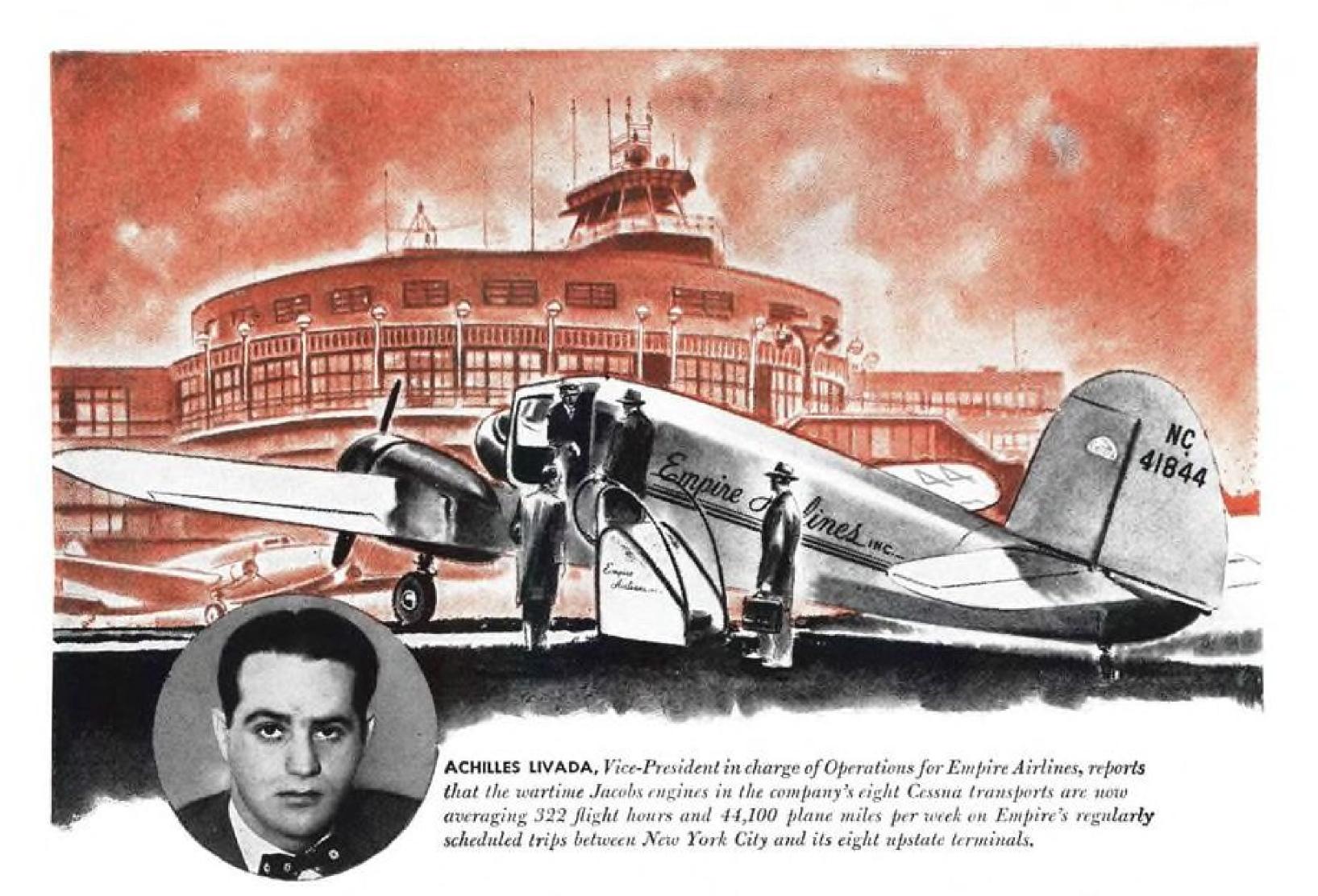
AUGRAW-HILL PUBLISHING COMPANY, INC. DISCRIPTION OF THE PUBLISHING COMPANY, INC. APRIL 29, 1946



Floats on Two-Control Plane: Preliminary flight tests of the new Edo float installation on the latest 75 hp. Ercoupe, prior to CAA type certification, indicate satisfactory performance on water and in air with no impairment of non-spinnable characteristics. Details of the attachment of struts at the same points where the tricycle landing gear is attached are shown in the photo, as Robert Fogg, Edo sales manager, climbs aboard the plane at College Point, L. I. (Story on Page 15.)



Wartime engines...on a peacetime job-

Empire Airlines began operations on December 26, 1945, at LaGuardia Field . . . and within three months was flying twenty-six daily schedules which bring fast air service within convenient reach of thirty-two communities in the Empire State. These flights are maintained with newly converted AAF UC-78 Cessna transports powered by the wartime Jacobs R755-9 engines.

On peacetime airways, the Jacobs is again demonstrating the performance that established unsurpassed records for continuous service and minimum maintenance among engines used by the Army Air Forces . . . is carrying peacetime payloads for scores of the new airlines and charter services, for hundreds of new private owners. The stamina, dependability and low operating costs which have characterized the Jacobs in the past, are confirmed

once more in today's commercial operation.

And the Jacobs R-755A, a new and improved version of the wartime R755-9, has been benefited by quantity production experience, better metals, extensive research . . . With the same dry weight, 510 lbs.—the new model has a normal rating of

300 hp at 2200 rpm...uses only 15 gallons of fuel and 1 quart of oil per hour, cruising at 70% power ... is the most efficient, nonsupercharged radial engine in its power class available today...will fly more miles or greater loads at lower cost, with high security in every flight hour.

The R-755A is available for immediate delivery. Inquiries are invited . . . Jacobs Aircraft Engine Company, Division of Republic Industries, Inc.



THE AVIATION NEWS

Washington Observer



CAA REPAIR BASE—The fight against CAA's plan to establish a repair base for its own aircraft is expected to reach a showdown this week as the House returns from Easter recess, with the Commerce Department appropriation one of the first orders of business. Although CAA won half a victory when the Appropriations Committee recommended funds for the Oklahoma City warehouse and repair base—it asked for \$2,053,000 for three installations, was granted \$1,500,000—opponents of the venture still believe there is a chance to beat it during floor debate.

MITCHELL REPORT-A report by the Mitchell aviation subcommittee of the Senate's War Investigating committee which will endorse a large-scale well-worked out aviation research program and give government plans for such a program a Congressional push, has been delayed but is slated for release in the near future.

WEATHERMEN LEAVING-Headquarters of the Air Forces Weather Service in Washington are expressing increasing concern over the rapid demobilization of weather personnel. An emergency operation in the form of specially prepared plans is being executed to alleviate which has been described as a critical condition and to meet the current need for supplying adequate weather data. It is planned to inactivate all stations where the U.S. Weather Bureau has a unit in operation. A weather officer will be placed on liaison duty to insure service for AAF agencies. Other emer-

gency measures include disbanding AAF temporary weather units that are within local telephone range of a Weather Bureau station and placing a forecaster on liaison duty with the Bureau.

SURPLUS SALES—With War Assets Administration pressing vigorously its program to dispose of surpluses through normal trade channels by means of agency agreements, there is renewed interest on the part of WAA officials to consider the employment of an outside firm, skilled in liquidation, to administer the agreements. The Murray Cook Corp., which reportedly did an outstanding job of liquidation for Metals Reserve Co. (a Reconstruction Finance Corp. subsidiary), is most prominently mentioned for the WAA work.

* * *

NAVY RESEARCH EXPANSION—Naval Research Laboratory, which does basic research in 10 fields of science, is establishing a new center at Sunnyvale, Calif., to conduct research in airborne communication and electronic equipment, as well as guided missiles. It is little known that NRL has a prominent role in the V-2 rocket tests being made under the direction of the Army at White Sands, N. M.

ALL-AMERICAN FLAG LINE—New series of hearings on Senator McCarran's revised "All American Flag Line" bill will start around May 20. Two series already have been held over the past three years.



Republic's XP-84 Thunderjet, now undergoing tests at Muroc.

AVIATION NEWS • April 29, 1946

WASHINGTON OBSERVER — 3



AMERICA'S SHORTEST Coast-to-Coast Airway Launched by America's Pioneer Airline

NEW-SCENIC... Now, Western Air's 44-passenger, 4-engine Douglas Skymasters whisk passengers, air mail, and air cargo over America's new, spectacular Denver-Los Angeles airway in just 5½ hours, 2 hours less than former schedules. (Via United Air Lines east of Denver.)







FOR BUSINESS...Western's new "cut-off" route links Southern California to all the nation's leading production centers. The only California-New York skyway to follow the "Great Circle" route, it is shortest, measuring only 2543 miles, saves time of 85 million Americans who live and work in the areas it serves.

California beaches, mountains, and deserts hours closer to the East. Rocky Mountain playgrounds are only a short. fast flight from the Far West. A unique scenic spectacle, the "cut-off" traverses America's last frontier. See your airline ticket office or air travel agent. Specify routing via the Denver-Los Angeles "cut-off."





AVIATION NEWS

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CONTENTS	PAGE
Washington Observer	3
Industry Observer	. 5
Headline News Section	7
Private Flying	. 13
Special Air Services	. 17
Production	20
Personnel	24
Financial	. 26
Fransport	. 27
Editorial	. 34

The Photos:

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Volume 5, No. 16

Aviatio	n Associates, Inc	33
Beech	Aircraft Corp	12
Countr	y Gentleman	19
Edo /	Aircraft Corp	23
Genera	l Electric Co4th	cover
Gulf (Oil Corp3rd	cover
Jacobs	Aircraft Engine Co2nd	cover
McGra	w-Hill Book Co	. 32
Mantz,	Heath & Hapgood	33
New ?	ork Air Brake Co	25
Ort,	Karl	32
Repub	ic Aviation Corp	6
Romec	Pump Co	33
12. 1	Aircraft Co	29

News at Deadline

WAL Route Award Upheld

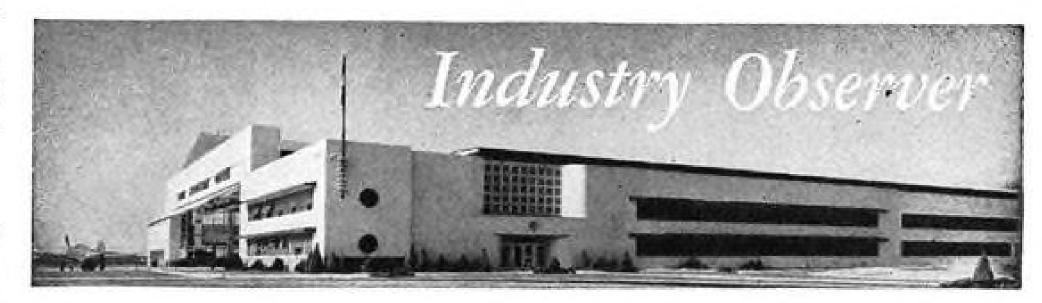
CAB'S decision awarding the Denver-Los Angeles route to Western Air Lines was affirmed last week by the U. S. Circuit Court of Appeals in Washington, D. C. United Air Lines had appealed the case (Aviation News, April 2 1945). The court found the Board's findings were sufficient from two standpoints. One was the nature of the final decision. After determining to establish the new route and maintain Western as a strong carrier, the Board concluded to eliminate applications by TWA and Continental Air Lines, reducing the decision to a choice between Western and United. The Board found the award to United would injure Western, while granting the route to Western would assure Western's economically sound operation. It was the court's opinion that these findings were sufficient foundation for comparison and exercise of a choice. Second feature was the general nature of the problem. Factors from which a conclusion must be reached, the court said, were largely imponderables. In the absence of a formula for combining them, selection of operators for new air routes "is a task for administrative judgment," and the court decided that "the generalities in which the alternatives were depicted . . . suffice in view of the nature of the final action involved."

To Discuss Shortages

A meeting of the purchasing agents of the East Coast aircraft manufacturers will be held tomorrow in New York City to discuss the extreme shortages of materials. An attempt will be made to arrive at some definite procedures looking toward an alleviation of the scarcity of fabric, lumber, aluminum, etc.

Johnson May Join CDC

Selection of Col. Earl Johnson, Civil Air Patrol commander, for a top post in the newly-formed Citizens Defense Council is forecast in some aviation circles, although CDC withholds comment. Most likely role for Johnson in CDC, which was organized primarily to promote unification of the armed services, is a coordinator and liaison man with the War Department.



- Airline engineers are convinced that they have hardly more than six months to make sweeping improvements in traffic control and low approach systems, or the airlines will chalk up their worst winter in history. If insufficient improvements are made, questionable weather will bring either accidents or flight cancellations on an unprecedented scale because of the greatly increased fleet of planes and the much larger passenger list which will be affected per four-engined plane. Actually, there has been little change or improvement since 1938 in the method of controlling airliners along the airways, in the system of let-down procedures under instrument conditions over airports, and in airway aids. ATA's Air Navigation Traffic Control group is taking vigorous action to solve as many of these problems as possible before winter.
- ▶ The AIA National Aircraft Standards Committee is studying standardization of a dozen items on airliners. The carriers have been asked to comment on uniform equipment for batteries, underwing fueling, cargo tie-down, greasing fittings, high-pressure air valves, connections for fuel loading, ground air conditioning, hydraulic tests, water loading, low pressure oxygen, fuel hose and towing rigs.
- Weather Bureau expects to have ceilometers installed at 140 points throughout the country in the next four to six months. About 35 of the devices for measuring height of the overcast are already in place.
- Inc., and Precision Industries, Inc., representing merger of Jack & Heintz, Inc., and Precision Products Corp., with B. C. Milner, Jr., New York industrialist, as president; William S. Jack, board chairman and chief of production. Ralph M. Heintz remains as vice-president in charge of engineering. Chrysler influence is apparent in the directorates, which includes Byron C. Foy, son-in-law of Walter P. Chrysler and director of Chrysler Corp. and Electric Auto-Lite, and the fact that K. T. Keller, chairman of Chrysler, has visited the plant recently. There is speculation on whether Chrysler itself will enter aviation.
- Dreeze Corps., Inc., enters the household appliance field with purchase of Anderson Stove Co., and Foundry Service, Inc., Anderson, Ind. The Breeze Newark plant is being reconverted from wartime work on armor plate and other sheet steel and aluminum projects to stove castings and components for the Anderson plant.
- North American Aviation began the second quarter with a backlog estimated at \$75,000,000.
- A responsible group of aircraft engineers still is convinced that further study and experimentation is justified toward ultimate elimination of landing gears on big transports. Present-day gear is about 6 percent of gross weight. Several aircraft companies and research groups are investigating possibilities of using the cushioning effect of air or compressed air.
- Delivery of new jet engines to the services has been suspended since December because of strikes, according to Aircraft Industries Association, which reports March output of standard power plants of 150 hp. or larger was 135, of which 21 were 2,500 hp. or over; 21 of 2,100 to 2,500 hp.
- ▶ Trans-Canada Air Lines has taken delivery of the first three of 24 Douglas DC-3s being converted by Canadair, Ltd. They will replace 11 Lockheed 1408 transports. The line will keep its Lodestars.
- ▶ The C-54's being converted by Glenn L. Martin Co., for Chicago & Southern Air Lines are being equipped with Pioneer PB-10 all-electronic automatic pilots, first such installation by domestic airlines, according to the Martin Co.
- The phototype four-place all-metal, spinproof, Kaiser-Hammond personal plane has been transferred from the West Coast after successfully completing its pre-liminary flight tests, to the Kaiser Fleetwings Division plant at Bristol, Pa., where final production plans are being developed.

Committee recommendations.

Efforts looking toward the formu-

lation of a national aviation policy,

based on a manufacturing industry

kept strong and capable of quick

expansion, are in danger of being

bogged down in the War Depart-

ment despite favorable action else-

New developments highlighting

where.

these efforts are:

National Air Policy Formulation

Bogged Down In War Department

Favorable action elsewhere includes National Planning Associa-

tion report and strong Navy endorsement of Air Coordinating

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A fine old proverb long ago measured reputation in slide rule ratio—"a man is known by the company he keeps"...

So, too, the measure of a product's value is revealed by the character and integrity of those who sell it.

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O'Connor Aircraft Company

ning Association, released yesterday, emphasizing that a "sound national policy relative to military

aviation, coupled with the increasing development of civil aviation, should make possible a healthy aircraft industry and keep the United States in the leading position it now occupies in international aviation." Strong endorsement by the Navy of the recommendations of the Air Coordinating Committee as sub-

A noncommittal reply by the War Department when queried regarding the ACC's views.

mitted to Congress last fall.

A tendency on the part of top War Department procurement officials to question the necessity of separate legislation covering aviation procurement.

Report Follows Recommendations -The NPA report of its Advisory Committee on the Aircraft Industry contains the recommendations submitted by the Committee to NPA's Board of Trustees some months ago (Aviation News, Oct. 22). The recommendations cover seven topics and in essence call for all measures consistently favored by both government and industry on research and development, military procurement, air transportation, non-scheduled and private aviation, aviation education, the export market, and surplus disposal.

Probably only point on which the NPA report diverges from industry's viewpoint is in favoring the port Auxiliary.

patent provisions contained in the present bill for a National Science Foundation.

Navy Records Support - The Navy's support of ACC's recommendations was contained in a letter from Assistant Secretary John Kenney to Sen. Joseph C. O'Mahoney (D., Wyo.), chairman of the Surplus Property Subcommittee of the Final report of the National Plan- Senate Military Affairs Committee.

O'Mahoney has asked for comment on the disposal of surplus plants as suggested in ACC's report which outlined number of plants to be held on stand-by, recommended annual military procurement of from 3,000 to 5,780 military airplanes, and put forth a comprehensive national air policy (Aviation News, Oct. 29).

