in service today with fighting units of land, sea, and air, supplementing the many other well-known items of Breeze equipment that are helping the United Nations along the road to Victory.

Breeze **BREEZE MARK**

CORPORATIONS, INC. NEWARK, N. J.

PRODUCTION FOR VICTORY • PRODUCTS FOR PEACE



Breeze Shielding guards communications against high frequency interference from spark plugs and ignition system circuits.

trends and changes affecting production and other services.

Edward W. McVitty, assistant division manager of the Atlantic division of Pan American Airways, has received a 15-year gold service pin. McVitty opened and supervised regular Bermuda flights, and later the trans-Atlantic runs. He joined Pan American as an



apprentice engineer. Last February, McVitty relinquished his engineering assignment to become assistant division manager of the Atlantic division where he is second-in-command of the activities of this sector of Pan American's international operations.

Terence Sheard, air member for supply on the Canadian Air Council at Ottawa, who has been on loan to the Royal Canadian Air Force, is returning to Toronto to resume his position as assistant general manager of the National Trust Co. Sheard helped set up the British Commonwealth Air Training Plan in 1940.

James A. Healy, formerly general supervisor of contract administration,



GETS SERVICE AWARD:

United Air Lines Military Training Center at Oakland, Calif., has been awarded the Army's Certificate of Service Award in recognition of the center's training of approximately 5,000 aircraft technicians for the AAF. The certificate was presented to D. L. McDaniel, manager of the training center, by Maj. Gen. John F. Curry, in charge of the AAF Western Technical Training Command. Military Training Center was formerly known as Boeing School of Aeronautics and since Jan. 1, 1943, has been a division of United.



READJUSTMENT CHIEF:

Col. Edwin V. Rawlings, whose appointment as head of the AAF Materiel Command's Readjustment Division at Wright Field, was announced in AVIATION NEWS last week. Col. Rawlings was formerly chief of the resources control section of the production division at Wright Field. The new division will set up machinery for handling contract terminations, cutback, and disposal problems.

has been named assistant chief of contracts for Consolidated Vultee's Fort Worth division. Healy served in the Army Air Forces for 27 years before joining Convair.

Ernest F. Gamache (photo) has been appointed general administrative manager and acting sales manager for Simmonds Aerocesories, Inc. For many years interested in aviation, Gamache in 1939, with Winthrop Rockefeller, was instrumental in the formation of Air Youth of America. He was executive director of the organization until he joined Simmonds in 1942.



Don Mandell, who has been with Pennsylvania-Central Airlines since 1939, has been transferred from Birmingham to Chicago to serve as station manager there. The re-opening of stations caused by the return of three airliners resulted in several personnel changes at PCA. K. C. Sorby, who has been station manager in Morgantown, fills Mandell's place in Birmingham and in turn is replaced by E. O. Alvord, formerly chief in Pittsburgh.

W. G. Lewellen has been appointed assistant to E. F. Johnson, vice-president of General Motors in charge of

the Eastern Aircraft Division and of the Dayton Division. Lewellen was with Chevrolet before joining General Motors in 1941. He was with the office war staff of General Motors before his present position.

Sterling W. Nelson has been named district traffic manager for United Air Lines at Hartford. He has been with United for seven years. Nelson has served as district traffic manager for the company at Moline and manager of counter service in United's Chicago traffic office.



Raymond G. Lochiel, treasurer of Pennsylvania-Central Airlines, was recently elected to the board of directors of the District of Columbia Control, Controllers Institute of America.

C. W. (Bill) Garratt, recently appointed traffic manager at Chattanooga,



is the first employee of Pennsylvania-Central Airlines to return from military service. Garratt was formerly a PCA agent at the Pittsburgh station. He flew a B-25 while in the AAF and was recently given a medical discharge. He succeeds Vance Tomlin who was transferred.

Wesley R. Flinn has been named division chief of material at North American Aviation, Inc., succeeding F. T. Towne, who resigned. Flinn has been with North American since 1940.

W. A. Armstrong has been appointed chief of materials at Consolidated Vultee's Vultee Field succeeding Reuel G. Phillips, who has been transferred to the general offices in San Diego as assistant to the director of purchases. Armstrong joined Convair in May, 1941, having been president of Harold F. Ritchie Co., Inc., and J. C. Eno (US), Ltd. Replacing Armstrong as contract administration supervisor is F. M. Darling, whose post as production control supervisor was filled by appointment of Robert J. Lanham. Myron A. Wiest has been named production control group leader to assist Lanham.

Frederick Arthur Jude has been named works manager at Canadian Car's Point St. Charles plant. Jude has held many positions with Canadian Car and in 1939 went to England on a large aircraft tooling job for the company.

AIRCRAFT PRODUCTION

Industry Asks Aircraft Cutbacks Be Made First in Converted Plants

Spokesmen suggest to Murray War Contracts Subcommittee that cancellations become effective first among temporary manufacturers, such as auto industry, which have post-war markets waiting for them.

Aircraft cutbacks should be effective first for temporary manufacturers such as the automobile industry, which have substantial post-war markets waiting for them, spokesmen for the aircraft industry told the Murray War Contracts subcommittee of the Senate Military Affairs Committee last week in presenting an integrated program for achieving a balanced production as war needs slacken.

The overriding consideration in the cutback program should be the safeguarding of the creative design staffs of the pioneer aircraft companies, Harry Woodhead, president of Consolidated Vultee, said in outlining the views of the Aeronautical Chamber of Commerce to the Murray Committee.

► **Urge New Designs Be Continued**—The termination program should assure that planes of new design, in

production or projected, be continued if in the opinion of the Army or Navy they are needed for the maintenance of air power, Mr. Woodhead said. He urged also that the program include continuation of development of experimental types that will contribute to advancement in the sciences, complete termination of types of which there are excess quantities and of types which are no longer of tactical value.

The program also should be so designed as to prevent precipitous and continued wholesale unemployment and should provide employment in non-war industry in proportion to decreased employment in war industry, Woodhead said.

► **Factors to Be Considered**—The ACCA program suggested that the following factors be taken into con-

sideration in formulating cutback programs, in addition to the primary factor of post-war markets: ► Problems of the creator of the original design should be given consideration in the decision as to which manufacturer is going to be cut back first—the licensee or the basic manufacturer.

► Present production status of the manufacturer concerned.

► Local manpower situation.

► Overall costs of the products to the government.

► Manpower utilization.

► Meeting of production schedules.

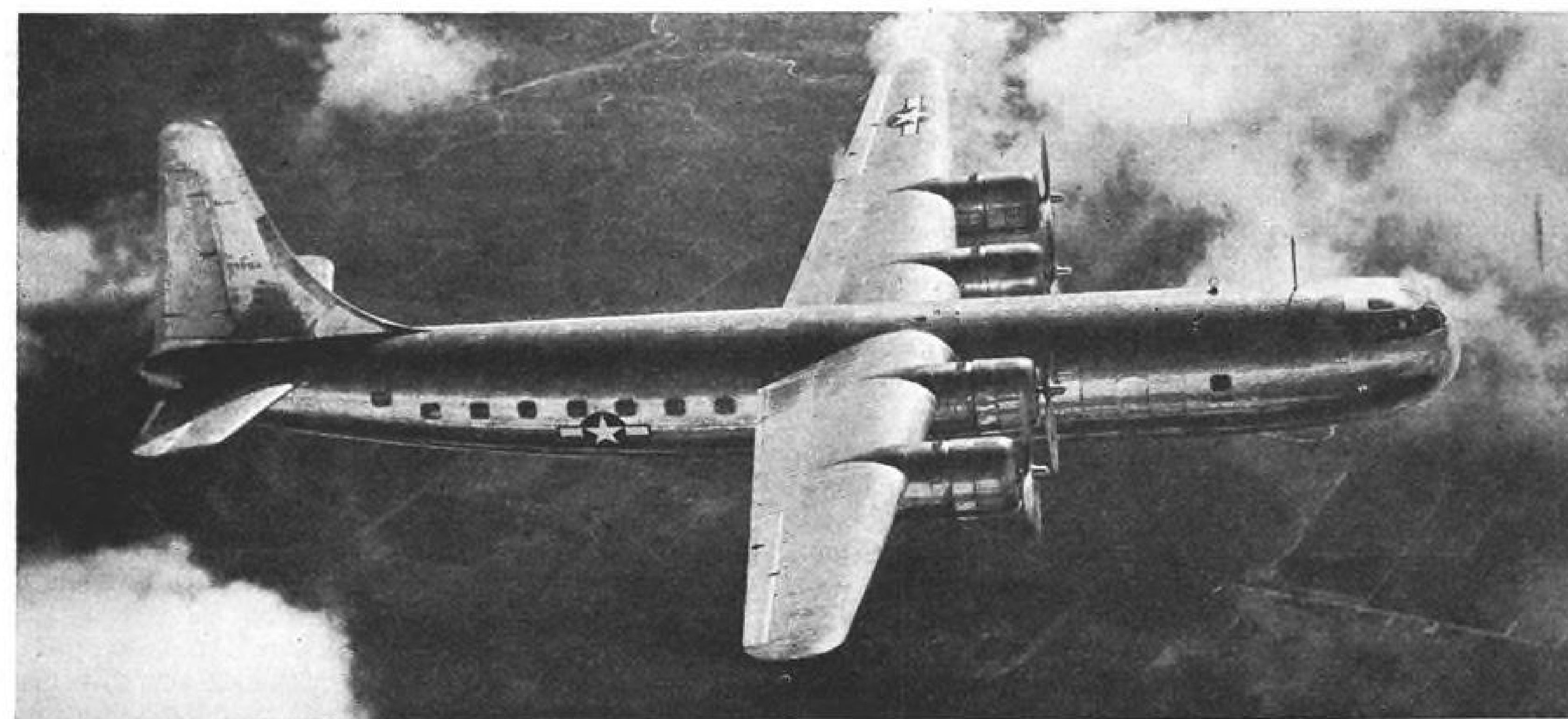
► Contributions to the progress of aviation.

► Needs of the aircraft industry to prepare for post-war development and production.

► Orders for aircraft that are becoming obsolete should be cut back before orders for aircraft of more advanced design and of greater tactical usefulness.

Woodhead pointed to the need for coordination between the Army and the Navy in cutbacks, and advocated that advance notice be given in time to mesh with the 60 to 120 aircraft manufacturing cycle. This should prove sounder economy to the government and aid in the solution of the problem of losses of workers hard to replace and the evaluation of work in process for estimations of termination costs, he said.

Cutbacks, Mr. Woodhead emphasized, should not interfere with future production of types of aircraft still in demand by the military,



CONSOLIDATED'S NEW TRANSPORT:

The Model 39, post-war commercial transport version of the famous Liberator bomber, built by Consoli-

dated Vultee, is shown in this new photograph during a recent test flight.

particularly where the cutback will upset the labor reserves of the company involved.

► **Job Insurance**—Mr. Woodhead said the aircraft industry is in thorough agreement with the principle of adequate unemployment insurance as an essential to orderly manpower demobilization and re-employment, together with retraining of workers going into other fields by new employers or educational agencies and transportation of workers at government expense to new jobs or to their home communities. Retraining of workers by new employers or educational agencies is suggested.

The demobilization problem is one of national economy as a whole, he said, pointing out that the aircraft industry is not financially in position to assume additional burdens over and above those unusual burdens that will face the industry on termination of war contracts.

Navy Chiefs See New F-7-F Perform

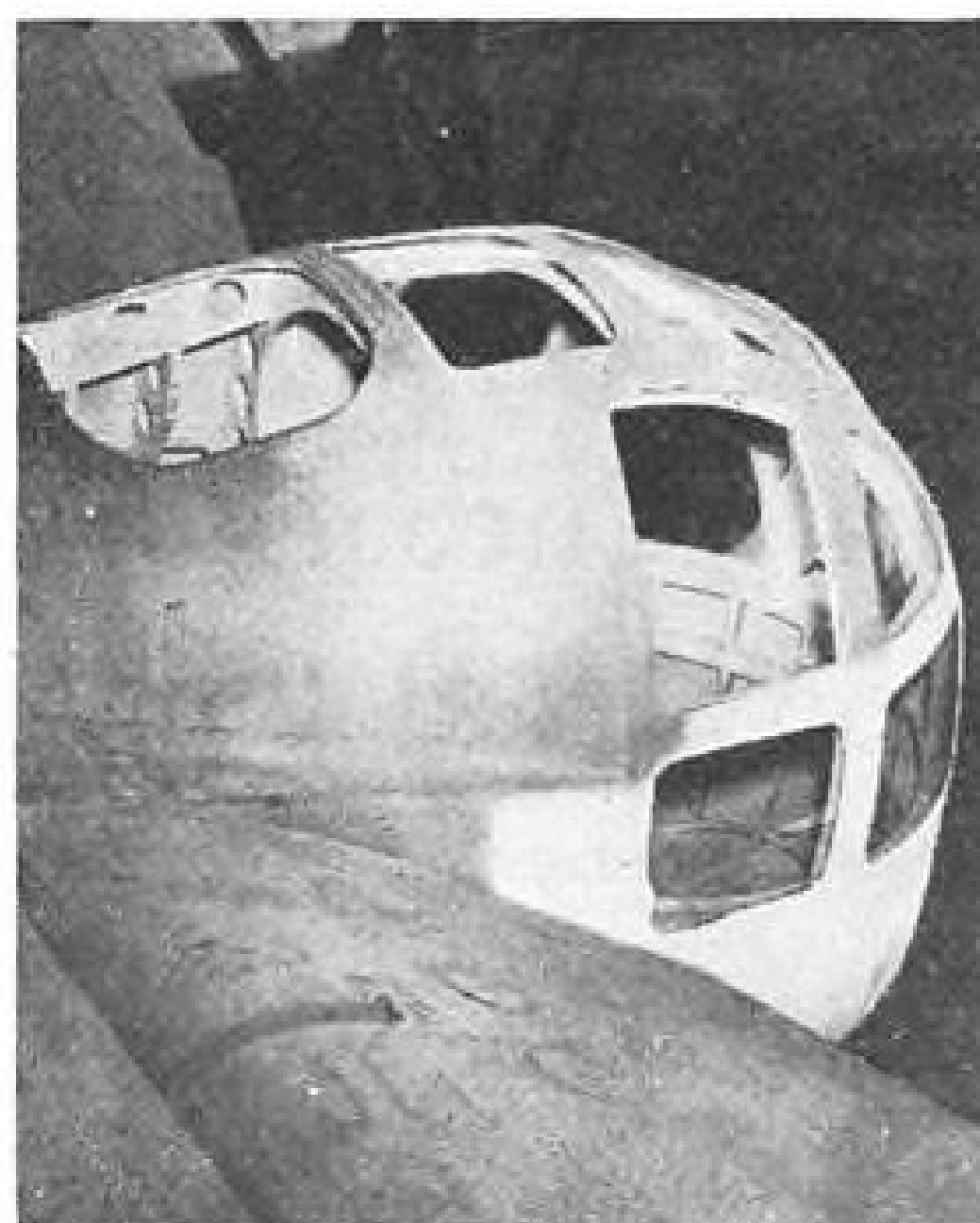
Fleet's first twin-motored fighter said to top *Hellcat* in speed and climbing ability.

