Aviation News

McGRAW-HILL PUBLISHING COMPANY, INC.

JULY 24, 1944

Study Landing Rights in Spain: *Although his pencil points to Australia, Oswald Ryan, member of the Civil Aeronautics Board, was on his way to Madrid when the picture was taken, with Charles I. Stanton (right), Civil Aeronautics Administrator, and Fred B. Novinger (center), chief of the New York region of CAA's Air Carrier Inspection Division. They went by Pan American Clipper on a mission to study technical possibilities of landings in Spain by U. S. airlines, in line with "agreement in principle" between U. S. and Spanish governments.*

THE AVIATION NEWS

Washington Observer

PRESS SUPPORTS CHAMBER—A virtually unprecedented editorial support is being given the Aeronautical Chamber of Commerce's Air Power statement and its extension by Undersecretary of War Patterson and Assistant Secretary of the Navy Gates in testimony before a Congressional committee. The Air Power declaration has been sent to virtually every medium of public information and is being used both in credited and uncredited acclamation of the overall program. It emphasizes the absolute necessity for a strong aviation voice in Washington.

★ ★ ★

MORE ACTION NEAR—Although the European Atlantic front has been relatively bogged down for some time, look for it to burst into renewed flame and fury before long. The Eisenhower and the Montgomery conceptions of waging war do not permit static situations. When they develop, as they have in Normandy, some means is devised to break it radically and quickly. It may come as soon as the weather breaks enough for air power to be used to full extent.

★ ★ ★

DETROIT LOOKS AHEAD—Aircraft industry is interested in recent announcement that Packard is establishing a separate division at its Toledo plant to "handle advanced aircraft engine development at the specific request of the AAF." That means substantial and continuing post-war aviation activity. General Motors is also known to have plans somewhere in the undetermined future for its new two-cycle, four-cylinder liquid-cooled engine described in the News July 3. Ford has no intention of deserting aircraft when the war ends. These are reasons why public statements from Detroit on lack of interest in aviation are not readily accepted by oldline aircraft firms.

★ ★ ★

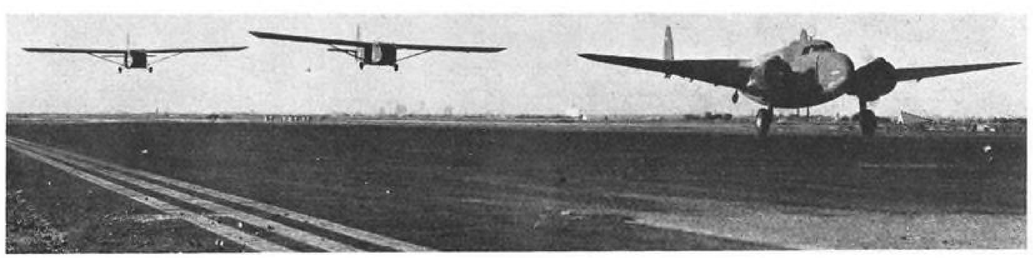
MISGIVINGS ABOUT PAC—Far from being merely a nuisance, the robot bombs (described by returning visitors as PAC, or pilotless aircraft) striking Britain are an important weapon. Washington brass hats are beginning to be embarrassed because of our failure to develop and exploit robots. It is true that they may not change the course of the war. But their ease and economy of manufacture in proportion to the damage they cause, and their implication for the future, make it difficult for top Army officers to answer questions. The U. S. has been using radio-controlled planes of various sizes for years, mainly as moving targets for gunfire practice, but these are not in the robot bomb class. One high government official in a press conference last week embarrassed military men present: "Why is it that we left it to the Nazis to spring this weapon on us?" He had just returned from England. The question is gaining currency.

★ ★ ★

JAPS SLOW RECUPERATION—Bombing of Japan will have much more serious consequences than generally believed, Washington officials believe. The answer does not lie in "wooden" cities, but in lack of fine reconstruction equipment. In Germany and England, good firefighting and construction equipment minimized damage, enabled speedy rebuilding. Indications are that this will not be true of Japan. Parallel may be drawn from airfield construction equipment. Navy has found that Jap airfields have been built and repaired the laborious way throughout the South Pacific, whereas the United States has moved in with highly-specialized, well-equipped Seabees and finished the job in one-tenth the time the Japs required. Such a handicap mounts in geometric proportion under bombing of industrial facilities.

★ ★ ★

TIRE SHORTAGE THREATENS—Mainly because technological progress in the synthetic manufacturing phase is beginning to outstrip manpower, supply of all types of tires is tightening rapidly. High Army officials, including Gen. Knudsen, have swarmed around Akron to study



Lockheed Lodestar *takes off with two Waco gliders.*

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Advertisers Index

Washington Observer

the problem and seek to encourage higher productivity per worker. War Department is understood to have approved release from the Army of all qualified former rubber workers over 30. Aircraft and army truck tire schedules will be met, but probably at the expense of auto tires for civilians.

* * *

PORT PROGRAMS TOO SPECIFIC—Several leading aviation groups and agencies have agreed not to go on record specifying the minimum number of new facilities which should be built. Figures have varied so widely, depending upon the particular agency or individual making the statement, that there appeared a glaring lack of unanimity among those who should know most about the subject.

* * *

PCA-NWA DECISION EXPECTED—Washington observers are betting heavy odds that the examiners' report recommending extension of Northwest Airlines from Milwaukee to New York and PCA's Pittsburgh-New York route will be backed up by a CAB decision.

* * *

POST-WAR AIR FORCE—High War Department officials, in making confidential recommendations as to the size of the post-war air force, are preparing varying programs ranging from a big fleet in the case of little international cooperation, down to an air force very much smaller than our present set-up if the world submits to a high degree of international cooperation.

* * *

PLANES FOR AUSTRALIA—After a long struggle, Australia is about to abandon hope of obtaining Douglas transports from U. S. factories. She was turned down by top military officials here recently. All of her transports are at least seven years old and are badly worn by heavy war duty. Officials now hope to obtain some abandoned U.S. army transports from the Southwest Pacific theater and reconvert them to commercial types, although this may cost as much as $40,000 additional per plane. U.S. manufacturers, however, don't favor this idea, even though the Australians claim they will still want new craft from us after the war.

* * *

CUTBACKS INEVITABLE—Aircraft schedules for the remainder of 1944 and through 1945 are being decreased in some categories. Transports will be unaffected probably. Bombers and fighters will be cut somewhat. Meanwhile, output in the first ten days was below program to the point where high WPB officials were asking questions of the industry. Plants behind reported few dangerous retarding elements. Subcontractors' difficulties, irregular deliveries of assemblies, the usual unpredictable problems. Most firms are confident they can meet the July schedule.

* * *

WASP DEMISE—Although the War Department's announcement indicates WASP activities will continue "for the present" it is only a matter of months until the entire program will be washed out. The recent House vote against taking the WASPS into the Army and increasing the program was the first major defeat the Army Air Forces has met in Congress since the beginning of the war.

* * *

BRITISH AAF EXCEEDS RAF—Officials returning from England report that the United States, in its 8th and 9th air forces, now is operating more aircraft and on more and heavier missions, than the famous Royal Air Force can muster. The 8th and 9th represent the world's most powerful air force, yet these two components are only a part of our global fighting network.

* * *

NO COMPLAINTS—War Department officers visiting AAF bases in England hear few complaints about our aircraft. It is a far cry from the widely broadcast squawks of a year or two ago, during debates over whether our fighters and bombers were inferior to those of Great Britain. Now our investigators are actually being advised by fighting pilots, "Leave the ships alone. Don't change 'em." The P-51 came in for special praise last week from Assistant Secretary of War Lovett, at his first press conference since returning from England. "It's a honey," he said.

* * *

WEST COAST FLYING—By the time this is printed the 4th Air Force may have issued from San Francisco headquarters long-awaited orders easing wartime civilian flying restrictions on the Pacific coast. Owners of civilian flying schools, their military training programs now canceled, should not anticipate any relaxation of military orders prohibiting civilian flight training within the western combat zone, however. This restriction may remain in effect for the duration. Should the new orders follow an anticipated trend, they will extend beyond recently issued orders the authorized flight of privately and company-owned planes in connection with war effort business trips, and the ferrying into the combat zone of private aircraft for repairs in west coast shops.

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Aviation News

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July 24, 1944

CAB-CAA Mission Lands in Spain; U. S.-Netherlands Air Talks Open

Conversations with Russian mission continue as diplomatic activities are speeded up on all fronts with view to clearing way for establishment of America's post-war routes.

The State Department's intention to place American air transport in the forefront of post-war international flying is marked today by accelerating diplomatic activity in direct relation to the progress of the war in Europe.

Specific developments last week were the opening of talks with Netherlands diplomats and air experts and the arrival in Spain of a CAB-CAA mission to put meat on the skeleton "agreement in principle" which the Department confirmed had been reached.

▸ **Reds Continue Mission**—Russian aviation officials at the same time continued their mission in Washington, having sandwiched in several inspections of American commercial aviation facilities.

Qualified sources made it clear that the time has arrived to lay out our overseas air pattern and to guarantee it through a series of bilateral agreements. They said the progress of the war is pointing that necessity.

▸ **Route Battle On**—It appeared, moreover, that the battle for post-war air routes was on in earnest. At the time of the disclosure of the American-Spanish agreement, both American and British sources here said Britain either had obtained or soon would obtain landing rights in Spain under conditions similar to those granted America.

In this connection it is of interest that Britain and the United States at the outset of the war reached an "understanding" whereby neither is to seek an exclusive commercial agreement anywhere while the war is in progress.

There was no disposition here to regard the Spanish deal as a windfall to France. It was believed to have roots in the negotiations during the Winter and Spring which issued in an Allied triumph over Nazi diplomacy. Although details of the air agreement with Spain are not public, it is unlikely that they would give Germany satisfaction.

▸ **First U. S. Foothold in Europe**—In Spain, America secures her first foothold in Europe under the appointed system of intergovernmental negotiation which will be used from now on. It would appear likely that Portugal sooner or later will be approached in the same vein. Her contract with Pan American bears a stipulation that either the U. S. or Portuguese government may, in effect, supersede it by opening negotiations on landing rights.

The Army and Navy probably are pleased with the commercial aviation moves by the State Department. It is a good guess that the ATC will prefer to move out of Europe insofar as trans-oceanic operations are concerned, as soon as Germany surrenders unconditionally. In that event, commercial aviation must be prepared to move in.

▸ **Dutch Position**—The Netherlands position has not been set forth as yet, but Americans are presuming the Dutch to be one of the leading contenders for air routes.

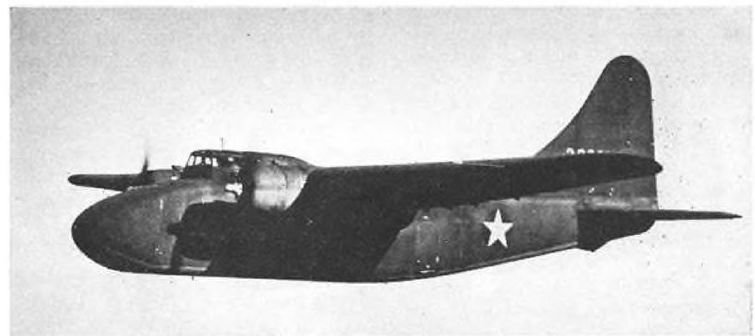
Royal Dutch Airlines, among the few foreign operators permitted to land in this country, long has been one of the world's most efficient lines.

The Dutch, as a colonial power, naturally will be quick to capitalize on the necessity to tie their interests together with air routes where sea power once sufficed.

Members of the Netherlands delegations are Minister B. Kleijn Molekamp of the Embassy, M. P. L. Steenberghe, delegation chairman, Frederick C. Aronstein and Copes Van Hasselt.

Air Attaches

A State Department source disclosed last week that plans have been made to place commercial air attaches in United States Embassies at Rio de Janeiro, London, and Ottawa, to advise the U. S. Ambassador or Minister on matters relating to commercial aviation. Others may follow.



CARAVANS AROUSE CURIOSITY:

Although the large contract for C-76 Curtiss Caravans *was canceled last year, 25 of the ships, built of plywood and other non-strategic materials, were completed and are in regular operation throughout the country on Army cargo flights. Because of the small number, the planes are not well known and arouse curiosity wherever they are seen. (Previous photos in* AVIATION NEWS, *Feb. 7.)*

Aviation Welcomes Hinckley Assignment

Sperry vice president and former CAA chairman selected to direct new and vital Office of Contract Termination.

The aircraft industry generally welcomed the announcement that Robert H. Hinckley, vice-president of Sperry Corp., former chairman of the Civil Aeronautics Authority and later Assistant Secretary of Commerce for Air, had been nominated by the president as director of the Office of Contract Termination.

From his post as vice president of an organization that has made a vital contribution to the war effort, Mr. Hinckley steps into an office that will direct and coordinate the liquidation of the war production and its conversion to peace. Ability of the Director of Contract Termination to accomplish this task quickly and efficiently will have an important influence on the industrial future of America.

Worked with FRA—Mr. Hinckley, formerly a successful businessman in Salt Lake City, first came to Washington with the old Federal Relief Administration, becoming head of the Civil Aeronautics Authority while that organization was an independent agency and Assistant Secretary of Commerce for Air in the reorganization of 1940.

He is given major credit for the Civilian Pilot Training program, one of the few measures accomplished in advance of the war to become a major factor in the successful conduct of the war.

Joined Sperry Corp.—In 1942 he resigned from the Commerce post to join Sperry Corp. at a time when that company was engaged in one of the most vital of all the war expansion programs.

He was recommended for his new position by John M. Hancock, who is now serving as chairman of the Contract Termination Board in the office of Director of War Mobilization James F. Byrnes. The legislation creating the office Mr. Hinckley will hold is a vital part of the Baruch-Hancock program for demobilization and is a keystone of their recommendations. Many of its features were incorporated over the bitter protest of Comptroller General Lindsay Warren because of its emphasis on speedy conversion of the nation's industrial economy from war production to post-war production for full employment.

Robert H. Hinckley

Air Industry Important Phase—One of the most important phases of the demobilization and conversion problem will be that of the aircraft industry and the appointment of Mr. Hinckley, familiar as he is with the problems of the industry that is now the largest in the nation, indicates the importance that its orderly demobilization holds in the eyes of the nation's leaders.

His interest in aviation dates from 1928, when he became president of the Utah Pacific Airways. He no longer holds any interest in this company. He entered public service in 1918 as a member of the Utah State House of Representatives; was Mayor of Mount Pleasant, Utah, 1924-25. In 1933 he became Emergency Relief Director for Utah, then director for seven western States, assistant administrator of FERA, and assistant administrator of WPA in charge of eleven western States.

Linguist—Born at Fillmore, Utah, in 1891, Mr. Hinckley was graduated from Brigham Young University in 1916, after three years of residence and travel in Europe. He has been an instructor in languages at the University, and conducted a state-wide automobile sales business. He is married, and has three sons and a daughter. His oldest son is a cadet at West Point.

James V. Griffin Dies

Death of James V. Griffin, first public relations director of the reorganized Lockheed Aircraft Corp. in 1934, culminated a lengthy illness which required his retirement on leave of absence in 1935. Griffin had recovered sufficiently a year ago to assist in the company's public relations program.

Decision Near on Gas Ration Transfer

Move for shifting jurisdiction on 73 and 80 octane fuel from OPA to CAA expected this week.

A decision on the proposal to transfer rationing of 73 and 80 octane gasoline from the Office of Price Administration to the Civil Aeronautics Administration is expected this week. Action was awaiting return of WPB Chairman Donald Nelson to his office following illness.

The Petroleum Administration for War has advised Mr. Nelson's office that, so long as consumption of this type of fuel does not increase, it does not care whether rationing is in the hands of OPA or CAA. Observers said Nelson's need for overall cooperation of OPA might make him hesitate to deprive it of authority over aviation precedent for special treatment for other groups. But no one felt capable of predicting what the chairman of the WPB will do.

The National Aeronautic Association expressed the opinion that rationing of this gasoline will be tougher if it is handled by OPA than if it is done by CAA, since CAA would be inclined to be more sympathetic. NAA officials said there are about 1,100 pumps in the country dispensing 73-80 fuel. OPA probably would make its first allocation to them on the basis of requests from the dispensers. The second, and continuing, allocations would be based on required reports from dispensers, stating in general who purchased the fuel and for what purposes.

CAA Procedure—If CAA is put in charge, pump operators will be given detailed instructions as to what classes of non-scheduled flyers are entitled to gasoline, and for what purposes, together with the fuel consumption rates of various aircraft types.

At present 73-80 gasoline is rationed by local boards under OPA, but there is no official restriction on the amount of coupons applicants may receive.

National Aviation Trades Association warned all operators against "the effects of abuse of the gasoline privileges which they now have. Some operators are advertising pleasure flights and other types of flying that can have no necessary or essential aspects," NATA stated.

Hawthorne Expands Fixed Base Plans

Two new operations part of post-war program in Southeast.

A four-point program based on expansion of fixed base operations, an air-mail pick-up route, establishment of a master overhaul base, and development of aircraft parts sales and distribution form the basis of post-war activities projected by Beverly Howard, president of Hawthorne flight operations, whose headquarters are at Orangeburg, S. C., where Hawthorne operates a large Army Air Forces contract pilot school.

Progress in at least one of these phases is already well under way with recent establishment of two new fixed base operations in North Carolina.

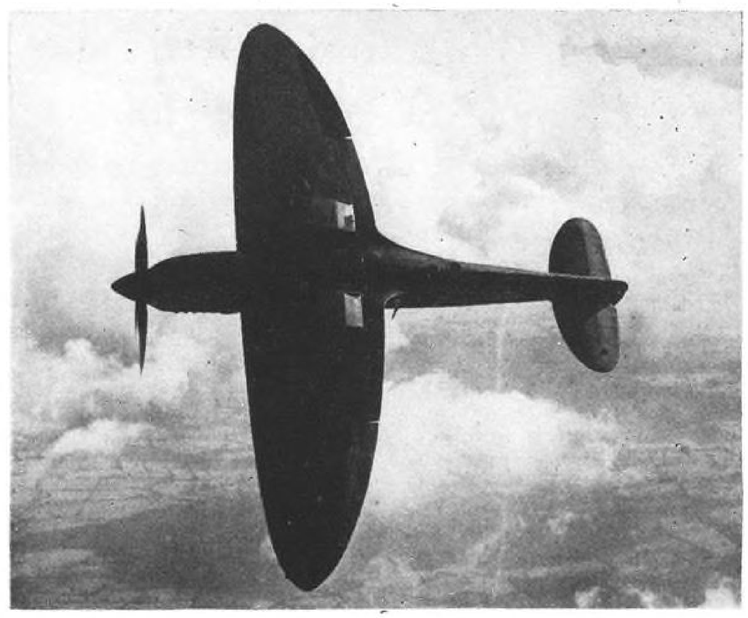
Affiliation with Air Services, Inc., the only special carrier authorized by CAA to operate sightseeing and charter service from Washington National Airport, was accomplished with purchase of an interest in that organization.