Kenney Backs Report—Kenney asserted the Navy was in accord with the ACC report and in particular was attempting to see that

the recommendations regarding stand-by plants would be implemented as far as the Navy is concerned.

Secretary of War Patterson, replying to a similar inquiry made by O'Mahoney, stated the War Department has embraced the standby proposal of ACC, but went no further in commenting on the Committee's views.

Action Sets Precedent—This is the first time, insofar as is known, that the Army and Navy have taken cognizance of the ACC report, although the assistant secretaries for Air of each service are on the Air Coordinating Committee. Neither the Army or Navy have officially and publicly endorsed the report. Kenney's letter is regarded as encouraging as it comes closest to being a forthright declaration to guide Congress in its efforts to formulate a national air policy.

Contained in Procurement Bill -A declaration of such a policy is contained in the draft of procurement legislation to supplant the present Air Corps Act of 1926 (AVIATION NEWS, April 15). This is one of the major reasons AAF officers and the industry are anxious to have the bill sent to Congress.

However, as reported previously, the draft has been sent to the



BRITISH EXPERIMENT:

A four-place plane powered with two 65-hp. Continental engines, the Helmy Aerogypt Mark IV, has been prepared for airworthiness test by the British Air Ministry. The plane originally was designed as a flying scale model of a passenger or freight transport plane for the Egyptian government. It now is being groomed for marketing in its present size as a charter or private plane. It was designed by Flt. Lt. S. Helmy, and has been test-flown by Capt. C. A. Henderson, chief test pilot of the Air Trans-

office of the Undersecretary of War who is charged with all procurement for the Army. Also in the works is a bill revising general procurement legislation. AAF officers in charge of the aviation purchasing legislation have now been asked informally, and expect shortly to get a formal request, to justify the submission of a separate

Might Imperil Plans—Should the "justification" be too long in coming, or if it should not be acceptable to the Undersecretary, it would imperil the AAF's plans to put before Congress at least a proposal for a national air policy.

Shortages Cause Lay-offs at Boeing

Boeing Aircraft has been forced temporarily to lay off a portion of its factory working force because of delays in receipt of criticallyneeded materials due to recent strikes in the East.

William M. Allen, president, said first lay-offs affected approximately 175 factory workers or about 2 percent of Boeing's total Seattle payrell. He said that as present work in the factory runs out and materials fail to arrive from suppliers additional temporary lay-offs probably will be necessary.

▶ Aluminum Is Critical—Most critical delays are in 75s aluminum alloy sheet, a new alloy produced only by the Aluminum Co. of America. H. Oliver West, Boeing executive vice-president, said it also has been advised by suppliers that there will be serious delays in delivery of certain steel items and that the effect of the strikes in the electrical manufacturing field on electrical equipment items still is not wholly known.

Most of the items on which the situation is now critical were ordered by Boeing early last fall even before sales contracts for the commercial Stratocruiser had been signed. Many of the needed items were scheduled for shipment from the mills in December.

VA Report Shows Ex-GI's Favor Ground Courses

Veterans desiring aviation training are choosing the branches of aeronautics that hold greatest hope of employment, according to Veteran Administration figures which show that 88 percent of veterans offices, aviation representatives, enrolling in February are taking airports and major customers.



RAMSEY DECORATED:

Admiral Dewitt C. Ramsey is awarded the Distinguished Service Medal by Secretary of the Navy James Forrestal, for exceptionally meritorious service in a position of great responsibility as Chief of the Bureau of Aeronautics from August, 1943, to June, 1945. Admiral Ramsey now is Vice Chief of Naval Operations.

ground courses. This is regarded as an encouraging sign by many school operators who have been fearful that an undue emphasis might be put on flight training with consequent unfavorable repercussions later when jobs for pilots might not be available.

The VA figures, covering the first full month of operation of the aviation training program, reveal total enrollment of 985 for aeronautics courses. Enrollment for all forms of education and training in February reached 82,543. Aviation enrollment constituted only one percent.

Report Analyzed-Breakdown of the aviation enrollment is: airplane mechanics, 580 in schools and 195 on-the-job, total 775; commercial flying training, 50 in schools, 12 on-the-job, total 62; private flying raining, 54 in schools, two on-thejob, total 56; aviation management, 47 in schools, three on-the-job, total 50; other aeronautical training, 32 in schools, 10 on-the-job, total 42.

Oil Firm Buying 6 Planes

A fleet of seven new executive and salesmen's aircraft is being purchased by Standard Oil Co. of Indiana, including a Lockheed Lodestar, a six-place Beech, a fourplace ship as yet undetermined, and four smaller craft. The smaller models will be used by company's expanded aviation sales department under L. A. Henry to contact field

Post Office Interest Welcomed By CAB

Sullivan lists cases in which Department hopes to intervene; Board expresses pleasure.

By MERLIN MICKEL

Latest evidence of the earnestness with which the Post Office Department intends to keep its promise of "closer relationship" with CAB on route proceedings comes in a letter to the Board designating cases in which it desires to partici-

Written by Gael Sullivan, Second Assistant Postmaster General, to CAB Chairman L. Welch Pogue, the communication brought not only a response that the Board heartily welcomes such activity but assurance from James M. Landis, who has been nominated to succeed Pogue in June, that the welcome will continue.

Urged To Follow Through-Sullivan already has been urged by Postmaster General Hannegan to follow through on his March 15 report, on which he stated the Department's intention to engage actively in the Board's route proceedings through testimony at hearings and submission of Department views on routes at issue.

Writing as Acting Postmaster General, Sullivan informed Pogue that, in addition to cases involving helicopter applications, the Department hopes to take an active part in the Texas-Oklahoma, Mississippi Valley, Great Lakes Area, Southeastern States and Middle Atlantic Area cases, and the North Central States case if practicable.

Action Near-All the latter are regional cases on which examiners' reports have been issued or are be-

Airmail Plans

Plans to create a separate air mail supervisory bureau were outlined last week by Gael Sullivan, Second Assistant Postmaster General. Sullivan told the first national conference of the U. S. Postoffice Railway Mail Service at Chicago of his plans to reorganize his bureau for the first time in 60 years, consolidating budgetary and administrative functions and setting up two divisions for handling of surface and air mail on operating levels. The reorganization would require approval by the Bureau of the Budget.

AVIATION NEWS • April 29, 1946

ing readied. The Department will consider requesting leave to intervene and file and present in oral argument its views on the value to the Postal Service of the proposed services.

Since the West Coast and New

England cases await final decision by the Board, the Department said that rather than delay those decisions, which it awaits with interest, it will take no action at this time. ▶ Helicopter Feasibility Checked — Sullivan made a personal trip to Los Angeles this month to study feasibility of helicopter operations there. The Department was represented at a recent prehearing conference on helicopter applications for property and mail authorizations in that area, and his letter promised that its participation in the case will continue.

Among other cities where Post Office is interested, he listed Boston, Chicago, San Francisco, Kansas City, New York, Philadelphia and St. Louis and their surrounding areas. Sullivan's office expects him to visit some of these later.

Interested In New Routes-Aside from helicopter services and those to additional small communities involved in the area cases, the Department evinced interest in new route proceedings, and offered "every cooperative assistance possible to the Board in the encouragement and development of an air transportation system properly adapted to the present and future needs of the Postal Service."

Four teams of 16 men have been sent into the field by Sullivan to study five aspects of airmail: new aircraft equipment and its use, construction of new airports, coordination of projected route patterns, development of new economies in rate structures, and expedition of foreign agreements for international movements of U. S. mail.

New CAA Appointments

Harry G. Tarrington has been appointed chief of the CAA's Division of International Activities, succeeding Alfred Hand who has been named to the new position of director of the plans and performance staff. Tarrington has been liaison officer of international activities. He will be succeeded by Col. John P. Marshall, recently of the CAA office of safety regulation. Tarrington served as U. S. Technical Expert at the Chicago Conference and was largely responsible for agreement on aircraft registration and identification marks.

Commerce Committee Resolution Challenged By Sen. Barkley

Majority Leader questions group's jurisdiction over international air agreements, stresses fact that move is not to be regarded as full Senate action; sees administration policy unchanged.

The Senate Commerce Committee resolution declaring the Bermuda and French executive aviation agreements illegal was challenged last week by Senate Majority Leader Alben Barkley (D., Ky.)

committee by a 17-1 vote, was filed with the Senate, together with a detailed report by acting committee chairman, Sen. John Overton (D., La.). Barkley, absent from the Senate floor when Overton obtained permission to submit the resolution and report to the Senate, challenged the action on his return.

Assails Jurisdiction—"The Committee on Commerce does not have jurisdiction over the matter," Barkley stated, maintaining that international aviation should come within the purview of the Senate Foreign Relations Committee.

His challenge brought backfire from Senate Commerce committeemen, starting off with a justification of their action and leading on into lengthly criticism of Administration policies on international aviation, including the TWA-Italian air agreement.

▶ Defend Action—Overton and Sen. Owen Brewster (R., Me.) conceded the jurisdiction of Senate Foreign Relations Committee over treaties of all types, including air treaties, but maintained the Commerce Com-The resolution, adopted by the mittee was within its rights and acting in accordance with its responsibilities in pointing to violations of the 1938 CAA Act, which it drew up.

The CAA Act stipulated public hearing prior to the granting of any certificate for operations to or within the U.S. to a foreign flag line, and the President is without powers to over-ride Congressional law through executive agreement, Brewster and Overton held. They argued that the treaty is the only constitutional vehicle for superceding enacted law.

▶ Administration Supported—Barkley, however, claimed that the executive branch of the government was "on sound ground" in its position asuming the right to negotiate bilateral air agreements.

The Majority Leader's challenge to the resolution and report came too late to block their submission



CAA'S OFFICIAL FAMILY:

First post-war group picture of T. P. Wright, Administrator of Civil Aeronautics and his staff, including newly-appointed regional administrators. Standing, from left: Joseph S. Marriott, Regional Administrator, Sixth Region; Howard Rough, consultant; Walter P. Plett, Eighth Region; R. D. Bedinger, Seventh Region; Ora W. Young, First Region; William E. Kline, Assistant Administrator for Federal Airways; Al S. Koch, Assistant Administrator for Foreign Operations; L. C. Elliott, Fourth Region; and John F. Warlick, Regional Counselor. Seated, from left: John M. Beardslee, Regional Administrator, Ninth Region; Leonard W. Jurden, Fifth Region; George W. Vest, Third Region; William M. Robertson, Second Region, and Mr. Wright. Marriott, Rough, Bedinger, Young, Koch, Warlick, Jurden and Vest recently returned from military service.

to the Senate and their publication as Senate documents. Largely because of Barkley's opposition, however, it was agreed that the resolution and report would be printed with the words: "This document is printed solely as an expression of the opinion of the Committee on Commerce, and is not to be regarded as the action of the Senate." No Change In Policy Seen-During the course of the Senate debate over the Commerce Committee resolution, Barkley hinted that the action would have no disruptive effect on the course being steered by the Administration.

A substantial part of Senate Commerce's report, acclaiming the Bermuda agreement illegal, was given over to quotations from an opinion filed in 1939 by CAB Chairman L. Welch Pogue, then general counsel of the Board, who declared that "no international agreement, as distinguished from a treaty, can be made between the U.S. and any foreign country or countries which will have the legal effect of dispensing with the notice and hearing and the exercise of the Authority's judgement called for" by the 1938 act.

McConachie Honored

Grant W. G. McConachie, general manager of Canadian Pacific Airlines' western operation and one of Canada's veteran flyers, has been awarded the 1945 McKee Trophy, the outstanding annual aviation award in Canada "in recognition of the program pointed out that "we long service, energetic support and wholehearted efforts in the development of civil aviation in Canada and his untiring endeavors in opening up our vast hinterland. . . ."



Endorsement likely to be held up for some time on huge project to test supersonic aircraft and missiles; Gen. LeMay stresses expense of work in outlining proposal.

By SCOTT HERSHEY

Plans disclosed by the Army Air Forces for the construction of an Air Engineering Development Center are receiving closest study by aircraft industry engineers and technicians and while reaction has not yet crystalized there were indications the industry would move slowly on any all-out endorsement of the program.

The AAF plan calls for such a center "for the purpose of applying the results of research and invention to the development of air weapons required by the AAF for the defense of the Nation."

Will Be Costly—Supersonic aircraft and missiles head the list of equipment which the Air Forces proposes to develop at its new facility if funds are made available. It was understood that the initial request for a Congressional appropriation would amount to around \$300,000,000 with future projects running this up close to \$1,000,-000,000.

Maj. Gen. Curtis E. LeMay, deputy chief of air staff for research and development, who announced are entering a new age of development—a very expensive age.

▶ Small Contracts Out — "We can no longer depend on letting small contracts to companies for the de-

velopment of our weapons. The required equipment would entail too great an expenditure for most concerns. We must now furnish the tools for doing this work.

"The center should be available to all civilian agencies in the country which are devoted to the development of aviation. There should be a board, representative of both military and civilian organizations to determine the priority of projects."

No Statement From NACA—The National Advisory Committee for Aeronautics which has just promulgated its own national aeronautical research policy has not indicated its reaction to the AAF program.

The NACA policy, however, considers that fundamental research is its function; that application of results in the design and development of aircraft and equipment are the function of the aircraft industry, and that evaluation of military aircraft and equipment and military application of research results the province of the Army and the Navy.

In some industry circles there is an inclination to go slowly on the AAF plan until costs can be more definitely determined and until it is made more clear as to the sponsorship of the program. NACA, in the light of past experience will channel results into civilian circles while the military forces have not always shown themselves eager to follow this route.

LeMay Stresses Function-If the work is development work, the industry generally believes that is its function while fundamental research belongs to the NACA.

Gen. LeMay, however, emphasizes that the purpose of the proposed Air Engineering Development Center will serve is "unique" in that it will not encroach on the fields of either research or production, but will perform the function between these two fields.

▶ Policy Outlined—The General recommended that while the Development Center is primarily intended



NEW PREFABRICATED HANGAR:

One hangar per week, like the one pictured, is being made by Fox & Co., Ogden, Utah. These hangars for small planes sell for \$666 F.O.B. Frontage is 40 ft. with eight doors which work on the accordion principles. The main section is 40 ft. by 14 ft. with a 14-sq. ft. shed in the rear for the plane's tail. The entire unit is made of galvanized steel for rust protection and is fireproof. The hangar is bolted every 39 in. to a foundation about 12 in. high and 6 in. thick.

to serve the military and military development contractors, it should release for beneficial peaceful purposes all development achieved which would promote U. S. commercial interests and welfare.

For the future, Gen. LeMay asserted, two prerequisites are clear: "(1) Fundamental research in aeronautics must never again be interrupted, and (2) there must be adequate development facilities independent of research facilities where the specific problems connected with the design and construction of aircraft and missiles can be solved."

Col. Glass Appointed PCA Vice-President

names Verner assistant counsel; Byrne joins Colonial as treasurer; Roberts to represent Boeing in D.C.; Cunningham heads Luscombe production.

Several executive appointments were announced last week by airlines and aircraft companies and one executive tendered his resigna-

Col. Fred M. Glass (photo), wartime chief of staff for the Pacific



division, Air Transport Command, has been appointed vicepresident of PCA in charge of its southern region. Regional headquarters will continue at National Air-

port, Washington. Glass came to Washington in 1938 as chief attorney for the Air Safety Board and later was counsel for the Civil Aeronautics Authority. Prior to entering the Army, he served as counsel for American Airlines.

James P. Cunningham has been appointed vice-president in charge of production for Luscombe Airplane Corp., Garland, Tex. Cunningham has been with Luscombe since 1942 when he joined the tool design department. He became chief production engineer and then factory superintendent before receiving his present executive post. James M. Verner has been appointed assistant general counsel for Chicago & Southern Airlines. Verner was with NATS and prior to that was a member of the general counsel staff of the CAB. At

made of the resignation of William J. Byrne as treasurer of C&S. Byrne has accepted a position as treasurer of Colonial Air Lines. No successor has been named.

Clifford E. Roberts has been named Washington, D. C., engineering and sales representative for the Boeing Aircraft Co. Roberts, who was assistant chief engineer for the Glenn L. Martin Co., will assist James P. Murray, vice-president in charge of the Washington office.

Burden Assails Criticism Of CAA Employee Ratio

To use the number of employees per civil airplane as an index of CAA efficiency is completely misleading, Assistant Secretary of Commerce for Air William A. M. Burden told the Third New England Conference for Aviation in Boston recently.

Civil aviation was deprived of its growth during the war years, Burden said, and there were only 280 transport and 22,000 personal planes flying, or 20 CAA airways employees for every transport and one for every four civil planes. However, the operations over the airways were not at capacity and the present staff of 8,235 employees could handle a far larger volume of traffic. When the traffic increases, there will not be a commensurate increase in CAA employment.

The airways now consist of 40,-000 miles, 2,151 beacon lights, 420 radio ranges. There are 135,000 miles of land line communications network.

TWA Set to Start Service To Spain on May 1

First commercial air link between the U.S. and Spain will be established May 1 when TWA begins operations on a 6,861-mile route (FAM 27) between Washington and Cairo via Lisbon and Madrid.

TWA's latest overseas operation will be operated initially on a onceweekly basis with DC-4's, according to T. B. Wilson, managing director of the carrier's international division.

Makes 8 Other Stops—Scheduled flying time for the Washington-Cairo run via the Iberian peninsula is 33 hrs., 55 mins. Elapsed time is 41 hrs., 25 mins., including stops at Philadelphia, New York, Boston, Newfoundland, Shannon, Lisbon, the same time announcement was Madrid and Rome. The new service will supplement present twiceweekly flights on TWA's other Cairo route via Paris.

Admiral Carpender Named Navy Public Relations Chief

Vice Admiral Arthur S. Carpender has been appointed chief of the Navy Department's newly-created post of coordinator of public relations. He will have overall supervision of all Navy relations with civilians, industry, organizations, individuals and the press.