The Grumman F-7-F, the Navy's first twin-engine fighter, a plane of high speed and power, has been demonstrated before Assistant Secretary Artemus L. Gates, Rear Admiral A. W. Radford, acting deputy chief of Naval air operations, and other ranking officers in the first public showing of the craft.

Details of the performance are still restricted, but the observers who watched Comdr. Joseph C. (Jumping Joe) Clifton put the F-7-F through its paces were obviously impressed. The new plane, as yet unnamed, is powered by two big Pratt & Whitney engines and its take-off and landing characteristics were termed remarkable by the Naval observers.

► **Faster Than "Hellcats"**—An indication of its speed was given when the F-7-F easily caught and overtook *Hellcats*, one of the fastest fighters which is known to be in the 400 mph. class.

The F-7-F is reported to be an outstanding climber. The pilot pulled the plane from level flight to an angle that was nearly vertical and continued the climb for some seconds, literally hanging on the propellers, in the midst of other maneuvers which indicated ease of handling.



REPLACES TURRET:

This new tail enclosure has been devised at the Advanced Bases Aviation Training Unit, Norfolk, for the early model PBM-3 Mariner patrol bombers which are now being converted to cargo transports. The new enclosure replaces the tail turret on the combat version, and is used as a navigator's station. Entrance is provided both through a top hatch and from the main compartment of the hull.

Plane Firms Aided By Canadian Budget

Canada's new financial budget provisions are expected to benefit Canadian aircraft companies along with other Canadian corporations.

Under the new provisions, which have post-war significance, companies will be able to borrow on the 20 percent refundable part of the 100 percent excess profits tax. This refundable portion is to be repaid after the war.

► **Provisions**—Losses in any year may now be charged back one year or forward three years for corporation or excess profits taxes. Companies are granted double depreciation on new capital investment after a date to be set by the government; may write off expenditures on scientific research directly or indirectly connected with the business; one half-expenditure for maintenance and repairs in a period to be fixed may be allowed against income of previous fiscal periods in computing corporation and excess profits taxes.

► **Benefit Plane Manufacturers**—While no final ruling has yet been made on what are standard profits for Canada's airplane manufacturing plants, the proposed financial

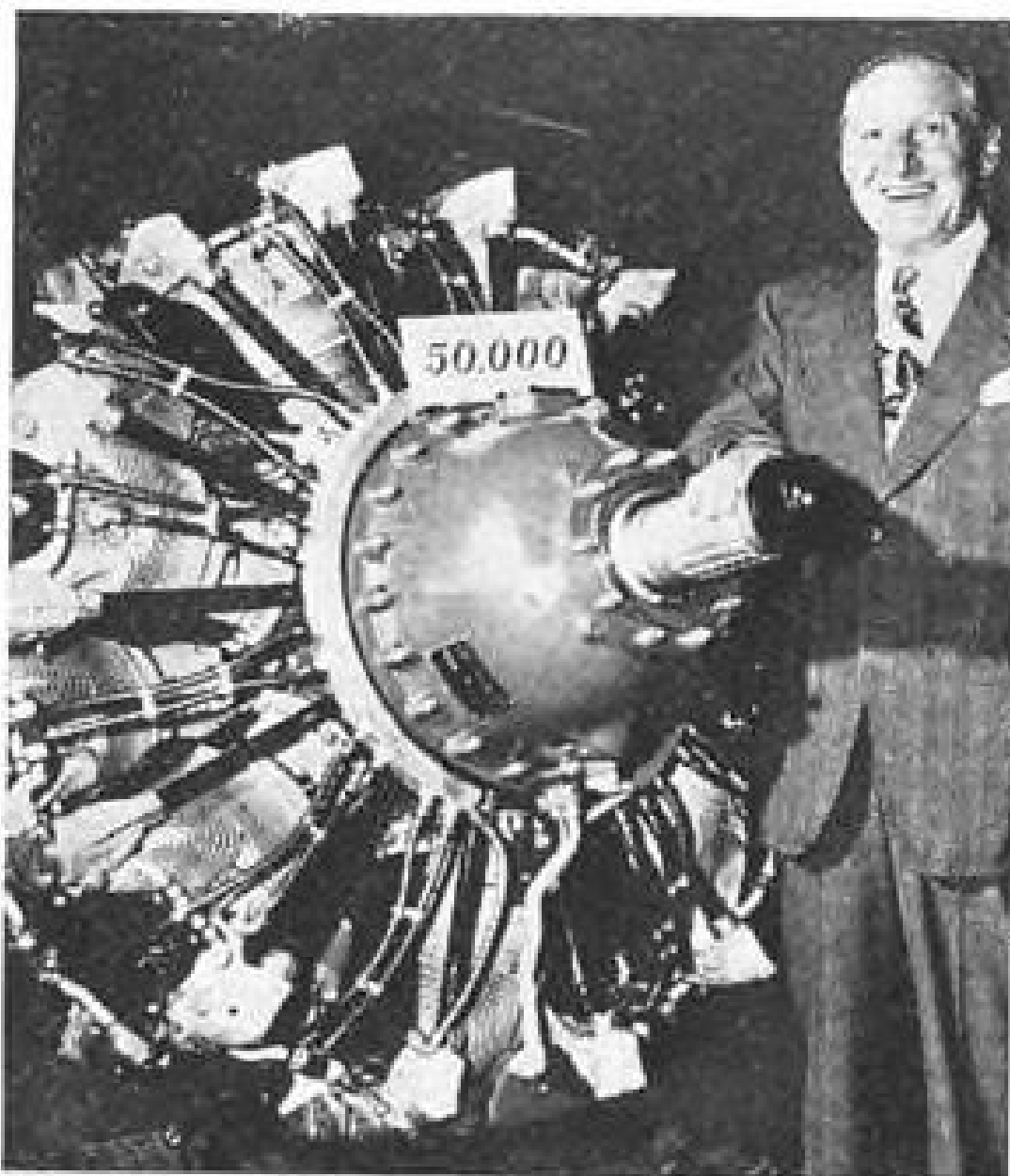
legislation is expected to benefit the aircraft manufacturers who have been faced with the possibility of most of their wartime revenue going into taxes, since no airplane firm in Canada was a big industry before the war, except those connected with shipbuilding, munitions or other heavy industry.

Buick Hp. Output Passes 60 Million

Total aircraft horsepower manufactured by Buick division of General Motors has passed more than 60,000,000 in 30 months of war production with the production of the 50,000th *Liberator* bomber engine.

Output is currently at the high rate established last year when the Buick plants in Flint, Mich., and Melrose Park, Ill., reached full operations in accordance with the production schedule laid down by the AAF Materiel Command and the WPB and will continue at this pace, according to present plans.

► **Buick Retooling**—While maintaining this schedule, Buick is retooling for the manufacture of two new engines of greater horsepower and improved performance, one of which will replace present production for the *Liberators* and the other to power the four-engine Douglas C-54 *Skymaster* transport. Both new engines are of Pratt & Whitney Twin Wasp design, which Buick manufactures under license.



Buick's 50,000th: Within a month after Pearl Harbor Buick produced its first *Liberator* engine and within a month after D-Day the firm manufactured its 50,000th Pratt & Whitney engine shown here with Harlow H. Curtice, General Motors vice-president and Buick chief executive.



REHEARSING FOR THE AIR-LANES OF TOMORROW

In Europe, in Asia, in the South Pacific... on battle fronts around the globe... American pilots are fighting to Victory. Thousands of these air heroes won their wings in Ryan PT-22's... at Ryan flying schools.

To get these superb military pilots started right, Ryan has been privileged to conduct a most extensive flight-training operation for the United States Army for nearly five years.

Daily, Ryan Schools at Hemet, California, and Tucson, Arizona, fly a distance equal to *five trips around the world*. Hundreds of seasoned pilots, men and

women skilled in maintenance, and technical experts make the Ryan Schools a smooth-functioning organization experienced in the operational problems which must daily be met to keep such a large-scale project operating at peak efficiency.

Ryan Schools, with more than 20 years of active flying experience, are also, in effect, operating laboratories for the aircraft designers of the Ryan Aeronautical Company; they are instrumental in bringing new and improved methods to flying operations and better ideas on streamlined maintenance.

FIRST IN THE U. S.—Ryan, in 1925, established the first year 'round passenger air-line in the United States. The next year this pioneer organization began manufacture of planes for the air-mail service and pioneered in establishing the important Pacific Coast airway from San Diego to Seattle.

RELY ON RYAN TO BUILD WELL



RYAN

RYAN SCHOOL OF AERONAUTICS, SAN DIEGO, CALIFORNIA
OPERATING BASES: HEMET, CALIFORNIA, AND TUCSON, ARIZONA
THE RYAN SCHOOLS ARE SUBSIDIARIES OF THE RYAN AERONAUTICAL COMPANY

U.S. Tests Plan to Absorb Loss on Company-Owned Surplus Stocks

Materials will be sold to the government for \$1 and adjustments made in renegotiation and tax proceedings under program being tried out.

Agreement with government agencies on a plan whereby company-owned surplus materials will be sold to the government for \$1 and company losses absorbed in renegotiation and tax proceedings was reported last week.

No formal agreement has been made, but a test proceeding in which the principle will be established is now under way. Its completion along lines already agreed on will clear the way for industry-wide operation of the plan.

► **40 Percent Tied Up**—It is believed that 40 percent of all aircraft material surplus is tied up because it is company-owned and not government-owned, and that the projected plan will remove over half of this 40 percent.

Meanwhile, the first shipment of excess inventory materials under the warehousing plan has been made from the Republic Aviation Corp. plant at Farmingdale, Long Island, and an additional flow of materials will start within a week at the Bell plant in Buffalo, and the Interstate factory in California.

► **Revision**—The benefits of the segregation of excess materials other than preparation for shipment to warehouses were shown in the Republic plant when at the last minute before shipment was to have started two weeks ago, an upward revision in the P-47 production program meant that some of the excess would have to be used. Segregation of the materials enabled the plant to shift the needed materials from the surplus stocks and delayed movement of the balance to warehouses for only one week.

Fifteen warehouses have completed contracts for the excess materials program of the 50 expected to participate in the plan, it was learned. Other contracts are in process and should be ready by the time a heavy volume is moving from the aircraft plants.

► **129 Plants Complete Job**—One hundred twenty-nine aircraft plants of 409 eligible under the program have fully completed segregation and reports on the excess materials, and are ready to move

surplus goods as soon as arrangements are completed. Complications in the system are being ironed out through the virtually experimental transfers from Republic and Bell, and as soon as it is determined that the process is working out as projected, the movement of materials will be speeded up considerably. The volume of excess inventory is running as high or higher than anticipated—well more than \$100,000,000 for the country's aircraft plants.

Efforts of individual plants now will be concentrated on materials other than those included in the warehousing plan. Going to the warehouses are aluminum, steel, copper and hardware of various classes, since these lend themselves more readily to warehousing and are relatively fast-moving items. Other goods will continue to be marketed through surplus disposal units of the individual companies. —W. G. K.



TECHNICAL ADVISER:

Opie Chenoweth, technical adviser to the AAF Materiel Command's powerplant laboratory chief at Wright Field, has been developing engines for the AAF for 21 years, having started with the command at old McCook Field, Wright Field's predecessor. He was an important contributor to development of the geared supercharger, and was a joint recipient of the Manly Memorial medal in 1938.

1944 Engine Output To Top 4 Billion

Dollar volume estimate based on scheduled production of 277,871 aviation power plants for year.

Total dollar volume of aircraft engines to be produced this year is estimated at \$4,264,201,000, based on a scheduled output of 277,871 engines for 1944, according to the Aeronautical Chamber of Commerce.

For the first five months of this year, 113,336 aircraft engines were produced with a total dollar volume of \$1,625,959,000 and for the rest of the year 164,535 engines are scheduled with an estimated dollar volume of \$2,638,442,000.

Production for the first six months and estimates for the last six months, as reported by the Chamber, shows:

Month	Engines	Dollar Volume
Jan.	22,695	\$313,643,000
Feb.	21,147	396,288,000
Mar.	23,996	345,040,000
Apr.	22,681	331,977,000
May	22,817	339,011,000
June	24,031	371,317,000
Estimated:		
July	23,663	366,060,000
Aug.	24,281	383,376,000
Sept.	23,586	377,793,000
Oct.	23,817	383,863,000
Nov.	23,094	382,252,000
Dec.	22,063	374,781,000

It was pointed out that the estimated schedules are subject to change with changing tactical requirements and that both numbers of engines and dollar volume would be revised accordingly.