Two Bases Opened—Hawthorne's two North Carolina bases, opened this Spring, are at Rocky Mount and Greensboro-High Point, where the respective cities have granted contract to Hawthorne to operate general aeronautical services. Five or six airplanes have been assigned to each of these bases and a brisk flying instruction and charter business has been developed.

These augment establishments at Columbia, S. C., where for six years Hawthorne Flying Service has operated Owens Municipal Airport and given training to hundreds of Naval aviation cadets under the V-5 program in conjunction with the University of South Carolina, and at Orangeburg, where Hawthorne Airmotive conducts a general flying operation separate from the Army training center at Hawthorne Field in the same city.

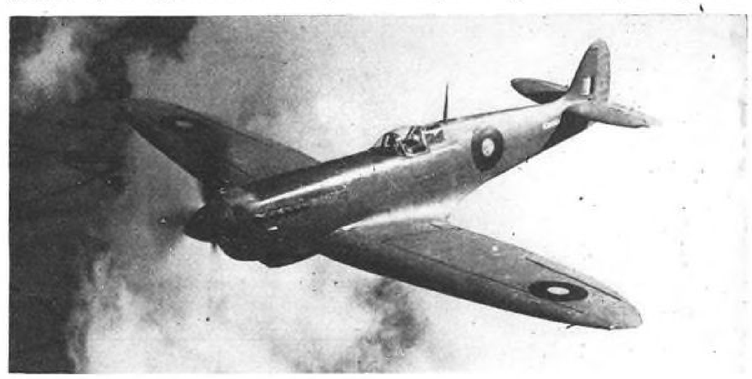
Charleston Unit to Be Used — Hawthorne also will reopen its original base established in 1932 at Charleston, S. C., municipal airport upon conclusion of the war emergency, which forced cessation of activities several years ago.

In addition to these definite steps already taken, negotiations are under way with a number of other key cities in the east and southeast for operating rights on their municipal airports. The broad expansion program visualizes a tripling of the present number of Hawthorne fixed bases.



NEW PHOTOGRAPHIC *SPITFIRE:*

First photos released of the all-metal Spitfire XI, *long-range photo reconnaissance plane, with Rolls-Royce Merlin engine of more than 1,650 hp. and Rotol four-blade constant speed propeller. Later versions have hydraulically retractable tail wheel. Two main fuel tanks are in the fuselage and long-range tanks are in the wings. Cameras are in the bottom of the fuselage. Span is 36 ft. 10 in., length is 31 ft. 2 in., and height is 11 ft. 8 in. Described by RAF Coastal Reconnaissance Unit as fastest of its type in the world, it is also flown by USAAF photo pilots.*



Sales Program—An aggressive sales program, to represent every type of airplane from light ships to large twin-engined personal transports, will be coordinated with these fixed bases.

Hawthorne Airways has filed applications with CAB for five pick-up routes serving 167 communities in the Carolinas and Virginia with the hub of operations centered at Greensboro-High Point. The service projected is of the same type pioneered by All American Aviation, Inc.

Air Services, Inc., in Washington is non-operative at present, but will resume activity as soon as civilian flight restrictions in the capital area are lifted.

Overhaul Base—To serve not only the maintenance requirements of Hawthorne equipment but also the needs of the general flying public, a master over-haul base, capable of caring for the smallest aircraft up to large multi-engined equipment, is projected for some strategic point in the east, and personnel and plans for such an establishment already have been organized.

Hawthorne's military training at Orangeburg is continuing at present with full quotas of cadets and more planes than previously used.

Knudsen's Ability to Slash Red Tape Faces Test in ASC-Materiel Job

Veteran trouble shooter in office of Under Secretary Patterson will take over oft-conflicting and overlapping commands and seek to coordinate vital work of both.

The aviation industry will watch closely the new administrative reorganization of the Air Service Command and the Materiel Command to determine whether Lieut. Gen. William S. Knudsen, director of the new AAF Materiels and Services, can slash the red tape and organizational complications that have slowed down many projects. He has been given ample authority, it was said authoritatively.

Gen. Knudsen production trouble-shooter in the office of Under Secretary of War Patterson for several years, will take over two commands whose work has frequently been interlocking and source of much friction. Bringing them back into a single organization, it is hoped, will bring about smoother functioning of cooperative projects. At any rate, Gen. Knudsen is regarded as the best man in the Army to do a red-tape slashing job and coordinate the vital work being done by the two organizations.

▸**Remain Separate**—They will remain separate under Gen. Knudsen's overall command, with Maj. Gen. Delmar H. Dunton as commander of the ASC and Brig. Gen. Kenneth B. Wolfe commander of the Materiel Command. Maj. Gen. Bennett E. Meyers, who has been head of the Materiel Command, becomes deputy director under Gen. Knudsen.

Before Mar. 15, 1941, ASC was the field service section of the Materiel Division, and had continued in that status for many years, with a relatively small peacetime volume of aircraft repair, maintenance and supply for the Army's planes. With realization of the tremendous problem of maintenance and supply created by our growing air force, a provisional maintenance command was set up, still under Materiel Division, and headed by the then Col. Henry J. F. Miller.

▸**Two Commands Set Up**—A further reorganization Oct. 17, 1941, established the two commands on an equal footing. After laying ground work for the separate organization, Miller, who eventually became a major general, swapped jobs with Maj. Gen. Walter H. Frank, who had organized a counterpart of the ASC in Europe.

From Frank's arrival in November 1942, at Dayton, the unwieldy organization with many untrained workers began a rapid transformation. General Frank is known in the AAF as a hard-driving, vigorous organizer. He is unquestionably the main sparkplug which has turned ASC into a working organization.

▸**Organized on Business Lines**—Frank organized ASC as a business, with operating divisions and an overall control, pointing out that the organization handled over 500,000 items and was, in fact, much larger than any single private American business enterprise.

Under the divided setup, the Materiel Command, which was headed successively by Gens. George C. Kenney, Arthur W. Vanaman, Charles E. Branshaw, and the new deputy director of the joined commands, Bennett E. Meyers, has been charged with research and development and purchase of AAF equipment, supplies, and accessories, including virtually every article required by the planes and the men who crew them.

▸**Overlapping**—It is obvious that there is an overlapping of function between the two commands, which has been handled by coordinations on projects, but which has nevertheless resulted in considerable duplication of effort.

For example, under the divided command setup, ASC had no business developing new maintenance tools or equipment. If an ASC worker had an idea, he had to coordinate it with the proper Wright Field laboratory. Materiel Command prescribed the information from which technical orders are issued, but Air Service Command's technical data section printed and distributed the order. Every minute change on an airplane or piece of equipment necessitated coordinations between the two organizations to bring about the technical order for the change, and to follow through and see that it was done. The ramifications are many.

Dayton observers believe Frank did a good job under the existing ASC setup. Whether the reunion of the two commands will cut the red tape, which has slowed down many projects, remains to be seen.

Contract Tapering

Major aircraft manufacturers are reported insisting on taper-off clauses in their negotiations for new contracts for war orders, which would permit them to continue production for a considerable period in order to protect them and the thousands of aircraft workers from any unexpected terminations.

The cash position of most aircraft manufacturers is such that they could not continue to meet payrolls for more than a week, or at best a few weeks, in the event of sudden cancellation of contracts.

Airworthiness Talks

Conditions which should govern the admission of foreign aircraft to this country for sale to private purchasers and regulatory requirements which should be placed on equipment of foreign airlines operating into this country will be the subject of early discussions by the Airworthiness Requirements Committee of the Aeronautical Chamber of Commerce.

The meetings, called for Aug. 1 and 2, will be held at the Hollywood Knickerbocker Hotel in Hollywood, Cal., for the Western Division, and at the Lexington Hotel, in New York City, for the Eastern Division.

AVIATION CALENDAR

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. 5-6—Motorless Flight Conference, Soaring Society of America, Polytechnic Institute of Brooklyn, N. Y.
Aug. 14-20—North Carolina State Aviation Week, Charlotte.
Aug. 29-31—Southeastern States Airport Management Conference, Alabama Polytechnic Institute, Auburn, Ala.
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.

WEST COAST REPORT

Study Tax Exemption Plan for Airlines

California legislation committee expected to draft proposal to ease burdens of air transport firms till they have become more firmly established.

By SCHOLER BANGS

California's State Legislature Interim Committee on Aviation soon is reported to be considering a proposal to the Legislature that aircraft operators be exempted from gasoline and property taxes until their post-war business has become "firmly established." Anticipated railroad opposition will be countered by reminders of tax and land grant concessions given the railroads in their infancy.

Chairman William H. Rosenthal (Assemblyman) also expects to propose the creation of a California Aviation Committee of ten members to guide the state's formative aviation policies. The proposal will recommend that appointments be made by the governor from lists of candidates submitted by aircraft manufacturers, airlines, airport operators, and civilian flying organizations.

▸**"Control" Legislation**—The committee is expected to oppose any state aviation "control" legislation beyond that which might give support to Federal air commerce regulations.

Offering a gradual approach to regulatory legislation that is inevitable, the Rosenthal proposals hold promise of gaining industry support as substantial as the opposition airlines probably will give to a California Railroad Commission bill that is expected to go to the Legislature in January.

California aviation leaders feel that the Railroad Commission's proposal of air commerce legislation that would give the Commission air transport rate fixing jurisdiction presents the danger of surface carrier influence upon a political commission which has had no previous interest in fostering the development of air transport enterprises.

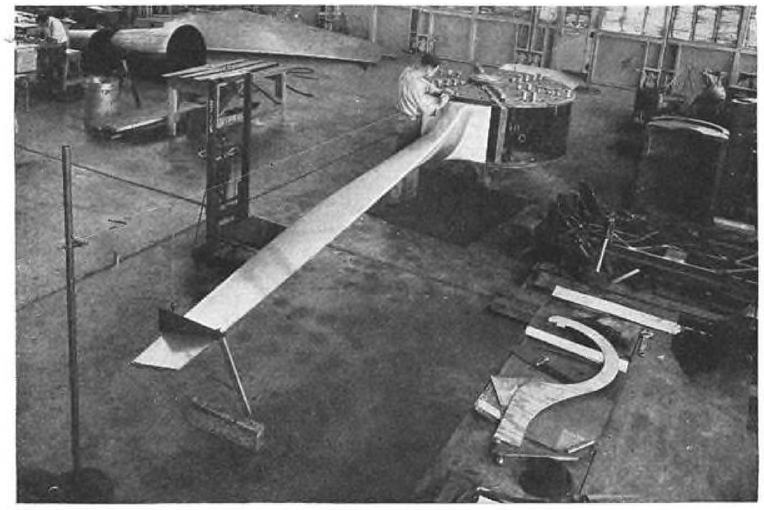
▸**Air Cargo Questionnaire**—A test of the maturity of the Rosenthal Committee, and one which may determine the extent to which the aviation industry of the West Coast gives ear to its later legislation proposals, will be a state-wide air cargo survey questionnaire, which should be in distribution this week to industries, agricultural groups, business firms and heads of municipal and county governments.

▸**PLANE CONVERSIONS**: West Coast conversion of Air Transport Command planes returned to airlines may result in the demands of some airlines for a review of repurchase contracts and a scaling down of prices. Airlines are reported to be discovering in the returned aircraft damage that will boom conversion costs far above government allowances before the airplanes can be certified as airworthy.

West Coast Hearings

Reconversion hearings similar to those recently held by the War Contracts Subcommittee of the Senate Military Affairs Committee in Washington will be conducted late this month and early in August on the West Coast. Senator Murray (D., Mont.) will conduct the hearings.

Both aircraft and shipbuilding executives and labor leaders will be heard in the open sessions, starting July 26 in Seattle. Others will be held in Portland, July 28 and 29; San Francisco, July 31, Aug. 1; Los Angeles, Aug. 2 and 3; and San Diego, Aug. 4. It is understood that Henry Kaiser will appear at the San Francisco hearings.



ASSEMBLING 40-FOOT PROPELLER FOR NACA TUNNEL: *This photo of a workman putting together one of the six-blade, 40-foot diameter propellers for the NACA wind tunnel at the $7,000,000 Ames Aeronautical Laboratory at Moffett Field gives some idea of the size of the huge chamber, which measures 98 by 128 feet at the point where the six motor-driven propeller units are located. The tunnel is wide enough to test models of 80-foot wingspread.*

Pilot Output Rate Hits 110,000 a Year

Yount lauds Aeronautical Training Society contract schools.

Training of pilots for the Army Air Forces has reached the 110,000 per year mark for the first time, according to Lieut. Gen. Barton K. Yount, commanding the AAF Training Command.

General Yount has completed a world flight of more than 37,000 miles, during which he visited AAF installations and observed in combat American airmen who had received their training under his command. The AAF jumped from 21,556 officers and men in 1939 to 2,385,000 as of January, 1944.

▸**Lauds Schools** — In thanking Army contract school operators who are represented by the Aeronautical Training Society, General Yount said: "We have built up this great air force in far less time than anyone had ever dreamed possible. From now on our training will be confined to furnishing replacements."

Of the 64 ATS schools engaged in primary flight training for the AAF since 1939, about 17 have completed their work, leaving only 47 schools in operation, and by the end of August the number will probably go down to 39.

Plane Costs Cut 15 to 35 Per Cent, East Coast AWPC Survey Shows

Savings effected by manufacturers are in addition to the more than $100,000,000 returned to government in 1942 and 1943.

War prices of planes built by aircraft manufacturers in the East Coast Aircraft War Production Council have been reduced from 15 to 35 per cent, in addition to more than $100,000,000 returned to the government in 1942 and 1943, a study of production savings reveals.

A substantial portion of the $100,000,000 returned to the government was in voluntary rebates made after production experience showed true cost factors, while the remainder was turned back as a result of renegotiation between service officers and manufacturers.

▸ **Costs Scaled Down**—Largest savings came in the scaling down of the purchase prices of the planes as production efficiency and improved economies of operation were reflected in total costs.

The East Coast Council survey showed that a large number of contracts, originally negotiated on a fixed fee basis, have been changed to a fixed price basis as manufacturing experience permitted more accurate determination of the actual costs of production. Members of the council are: Aviation Corp., Bell Aircraft, Chance Vought, Curtiss-Wright, Eastern Aircraft Division of General Motors, Fairchild Engine and Airplane Corp., the Glenn L. Martin Co., and Republic Aviation Corp. In addition many subsidiaries of these companies are members of the Council.

▸ **Fixed Fee Basis**—In some instances the fixed fee basis was adopted at first because experience needed to determine actual cost was lacking. This was particularly true in the manufacture of new types of aircraft and equipment, a council spokesman said, pointing out that such costs as labor, materials, engineering, subcontracting and training were unknown in the beginning and that manufacturers for that reason had to gain knowledge through actual practice. Cost of design changes required by combat experience also was a varying element.

The council spokesman emphasized that the fixed fee contracts do not permit the plane maker a percentage above the costs of manufacture, but instead call for him to receive a fair return of a fixed amount above the probable, but undetermined costs. Determination of the fee is arrived at by Army or Navy contract officers working with the manufacturer. Costs may vary, but the fee is not increased by higher costs, as were the contracts of somewhat similar nature in the World War.

▸ **Extra Costs Absorbed**—In fixed price contracts, added costs must be absorbed by the manufacturer, while lowered costs usually are reflected in renegotiation proceedings to prevent excessive profits.

Costs under the fixed fee contract are more likely to be higher than those under fixed price contracts because of the volume of auditing procedures and added manpower for timekeeping and other non-manufacturing duties, it was pointed out, but otherwise there is little to choose in costs under the different contracts.

Stocker Improving

Alexis Rutherford Stocker, foreign relations director of Fairchild Engine and Airplane Corp., is recovering in a Washington hospital from a bullet wound that resulted in the loss of an eye. It was not known last week whether the sight in the other eye could be saved.

Mr. Stocker was found in his apartment by an associate, Alfredo di Los Rios. He had been shot in the temple.

DC-3's Role in War

Seven thousand Douglas DC-3 type planes have been manufactured by Douglas Aircraft Co. for the armed service, it was disclosed last week when the Douglas company released data showing that 69 percent of multi-engined planes used by the Air Transport Command are Douglas transports.

Virtually all the planes used by the Troop Carrier Command are combat transports of the DC-3 type, and more than half of all planes used by the Naval Air Transport Service in its world-wide operations.

250,000 Casualties Evacuated by Air

Maj. Gen. David Grant, AAF Air Surgeon, reveals movement of wounded and sick from front since Pearl Harbor.

More than 250,000 sick and wounded American and Allied troops have been evacuated from battle areas by air since Pearl Harbor, it was revealed last week by Maj. Gen. David N. W. Grant, Air Surgeon of the USAAF.

The rate has reached 1,000 a day, General Grant revealed, while Lieut. Col. Richard L. Meiling, attached to the Air Surgeon's office, disclosed that patients are being moved by air from hospitals in India to this country in less than one week, as compared with two months or more required for sea evacuation.

▸ **7000 From Normandy**—Gen. Grant also disclosed that more than 7,000 wounded were evacuated from the Normandy Peninsula in the first three weeks of the invasion with air operations beginning on D-plus-4 as soon as a landing strip for C-47's could be built by air engineers.

Last year, before the peak of air evacuation operations had been reached, 173,000 men were moved to safe areas by air in planes ranging from specially-equipped Piper *Cubs* to giant C-54's for transocean operations. In a recent month 3,839 patients were brought to this country.

Wagner Returns To Pacific Front

Rear Admiral Frank D. Wagner, commander of famed Patwing 10 in the Java campaign, has returned to the Southwest Pacific as commander of aircraft of the Seventh Fleet supporting General MacArthur's operations northward to the Philippines. Admiral Wagner, like MacArthur, has a score to settle on the return engagement in the Philippines, the two squadrons of his patrol wing having been virtually wiped out in fighting back from the Philippines to Australia, saving only three *Catalinas* of the 33 planes in the original Patwing 10.

▸ **Served in Capital**—He has been serving in Washington as Assistant Deputy Chief of Naval Operations (Air), the first to hold that post when Vice Admiral McCain became Deputy Chief of Naval Operations (Air).