Rear Admiral Harold Miller continues as chief of press information and relations under policy guidance from Admiral Carpender and his

Admiral Carpender formerly was commandant of the Ninth Naval District, Great Lakes, Ill.

AVIATION CALENDAR

April 28-30-NASAO Executive and Legisla-tive Committees meeting, Statler Hotel, Washington, D. C.

May 2-New York Board of Trade (Aviation Section) second annual International Civil Aviation Luncheon, Hotel Roosevelt, New York City. May 6-7-AIA National Aircraft Standards Com-

mittee, 11th national meeting, Hotel Lexington, New York City. May 6-8-Joint meeting on personal aircraft.

CAA and AIA Airworthiness Requirements Committee, Shoreham Hotel, Washington. May 9-First post-war NACA Engineering Con-ference, Langley Field, Va.

May 13-14-New York State Aviation Council, semi-annual meeting, Westchester Country Club, Rye, N. Y.

May 13-19-Aviation Week Air Show, Galveston, May 21-PICAO Assembly begins three-week meeting, Montreal.

May 24-Organization meeting of Kansas Farmers Flying Club, Hutchinson Municipal

May 27-28-Aeronautical Training Society annual meeting, Mayflower Hotel, Washington,

June 1-2-National Air Carnival, Birmingham. June 2-7-SAE Summer (Semi-Annual) Meeting. French Lick, Ind.
June 8-9-Formal dedication of Eldon, Mo., Air-

June 13-15-First post-war Annual New England Lightplane Tour.

June 14-15-Third National Air Conference sponsored by National Aeronautical Association of Canada, King Edward Hotel, Toronto. June 25-26-ADMA officers, directors and com-

mittee chairmen, open meeting, Hotel Traymore, Atlantic City, N. J. July 17-19-NAA national convention, Omaha. July 18-19-IAS national annual summer meet-

ing, Hotel Hollywood-Roosevelt, Los An-July 18-21-World's Fair for Aviation, Omaha. July 26-27-NAA Joint Private Flying Con-

ference, Milwaukee. July 29-30-NAA Joint Air Youth Training Conference, Milwaukee.

Aug. 1-2-National Flying Farmers Associa-tion first annual convention and Oklahoma Flying Farmers conference, Oklahoma A & M College, Stillwater, Okla.

Aug. 22-24-SAE National West Coast Trans-portation & Maintenance Meeting, New Washington Hotel, Seattle, Wash.

Aug. 30-Sept. 7-First post-war Canadian air show, sponsored by NAA of Canada, De-Havilland Airport, Toronto.

Aug. 31-Sept. 2-National Air Races, Cleveland. Oct. 3-5-SAE National Aeronautic (Fall) Meeting and Aircraft Engineering Display, Biltmore Hotel, Los Angeles, Calif. Oct. 16-17-SAE National Transportation &

Maintenance Meeting, Hotel Knickerbocker, Oct. 23-25-Second Annual Arizona Aviation

Conference, Phoenix. Nov. 7-8-SAE National Fuels & Lubricants Meeting, Mayo Hotel, Tulsa, Okla.

Dec. 2-4-SAE National Air Transport Engineering Meeting, Edgewater Beach Hotel,



PRIVATE FLYING

Three-Place Pusher Amphibian Being Tested By N. Y. Designer

Spruce and plywood Bunyard Sportsman has horizontal stabilizer mounted on top of rudder; 130-hp. Franklin engine gives it 105mph. cruising speed and 450-mile range.

A three-place amphibian of spruce and plywood construction, the Bunyard Model BA-X3 Sportsman, now being test-flown in the vicinity of Long Island City, N. Y., is another interesting "dark horse" entry in the personal plane market competition.

Kenneth L. Bunyard, of Long Island City, the designer, expects the Sportsman to complete its CAA tests this Fall and will delay announcement of production plans and price until that time.

Designed For Navy-The plane originally was designed as an ambulance-liaison aircraft for the Navy, but the interest shown by private flyers in other amphibians has caused revision of his plans for peacetime production.

Most unusual feature of the design is the empennage. The horizontal stabilizer and elevators are set at the top of the vertical fin, slightly below the thrust line of the pusher engine installation. The arrangement is said to supply the plane with unusually good longitudinal stability. Larger Engine To Be Used-The prototype is credited with a cruising speed of 105 mph, and a range of 450 miles at this speed. Its 130hp. six-cylinder Franklin engine is expected to be replaced by a 150hp. engine in the production version, which should increase the speed somewhat. Bunyard also is contemplating production of a fourplace amphibian of similar design, with a 540-mile range cruising at 118 mph. Main difference in the feur-place design will be a longer fuselage.

The Model BA-X3 cabin will carry three persons and 50 lb. of luggage. Entrance is gained through either side of a hinged plexiglas canopy. A patented dual control system, is said to require a minimum of maintenance and provide ample leg room for all three occupants.

Hull Is Conventional—The hull is

intermediate frames and built-up spruce-plywood bulkheads. An outer keel on the forward section of the hull is of oak sheathed in stainless steel to bear stress of water landings.

Upper chine is of box type construction running from nosewheel bulkhead to aft of the rear spar head, and then aft to rudder post as

Specifications

Specifications and tentative flight performance data for the new experimental Bunyard Sportsman amphibian include:

Wingspan34 ft. 4 in.
Length
Height 9 ft.
Gross weight2,250 lbs.
Powerplant130-hp. Franklin
Cruising speed105 mph.
Landing speed (without
flaps)55 mph.
Landing speed (with
flaps)48 mph.
Water takeoff run750 ft.

Land takeoff run.....500 ft.

Rate of climb....540 ft./min.

a solid spruce section. Lower chines and keel are also spruce. Except for the forward deck, the fuselage skin is of flat plywood sheets, eliminating expensive pre-forming. The slotted full-cantilever wing is described as exceptionally strong and with high torsional rigidity, due to its wide main spar, an auxiliary spar supporting ailerons and flaps, and the 1/8 in. mahagony plywood

Firestone Gear Used—A steel tube tripod above and behind the cabin supports the engine and the 34-gal. fuel tank. The engine is fitted with a two-position Sensenich propeller. Both tripod and engine are neatly faired and cowled.

The recently-developed Firestone Super-flex tricycle landing gear is used. Front wheel retracts vertically into a nosewell, while main wheels turn to rear and upward to become partially housed in the wings.

▶ Features Listed — Bunyard cites the following "easy maintenance" features:

Easy skin repairs in field due to flat plywood components.

▶ Removal of cowling makes engine entirely accessible.

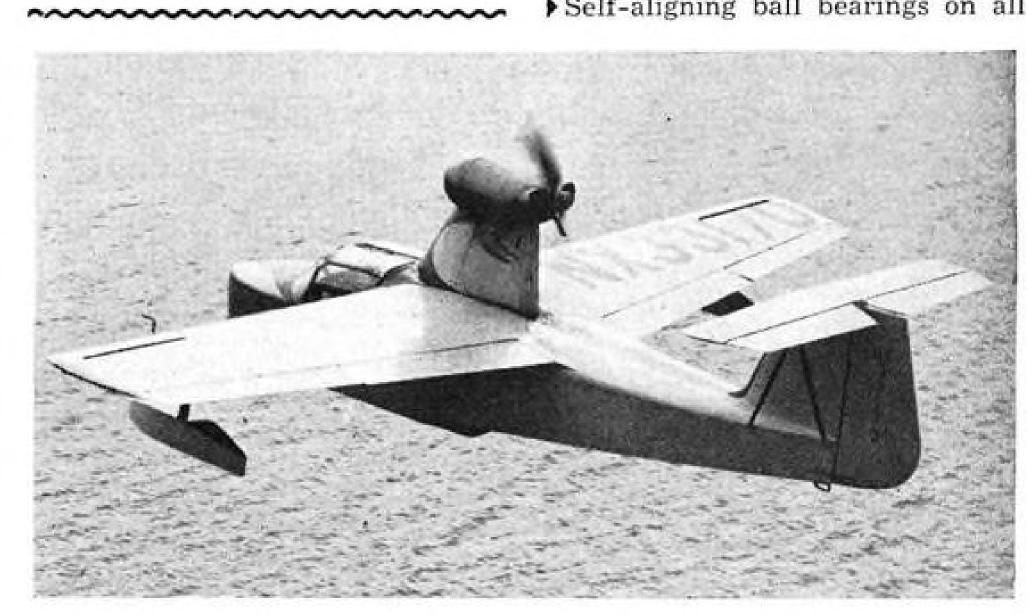
Fuel tanks and fittings are accessible for inspection and repair by removing side cowling on tripod.

Main landing gear legs are detached from hull by removing two bolts, and nosewheel assembly may be removed by lifting deck cover and removing two bolts.

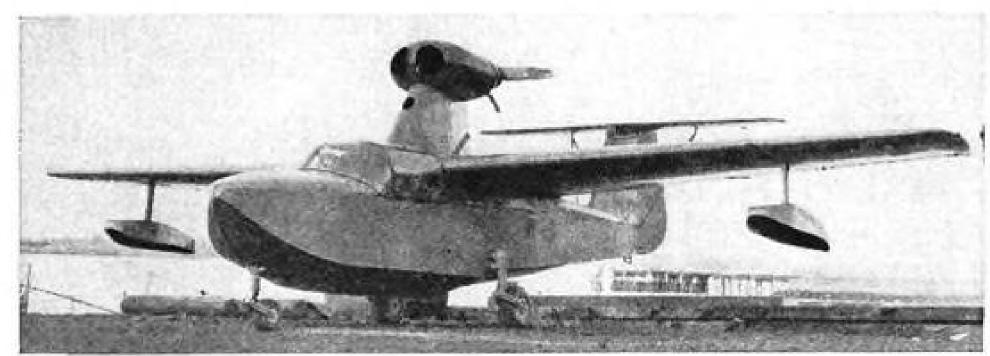
Easy inspection of controls, and rear hull section.

▶ Use of stainless steel in fittings exposed to water spray.

Self-aligning ball bearings on all



New Amphibian: The three-place experimental Bunyard Sportsman amphibian originally was designed as an ambulance, liaison amphibian for possible Navy use. With a 130-hp. Franklin engine, the plane is credited with 105-mph. cruising speed. Its unique tail design gives it unusually of conventional design with spruce good longitudinal stability, the designer reports.



Designer and Plane: Kenneth L. Bunyard, Long Island City, designer of the Bunyard BA-X3 Sportsman, below, opens the plexiglas cockpit canopy on his three-place amphibian, a likely new entry in the personal plane field. The Sportsman has retractable tricycle landing gear, trim plywood hull, and neatly faired engine mount.

establish airports, with special em-

phasis on Classes I, II and III fields,

avoiding selfish grasping for large

airport funds that may later re-

bound on the small community's

An aviation education program

through state and local school offi-

An extensive air and ground

safety program correlated with a

state search and rescue organiza-

Two Licenses Revoked

The Civil Aeronautics Board re-

voked the airmen certificates of two

pilots recently and suspended those

of eight others following investiga-

tions of Civil Air Regulation viola-

Summaries of the cases and Board

Ivan F. Coppers, student pilot, for

flying over congested areas of West

Los Angeles, Calif., at altitudes which

were not sufficient to permit emergency

penalties follow:

REVOCATIONS:

For CAR Violations

ability to maintain.

tion.

An airmarking program.

cials as well as colleges.

control surface hinges and control rods.

▶ Treatment of all wood and metal components with plastic bonded finishing materials.

Designing Since 1931 — The designer traces his flying and design experience back to 1931 when he built his first airplane at Westchester, N. Y. Known as the world's smallest flying boat, it was a biplane of 16-ft. span, powered by a 15-hp. Johnson outboard motor, and carrying license NX-920M. The plane flew successfully but was never built in quantity. A second Bunyard design, which never went beyond mockup, was an amphibian with a monococque landplane fuselage which nested in a flyng boat hull and could be removed to convert the plane into a landplane. He hopes to continue this project at a later date.

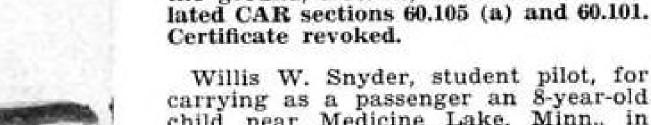
Committee to Meet

Simplification of radio licensing for the private pilot, aviation instruction for returned GIs, improvement of service at airports for pilots and air navigation problems were on the agenda of the CAA Non-scheduled Flying Advisory Committee which convened in Washington last week. Committee members were guests at a demonstration of the new Bendix Flightweight radio at Washington National Airport.

New Idaho Aero Head Sets 5-Point Program

Chet Moulton, new Director of the Idaho Bureau of Aeronautics, has announced the following fivepoint program for Idaho aviation and is asking the support of Idaho aviation enthusiasts for its realiza-

▶ Encouragement and assistance to individuals and communities to landings, and less than 1,000 ft. above Joseph Warren Rosenfield, private



Willis W. Snyder, student pilot, for carrying as a passenger an 8-year-old child near Medicine Lake, Minn., in February of 1945, on Mar. 6 piloting solo from the front seat of an aircraft contrary to the operations record specifica-tions of the aircraft, flying without a currently effective medical certificate, piloting an aircraft closer than 500 ft. to another plane, causing the two planes to collide in mid-air, fatally injuring the other pilot, Mar. 6, 1945, near the Robbinsdale, Minn., airport. Actions violated CAR sections 43.50, 60.31, 01.12, 20.73(a) and 60.343. Certificate revoked.

the ground, Dec. 16, 1945. Actions vio-

SUSPENSIONS:

Frank Gilliam Basham, commercial pilot, for carrying a passenger in a 65h.p. aircraft although holder of 775-6240 h.p. rating, and flying just above tree top levels in the vicinity of Graham, Tex., May 12, 1945. While flying at such an altitude Basham struck a power line causing severe injuries to him and his passenger, and complete destruction to the plane. Action violated CAR sections 60.3503 and 20.70(b). Certificate suspended for six months.

Chester Bernard Wenskoski, student months.

tificate suspended for six months.

Walter Henry Reuman, private pilot,

Marshall B. Potts, commercial pilot, for flying near and over the Olympia Airport, Wash., acrobatically by performing loops and rolls so as to endanger air traffic, Oct. 14, 1945. Actions violated CAR section 60.104. Certificate suspended for 90 days.

Leroy A. Stacey, private pilot, for flying at night in an aircraft not equipped with a set of certificated forward and rear position lights, leaving Chehalis, Wash., a short time before dark for Olympia where he landed after dark without notifying the manager of the Olympia airport to have the runways lighted for his landing, failing to observe other traffic and landing on a runway where another airplane had landed and was taxiing. His collision with it resulted in damage to both aircraft and injury to both pilots, Nov. 4, 1945. Actions violated CAR sections 43.30, 60.101, 60.106 and 60.108. Certificate suspended for 90 days.

pilot, for flying outside the local area designated by his instructor when he had not passed a written examination on CAR Part 43, July 4 and 22, 1945, in the vicinity of Northville, N. Y., on July 22 flying through clouds although he did not hold an instrument rating and the aircraft was not equipped for instrument flight. Actions violated CAR sections 43.52(b) and (c), 43.65 and 43,-30(c). Certificate suspended for six

James McGowan Miller, private pilot, for diving twice to altitudes of less than 500 ft. over the congested area of St. Clair, Minn., permitting an uncertificated passenger to perform acrobatic maneuvers, consisting of steep turns and banks over the same area, and when neither occupant of the plane was equipped with a parachute, Aug. 30, 1945. Actions violated CAR sections 60.101, 60.105, 60.104(b) and 43.409. Cer-

for flying over Oak Openings State Park, Toledo, Ohio, at altitudes of less than 200 ft. in an area where friends were having a picnic, and ultimately causing the aircraft to crash into a tree 100 ft. or less in height, resulting in demolition of the plane and damage to a nearby automobile, Sept. 16, 1945. Actions violated CAR section 0.101. Certificate suspended for six months.

tude below 500 ft. over a congested area near the University of Kansas campus, Lawrence, Kans., Oct. 2, 1945. Actions violated CAR sections 60.101 and 60.105.

Bernard Zipperstein, commercial pilot, for piloting an aircraft in the eastern section of Rochester, N. Y., over a congested area of the city at an altitude of less than 1,000 ft., May 27, 1945. Ac-tion violated CAR section 60.3500. Certificate suspended for three months.

pilot, for diving and circling at an alti-

Certificate suspended for six months.

Interesting Projects Underway at Convair

Some of the most interesting development work on personal aircraft on the West Coast is going on at Consolidated Vultee Aircraft Corp.'s experimental laboratory at San Diego.

Joe Gwinn, designer of the prewar roadable Gwinn Aircar who recently was named head of personal aircraft development for Convair, and his staff are assembling their version of a three-place pusher, with the propeller behind the tail, similar in some respects to the Lockheed Big Dipper two-place design, shelved after the prototype crashed.

"Sky Coach" Tested - They are also pushing performance flights of the experimental low-slung, fourpassenger, twin tail-boom Sky Coach which resembles a highly streamlined Stearman-Hammond. These, and experiments with the Stinson, the company's current personal plane, are keeping in the background further development work on the various versions of the Spratt controllable-wing plane.

Veterans Obtain Lease On Marysville Base

A temporary lease on Alicia Airport at Marysville, Calif., has been obtained by Brandt, Perkins & Brandt, new firm of Air Force veterans, which will establish a repair and service station and sales agency.

The airport, where the government built Marysville Army Air Base in 1942, represents a \$2,000,-000 investment. It was returned to the city and county in mid-March. The council and supervisors will make plans for its use shortly.