4,000 Hp. Next

Engines of 4,000 hp. are indicated for the future with the building of eight new production test cells at the East Hartford plant of Pratt & Whitney Aircraft Division of United Aircraft Corp., capable of handling engines up to that size.

The new cells are being built for quantity production of already announced models of horsepower greater than the 2,000 hp. range now handled in the more than 60 production test cells at the P&W plant, but with the greater capacity should it be needed. Forward planning led to the preparation for tests of units up to 4,000 hp., according to William P. Gwinn, P&W general manager. The new units are 18 feet in diameter in the test sections.

PRIVATE FLYING

Embry-Riddle Plans Expansion But School Remains Main Interest

Organization, which started with single seaplane in 1939 and grew to eight divisions, announces intention to enter other fields, including plane sales and feeder line operations.

By BLAINE STUBBLEFIELD

Aviation training will remain the primary interest of Embry-Riddle School of Aviation, Miami, Fla., according to executive statement, although expansion into other fields is contemplated.

Purpose of the school, which started with a single seaplane on the MacArthur Causeway in 1939 and grew into eight divisions, was to provide thorough aeronautical training in all phases from the ground through the air, and this policy is being maintained.

► **Capacity Operations** — Today, with restrictions lifted, both the seaplane base and Chapman Field, the landplane base in Miami, are operating at capacity. Civilians, coming from all over the United States to take advantage of Florida's climate and long flight hours, are getting their wings at Embry-Riddle along with WAVES, Navy cadets, Air Forces offices—all studying on their own time. Flight instruction will continue as an important part of the school's operation in the post-war period.

The technical division, housed in an eight-story building containing 176,200 square feet, originally designed as a hotel, offers one of the finest physical set-ups in the country, officials say. All the ground courses, including aircraft and engine mechanics, drafting, radio, instruments and Link training, run for 10 months.

► **40 Months' Course**—Embry-Riddle is now developing a complete 40 months' aeronautical engineering career course for instruction of returning war veterans and for civilians in peace time.

The school expects to play a stellar role in the nationwide veterans' rehabilitation program, and today is arranging courses, instructional staffs and accommodations to take care of a large number

of these men. Here, too, the Florida climate is expected to play an important part, enabling veterans to regain their health rapidly at the same time that they are preparing themselves to return to positions in civilian life.

► **Outstanding Job**—The engines, aircraft and instrument divisions of Embry-Riddle performed an outstanding job for the Army Air Forces during a period when speed and production were of the utmost importance. The instrument division, for instance, overhauled approximately 15,000 instruments of all types for the Air Forces, while more than 3,000 major engine overhauls were performed by the engine division.

Miami is already an important air center, and seems destined to expand as such in the future; there will be a constant need for servicing, maintenance and overhauling of civilian aircraft and the Embry-Riddle management says it will be ready to meet this demand with the same shops and equipment that have been servicing the Army during the war.

► **Sales and Feeder Line**—Other post-war plans which Riddle said were being investigated by the school as possibilities include operation of a sales division for planes and parts and operation of a feeder plane line.

Today the school continues to train hundreds of cadets for the Army Air Forces at Carlstrom and Dorr Fields in Arcadia, Fla., and RAF cadets at Riddle Field, Clewiston, Fla., in addition to operating its Miami divisions. In Sao Paulo, Brazil, Riddle is operating the Brazilian Technical School of Aviation for the Brazilian Air Ministry, training aviation technicians for the Air Force, the Army and the Brazilian aviation industry.

Geuting Asks Easier Rules for Flyers

Tells Murray Subcommittee that marked upturn in private flying will follow relaxation of strict regulation.

The right to fly, in many respects, has been taken from the personal flyer and a sane and sensible relaxation of regulations and restrictions is needed if private flying is to assume its rightful place, Joseph T. Geuting, vice president of General Aircraft Corp. and spokesman for the Personal Aircraft Council of the Aeronautical Chamber of Commerce, told the Murray War Contracts subcommittee of the Senate Military Affairs Committee last week.

"A new point must be taken by the law and the administrative agencies of our government" if the public is to reap the benefits that personal flying makes possible, Mr. Geuting told the Murray group.

► **Asks Relaxation of Rules**—Geuting predicted that personal aircraft would take an important place in the post-war picture if regulations are relaxed and if landing and takeoff facilities are provided for

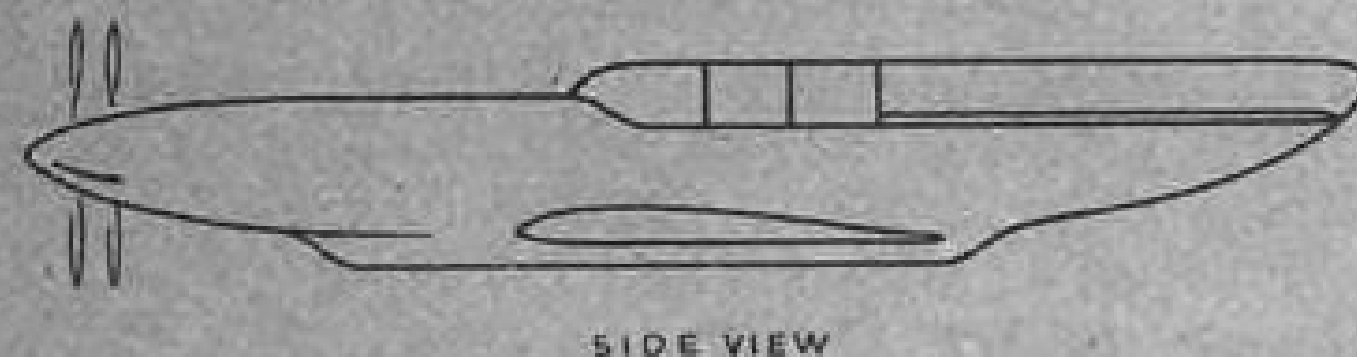
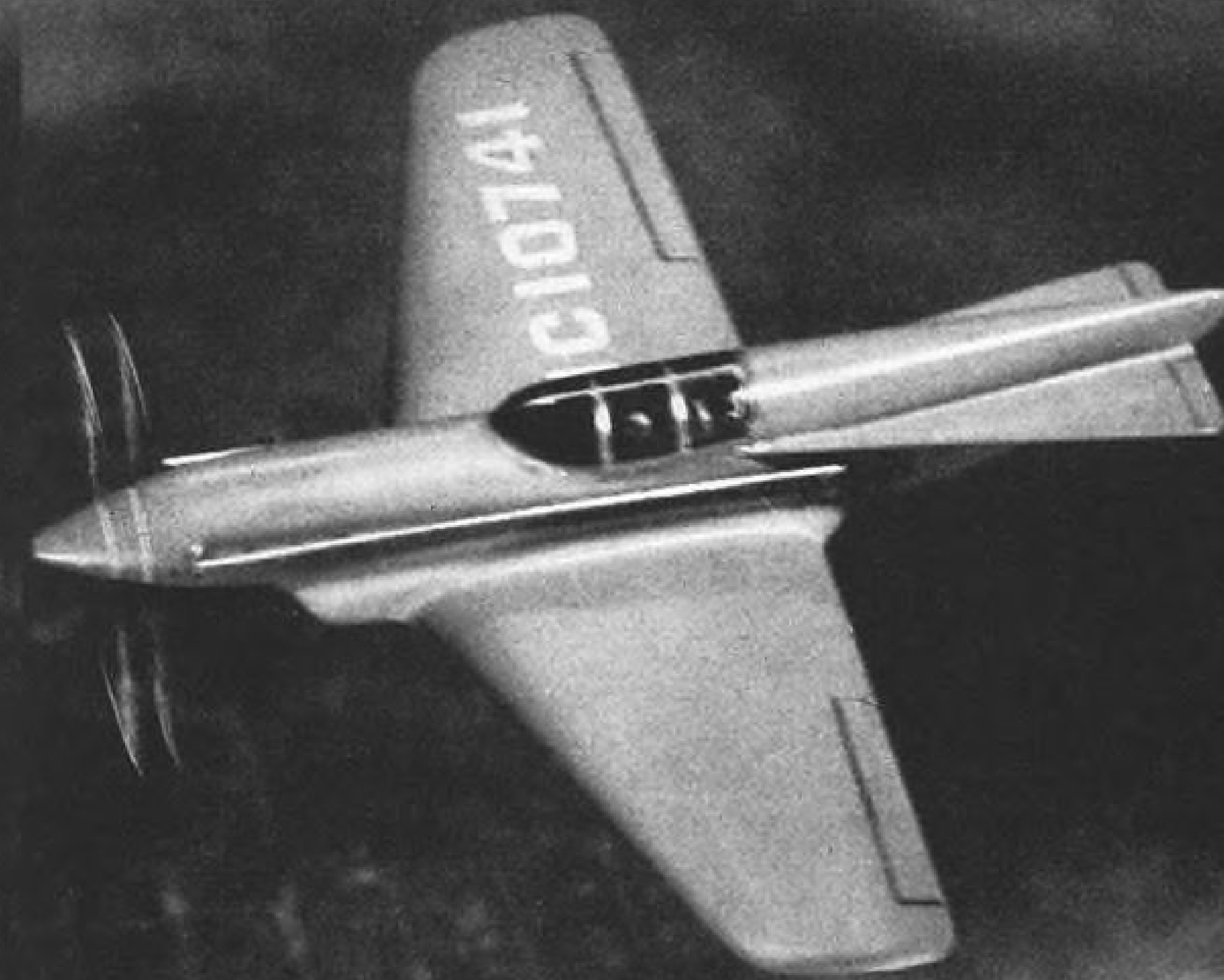


PRISMS EXTEND LIGHTS:

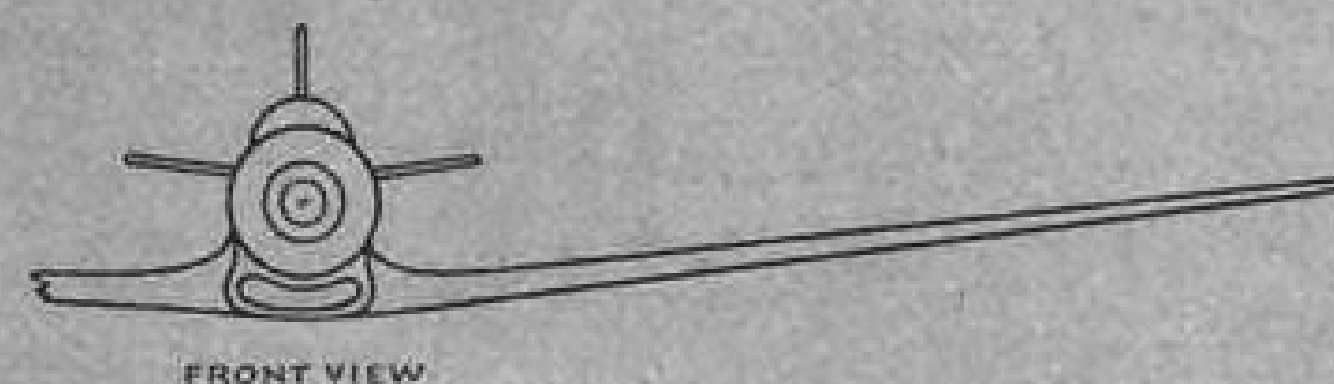
Technicians at Civil Aeronautics Administration have developed this plastic extension rod to elevate runway marker lights at northern airports where snow covers the standard, flush type of installation. A prism at the top of the rod directs a beam of light each way along the runway, refracting it from the regular set bulb at the base.

*The Makers of Fafnir Aircraft
Ball Bearings Present Number
Four in a Pre-showing of Future
Flight Possibilities . . . Models
and Settings Created by Norman
Bel Geddes and Company.*

FOR THE SPORTSMAN PILOT



HIGH SPEED PRIVATE PASSENGER PLANE
FEATURES — DUAL ROTATION PROPELLERS —
POWERED BY LIQUID COOLED ENGINE —
LANDS ON THREE RETRACTABLE WHEELS —
ACCOMMODATES FOUR PASSENGERS & LUGGAGE



Executive or sportsman may find his dream an actuality in this comfortable, streamlined plane designed for 500 m.p.h. cruising speed. Superfast, it will incorporate twin propellers in its design and will have an electronic "eye" to indicate a clear lane of flight. For the sportsman-pilot, it

Prompted by wartime achievement in aircraft, men will want to fly farther and faster in peacetime pursuits. To fulfill their desires, efficient designs for private and commercial airplanes are already taking shape.

Contributing substantially to past progress in aircraft

has been Fafnir's success in engineering friction out of aircraft controls and engines through the development and production of specialized ball bearings. Millions of Fafnir Ball Bearings in America's great airplanes furnish convincing proof. Continuing its 15-year close associa-

suggests a New York family's week-end tour to California and back . . . or a Texas hunter's date with a caribou in Alaska.

tion with aircraft engineers, Fafnir will provide the ball bearings to free power and control from friction in aircraft of Tomorrow. If it's an airplane — or any moving rotary part — there'll be a Fafnir for it! The Fafnir Bearing Company, New Britain, Conn.

FAFNIR
BALL BEARINGS
for Aircraft



the personal flyer. He explained the Personal Aircraft Council's program for a suitable number of landing facilities, and pointed out that the industry was not asking federal help in this program. He outlined the "Airparks," "Flight-stops," and "Air-Harbors" plan whereby committees and states would assume responsibility for construction and maintenance of these relatively inexpensive facilities.