Airline Chiefs See Wide Post-War Gain

Forecast traffic increases from five to twenty times that of pre-war era at Denver conference.

By SCOTT HERSHEY

Top executives of the nation's leading airlines, meeting in Denver last week at the Air Traffic Conference, division of the Air Transport Association, forecast that air traffic will be from five to twenty times as great after the war as before, with an increase in air express and much of first class mail carried by plane.

Charles E. Beard, vice-president of Braniff Airways and president of the conference, presided at the two-day session, which featured a luncheon commemorating the tenth anniversary of Continental Air Lines with headquarters in Denver. Edward Leasure, chief examiner of the CAB, was the principal speaker.

▸ **Post-War Plans**—Post-war proposals as related to commissions for sale of air travel and general industry viewpoints on air travel plans were threshed out at the closed meetings. A standard sales agency agreement was adopted, covering relationship between agent and carrier.

While the emphasis of the sessions was on commercial air transportation, Leasure reminded the airlines' executives that they sometimes had a tendency to lose sight of other phases of civil aviation, including the private flyer, fixed base and charter operators, pilot training schools and sales and service agencies.

▸ **300,000 Private Planes**—Leasure said a relatively conservative estimate of the growth of private flying indicates that there may be 300,000 private airplanes in the country from six to ten years after the war.

Of commercial air transport, Leasure said that naturally the war had a greater effect on international operations than on domestic and that many agencies of the government are actively interested in the future expansion of foreign air routes and that while debate on questions of policy involved has been vigorous, all are agreed that this nation must be prepared to meet the post-war challenge of competition in the international air transportation field.

▸ **Domestic Side**—He said authorized air service within continental United States totals about 55,000 route miles and reaches 300 cities and towns. While public opinion believed commercial air transportation would be extended to every hamlet after the war and provide innumerable jobs in the reconversion days, Leasure said that aviation enthusiasts frequently overlook the fact that in going into the small city short haul market the airplane will be faced with the most intense kind of competition from the railroads, bus companies and private automobile and it will be facing this competition with its principal selling point—speed—greatly diminished in value.

At the luncheon session, which was under the joint sponsorship of the Denver Chamber of Commerce and the Denver Chapter of the National Aeronautic Association, of which Harry Anholt is president, Robert F. Six, president of Continental accepted a tenth anniversary award from the Chamber of Commerce.

Air Traffic Conference Officers: *These four men are at the helm of the Air Traffic Conference, which met last week in Denver. Left to right they are N. B. Fry of United, first vice-president of the conference; Charles E. Beard of Braniff, president; Tom Wolfe of Western, second vice-president; and M. F. Redfern of the Air Transport Association, secretary.*

Canadian Car Expands

An aircraft and accessories service division of Canadian Car and Foundry Co., Ltd., has been organized to service aircraft instruments, dial indicators, pyrometers and precision measuring tools, and will install and service radio equipment and other electrical accessories in aircraft, the company has announced. The new division, at the St. Laurent plants in Montreal, is directed by O. C. S. Wallace.

U.S. Ports Doubled Under CAA Plan

Burden, in radio talk, says program to be presented to Congress is based on aviation needs five or ten years after war.

Assistant Secretary of Commerce William A. M. Burden last week gave radio listeners a hint of the scope of the national airport plan prepared by the Civil Aeronautics Administration, soon to be presented to Congress as a report.

The plan shows that twice the present 3,086 airports will be required in five to ten years after the war, plus improvement of 1,625 existing fields. Of the 3,000 new fields proposed, 2,900 will be of smaller classes. The plan would give 1,827 cities airports capable of accommodating air transport operations.

▸ **Billion Dollar Job**—Burden said the total cost was estimated at slightly over a billion dollars—$630,000,000 for larger airports, and $370,000,000 for smaller fields. He pointed out that no legislation or appropriations exist to translate this plan into facts, but that pending legislation for Federal-state cooperation in financing airports seemed desirable.

Burden said every community should have some agency studying its airport problem. He stressed the need for rapid action on construction of a national system of airports both for commerce and national defense, but said Washington can't do the job alone.

CAA Role in AAF's Airways Revealed

Bourne tells of comprehensive work in site selection, construction and radio installation at 204 locations outside U. S.

The role of Civil Aeronautics Administration engineers and technicians in setting up the world system of airways required by the Army and Navy was disclosed last week by Thomas W. Bourne, director of Federal Airways, who said CAA has participated in site selection, construction, or radio installation at 204 locations outside the United States.

▸ **Technical Advice** — Actual construction of these range stations was accomplished by cooperation between the Navy's Seabees, the Army Air Force, the Army Signal Corps, the CAA, and in several instances, the British Signal Corps. The technical advice and experience of CAA engineers contributed largely to the combined effort to make this world-wide airway system possible.

The major portion of the Administration's work was in the installation of radio ranges, 40 of which were removed from points in the U. S. and installed in foreign stations. CAA personnel now are operating 70 of the 204 installations in which the Administration assisted.

In 1942 and 1943, Bourne said airways were constructed from Miami to India via South America and Africa, and from the United States across the North Atlantic route to Ireland, Scotland and Wales.

▸ **Pacific Area**—In the Pacific area, the CAA installed range equipment for the Navy at various locations including Tahiti, Tutuila (Samoa), Christmas Island, Funafuti, Nandi, Espiritu Santo, and Guadalcanal. The CAA also installed 14 localizers for the Navy in South America. These are now operated by CAA personnel.

In Alaska, where the CAA has been working for several years, a 4,000-mile airway system existed at the outbreak of war. This has since been extended to 7,000 miles. Some 25 Alaskan airports are now being enlarged with CAA assistance.

▸ **Foreign Locations**—Radio range stations moved from points in the U. S. to foreign locations, Bourne said, included the following:

Elkins, W. Va., to Cairo, Egypt; Dothan, Ala., to Karachi, India; Yoakum, Tex., to Canton Island; Sault Ste. Marie, Mich., to Fiji Islands; Norman Mesa, Nev., to Salala, Arabia; Garden City, Kan., to Dakar, French West Africa.

Chinese Plant Ready To Make A-26 Parts

Douglas Aircraft Co.'s subcontractor China Aircraft Corp. will begin production of A-26 *Invader* attack bomber components in San Francisco next month. By the year end 3,000 Chinese are expected to be working in the plant, financed by a $500,000 DPC loan.

Credit for development of the project goes to a 25-year-old Chinese aircraft engineer, Dr. Hu Seng-Chiu, founder, director, vice-president and chief engineer of the corporation. Dr. Hu submitted plans for the enterprise to Mme. Chiang Kai-Shek in Los Angeles in 1943, won Chungking Government approval and then spent 15 months in development negotiations with the State, War, Navy and Treasury Departments as well as interested American and Chinese boards and commissions.

China Aircraft is owned wholly by 30 large Chinese families having headquarters in San Francisco, and its board chairman is Shuck Ho, president of the San Francisco branch of the Chinese Association for the Promotion of Aviation.

Budd to Finish 26 Steel Planes

When the Navy contract with Edward G. Budd Manufacturing Co. is terminated on September 15, a total of 26 *Conestogas* will have rolled off the assembly line completed. The *Conestoga* is the unique twin-engine, welded stainless steel cargo transport.

The Navy reports that the Army Air Forces has agreed to supply it with enough R4D's (Douglas DC-3) to fill probable needs.

▸ **Had Ordered 200**—The Navy had on order 200 *Conestogas*. Since it will receive only 26, it can be assumed that the Army will turn over about 175 R4D's to the Navy from the Douglas production line.

The *Conestogas* being acquired by the Navy will be utilized by the Naval Air Transport Service as utility ships to fly cargo and passengers. They will operate on regular NATS scheduled flights. In addition the *Conestogas* will be used to break in NATS crews who will fly scheduled trips.

Navy Backs ACCA's Air Power Policy

Navy Department was on record last week as endorsing the air power policy of the Aeronautical Chamber of Commerce. Assistant Secretary for Air A. L. Gates told the Senate War Contracts Subcommittee that the Navy supported the principles set forth by the ACCA and also favored a new examination of the relationships of the service and industry by a new Morrow Board representing Congress, the armed forces, the aviation industry, labor and other interested groups.

Mr. Gates also told the Murray committee that a declaration for a strong post-war Navy with its closely integrated air components would be of great benefit, enabling industry to go ahead with its plans and experimental work for the Navy. The settlement of post-war problems, he said, will enable aircraft manufacturers to concentrate on completing their jobs so that the Navy will have the weapons to finish the job.

TELLING THE WORLD

• Walter Kidde and Co., Belleville, N. J., anounces the opening of a new sales and engineering office in Beverly Hills. John M. Noble who for the last four years has been manager of the Aviation Department at Kidde, has been appointed district manager in charge of the new West Coast office. Noble was formerly manager of the flight instruments department and assistant to the manager of the Friez division of Bendix Aviation Corp. He also has served as a pilot for Pan American Airways.

• Ray Bell, director of public relations for Pennsylvania-Central Airlines, has been elected a member of the board of governors of the Advertising Club of Washington. Bell announces that Paul Dennehy has become news photographer for PCA. The National Advertising Agency Network awarded second prize in the "Best Employee Relations" classification to the "Know Your Company" booklet issued by PCA to all new workers.

• Grumman Aircraft Engineering Corp., appoints Charles W. Hoyt Co., New York. Media will be newspapers and magazines.

• Account of Panair do Brasil, S. A., has been taken over by the Rio de Janeiro office of McCann-Erickson, Inc., for Brazilian advertising.

• Simmonds Aerocessories, Inc., has given its account to Burke Dowling Adams, Montclair, N. J.

Chicago Port Plans Ready in 90 Days

Work on new $1,200,000 municipal field expected to start in about three months.

Plans for the new $1,200,000 Chicago municipal airport terminal being built jointly by the eight airlines serving the city are expected to be completed within 90 days and construction may begin shortly thereafter. Mayor Edward J. Kelly is reported to have received assurance from Washington of necessary priorities on materials and equipment.

The new structure will be built on the unit terminal plan of which Albert F. Heino, United Air Lines architect is the leading exponent, and may be the first of this type to be completed. Denver, Dallas, and Seattle also are planning terminals of this type which will permit additions and double-decking as expanded needs require.

▸ **18 Plane Gates**—While present runway capacity of the field would permit 30 plane gate spaces at the terminal, tentative plans call for 18 plane gates, to be built to DC-4 proportions as a fair average size, with a plan for expansion to full capacity later as it is needed.

Two committees of airline representatives working on the arrangements include a building committee of which Heino is chairman, and an agreement committee to handle leases and business headed by P. M. Willcox, also of United. Other members of the building committee are: E. H. Sittner, American; R. M. Huber, TWA; F. R. Meisch, Northwest, and Walter Prokosch, Eastern, and the following alternates: H. S. Pack, PCA; W. G. Gabehart, C&S; R. M. Lewiss, Braniff; J. D. Crichton, United; H. Sclosser, American, and T. M. Sullivan, TWA. Other members of the agreement committee are: Ken Crago, American, Robert J. Wilson, PCA, and A. M. Jens, Jr., TWA.

▸ **Architects at Work**—The Chicago firm of Shaw, Naess and Murphy, architects, has been employed to prepare plans for a purely functional terminal building, which is expected to use large amounts of glass and steel with relatively little masonry. Besides providing operating unit terminals for the eight airlines, and facilities for the city, the project will include a CAA-operated control tower, a central distribution building for mail and express and restaurant and other facilities for the public.

Close coordination between the airlines and the city is being maintained by John A. Casey, municipal airport manager, and the airlines are planning to name a full-time coordinator to represent them as the project progresses.

Geuting Clarifies Airport Program

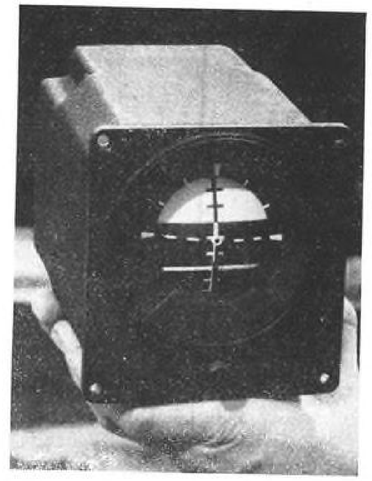
Denies conflict between CAA and Personal Aircraft Council on number of facilities needed.

There is no basic conflict between the Civil Aeronautics Administration and the Personal Aircraft Council in their viewpoints about landing facilities for private planes, Joseph T. Geuting, Jr., chairman of the Aeronautical Chamber's personal plane division, pointed out last week in a letter to CAA Administrator Charles I. Stanton.

Stanton, in recent speeches, has been reflecting the CAA plan for 6,200 airports, while Mr. Geuting told the New England Council, a regional group, that 20,000 airparks would be needed after the war. It appeared that the two were in conflict, although actually, Mr. Geuting states in his letter, they are not.

▸ **Clarification**—"I think the basic difference in thought," Mr. Geuting told Stanton, "revolves around the planning for and kind of landing facility which we are talking about. The Personal Aircraft Council's plan is to arouse in the community an interest in their responsibility to provide a landing facility suitable for the personal or private aircraft . . . you of course know that we are not talking about airports in the same sense as you are talking about airports.

"We are discussing what we choose to call 'airparks' to differentiate from the larger, more complex type of landing facility. I know that you are urging that the great majority of airports, which now need be built, are Class One. Even so, the thought back of the CAA plan is to tie communities together with airports, whereas the basic thought back of the Personal Aircraft Council plan is to see that every community in the U. S. A., regardless of size or importance, has a landing facility suitable for the use of personal aircraft."



NEW ATTITUDE GYRO: *Sperry Corp.'s new attitude gyro to provide pilots with precise attitude indications throughout 360 degrees of roll and pitch. With the new instrument it is possible to accomplish all aerobatic maneuvers without visual reference to the earth's surface.*

Shorter Week Fails To End Absenteeism

Reduction of work hours, made in an experiment to combat absenteeism in the Cleveland Fisher Aircraft Plant No. 2, has failed and the plant is resuming a full 54-hour week after a month on a 50-hour week.

The 50-hour week was put into effect to give workers Saturday afternoon off to do personal business such as shopping. But absenteeism in the plant producing major assemblies for the B-29 continued with little change. The plant also is engaged in work on a highly secret experimental fighter plane. Most absences occurred on Saturdays and Mondays, with little change noted under the reduced time schedule.

Douglas Plant Burns

Fire last week destroyed the two-story administration building of the Chicago plant of Douglas Aircraft, resulting in damage placed at $1,500,000. The main manufacturing division plant, producing C-54 transports for the services, was only slightly damaged, although flames for a time threatened to spread to the $33,000,000 structure.

★ ★

Boeing-Wichita Seen as Potential Post-War Personal Plane Builder

Division, with 10,000th *Kaydet* trainer off assembly line, has running start in race for peacetime markets but officials doubt demand will reach proportions generally predicted.

By BLAINE STUBBLEFIELD

Boeing Airplane Co.'s Wichita Division must be counted among potential future personal aircraft builders. Last week their 10,000th *Kaydet* trainer came off the line, marking unexcelled experience in the field of middleweight non-schedule type airplanes.

Officials of Boeing-Wichita say they are in the aircraft business to stay, but they do not reveal specifically what designs they have in process. They feel that the personal aviation market of the predictable future is being greatly over-emphasized. Their interest is such, however, that they have had the market surveyed by a nationally-known research agency, whose report has been delivered.

▸ **Boeing Name Factor**—The Wichita Division's experience and judgment will weigh heavily in any small plane plans that may be promulgated. But the parent Boeing Aircraft Co. of Seattle, with its great engineering and development facilities, and especially its continuing commercial and technical investigation of the possibilities in aircraft and a wide range of durable goods, will extensively determine, and integrate with, the Kansas program.

Wichita officials are well aware that the name of Boeing on any design they choose to build will receive wide public acceptance from the start. They feel that this acceptance is justified by years of successful operations.

▸ **Doubt Mushroom Market**—But these spokesmen are frankly doubtful concerning the practicality of aircraft for a large number of business and personal users.

"How will purchasers justify the large first cost of well-made planes?" they ask. "How long will they be willing to foot the operating and maintenance bills? Where will they fly? And why? And what will they haul? How will they meet the problem of weather interrupting their plans?"

The nation will be in heavy debt, and will have to rehabilitate itself. Most people will need all their money to replace necessary personal property, and as working capital. Returning service men generally will have nothing but their jobs.

▸ **Confidence**—Boeing men say they have full confidence in the eventual large-scale development of aircraft use. They think business will be good if the Government handles its share of the transition problem wisely. They believe that many individuals can afford and will buy private airplanes, and that a large number of business firms will buy and use them profitably, many to perform a real service, some for promotion and publicity.

The only standard by which the post-war aircraft volume can be judged, they say, is the prewar record, plus improvements, in planes and in ground facilities, which will improve utility. The volume will be greater from the outset than it was before. How much greater, no one can guess. Costs and prices in the initial post-war period will be higher than in 1942, due mostly to high wages.

▸ **Design Change Unlikely**—Boeing engineers have been devoted to "heavy" design since the company's inception. It is most unlikely that they will change policy in favor of design that would fit into lightplane low-price brackets.

Pass 10,000 Mark: *Deliveries of the Boeing* Kaydet *trainer, now produced identically for the Army and Navy, have passed 10,000, with current output at the rate of 100 a month.*

3 Biplane Types Left

The only three remaining biplanes produced by the U. S. aircraft industry, by odd coincidence, originated in Wichita, where Beech, and Boeing (formerly Stearman) remain. The third is Waco, the letters of which stand for Weaver Aircraft Co.

Buck Weaver made his early beginnings in Wichita, and later moved to Troy, Ohio. If there is another biplane, which Wichita boosters and AVIATION NEWS have overlooked, it will be heard from very soon.

The Boeing *Kaydet* trainer is in the heavy, quality class. Its continued development and manufacture since 1935 has contributed extensively to experience which will be directly useful in any small plane produced by the company in the future. But it is a military design and, as airplanes go, it is getting old. Comments of company engineers indicate it will not be used as the basis of future commercial airplane development.