Post-war "Airman's Guide" Is Published by CAA

CAA recently issued its first post-war "Airman's Guide," which will be published every two weeks to keep active pilots up-to-date on

Glider Speed Mark

A new unofficial speed record for point-to-point flight in a motorless aircraft was set April 16, by Stephen J. Bennis, of Long Island City, in a flight from Elmira to Towanda, N. Y., the Soaring Society of America reported last week.

Bennis was credited with flying a Laister Kauffman LK-10A sailplane 37 miles from Harris Hill, Elmira, to Towanda, N. Y. Airport in 20 minutes, for an average speed of 111 mph. The record was not timed by the National Aeronautic Association and so does not have official status.

ments, and air navigation radio

A principal feature of the guide is its new Flight Planning Charts. which the CAA says offer all necessary information for airmen, including radio facilities, Army and Navy fields, designated airways "and other pertinent information," including minimum safe altitudes nents, at wing spar attachment and mileage between radio fixes.

rectory and air navigation radio aids were published at two-month intervals. The new booklet will supply much more up-to-date information. The guide is being distributed to certificated airmen actively engaged in flying.

Ercoupe Does Well In Pontoon Tests

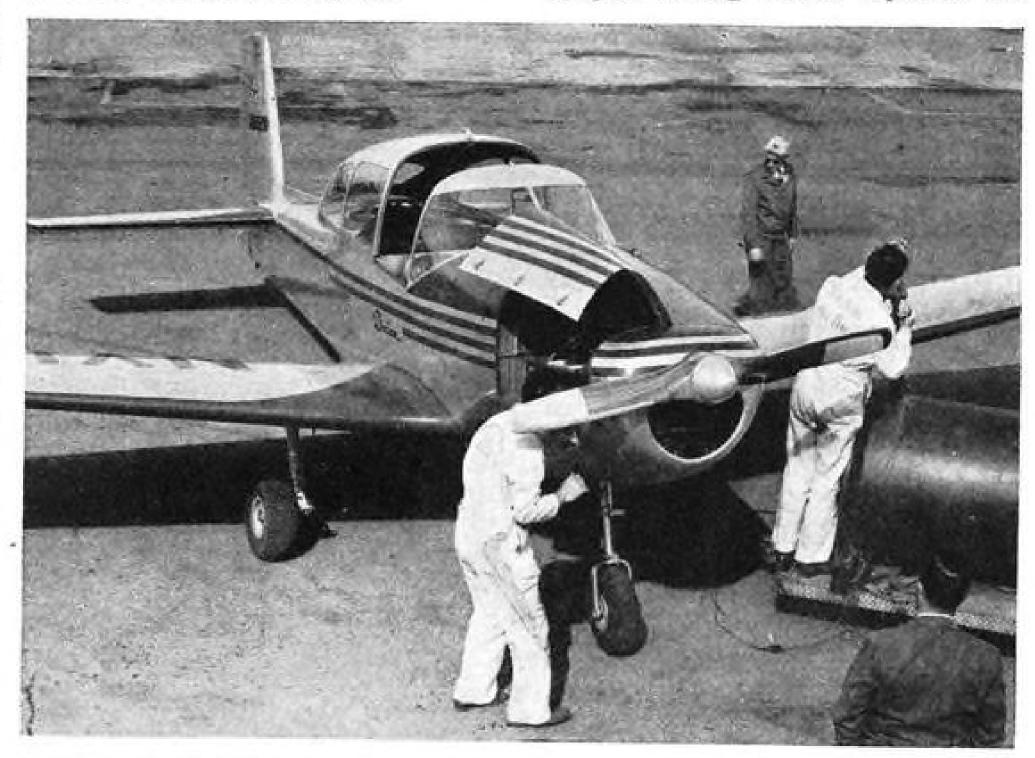
Non-spinnable characteristics of two-control plane are not affected by installation.

The low-wing, two-control nonspinnable Ercoupe personal plane is well adapted to installation of floats, it has been discovered by technical experts of Engineering & Research Corp. and Edo Aviation Corp. in the course of installing Model 1320 Edo floats on the plane at the Edo plant, College Point, Long Island.

Engineers have watched closely the preliminary flight tests of the Ercoupe as a floatplane to see whether the changed configuration had any effect on the plane's nonspinnable characteristics. However, tests so far show satisfactory performace both in the air and on water, E. E. Hart, ERCO chief test pilot, reports.

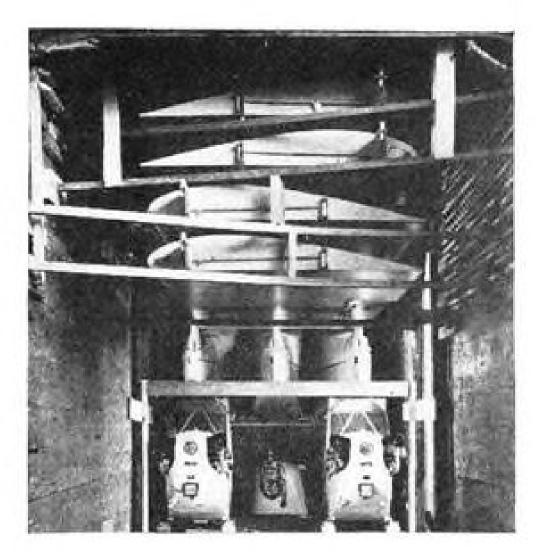
Has Wide Tread—The float struts are attached at the same points as the regular landing gear compopoints and at the nose. This gives Heretofore the CAA airports di- the Ercoupe a float tread 6 inches wider than any other lightplane using Edo floats. Presumably this advantage will be shared by some other low-wing lightplane designs when they are adapted for floats.

> Forward struts are attached to an adapter fitting which replaces the



EASY MAINTENANCE:

Automobile type cowlings, which lift like motor hoods for easy accessibility, are likely to be adopted soon on many of the personal planes. Typical of the new cowling arrangements is this one on the new fournotices to airmen, airport develop- place North American Navion.



CARLOAD OF PIPERS:

Taking advantage of the new CAA policy of permitting flight test of production aircraft after delivery of the planes in disassembled state, packed in freight cars, Piper Aircraft Corp., Lock Haven, Pa., recently shipped a car containing six Cub J3 planes, packed as shown above, to Mountain State Aviation, Denver, Colo. Under the previous system planes were assembled at the plant, test flown, and then disassembled for boxcar shipment. The new policy results in a savings of about \$40 to the manufacturer on the delivery price of each airplane.

nosewheel assembly. Diagonal struts which provide steps for cockpit access, and wire braces, complete the float bracing.

> Steering Connected—The control wheel operates the water rudder through the steering mechanism for the nosewheel. Standard control cables from the rudder are attached to a bell crank forward of the fire wall. The crank is actuated by the nosewheel steering pushrod.

While most lightplane float installations provide for retraction of the water rudder at high speeds, the Ercoupe water rudder is kept in the water providing positive

New Edo Branch

Edo Seaplane Service, Inc., College Point, N. Y., recently received a charter from the New York secretary of state, to promote and engage in flying activities. Directors are Earl D. Osborn, president of Edo Aircraft Corp., and George B. Post and K. D. Vosler, vice-presidents of Edo. It is understood that the new corporation was formed to handle planes and flight activities for the float manufacturer.

Briefing For Private Flying

The Hallicrafters Skyfone soon will be standard equipment on the 100hp. Piper Super Cruiser. Hallicrafters which principally made amateur radio equipment before the war, is producing an aircraft transceiver which weighs less than 10 lbs. complete with power supply and other accessories and which eliminates the requirement for special bonding and shielding of ignition systems on most planes. The Piper deal is the second big contract for Hallicrafters, following close after announcement of a contract to supply the Skyfone as standard equipment on the Republic Seabee (AVIATION NEWS April 15).

BRITISH SERVICE—American charter flight operators may well study the possibilities of a new plan of the London Aero & Motor Services which has announced a combination auto and airplane taxi service. The charter operator sends a Daimler auto to the customer's house or office, takes him to the airport, flies him to an airport near his destination, and has an auto waiting for him there to deliver him where he wishes to go. The operator is using three-place "Austers," which carry two passengers and 100 lbs. of luggage. Rates are on a mileage basis scaling down from a 100-mile minimum flight at approximately 32 cents a mile to a rate of 24 cents a mile for flights of over 400 miles. Charterer pays for the flight both ways whether he uses it or not on the return trip, and pays waiting time of \$4 an hour in daytime and \$10 an hour at night if the plane remains for a return trip. This includes all pilot's and plane's expenses.

PERSONAL HELICOPTERS?—A brief flight in the new commerciallylicensed Sikorsky four-place S-51 helicopter at Washington National Airport last week, offers basis for our conclusion that the helicopter is much farther along its way toward many practical uses than the conservative fixed-wing adherents would have you believe. From a standpoint of passenger comfort the S-51 has an edge over most four-place airplanes. The instrument panel and control grouping on the S-51 is one of the most compact jobs seen on any aircraft. The cabin is well soundproofed, visibility is excellent. The aircraft is painted in a maroon and gray color combination which makes it look much more like an ordinary commercial aircraft. The pilot worked harder at the controls than an airplane pilot has to do, but of course he accomplished flight maneuvers such as vertical takeoff, hovering, flying sideways, flying backwards, and vertical descent, which the ordinary airplane cannot do. And the price is high for a fourplace aircraft (around \$45,000). Give the helicopter manufacturers a couple of years to simplify the controls and get production costs down, through quantity manufacturing, and then the fixed-wing boys may see some new competition in the personal aircraft field.

-Alexander McSurely

control at all speeds while the floats are in the water.

Jamming Prevented - A clutch mechanism is incorporated in the bell crank, to replace springs normally used in water rudder systems to prevent jamming of air controls by fouling or freezing of water rudder or cables. A pin in the clutch may be withdrawn, by pulling out the parking brake lever on the control panel, thus disconnecting the water rudder from the air controls if this should be necessary.

While the float version of the Ercoupe has yet to complete its CAA certification trials, preliminary flight tests indicate its attitude on floats ing technique is quite similar to 900 ft. long.

that used on land.

Cost Set at \$995-The Edo float installation on the Ercoupe is quoted at \$995, although the installations will not be available until the CAA certification procedure is completed. The Edo company reports it has already received a large number of orders for floats to be installed on the planes.

New Airport to Open In Greater Boston Area

The Revere, Mass., Airport will be open for operations early in May to provide another personal plane center for flyers in the Greater is about the same as on wheels, Boston area. The field will have and that water takeoff and land- three runways, 2,400, 2,000 and 1,-

AVIATION NEWS • April 29, 1946

SPECIAL AIR SERVICES

CHARTER NON-SCHEDULED INTRASTATE

6,000,000 Miles Flown By Trans Air

1,866 passengers carried in first eight days of April; New York-London flights under study.

Trans Air, Inc., first non-scheduled carrier to operate DC-4's, has run up a total of 6,000,000 plane miles since beginning operations Feb. 1 and is planning non-scheduled operation between New York and London. During the first eight days of April a total of 1,866 passengers were carried.

Much of the mileage to date has been run up by Trans Air's five DC-3's, aided early in March by two DC-4's. A third is scheduled to arrive in about a week and the fourth is expected by about the third week in May. All are without fuel dump valves and certificated by CAA for 63,000 lb. gross weight at takeoff and 61,000 lb. for landing.

Area Served—Domestically, with a short international "leg," Trans Air is operating a New York-Miami-Nassau - Miami - Chicago - Detroit - New York route. Intermediate stops are made. Passage is sold from New York, Miami, and occasionally Chicago, to New York with Miami confirming.

Dresser, Inc., air tourist and ticket agency, handles all ticket sales at New York, Miami and Chicago. No passages are sold between Nassau and Miami to avoid conflict with a local carrier.

New Charters-The New York-Miami business is declining, but Carl Lawrence, manager of operations, says this operation was undertaken only to get the line into operation. Domestic and occasional international charters are being booked.

The company recently transported the Soviet embassy staff from New York to Santiago, Chile, but used two DC-3's instead of a DC-4. The smaller transports were selected for the job because of the size of fields at refueling points and the availability in the central and South American areas of DC-3 parts.

charters are scheduled for the next few months, most of them domestic, although several may be run into Alaska and serious consideration is being given to operating nonscheduled between New York and London.

These flights with the DC-4's might be on charters by large companies or tourist and travel agencies, or some might carry passengers on separate tickets handled by such an agency as Dresser, Inc.

Milwaukee Store Uses Air Delivery Service

Three regularly scheduled delivery flights are made weekly from Gen. Mitchell field, Milwaukee, by a light plane delivery service operated for Milwaukee's Boston Store. Super Cruiser for additional speed Twenty cities now are receiving the and load carrying capacity. service, operated without extra charge for the store's out-of-town Kansas Intrastate Line customers.

As of Jan. 15, the last figures available, the two Piper Cubs, which are used in the service had flown more than 22,000 miles carrying more than 6,100 lbs. of merchandise, or 2,086 packages.

Restrictions Are Few—The planes and pilots are provided by Midwest Airways, at Milwaukee. There are no restrictions on the size of packages as long as they will fit into the 25 cu. ft. cargo space and do not weigh over 200 lbs.

The air delivery service carries the bundles to the local airports, > Routes Detailed-One route will where local delivery services pick start at Wichita, with stops at them up and make final delivery to Hutchinson, Salina, Manhattan, Tothe customer. The planes carry

Air Ambulance

An ambulance service by air has been inaugurated by John L. Bulloch, co-owner of Johnston-Bulloch Funeral Homes of Houston. The service utilizes a twin engine Cessna to hurry patients from Houston to specialists in any part of the U.S.

The plane is fitted out to carry pilot, co-pilot, two passengers and one patient. It is equipped for day and night flying, with all instruments.

be delivered in Milwaukee.

Service Is Regular—Regularity of flights over the first six months of operation was comparable to airline schedules. Flights were delayed three times during the period, twice because of weather. The planes operate with skis during the winter months.

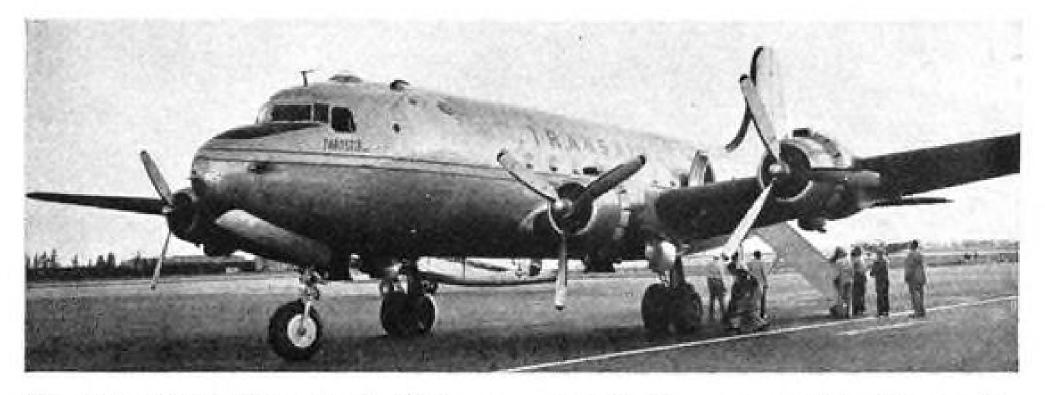
Interest in the service has been growing steadily throughout the state, and Midwest Airways is studying plans for replacing at least one of the Cubs with a new Piper

Plans Service by June 1

Kansas' first intrastate airline, linking 25 cities, is converting military twin-engined Beechcraft in preparation for regular service about June 1.

Although final arrangements have not been completed, Kansas Airways, Inc., at this time proposes two circular routes with Hutchinson as the only city on both. Harry P. Colmar, of Wichita, is in charge of operations; Fred Haley, of Wichita, is comptroller.

peka, Atchison, Leavenworth, Kanmerchandise on the return trips to sas City (Kans.), Ottawa, Emporia,



Non-Scheduled Transport: This converted C-54, operated by Trans Air, ▶ Summer Plans —A number of Inc., was the first put in non-scheduled operation.

AVIATION NEWS • April 29, 1946



SEAFOOD FLIGHTS STARTED BY ACT:

A shipment of 5,000 lbs. of lobsters from Augusta, Me., to New York for Jordan Lobster Co. opened a seafood air service by Air Cargo Transport Corp. which will extend shortly to Detroit, Chicago and the West Coast. The lobsters are packed in a waterproof cardboard container with a bit of wet seaweed. No ice is used. Shown, left to right, are: Gov. Hildreth of Maine; H. Roy Penzell, ACT president, and Richard Reed, State Sea and Shore Fisheries Commissioner, before the first flight started. The ACT Skyvan reached New York 2 hrs. 5 min. after taking off from Augusta.

Chanute, Ft. Scott, Pittsburg, Parsons, Coffeyville, El Dorado, and Wichita.

The other route will link Hutchinson and Wichita with northwest, southwest, and southern Kansas, including Great Bend, Russell, Hays, Plainville, Norton, Goodland, Garden City, Dodge City, Pratt, Anthony, Arkansas City, and Wichita. Airports at several of these stops must be improved, however, before the Beeches can land.

NEW DEVELOPMENTS

Arizona Line Adds Second Round-trip

Arizona Airways, Inc., Phoenix, has added a second round-trip daily on part of its intrastate network opened last month (AVIATION NEWS, April 1), and has applied to CAB for interstate mail, cargo and passengers, H. O. Nelson announces.

Two round-trips will be made on four days a week between Phoenix and Prescott, with a stop at Grand Canyon added on the first Prescott flight each day. Two daily flights on three days a week will connect Phoenix and Yuma. Company seeks approval to serve Las Vegas. Nev.:

El Paso, San Diego, Albuquerque, Salt Lake City, and in Mexico two cities, Guaymas and Sonora.

Veterans Air Express Co., 11 Commerce St., Newark, N. J., flew 66,000 hatching eggs to Prague, Czechoslovakia, under UNRRA contract, using the company's newly converted C-54. Special packing cases were used. Cargo temperature was kept at 40-70 degrees temperature.