But even these will not be sufficient unless changes in regulations make flying for personal uses more attractive, he told the committee. Civil Air Regulations now are a deterrent to volume production of personal aircraft, Geuting maintained, saying that "the industry feels that regulation of personal aircraft and the personal pilot has grown through the years to the point where present regulations impose onerous burdens which hamper the public right to fly and impose additional and unnecessary costs on the flying public."

He suggested:

► That personal flying be covered in separate legislation that would make the air spaces available to all persons wishing to travel;

► That these spaces be placed under federal jurisdiction;

► Ownership and operation of airplanes should be put on the same basis as that of ownership and operation of automobiles;

► Permit piloting of aircraft following proof of reasonable skill, and permit flight in a straight line from any point without clearance, flight plan, permission or report except along commercial airways under instrument conditions.

► **Fairness to Private Owner**—Regulations should be drafted so that airplane owners would bear no greater burden than the automobile owner.

A pilot would receive a pilot's license with no greater relative difficulty than in securing an automobile driver's license.

A "learner's permit" would be granted to students without undue formality.

No medical or physical qualifications above those of major importance would be required.

Any individual holding a pilot's license could give instruction providing he does not do it for hire or reward, and a student passing a simple and realistic flight test would be certified.

► **Berliner Testifies**—Col. Henry A. Berliner, chairman of the board of

Engineering and Research Corp., also testified before the committee, urging that personal plane manufacturers be permitted to begin the manufacture of parts for small planes now so that production could start within one or two months after the close of the war instead of six months later. He explained that this company did not fear competition from surplus planes.

Ballard to Enter Aviation After War

Plans for a post-war nationwide service in the field of interior engineering, designing and decoration as applied to airport buildings, airparks, skyharbors, airport communities and other aviation facilities are being made by the Walter M. Ballard Co., whose personnel and facilities have been assigned to Ballard Aircraft Co., Inc., since 1942.

► **Will Enter Aviation**—The company is now engaged in manufacture of aircraft and aircraft parts for the armed services and plans to enter the civil aviation field after the war when materials are available. The firm has long been engaged in interior engineering, de-

signing and decorating and various phases of manufacturing although it has specialized heretofore in the interior design of steamships, hotels and public buildings and has manufactured furniture and appliances.

Officials said the decision to enter the aviation field was made after extensive surveys.

Canadian Air Force Halts Recruiting

Recruiting for all branches of the Royal Canadian Air Force has been halted to Oct. 1, with diminishing enemy strength and reduced RCAF casualties given as the reason. The action follows closely action of the AAF and the Navy in cutting back pilot training. Canada announced at the same time that training courses would be extended by eight weeks, which would enable the RCAF to give more advanced training in Canada. The U. S. Navy likewise extended its training period coincident with a cutback in pilot recruiting.

► **Manpower**—Due to plentiful supply of pilot material in Canada, only those who showed the greatest aptitude will continue their pilot training. The suspension of recruiting would avoid withdrawing additional men and women from the manpower resources of Canada "at this critical time," according to the announcement.

Snyder Buys A.I.D.

Snyder Aircraft Corp., of Chicago, which recently acquired A.I.D. Inc., at Denver, will combine the Denver operations with the present Chicago and Columbus activities.

The expansion was undertaken to serve an expected large new group of private plane owners and fixed base operators with a line of engine parts, accessories and aircraft supplies, together with overhaul and repair service at the Denver branch.

High School Aviation

The Aviation Division of the Florida State Chamber of Commerce, at the suggestion of MacDonald Bryan, public relations counsel for National Airlines at Jacksonville, has voted to ask the State Education Board to make aviation a part of state-wide high school year-round instruction.

TRANSPORT

ODT Asks Cut in Air Priorities In Move to Ease Congestion

Also suggests complete review of airline advertising with view to deterring rather than encouraging plane travel, in letters from ODT Director J. M. Johnson forwarded by ATA President Gorrell to airline officials.

By MERLIN MICKEL

Office of Defense Transportation, in a double-barreled assault on the vexatious problem of congestion in airline traffic, has called for reduction in air priorities in favor of non-priority transportation and suggested a complete review of airline advertising lest it encourage rather than deter plane travel.

Copies of both letters, which were signed by ODT Director J. M. Johnson, have been sent to the heads of airlines, traffic and sales executives by Col. Edgar S. Gorrell, president of Air Transport Association.

► **Left Up to Army**—That dealing with priorities was addressed to Robert A. Lovett, Assistant Secretary of War for Air. Although ODT is responsible under presidential edict for air transportation as well as other forms, administration of the priorities system has been left to the Army because of its facilities for the job.

Asking whether the priorities are being construed strictly in accordance with the President's memorandum of May, 1942, Johnson expressed apprehension that strict limitations suggested by the President "are not being followed in all cases," and the belief that "the present situation justifies a careful review of present policies. . . ."

► **Eases Non-Priority Needs**—"A substantial reduction in the granting of priorities for air transportation," Johnson wrote, "will, of course, proportionately increase the space available to the airlines for non-priority transportation, which is so badly needed at the present time."

The director also was glad to note that additional planes were being released to the domestic airlines.

His letter to Gorrell and Chair-

man L. Welch Pogue, of the Civil Aeronautics Board, on airline advertising followed discussions of the passenger situation with railroad men who "referred critically to their competitive disadvantage as a result of current airlines' advertising," of which Johnson attached specimens to the letter to Pogue.

► **Asks Review of Ad Practices**—"Although I understand that the rules of the Air Traffic Conference cover advertising practices," the director wrote, "I am not persuaded that the attachments adhere to this agreement. In any event, under current conditions, I

believe that advertising practices of the airlines should be completely reviewed. . . . It might be well to call the attention of the airline industry to the desirability of their conforming to their agreed advertising restrictions and likewise to review the advertising agreement to see if it meets the tests of present sound public policy, which, in my opinion, is to deter travel."

► **Problem for Railroads**—Johnson pointed out that the railroads had been asked to discontinue traffic-creating and stimulating and competitive advertising, and commented that during the past two and a half years their record in this regard is "exemplary." But "naturally they grow restive when they see airlines apparently bidding for business."

ODT has evinced particular interest in the airlines since as long ago as last January. The then director, Joseph B. Eastman, prompted by the Truman Committee report urging that additional planes be turned back to the airlines, wrote Lovett and Civil Aeronautics Administrator Charles I. Stanton asking their observations. For reasons which had seemed sufficient to Jan. 21, when the letter was written, ODT had not concerned itself with operational problems of the domestic airlines. But Eastman, who since has died,



STANTON IN CALIFORNIA:

Civil Aeronautics Administrator Charles I. Stanton, (left, seated), concluded his first inspection tour of California recently at Sixth Region Headquarters of the CAA in Santa Monica. At Stanton's left is H. A. Hook, Sixth Region manager. Standing, left to right, other Sixth Region officials are Arthur Johnson, superintendent of airways; Harold Bromley, superintendent of war training; George Hammond, administrative officer; James Read, superintendent of safety regulation, and R. W. F. Schmidt, superintendent of airports.



PCA STATIONS GET FIRST AID KITS:

The first 24-unit emergency kits specially designed for Pennsylvania-Central's ground stations are shown above being presented by Sam Miller, PCA safety director, to station employees. The kits were designed by Dr. L. G. Lederer (extreme left), and contain all the necessary items for administering first aid.

said the position taken by the Senate committee prompted him to seek comment.

► **Estimates**—Pogue, to whom Stanton forwarded the inquiry, replied that the airlines did not have "anywhere near the number of aircraft required to handle the vital war traffic offered." He said the Board estimated that additional craft required by domestic and international flag carriers this year would include 93 to carry essential priority traffic without substantial displacement, 163 were estimated by the carriers as needed to carry war traffic adequately, and 369 was the Board's estimate on the additional number required to

transport normal traffic at normal utilization and load factors.

Gorrell subsequently seconded these estimates. Writing the ODT late in April, he commented that "more priority passengers are being displaced now than ever before," and said the trend seemed to be continuing as priorities were granted in increasing numbers without proportionate increases in equipment.

His memorandum to the airline heads, accompanying ODT's latest communications, declared that the quantity of planes currently being returned was "greatly influenced" by the CAB estimates, although planes are not yet being made available to the airlines on any estimate of equipment required for normal traffic transportation.

Priority Load

The Army has been criticized increasingly for too indiscriminate granting of air priorities. The ODT letters may bring action. Some steps have already been taken as a check. Recently the system whereby government agencies had a certifying officer who could issue priorities directly was eliminated, and such priorities are now processed like others through Rapco, the regional air priorities offices. Return of planes also has brought some drop in priority load factor, although on some transcontinental flights, such as those west from Chicago, Kansas City and Dallas, it still runs about 90 percent.

B-29's Modified by CAL's Denver Plant

Simultaneously with the announcement that B-29's had bombed Japan for the second time, the Army permitted Continental Air Lines to disclose that its Denver modification center had been working on the huge bombers for several months. Although previously known in the industry, this was the first public announcement that the Denver plant had shifted from *Fortresses* to *Superfortresses* in mid-February.

► **Worked 24-Hour Day**—As the first and only airline modification center to receive the B-29 assign-

ment, Continental's shops met the initial February quota by working a 24-hour, 7-day week for over a month. Production schedules have been set through September. The planes come from Boeing factories at Wichita, Kans., and Seattle.

Personnel at the Denver plant has been jumped 20 percent to handle the work. During March, 75 Continental technicians were sent to army bases to make certain additional changes in the planes.

Two of the airline's pilots have been checked out to test-fly the *Superfortresses*.

Hawaiian Airlines Asks Link to Orient

Application filed with CAB seeks to connect islands with Philippines, Japan and China.

Hawaiian Airlines, Ltd., moved last week to become an international as well as a trans-Pacific carrier in an application filed with the Civil Aeronautics Board for routes connecting Hawaii with the Philippines, Japan, and China.

The China route is laid out via Midway Island and Tokyo, with Shanghai as terminus.

► **Alternate Routings**—Two alternate routings link Honolulu with Manila, one via Wake Island and Saipan Island, and the other via Johnston, Ponape, Marshall, Truk and Palau Islands.

Combined with the Honolulu-California routes already applied for these links would give Hawaiian a complete Pacific route. A permanent certificate to authorize scheduled mail, passenger and express service is asked. Hawaiian plans to use four-engined land-planes in operating the routes.

► **Interlocking Relationship**—Western Air Lines filed jointly with five of its officials for approval of interlocking relationships resulting from the recent acquisition of Inland Air Lines and the subsequent assignment of Western officers to comparable positions with Inland. The applications for approval include L. H. Dwerlkotte, Charlie N. James, Thomas Wolfe, Paul E. Sullivan, and J. J. Taylor.

North Central Airlines, Chicago, Ill., applied for a permanent and/or temporary certificate to authorize scheduled mail, passenger, express and pickup service over 10 routes in Michigan, Illinois, Wisconsin, Iowa, Minnesota, and North and South Dakota.

► **Mexican Border Service**—Wil-

liam Beatus, Nogales, Ariz., asked a certificate for a mail, passenger and express feeder service along the U. S.-Mexican border between San Diego, Calif., and Brownsville, Tex. He operates the International Airport at Nogales. The application states that Beatus owns two Fairchild 24s, is purchasing a Waco cabin type ship, and proposes to acquire four twin-engined Beechcraft or Cessnas. He disclosed that he is ready to invest \$50,000 in the enterprise.

Food Shipments By Air Studied

Coast perishables sent by plane in test of feasibility of program.

Difference of opinion as to whether the future of air transportation of perishables lies with the established airlines or with contract carriers appears to be developing as researchers continue their study of this type of commodity and its adaptation to air travel.

In one quarter studies were being made by major trunk operators, one of whom began experimental carriage of West Coast fruits to the East for a university experiment. In another a leading exponent of such transportation suggested "tramp steamers of the air," as possibly the best solution.

► **Taste Tests Conducted**—At Detroit, a panel of 38 food experts conducted taste tests last week of the first perishable fruits sent from the West Coast to Wayne University as part of a year's experiment to determine what value such shipments may have after the war.

The shipment started a research program on air shipment and merchandising of such items, in which the university, United Air Lines, and the Great Atlantic & Pacific Tea Co. are cooperating.

► **Foods Sampled**—Under supervision of Dr. Spencer Larsen of Wayne, the food tasters sampled figs, boysenberries, plums, tomatoes, apricots, nectarines and strawberries picked less than 40 hours earlier. Officially results were not made known, but J. Prescott Blount of United's air cargo department and Earl R. French, national marketing director of A & P's produce affiliate, said they were "extremely favorable."

The first shipment, non-priority like others to come, was flown from San Francisco. Shipments are to be made once a month, for



Study Perishable Cargo Possibilities: One of the early studies of reciprocal air movement of perishables and manufactured goods is being conducted by Evans Transportation Research. Here the matter is being discussed by (l. to r.) William A. M. Burden, Assistant Secretary of Commerce; Edward S. Evans, Detroit industrialist and authority on loading, and Secretary of Agriculture Claude R. Wickard.

a year or more. After each, flavor, appearance and condition will be checked against those of the same items sent through usual market channels. The comparison will extend to laboratory studies for vitamin and sugar content, deterioration and weight loss.

► **Other Studies Under Way**—As this study was developing, another by Edward S. Evans Transportation Research, in collaboration with the Departments of Agriculture and Commerce, was well under way. Here investigators are looking into the possible use of surplus war transport planes for peacetime contract carriers as part of their studies of reciprocal movement by air of perishables and manufactured goods.

Founded by Col. Edward S. Evans of Detroit, industrialist and loading authority, who made a grant for air cargo research to Wayne University, the study also has the cooperation of the United Fresh Fruit and Vegetable Association and Detroit Board of Commerce. Findings are to be made public periodically.