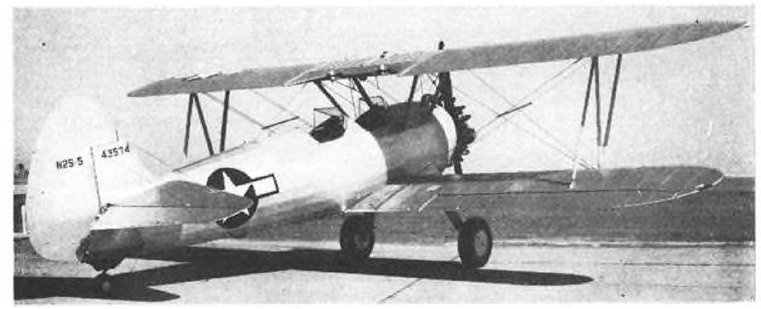
▸ **Post-War Plans**—It is a safe assumption, confirmed by remarks of company officials, that Boeing has on paper, at least, several proposed designs for personal and other non-scheduled purposes, and including, of course, airline and military equipment.

During conferences last fortnight with Boeing people at Wichita, the writer was told that the *Kaydet* trainer, which is furnished identically to both Army and Navy, is not believed suitable for extensive surplus re-sale for private use. It carries only two, and has open cockpits. Allowable live cargo is only 400 pounds, plus light baggage.

▸ **Surplus Market** — If surplus *Kaydets* are offered at low enough prices, many pilots (thousands trained on them) will bid them in for personal use, with more or less satisfactory results. Fuel will be high but parts will be cheap. Many established aviation schools, like Boeing at Oakland, Parks, and Embry-Riddle, are reported already inquiring for surplus *Kaydets*. They have had experience with them, can figure costs and service accurately in advance, and they know that sturdy construction permits many trainees to walk away from accidents. These schools need such planes for turning out pilots with professional ratings. Many grasshopper type of schools, in which students pay low fees, can scarcely afford to fly *Kaydets*, even at low purchase and parts cost.

Though the *Kaydet* is old, it is not excelled by any other trainer in the favor of the air forces. In numbers delivered to Army and Navy, it is far in the lead of all trainers, and is widely used abroad. Its prospects for continued acceptance in peacetime military use, here and in foreign air forces, are good.

▸ **Production Rate**—In 1940, *Kaydets* were rolling off the line at the rate of 12 a day, or more than 300 per month, at the Wichita Plant I. The high rate was 180 in 16 days. Working around the clock, with unlimited supplies, the plant could have delivered 600 a month.



Boeing's "Kaydet" Trainer: *Experience piled up in continued development and production of this middleweight quality plane, since 1935, would be used to advantage by Boeing in design of models for private business, personal and other non-schedule uses.*

At present, *Kaydet* production has been cut back to 65 planes a month, plus parts equivalent to about 35 planes, or 100 per month. Trainer fabrication and assembly have been compressed into corners and sidelines, to make room for B-29 operations, to an extent that surprised even the plant management.

▸ **Started in 1935**—Since the original XPT-943 biplane of 1935, the trainer, undergoing slight changes, has been Army's PT-13, then the famous PT-17, and now PT13-D, and Navy's NS-1, now N2S-5.

Standardization

Army and Navy Air Forces and Boeing-Wichita compromised more than 35 design details of the *Kaydet* trainer PT-13D and the N2S-5 before it was finally delivered, identical and completely standardized, to both services last November. Boeing believes the *Kaydet* is the only trainer ever standardized for Army and Navy. Other planes, however, have been procured by one service and later allocated to the other. The *Kaydet* standardization program was started in July, 1942, upon a suggestion made by J. E. Schaefer, Wichita Division president. A committee of Army and Navy personnel was established in Washington to review differences in the two versions. Standardization was carried out in a period of materials shortages and when trainers were on the urgent list. Army and Navy's demand for different versions of the same thing, creating extra heavy costs, is a major argument of those favoring unification of the armed forces—a battle that will remain to be fought in peace time.

San Francisco Maps Lightplane Parks

Steps to provide San Francisco with facilities for individual airplane owners and operators are expected to be taken soon by city officials.

An initial problem will be selection of landing field sites within reasonable distances from residential sections. Also, California airport laws will be investigated to determine whether they should be modernized to permit the city to participate in the Federal airport financing program.

▸ **Conferences Scheduled**—With his major task one of coordinating activities of municipal departments and private organizations, Mayor Roger D. Lapham is scheduling conferences with the San Francisco Chamber of Commerce Aviation Committee, CAA authorities and others.

San Francisco's municipal golf course has been suggested as a possible site for a lightplane field, and surveys will be made to determine if seaplane facilities might be developed at Yacht Harbor.

New Goggle Lens

New single-window goggles with interchangeable lenses for various types of weather are being issued by the Army Air Forces.

The new type goggle mounts clear lenses for wind protection, green lenses for sunny days and amber lens for hazy days. It is so designed as to afford a wide angle of vision. It is supplied by Polaroid Corp.

PERSONNEL

★ ★

Camey D. Vinet has joined Consolidated Vultee Aircraft Corp. as staff assistant to the head office in San Diego in charge of sales research. Vinet was a pioneer pilot on the air-mail pickup service with All American Aviation and was formerly aviation director of the state of Pennsylvania.

William P. Brotherton, president of the San Diego Junior Chamber of Commerce and former gas company engineer, has joined the public relations staff of Ryan Aeronautical Co., San Diego, to specialize in the preparation of technical aeronautical information for national magazines.

L. C. Peskin has been named director of the contracts division of Kellett Aircraft Corp., and **Harold A. Backus** has been appointed products engineer, succeeding Peskin. Before joining Kellett in 1943, Peskin was associated with American Steel and Wire Co. Backus has been with Kellett since 1942.

E. F. Lazar, manager of the federal department of Sperry Gyroscope Co., now heads the new special electronics department, handling sales activities of electronic equipment for the ground forces of the Army.

NEW AAF STAFF CHIEF:

Brig. Gen. Aubrey Hornsby, who has been named chief of staff of the Army Air Forces Central Flying Training Command, succeeding Brig. Gen. Luther S. Smith. General Hornsby reported to the Randolph Field headquarters after having served as commanding general of the 32nd Flying Training Wing at Perrin Field, Tex.

Norma E. Craig has been named promotional advertising representative for United Air Lines, based in New York. Miss Craig was previously engaged in publicity and advertising activities with the Johns-Manville Sales Corp., Silcox Exporting Co., and the American District Telegraph Co.

Harrel Gladish has been appointed supervisor of payroll accounting for United Air Lines in Chicago. Before joining United, Gladish was with the Holland Furnace Co., Holland, Mich., for eight years.

Raymond Francis Connors has joined the public relations staff of Pennsylvania-Central Airlines in Washington. He has been with Springfield (Mass.) *Republican*, the *Berkshire* (Mass.) *Courier* and the United Press during ten years in the field.

Lawrence Nichols of Edmonton, Alberta, has been appointed traffic representative for Western Air Lines in the western Canadian region. Nichols was formerly a British Columbia station manager for the Canadian Greyhound Lines.

Brig. Gen. Robert M. Webster, formerly commanding general of the 1st Air Force Support Command at Mitchel Field, N. Y., has been assigned deputy commander of the 12th Army Air Force, in the North African theater under command of **Maj. Gen. John K. Cannon**. At present General Webster is commander of a *Marauder* bomber wing and the Allied garrison on Sardinia.

THE NEWS VIEWS—

A. A. Vollmecke

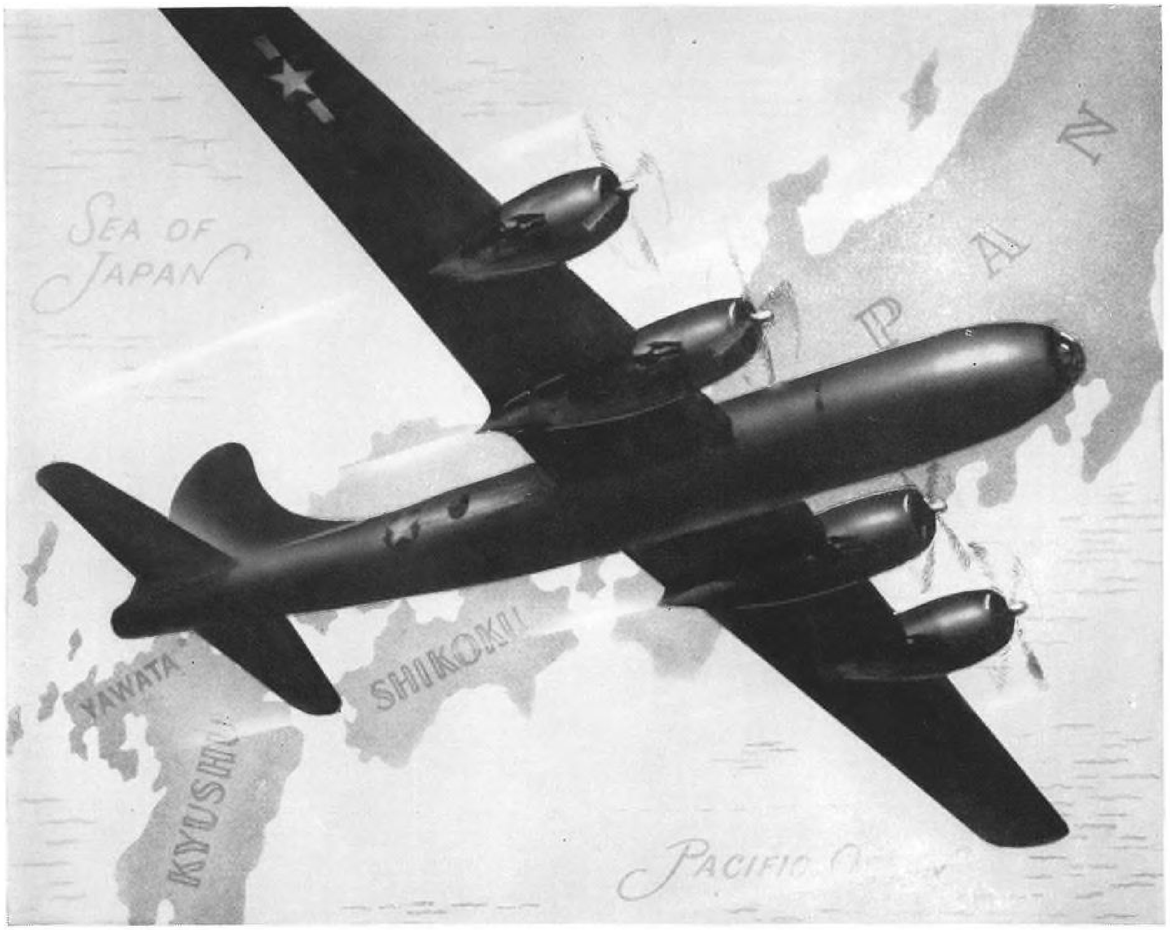
The industrious chief of the Aircraft Engineering Division of CAA's Bureau of Safety Regulation has been a pilot since 1923 and he neglects few weeks of good flying weather during the year to increase his time.

Born at Osnabruck, Germany, in 1901, he graduated as a mechanical engineer from the Technical Institute at Braunschweig (Brunswick) in 1925, with post-graduate work on light alloy pistons of high speed internal combustion engines. During his school years he participated in sailplane design and flight competitions.

Before coming to the U. S. in 1927, to join the old Command-Aire Co., he worked with Dr. Ernst Heinkel. His promotion as chief engineer of Command-Aire came in 1928. His model 5-C-3 was, in accordance with the official report, the only standard production plane to pass the qualifying tests of the Daniel Guggenheim Safety Contest of 1929. A racing plane of his design in 1930 won the All-American Flying Derby of more than 5,000 miles by a margin of 4½ hours.

After operating the Alvo Aircraft & Mfg. Co. at Little Rock, Ark., manufacturer, repair and maintenance base, Mr. Vollmecke joined the engineering section of the old Aeronautics Branch of the Department of Commerce in 1933 and eight years later became the head of the Aircraft Engineering Divsion of CAA.

The Vollmeckes have two sons, 16 and 13, and the older one already follows his dad's hobby of camping and fishing, and building model planes. The senior Vollmecke is a Quiet Birdman and member of several NACA committees.



U. S. Army Air Forces Photo of B-29 Super-Fortress

COMMENTARY

Allied Air Blockade Eases Job Of Invasion Forces in France

Same tactics used in Africa, Italy and Southwest Pacific are employed in isolating enemy in Cherbourg peninsula.

Despite superficial differences and widely varying external conditions in the European, Mediterranean and Asiatic-Pacific theaters of operations, most of the principles of air warfare remain the same.

Notable among these is the principle of air blockade. It is now known that one of the biggest factors in preventing strong German reaction on the ground and in the air against the initial Allied landings in Normandy was the systematic cutting to pieces of enemy communications.

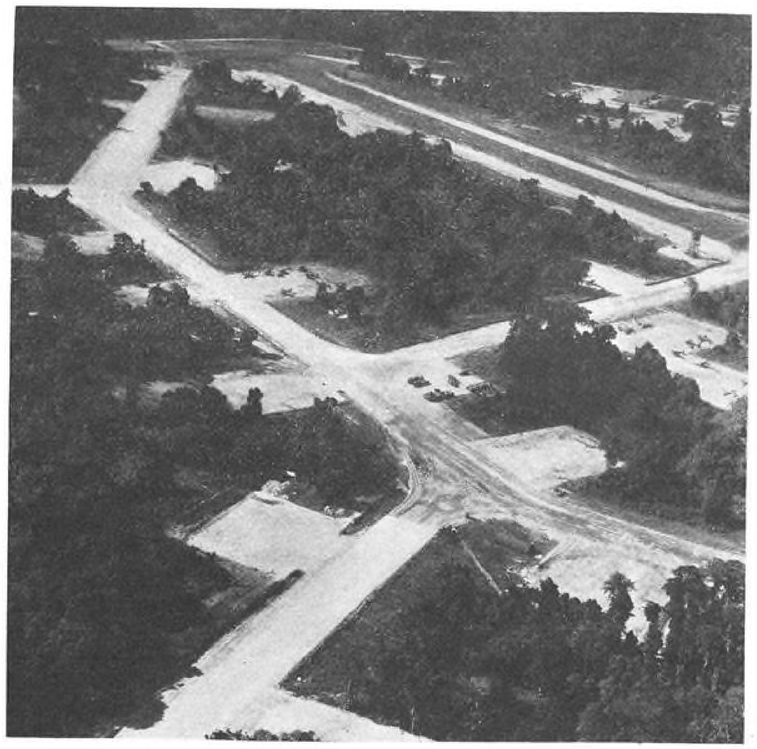
Repeated blows at freight yards, rail installations, locomotives and freight cars, rail bridges across the Seine below Paris, and important rail junctions on the main lines feeding through Paris, plus a large number of attacks on road junctions and airfields, served to isolate the battlefield and a continuance of the process tended to keep it isolated. June's worst weather for 40 years cut down the effectiveness of this air blockade, but on the whole it is seen to have worked exceedingly well.

A similar operation strangled Kesselring's forces in Italy, leading to the break-through on May 11, rapid conquest of Rome and well beyond, with Alexander's goal of destroying the German armies in Italy now a reasonable possibility.

While criticism of the Italian "stalemate" was mounting both in England and in this country, monotonous communiques from as far back as February told of missions of medium bombers and fighter-bombers from General Cannon's Tactical Air Force (one of General Eaker's Mediterranean Allied Air Forces) smashing bridges, tunnels and railroad tracks at hundreds of places north of Rome, and bombing ports and shipping so as to reduce to a trickle the supplies needed by Kesselring's 20 divisions, estimated at about 3,400 tons per day during their holding operations. Some 20 percent more than this would be required under full combat conditions. By a ceaseless effort extending over ten or twelve weeks, all communications were so slashed that finally supplies could come only by truck and by night.

Devastation — Photos show wreckage of locomotives, freight cars and trucks to be little short of fantastic. This meant hitting scores of targets repeatedly as resourceful German engineers and repair groups got the stuff rolling again. One important bridge was smashed and after eleven weeks of hard work by night and day was repaired; a few hours later it was wrecked again. As a result of all this the combined assault on May 11 was far more successful and far less costly than would have been the case without the air blockade. It was the story of Tunisia, one year earlier, all over again. Different setting, but the same principle.

Leapfrog in New Guinea--For a



ESPIRITU SANTO AIRFIELD:
Aerial view of Luganville Field, in the southwest Pacific, where the AAF has hacked out a model airfield, with long strips and revetments and dispersal areas leading off.

Quick Refueling

Fighter planes of the Ninth Air Force are completing four or five missions a day over the front in Normandy through use of new landing strips on which they can be refueled and rearmed in 20 minutes, it was disclosed last week.

The runways are 1,000 feet long and enable fighters to operate over the French area without auxiliary gas tanks.

Ground elements of the Ninth Air Force went ashore on invasion day to begin the work of building the strips on previously selected sites

C-54's BRING WOUNDED BACK TO AMERICA:

American troops, wounded in the Normandy invasion, are shown being taken out of an Army Air Transport Command C-54 for transfer to ambulances on arrival at Mitchel Field.

really different setting, have a look at what has been happening down under. Col. Merian C. Cooper, chief of staff of the Advance Echelon of the Fifth Air Force, has described the air blockade as "D to the 5th Power," "D" standing for Destroy as used in five ways.

(Col. Cooper was executive to Brig. Gen. Martin F. Scanlon, first A-2 on the newly organized Air Staff in the summer of 1941; after Pearl Harbor Cooper was chief of staff on General Chennault's China Air Task Force.)

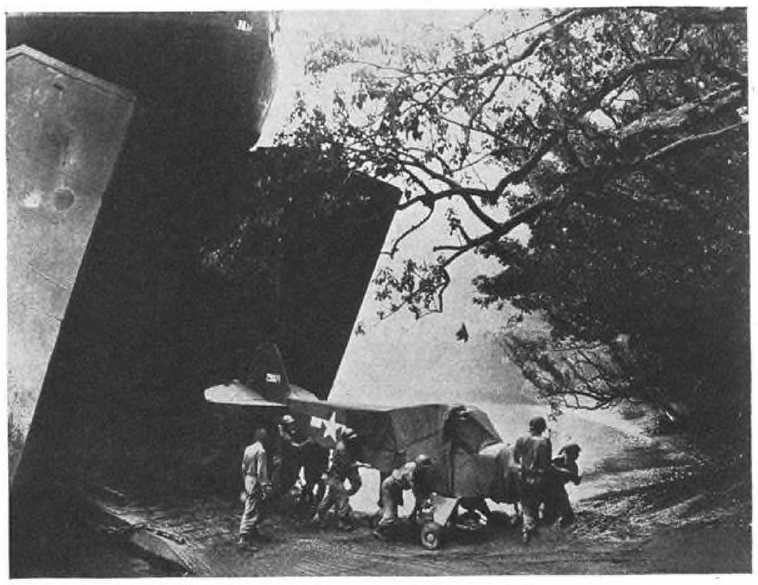
Here is the formula: (1) Destroy the enemy's air power. (2) Destroy his AA defenses. (3) Destroy his airdromes. (4) Destroy the enemy's living quarters and areas of key personnel. (5) Destroy all his stores and installations.

