Aviation News

McGRAW-HILL PUBLISHING COMPANY, INC.

MARCH 18, 1946

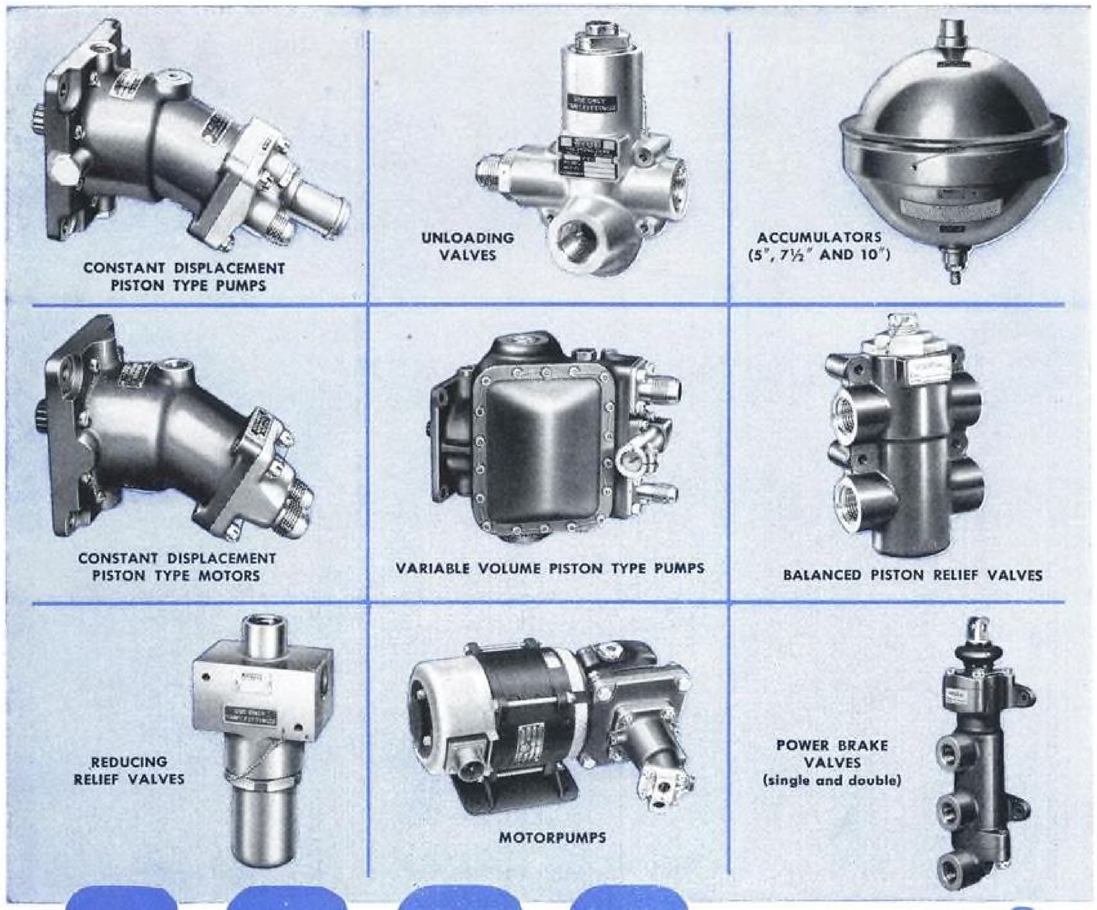
Conference Speakers: *Among the discussion leaders at the Joint Air Transport Users Conference last week in Washington were, left to right, E. Merritt Anderson, owner of Anderson Air Activities, Milwaukee, charter operator; Harry R. Playford, president, U. S. Air Lines, Inc., St. Petersburg, Fla., contract freight operator; Joseph J. Mitchener, Jr., executive director, Feeder Airlines Association, Washington, D. C.; Bowman R. Otto, president, Feeder Airlines Association and president, Otto Airlines, Inc., Newark, N. J., intrastate operator; and Albert L. Zimmerly, president, Empire Airlines, Inc., Lewiston, Idaho, intrastate operator.* (Story on Page 7)

Rockets Exceed 43.5-Mile Altitude In Army Tests

16-ft. experimental models designed by Caltech laboratory believed most efficient in world..Page 9

Considerable Aero Stocks Sold By Firm Officials

SEC compilation shows liquidation was broad in aviation group in December.....Page 16



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ENGINEERS AND BUILDERS OF OIL HYDRAULIC EQUIPMENT SINCE 1921

THE AVIATION NEWS

Washington Observer

AAF REORGANIZATION—An efficient air force-in-being as proposed by Gen. Spaatz (story on Page 10) is a prime necessity in an unsettled post-war world, a situation which friends of aviation in Congress recognize. But there still are too few national legislators who realize the importance of such an air force combined with a broad program of research and development. The program outlined by Gen. Spaatz will require a sizeable appropriation, but insurance premiums sometimes are costly too, although valuable.

★

ECONOMY VIEW—Chairman Cannon (D., Mo.) of the House Appropriations Committee stated his views frankly on expenditure cutting to Air Forces officers during recent hearings before his committee on additional military cutbacks. He said that "if we are going to make a mistake we would rather, in view of the present status of federal finances, make the mistake of taking too much money away than of leaving too much money in,"—a view regarded in more progressive quarters as extremely short-sighted, particularly so far as aviation is concerned.