► **Loads Both Ways**—Currently the investigation deals with east-bound air movement of such perishables as lettuce from the Pacific Coast and the return haul of Detroit manufactured products. Evans

expects it to indicate whether the best interests of consumer, producer and manufacturer, will lie in fleet operation by contract carriers—"tramp steamers of the air, able to go where business lies."

Evans welcomed private research by various airlines, but said he felt that the public interest required studies along broader lines regardless of the nature of the carrier—air, rail, truck or marine. His group will work with all airlines, including those who have undertaken their own research, in an order depending on commodities and geographical centers.

Col. L. H. Brittin, founder of Northwest Airlines and more recently consultant for the Aeronautical Chamber of Commerce and Wayne's air cargo research, is director of Evans Transportation Research. Headquarters are in Washington.

Warner Names Aide

Newly appointed assistant to Vice-Chairman Edward Warner of the Civil Aeronautics Board is Melvin A. Brenner. He replaces Mrs. Hope Aspel. Brenner is a graduate of City College of New York and a former War Production Board economist.

ATA Studies State Legislation Plans

Six-point program recommended by committee for adoption as industry policy.

Six points on state aeronautical legislation have been submitted to the Air Transport Association by its State Relations Committee with the request that they be adopted as industry policy.

Based on recommendations by a subcommittee, they were accompanied by a plea that ATA's board of directors instruct the committee by Sept. 1 so that it may prepare for its work next year, when 44 state legislatures hold regular session, 40 starting in January.

► **Report**—The proposed industry policies were contained in a detailed report by a subcommittee composed of Russell Cantwell of TWA, chairman, Heiner Hinshaw of United, and R. J. Moulton, Jr., of Continental.

Briefly, the six points are as follows:

► **State Regulation of Intrastate Operations of Interstate Carriers:**—

Now duplicating and unnecessary and will prove harmful to development of air transportation and public interest. State regulatory and jurisdictional powers should not apply to interstate air carriers.

► **Taxation of Aeronautics:**—Equitable taxation is vital to development of aeronautics. Aviation motor fuel taxes and special taxes such as license and registration fees should not be imposed. State aviation taxes should be allocated exclusively for aviation purposes and primarily redistributed to the source of collection.

► **Airports, Airport Zoning and Air Navigation Aids:**—State regulation of airports and such items as zoning, hazard removal, navigation aids, etc., should be uniform in terminology, standards, rates and application and consistent with Federal regulations and standards.

► **Enabling Legislation for Municipalities:**—Local governmental subdivisions can best achieve creation and development of airports and flight strips. Legislation to authorize zoning and exercise of eminent domain as to airports and landing strips should delegate responsibility to local political subdivisions.

► **General Laws:**—When applicable to aviation, state laws should be clearly defined and uniform throughout the nation.

► **Educational Work and Public Re-**



SETS FLIGHT RECORD:

United Air Lines claims a flight record of 7 hours and 15 minutes between Anchorage, Alaska, and Portland, Ore., established recently by Capt. Robert Sailors (above) piloting a C-47 under United's Air Transport Command Alaskan contract operations. The plane carried patients destined for an Army hospital in Vancouver, Wash.

lations Program:—Should be aggressively and consistently conducted by the industry to obtain the most practical state laws. Important that early consideration be given development of an air carrier legislative organizational program by states, including active participation and acceptance of responsibility by all air carriers in the industry.

Resale Formulas

Four formulas for determining resale price of DC-3 type aircraft to the airlines have been advanced, but to date none has been satisfactory to those representing the purchasers.

One was recommended by the Civil Aeronautics Board. Maj. E. M. Weld, of the Materiel Command at Wright Field, proposed another, later modified it, and now proposed a simpler one.

Major Weld's latest proposal would fix a standard basic price of \$75,000 for all planes of this type. As a credit against the basic price, a maximum of \$45,000 would be allowed for the cost of restoring each individual airplane to airline operating condition and standards.

Top Air Transport Association officials were reported in discussion of the matter last week with high Army officers.

CAB Examiner OK's Hughes TWA Control

Tool company's holdings of airline stock found "not inconsistent with public interest".

A Civil Aeronautics Board examiner has recommended that the Board find the relationship existing between the Hughes Tool Co. and Transcontinental and Western air as "not inconsistent with the public interest."

The proceeding grows out of an application by Hughes Tool Co. for such approval "if necessary" because of the 440,050 shares or 45.6 percent of TWA stock it holds. Howard R. Hughes is the sole owner of Hughes Tool.

At the solicitation of TWA president Jack Frye, the company began purchasing TWA stock in 1939, until approximately \$5,505,000 had been invested. All parties to the proceeding agreed that the percentage of stock held by Hughes Tool Co. constitutes control of TWA.

Several aspects of the Hughes Tool Co.'s activities were questioned as being "phases of aeronautics."

► **Contracted with Lockheed**—A contract between Hughes Tool Co. and Lockheed Aircraft Corp. of June 30, 1939, covered construction and delivery of 5 *Constellation* airplanes. This contract restricted sales of this plane to others than Hughes Tool Co. or TWA. It was later modified to increase to 40 the number of planes Hughes Tool Co. would purchase, and to permit the governments of the United States and Great Britain, Pan American Airways, and the Royal Dutch Air Lines to acquire *Constellations*.

In 1942, Hughes Tool Co., with the approval of Lockheed, assigned this agreement to TWA. Under the terms of the agreement as it now exists, TWA is to purchase 15 *Constellations*, and Hughes Tool Co.

Financial Picture

Financial reports of Hughes Tool Co. in CAB's records on the TWA control proceeding reveal that as of Nov. 30, 1943, the company had a capital and earned surplus of nearly \$21,500,000. Current assets were more than \$22,000,000 against current liabilities of \$10,770,000.

25, the latter under an option through TWA.

All *Constellations* manufactured are now assigned to the U. S. government, subject to an option to reacquire 40 planes by repurchase from the government.

► **TWA Holds Priority**—Restrictions against the manufacturer which would prevent the sale of *Constellation* type aircraft for domestic air transport use except by TWA continue under existing contracts.

Examiner Frank A. Law, Jr., states that "the obvious, if not expressed, purpose of these arrangements was to give TWA the benefit of the credit and financial standing of Hughes Tool in a transaction involving substantial financial responsibility."

The 25 *Constellations* Hughes Tool Co. is to purchase will be held "for resale and for experimental use."

Hughes Tool Co. is also manufacturing, under war contracts, aircraft parts and accessories, but the record in the case shows that this activity will not be continued by the company after the end of the war.

While these activities might be construed as engaging in a phase of aeronautics, the examiner found that "the possibility of wrong doing is no basis for the interruption of a relationship that has not proven harmful, but on the contrary has been and may continue to be helpful to the air carrier."

The only restriction Examiner Law recommended on approval of the relationship was a limitation as to commercial transactions between TWA and Hughes Tool Co. to aircraft parts or accessories, not exceeding \$25 per item, and aggregating annually not more than \$10,000.

Ark. 'Copter Service

Two Chicago & Southern Air Lines officials appeared before the Arkansas Corporation Commission recently against an intrastate helicopter taxicab service proposed for that state by the North Little Rock Transportation Co. R. L. Heininger, general traffic manager, described Chicago & Southern's plans for Arkansas Service. Reed Knight, superintendent of flying, testified on the helicopter's experimental characteristics. The line's counsel urged that the Commission delay action until it has considered all air services that are now proposed for Arkansas.



U.S.-CANADA AIR MAIL 25 YEARS OLD:

The 25th anniversary of the first international airmail flight between Canada and the United States was marked recently at Vancouver. This old photo shows Eddie Hubbard (left) and W. E. Boeing in front of their Boeing C-3 seaplane at Seattle on completion of the first airmail flight from Vancouver to Seattle in 1919. United Air Lines now operates the route.

Need of Hemisphere Port Plan Stressed

Creation of inter-American network, development of Latin American service urged at New York conference.

Increasing stress on the importance of airport planning and development in the United States is paralleled in the 20 other American republics.

The U. S. Office of Air Transport Information reports that these expect to have more than 2,100 civil airports in operation at the end of this year, compared with a probable 3,129 in the United States.

► **Port Survey Asked**—Delegates of all 21 American republics recommended at the first conference of Commissions of inter-American Development in New York recently that an immediate survey be made of airports and air navigation facilities in the other Americas. The conference urged by resolution the creation of a complete network of inter-American airports.

Meanwhile, a preliminary survey by the United States Defense Corp., through its American Republics Aviation Division, has shown that ton-mile volume of traffic in, to and from Latin America increased more than 200 percent from 20,544,000 in 1940 to 61,919,000 in

1943, equaling 29 percent of the U. S. domestic traffic in the latter year. Passenger traffic in Latin America was 76 percent of its total traffic last year. Cargo was 18 percent and mail 6. Comparative figures in the U. S. are 76, 7 and 17 percent.

► **Cargo Volume** — In some cases cargo was equal or ahead of passenger volume. Cargo amounted to 50 percent of total ton-miles in Central America, 44 percent in Bolivia, 33 in Colombia and 28 in Peru.

Total ton-miles in 1943 were more than the estimated total traffic carried in 1938, the last pre-war year, by all European airlines, including their overseas routes.

Latin America has almost three times as many route miles as there are in the United States, but flew only half as many miles last year, in a frequency of service about a sixth as high as that in this country. Average passenger fares, despite slight decrease since 1940, are about 40 percent above the U. S. level. The conference urged that fares be reduced and frequency increased.

► **Utilization**—The DSC reported Latin American aircraft utilization in 1943 was 3 hours per plane per day against 9.6 in the U. S. Foreign-flag carriers' average of 2.4 hours compared with 5.8 for U. S.-flag carriers in Latin America. But

trends indicate that the next few years will bring increased utilization, which has been low because of low service frequency, lack of night flying, inadequate maintenance facilities and the "advanced age" of many planes.

Last year 386 planes operated in Latin America, only 57 of them U. S. flag craft. Of the 246 multi-engined planes, 97 were of the modern type manufactured since 1936 and of the latter, 48 were U. S. flag ships.

5-Man Group Guides Airlines' Policies

Committee, entering second year, stresses need for government regulation of competition.

The Airlines Committee for U. S. Air Policy, determined to keep a watchful eye on Congress and place more emphasis on regulation of competition in its discussions of post-war international air routes, begins its second year under the guidance of a five-man executive committee.

This does away with the post of chairman, which Sam Solomon, chairman of the board of Northeast Airlines, is relinquishing. Solomon will remain, however, as a member of the new executive group, to which he appointed Thomas Burke, American Export Airlines; O. M. Mosier, American Airlines; Jack Nichols, TWA, and Robert Thach, attorney and representative of Northwest Airlines, and former vice-president of Pan American Airways.

► **Enters Aviation Law Practice**—Solomon gave as a reason for his resignation his desire to represent Northeast as counsel in its foreign route applications before the Civil Aeronautics Board. At the same time he announced, however, that he will engage in the practice of aviation law in Washington, an independent move which led to speculation on his future connections with Northeast.

Airline representatives who attended the "reappraisal" meeting at which Solomon submitted his withdrawal made the usual recognition of committee work under his chairmanship and also approved unanimously an expression of determination by the 17 member airlines—16 if Western and Inland are counted as one in light of their merger negotiations—to continue their campaign "against any monopoly in overseas aviation."

► **Competition Regulation**—Solo-



EXPERIMENTAL TOWER:

The experimental combination communications and airport traffic control tower building shown above was constructed at Roanoke, Va., by the Civil Aeronautics Administration for \$15,000. Built chiefly of wood, the tower contains offices for the Chief Tower Operator, the Chief of Communications, and meteorological unit.

mon said at a press conference that the policy remains the same as it was when announced a year ago, but increasing stress will be placed on the condition that the free and open world-wide competition advocated by the committee be subject to reasonable regulation by appropriate government agencies. This was the first point in the policy declaration, the others calling for private ownership and management, government encouragement of a sound world-wide air transportation system, world-wide freedom of transit in peaceful flight, and acquisition of civil and commercial outlets required in the public interest.

In the last connection, the committee feels that landing rights are a matter for government supervision and diplomacy. It also believes that the intricate network of navigational facilities set up by the military as a war measure should become available for peacetime commercial flying.

► **World Route Policy**—It was obvious that the committee feels one of its major duties is to keep in close touch with Congressional committees dealing with post-war international aviation. It probably means a stepping-up of the organization's efforts to "sell" Congress on competition as opposed to chosen instrument operation.

Two advocates of the latter community company idea, proposed in

the McCarran Bill, are Pan American and United Air Lines. United is also the only domestic hold-out in the policy committee group, whose meeting last week was attended by representatives of American, American Export, Braniff, Colonial, Continental, Chicago and Southern, Delta, Eastern, Mid-Continent, Northeast, Northwest, PCA, TWA and Western.

Port-Airline Leases Studied by ATA

Committee is examining agreements with view to establishment of standard practice.

Airport agreements with the airlines, now pretty much a catch-as-catch-can proposition, are being studied by an Air Transport Association committee which hopes to establish a standard.

The Airport Agreements Committee, which meets at Minneapolis early next month, has been working on two basic types of agreements. One is a long form for use at large airports where leasing arrangements are more complicated, and the other a four-page folder short form for situations where airports are small and served by fewer carriers. The committee, incidentally, prefers the word "agreement" to "lease."

► **Plan Tried Out**—Meanwhile, actual practice is supplementing the group's discussions. At Buffalo, for instance, there is being tried a plan under which landing fees are being adjusted on the basis of gross weight.

Agreements between airports and airlines have been notably lacking in uniformity. There have been a few oral agreements, and those written have shown wide variation. Generally the airlines believe in long-term leases, with periodic renegotiation. A recent survey by the Bureau of Governmental Research of the Chamber of Commerce at Indianapolis, where some leases are running out, indicated the agreement differences.