This sounds like good Tedder stuff, and is another example of the fact that the top air strategists and tacticians, Spaatz or Tedder, Chennault or Kenney, tend to see air power in the same general terms. The battle of the Bismarck Sea was really air blockade. So was the leapfrog operation in New Guinea this spring which knocked out Wewak, and then permitted a surprise jump of some 500 miles from Saidor to Hollandia, a distance greater than the whole Southwest Pacific forces had been able to move in the two years since March, 1942.

Surprise Pays Off Again—Wewak, one of two principal enemy air bases south of the Equator, lay about half-way between Saidor, above the Huon Peninsula, and Hollandia, Dutch New Guinea, the other principal Jap air base. Between Mar. 10 and 25 Maj. Gen. Ennis Whitehead ("Ennis the Menace"), commanding general of the Fifth, struck at Wewak, going after the objectives in the order named. Eighty-nine enemy planes were destroyed in the air and scores more on the ground. On Mar. 23, two days before the final strike, the Jap forces began evacuating Wewak through the back country as constant air patrol had completed the air blockade by cutting off his reinforcements by barge.

Then, between Mar. 30 and Apr. 16, seven great strikes completely smashed up Hollandia. The Jap was caught off base flat footed. He expected our forces to occupy Wewak, not to leapfrog over it to Hollandia. A big element in the surprise was the unleashing of the new longer range *Lightnings*, the P-38J's with more powerful engines, improved supercharging and built-in leading edge gasoline tanks; hitherto they had been flown only to Wewak, 300 miles from the nearest fighter base. When the *Liberators* struck Hollandia in force on Mar. 30, of some 150 fighters at the various airfields 40 came up to intercept and 20 of them were promptly shot down by the escorting *Lightnings*. The same thing happened the next day, and as a result of the two days' strikes 219 enemy planes were destroyed or damaged, while we lost one P-38. The rest of the story is well known, and before the end of April, MacArthur's forces were 500 miles nearer the Philippines.

NAVIGATOR



LST UNLOADS *CUB* IN NEW GUINEA:

Piper Cub *being wheeled out of an LST somewhere along the shores of New Guinea. The rugged little planes are gaining fame around the world as artillery-spotting and liaison ships. Here the mouth of the LST dwarfs the tiny plane.*

★ ★

Industry Studies Patterson Plan To Decentralize Aircraft Plants

Wisdom of Undersecretary's post-war defense proposal admitted but proximity to coast of factories furnishing raw materials, parts and supplies, and labor, housing and climate are factors to be considered, manufacturers point out.

Undersecretary of War Patterson's contention that aircraft manufacturing plants should be scattered in the post-war era posed a new problem for the industry last week. Most manufacturers viewed the suggestion as desirable, but are most concerned about the practical aspects of the decentralization urged by Mr. Patterson before the War Contracts Subcommittee of the Senate Military Affairs Committee.

It was the first time that the proposal for post-war general movement of the industry inland and scattering it through more easily defended territory had been broached publicly by a high government official and it may easily become one of the most widely discussed problems to be faced.

While on the surface it might appear economically desirable to shift operations from the Northeast and West Coast to new plants located in the interior areas, it was pointed out that the facilities in the interior are superplants requiring a high overhead in areas in which other considerations had previously not been attractive, and are little more, if any, attractive now.

Other Factors—The early aircraft plants were built in their present locations for eminently practical reasons, and these same reasons will apply with equal force in the post-war period, those close to the picture point out. Restricted operations will require that the companies utilize their plants least expensive to maintain in areas where the proper labor supply is located, where tax problems have been stabilized, where good peacetime housing is available and where climate is particularly suited to aircraft production.

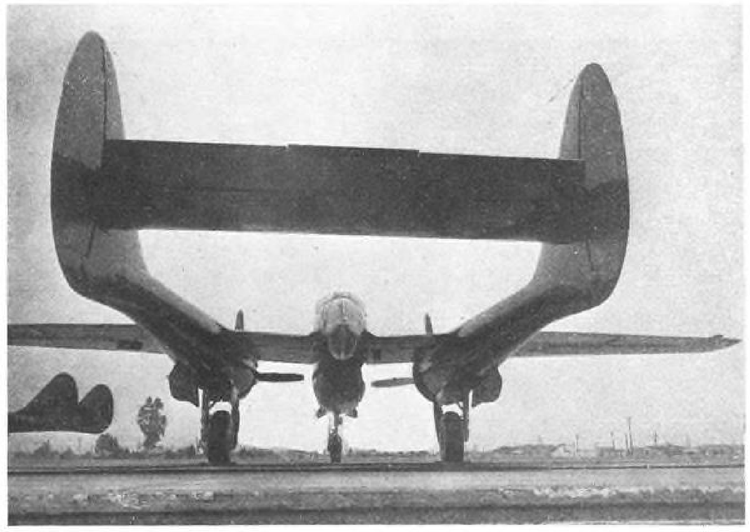
It was suggested that the problem might be worked out by maintaining the inland facilities as

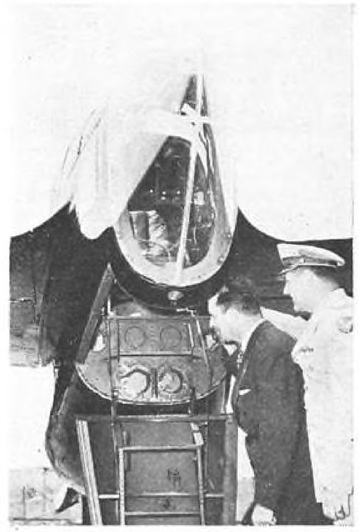
Decentralization

Inland aircraft manufacturers are strongly supporting certain elements in the armed forces who would like to continue their plants in peacetime operation in preference to coast plants. They argue that if and when another aggressor attacks this country he will be well prepared, and he will not stop at Pearl Harbor or any outlying base, but will hit our coast industries and population concentrations with power and determination.

Another point is that labor, in the inland agriculture and stock regions, is readily transferable to war production. One impediment in the way of such a move will be the parent companies of the inland plants, most of which will want to retain fullest operation in their own coast facilities.

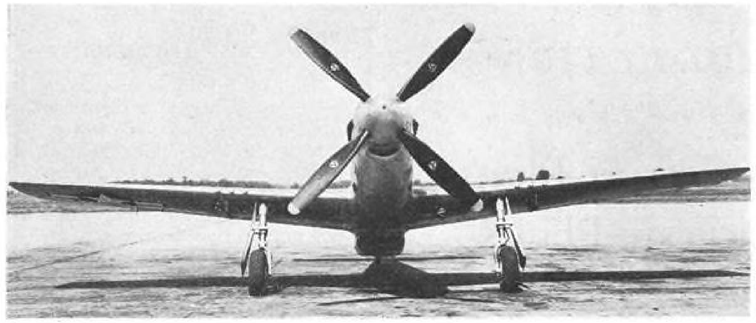
It remains to be seen whether the Army and Navy in peacetime will have sufficient political influence to locate production strategically, or whether it will be located by voting power represented in Congress.





OFFICIALS INSPECT *BLACK WIDOW*:

Photo at left shows rear view of the new Northrop P-61 Black Widow, *night fighter, first Army fighter revealed since Pearl Harbor. Right: rear entrance of cockpit being inspected by LaMotte T. Cohu, general manager of Northrop Aircraft, Inc., and Brig. Gen. Donald F. Stace, commanding general of the Western Procurement Division of the AAF Materiel Command.*



NEW PROP FOR *MUSTANG:*

This photo, newly released by the War Department, shows the new four-blade Aeroprop propeller installed in the North American P-51D Mustang. *This* Mustang *version also has a bubble canopy and other refinements expected to boost its already high performance rating.*

military standby plants — each maintained by stipulated manufacturers as complementary production facilities to the poorly located —from the defense standpoint— home plants.

▸ **Underground Plants** — Others suggested that the vulnerability of the present coast plants will soon be almost equally true of the inland plants, and that it may be necessary to be even more realistic about the dangers of future attacks and build underground factories to obtain a really needed degree of safety.

It was pointed out that some of the inland plants are no more safe in their location than the coastal plants—in the Detroit area for example—and that these plants, too, were established in their locations because of the practical recognition of labor, housing and other considerations.

Truly inland and southern manufacturing plants, such as Omaha, Wichita, Fort Worth and Marietta facilities, still are dependent upon the vulnerable mid-northern industrial section for materials, parts and supplies.

Corsair Bomber

Pilots of the Fourth Marine Aircraft Wing have been using the *Corsair* fighter as a fighter-bomber in Central Pacific action in the past few weeks. A single thousand-pounder is being attached under the fuselage.

The fighter-bomber *Corsairs* are in action in the Marshall Island sector, where by-passed enemy bases are being kept neutralized by air action.

Price Formula Set On Machine Tools

A pricing formula for standard general-purpose machine tools in government-owned surplus stocks has been announced by the Surplus War Property Administration. The formula would return a minimum of 45 percent of cost to the government.

Price formulas for special types of tools will not be announced until later.

▸ **Speed Production**—The objective in handling the machine tools, the SWPA said, is to get the machines into production as soon as possible and to avoid expenses from depreciation, obsolescence, warehousing and handling.

Although procedures were not announced with the pricing policy, the SWPA announced that they will be drawn to avoid favoritism, speculation or unsound distribution.

The formula for standard tools is worked out on two bases. In the first, where tools are not in the purchaser's plant, they are sold with an immediate depreciation of 15 percent, and further depreciation of two and one-half percent per month of use for the first six months, one percent per month for the next four months, and eight-tenths of one percent per month for the next 26 months. When tools are bought when installed in a plant, the price is five points higher in each age group.

▸ **Buyers Pay Freight**—The price from which the formula will be worked is the tool manufacturer's original price complete with accessories, f.o.b. maker's factory. Buyers must pay freight costs from storage centers. The formula for depreciation is worked from the date a machine originally was put in use to the date of the termination of the lessee's facilities contract, or to the time when the machine is withdrawn from contract, placed in storage or sold, whichever is earlier.

Carried to the full period of 36 months, used machine tools thus can be bought from storage at approximately 45 percent of original cost or installed on a factory floor for approximately 50 percent of cost.

FIRESTONE AUTOGIRO EXHIBITED:

This self-catapulting two-place autogiro, built by G. & A. Aircraft, Inc., Willow Grove, Pa., Firestone subsidiary, was displayed recently by the parent company. Several such models, with hovering speeds of 20 mph. and top speed of 118 mph., were delivered to the British on a sample order and one was presented to Princeton University. G. & A., formerly Pitcairn Autogiro Co., is reported building a new helicopter.

The Birdmen's Perch

SEE HOW EASY IT IS?

You send in a Little Known Fact (About Well Known Planes), and if it's red-hot and we use it, you get a commission as a Perch Pilot (bottom rung). Then you send in some more!

After we've used 5 of your "facts," you get a promotion to Senior Perch Pilot. And we guess if anyone ever sends us 20 Little Known Facts that we can use, we'll have to make them a Command Perch Pilot.

We want you gals to send them, too. (Even if you're not a WASP.) Like the "Facts" below we picked up for this month.

Major Al Williams,
alias "Tattered Wing Tips," Gulf Aviation Products Manager, Gulf Bldg., Pittsburgh 30, Pa.

LITTLE KNOWN FACTS DEPT.

The "C-40" is the world's fastest cargo plane, its pilots say. Never heard of it? . . . It's a P-40 with the disposable belly tank rigged to carry cargo instead of fuel. It's carried mail, instruments, and medical supplies in New Guinea; delivered fresh meat in the Aleutians!

A C-46, surprised by Zeros as it flew "The Hump" into China, dived to an indicated 405 mph in escaping!

The Navy's using stripped down 2000 hp Corsairs for scouting missions in one theater!

Okay, now you *write the next ones.*

CHILLING, HORROR STORY
(in 2 parts)

PART 1.

Ever get the old "hollow-belly" this way:

You look out and see a "skin" of ice building up on the leading edge? As you nervously hunt for a no-ice altitude, you think longingly of the long, beautiful de-icer boots on the big ships? And how they "peel" the rime or glaze right off that sensitive leading edge? And you sigh and wish someone would put out a good five-cent de-icer for light planes, as you continue your search for a no-ice layer?

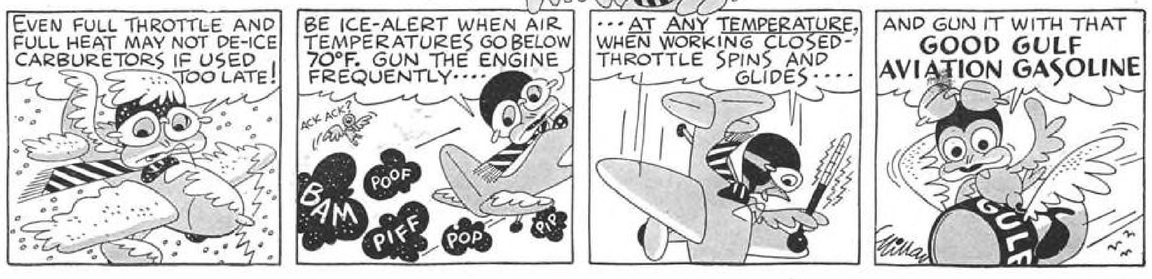
PART 2.

Now imagine you were in a cylinder. (Oh, come on . . . we'll be out in a minute!)

If you were using an ordinary oil, you'd see a "skin" of oil-carbon and combustion by-products building up on piston rings, lands, and grooves. And you'd see sludge forming . . . sludge that might get into the oil circulating system to clog filters and screens. And you'd wish there was a method to "peel" more of those carbon-and-sludge elements out of the oil.

Unless you knew about the Alchlor Process, which does just that to GULFPRIDE!

Come on out of that cylinder, now, and service up with GULFPRIDE.



WPB's Revision of Order L-48 Studied

Manufacturers seek clarification of rule expanding APB control to all types of civilian aircraft.

Clarification of the War Production Board's revision of Limitation Order L-48 governing production of civilian aircraft and components is being sought by the industry.

The order expands control of the Aircraft Production Board to include all types of civilian aircraft, instead of only planes of 500 hp. or less, and adds engines, propellers, gliders, airframes and training devices previously not covered.

Clarification—On the face of it, the order is meaningless unless it has for its purpose the setting up of machinery to provide for some civilian aircraft production over and above military production, but WPB spokesmen deny that this is the case now.

WPB maintains that the order is merely clarification of existing authority to permit faster and more coherent processing of civilian requests for planes and parts, but admit that it constitutes machinery for relaxing essentiality standards as war orders begin to slacken.

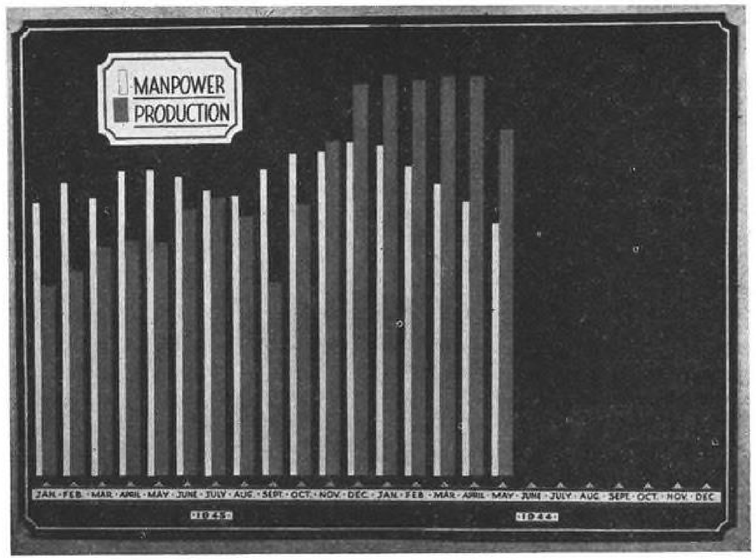
Heretofore, the WPB spokesman said, it has been necessary to readjust military schedules to meet essential civilian requests, a process made unnecessary by this revision of the order. It also was said that a single group in APB would be able to process the requests, whereas heretofore it has been done on a "spot" basis.

Post-War Planning—The WPB spokesman insisted that the revised regulations will not permit any immediate expansion of civilian aircraft production, but said "the new procedure will have the advantage of permitting manufacturers to schedule production for essential civilian purposes in an orderly fashion, and also will obviate the necessity to make adjustments in military production schedules because of unplanned diversions of equipment for civilian use."

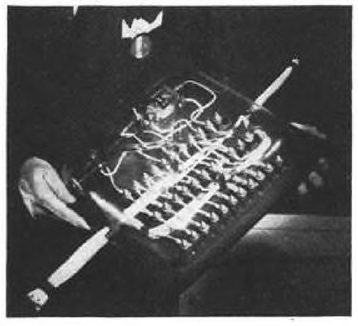
Other sources pointed out that the revised L-48 would simplify procedure for conversion such as that of the Boeing *Stratoliners* now under way at the Boeing Seattle plant, and for gradual conversion of other war plants to civilian production.

Prototypes—The revision does take cognizance of Order P-43, which similarly was reinterpreted in March to permit aircraft manufacturers to develop prototypes of new planes, provided manpower and facilities are not diverted from war work, that no "L" or "M" orders are violated, and also that no publicity is given the prototypes.

A successful prototype might be built under P-43 and permission for civilian production granted under L-48 so that tooling for the new model could be completed before the actual end of the war has arrived.