★

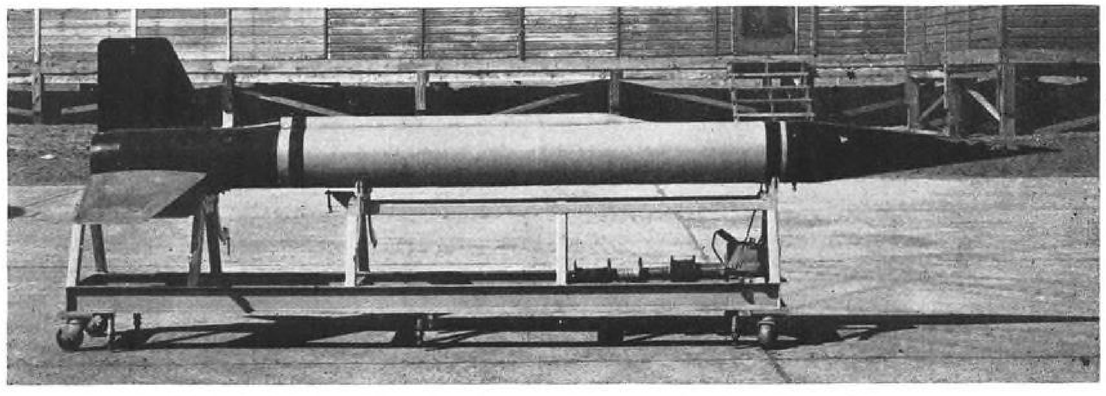
PROGRESS—Gen. Spaatz proposal for an Air University is indicative of a changed and in this case far-sighted view of things to come. The Air University would be a post-graduate school patterned somewhat after the Staff and Command School and the Army War College and would train junior officers after West Point. The task of the peacetime AAF, difficult as it is, will be more so, in the view of many Washington observers, unless the Air Force is on a co-equal basis with the Army Ground Force and the Navy. If there is to be a separate Air Force, then there would have to be more than a post-graduate school—there would have to be a West Point of the Air.

★

SENATOR AND THE GENERAL—As expected, Sen. Elbert D. Thomas' *American Magazine* blast at the AAF produced repercussions at the Pentagon Building. In a special statement, Gen. Spaatz said he, as a user during the war, and not as a planner of equipment, was eminently satisfied. What makes the Thomas article important is his position as chairman of the Senate Military Affairs Committee, with which Spaatz and the AAF will have to deal. Thomas' point that the equipment planning of the AAF pointed to the need of civilian authority over that phase of AAF action, is believed to be tied in with the proposal for unification of the armed services. The argument has been advanced that a single commander of ground, air and sea forces would have too much power.

★ ★ ★

AIRPORT BILL—It is practically certain that the long-pending Federal-aid airport legislation which has been in a House and Senate conference committee for months will be approved shortly and returned to both houses for final enactment. Informal agreement has been reached on the House method of granting funds to any public agency, rather than the Senate formula of channeling funds to both states and municipalities. Senator Owen Brewster (R., Me.), die-hard states advocate, may oppose the conference report on the floor but will be defeated. Sen Pat McCarran (D., Nev.) and Rep. Clarence Lea (D., Calif.), authors of the legislation, now are engaged in ironing out minor differences in their respective bills.



One of the Army-Caltech rockets which have soared more than 43.5 miles. (Story on Page 9)

AVIATION NEWS

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CONTENTS

Editorial Headquarters
National Press Building
Washington 4, D. C.

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

Pacific Coast Office, 621 So. Hope St., Los Angeles

Published weekly by McGraw-Hill Publishing Co., Inc. Price 50c a copy. Allow ten days for change of address. Subscription rates—United States, Mexico and Central and South American countries, $5 a year, $8 for two years, $10 for three years. Canada, $6 a year, $10 for two years, $12 for three years. All other countries $9 a year, $14 for two years, $18 for three years. Entered as second-class matter July 31, 1943, at the Post Office at New York, New York, under the Act of March 3, 1879. Printed in U. S. A. Cable Address "McGrawhill, New York." Please indicate position and company connection on all subscription orders.

JAMES H. McGRAW, Founder and Honorary Chairman; JAMES H. McGRAW, Jr., President; CURTIS W. McGRAW, Senior Vice-President and Treasurer; HOWARD EHRLICH, Vice-President and General Business Manager; EUGENE DUFFIELD, Editorial Assistant to the President; JOSEPH A. GERARDI, Secretary, and J. E. BLACKBURN, Jr., Vice-President (for Circulation operations). 330 West 42nd Street, New York 18, N. Y. Branch offices: Chicago, 520 North Michigan Ave.; San Francisco, 68 Post Street; Los Angeles, 621 So. Hope Street; Aldwych House, Aldwych, London, W. C. 2; Washington; Philadelphia; Cleveland; Detroit; St. Louis; Boston; Atlanta. Return Postage Guaranteed. Copyright 1946. All rights reserved by McGraw-Hill Publishing Co., Inc.