Hawaiian Air Transport, John Rodgers Airport, Honolulu, has been organized by ex-service men headed by Lloyd Osborne, president, for charter services. One Beech D18S has been delivered; a second is expected in June.

Viking Air Transport, Metropolitan Municipal Airport, Los Angeles, has begun cargo service to the East. Harry E. Ljung is president; Robert Reed is vice-president.

by R. C. Jones, president, has announced that daily service will be started about May linking Pampa, Amarillo and Dallas.

N. Y., has been incorporated by the owners of Empire Air Lines, already flying intrastate passengers into New York City (Aviation News, March 25).

Travelair Lines, Atlantic City, N. J., has begun charter passenger service to metropolitan points.

Phoenix and Yuma. Company seeks approval to serve Las Vegas, Nev.; been chartered in New York by Jack unnecessary.

J. Gischerm, 521 Fifth Ave., New York City, attorney.

National Air Cargo Service, Inc., has been chartered as freight carriers by Sigfried B. Samuelsson, executive vice-president of the new Institute of Air Transportation, and George B. Boochever, 82 Central Ave., Rye, N. Y., IAT counsel.

Copper State Airways, Inc., Tucson, Ariz., has discontinued its air pickup and delivery service to 26 ranches in mountainous Southern Arizona (AVIATION NEWS, April 15), after two weeks' operation, because of dangerous air currents.

Skytrain Express Co., Durant, Okla., has received its first C-47, with additional aircraft to be added, according to Edward R. Mc-Gee, president, and Roy B. David, Durant, attorney, co-owner. One contract calls for carrying 2,000,000 lbs. of strawberries from Memphis to Los Angeles, McGee said. Passenger charters will be offered later.

Non-scheduled Ruling By CAB Awaited

Recent completion of oral argument on CAB's investigation of Trans-Marine Airlines has presented the Board with a third vehicle by which it can enunciate a definitive policy setting apart nonscheduled from scheduled air carrier operations. Already before the Board and involving the same issues are the non-scheduled investigation, submitted for decision last November, and the Page Airways case, submitted early in March.

by attorneys for Northeast Airlines and the Air Transport Association in declaring that Trans-Marine's once-daily operations between New York and the Cape Cod area last summer were so regular that the service could not come within the non-scheduled exemption provisions of Section 292.1 of the Board's Economic Regulations. They admitted, however, that the exemption has never been defined by the Board and is vague, if not ambiguous.

▶ Defense Answered—In answer to Trans-Marine's contention that it never "held out" a regular service by advertising, opposing attorneys declared that the carrier had not attemped to curb publicity on its operations and that the regularity of the flights in itself was sufficient to provoke so much public attention through word of mouth and news items that advertising was unnecessary.



SPRAYING orchards from his private airplane, for instance, to control insects. Throwing a switch or shifting a gear to grind his grain, light his place, pump his water, milk his cows, drive his tractor.

New ideas . . . new and better ways of doing things . . . these are the very breath of life to Colossus. They help him produce more, earn more, labor less, and share in the good life he has helped to create. Colossus is modern in every respect.

Take his interest in aviation. He sees the airplane as an efficient tool of farming, enabling him to cover great distances in the twinkling of a propeller. With it, he can inspect crops, livestock, fences . . . spot forest fires . . . control insects . . . check on soil erosion . . . even hop to town for machine parts, or a doctor.

Be sure of this: The more responsive he is to new ideas, the more he depends on Country Gentleman. It is his and his family's friend and guide. This magazine is read . . . and relied upon . . . on America's top-half farms, enjoying nearly four-fifths of the national farm income.

It is not only a guide to better farming, but a guide to better living and better spending, as alert advertisers have discovered.

Facts of Special Interest to the Aviation Industry:

Survey shows 60% of personal planes will be sold to residents of rural areas.

In Kansas 455 out of 10,000 farm families intend to buy planes as against only 196 out of 10,000 city families.

Rural families—even in normal times—purchase and consume 40% of all America produces!

Farmers' incomes have doubled in the last five years! Country Gentleman's readers are concentrated among the top-half farm families.



NATIONAL SPOKESMAN FOR AGRICULTURE A CURTIS PUBLICATION

PRODUCTION

U. S. Manufacturers Eye British Move to Corner Export Market

Apprehension is relieved somewhat by belief that primary concern should be our own domestic markets, plus fact that American distributors are clamoring for planes.

By WILLIAM KROGER

Increasing efforts by Great Britain to gain outright control of the
aircraft export market, particularly
in South America, is being watched
by U. S. manufacturers with a degree of apprehension that is relieved to some extent by their belief
that the primary concern should be
the U. S. domestic market.

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Transport plane manufacturers have openly gone after foreign business, and with marked success in some cases. Makers of private planes—who in the end may account for the greatest export volume—are just as sincere in their efforts, but for the moment are restricting both their export activities—and information about them—for fear of offending plane-hungry distributors at home.

Meanwhile, the British are moving on a broad scale, with discreet publicity as to results, and the method

of achieving the results are not always indicated. DeHavilland claims to have "sold" 100 Dragon Rapides, two-engined, biplane light transports, to some 19 countries, although the extent of deliveries is not known.

DeHavilland also has negotiated with Sweden what is termed one of the largest export orders in the history of Britain's aircraft industry. It covers *Vampire* jet-propelled fighters, *Goblin* jet engines and a *Goblin* manufacturing license for the Swedish Air Force.

Probably the most intense British export activity centers in South America. Argentine firms have ordered 20 Vickers Viking transports, and have already received several war-built flying boats converted for commercial purposes.

The Argentine situation is of interest because of the size of its pre-

The state of the s

British Export Progress: Dark areas on the map are where only one British company, DeHavilland Aircraft, has sold only one type of plane—the Dragon Rapide, biplane transport designed 12 years ago. Countries where orders have been obtained for this aircraft include: Holland, Lebanon, Iraq, Turkey, Iceland, Portugal, Angola, East Africa, Egypt, Brazil, South Africa, Canada, Australia, India, Algeria, Peru and Chile.

war market for U. S. aeronautical products, and our present relations with that country. In 1938, U. S. sold to Argentina \$6,187,000 worth of aeronautical products, including aircraft valued at \$4,648,000. As this country's manufacturers turned to the job of augmenting British and French war production, the exports to Argentina progressively declined to \$1,180,000 in 1940. Last year, exports to that country amounted to \$151,000, including one glider, but no powered aircraft.

▶ Britain Stressing Argentina—Argentina, second largest South American nation, but the wealthiest, in normal times has a healthy trade with both Britain and the U. S., with Britain possibly being the most important due to its role as Argentina's largest single customer. Britain is taking full advantage of the present bad relations between U. S. and Argentina.

A British trade mission now is in Argentina. Sales other than those covering the *Vikings* and the flying boats have been arranged, representatives of the Argentine Air Ministry are going to London to study "terminal air traffic," and Argentina has been licensed to produce several British plane models.

British activity in other South American countries is noticeable. Planes have been delivered in Brazil and Venezuela, although the effect has not been too happy for Britain as most of them reportedly were cracked up shortly after arrival.

U. S. manufacturers deeply interested in the export market feel convinced Britain is not out just to regain a pre-war share in South America, but to capture the market completely before the U. S. industry is ready to go after it with vigor.

There are some indications of how this could be done. For example, the Percival *Proctor*, fourplace plane, is being sold in South Africa for the equivalent of \$12,000, which some U. S. authorities regard as below cost—which points to an export subsidy. Similarly, the Bristol *Freighter* is being listed at \$76.-000 f.o.b. This is a 40-passenger aircraft, roughly equivalent to the DC-3 in size.

▶ 100 Planes Ordered Here—While orders from 13 foreign nations for U. S. transports total approximately 100 planes, there is only one South American nation—Brazil, with two Douglas DC-3's—on the list. The fact that British Overseas Airways Corp. has ordered five Lockheed Constellations means little in the

long-run export tussle between the two nations, as the early delivery date, within the next few months, is seen as a motivating factor in the deal. In view of the competitive situation on the North Atlantic, Britain cannot wait for its own large, long-range transports.

Fleet Aircraft Ltd. Reports Decrease in '45 Profits

Fleet Aircraft Ltd., Ft. Erie, Ont., has reported a net profit of \$160,696 for the calendar year 1945 as compared to \$185,768 in the previous year. During the year all government contracts were terminated.

President E. G. Smith stated at the annual meeting that he did not anticipate a profitable 1946 due to heavy expenses of reconversion and to the higher cost of initial production on the new two-place *Canuck* personal plane now in production. The company also is planning development of other types of aircraft.

Ohio Firm Seeks Space at N. C. Field

The International Aviation Corp. of Cleveland, Ohio, has applied to the city-county airport authority at Wilmington, N. C., for authority for lease of a portion of Bluenthal Field and several adjoining surplus Army buildings to be used in the manufacture and development of radio-controlled aircraft.

The Cleveland firm, in a com-



FIRST PRODUCTION ROCKET:

R. S. Johnson, left, president of Johnson Aircraft, Inc., and designer of the Rocket 185 personal plane, delivers the first production model to L. D. Thomas, president of the Rocket Aircraft Sales Corp., national distributor. Cash deposits for more than \$4,000,000 worth of the planes already had been received from customers before the plane was certificated.

munication to the airport authority, said it would require approximately buildings the Cleveland firm proposes to use belong to the govern-hangars and wind tunnel. including hangars. Most of the buildings the Cleveland firm proposes to use belong to the govern-ment and have not yet been de-

▶ Board Is Favorable—At Wilmington, a spokesman for the airport authority said the latter was favorably inclined to negotiate the lease but will request additional information as to buildings desired.

Currently the airport authority has control over the field proper and some 35 one-time Army buildings,

poses to use belong to the government and have not yet been declared surplus, although the Army has abandoned them.

Warehouse Is Established By Lockheed of Canada

Lockheed Aircraft Corp. of Canada, Ltd., has established an office and warehouse in part of the building occupied by Fleet Aircraft Ltd., in Ft. Erie, Ont. Chartered in 1939, the corporation which has been inactive prior to and during the war, will confine its activities for the present to the sale and spare and component parts acquired from the Canadian War Assets Corp. George L. Hill is in charge of the office.

Convair Plant Space Being Split Up

Disposal of a major portion of the San Diego plant operated by Consolidated Vultee during the war is expected shortly through various negotiations now pending at War Assets Administration on the basis of "multiple tenancy."

This arrangement is merely the leasing, or sale in some cases, of parts of huge plants to small businesses. In the case of the Convair facility, three deals already have been made. A new baking concern has leased 41,357 sq. ft. in four buildings at an annual rental of \$6,203, and a heating equipment company has leased 15,338 sq. ft. in one building at \$2,300 a year. Another section of the plant has been sold outright to the Bobbi Motor Car Corp. of San Diego for \$1,600,000.

Other Deals Pending—Approximately half a dozen other deals are pending for space in this plant which comprises 25 buildings con-

taining 1,833,000 sq. ft. and covering about 93 acres.

One other war-built aviation plant has been disposed of on the multiple-tenancy basis, the modification center at Birmingham, Ala., leased during the war by Bechtel, McCone Parsons, Inc. This plant, containing 1,678,500 sq. ft. now is occupied by six tenants.

No Other Deals Pending—At the present time, multiple-tenancy disposal for any other large aircraft plant is not contemplated, although that situation could change overnight should there be applications covering a particular plant.

In another action brought about by the surplus plant disposal program, Wright Aeronautical Corp. has agreed to sell its Plants 1 and 2 at Paterson, N. J. to the Aero Holding Co. of New Jersey. Transfer is subject to final acquisition by Wright of the Wood-Ridge plant it recently agreed to buy from WAA.

Surplus Equipment Dealer Agreements Total 1,574

Number of dealers signing agency agreements for the disposal of surplus machine tools and production equipment had reached 1,574 by March 31, War Assets Administration has announced. In addition, 119 agreements have been negotiated but not finally approved, and 312 applications are pending.

The agreements with agents for tools provide for 12.5 percent commissions, while those covering aircraft parts and components permit 40 percent commission. Difference is largely accounted for by the fact

that agents for aeronautical items must warehouse and maintain the surpluses pending sales, while most of the tools are shipped direct from WAA warehouses to buyers upon an agent's orders.

As of March 23, tool agents had sold material costing originally \$23,557,909 for \$11,822,681. On March 15, surplus tool inventory was \$495,669,807 on the basis of original cost.

Fiscal Problems Delay Fairchild Annual Meeting

Annual meeting of Fairchild Engine & Airplane Corp. has been postponed from its regularly scheduled date of April 24.

J. Carlton Ward, Jr., president, said postponement was found necessary because of unusual accounting problems arising in connection with the conversion of a cost-plusa-fixed-fee to fixed price of a large government contract still in force, a recent settlement with the government covering materials taken over after VJ-day from another aircraft manufacturer, and settlement of terminated contracts and subcontracts.

> Statements Delayed-These problems, Ward indicated, prevent the corporation from preparing financial statements that adequately reflect the result of operations during the last fiscal year in time for the regular meeting date. The meeting is expected to be held within 90 days.

RAF Test Pilot School Draws Many Allied Flyers

A test pilot training school operated by the RAF at Cranfield, England, is drawing test pilots from all parts of the world for the ninemonth course.

Fifty-seven pilots have taken the course after being selected by the governments of Great Britain, Australia, New Zealand, Canada, South United States, France, Holland and Norway, and another 35 are in training now.

Advanced Work Given - The purpose of the RAF school is to give advanced training to the most able test pilots to equip them to analyze the performance of planes and judge their structure. The course includes study and flying various types of aircraft, visiting British aircraft factories, and visiting the RAF experimental station at Farnplaces are reserved for the RAF, commercial broadcasting stations.

seven for the Fleet Air Arm, four for British civilian test pilots, six for pilots of the Dominions, and seven for those of Allied countries.

British Aircraft Industry Assigns 'Envoy' to India

Group Capt. Stewart O. Tudor has left London for India to act as trade ambassador there for the British aircraft industry. He will open an office for the Society of British Aircraft Constructors at New Delhi. He is the third representative to go abroad to represent the Society, the others being W. T. W. Ballantyne in Latin America and Col. E. P. J. Ryan in the Middle East.

The expansion of the British aircraft industry's foreign representation comes at a time when the United States is abandoning its program for civil air attaches in our embassies and legations.

PT-23's Sell Rapidly

Sale of 300 surplus Fairchild PT-23 primary trainers during the first 15 days they were offered at new prices, has been announced by War Assets Administration. The revised rates, ranging from \$590 to \$1,275, became effective March 15. The Cape Girardeau, Mo., sales-storage depot sold 169, 138 were disposed of by the Union City, Tenn., depot, and three were sold at Sikeston, Mo. More than 500 PT-23's remain

New Engines Readied

Jack & Heintz is expected to have their two new unconventionally designed aircraft engines ready for NACA tests soon. One will be a four, the other a six-cylinder model. Both are air-cooled and have reduction gears.

They are rated to develop 50 and 75 h.p. at cruising and about 60 and 95 h.p. at takeoff, respectively. Each has a 3.5-in. bore and a 2 3/16-in. stroke, or a piston displacement of 21 cu. in. per cylinder.

Construction Details-The six has a 126-cu. in. total piston displacement; weighs 190 lbs. or about two pounds per horsepower and develops about .75 horsepower per cubic inch displacement. The three cylinders on each side, and half the crankcase, are die cast from an aluminum alloy, with cooling fins, studs, bolt holes and oil passages all formed in the die. Slide valves are used.

in WAA surplus stocks, most of them located at Cape Girardeau and Union City.

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GE Gets 'Lab' Planes

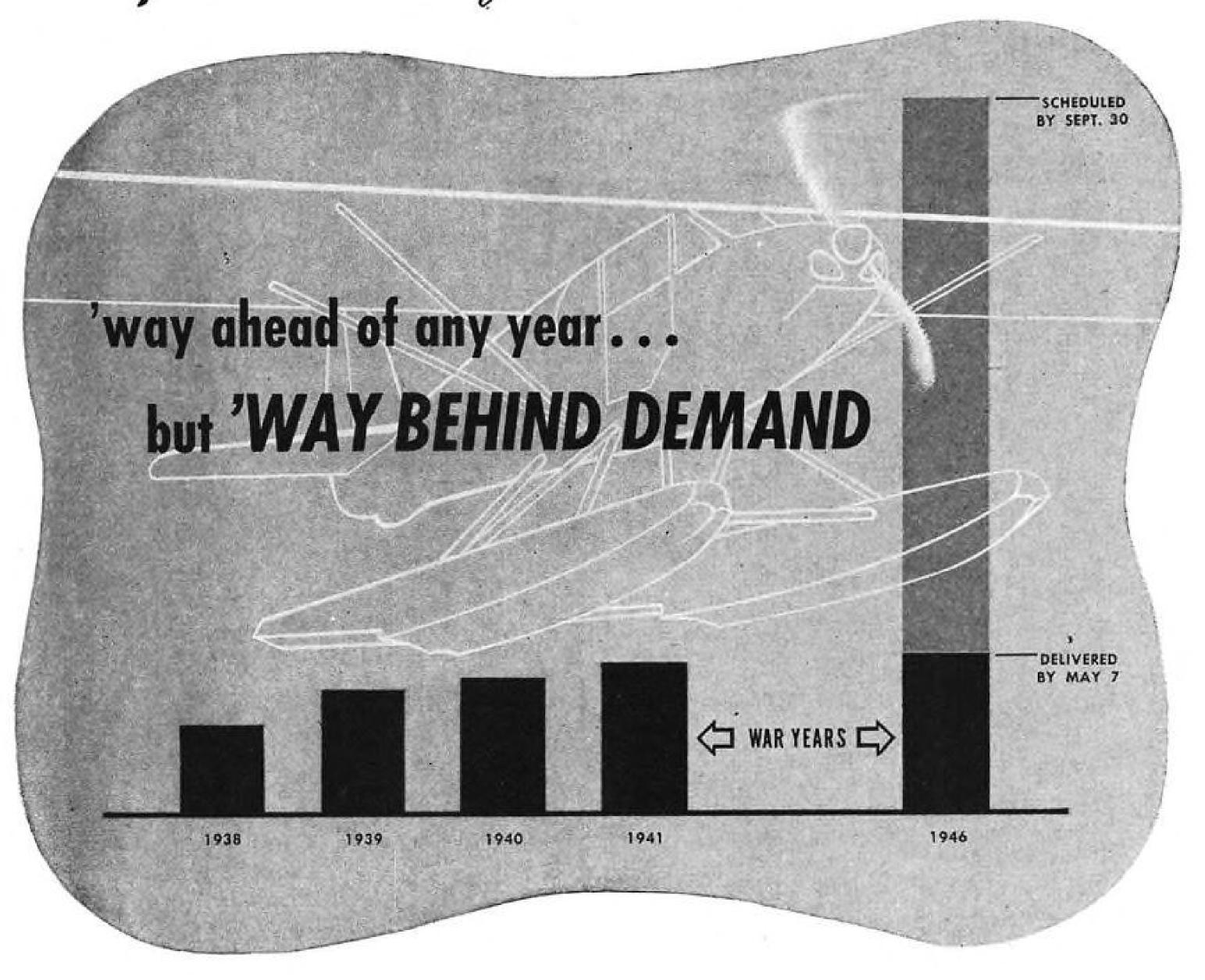
General Electric Co., Schenectady, N. Y., has been loaned a B-29 and two B-24 bombers for conversion into flying laboratories for the testing of radar and aircraft electronic equipment.