► **Rate Variations Found**—The Indianapolis study showed variation in monthly schedule rates and no definite policy on second sections. Some leases fail to cover sightseeing, pleasure or training flights. Most frequent minimum schedule rates are \$25 a month, although they vary in application from 2 to 17 monthly schedules. Five to ten year lease contracts are in the ma-

jority, although they vary from one year with monthly renewals to 20 years.

Administration building space rentals vary from \$1.50 to \$3 a square foot for ground floor to second floor rentals "rather common" at \$1.50 per square foot per year. The Bureau found evidence of variation in airport administration in negotiation of leases directly with city councils, boards of public works, park boards and boards created for the purpose. Other variations exist in responsibility for installation of radio and meteorological equipment.

Incomplete data were received on fuel service and concession revenue. The Indianapolis investigators, finding that provisions for contract termination commonly include cancellation of air mail and U. S. Postal facility contracts,

WAL-TCA Office

Western Air Lines is opening jointly with Trans-Canada Air Lines traffic offices in Edmonton and Calgary.

WAL's northern terminus at Lethbridge, Canada, will provide a funnel for Trans-Canada traffic flowing into western United States, and also is expected to provide an air gateway into the United States for a considerable portion of Alaska-generated traffic.

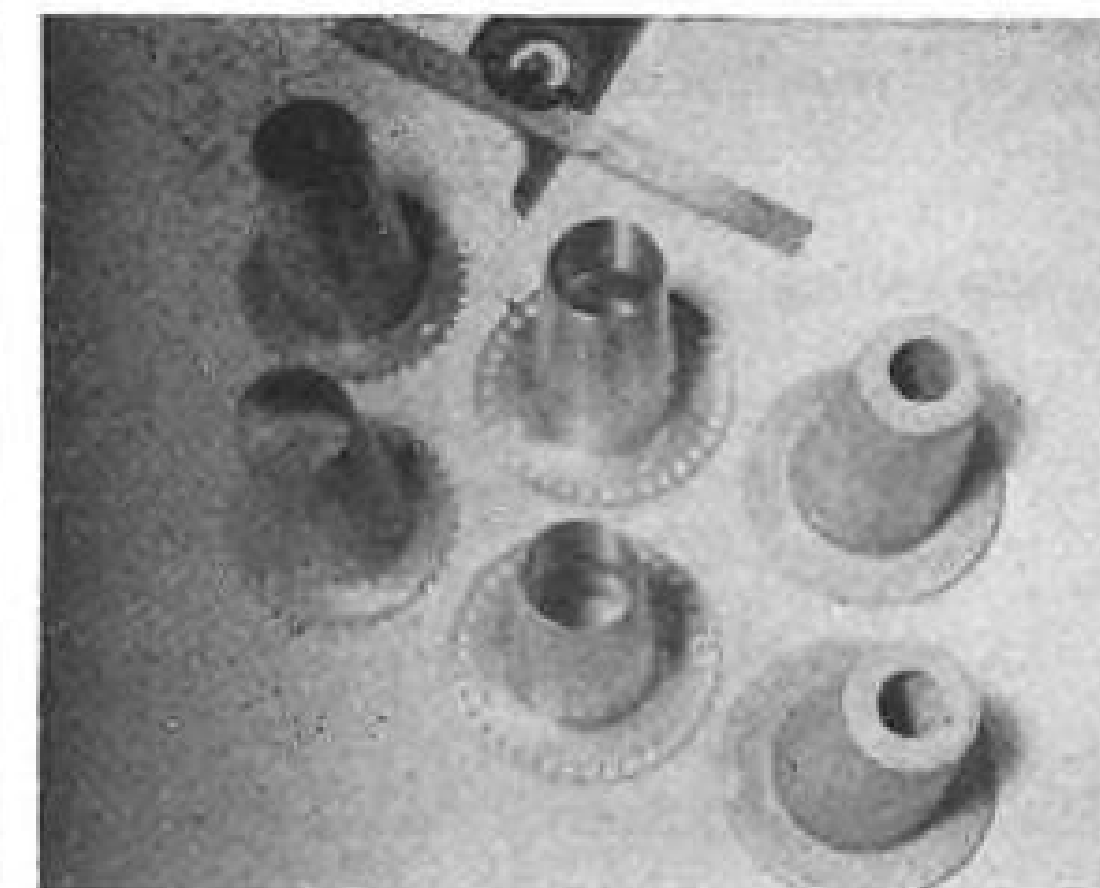
AAF Aids Airlines

The Army Air Forces Materiel Command headquarters at Wright Field, airline sources say, has agreed to make available supplies needed by the airlines when such material cannot be obtained from industry sources and are available from AAF surplus.

The situation applies to engines, parts and accessories badly needed by the lines as more planes are returned by the Army. Examples are G-102 Wright engines, which are needed for the DC-3S but are not now being manufactured.

Wright Field, it is understood, agreed to release parts only when they are unavailable elsewhere, and then only if they are surplus.

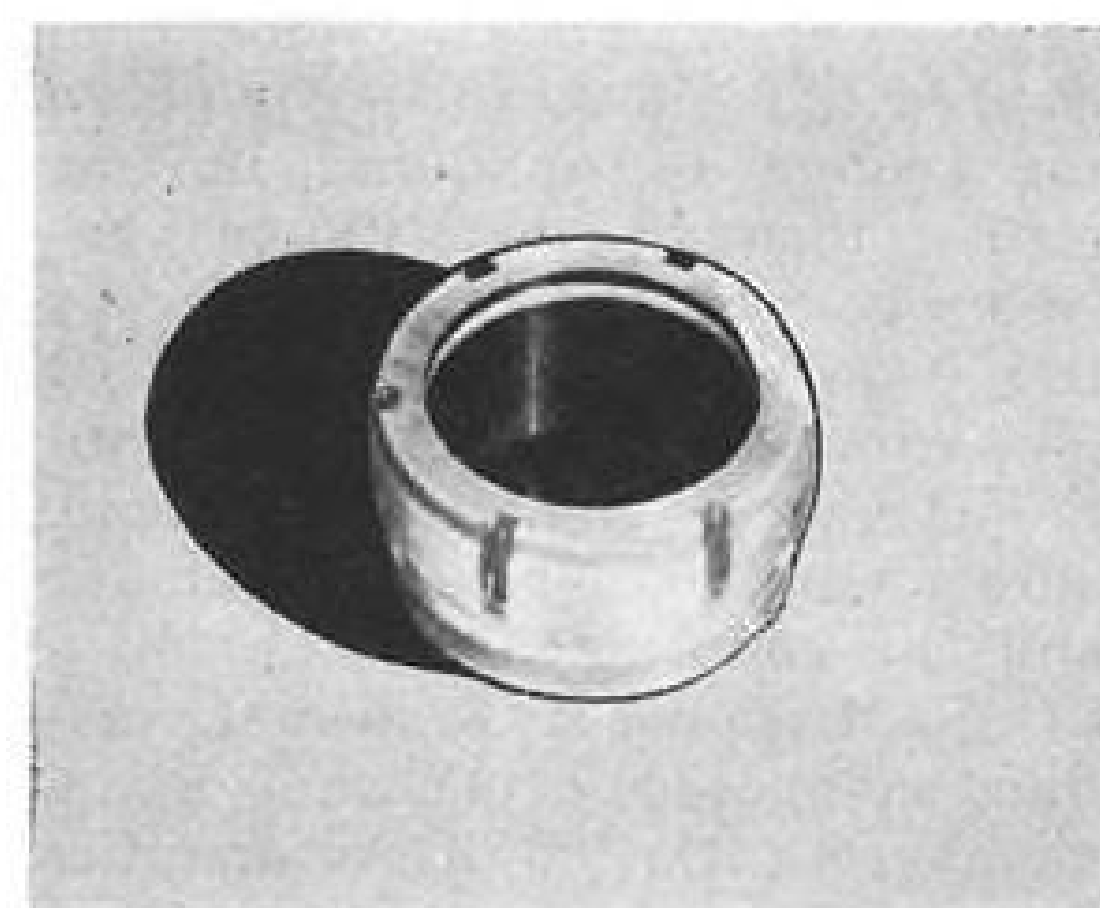
The airlines are said to be heartily in favor of this condition, which avoids any savor of competition with parts manufacturers and is an emergency resort in the strictest sense.



PROPELLER These Ampco Metal propeller blade bushings are typical of 9 applications in aircraft propellers.



ENGINE 16 parts of Ampco Metal (including bushings, valve parts, cam parts, etc.) are found in typical aircraft engines.



LANDING GEAR At least 18 parts of this vital mechanism are customarily made of Ampco Metal. (Illustrated: Packing nut.)



TAIL WHEEL Usually protected in at least 4 places with Ampco Metal. (Illustrated: Tail-wheel yoke.)

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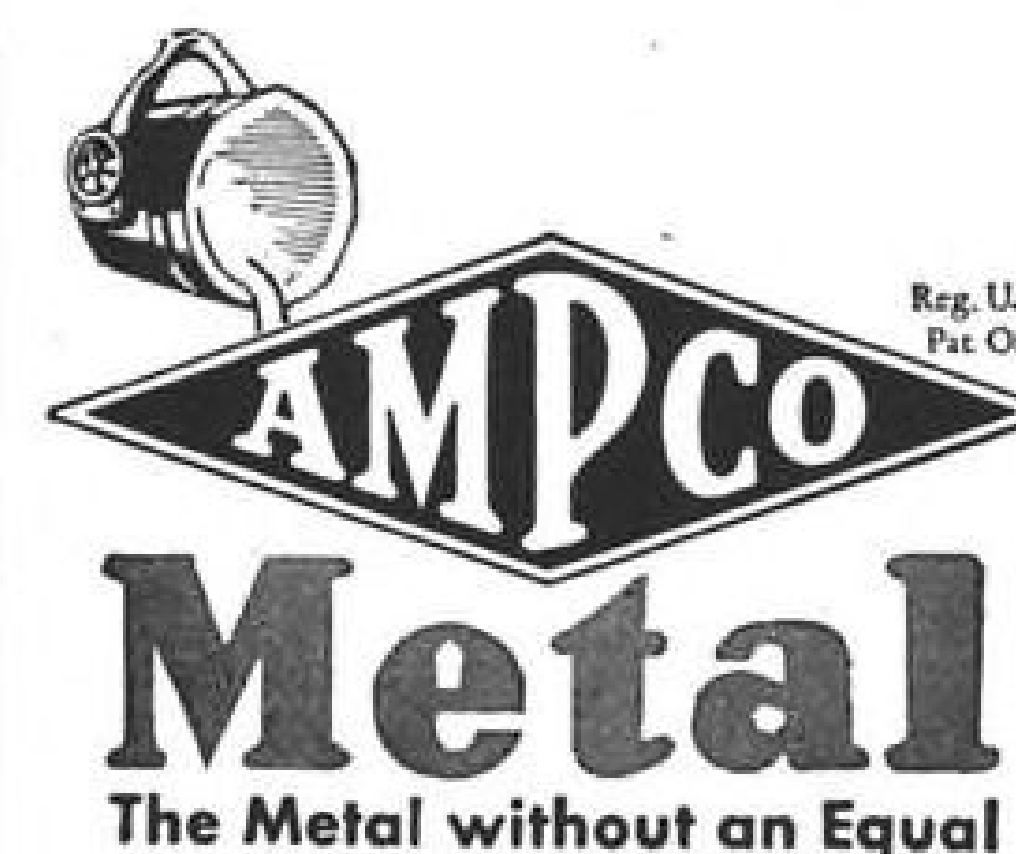
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CAB Pessimistic On Feeders

Sees traffic potential at small cities not encouraging.

Civil Aeronautics Board, in its opinion on its local-feeder-pickup investigation, echoed the same note of pessimism over the future of short-haul air traffic that characterized the early report by its examiners.

The Board's findings, which terminated a study instituted 16 months ago, supported the conclusion by Examiners William J. Madden and Albert F. Beitel that traffic potential at small cities is not encouraging.

To their controversial suggestion that extensions by presently operating air carriers be limited to cities of 25,000 or over, the Board replied that regional consolidation of applications, now established procedure, has eliminated necessity for such a restriction, proposed by the examiners to increase opportunities for feeder operators.

"Need for service of a local character," the Board said, "can be weighed in conjunction with local service proposals." In a word of caution it added that "in attempting to develop this potential, local air carriers will be competing with the most highly developed rail and highway transportation systems in the world."

The Board indicated a willingness to certificate for the proposed type of service, but set as safeguards limitation of such authorizations to temporary periods and their confinement to operations which show "justifiable expectation of success at reasonable cost to the government." Belief was expressed that three years would be sufficient to judge potentialities, and the Board suggested that applications not containing request for temporary authorization be amended to do so.

The Board rejected the examiners' recommendation of a top of 25 cents per mile mail compensation for local services, approving the purpose but holding that no pre-determined figure should be established as a uniform maximum.

In reference to helicopter applications, the opinion said: "We cannot be expected to grant an application for service which cannot be performed except by the use of a vehicle which is not obtainable for a number of years."

On proposed pickup services, the Board said, it will seek the advice of the Post Office Department, since these have their principal utility in providing postal service.

Spanish Agreement Held Significant

Authoritative State Department sources disclosed late last week that an "agreement in principle" has been worked out between the United States and the Spanish government to permit U. S. commercial planes to land in Spain. This means of reaching an agreement is cited as a significant example of the system of obtaining landing rights through negotiations between governments rather than by the system hitherto employed by Pan American Airways which obtained such rights by private agreements between the airline and the country involved.