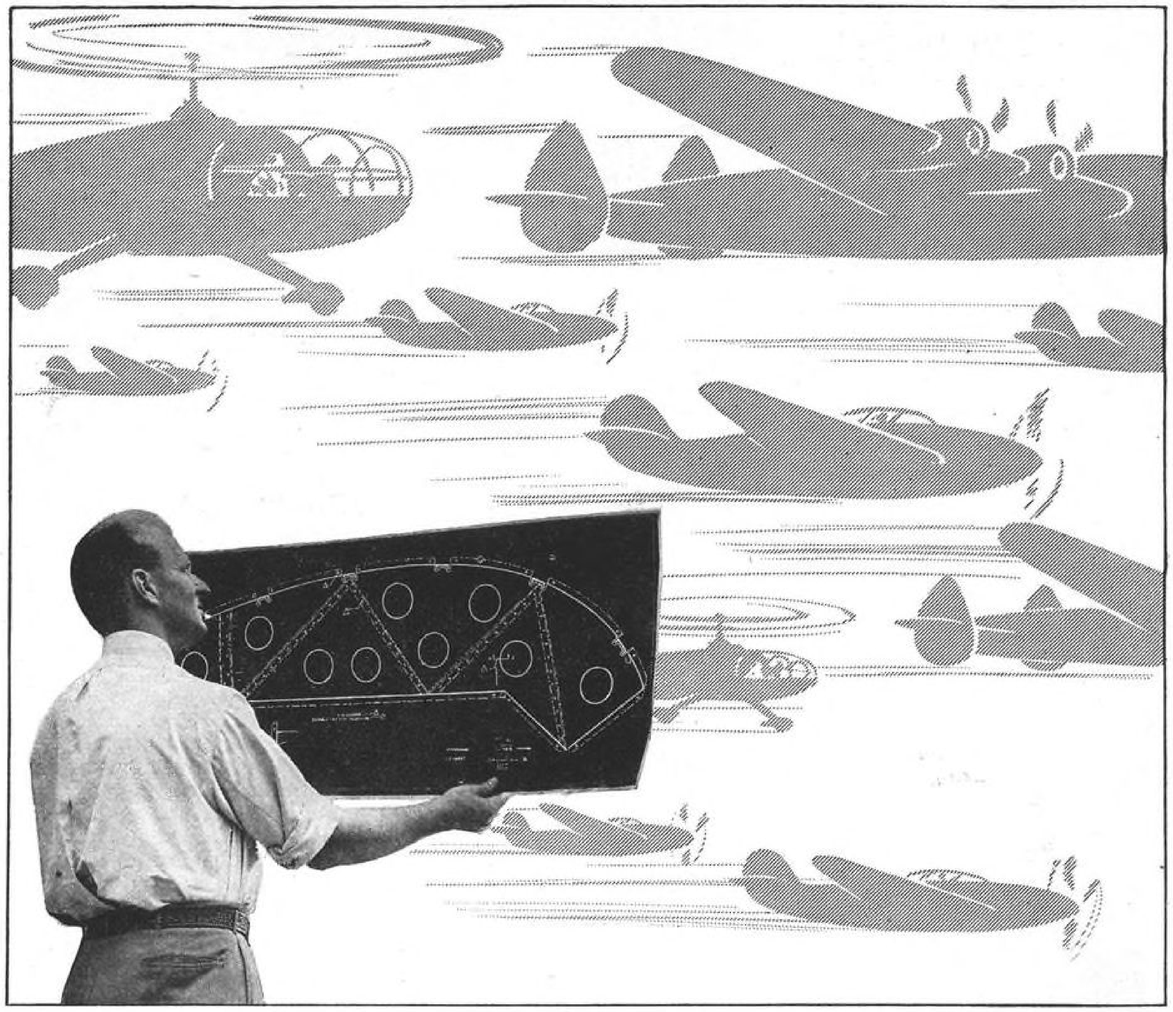


FIVE-DAY WEEK BOOSTS PRODUCTION:
Charts of Aircraft Components, Inc., of Van Nuys, Calif., employing 450 workers, support the company's shift seven months ago to a five-day 50-hour week. Joseph A. Ricketts, head of customer relations, attributes a sharp increase of production with decreasing manpower and a 50 percent drop in absenteeism to the five-day 50-hour week.



PLASTIC JUNCTION BOX:
Photo shows new type plastic electric junction box, lighter and easier to assemble and maintain than standard aluminum alloy boxes now in use, which has been developed by the Glenn L. Martin Co., for use on forthcoming Martin models. A time-saving improvement is sensitizing of the base plate and the reproduction thereon by a photographic process of the wire flow diagram, which simplifies drilling, assembly and wiring of the boxes in the factory.

NEW SAFETY CANOPY:
This tubular steel safety canopy, first of its design to appear on West Coast aircraft plant lift trucks, is the development of Douglas Aircraft Co. engineers. It is in operation at the company's Long Beach plant.



New Kellett Reproduction Method Speeds Engineering — Cuts Costs

THE thousands of drawings, layouts, templates, router block and jig patterns required for production of a single type of plane emphasize the importance of the time and cost-saving benefits of the new Kellett Loft Reproduction System.

The method, which meets the wide range of requirements for photo-reproduction, requires only one hand-made layout, which is the original drafting board item. This is made on a matte finish vinylite —a readily-available, transparent, plastic sheet, which is impervious to moisture and possesses a very low co-efficient of thermal expansion.

Once checked, the vinylite drawing is used to make photographic copies on sensitized tracing cloth for blueprints, and on steel and other sensitized materials for templates, router blocks and jigs. Right or laterally-reversed images can be obtained with maximum accuracy.

The Kellett Loft Reproduction facilities are available to other manufacturers. For full details write Loft Reproduction Dept. F, Kellett Aircraft Corporation, State Road and Landsdowne Avenue, Upper Darby (Philadelphia), Pennsylvania.

KELLETT

OLDEST ROTARY WING AIRCRAFT MANUFACTURING COMPANY

FINANCIAL

★ ★

Stocks Reflect Changed Outlook For UAL, United Aircraft Shares

Market sees significance in action of airline company's common passing price of manufacturing unit's equities for first time since formation of separate companies in 1934.

The changing fortunes of the aircraft and airline industries were vividly highlighted recently when the price of the common stock of United Air Lines passed that of United Aircraft on the New York Stock Exchange.

This represents the first time since the dissolution of the old United Aircraft & Transport Corp. in 1934 and the formation of three separate entities now represented by United Aircraft Corp., United Air Lines, Inc., and Boeing Airplane Co., that the market price of United Air Lines has topped United Aircraft. (Table 1).

Up to this point, United Aircraft common consistently commanded higher prices than United Air Lines' common. There were times when the aircraft equity sold at a price of more than four times that of the air transport operator. This precipitate reversal reflects the public apathy accorded the aircraft industry as contrasted to the high favor shown the airlines.

Both Leaders—The two companies are both leaders in their respective fields. Similar securities are issued by both: almost identical common and preferred stocks are outstanding.

Market quotations in themselves are misleading. These prices must be related to basic earning power and underlying values. Despite almost similar quotations for the two common stocks, capitalizations are far from alike.

United Aircraft controls total resources of about $236 500,000. while United Air Lines shows total assets of around $32,000,000.

Capitalization—United Aircraft has a 5 percent preferred stock outstanding to the extent of 258,-865 shares. United Air Lines has its recently issued 4½ percent preferred issue of 105,032 shares. Both are quality preferreds, yet the aircraft senior equity sells around $104 per share compared with $116 per share for the airline preferred. In other words, the former yields about 4.8 percent on the current price while the latter, being in greater demand because of the conversion feature, returns but 3.9 percent on the investment. (Should United Air Lines common continue to appreciate, the preferred will sell at levels completely disregarding the dividend income.)

To United Air Lines' 1,500,451 common shares, United Aircraft reveals 2,656,701. The market price of these two common stocks is about the same, but not underlying values. Reduced to terms of net equity per common share, United Air Lines showed a net book value of $13.97 per share or less than one-half of the current market quotation. On the other hand, United Aircraft's common stock equity per share amounted to $27.18 or almost equal to recent market levels. The book valuations for both companies were as of Dec. 31, 1943.

Earnings Record—Based on past earnings, United Aircraft has the most impressive record. In the five years ended Dec. 31, 1943, the company showed aggregate earnings of $26.93 per common share. Against this, United Air Lines can muster but $4.99. (Table II). As recent as the first quarter of 1944, United Aircraft's earnings are better: $1.41 per share against United Air Lines' 66 cents.

Stockholders of United Aircraft have also fared well in the past, receiving a total of $15.50 per common share during the past five years while United Air Lines paid but 50 cents per share in dividends during the same period. (Table II).

Future Discounted—This comparative analysis clearly reveals that on the basis of underlying assets, past and current earnings and dividend payments, United Aircraft's common has a far superior record over United Air Lines' counterpart. Then why this disparity in market prices of the two equities?

It is the familiar story of looking ahead and discounting the future. The aircraft industry is believed to have slim pickings in the post-war era while the airlines are expected to grow and expand. Aggregate market opinion appears to take a long view of the future and in effect says that past and current aircraft earnings are very impressive but this pace will be most difficult to maintain.

Similarly, the airlines have not yet demonstrated any real earning power but, in the new air age to come, air transportation will broaden on all fronts. The record of successful new industries is offered as examples, automobile and radio in particular. So reasons the current market consensus. To this may be countered the wild gyrations and deflations of equities of successful new companies in the past. For example, the common stock of Radio Corp. sold above $500 per share without ever paying a dividend. Now, with established earnings a reality, the equity has established a market level of around $10 per share.

Sidelight—An interesting sidelight to the market action of the two United aviation common stocks is the history of the companies themselves. When under the provisions of the old Air Mail Act of 1934 the former United Aircraft & Transport Corp. was disbanded, fears were entertained that a promising aviation enterprise would be killed and aviation progress stifled. Instead, three strong units emerged—any one

TABLE I
MARKET RECORD OF UNITED AIRCRAFT AND UNITED AIR LINES
(Common Stocks)

	Years ended Dec. 31: 1944*	1943	1942	1941	1940	1939
United Aircraft						
High...	30⅝	40	36⅜	44⅜	53⅜	51
Low...	25⅝	24¼	23⅞	28¾	31½	31
United Air Lines						
High...	32⅛	33⅜	20⅜	17⅛	23¾	16½
Low...	22⅝	17¾	7⅞	9⅜	12	7⅜

*Up to July 19, 1944.

Source: Moody's Industrial Manual
Wall Street Journal

TABLE II
EARNINGS AND DIVIDEND PAYMENTS OF UNITED AIRCRAFT AND UNITED AIR LINES
(Per Common Share)

	Years Ended Dec. 31: 1943	1942	1941	1940	1939
United Aircraft					
Earnings	$5.31	$5.99	$6.29	$5.81	$3.53
Dividends	3.00	3.00	4.00	3.50	2.00
United Air Lines					
Earnings	2.13	1.42	0.40	0.52	0.52
Dividends	.50	none	none	none	none

Source: Moody's Industrial Manual

of which proved to be larger and stronger than its progenitor and each became a potent factor in the aviation field. This is the same sequel as that which followed the dissolution of the old oil and tobacco trusts.

Minn. Wins 2 More Aviation, Tax Suits

Another series of legal actions revolving around the aviation and tax laws of the state of Minnesota has been decided in favor of the state.

In two decisions handed down by the Minnesota state supreme court, the constitutionality of the state's Metropolitan Airports Commission has been upheld.

▸ **Favors State Control**—The high court in its ruling said that "establishment of adequate terminals and facilities for the control of air traffic is beyond the capacity of private enterprise, and the necessity for a unified, integrated, centralized system of control of all classes of aerial traffic in the air ocean above the state, as a safety measure, calls for centralized control by the state government functioning in its sovereign capacity."

One challenge to the constitutionality of the law involved a Minneapolis case in which it was contended the act was "special legislation" that resulted in the transfer of Wold-Chamberlain field from the Minneapolis Park Board to the Commission without "due process of law." The other action, which was filed in St. Paul, contended that the act was invalid because expenditure of tax money was authorized therein for "private purposes."

Financial Reports

▸ **Edward G. Budd Manufacturing Co.** reports 1943 net income of $2,008,137 and Budd Wheel Co. net income of $1,413,278. Budd Manufacturing's total sales of $116,626,645 were up slightly more than $10,000,000 from the previous year and Budd Wheel's $48,655,781 topped 1942 figures by $6,552,168. Contract for 175 stainless steel *Conestoga* cargo planes with Budd Manufacturing recently was cancelled by the Navy, but a new contract for heavy ammunition was given the company several weeks later.

▸ **Aviation Corp.** reports consolidated net income for the six months ended May 31 of $2,317,853, equal to 40 cents a capital share, against $1,902,164, or 33 cents a share last year. Earnings for both periods are before contract renegotiation. Net sales at $33,902,816 for the recent six months compare with $37,780,792 a year ago.

J. & H. Employees Get Stock Rights

Offered privilege of subscribing to 150,000 Class A at $100 a share.

Jack & Heintz, Inc., Bedford, O., manufacturers of aircraft components, are offering employees (associates) the right to subscribe to 150,000 shares of Class A stock at $100 per share, with the proviso that the shares be placed in a voting trust under which William S. Jack, Ralph M. Heintz and William R. Jack will exercise voting rights for 10 years.

▸ **Working Capital**—The prospectus covering the offering of the shares says proceeds from sale of the stock will be used for working capital, but may be used to provide changes or additions to fixed capital assets. The voting trustees retain full power to authorize mergers or consolidations with other companies, changes in the capital structure of the company, but must have a 75 percent agreement of shareholders to sell or lease all, or substantially all, assets of the company. Distribution is restricted to employees who are residents of Ohio.

The Class A shares are preferred equities to the extent of $5 each, cumulative. They have no par value, the $100 value being declared.

All common stock of the company is held by the William S. and William R. Jack and Heintz.

Fibreboard Shortage

Shortage of fibreboard containers for air cargo and other shipping purposes will get worse before it improves, according to War Production Board prediction.

▸ **War Demands Heavy**—J. D. Malcolmson, chief of the technical section of WPB's paperboard division, stated recently that demands by the Army, Navy, Lend-Lease and other wartime activities for packaged goods is responsible for the bottleneck.

SHORTLINES

▸ Zimmerly Air Transport Co. has started a daily experimental air service between Lewiston and Boise, Idaho. Albert L. Zimmerly has filed extensive applications with Civil Aeronautics Board for routes in the West Coast states.

▸ American Airlines has announced the return to general ATC service of a Douglas C-54A, known as the *Icicle*, which was used during the winter for weather surveys on the North Atlantic route.

▸ An air route between Canada, New Zealand and Australia, to be operated by Trans-Canada Air Lines, is under consideration by the Canadian Government, C. D. Howe, Munitions and Supply Minister, told the Canadian House of Commons recently.

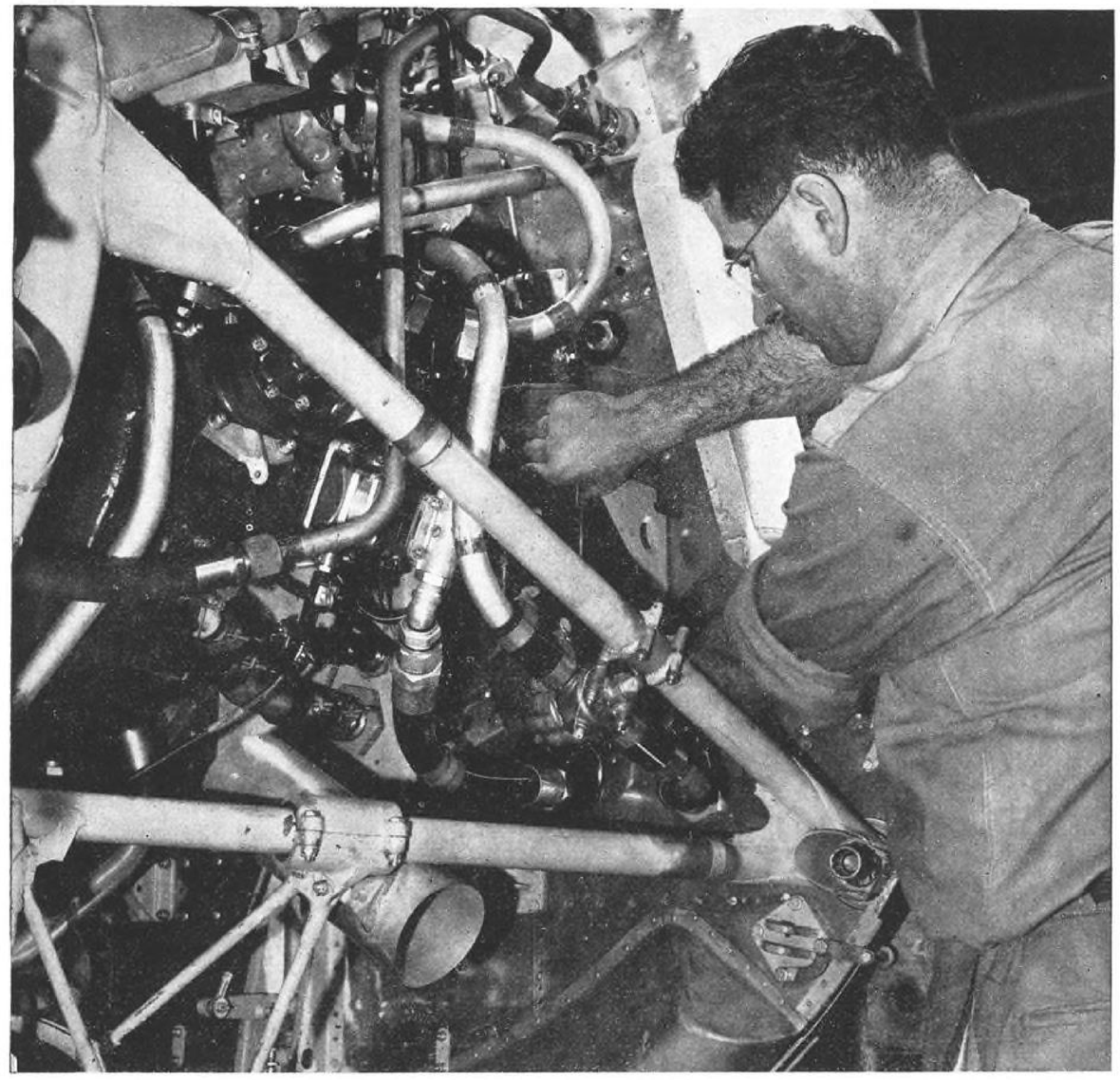
▸ New experimental air services started recently in Mexico include three weekly round trips by LAMSA between Torreon and Nuevo Laredo, and two round trips weekly between Monterrey and Torreon by Aero Transportes, S. A., American Airlines' Mexican subsidiary.

▸ Pan American Airways is using two ten-man cargo unit teams at its North Beach, N. Y., terminal to perform all functions relating to weighing, checking, listing, classifying, measuring, labeling, recoopering and stowing all types of cargo. The two teams which replace four departments, recently handled 50,000 pounds of air cargo in 26 hours.