Volume 5, Number 10

Advertisers Index

News at Deadline

CAA Defends Repair Policy

In reply to criticism of its plans to warehouse a five-year supply of parts for and to do repair work on its 231 aircraft abtained from surplus stocks, CAA states its program will save the taxpayer about $9,000,000 over a five-year period. In rebuttal, the Aeronautical Training Society, leading opponent of the plan, declares that all of the claimed saving of $1,754,000 per year except $362,000 is based on the fact that another government department has turned over to CAA surplus equipment and parts. A CAA spokesman asserts the saving of $362,000 on repair and maintenance is based on Army and Navy service records for the types of aircraft concerned, and the wage rate paid by government. If the work on the 231 aircraft were to be done by private contractors, it would cost the government more than $362,000 per year. This does not mean that in the past CAA has been paying the industry more than $362,000 per year as the planes now involved are different. Previous work was let on contract by regional offices and CAA has no coordinated records on the cost. CAA also points out that it will continue to contract with the industry for major engine overhauls. ATS, however, does not consider this significant, as all the aircraft are in new, or practically new, condition.

Bowman Resigns NATA Post

Leslie H. Bowman, of Aircraft Sales Co., Ft. Worth, has resigned as chairman of the board of the National Aviation Trades Association. This is the second resignation of a top NATA official in three weeks, Beverly Howard having quit as a vice-president and director. Both will continue as members of NATA. With the latest attempt to revive NATA (AVIATION NEWS, Feb. 18) lagging, there are reports pointing toward the formation of a new trade group to represent aviation distributors.

Convair Plans Feederliner

Consolidated-Vultee Aircraft Corp. will announce about April 1 its plans to enter the short-haul transport manufacturing field. Convair has begun design studies on a feederline plane, but passenger capacity has not yet been decided.

▸ Acceptances by the services in February of 175 warplanes involved 119 Army and 56 Navy craft, with a total airframe weight of 1,046,600 lbs. January acceptances were 163, weighing 1,166,200 lbs. Army models comprised 7 B-29's, 4 North American P-82's, 3 Bell RP-63G's, 41 Lockheed P-80A's, 4 Fairchild C-82A's, 1 Curtiss C-46G, 4 Sikorsky R-5A's and 55 Culver PQ-14A special purpose target planes. Navy acceptances: 2 Martin PBM-5's, 3 Douglas XBT2D-1's, 5 Grumman F7F-3's, 1 Goodyear F-2G-1, 21 Chance-Vought F4U-4's, 24 Grumman F8F-1's.

▸ Aircraft modification companies await some indication that the Navy will begin releasing as surplus its large supply of Lockheed *Lodestars*. At last report, the government disposal agencies had disposed of all except 20 of the Army's 160 surplus planes of this model, and it was expected that the final 20 would be bought almost as soon as they are released. While the demand for all twin-engine surplus aircraft continues heavy, the *Lodestar* has been popular for modification, both as a 14-passenger transport and as an executive plane. A *Lodestar* bought from surplus for $22,000 to $25,000 can be modified for airline use for $60,000 or less. Plush executive modifications cost corporations from $80,000 up to $130,000 or more, and include such fittings as mahogany trim, desks for stenographers, and refrigerated liquor cabinets.

▸ Howard Hughes has purchased for $856,500 the 298,000-sq. ft. air conditioned government-owned building in which his giant flying boat is being assembled. The purchase from RFC was consummated by his Hughes Tool Co. of Ft. Worth. What Hughes will do with the massive structure, which has a maximum ground clearance of 71-ft. is conjectural. Popular supposition on the West Coast is that he might convert the building to a sound studio for movies, although those close to Hughes doubt this.They believe he will adapt the flying boat hangar and adjoining buildings to one or more industrial enterprises.

▸ Among other RFC aircraft facility sales and leases last week was the leasing for five years of two assembly buildings of the sprawling Douglas Long Beach plant to Kaiser-Fraser Corp. as an auto assembly plant. The lease is on a sliding scale, rising to maximum of approximately $250,000 a year.

▸ Civil Aeronautics Administration regional offices have been instructed to review all instrument approach procedures, and it appears likely that they will increase initial and final approach altitudes to conform with the IATCB formula.

▸ Persistent reports in reliable financial circles indicate that the 25,000 shares of American Airlines stock recently disposed of by Aviation Corp. were sold to Amon Carter, a director of American, although he has not yet filed such a report with the SEC.

▸ Convair, Martin and others contemplating use of exhaust jet thrust are confronted with disposing of a critical noise problem. Those who have flown in military planes using exhaust jet stacks pronounce the noise level extremely irritating. The present plan of leading the exhaust through cowling, or ducts, to the trailing edge of the wing does not appear to be a solution. Some consideration is being given by design engineers to a jet pipe extension which will trail the wing at some distance. The speed boost of jet thrust is so important to commercial transport builders that top engineers are giving the noise bugbear primary attention.

▸ Fairchild has decided against production of a passenger version of its well known C-82 Packet, for an indefinite period.

▸ His purchase of 509 surplus aircraft recently (the total supply at Stillwater, Okla.), was clarified by Paul Mantz, Los Angeles charter operator, by organization of the Mantz-Heath-Hapgood Aircraft Co., which will operate at the Stillwater surplus base. The firm will sell engines, instruments and airframe accessories scavenged from the unflyable planes purchased, and will market flyable bombers and fighters to those inclined to buy them. Associated with Mantz are J. W. Heath of Henrietta, Tex., hog rancher, and L. B. Hapgood, Henrietta cattleman.