GE AIRCRAFT RADIOS:

Final check is given the new General Electric two-way radio sets for use in personal aircraft. This "flying radiophone" provides two-way commuborough. At the school eleven nication with airports and radio range stations, and permits reception of

A Report on EDO Light Plane FLOAT PRODUCTION



 Already in 1946 we have manufactured more Model 1320 floats for light planes than we ever made in any previous year. Yet the backlog of orders is still large and we cannot now make immediate delivery on new orders.

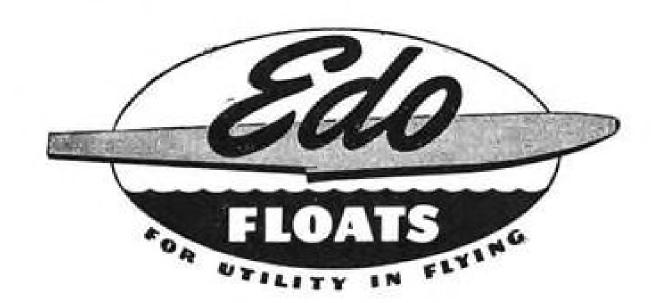
We anticipated this tremendous interest in float flying and planned 1946 light plane float production at five times the largest pre-war year. Moreover, we planned to manufacture floats over the winter for spring availability from stock.

All this planning could not produce floats without materials-and many items were unobtainable. Consequently, float production did not begin until January and is just now reaching the planned rate. We are over the hump and future deliveries will be accelerated if materials continue to flow steadily.

The great demand for aluminum alloy floats is due to their good performance and long life. All-metal construction offers great strength with utmost lightness and insures against water absorption with conse-

quent weight gain. Our 20 years' experience in float design and manufacturing assures the highest degree of hydrodynamic and aerodynamic efficiency, along with tried and proven production methods.

We know that, even though waiting is difficult, you will find greater satisfaction in operating on Edo allmetal floats. We are doing our best to see that your needs are filled and we anticipate that our increased production rate will eventually meet the demand.



EDO AIRCRAFT CORPORATION . College Point, Long Island, N. Y.

PERSONNEL

Benjamin Watson Named As Assistant to Hardin

Benjamin M. Watson (photo) has been appointed assistant to Thomas



O. Hardin, executive vicepresident of TACA Airways, with headquarters in Miami. He is the great - grandson of Jose Figueroa, first Mexican governor of California. Watson

has spent about 20 years in Mexico and Central America. During the war he was deputy director of transportation for the Army with headquarters in San Francisco.

Bernard Schaffer has been appointed assistant chief engineer at Greer Hydraulics, Inc., to direct design and development of aircraft motive engineer in the research and testing and maintenance equipment. development division of the Atlantic Schaffer was formerly with American Airlines, Inc., as project engineer in charge of maintenance and overhaul equipment.

David B. Acker has been appointed director of manufacturing and Robert A. Lawson assistant general manager of Menasco Manufacturing Co., Burbank, Calif. Acker, who has been an assistant to the president, succeeds Harold F. Schwedes, who resigned. He previously was with General Motors and White Motor Co. Lawson was works manager for Consolidated Vultee Aircraft Corp. at Downey and later at San Diego before joining Menasco.





ENGINEERS HONORED:

Arthur E. Raymond, left, vice-president in charge of engineering at Douglas Aircraft Co., and Ronald M. Hazen, chief engineer of the Allison Division of General Motors Corp., who have been nominated by President Truman to the National Advisory Committee for Aeronautics (AVIATION NEWS, April 22).

The second annual awards of the American Museum of Safety's Arthur Williams Memorial Fellowship have been made to Walter F. Johnson, chief industrial safety engineer of American Airlines, Inc.; and Gilbert F. Tyler, industrial safety superintendent of Pan American Airways. Under the guidance of New York University they will conduct research on safety in aviation ground operations.

Andrew L. Pomeroy (photo) has been promoted to engineering oper-

ations manager of Ranger Aircraft Engines Division of the Fairchild Engine & Airplane Corp. He has been serving as chief project engineer. Before joining Ranger he was an auto-



Refining Co.

Col. Stanley M. Prouty (photo) has been named TWA representative and



chief of administration in the office of Iranian Airways, of which TWA is arranging to purchase 10 percent of the capital stock and to aid in organizing and operating the com-

pany. Col. Prouty is a regular Army officer recently retired from active service.

F. M. McGregor, formerly central region superintendent for Trans-Canada Airlines, has been promoted to operations manager of TCA's trans-Atlantic service. F. J. Young, formerly superintendent of the Atlantic region, succeeds McGregor as operations manager of the central region. T. F. K. Edmison has been appointed eastern region operations manager and E. W. Stull, operations superintendent at Lethbridge, has been promoted to operations manager of western region.

Charles A. Potter has joined Pacific Air Lines as director of engineering and maintenance after resigning as airlines engineer with Wright Aeronautical Corp. in Los Angeles. He was formerly western aviation sales manager for the Texas services during the war.



NEW TWA VICE-PRESIDENT:

Maj. Gen. Arthur R. Wilson who will join Transcontinental & Western Air, Inc., as a vice-president on his release from the Army. Gen. Wilson will be in charge of TWA's European projects. He served overseas during the war and has been War Department representative on several committees, including the Senate War Investigating Commit-

Co., and was an executive with Pratt & Whitney.

Robert H. Wharton, Jr., has been named director of personnel by Delta Air Lines. He was formerly chief accountant. Wesley Warren continues as employment manager. At the same time Todd G. Cole was advanced from general auditor to chief accountant. Fred Herschelman, Jr., has been assigned as chief inspector of the airline. He has been air carrier inspector of maintenance for the Civil Aeronautics Administration.

Lawrence H. Avila has returned to United Air Lines as chief of cargo sales at San Francisco after serving with the ATC. Avila has been with United for 12 years.

Wing Commander Tussell Bannock, recently discharged from the RCAF, has been appointed operations manager and chief pilot of DeHavilland Aircraft of Canada Ltd., Toronto.

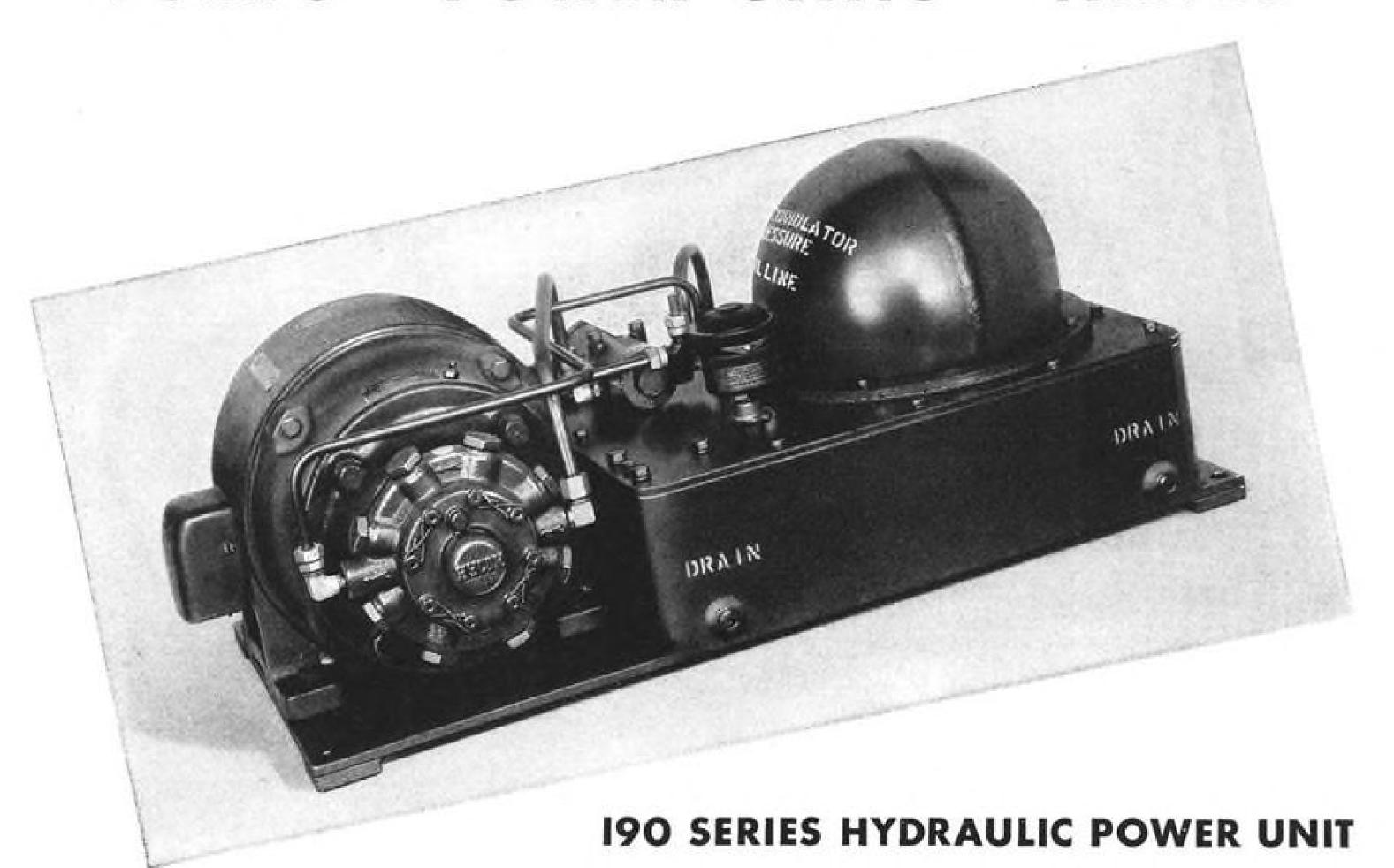
R. Haskell Blaisdell has been named flight service superintendent for the transatlantic Clippers operated by Pan American Airways. He previously was supervisor of passenger service for the line at Lisbon.

Comdr. John Clausel Adams, flight surgeon in charge of the division of aviation medicine of the Bureau of Medicine and Surgery, has been awarded the Legion of Merit for his

AVIATION NEWS • April 29, 1946

HON'S

HIGH PRESSURE HYDRAULICS PUMPS · POWER UNITS · VALVES



Engineering Service Available Available without Obligation



3000 P.S.I. Pump · Motor Unloading & Relief Valve 101/2" Accumulator on 5 Gallon Reservoir

For Continuous Operation on: ROLL BALANCING . PRESSURE SEALS LABORATORY PRESSES METAL & WOODWORKING MACHINES TEST BENCHES & STANDS

STARTING TORQUE RELIEF - TEXTILE SEAM SKIPPERS HIGH PRESSURE DWELL & CURE

THE NEW YORK AIR BRAKE COMPANY

Hydraulic Division

420 Lexington Avenue, New York, 17, N. Y. • Factories Watertown, N. Y.

AVIATION NEWS • April 29, 1946

FINANCIAL

Annual Airline Reports Show Eastern Led 'Big Four' Last Year

Gross revenues rose 44.48 percent and operating profit 45.48 percent; TWA net operating income declines 34.73 percentsharpest drop of group.

airlines show divergent trends. Seven reporting carriers reveal substantial gains in gross revenues, varying from 10.44 percent for stantial reduction from 1944. United to 76.60 percent for PCA.

Translating these gains to operating profits, however, was a different matter. Four of the reporting lines reveal material declines in net operating income, the largest by TWA with a decrease of 34.73 percent. Net income after taxes was equally dis- on Oct. 15, 1945. appointing. The detailed results are > Taxes Were Lower-Federal insummarized in Table I.

▶ Eastern Does Best — Eastern Air Lines turned in the best profitable performance for 1945 among the "Big Four." It increased its gross revenues by 44.48 percent and yet showed a gain of 45.48 percent in its net operating profit.

This clearly demonstrates that Eastern had its operating expenses under control as they did not increase at a faster rate than the gain in revenues. A significant factor was lower depreciation charges in 1945 than in 1944.

▶ Cost Control Is Key—A key measure in determining the relative efficiency of cost control can be found in operating expenses per revenue mile. These costs for 1945 and 1944 are shown in Table II for the seven

The 1945 annual reports of the carriers under review. Eastern clearly has the lowest operating costs at 68.8 cents per revenue mile for 1945 and accomplished a sub-

The company's annual statement, however, reports that operating expenses have risen since August, 1945, due to increased training expenses in anticipation of the acquisition of new equipment and the inauguration of the 40-hour week

come taxes were, with one exception, lower for the reporting airlines. Eastern was the only carrier which paid an excess profits tax. If the company had been exempted from such tax in 1945, its net earnings would have amounted to \$8.20 per share instead of the \$3.56 actually reported.

In all cases, increased gross revenues were due to the gain in passenger traffc. Revenue gains would have been even greater were it not for the two separate reductions in fares, aggregating 13.5 percent, made during the year. The basic fare for the industry now averages around 4.5 cents per passenger mile and represents a reduction of approximately 22 percent since 1941. Some industry observers have ex-

TABLE II Comparative Operating Expenses Per Revenue Mile

	1945	1944
American	\$0.819	\$0.862
Braniff	0.839	0.827
Eastern	0.688	0.759
PCA	0.897	1.03
TWA	0.946	0.926
United	0.871	0.974
Western	0.992	0.991

considerable misgivings about these fare reductions. They maintain that, the carriers, operating at reduced load factors, will be unable to show profitable results.

Loads Increased—All of the "Big Four" operators carried increased mail loads but received less in revenues from this operation. This was due to action of the Civil Aeronautics Board in ordering lower

A typical example of this action is found in United's results. This carrier, the largest transporter of mail, reflected an increase of 17.3 percent in mail ton-miles by a reduction of 12.8 percent in revenues per ton-mile.

Western Shows Great Gain -Western Air Lines showed one of the most outstanding records for the year. Its total revenues increased 68.11 percent, reflecting gains in passenger and mail revenues. The company, as a result of keeping its expenses in line, was able to show an increase of 52.94 percent in net profits after all charges and taxes.

One of the more disappointing reports is that of TWA. Its gain of 33.29 percent in gross revenues were more than offset by the net decline of 34.11 percent in net income.

▶ United Lags—Probably the poorest relative performance belongs to United. This carrier was able to show but a 10.44 percent increase in gross revenues. Reflecting the \$500,000 provision for 1944 postwar reserves, the company actually had a decline of 36.45 percent in net income instead of 31.25 per cent as shown in the table.

The substantial increase of 76.60 percent in gross revenues for PCA loses most of its significance when it is realized that the company was able to show but a 1.08 percent increase in its net operating profit. Lower 1945 taxes brought the gain in net profits to 8.89 percent.

Other significant elements revealed by the airline annual reports will be discussed in a subsequent analysis.

TABLE I—COMPARATIVE ANALYSIS Airline Revenues, Net Operating Income and Net Profit (\$000 omitted)

Net Operating Income Before

Carrier	Gross Revenues			Income Taxes			Net Profit		
	1945	1944	% Increase	1945	1944	$\mathop{\%}_{\text{Change}}$	1945	1944	%Change
American	\$47,416	\$39,244	20.82	\$8,139	\$9,446	-13.84	\$4,339	\$4,396(A)	-1.30
Braniff	7,920	5,708	38.75	1,312	1,402	-6.42	850	774	9.82
Eastern	27,170	18,806	44.48	8,291	5,699	45.48	2,126	1,499	41.83
PCA	10.979	6.217	76.60	750	742	1.08	441	405	8.89
TWA	33.776	25,341	33.29	3.141	4,812	-34.73	1,814	2,753	-34.11
United	39,348	35,630	10.44	7,606	11,359	-33.04	4,204	6,115(B)	-31.25
Western	7,158	4,258		360	302	19.21	208	136	52.94

(A) After \$1,000,000 provision for post-war reserves.

(B) After \$500,000 provision for post-war reserves.

TRANSPORT

ALPA Failure to Supply Evidence Confuses Pilot Strike Situation

NMB chairman says it cannot recommend presidential action because of irregularities in case; asserts walk-out would be "illegal", with board unable to restrain union.