▸ Northwest Airlines passenger revenue for June exceeded $500,000, a new company record, President Croil Hunter states, assigning the gain to an additional flight between Chicago and the Pacific Northwest. The airline hauled 15,000 revenue passengers in June, exceeded only by the 16,598 record of August, 1941, a pre-war year.

▸ United Air Lines announces that 11 of its fleet of 50 planes await reconditioning, leaving 39 planes in operation. With this number, it is flying approximately 84,000 miles daily, compared with 81,000 flown before the war with 67 planes. Daily plane mileage has been increased to 2,100 compared with 1,200 before the war.

▸ A four-engined Douglas R5D *Skymaster* transport, first of its kind in the Navy, is to be used on trips between America and North Africa after logging 234,000 miles in all war theaters. Douglas said when the big plane took off at Santa Monica recently for Patuxent, Md., its 60,000 pounds was one of the heaviest gross loads ever to leave the California field.



★ ★

Examiners OK Northwest Extension Of Seattle-Milwaukee Line to N. Y.

PCA recommended for Pittsburgh-New York route but Chicago-New York request disapproved; consolidation of part of American's lines favored.

By DANIEL S. WENTZ II

Northwest Airlines' ambition to become the fourth transcontinental air carrier and Pennsylvania-Central's plea for a New York connection were closer to fulfillment last week after two Civil Aeronautics Board examiners recommended that the Board extend the lines' Seattle-Milwaukee route to New York and grant PCA a Pittsburgh-New York link.

The report by Assistant Chief Examiner Francis W. Brown and Examiner William F. Cusick in the New York-Chicago Case (Docket 629 et al.) also proposed consolidation of a portion of American Airlines' routes.

▸ **Five Requests Opposed**—Applications by Braniff, Colonial, United, and TWA for Chicago-New York routes and a request by Chicago and Southern for a Chicago-Toledo certification failed to gain the examiners' sanction.

Although sweeping in scope, conclusions by Brown and Cusick followed the trend of previous examiner reports and Board decisions in emphasizing the trunk line competition aspect of the expansion problem, leaving for later consideration the relation to local-feeder service of the routes involved. Some industry observers have felt that if there is to be a joint responsibility for trunk line and local-feeder operation, trunk lines should be patterned accordingly.

The report reflected the emphasis placed by parties in the pleadings on a diversionary character of the proposed operations and the doctrine of expansion by interpenetration exemplified by the smaller carriers, many of whom want to get into the populous northeast quadrant of the country.

▸ **Fourth Trans-U.S. Carrier**—Transcontinental lines now operating are American, TWA and United. In favoring a fourth transcontinental carrier to connect "the important northwestern part of this country with the industrial east," the examiners proposed a route which, if granted by CAB, would give Northwest a course 213 miles less than United's shortest routing and 176 miles shorter than the connecting service possible over Trans-Canada Air Lines. The Northwest route would be 2,618 airway miles, compared with 2,832 for United and 2,795 via Trans-Canada.

The recommendation was a possible threat to United's present operation and its plans for an Alaskan extension. Should Alaska fulfill the expectations of those

Service Compared

In the presentation of their case in the New York-Chicago proceeding, Braniff Airways attorneys produced exhibits to show that of 76 certificated airline stops of over 100,000 population, American serves 39 (51 percent), United serves 26 (34 percent), TWA and Eastern each serve 22 (29 percent), whereas Braniff serves 9 (12 percent of the total).

Of eleven metropolitan districts with populations over 1,000,000, American serves nine; United, six; TWA, eight; Eastern, five; and Braniff, one. Of the 25 highest passenger traffic generating centers, American serves 14; TWA, eleven; United and Eastern, ten; and Braniff four.

POLICY GROUP'S NEW EXECUTIVE COMMITTEE:

New executive committee of Airlines Committee for U. S. Air Policy plans to hold regular meetings but has not yet decided on a schedule. Sam Solomon, former chairman of the Policy Committee, says neither it nor the Executive Committee will have a chairman during the Committee's second year, which began July 15. Left to right: Jack Nichols, TWA; Sam Solomon, Northeast; Miss Ruth Basius, secretary to the committee; Tom Burke, American Export; O. M. Mosier, American, and Robert Thach, Northwest.

AIR EXPRESS OFFICIALS MEET:

More than 60 round-table discussions of mutual air express operating problems have been held in the past few months on a nation-wide basis, Railway Express Agency's Air Express Division reports. This picture of one of them was taken at Baltimore and shows, counter-clockwise around the table, R. W. Starkey, REA; Paul Burbank, United Air Lines; W. L. Morrisette, Eastern Air Lines; T. Dorsey, REA; J. B. McLaughlin, REA; F. G. Blyth, REA, chairman; F. A. VanDenbergh, REA; Al Emery, American Airlines; Marshall Butler, PCA; W. N. Harig, REA; C. N. Knoble, PCA, and Don V. Seevers, All American Aviation.

who view it as a highly strategic link in post-war international transport operations, the route recommended for Northwest might well become a major artery of air travel linking the entire northeastern United States with an international gateway at Seattle.

▸ **Intermediate Points**—Detroit and Cleveland were recommended as intermediate points between Milwaukee and New York, with a restriction that flights east of Milwaukee must originate or terminate at Minneapolis and St. Paul or points west thereof on Northwest's system.

In October, 1943, surveys show that 36.8 per cent of passengers, 53.6 per cent of the mail, and 90.5 per cent of the express hauled by Northwest into Chicago were destined to points east of Chicago. American, United, PCA, and TWA will all feel diversion of a portion of this traffic should Northwest be certificated into New York, thereby carrying itself cargo and passengers now transferred to these lines at Chicago.

▸ **Congestion**—Elimination of this connecting service at Chicago will also mitigate in part the congested traffic situation at the Chicago Municipal Airport, which in October, 1943, was averaging 338 landings and takeoffs per day.

Northwest estimates a net profit of $615,514 on the basis of four daily round trips between New York and Minneapolis-St. Paul, with a total capital outlay of $988,943, which includes purchase of five DC-3's.

▸ **Competition**—"Establishment of the service proposed by Northwest," the examiners found, "will place that company in a position to compete on an equal basis with United for the transcontinental business originating or terminating in the Pacific Northwest and should, therefore, lend itself to the development and maintenance of a proper competitive balance in this area."

To afford American Airlines opportunity to improve its service from Boston to the West in order to meet on an equal footing competition over that route recently established by awards to United and TWA in the New York-Boston case, the examiners recommended consolidation of American's AM 7, AM 21, and the Albany-New York segment of AM 23.

▸ **Skip-Stop Flights**—American asked the consolidation to simplify clerical work and improve operations by permitting additional skip-stop and non-stop flights between cities on its system. Other carriers objected that the non-stop operations possible under the proposed arrangement would subject them to considerable new point-to-point competition.

The examiners, therefore, recommend granting American a certificate drafted in such a way as to prohibit non-stop operations between points east of Buffalo and Cleveland and Erie. "The only important non-stop service possible" under the suggested certificate would be between Cleveland and New York.

▸ **PCA Application**—PCA's application for Chicago-New York route failed to meet the examiners' approval in toto, but they do recommend giving that carrier entry to New York via an important extension from Pittsburgh. In addition, the examiners approve PCA's application for non-stop privileges between Detroit and Chicago, to place it on a more equal competitive footing with American.

Entry into New York will strengthen considerably PCA's AM 55 by giving the carrier access to one of the heaviest traffic generating centers in the country, and will strengthen the likelihood of a future PCA application to extend its routes from its present southernmost terminus at Birmingham to New Orleans.

NATS Competition

The airlines do not need to fear competition from the Naval Air Transport Service after the war, Assistant Secretary of the Navy for Air A. L. Gates told the War Contracts Subcommittee of the Senate Military Affairs Committee during the aircraft hearings. The Army so far has not gone on record as to its Air Transport Service.

Gates told the Murray group that NATS would reduce its operations to a point where it would not be competing as soon after the completion of hostilities as the commercial airlines can take over the load.

The air secretary told the committee the Navy would always have to maintain a fleet of cargo and transport planes to carry unusual loads, reach out-of-the-way bases and make emergency transfers of personnel and cargoes for military purposes, but that there will be no occasion to duplicate service where facilities are adequate.

AIRPORT EXECUTIVES ELECT OFFICERS:

Maj. Charles E. Hanst (center), who was reelected president of the American Association of Airport Executives at the Association's Chicago convention, is shown with other officers. Left to right, seated, are Maj. George Moore, secretary-treasurer; Maj. Hanst and Neil Brackstone, Lansing, Mich., second vice-president. Standing are Woodruff De Silva, Los Angeles, first vice-president, and Howard Crush, Cincinnati, third vice-president.

PAA's Mail Pay Cut On Three Routes

Reduced on trans-Atlantic, trans-Pacific and Latin-American operations; initial rates set up for Alaskan lines.

In four decisions issued simultaneously the Civil Aeronautics Board reduced substantially the rates of mail pay for Pan American Airways' trans-Atlantic, trans-Pacific and Latin-American operations and established initial rate for Pan American's Alaskan operations.

All but one of the cases had been awaiting the Board's decision since last year, and two of the opinions were withheld for security reasons.

▸**Latin-American** — For PAA's Latin-American operations, the Board lowered the rate of pay from 17.83 cents per pound-mile for a base poundage of 300 to 13.32 cents for a base of 266 pounds. All mail in excess of the base poundage is compensated for at 0.5 mill per pound mile.

Board Member Harllee Branch dissented from the decision, founding his objections on the selection of a 266-pound base. He held that payment on such a basis might result in the "carrier's earning a higher rate on its overall investment than the 10 percent . . . which the Board has found to be fair and reasonable while it is on a 'need' basis."

The rate established by CAB is effective from Sept. 1, 1942. The door was left open, however, for the carrier to petition the Board within the next 60 days for a further determination of the "continued reasonableness" of this rate from and after Feb. 28, 1944.

▸**Alaskan Rates**—In its Alaskan rate case, Pan American was awarded $1,071,092 as pay for carrying mail between Seattle and Juneau from June 21, 1940 to Aug. 31, 1942, and between Juneau and Whitehorse, Whitehorse and Fairbanks, and Fairbanks and Nome from Aug. 14, 1940 to Aug. 31, 1942. This is the first rate that has been set for Pan American's Alaskan operations.

Payment for mail transportation over the trans-Atlantic routes was made to Pan American previously on the basis of a lump sum varying from $21,500 to $31,000 per round trip, as fixed by the Board in 1939 and 1940. The payment schedules did not cover the third round trip subsequently added by Pan American, and when the line applied to CAB to fix rates for this trip, the whole rate question was reopened.

In the Board's order of last week, the mail rate is fixed at 0.44 mill per pound mile, computed on a direct airport to airport mileage in statute miles. It applies for the period from Dec. 13, 1941, through Dec. 31, 1942. The Board's opinion was withheld in this proceeding.

For the trans-Pacific operations between San Francisco and Auckland, N. Z., and San Francisco and Hong Kong, Pan American was awarded $967,142.72 to cover the period from Dec. 14, 1941, through Aug. 31, 1942. The opinion in this case likewise was withheld.

NAA Experts Check Port Manuscripts

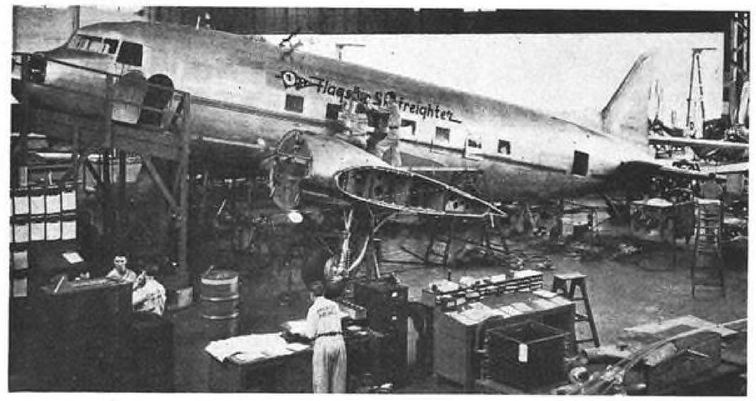
A group of experts, headed by Civil Aeronautics Administrator Charles I. Stanton, has been set up by the National Aeronautic Association as technical advisors on airport manuscripts. Other members are John Wilson, executive director, National Aviation Trades Association; Leslie L. Schroeder, Minnesota State Aviation Commissioner; John C. Grovers, operations division manager, Air Transport Association; John E. P. Morgan, manager, Personal Aircraft Council, Aeronautical Chamber of Commerce, and Lowell H. Swenson, manager of NAA, who will act as secretary.

▸**Check Manuscripts**—Pointing to an increasing volume of literature about airports, NAA President William Enyart said the new editorial review board will check manuscripts on landing facilities for technical accuracy and agreement with policies of airport planning and construction advocated by the participating groups.

The review board membership represents Federal and state air agencies, plane manufacturers, fixed base operators, airlines and consumers of aviation products and services. The suggestion was made that six copies of each manuscript any government agency, commercial organization or individual wants checked be sent to Swenson at NAA Headquarters, 1025 Connecticut Ave., Washington 6, D. C.

New Ad Chairman

Charles A. Rheinstrom, traffic vice-president of American Airlines, has resigned as chairman of the Joint National Advertising Committee of the Air Transport Association. Paul H. Brattain, of Eastern Air Lines, has been appointed to succeed him. Rheinstrom has been a member of the committee six years.



AMERICAN ADDS TO CARGO EQUIPMENT:

American Airlines is converting some of the 25 planes it is getting back from the Army into "Skyfreighters," a new copyrighted designation for its all-cargo equipment. Picture shows the work in progress. The ships will be divided in sections for efficient loading, with special compartments for fragile cargo. First is in operation and two more are to go into use July 29, with others to follow.

CAB SCHEDULE

July 24. Hearing before Examiner Thomas L. Wrenn on American Airlines' proposed acquisition of control of American Export Airlines.
July 27. Postponed exhibit date for Fairbanks-Anchorage-Kodiak mail case. (Dockets 864 et al.)
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. 7. Briefs due in the Hughes Tool-TWA control proceeding. (Docket 1182.)
Aug. 8. Briefs due in the Chicago-New York route case. (Dockets 629 et al.)
Aug. 9. Oral argument in combined Joplin-Tulsa-Oklahoma City (Dockets 413 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. 15. Tentative hearing date for the Fairbanks-Anchorage-Kodiak mail case. Postponed from July 17. Hearing will probably be held in Alaska.
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. 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.

Instrument Landing Fields Disclosed

Government removes security restrictions on listing 90 in U.S. equipped with systems.

Removal of security restrictions by the Army permits disclosure of location of 90 U. S. airfields where instrument landing systems have been or are being installed by the Civil Aeronautics Administration either at request of military authorities or in anticipation of widespread use by commercial airlines. Progress marks an important step toward all weather takeoffs and landings by commercial airlines to be possible at some time after the war.

Airline use of these facilities, until now experimental, will become general as the necessary equipment for installation in commercial planes can be obtained. In the meantime, their widest use is by the Army. Locations were chosen from a list of 95 stations where the installation of the equipment was deemed desirable by the Air Transport Association, supplemented by a further 29 selected by the Director of Federal Airways.

▸ **Completed**—The CAA has completed installations for the Army at:

Fort Wayne, Ind.	Langley Field, Va
Spokane, Wash.	Mitchel Field, N. Y.
Tucson, Ariz.	Presque Isle, Me.
Chicopee Falls, Mass.	Romulus, Mich.

Installations for the Army are being made by CAA at:

Memphis, Tenn.	Greenville, S. C.
Nashville, Tenn.	Mobile, Ala.
El Paso, Tex.	Orlando, Fla.
Jacksonville, Fla.	Mt. Clemens, Mich.
Long Beach, Calif	Alamogordo, N. M.
Fresno, Calif.	Clovis, N. M.
Charleston, S. C.	Lake Charles, La.
Columbus, Ohio.	St. Joseph, Mo.
Oklahoma City	Salina, Kans.
Tampa, Fla.	Muroc, Calif.
Richmond, Va.	Riverside, Calif.
Boise, Idaho.	Salinas, Calif.
Tallahassee, Fla.	Tonopah, Nev.
Columbia, S. C.	Great Falls, Mont.
Newark, N. J.	McChord Field, Wash.
Meridian, Miss.	Mountain Home, Idaho.
Savannah, Ga.	
Bakersfield, Calif.	
Bangor, Me.	

Fields where the CAA has completed instrument landing systems other than at the request of the Army:

Los Angeles, Calif.	Kansas City, Mo.
Oakland, Calif.	Philadelphia, Pa.
New York, N. Y.	Cleveland, Ohio.
Chicago, Ill.	Atlanta, Ga.
Washington, D. C.	

CAA is now working on installations at:

St. Louis, Mo.	Denver, Colo.
New Orleans, La.	Seattle, Wash.
Dallas, Tex.	Akron, Ohio.
Cincinnati, Ohio.	Baltimore, Md.
Houston, Tex.	Dayton, Ohio.
Wichita, Kans.	Amarillo, Tex.
Tulsa, Okla.	Phoenix, Ariz.
Omaha, Neb.	Toledo, Ohio.
Pittsburgh, Pa.	Cheyenne, Wyo.
Minneapolis	Salt Lake City
Buffalo, N. Y.	Jackson, Miss.
Albuquerque, N. M.	Little Rock, Ark.
Milwaukee, Wis.	Moline, Ill.
Portland, Ore.	Des Moines, Iowa
South Bend, Ind.	Louisville, Ky.
Brownsville, Tex.	Morgantown, W. Va.
Indianapolis, Ind.	Tri Cities Airport, Tenn.
San Diego, Calif.	
Knoxville, Tenn.	
Birmingham, Ala.	Billings, Mont.

Other locations recommended by the ATA for instrument installations, but where work has not been begun:

Burbank, Calif.	Reno, Nev.
San Francisco	Elko, Nev.
San Antonio, Tex.	Salem, Ore.
Fort Worth, Tex.	Bellingham, Wash
Detroit, Mich.	Charlotte, N. C.
Boston, Mass.	Providence, R. I.
Shreveport, La.	Hartford, Conn.
Las Vegas, Nev.	Fargo, N. D.
Chattanooga, Tenn	Syracuse, N. Y.
Raleigh, N. C.	Rochester, N. Y.
Rochester, Minn.	Big Springs, Tex.
Bismarck, N. D.	Grand Rapids, Mich.
Erie, Pa.	
Winslow, Ariz.	Abilene, Tex.
Reading, Pa.	Topeka, Kans.
Medford, Ore.	Joplin, Mo.
Rock Springs, Wyo.	Elkins, W. Va.
	Miami, Fla.