What Airline Executives Say About the New Martin Transports

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NUMBER 10 **Aviation News** March 18, 1946
McGRAW-HILL PUBLISHING CO., INC.

Uncertificated Operators Discuss Steps Necessary to Expansion

75 leading figures in field examine prospects at Joint Airport Users Conference, sponsored by National Aeronautic Association; see growth despite current confusion and problems.

By WILLIAM KROGER

Despite confusion as to their exact legal status, and a multiplicity of problems inherent in a young industry, operators of contract, non-scheduled and intrastate air services see themselves as being the medium through which will be attained the long-desired goal of linking every sizeable community by air.

At the Joint Air Transport Users Conference last week in Washington—the first chance for general expression of the uncertificated operators' thinking since the CAB hearing on regulation of non-scheduled aviation—about 75 outstanding figures in the field discussed objectives and pointed the way toward their realization. The conference was sponsored by the National Aeronautic Association.

Banking On New Equipment — Like the trunkline carriers, uncertificated operators are banking on new flying equipment to reduce operational costs. Objective, however, is not competition with the trunk lines. Expansion of the air network, it was pointed out, would in fact be an auxiliary to trunk carriers.

Charter operators, for example, cannot compete with scheduled air transport, it was stated by E. Merritt Anderson, owner of Anderson Air Activities, Milwaukee. In his state, he said, the average fixed-base operator uses a four-place single-engine aircraft at an average charge of 20 cents a mile. With new, twin-engine equipment and maximum utilization at least 1,200 hours per year, Anderson expects to reduce that charge.

Costs Have Many Angles—However, reduction of direct flying costs in itself will not bring charges down to a level competitive with bus and rail fares, it was emphasized by several speakers.

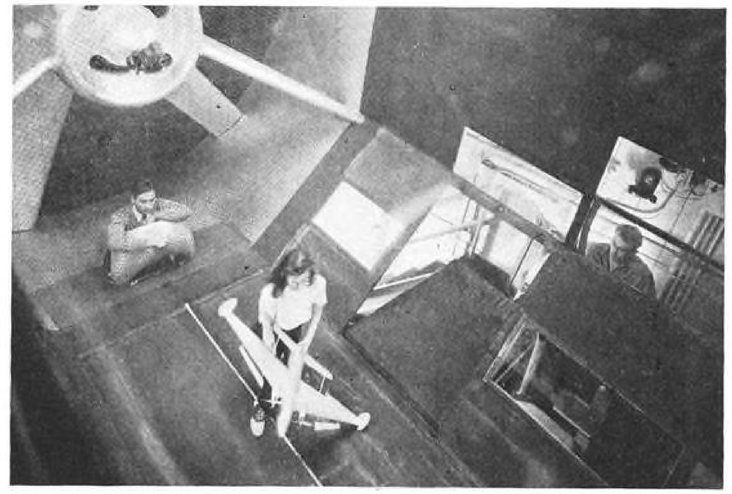
Ivar C. Peterson, technical director of the Aircraft Industries Association, asserted that manufacturers in the past five years have improved aircraft to such an extent that direct flying costs have been cut in half. On the other hand, he said, ground and indirect costs are increasing at such a rate they threaten to wipe out the economies of new planes.

Zimmerly Agrees—A similar thesis was put forth by Albert L. Zimmerly, president, Empire Airlines, Inc., Lewiston, Idaho, who finds it discouraging that some communities expect to make airport charges that will pay for their fields. He feels there is justification "for granting free use of airports to short-haul carriers until such time as they are on their feet financially."

Albert F. Beitel, Washington attorney for several carriers, expressed the belief that this year there may be as many as 12 feeder lines certificated by CAB.

Needs Outlined—On the basis of his extensive experience in the operation of a successful short-haul intrastate airline, Zimmerly highlighted its financial aspects.

"The smallest short-haul airline will need a minimum capital of $500,000 to finance and operate," he stated, adding that an operator will need a fleet of four 14-passenger planes. Each plane, operating 9 hours daily, should develop passenger



FREE-FLIGHT TUNNEL:

An unusual airplane model with a fixed auxiliary airfoil projecting ahead of the leading edge of the wing, is shown under test in the free-flight tunnel at NACA's Langley Field, Va., laboratory. The free-flight tunnel, only one of its kind, has a 12-ft. octagonal test section which pivots within a 60-ft. sphere, permitting the remotely-controlled models to fly freely under their own power in a wide range of glide or climb angles. The model is controlled by a "pilot," shown standing in "cockpit" with windshield opened. The tunnel is rotated within the sphere under control of the operator, at right.

revenue between 35 and 40 cents per airplane mile.

The overall expense should not exceed 65 cents per mile, which would leave a gap of from 25 to 35 cents per mile to be made up by mail pay in order to give a profit of about 5 cents per airplane mile.

Mail Pay Seen Necessary — Mail pay may be necessary to get feeder lines over the initial hump in the opinion of Joseph J. Mitchener, Jr., executive director, Feeder Airlines Association.

"Such an expenditure would not be without precedent," he said, "even though many people seem to look with horror upon anything which involves 'governmental subsidy.'" He stressed that airmail now returns a profit to the Post Office, and has paid off the total expenditure on airmail.