By BLAINE STUBBLEFIELD

Appointment by the President of an emergency fact-finding board to investigate and to recommend terms on which to settle the threatened strike of 1,000 TWA pilots "during the week of April 21," was postponed when the National Mediation Board found irregularities in the case. The President would act only on recommendation of the Board.

Board, confirmed to AVIATION NEWS his statement that the strike would be regarded as illegal as things now

However, if the pilots should strike, regardless of the Board's position, there is no provision in the Railway Labor Act for restraining or punitive action against them. They would be "confronted only by public opinion," in the words of a qualified official.

Vote Evidence Withheld - The Board Chairman said that in response to several requests David L. Behncke, ALPA president, had promised to furnish evidence of the strike vote, but later he refused. Schwartz also said Behncke had refused to give the date of the proposed strike, or to make a statement of ALPA demands for higher pay on 4-engined planes. Behncke previously had failed to detail his demands during a press conference in Washington.

Arbitration Refused—According to Schwartz, ALPA refused a Board proposal of arbitration which TWA agreed on April 3 to accept. Ralph S. Damon, chairman of the airlines wage negotiating committee, previously had made a statement to the same effect. Latest word was that the committee, which has power of attorney to negotiate pilot pay on 13 airlines planning to operate 4its arbitration offer, leaving ALPA engined equipment, is standing on to make the next move.

AVIATION NEWS • April 29, 1946

The mediation board takes the position it cannot recommend appointment of an emergency factfinding board until it has date of the proposed strike, evidence authenticating the union's poll, and a list of its demands.

ALPA Choices Outlined — ALPA had the choice of (1) going ahead with the "illegal" strike; (2) furnishing information so that the H. H. Schwartz, chairman of the Board may recommend an emergency fact-finding board; (3) accepting arbitration by the mediation board; (4) reopening negotiations with TWA, either on its own or with mediation; or, (5) dropping its claims entirely.

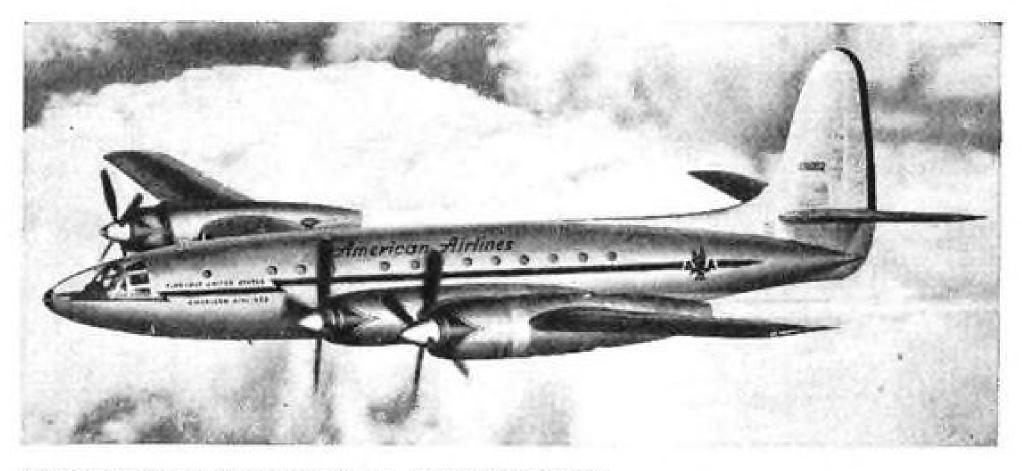
Delay Rumored

Government officials dealing with the airline pilot controversy last week had unauthenticated information that the Air Line Pilots Association had set back its threatened TWA strike to start this week instead of one day in the week of April 21, as previously announced by ALPA President David L. Behncke. They said the controversy was the most confused they ever had encountered, and added that official information on the strike call still was lacking.

CAB Makes Progress In Reducing Backlog

Important progress toward reducing its heavy backlog of pending applications was announced recently by CAB in a comprehensive report on the March 31 status of all formal economic proceedings.

During March, the Board disposed of more applications than in January and February combined. The number of dockets pending was reduced from 1,000 on Feb. 28 to 968 on March 31. Twenty-three new applications were received last month, one case was re-opened



AMERICAN ORDERS 20 RAINBOWS:

American Airlines System expects to receive delivery in the fall of 1947 on the first of 20 Rainbows ordered from Republic Aviation Corp. Where the fast four-engine transports will be used has not been decided, but since they are best adapted to long-range operation they may be used transcontinentally as well as overseas. For greater passenger comfort, the version for American will be a 40-passenger ship, although the plane can carry 46 under a new seating arrangement (Aviation News, Feb. 18). Commercial adaptation of Army's XF-12 reconnaissance plane, the Rainbow has a total range of 4,100 miles at 40,000 ft. in still air at an average speed of 410 mph., according to its designer, Alexander Kartveli, Republic's engineering vice-president, who also designed the Thunderbolt. American says a top speed of 450 mph. at least is guaranteed, making possible flights from New York to Los Angeles in 6 hrs. 45 min. and New York to London in 8 hrs. 30 min. Fastest schedules between these points now are 11 and about 12 hrs., respectively. American's is the second order for Rainbows. First was by Pan American, which ordered six then negotiated for 12

and 56 proceedings were closed, for a net drop of 32.

▶ Backlog Analyzed—Breakdown of the 968 dockets still pending on March 31 showed 547 route applications for scheduled domestic operations, including 461 services using conventional aircraft, 37 using pickup equipment and 49 employing helicopters. Route applications for scheduled foreign service totaled 92, including 85 with conventional aircraft, four with helicopters and three with lighter-than-air craft.

Non-scheduled applications numbered 108; requests for foreign permits, 15; Alaskan route requests, 87 and miscellaneous proceedings including mail rate, interlocking relationship, acquisition and exemption cases, 119.

British Protests Snag TWA Italian Deal

TWA's contract with the Italian government for participation in operating Italy's civil airlines has been blocked at least temporarily by British protests to Rome, and the U.S. State Department has indicated the TWA deal is causing embarrassment in foreign relations.

The British have demanded an equal interest with TWA in Linee Aeree Italiane (LAI), to which the Italian government was prepared to give exclusive ten-year rights for a network of routes in Italy, Sicily and Sardinia.

Want 20 Percent Interest - The British ambassador informed the Italian government that Britain opposes legislative steps which were about to be taken to implement the contract with TWA. He said that Britain, through British Overseas Airways Corp., wants a 20 percent interest in LAI and asked that TWA's 40 percent participation in the company be reduced to a like proportion.

The State Department, to which TWA appealed for protection of its rights against British "pressure," instead of backing the U.S. carrier has branded the contract as "monopolistic." In a formal statement to the Senate Commerce Committee, the State Department said the deal has features of exclusivity inconsistent with U.S. economic and trade policies.

Jack Frye, TWA president, declared last week that his company will not agree to a business partnership with the British government, participation in LAI would make cost or 42 cents per ton-mile, NEWS, March 25).

28 — TRANSPORT



ATC RADAR:

Radar equipment like that shown above in a C-54 used between Washington and Paris is being installed in 300 long-range Air Transport Command planes. Ten of the 60 planes on the North Atlantic run already have been outfitted. The equipment is the AN/APS-10, manufactured by General Electric. Its first use in scheduled air transport occurred this month when ATC's North Atlantic wing took over operation of the Diplomat Washington-Paris run, formerly operated by TWA under Army con-

the whole arrangement unwieldy, inefficient and a losing proposition. ▶ Would Be Irreconcilable—He said the British would insist on partial use of their own equipment, personnel and methods, which would be irreconcilable with U.S. airline practices. TWA, he added, had no objection to formation of another Italian airline with British participation.

While admitting the British previously had been effective in blocking TWA's participation in the civil airlines of Greece and Lebanon, Frye said he thought the Italian contract would go through despite London's objections and estimated LAI operations would begin 60 days after the agreement is ratified.

OPA Agrees to Allow Airborne Food Markup

OPA has acceded to a request by ATA and others that air transportation costs be recognized in regulations on the marketing of fresh fish and seafoods. The agency has permitted wholesalers to add to ceiling

whichever is lower. If a retailer pays the cost, he may make the same addition to his net cost for the

The figure of 42 cents a ton-mile in the new special provisions, effective April 20, is the same as that used by the fresh fruits and vegetables industry, and will apply pending outcome of further experiments. OPA anticipates that most airborne fresh fish and seafood will be purchased by hotels and restaurants in wholesale quantities.

Markup Estimated—For the relatively small amount sold at retail, prices will be higher, the estimate being that consumers probably will pay 5 to 6 cents a lb. more for fresh fish or shrimp, for example, brought inland 1,000 miles than for the same product carried by surface transportation.

Four Airlines Lease C-54's For Use in Pilot Training

Seven Douglas C-54A's have been allocated on a rental basis by War Assets Administration to four airlines for use in pilot training. The ships were leased for six months at \$2,000 per plane per month, subject to WAA recall on 30 days' notice if there is a sale for the planes after the leases have been in effect 60

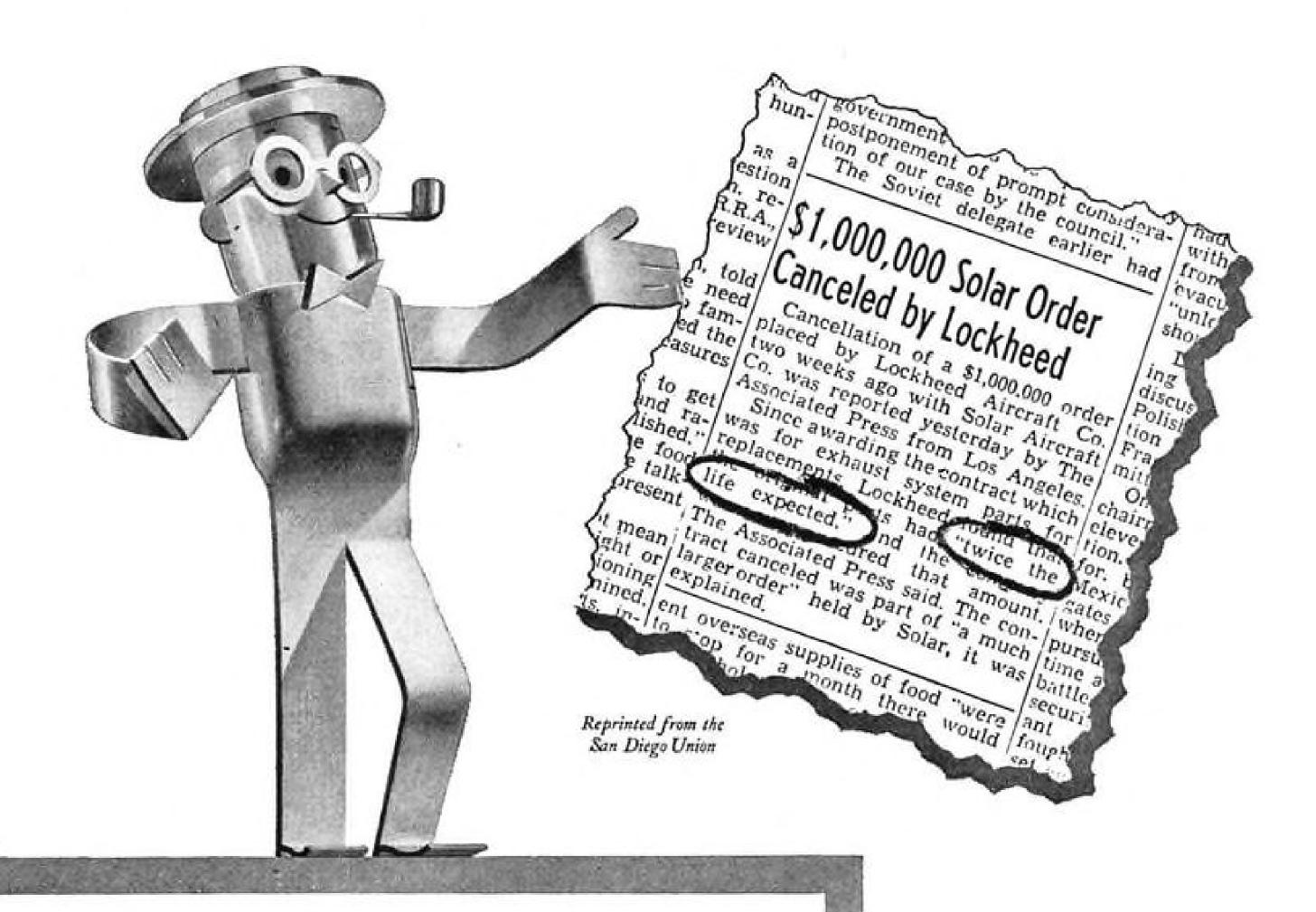
Two each went to Pan American, TWA and United, and the other to Chicago & Southern.

Dother Allocations - In addition, WAA allocated one Curtiss C-46E to Curtiss-Wright Corp. for continuation of an Army experimental project, a Douglas C-54B to Transcontinental Air Express Corp., and a Consolidated PBY-5A to Walter Male, Middleton, Pa. If the C-54B is rejected by Transcontinental Air Express, it will go to Aero Industries Corp., New York City.

Divestiture Completed

Aviation Corp. has sold its controlling interest in American Airlines, thus complying with a CAB divestiture order issued last October. The Board has recognized the compliance in permitting AVCO to remove its remaining 4 percent interest in AA (51,538 common shares) from trust. The divestiture paves the way for implementation of American's contract with Consolidated Vultee for 100 Model 240 twin-engine transports, held up by CAB on grounds that AVCO conasserting that Britain's suggested prices the actual air transportation trolled both companies (AVIATION

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Texas-Oklahoma Report Urges Wide-Scale Feeder Network

Wrenn recommends four companies for new temporary certificates to serve approximately 150 communities; Essair extension, American, Eastern and C&S intermediate stops, also endorsed.

By CHARLES L. ADAMS

than hitherto recommended in any regional feederline case have been endorsed by CAB Examiner Thomas L. Wrenn in the Texas-Oklahoma area.

Four feeder companies — Central Airlines, Inc., Oklahoma City, Okla.: Texas-New Mexico Air Lines, Amarillo, Tex.; Aviation Enterprises, Inc., Houston, Tex., and Aircraft Sales Co., Ft. Worth, Tex.-were recommended for thousands of route miles covering all sections of Texas and Oklahoma and extending into New Mexico, Colorado, Louisiana and Kansas.

Additions Also Approved—Applito its presently - certificated Texas routes and requests of American, Eastern, Chicago & Southern and Braniff for new intermediate stops also were favorably recommended.

Approximately 150 different cities and towns in the southwest, the great majority of which now lack any scheduled air transportation, would be served by the four feeders

Route Mileages

The first three area feeder lines certificated by CAB in the Rocky Mountain and Florida decisions (AVIATION NEWS, April 8) aggregate 3,627 route miles, according to Board estimates. Summit Airways, Laramie, Wyo., will operate the largest system, 1,585 miles, followed by Ray Wilson, Inc., Denver, with 1,549 miles and Orlando Airlines, Orlando, Fla., 493 miles.

Orlando, except for 61-milelong Catalina, has now become the smallest certificated carrier in continental U. S., with a mileage considerably under Essair's 683, Several airlines, however, have mileages smaller than Summit and Ray Wilson, including Colonia, 1,050; Inland, 1,228; All American, 1,432 and Northeast, 1,451. American Airlines has the longest route mileage of domestic carriers, with 10,542.

Local services on a wider scale endorsed by Wrenn. With the exception of Texas-New Mexico Air Lines, which plans to use 10-passenger Lockheed Electras, the service would be provided with 6- 8passenger Beechcrafts.

> Wrenn took cognizance of repeated contentions by applicants that the three-year period for which the temporary feeder certificates are granted is too short a time to provide a satisfactory basis for determining the success of a new local

While refusing to recommend extension to four or five years, he asked that certificates granted in the case run three years from the date cations by Essair, Inc., for additions operations begin rather than from the date of issuance. He also urged the Board to include in the certificates provisions for making changes in service patterns in order that service provided the various communities will conform in considerable measure to their needs as determined by actual experience.

> Opposes MCA Extension—In another phase of his report, Wrenn, noting Mid-Continent Airlines' repeated negotiations for merger with or sale to other carriers, declared that any further extension of MCA's system should be made only after the carrier has evidenced "an ability and desire" to develop and operate its presently-certificated mileage. He accordingly recommended that Mid-Continent's application for an extension of its AM 26 from Tulsa to Houston be denied.

Details of recommendations in the Texas-Oklahoma case are:

Central Airlines, Inc.—Authorization to carry persons, property and mail between Oklahoma City and terminal points Dallas-Ft. Worth, Amarillo, Tulsa, Wichita, Kans., Elk City, Okla., and Texarkana, Tex./Ark.; between Tulsa and Dallas-Ft. Worth and on a circular route originating and terminating at Tulsa, all via numerous intermediate points.

Texas-New Mexico Airlines, Inc. -Authorization to carry persons, property and mail between Trinidad, Colo., and Amarillo and Ft. Worth-Dallas; Amarillo and El Paso; Garden City, Kans., and Amarillo; Albuquerque, N. Mex., and Amarillo; Amarillo and Big Spring, Tex.; Lubbock, Tex., and Albuquerque and Lubbock and Wink, Tex., all via intermediate points.

Aviation Enterprises, Inc.—Authorization to carry persons, property and mail

between El Paso and Brownsville, Tex.; Del Rio and San Antonio, Tex.; Laredo and Houston, Tex.; San Antonio and Brownsville; Houston and San Antonio; Houston and Beaumont-Port Arthur, Tex.; San Antonio and Shreveport, La.; and Houston and Tulsa, all via intermediate points.