► **U. S. Mission**—A three-man mission, composed of Oswald Ryan, member of the Civil Aeronautics Board; Charles I. Stanton, Civil Aeronautics Administrator; and Fred Novinger, chief of the First Region (New York) of CAA's Air Carrier Inspection Division, is in Spain surveying technical possibilities of landings there by U. S. airlines.

Assistant Secretary of State Adolf A. Berle, Jr., was understood to have done most of the negotiating for the U. S.

The agreement is interpreted as a significant move by the State Department to realize its announced intention of getting the best possible international arrangements for U. S. airlines.

British sources disclose that the BOAC (British Overseas Airways Corp.) has sought similar rights in Spain.

ATA Body Discusses Sales Agreements

The Air Traffic Conference, a division of the Air Transport Association, meets at Denver this week, expecting to act on a standard sales agency agreement and details of interline procedure.

The proposed sales agency agreement, recommended by the conference's agency committee for adoption, covers relationship between agent and carrier in connection with sale of passenger transportation.

► **Agendum**—Points dealt with in-

clude scope of agent's activities, agency address and employees; designation of agency; issuance and delivery of exchange orders and tickets; collections and remittances; representations as to routing; securing of accommodations; remuneration commission; communications; refunds; agency fees, liabilities, standards, and similar matters.

The conferees also will discuss post-war plans as related to commissions for sale of air travel and general industry thinking concerning the air travel plan, carrying of specialized literature on planes, passenger trip insurance, use of common rate ticket coupons, tariff simplification, and miscellaneous items.

Conroy Quits TWA

Vincent P. Conroy has resigned as vice-president of TWA in charge of traffic, a post he occupied five years. His duties have been taken over by E. O. Cocke, who has been TWA's general traffic manager.

Flight Additions

Airline flight additions reported to Civil Aeronautics Board in mid-month:

All American Aviation—Additional round trip Pittsburgh-Huntington, starting July 17 on AM 49 B.

Chicago and Southern—Additional round trip Memphis-New Orleans starting July 15 on AM 8.

Delta—Additional round trip Atlanta-Fort Worth and additional round trip Charleston, S. C.-Atlanta, both starting July 16 on AM 24.

Eastern—Additional round trip St. Louis-Washington starting July 15 on AM 47.

PCA—Two additional round trips Norfolk-Washington and additional round trip Norfolk-Detroit, starting July 15 on AM 14.

TWA—Additional round trip New York-Los Angeles and additional round trip except Sunday and Monday, cargo only, New York-Chicago; opening of service at Palm Springs, Calif., all starting July 15 on AM 2.

United—Additional round trip Seattle-Vancouver, starting July 20 on AM 57.

No discontinuances were reported.

SHORTLINES

► Braniff Airways has occupied a new \$17,600 annex to its main hangar at Love Field, Dallas. The new building is 161 feet long, contains more than 4,000 square feet, and is one of 18 buildings on more than 17 acres that make up Braniff's base.

► Delta Air Lines' report for the first six months of 1944 compared with the same half of 1943 shows 54 percent increase in mail pounds, 62 percent in mail pound-miles, 57 in express pounds and 52 in express pound-miles. Passenger traffic was up 34 percent and passenger-miles 45 percent. Load factor for June was 94.3 percent, the line's highest, against a six-months' average of 91.33.

► Misr Airworks, only Egyptian civil aviation company operating in Egypt, was to begin service last month between Cairo and Damascus, according to *Foreign Commerce Weekly*. Turkish State Airline was to begin its 1944 service between Ankara and Istanbul and Adana and Ankara about the same time. A new company, Compania Dominicana de Aviacion, C. por A., was authorized to establish an air service for mail, express and passengers in the Dominican republic.

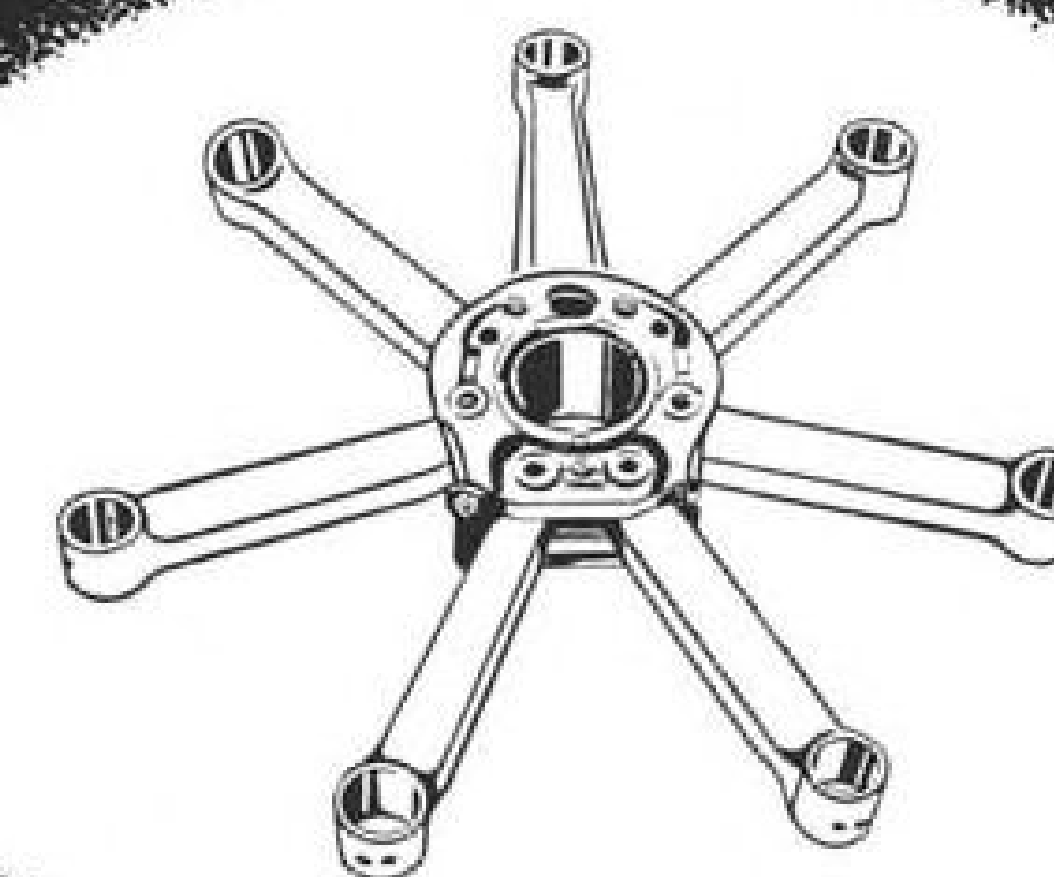
► In an announcement reminiscent of the days of peace, Pan American Airways has published special excursion fares for the public for flights from New York to New Brunswick and Newfoundland on the trans-Atlantic route to Eire. Round-trip fares with 45-day limit, effective through Oct. 15: New York-Shediac, N. B., \$81; New York-Botwood, \$148.50; Shediac-Botwood, \$74.25. Space on thrice-weekly departures from La Guardia, to the limit of accommodations not used by trans-Atlantic passengers, is "usually available without priority," PAA says. Lighter fuel arrangements on the shorter flights have made the arrangement possible.

Bell Leaves CAB

Civil Aeronautics Board lost another of its staff of trial examiners this month when Berdon M. Bell resigned to enter private law practice. Bell had been with CAB more than two years. He will specialize in aviation law in his private practice. Examiner Vincent L. Gingerich, who resigned last month, also has opened his own law office.

The rules of practice of the Board prohibit former examiners appearing before it as counsel for an applicant until six months after their resignations.

BETTER BEARINGS with INDIUM



New records for motor bearings life—several times pre-war's best—are being turned up despite the tight situation in white metals. In INDIUM, manufacturers found the answer.

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Coast Produce Men See Shift to Planes

Predict that two percent of perishables will move by air in post-war era.

West Coast produce men believe that within a reasonable period after the war 2 percent of the vast volume of perishables shipped out of Los Angeles will be carried by air—requiring at least 260 airplanes of the size of the DC-4.

Robert E. Caskey, United Air Lines area cargo manager at Los Angeles, basing his estimates upon meetings with produce experts, expects that the post-war air shipment of perishables will represent 60 percent of the air cargo revenue generated in his area.

Acceptance Problem—“Airlines will have a problem on their hands in the development of perishable cargo business from the standpoint of gaining acceptance by Eastern distributors, who will be forced to develop extremely rapid disposal of the tree- and vine-ripened produce they receive,” he adds. “Their spoilage risk will be high, potentially.”



TURKEY EGGS BY AIR:

These turkey eggs underwent three air transshipments on an experimental, successful journey from Worthington, Minn., to Los Angeles, where they are shown as hatching started. They were carried by Mid-Continent, United, and Western, whose stewardess Betty Wright, is shown watching with Will Hatch (that's correct), Los Angeles hatchery official, and Mrs. Alva Bernard, poultry grower.

CAA Expert Aids N.Y. Port Program

Works with Regional Plan Association on projected airports.

Post-war airport planning for metropolitan areas, with the assistance of the Civil Aeronautics Administration, is going ahead in several large urban centers, with the New York City area as the latest on the list.

There the Regional Plan Association, an organization designed to focus the efforts of several hundred separate planning groups in New York, is cooperating with the CAA's consultant to the Urban Planning Section, Edgar N. Smith. The Regional Plan Association is a non-profit enterprise supported by business and industry.

Facet of CAA Plan—The project is a facet of the CAA plan to bring to the attention of similar planning groups throughout the country the problems that will spring up when planes become plentiful. The object of the combined study will be to relate airport planning with other local facilities such as roads, shopping areas, and residential sections.

Similar projects are, or soon will be, under way at such cities as De-

troit, Cleveland, Omaha, Des Moines, St. Louis, Chicago, Kansas City and practically all other major metropolitan centers.

AA Operations Up

American Airlines reports its contract operations across the Atlantic rolled up 366 crossings during May for a total of 1,349,694 plane miles. This was an increase of 144 trips over the 222 flights made during April.

Three planes operated by American crews each crossed the ocean three times during one week, for an average of 15 hours in the air out of every 24.

During the first five months of this year, American's trans-Atlantic operation completed 1006 crossings, flying 4,262,970 plane miles.

CAB SCHEDULE

- July 20. Deadline for rebuttal exhibits in the West Coast case. (Docket 250 et al.)
- July 21. Exhibit deadline in Latin-American (Caribbean) case. (Docket 25 et al.)
- July 24. Hearing before Examiner Thomas L. Wrenn on American Airlines' proposed acquisition of control of American Export Airlines.
- July 31. Date for exchange of exhibits in the Rocky Mountain case.
- July 31. Exhibits due in the Hawaiian case.
- Aug. 1. Deadline for exhibits in proposed acquisition of control of Aerovias Braniff by Braniff Airways.
- Aug. 1. Prehearing conference, international route applications via North Atlantic.
- Aug. 2. Prehearing conference, international route applications via the South Atlantic.
- Aug. 9. Oral argument in combined Joplin-Tulsa-Oklahoma City (Dockets 412 and 1300) and Memphis-Oklahoma City-El Paso cases. (Docket 503 et al.)
- Aug. 14. Briefs due in the Great Lakes-Florida case. (Docket 570 et al.)
- Aug. 20. Rebuttal exhibits due in the Rocky Mountain case.
- Aug. 21. Exchange of rebuttal exhibits in the Latin-American proceeding. (Docket 525 et al.)
- Aug. 25. Deadline for exhibits in the Cincinnati-New York proceeding.
- Aug. 26. Rebuttal exhibits due in the Hawaiian case.
- Sept. 1. Prehearing conference, international route applications via the North Pacific.
- Sept. 4. Hearing on West Coast to Hawaii applications (Docket 851 et al.)
- Sept. 5. Hearing date for Rocky Mountain feeder case.
- Sept. 5. Tentative hearing date for Braniff Airways proposed acquisition of control of Aerovias Braniff.
- Sept. 11. Tentative hearing date for West Coast-to-Hawaii case.
- Sept. 12. Cincinnati-New York hearings before Examiners Frank A. Law, Jr., and Barron Fredricks.
- Sept. 15. Prehearing conference, international route applications via the Central Pacific.
- Sept. 18. Latin-American route hearing before Assistant Chief Examiner Francis W. Brown. (Docket 525 et al.)
- Oct. 1. Tentative date for briefs in the Oklahoma-Texas cases.
- Oct. 1. Deadline for exhibits in the Oklahoma-Texas feeder case.
- Oct. 2. Prehearing conference, international route applications, Australia.
- Oct. 16. Tentative hearing date for West Coast case before Assistant Chief Examiner Francis W. Brown and F. Merritt Ruhlen (Docket 250 et al.) Postponed from Aug. 1.
- Oct. 16. Tentative hearing date, North Atlantic routes.
- Oct. 20. Date for exchange of rebuttal exhibits in the Oklahoma-Texas case.
- Nov. 1. Tentative hearing date, South Atlantic routes.
- Dec. 13. Tentative hearing date, North Pacific routes.
- Jan. 10, 1945. Tentative hearing date, Central Pacific routes.
- Feb. 1, 1945. Tentative hearing date, Australian routes.

More Planes to Ease Maintenance Job

Availability of more planes to the airlines probably will mean a better basis for turn-around and reserve, although daily mileage averages about 1,900 miles compared with 1,100 before the war, probably will be reduced to 1,500 or 1,600 miles a day to bring about this improvement.

Even with the reduction, daily mileage would be a third to about half again the service before the war with the same size fleet. The high rate of utility, operators say, has not lowered maintenance levels. Some claim mechanical delays are at an all-time low.