Duckworth Stresses Safety—In the face of a warning from Joseph B. Duckworth, director of CAB's Safety Bureau that it is the obligation of every pilot and operator, and not of the government, to assume primary responsibility for safety, operators agreed that the safety factor probably is more important to charter services than to airlines.

Mitchener stated that a charter operator who has even a minor accident—resulting in no personal injury—on his own field may drive away all business for as long as six months.

Cites Accident Trend—Duckworth declared that investigation showed a trend toward operational accidents. These chiefly involve faulty maintenance and operational procedures. In the case of the latter, he underlined the importance of flight planning.

While there was no expressed opposition to the proposed Part 42 of the Civil Air Regulations which would lay down safety rules for non-scheduled flying, the disapproval of economic regulations that has been put forward before was repeated.

Burgess Opposes Plan — George Burgess, assistant to the assistant secretary of Commerce for air, opposed this type of control and cited the history of the truck and bus industry to point out how economic regulation now might strangle nonscheduled aviation.

However, Burgess called for support for passage of H. R. 3383, a measure of Rep. Clarence Lea (D., Calif.), which would bring all flying, including intrastate, under government regulation. In discussing regulation, Anderson declared he feels that the Federal government should supersede state governments in air regulation. Citing several court cases bearing on interstate commerce, Anderson inclined toward the view that no intrastate operator can escape the application of the commerce clause of the U. S. Constitution.

Centralization Seen — Although there are perhaps as many as 500 air service operators functioning today, it appears that when the cargo phase of this potentially great business finally jells it may be in the hands of a relatively few large contract air companies.

Harry Playford, president of U. S. Air Lines, Inc., St. Petersburg, Fla. —solely a contract freight operation—explained why under questioning. Maintenance is paramount in this type of operation in order to provide regularity of service, he said. The contract carrier cannot wait for overhaul and other type of servicing.

Playford stated his own company is contemplating the establishment of an engine overhaul and maintenance base which would cost between $150,000 and $200,000.

Part 42 Action Due

Part 42 of the Civil Air Regulations — safety regulation of nonscheduled carriers—will be promulgated by CAB without any further hearing or circularization of the industry, Joseph B. Duckworth, director of the Safety Bureau, told the Joint Air Transport Users Conference last week. Lack of personnel, and the pressing need for the rules are the reasons.

However, effective date probably will not be before summer. It will be perhaps a month before Part 42 will go to the Board for action, and the Board will allow sufficient time between adoption and effective date to give the industry a chance to register complaints, and to give CAA time to set up machinery to administer the regulations. It is extremely unlikely that the suggested ban on single-engine equipment will be adopted.

DC-3 JATO TESTS:

H. A. Toomey (kneeling), chief of CAA's Sixth Region flight engineering and factory inspection division, and E. E. Nelson, sales manager and chief of flight of Aerojet Engineering Corp., examine installation of the company's Jato rockets on the underside of a DC-3. Tested recently for CAA certification at Ontario, Calif., a Jato-equipped DC-3 cleared a 50-ft. obstacle in 2,400 ft. with one engine cut out (AVIATION NEWS, *March 11*).

American-MCA Merger Opposed By Goodkind

Control of Mid-Continent Airlines by American Airlines would be in conflict with fundamental public policies of the Civil Aeronautics Act, according to CAB Public Counsel Louis W. Goodkind.

In a brief urging denial of the proposed merger, Goodkind argued that the absorption would create a badly integrated combination of systems, cause a substantial diversion of traffic from other carriers and result in coordination of Mid-Continent's North-South traffic to American's East-West schedules to the detriment of connections by competing lines.

Altitudes of More Than 43.5 Miles Reached in Army Rocket Tests

Designed for Ordnance Department by Caltech jet laboratory head, 16-ft. experimental models probably are most efficient ever produced; give U. S. dominant research position.

By SCHOLER BANGS

Altitudes of "at least 230,000 ft." (43.5 miles) have been reached by slendor ½-ton rockets designed for Army Ordnance by Dr. Frank J. Malina, acting director of the Jet Propulsion Laboratory of California Institute of Technology.

They probably are the most efficient projectiles of their type ever built, and may be expected to give the United States a dominant position in upper atmosphere research.

Performance Restricted — How much higher the rockets may have gone, above the altitude determined by radar tracking, is conjectural, and Ordnance officers insist that details of performance and construction temporarily remain restricted.

Although the German V-2 rocket is credited with having reached an altitude of 60 miles in trajectory flight, the American rocket, by virtue of its comparatively small size and propellant load, may be considered to be a "stepping stone" toward rocket performance far exceeding the results attained by other nations.

Specifications Given — It weighs approximately 1,000 lbs., has a length of 16 ft. from its needle-pointed supersonic nose to trifinned tail, and is 12 in. in diameter. A liquid propellant, hydrocarbon and oxidizer, is used.

Under the amusing security code designation of "WAC Corporal" the project was initiated in 1944 and a number of the rockets were assembled by Douglas Aircraft Co. at Santa Monica, Calif. Flight tests, all successful, were begun last summer at the Army Ordnance Department's White Sands Proving Ground at Las Cruces, N. M., which is under the command of Lt. Col. H. R. Turner.

All flights have been vertical from a tower launching track.