Aircraft Sales Co.-Authorization to carry persons, property and mail between Ft. Worth-Dallas and terminal points San Antonio, Houston and Tex-

Essair, Inc.—Amendment to AM 64 certificate to include Midland, Tex., as intermediate point and extend route from Houston to Dallas-Ft.Worth, Abilene, Tex., and Wichita Falls, Tex., and from San Angelo, Tex., to Ft. Worth-Dallas. American Airlines—Amendment to AM 4 certificate to include Midland, Tex., as intermediate point.

▶ Eastern Air Lines—Amendment to AM 5 certificate to include Austin, Tex., as intermediate point.

Chicago & Southern Air Lines -Amendment to AM 53 certificate to include Beaumont-Port Arthur, Longview. Tex., and Texarkana as intermediate

Braniff Airways-Amendment to AM 9 certificate to include Tulsa as intermediate point.

Demand For Policy On Competition Rises

Growing demand for a clearlyenunciated CAB policy toward certification of competitive services is accompanying rapid solidification of the nation's trunkline pattern. Major carriers, beset by proposals to divert large parts of their traffic, are particularly anxious for a yardstick which could be used in evaluating requests for essentially duplicate services.

Recent surveys show that an increasing majority of new non-feeder applications seek either one-carrier throuh services to supplement an existing two-carrier connecting operation, or parallel services to provide competition on a heavilytraveled route.

▶ Mississippi Valley Case Cited—Extent to which requests for duplication of services dominate trunkline applications is shown in the Mis-

British Notes

LONDON (McGraw-Hill World News by cable)—Indian National Airways has ordered six 24-passenger Vikings. . . . Mollison is delivering the first of 26 Percival Proctor V's ordered in India. . . . The Danish government proposes to buy aircraft and equipment for its air force from Great Britain. ... Despite government threats, Scottish Airways still is flying passengers from Prestwick to Belfast at a fare of \$6, half the railway air services fare.

AVIATION NEWS • April 29, 1946

sissippi Valley area case now awaiting an examiner's report.

In this proceeding, Braniff, Continental, Eastern, Mid-Continent, Chicago & Southern and National are requesting new trunkline routes, and in every case the proposed service parallels an important part of another carrier's operations.

Scored By Public Counsel-Pointing to "an element of equivocation and inconsistency" in CAB's past policy, Public Counsel in the Mississippi Valley case recently stated that the Board had not yet attempted to define the sphere within which one-carrier service should be extended or parallel competition is justified, but instead had decided each application on its individual merits.

While admitting that many of the problems involved in cases requesting competition cannot be reduced to a mathematical formula, public counsel declared that identical issues are presented by so many applications that an attempt should be made to establish and apply some definitive policy.

▶ (1) American proposes to pay an

north-south system, joined with

American's east-west routes, would

not form an integrated pattern of

service; (3) Diversion of traffic re-

sulting from the merger would have

a detrimental effect on other car-

riers, especially Delta and Braniff;

financial agreement was made, and considerably more now.

Mexican Expansion Set

tranportation pattern.

ready strong competitive position

would unbalance the domestic air

Specifically, the examiners con-

tended that in purchasing control of

Mid-Continent, American would

receive a total of \$1,699,722 in tan-

gible assets, for which it would ex-

change 97,350 shares of American

stock having a market value of \$6,-

230,400 last September, when the

MEXICO CITY (McGraw-Hill World News)-Both navigating and land personnel of Mexican airlines will be increased considerably when new larger planes now on order are delivered. Pan American's Mexican affiliate, Compania Mexicana de Aviacion, expects to receive new four-engine 51-passenger planes this month and will shift the twoengine equipment now in use on its main routes to others with less traffic. Other lines also have larger planes on contract.

American Airlines has informed the CAB that as soon as the necessary equipment is available it will offer non-stop service between Buffalo and Boston, Buffalo and Cleveland, Cleveland and Cincinnati, Cincinnati and Nashville, and San (4) Enlargement of American's al- Antonio and Mexico City.

Examiners Urge CAB Disapproval of Proposed American-MCA Merger

Report not only opposes current plan but tends to discourage any other deals for control of midwestern line; specific objection is made to financial arrangement.

Prospects that Mid-Continent veners who opposed the absorption Airlines will remain an independent carrier have been heightened by an examiners' report which not excessive price for Mid-Continent's only urges CAB disapproval of the certificates; (2) Mid-Continent's AA Maps New Services company's absorption by American Airlines but tends to discourage any other deals for control of MCA.

Pointing out that MCA's future is not perceptibly dimmer than that of any other carrier in the country, Examiners William F. Cusick and J. Earl Cox have denied that merger with a stronger airline is necessary to prevent financial disaster.

Agree With Interveners - The examiners conceded that an AA-MCA merger would not constitute a monopoly, since the two systems are not competitive. However, they agreed with the 10 airline inter-

Emergency Flights

······

Several Alaskan airlines last week were preparing special charter flights to Seattle for food and other essential supplies needed critically in Anchorage and other cities of the Territory. In view of emergency conditions caused by a longshoremen's strike at six Alaskan ports, CAB has temporarily exempted the carriers from regulations which would otherwise prevent them from making the run. The exemption was granted until June 1, although it may be terminated before or continue beyond that time.



FOR WORLDWIDE AIR CARGO:

First of more than 50 self-contained, hydraulically driven conveyors mounted on Case tractors has been delivered to American Airlines, at Newark. Mercer Engineering Works, New York, the builder, says some may be used abroad by American Overseas Airlines. With 20-in. wide belt, capacity is 1,000 lb. distributed load at 60 ft. per min. Conveyor is 21 ft. long and can be elevated to the 10 ft. 6 in. height from ground to a DC-3's forward compartment. Belt is operated by a 500- to 600-lb. hydraulic system. Electric starter and searchlights are on a storage battery. Safety features include automatic stoppage if conveyor touches

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SHORTLINES

▶ Colonial's stockholders have voted to increase authorized stock capital stock from 500,000 to 1,000,000 shares. Outstanding shares now number 365,-000. No new issue is contemplated, approval of the increase being requested in event of future expansion. > Eastern Air Lines carried two plane-loads of officials and press and picture correspondents on the occasion of President Truman's recent visit to Hyde Park to honor the late President Roosevelt. The company believes it the first time a commercial airline has participated in such a

Northwest is reported interested, though it has not bid, in purchase of a Boeing plant at Renton, Wash., built at a cost of \$21,000,000 and now

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surplus. . . . The line set a new high in revenue passengers during March with a total of 38,520. Previous record was recorded last October with 36,702.

Pan American expects North Atlantic passengers to average at least 2,000 a month this year. Passenger crossings in 1945 numbered 19,963. ... PAA has 6,000 employees and annual payroll of \$18,000,000 in Miami.

Panagra estimates that addition of a reconverted DC-3A has increased its cargo carrying capacity 38 percent. . . . For completing 1945 without accident or fatality to passengers or crews, the company recently received the annual aviation safety award of the Inter-American Safety Council.

▶ PCA's 300 pilot captains and copilots are more than half former service men. . . . Fare reductions have been announced from Baltimore and Washington to Birmingham-Huntsville.

TWA is building a \$500,000 nose hangar at Los Angeles Airport to house its entire West Coast mainte-

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nance shop, as one step in transfer of its Southern California terminal from Burbank to the municipal field. . . . The carrier recently concluded its wartime assignment with its 9,500th ocean flight for ATC. Takeoff was from Washington.

▶ United has announced a dividend of 50 cents per share on common stock, payable July 1 to stockholders of record June 10. On April 1, 1,848,-041 shares were outstanding.

CAB SCHEDULE

April 29. Hearing in Northwest Airlines' route consolidation case. (Docket 2018.) April 29. Hearing in PCA-Northeast merger

case. (Docket 2168.) April 30. Hearing in Trans-Canada Air Lines' applications for foreign air carrier permits. (Docket 2253 et al.)

May 3. Prehearing conference in Eastern Air Lines' application for consolidation of AM 10 and 40. (Docket 1971.) May 6. Briefs due in Kansas City-Memphis-Florida case. Extended from April 8. (Dock-

et 1051 et al.) May 6. Briefs due in Arizona Airways' case for acquisition of TWA's AM 38, (Docket 2005.) May 6. Exhibits due in Chicago-Scattle route

case. (Docket 1303 et al.) May 6. Oral argument in North Central case. (Docket 415 et al.)

May 9. Briefs due in American Airlines' application for acquisition of Mid-Continent Airlines. (Docket 2068.) May 13. Rebuttal exhibits due in Chicago-Seattle

route case. (Docket 1303 et al.) May 15. Briefs due in Middle Atlantic area case. (Docket 674 et al.)

May 15. Exhibits due in Pan American Airways' application for domestic routes. Postponed from April 15. (Docket 1803.)

May 15. Prehearing conference in United Air Lines' applications for Detroit-New York and Allentown, Pa.-Detroit non-stops, (Dockets 2216 and 2277.)
May 16. Briefs due in route consolidation cases

of Braniff, TWA, Chicago & Southern and American. Postponed from April 25. (Docket 1154 et al.)

May 20. Exchange of exhibits in Boston-New York-Atlanta-New Orleans case. Extended from April 19. (Docket 730 et al.) May 20. Briefs due in Universal Air Travel plan case. (Docket 1939.)
May 22. Briefs due in Texas-Oklahoma area

case. (Docket 337 et al.)

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Aircraft Supply STILLWATER, OKLAHOMA June 10. Hearing in Boston-New York-Atlanta-New Orleans case, Tentative, (Docket 730 June 14. Rebuttal exhibits due in Pan American Airways' application for domestic routes. Postponed from May 15. (Docket 1803.)

May 29. Exchange of rebuttal exhibits in Bos-

June 1. Exhibits due in Arizona-NewMexico

June 3. Hearing in Chicago-Seattle route case.

aren case. (Docket 968 et at.)

(Docket 1303 et al.)

ton-New York-Atlanta-New Orleans case.

Extended from Apr. 29. (Docket 730 et al.)

New Mexico area case. (Docket 968 et al.) July 1. Hearing in Pan American Airways' application for domestic routes. Postponed from Jue 3. (Docket 1803.)

June 21. Rebuttal exhibits due in Arizona-

July 8. Hearing in Arizona-New Mexico area case. Tentative. (Docket 968 et al.)

CAB ACTION

The Civil Aeronautics Board:

· Permitted Mid-Continent Airlines to inaugurate non-stop service between Kansas City, Mo., and Shreveport, La., and between Omaha and Minneapolis/St, Paul, both on AM 26. Revoked orders authorizing suspension of service by United Air Lines at Lincoln and

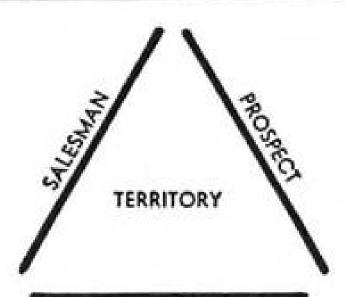
Grand Island, Neb., on AM 1. Permitted American Airlines to intervene in application of Northwest Airlines for route consolidations (Docket 2018).

• Denied Caribbean-Atlantic Airlines application for temporary exemption to permit operations between Christiansted, St. Croix, Virgin Islands, and Curacao, N.W.I., and between San Juan, P.R., and Kingston, Jamaica (Dockets 2249 and 2250).

 Consolidation foreign air carrier permit cases of Lineas Aereas Taca de Colombia and Aerovias Nacionales de Colombia for purposes of decision (Dockets 1824 and 1983).

• Denied petition of Moore-McCormack Lines that Board withdraw any recommendations it may have made to the President in the Latin American case (Docket 525 et al.) and refused to reopen proceeding.

· Reopened Aerovias Nacionales de Colombia's case for foreign air carrier permit to receive evidence in support of an amndment proposing an additional route between Barranquilla, Colombia, and New York (Docket 1983).



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The Need for an Air Policy Board

THE ARMY AIR FORCES has announced its own pro- ■ posal for a national air policy. It suggests a 10-year program for a \$600,000,000 military Air Engineering Development Center to test supersonic aircraft and missiles, and their components and equipment. The tremendous plant would be separate from the present AAF development base at Wright Field. It would set up an entirely new category—military engineering development research.

Simulaneously, the National Advisory Committee for Aeronautics proposes a new \$200,000,000 National Supersonic Research Center of its own. This base would accelerate fundamental research only, separate from its three existing laboratories.

Thus, two great agencies propose aggregate public expenditure of close to \$1,000,000,000.

But industry itself, rapidly burrowing into the complex problems of supersonics, will need other millions for applied research, to start and maintain prototype and quantity production.

Other contributions in the form of reports have been issued in the past year by outstanding groups. Congress must accept the responsibility for coordinating all such proposals and determining our future national air policy. The NEWS believes it can receive most help by depending upon a National Air Policy Board, a distinguished group of leaders similar to the Morrow Board and that proposed by Senator Mitchell.

A billion-dollar expenditure in peacetime may arouse criticism in some quarters. Yet in the five fiscal years ending in 1944 total outlay for research and development was approximately \$685,000,000 for the NACA, Army Air Forces, and Navy Bureau of Aeronautics. The opinion is unanimous among our aeronautical and military leaders that our sights were too low. Even in the pre-supersonic era, we barely won the air war. It is nearly a year since the fall of Germany. Yet we now have only 13 supersonic wind tunnels—fewer than the Nazis were running. Several German tunnels under construction would have provided tests for 7,500 mph.

In its announcement of the report by the Air Material Command, divulged by Maj. Gen. Curtis LeMay, Deputy Chief of the Air Staff, the AAF asserts, "Fundamental research in aeronautics must never again be interrupted. There must be adequate development facilities, independent of our research facilities."

The Army Air Forces says it will ask Congress for \$300,000,000 shortly, with ultimate cost of its project set close to \$1,000,000,000. A base of 100 sq. mi. is proposed for "continuous developments . . . to air power in its broadest sense," covering these fields:

Supersonic craft, piloted and pilotless; winged missiles.

- Atomic power propulsion of aircraft and missiles; other atomic devices.
- Flight and survival equipment above the atmosphere, including "space bases" anchored far above the earth.
- Destructive or death rays, and rays for control purposes, using light, heat, or magnetic energy.

Aircraft and missile technique development.

Eight facilities are proposed:

Fluid Dynamics-Five wind tunnels providing up to 7,500 mph.; thrust measurements perhaps up to 1,000,000 lbs.; components laboratory.

Thermodynamics—Heat transfer and insulation; velocity pressure distribution and boundary layers, combustion chamber data, nuclear fission; rocket or jet reaction stands.

Structure and Materiel-Testing and processing structure and parts of aircraft and missiles under extreme temperatures and pressures.

Electronics and Wave Phenomena-Radio control, telemetering, navigation, radar, loran, television, homing devices.

Physiology-Effect of acceleration, atmospheric conditions, vibrations, noise and odors on human bodies, under simulated flight conditions.

Fuels and Propellants-Equipment for present and future problems, including those in developing rocket and nuclear energy propellants.

Instruments-Five test areas for analysis of optics, mechanics, electronics, and development of instruments using high energy radiation.

Flight Engineering-Complete airport equipment for full-scale testing of man-carrying units, plus bases for launching missiles.

The base would be conducted by a board representing the services and others.

The NACA's own program for a National Supersonic Research Center covers at least five years. NACA already has six wind tunnels. Five more are in construction, two of which will permit attaining Mach number 1.8. Proposed in the newest program are four units, including one of 20 to 30 ft., with Mach number 0.8 to 1.6. Aerodynamic research will be accelerated on configurations, stability and control; factors in maneuverability; propulsion research.

Necessity for a long-term supersonic program is well pointed up by NACA, which is convinced that:

- (1) Supersonic piloted and pilotless aircraft will dominate the security problem of the future.
- (2) Successful development of supersonic aircraft requires the solution of many difficult scientific problems brought about by the unusual conditions of speed, atmosphere, control, and propulsion under which this type of aircraft operates.
- (3) The necessary superiority of these aircraft will come only from thorough, fundamental research in advance of the development.

We must have research facilities undreamed of before the war. We are hardly in the first stages of a technological revolution. We must not be caught sleeping again, as the Germans found us, when their jet aircraft and missiles began to take the air.

But how much public money should be spent? Which agencies will participate in the program? How shall they be coordinated for maximum productivity? How much should industry receive for vital applied research?

These problems emphasize the urgent necessity for a National Air Policy Board to advise the Congress. ROBERT H. WOOD

AVIATION NEWS • April 29, 1946



The Birdmen's Perch

By Major Al Williams, ALIAS, "TATTERED WING TIPS," Gulf Aviation Products Manager, Gulf Bldg., Pittsburgh 30, Pa.

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34—EDITORIAL





PRECISION PRODUCTS
AND
ENGINEERED SYSTEMS
FOR AIRCRAFT

HESE three G-E aircraft-instrument engineers, Messrs. Savage, Lynch, and Princi, were prominent in the development of the new compass-controlled directional gyroscope shown in the foreground. This is the first directional gyro that functions as if it had universal freedom of motion. It is not disturbed by sharp dives, spins, rolls, or other acrobatics. Teamed with the compass it becomes part of an electric instrument system that gives an airplane sustained and accurate directional heading in autopiloted flights. The system is so designed that errors usually occurring when compass and gyro are separate are automatically corrected. However, both can work separately if necessary.

In a plane, the compass is located near the wing tips and is electrically connected with the gyro which is considerably smaller than earlier models, and weighs less than the one now in general use. Unaffected by the earth's rotation, it points a steady hand to the set course, and frees the pilot from another routine task. Other electric instruments are being constantly designed by General Electric—including those for jet-propelled planes. Our engineers tackled many "can't-be-done" tasks during the war years. They'll be glad to help you with yours in the years to come. Apparatus Dept., General Electric Company, Schenectady 5, N. Y.