DC-4's—There is little likelihood that DC-4's or any other four-engine equipment, in fact, will go to the airlines soon, although CAA tests may be run on one against the future. The Pacific war and its air transport requirements are the obstacle in the aircraft equipment picture. Authorities feel that when that becomes the main allied war effort there may be a shortage of cargo planes, and that theater probably will require all the industry can produce.

Port-Road Parley

Relationship of airplanes to highways is one of the topics before the Fifth Pan American Highway Congress, meeting from July 15 to 24 at Lima in its first session since September, 1941.

Highway authorities from all American republics have before them an agenda including such items as road building modifications to provide landing strips and, for technical study, use of planes to map and survey routes for new highways.

India Now and Post-war

To manufacturers of aircraft, aero engines, aeronautical equipment, accessories including aviation, radio, aerodrome lighting and kindred lines The Asian Air Associates—a Company well-founded and financially sound—are prepared to consider the exclusive agency for or sub-licenses to manufacture—their manufactures in British India. The Asian Air Associates are planning a chain of maintenance stations at the major air ports in India which places them in an unique position to represent Air Lines and undertake the maintenance of aircraft.

Bank and other references submitted.

Communicate direct to:

THE ASIAN AIR ASSOCIATES

Wavell House, 15 Graham Road - Ballard Estate, Fort, Bombay

CAB ACTION

• The limitation imposed by the Civil Aeronautics Board on the purchase of the assets of Mayflower Airlines by Northeast Airlines has failed to meet the approval of the Referee in Bankruptcy administering the affairs of Mayflower. The Board's decision cut the proposed purchase price from \$17,500 to \$10,000. When approached with an offer to consummate the transaction at the Board's price, the trustees "eloquently, emphatically and unqualifiedly refused to accept \$10,000 for Mayflower," Northeast reported. As a consequence, Northeast has been granted its petition to reopen the record to include additional evidence. The Mayflower trustees disclosed other offers to buy Mayflower, one at \$25,000, accompanied by a \$5,000 certified check. The agreement to sell to Northeast is binding, however, if CAB will consent to the higher figure. Northeast points out that if the purchase fails under the existing agreement, the trustees may auction off Mayflower to the highest bidder, which might be less in the public interest than raising the price to \$17,500.

• The Board granted the cities of Greenville, S. C., Chattanooga, Tenn., and Huntsville, Sheffield and Florence, Ala., permission to intervene in the docket involving Eastern Air Lines' application for a route between Memphis, Tenn., and Greenville, S. C. Eastern's previous application for this route was denied, but a reapplication for the same route followed closely on the refusal. The case is not under active consideration.

• A petition of Braniff Airways to separate certain applications from the Joplin-Tulsa-Oklahoma City and Memphis-Oklahoma City-El Paso cases was denied by CAB. Braniff's petition sought removal from the Joplin proceeding of TWA's application for an alternate to AM 2 between Amarillo and St. Louis. Likewise they asked severance of an American Airlines' application from the Memphis-Oklahoma City-El Paso proceeding in which American seeks to extend AM 4 from El Paso to Tulsa and AM 23 from Little Rock, Ark., to Tulsa. With these two applications, Braniff had sought to have consolidated its own application for a Los Angeles-Boston route, inasmuch as the TWA and American proposals involve transcontinental routings.

• A supplementary consolidation order has been issued in the West Coast case (Docket 250 et al.) which incorporates into the proceeding amendments filed by applicants since the original consolidation order of May 15. The new order does not take into account the withdrawal of the applications of Interstate Transit Lines, which took place after it was issued. Applications for approval of control of one form of transportation by another under Section 408 of the Civil Aeronautics Act will be considered, but applications for approval of interlocking relationships are outside the scope of the case. The order does not affect the extent of the territory under consideration.

• At the request of TWA, the Board dismissed its application for temporary exemption orders covering AM 37 and 38 and for other exemptions TWA asked early in 1942 to aid rerouting traffic over its system. The application was filed after the Army commandeered the airlines' planes. Plane return has eliminated the problem bringing the withdrawal.

• City of Shawnee, Okla., was permitted to intervene in the Memphis-Oklahoma City-El Paso proceeding. (Docket 503 et al.)

• Ketchikan Air Service was authorized by a CAB exemption order, to undertake non-scheduled air transportation of persons and

property in the First Judicial District of Alaska within a radius of 150 miles from Ketchikan. An application for a certificate for this service is pending, and the order recognizes "the present acute need" for air service until the case can be heard. The exemption expires Oct. 1, 1944, unless the Board's decision is forthcoming sooner.

• The Board approved an agreement between Pan American-Grace Airways and Lloyd Aereo Boliviano for dividing revenue for the transportation of Bolivian domestic air mail.

• Section 241.1 of the Economic Regulations, regarding applications for foreign air carrier permits under the "grandfather clause," has been amended by designating the Department of State as the agency to which application shall be made. Formerly, such applications were filed directly with CAB. Section 241.1 outlines the requirements that such applications shall fulfill regarding information to be provided.

• Chicago & Southern Air Lines filed with the CAB to have the restriction covering service to Greenwood, Miss., rescinded. They simultaneously filed airport notice for Greenwood.

• The Board dismissed at the request of the Boston, Worcester & New York Street Railway Co. its application for 14 feeder routes in New England. A similar application has been filed under the name of B & W Lines, Inc., a wholly-owned subsidiary.

• United Air Lines' petition to have the American-American Export acquisition case deferred and consolidated with the North Atlantic route proceeding was denied by the CAB. The acquisition of control will come up for hearing July 24, as scheduled.

• Applications of Braniff Airways and T. E. Braniff for approval of acquisition of control of Aerovias Braniff, S. A., have been consolidated by the Board into one proceeding, and petitions of American Airlines, Eastern Air Lines, Pan American Airways and United Air Lines to intervene have been granted. A motion of Eastern to defer action on the case until policy in regard to the Latin American air transport pattern has been evolved was denied. Likewise denied was a petition of Braniff to dismiss the petitions of all parties seeking to intervene. By permitting the intervention, the Board seems to have recognized the merit of the interveners' contentions that the case actually involves the establishment of an international route system.

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Enterprise

AN UNEXPECTED CONVERSION PROGRAM for TWA's five war-weary Boeing 307 *Stratoliners*, already underway, has aroused keen interest in aircraft manufacturing and air transport industries because:

1. Boeing with its revised *Stratoliner* suddenly enters the field with a transport which may be a strong contender for post-war commercial business.

2. The *Flying Fortress* and *Stratoliner*, each previously considered uneconomical and out of the question as future airliners, are combined in what may well be one of the most economical transports.

3. TWA, developer of the Lockheed Constellation, on which TWA's publicity has been concentrated, emerges with a second modern four-engined transport which probably will be flying in regular public service before any other craft of similar size can be converted.

Because of the importance of its *Flying Fortress* and *Superfortress* production program, Boeing has been conceded generally in the industry as having had least opportunity to study post-war commercial requirements.

The original *Stratoliners*, never as profitable as originally planned, will emerge from their rebuilding process at Seattle looking more like *Flying Fortresses* with a *Stratoliner* fuselage. They will use *Fortress* wings, tail and landing gear. Wright engines with about 1,350 takeoff hp. will replace the original Wrights rated at 1,100 hp. takeoff. The improvements will increase gross weight by almost 9,000 lbs., virtually all of which is payload.

This means that the *Stratoliner's* original payload will be doubled. Gross weight will be raised from an airline rating of 36,000 to about 45,000 lbs., although in their war work for the ATC the *Stratoliners* have been loaded above 50,000-lbs.

By using the *Fortress* wings, additional gas capacity will be available for longer flights, or this load capacity can be shifted to payload with less fuel. Performance figures of the new liner have not been determined.

Two of the five planes which were acquired by the Army from TWA have already been returned and are undergoing conversion at Seattle. The others are to follow shortly. All five planes may be converted in six months, probably sooner than any domestic airline will receive other four-engined equipment.

Civil Aeronautics Administration officials have expressed interest in the conversion and have inspected the procedure. The first revised ship must pass CAA tests before airline use, but thereafter certification of the prototype will pave the way for the other four unless other major changes are made.

Although manpower and other war problems will prevent construction of additional *Stratoliners* at this time, the possibility appears strong that when conditions permit, Boeing will be able, under demand, to go into production rapidly.

The arrangement is a credit to the ingenuity of

Boeing and TWA, and to the Army Air Forces which has permitted one of its hardest working and most successful war contractors to improve its chances for survival after the war.

Example of Unity

THE APPEARANCE of top aircraft executives before the War Contracts Subcommittee of the Senate Military Affairs Committee was a significant step forward in the newly-established unity within the aircraft industry as exemplified by reorganization of the Aeronautical Chamber of Commerce.

Messrs. Ward, Woodhead, Wilson, Geuting and Berliner, all able spokesmen, were not speaking for Fairchild, Consolidated Vultee, United Aircraft, General and Engineering & Research Corp. They were speaking for the industry as a whole and their well-organized, literate testimony is certain to have an important effect on future Congressional action to prevent the destruction of the world's largest aircraft production plant and thus endanger world peace.

The nation's airlines could take a leaf from the manufacturers' book. The transport industry resembles in some respect the status of the disorganized Aeronautical Chamber of a year ago. Despite public denials, there still is bickering, prejudice, and selfishness among the directors of the Air Transport Association with a striking failure to unite for the common good of the industry and its future. The industry simply cannot afford to continue at odds with itself and more of its real friends should tell it so.

Progress

IN LESS THAN 11 months of publication, AVIATION NEWS has attained its initial goal of 10,000 paid subscribers. This is months ahead of original schedules.

A high percentage of the total readership represents the leading executives of aircraft and accessories manufacturers, the airlines, private flying, state and Federal government agencies and associations.

All of these subscribers have paid, in advance, a yearly subscription rate almost 70 percent higher than they have ever paid for any other aviation news magazine. Renewal subscriptions, four weeks before the first subscriptions expire, were coming in from readers far ahead of the expectations of experienced circulation people.

This response is not only appreciated by the editorial staff of the NEWS. It also assures readers of a similarly stepped-up program of expansion of news facilities and editorial improvements in coming months.

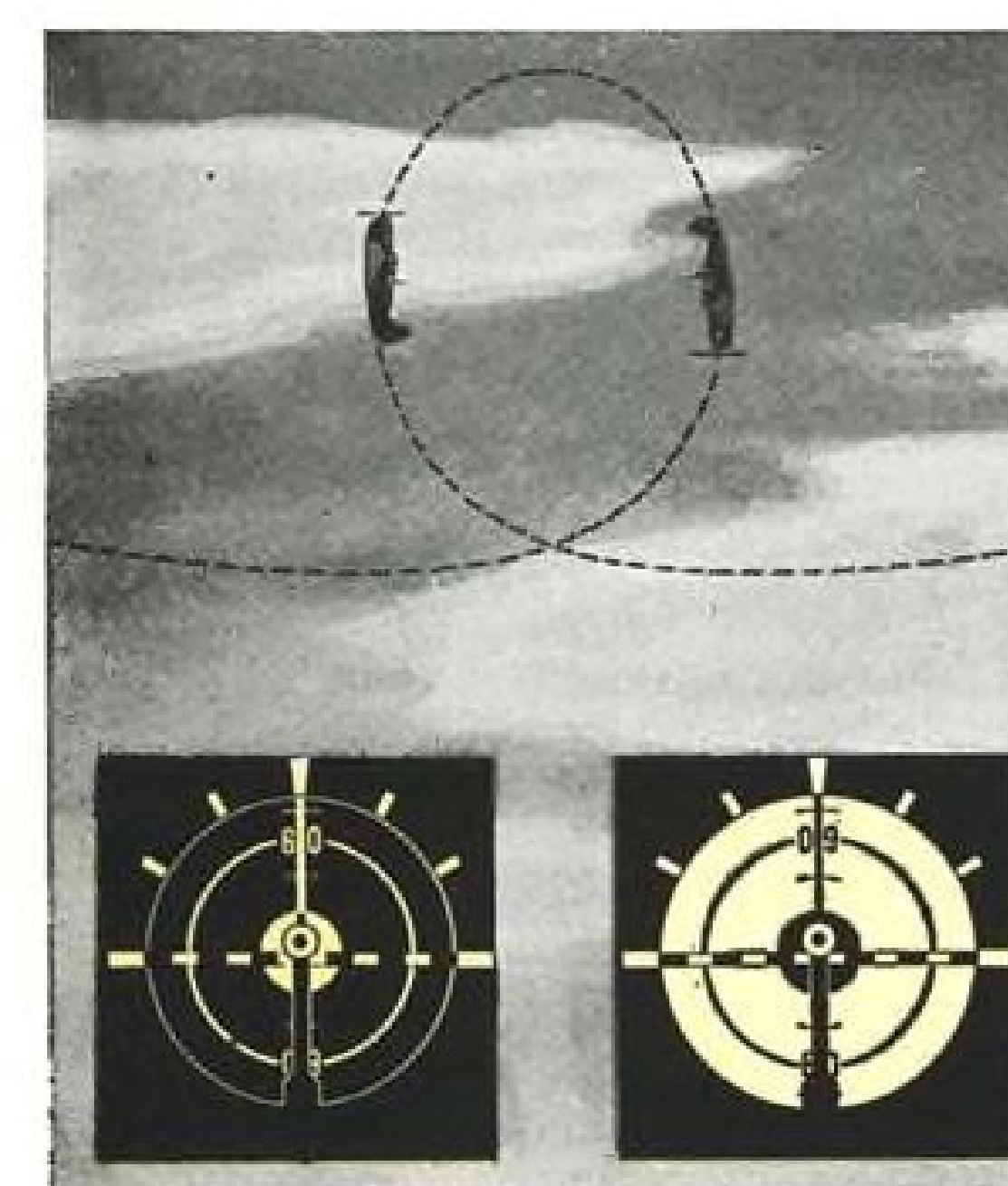
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