Valued As Instrument Carrier— Col. B. S. Mesick, Ordnance Department liaison officer at Caltech and coordinator of the project, believes that the "WAC Corporal" rocket will have inestimable value as a future carrier of high altitude instruments now being developed by the Signal Corps.

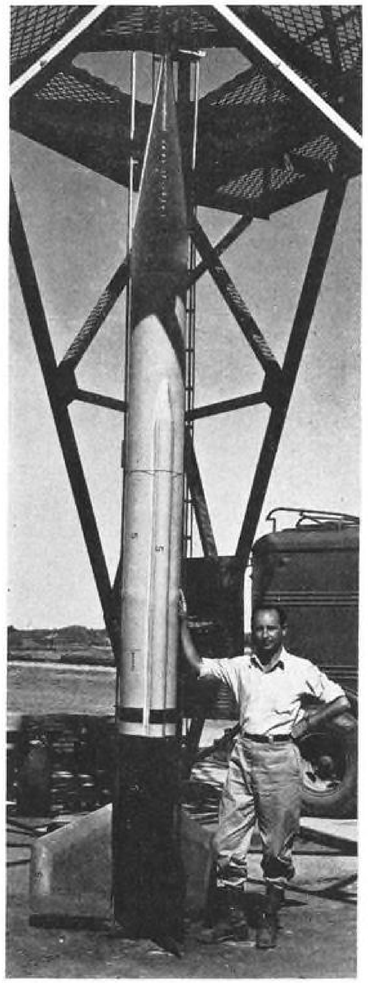
It offers for the first time a means for obtaining scientific data on the composition of the upper atmosphere, temperatures, pressure, density, cosmic ray measurements, and even photographs unimpeded by lower atmosphere optical distortion.

Early Objectives Realized — As technical director of "WAC Corporal," Dr. Malina sees in the rocket a realization of the early high-altitude objectives of the late Dr. Robert H. Goddard, whose experiments at Roswell, N. M., stimulated what previously had been only casual rocket research in this country.

As early as 1936, when Dr. Th. von Karman foresaw the possibilities of rocket research at Caltech, a group of his students set as a major objective the creation of a high-altitude instrument-carrying rocket for upper-atmosphere research.

War Speeded Progress—The experiences of this group in this developmental period were those of other rocket enthusiasts and, with little guiding precedent and very limited financial means, progress was slow. Through a period of several years effort was concentrated on the testing of a multitude of solid and liquid propellants.

The War gave this research its needed stimulus, and under sponsorship of the Army Air Forces the Jet Propulsion Laboratory was organized at the California Institute of Technology by Dr. von Karman, Dr. C. B. Millikan and Dr. Malina.



In Firing Position: *A "WAC Corporal" rocket shown ready for flight in a firing tower. Standing beside the rocket is Dr. Frank J. Malina, technical director of the project and acting director of the Caltech Jet Propulsion Laboratory. The yellow center section contains the rocket's propellants.* (Another photo on Page 3.)

Agreement Still Lagging on Cost-Plus Contracts

Although settlement on terminated war contracts showed a jump during January—with 15,000 contracts involving $2,700,000,000 settled—final agreement on cost-plus-a-fixed-fee contracts still lagged.

Director of Contract Settlement H. Chapman Rose announced approximately 41,000 contracts still remain to be settled, but said claims have been filed against almost 17,000 of these.

Cost-plus Settlements—During the month, the War Department settled 18 cost-plus contracts with cancelled commitments of $415,000,000, while the Navy settled five such terminations involving $6,000,000. On the basis of the year-end report of OCS (AVIATION NEWS, Feb. 11), this would leave 614 cost-plus contracts with commitments of about $10,500,000,000 to be settled. It is estimated that the bulk of the cost-plus contracts were in the field of aeronautics.

Spaatz Reorganizes AAF, Plans Combat-Ready Force-in-Being

Would be equipped with jet-propelled aircraft as rapidly as possible; sees funds and authority to maintain 400,000-man army as necessary for minimum need.

An air force-in-being of combat efficiency and equipped with jet-propelled aircraft as rapidly as production will permit is the immediate goal of Gen. Carl A. Spaatz, new commander of the AAF.

Authority and funds to maintain a force of 400,000 men is seen by Gen. Spaatz as necessary for minimum needs. He told his first formal news conference last week that "although rapid demobilization destroyed a large measure of our effectiveness, we are setting a goal of Jan. 1, 1947 to get whatever strength we are authorized in groups up to fighting efficiency. Under pressure this could be speeded up."

Kenney

Queseda

Stratemeyer

George

Three Major Commands—The reorganization program proposed by Gen. Spaatz would divide the AAF into three major combat commands: a Strategic Air Force under Gen. George C. Kenney, with headquarters at Andrews Field, near Washington; a Tactical Air Command under Lt. Gen. Elwood Queseda, with headquarters at Langley Field and an Air Defense Command—the old Continental Air Force—with headquarters at Mitchel Field, under Lt. Gen. George E. Stratemeyer.