Vhf. for Denver-L. A.

Plans are being made to install very high frequency radio range equipment on the Denver-Los Angeles air route, on which the Civil Aeronautics Board is expected to make an award soon.

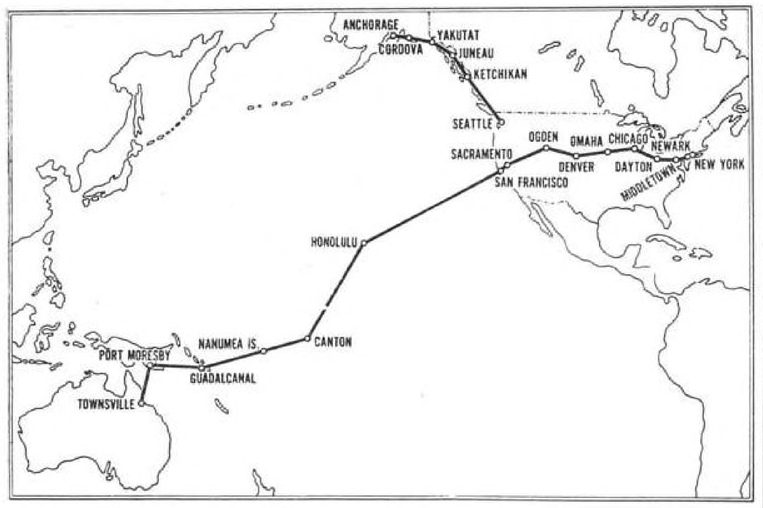
Civil Aeronautics Administration officials believe material for the installations will be available in about six months. The new route, assuming that it will receive CAB certification, thus will become the first domestic airway to start with such equipment.

Work already is near completion on vhf. installations along the Chicago-New York airway, and CAA will go ahead, as equipment becomes available, on converting other airways.

Conversion Record

Pennsylvania-Central Airlines announces reduction of the time required for conversion of a military DC-3 to commercial operation to 15 days.

The work was done on a plane formerly used by the Military Transport Division, between May 31 and June 14. Earlier conversion jobs, supervised by B. J. Vierling, the line's chief of engineering and maintenance, took about three weeks. PCA says the best previously announced time within the industry for a complete reconversion job was 30 days.



UNITED MAPS ITS ATC ROUTES:

Map shows routes flown by United Air Lines for the Air Transport Command, crossing the U. S. and connecting it with Alaska and the South Pacific to Australia. United has flown more than 18,000,000 airplane miles in its ATC operation, including 9,000,000 across the Pacific, 4,000,000 in Alaska, and 5,500,000 in domestic contract operations. More than 1,300 trans-Pacific flights and 1,800 Alaskan trips have been made from the United States.

CAB ACTION

● Orders issued by Civil Aeronautics Board last week establishing the administrative machinery for the newly authorized Alaska office empowered the director of the Alaska office to hear oral arguments in lieu of the Board, should parties to a proceeding request it. As outlined in an amendment to the economical regulations, the Alaska office will be substantially a small duplicate of the CAB. It will maintain a docket section, hold hearings and conferences, issue examiner's reports, and perform most of the procedural functions of CAB's Washington headquarters. Copies of applications filed with the Alaska office will consist of duplicate originals, one of which will be transmitted to Washington. The director of the Alaska office also is authorized to propose changes and amendments to the Board's regulations and to circulate them among Alaskan air carriers for comment.

● CAB removed from the Latin-American case (Docket 525 et al.) a portion of an application by Pan American-Grace Airways for a route between Chiclayo and Ramon Castillo, Peru. The route sought is a local service operation, the Board said, and as such should be considered in a separate proceeding, indicating that the Latin-American proceeding will be confined to proposed trunk line services. The route, if granted, would link Chiclayo on Peru's west coast with Ramon Castillo on the Brazilian border, connecting there with Panair Do Brasil to form a South American transcontinental air service. The severed portion was assigned Docket No. 1496 but was not set for hearing. On file with the Board is an application by Grace directors of Panagra for a temporary certificate to permit operations over the route until the application for a permanent certificate can be heard. The Peruvian government has asked that service be started as soon as possible.

● A motion filed by Pan American Airways asks the Board to postpone action on the Hawaiian cases and to consolidate the applications with the proceedings on Central Pacific and Australian routes. The Hawaiian hearing is now scheduled for September 4. Inasmuch as the prehearing conference has been held and the parties are preparing exhibits, it does not seem likely that the Board will grant PAA's request to delay the proceeding until Sept. 15, prehearing date for Central Pacific applications.

● American Airlines filed an airport notice for San Antonio, Texas, stating that it intends to begin service there Aug. 1.

● United States Lines Co., steamship operator, filed a petition to intervene in the American Airlines-American Export acquisition of control case, hearings on which started today.

● Delta Air Corp. began non-stop service between Atlanta, Ga., and Jackson, Miss., and between Jackson and Dallas, Texas, in mid-month with CAB permission.

● The Board rescinded the service suspension order on Northwest Airlines AM 3 between Spokane, Wash., and Portland, Ore.

DC-3's Returned to *Lodestar* Operators

CAB allocation gives National more equipment than it had before Army take-over.

Two airlines that have been operating Lockheed *Lodestars* but wanted larger Douglas DC-3's now are getting them through the Army's most recent plane release under Civil Aeronautics Board allocation, which at the same time is providing National Airlines—also a *Lodestar* operator—with more equipment than it had before the Army take-over in May, 1942.

In addition to this latest distribution, which sends three DC's to Mid-Continent Airlines, two to Continental Air Lines, two *Lodestars* to National and two to Alaska Airlines, it was learned that eleven planes were allocated a few days earlier to various airlines in Alaska. Of four Boeing 247-D's, two went to Woodley Airways and two to Wien Alaska Airlines. Three Lockheed *Electras* were assigned to Alaska Airlines, two to Morrison Knudsen, a contract carrier for Army, Navy and CAA, one to the Jim Dodson Air Service, and one to Ray Petersen Flying Service.

▸ **Equipment**—Continental has had four *Lodestars*, compared with six before the take-over. Mid-Continent also has had four, compared with nine in May, 1942. National had five planes before the take-over. Its earlier receipt of a plane off the production line, plus the present allocation of two more, now will give it six, all *Lodestars*.

G. T. Baker, National's president, announced that the latest acquisitions will be used to open the extension of its network from the Florida area to New York City, as recently authorized by the Board. National expects "several additions" beyond these two, its statement said. Date of start on the New York operation has not been set.

Ease Vet Job Tests

Civil Aeronautics Administration's General Inspection Division is smoothing the path to employment of former military pilots by the commercial airlines by preparing regulations to eliminate duplication of tests before approval of military flight certificates.

A holder of an instrument rating from any of the military air services will be entitled to a position as a commercial airline co-pilot, if he meets the company's requirements in other categories. To be certificated for other instrument flight, however, he must pass the regular CAA instrument rating tests.

Temporary Permit

Civil Aeronautics Board is divided over the wisdom of granting temporary air carrier operating certificates without hearing. While a majority of the Board in a letter to Rep. Lea, chairman of the House Interstate and Foreign Commerce Committee, endorsed a bill introduced by Rep. Case empowering the Board to issue such certificates, Member Harllee Branch opposed his colleagues' view.

Rep. Case introduced the bill to make the establishment of feeder lines easier, but its applicability to international operations quickly became apparent.

War Pilots File For World Routes

Trans-Oceanic Air Lines, Inc., says crews currently are flying most of six lines requested.

An organization apparently formed of war-time pilots has sought Civil Aeronautics Board certification for post-war international routes it plans to operate with personnel of other United Nations as well as the United States.

The applicant is Trans-Oceanic Air Lines, Inc., a Delaware corporation which says nearly all its officers and present personnel are "actively engaged in United Nations war activities." Thomas G. Smith, president, claims 20 years' flying experience. Two were in transocean flying, which he still does occasionally in addition to sometimes checking out overseas flight crews.

▸ **Fly Over Routes Asked**—Trans-Oceanic says in its application that its present and prospective flying personnel, all present or future stockholders, are "engaged in performing daily flying operations in the most modern and advanced types of aircraft over practically all the six routes" applied for. The corporation, which owns no planes, expects that 100 flight crews will be available soon after the end of the war.

The six routes ask links between:

New York and/or Washington and Moscow via Bermuda, the Azores, Portugal, Spain, Italy, and Turkey.

Charleston, S. C. and/or Norfolk, Va., and Moscow, via Bermuda, the Azores, Portugal, France, Germany and Poland.

New York and Washington and New Delhi, India.

New York and/or Washington over the North Atlantic route to Dublin, Ireland, Prestwick, Scotland, and London, England.

Lisbon and London, via Paris.

▸ **Alaskan Routes**—Wien Alaska asked CAB to extend its Nome-Kotzebue route from Kotzebue to Point Barrow via various intermediate points, and to certificate the route to carry mail. Wien operates numerous Alaskan routes, some of them without mail privileges. In lieu of the extension sought, should CAB refuse it, Wien asks a Fairbanks-Point Barrow route.

Piedmont Aviation, Inc., Winston-Salem, N. C., applied for a certificate to authorize a non-scheduled call and demand service over irregular routes to any point in the United States having an adequate airport.

▸ **New England Area**—Clayton L. Palmer, doing business as Palmer Airlines, Great Barrington, Mass., filed for a scheduled mail and property route between Pittsfield, Mass., Montreal and Quebec, via various intermediate points.

Palmer, who operates a truck company, also asked certificates to permit non-scheduled operations between New England and all points in the U. S. He plans to use helicopters as well as conventional aircraft.

▸ **Trade Area Feeder Airlines**—Braniff Airways applied for CAB approval of control in the cases of Houston Airways, Inc., Oklahoma Airways, Inc., Texas Central Airways, Inc., Great Plains Airways, Inc., and Lone Star Airways, Inc. All of these are the so-called "trade area feeder airlines" organized under the guidance of Braniff. Each has $100,000 subscribed stock of which Braniff holds 25 percent.

The applications say Braniff intends to maintain one director on the board of each trade area line, and to continue its 25 percent stock interest by further purchases as additional stock issues are authorized.

Port Heads to Meet In Alabama Aug. 29

An airport management conference and short school will be sponsored by Alabama Polytechnic Institute at Auburn, Ala., Aug. 29, 30 and 31, with delegates expected from Alabama, the Carolinas, Georgia, Tennessee, Florida, and Mississippi.

Prof. R. G. Pitts, the Institute's director of aeronautics, has been conducting courses in aeronautics for the past 14 years and is manager of the Auburn Airport.

Colorado Airways Asks Suspension

S. N. Drum, head of Colorado Airways, has filed a petition with the State Public Utilities Commission for permission to suspend operations, apparently having found them economically unfeasible. Drum started intrastate flights between Denver and Durango May 1, with five-place Waco equipment.

Retaining Competition

SCATTERED SPECULATION recently that the government is interested in competing in the aircraft manufacturing business, using DPC or other Federally-owned facilities, is discredited by statements of two top officials of the Army and Navy. Both Assistant Secretary Gates and Under Secretary Patterson made it clear at the Senate Military Affairs Subcommittee hearing recently that the services are making their intensive studies for maintenance of a post-war air force on the premise of a competitive industry.

The emphatic words of Mr. Gates are worthy of further dissemination than they have been given to date. "It is my belief," he said, "that the government should not try to operate, in competition with the aircraft manufacturers, the plants it now owns. Those plants which are regarded as essential standbys for future reserve production should be 'put on ice' and the others should be sold to private industry. The soundness of the policy of leaving aircraft production in private hands has been proved by the record of the industry in this war."

Mr. Gates' words are especially significant, since it is the Navy which operates the only existing government-owned aircraft plant, the Naval aircraft factory at Philadelphia.

Mr. Patterson, in his statement, took pains to say that only through the industry's preservation in sound health can we be sure of maintaining world leadership in the air. "At all times expenditures must be sufficient to insure the competitive development by the aircraft industry of advanced airplanes, engines and other components . . ."

These words should put at rest rumors which have been receiving undue currency in recent weeks.

International Clarity

ONE OF THE COUNTRY'S foremost authorities on air law has gone on record with the commendable recommendation that the United Nations, when they assemble to frame a new international air convention, draft the agreement in "language that would indicate clearly what the parties may have in mind," stripped of ambiguities and uncertainties.

As the State Department's adviser on air law, Stephen Latchford, points out in the current Department "Bulletin," such has not been the situation in previous air conventions. The terminology of international agreements has been a legalistic abracadabra whose complexity, it now appears from Mr. Latchford's candor, has created about as much confusion and doubt among legal experts themselves as it did among writers who sought to summarize the tenets for the public.

Mr. Latchford stresses also that among other Shibboleths "right of innocent passage" is a meaningless term as far as commercial operations are concerned, and suggests it be abolished. As most aviation-minded citizens should know, but few seem to remember, innocent passage is a term that in all air agreements to date has applied principally to private aircraft.

The article reviews provisions of the Paris Convention of 1919, American bilateral agreements with Italy and Canada, and the Havana Convention of 1928. It points out that although innocent passage was guaranteed in these agreements, provisos were included that flight into or through any country should be subject to prior approval of that country in each instance.

Latchford makes these specific recommendations:

1. Abolish "liberty of passage" and "right of innocent passage" as terms in air agreements. In their stead, there should be clear language indicating whether it is intended that private aircraft may fly into or through a foreign country without prior authorization from its government.

2. Use appropriate terminology to make absolutely clear whether "definite right of transit is to be accorded for scheduled air transport operations." If this right is to be accorded it should be made clear also "that this right of transit would be distinct from and in addition to any commercial rights of entry that may be agreed upon at the same time.

He defines right of transit as the right to make non-stop flights across any country with right to land for technical purposes but not to discharge or pick up cargo. The latter would come under the definition of commercial entry.

Latchford says he is not speaking for the government "necessarily," but the locus of his article suggests strongly that the U. S. will demand clear, indisputable language in the forthcoming air agreements.

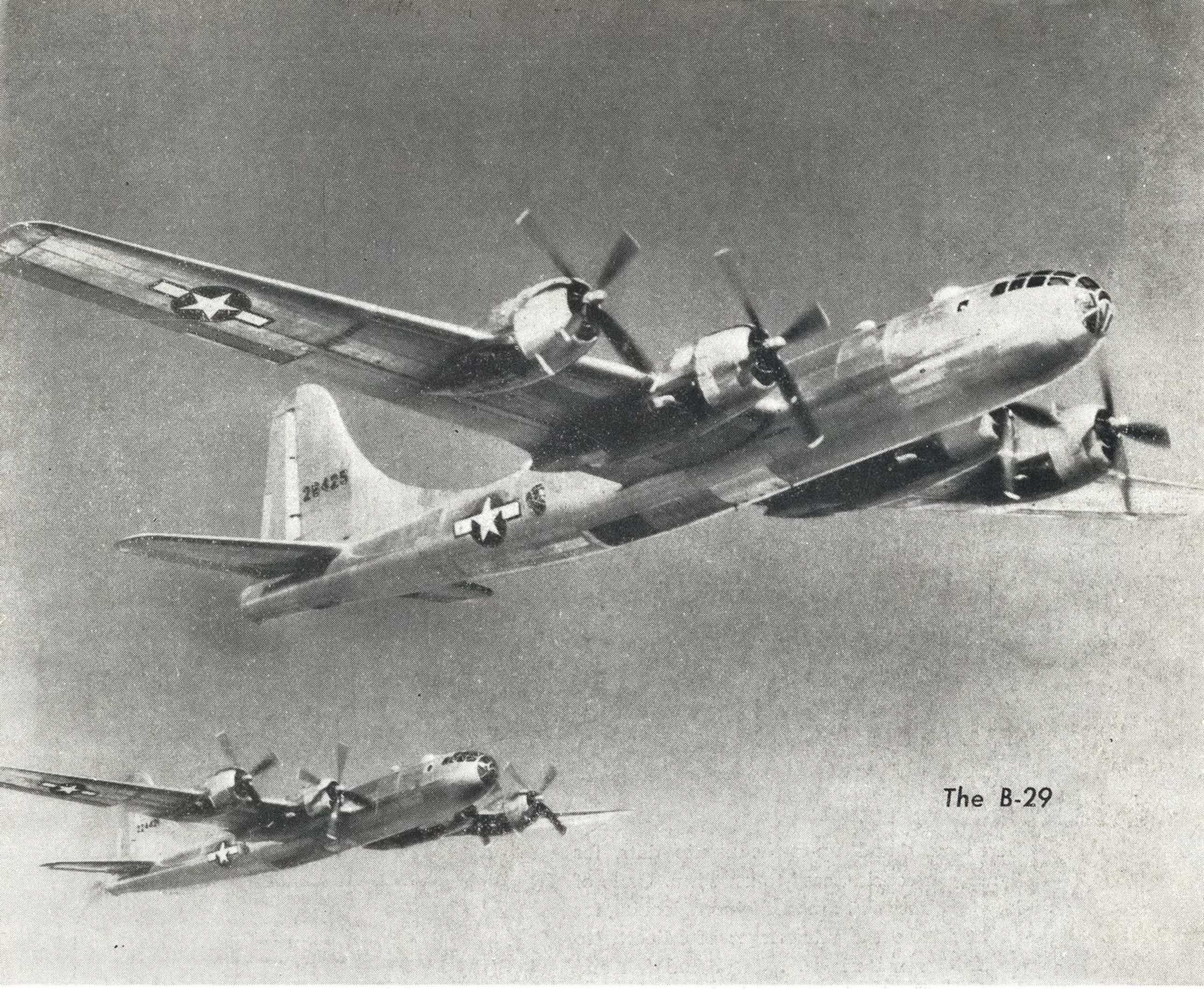
"Terrific" Ground Crews

THOSE GI GROUND CREWS of our Army Air Forces are terrific. Assistant Secretary of War Lovett in a press conference last week said only that word can describe them.

In any war it's the flying crews who win most public recognition for their work and sacrifices. Not until military statistics now secret can be released will the basis for Mr. Lovett's enthusiasm be fully appreciated by aviation maintenance and operations men and the public.

It can only be said, however, that four days after D Day, when we put everything into the air that would fly, the number of our heavy bombers inoperative from operations difficulties had dropped only a small percent despite over 2,000 sorties in one day alone. The number of fighters in operation in some squadrons decreased only slightly and in other squadrons the numbers did not decrease at all. As remarkable as these facts are, even they do not tell the full story of the amazing job the ground crews have done and continue to do.

ROBERT H. WOOD



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