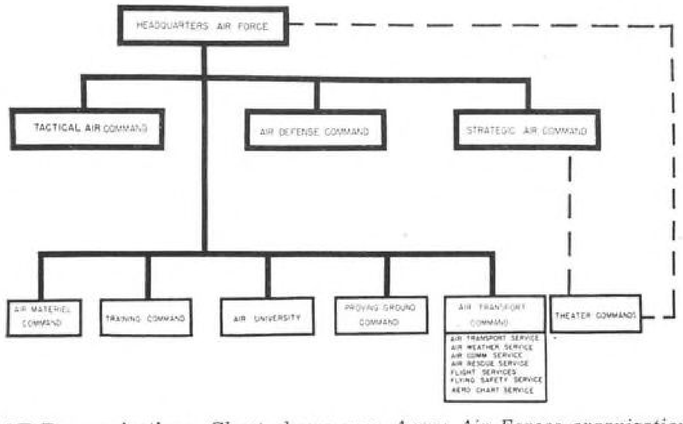
Emphasizing the importance which Gen. Spaatz attaches to the AAF's public relations and educational program was his appointment of Lt. Gen. Harold L. George as director of information. For the time being Gen. George will continue as commander of the Air Transport Command, but a replacement will be named within a few weeks.

CAF Is Disbanded—Disbandment of the Continental Air Force and its replacement by the Air Defense Command gives this unit responsibility for air protection of the United States and coordination of continental air units including the Air Reserve and the Air National Guard Squadrons.

The reorganization calls for five supporting commands, all under AAF headquarters in Washington:

- Air Materiel headquarters at Wright Field under Lt. Gen. Nathan F. Twinning.
- Training, Barksdale Field, La., Lt. Gen. John J. Cannon.
- Air Transport Command, Washington, with Gen. George continuing temporarily.
- The Air University, Maxwell Field, Ala., Maj. Gen. Muir S. Fairchild.
- Air Force Proving Ground Command, Eglin Field, Fla., Maj. Gen. Donald Wilson.

The 16 air forces set up during the war will be kept as entities under several commands.



AAF Reorganization: *Chart shows new Army Air Forces organizational set-up as announced last week by Gen. Spaatz.*

'47 Navy Plane Construction To Total $385,000,000

Construction of aircraft in the Navy's 1947 budget for the 1947 fiscal year totals $385,000,000 as compared with $94,737,200 estimated for the previous year and $1,492,664,497 during the 1945 fiscal year.

The budget recommends $100,000,000 for experimental and development work, as against $148,256,500 for the same work a year ago and $108,074,354 in 1945. Maintenance and operation expenditures in the budget are estimated at $360,656,000.

The budget recommends $30,500,008 for the Naval Air Transport Service for 480 transports and $8,288,056 for 472 utility transports.

Bell Helicopter Gets First Commercial License

First helicopter commercial license has been issued to Bell Aircraft Corp. on its new Model 47 two-place craft after exhaustive tests during which the helicopter established an operating speed of 80 mph. and a range of 250 miles.

Lawrence D. Bell, president of the company, said it would be some time before helicopters would be produced for the laymen but rather would be distributed for rescue work, mining and oil operations and to fill gaps in the airmail service.

New PT-23 Prices Set

New fixed prices on surplus Fairchild PT-23 primary trainers, ranging from $590 to $1,275, were established last week by the War Assets Corp. There are 861 PT-23's in stock, most located at WAC depots at Union City, Tenn., and Cape Giradeau, Mo.

Dr. Hunsaker Elected Sperry Corp. Director

Mankey named assistant to president at Ryan; Lukens appointed aide to Mosier at AA.

Sperry announced board appointments and Ryan and American named executive assistants last week.

Dr. Jerome C. Hunsaker, chairman of the National Advisory Committee for Aeronautics, has been elected a director of the Sperry Corp., to succeed O. Max Gardner, new under-secretary of the Treasury. Dr. Hunsaker also becomes a director of the Sperry subsidiaries: Sperry Gyroscope Co., Inc.; Ford Instrument Co., Inc.; Vickers, Inc., and Wheeler Insulated Wire Co. At the same time Edward S. Perot was elected president of the Ford Instrument Co., Long Island City, succeeding Hannibal C. Ford, who has retired.

W. Art Mankey, aircraft engineer, has been appointed assistant to the president of the Ryan Aeronautical Co. His special assignment will be coordinator of the aircraft engineering and experimental manufacturing departments. Mankey has rejoined Ryan after an absence of 20 years. Since then he has been in charge of engineering for Northrop Aircraft, chief of production design for Glenn L. Martin Co., and engineering manager of Bell Aircraft Co.

Matthias E. Lukens has been named administrative assistant to O. M. Mosier, vice-president of American Airlines. Lukens served with the Office of Production Management and later was in the AAF where he worked with continental air bases for AAF and ATC.

Veterans Leasing Van Nuys Center

Five Air Forces veterans probably will be in full lease possession of the $3,000,000 77-acre Lockheed-Navy aircraft modification center at Van Nuys, Calif. by the time this is printed.

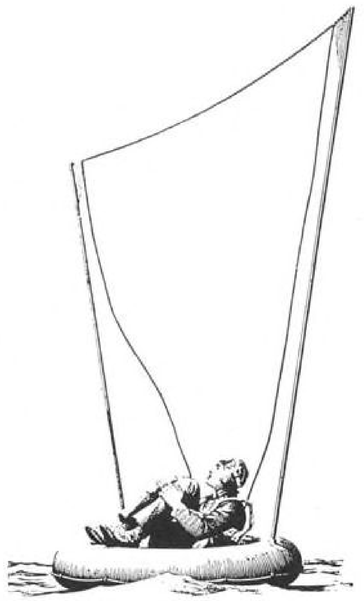
They have organized as Aviation Maintenance Corp. and last week were prepared to sign final lease agreements with the Reconstruction Finance Corp. in Washington, D. C. RFC said War Assets Corp. had approved the deal and referred it to the Justice Department.

Others Make Overtures—While theirs was the sole written bid for the property, it is known that unofficial overtures have been made for it by a motion picture studio, and by a trailer manufacturer whose lease proposal might carry some influence on the premise that his use of the facilities will aid in reducing Southern California's critical housing shortage.

Confident that their bid will stand, however, are Col. John H. Fite, president of Aviation Maintenance Corp., former chief of supply for the Air Forces Mediterranean operations, and his corporate associates: Lt. Col. August C. Esenwein, former chief of maintenance of the San Bernardino Army Air Base; Maj. William R. Howard, III, former assistant air inspector; Maj. Charles M. Fischer, formerly in charge of field operation at San Bernardino; and Eugene Finch, formerly in charge of San Bernardino aircraft shops.

Plans Outlined—They plan a complete range of modification and overhaul services for both airlines and individual airplane owners, and probably will handle some Government modification of surplus war planes. They will hire between 300 and 400 workers immediately.

The lease will run for a period of four and one-half years, and probably will include the corporation's agreement to assume the purchase of depot stores valued at $800,000.



LIFERAFT PICKUP: *Latest adaptation of the human pickup developed for military use by the AAF and All-American Aviation, Inc., allows its use in connection with a liferaft. A liferaft fitted with pickup poles and harness may be dropped from a rescue plane to a man in the water. He arranges the loop and harness as shown in the sketch, and awaits the return of the rescue plane which snatches him from the raft and hauls him to safety.*

Douglas El Segundo Plant To be Taken Over By CAA

Douglas Aircraft's government-owned El Segundo, Calif., engineering plant has been rented to the Civil Aeronautics Administration for $54,070 annually.

The structures this summer will become headquarters for the CAA sixth region staffs now located at Santa Monica, Calif. The Douglas El Segundo engineering staff will be moved to the company's home plant at Santa Monica.

AVIATION CALENDAR

March 19-21—Airlines' operational vice-presidents, regular spring meetings, Blackstone Hotel, Chicago.
March 25—IATA Middle East Traffic Conference opens in Cairo.
March 25-30—Aviation Show, sponsored by Aviators Post No. 350, American Legion, Municipal Armory, Los Angeles.
March 29-30—Joint Air Defense Conference, sponsored by Joint Airport Users' organization of the NAA, Mayflower Hotel, Washington, D. C.
April 3-5—SAE National Aeronautic (Spring) Meeting, Hotel New Yorker, New York.
April 5-13—National Aviation Show, sponsored by Aviators Post No. 743, American Legion, Grand Central Palace, New York City.
April 8-10—Annual meeting of Aero Medical Association of U. S., Edgewater Beach Hotel, Chicago.
April 12—New England Council, third annual aviation conference, Hotel Statler, Boston.
April 12-15—Annual flight of Sportsman Pilots Association to Palm Beach, Fla.; headquarters at Brazilian Court Hotel.
April 22-24—"Women in Aviation" conference, Stephens College, Columbia, Mo.
April 23—PICAO route service conference on European air navigation facilities starts at Paris.
May 13-14—New York State Aviation Council, semi-annual meeting, Westchester Country Club, Rye, N. Y.
May 21—PICAO Assembly begins three-week meeting, Montreal.
May 30-June 2—First post-war Annual New England Lightplane Tour, assemble at Hartford, Conn., May 29.
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., Airpark.
July 18-21—World's Fair for Aviation, Omaha.
July 19-20—NAA national convention, Omaha.
Aug. 1-2—National Flying Farmers Association first annual convention and Oklahoma Flying Farmers conference, Oklahoma A & M College, Stillwater, Okla.
Aug. 22-24—SAE National West Coast Transportation & Maintenance Meeting, New Washington Hotel, Seattle, Wash.
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, Chicago, Ill.
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, Chicago.

★ ★

High School Students Enlisted In Missouri Airmarking Program

Senior classes are urged to provide flying aids as commemorative gifts; more than 100 communities expected to be marked before May 15 as result.

By ALEXANDER McSURELY

Instead of the sundials, pictures, drinking fountains, etc. usually left as commemorative gifts, the graduating classes of many Missouri high schools this spring will provide class memorials in the form of airmarkers for their communities.

More than 100 Missouri communities are expected to be airmarked by senior high school classes before May 15, as result of efforts of the Missouri State Department of Resources and Development.

▸ **Conducted By Fryhoff**—The campaign, conducted by Eugene V. Fryhoff, head of the aviation division of the department, and Leo C. Harmon, state aviation engineer, has enlisted the efforts of the Missouri high school seniors by letters to their class presidents and school superintendents. It was sugeted that the marker be placed on the roofs of the schools if possible.

To "sell" the project to the class, the following reasons for airmarking were listed:

▸ It would teach civic cooperation.
▸ It would create something fine for the community.
▸ It would advertise the town to flyers.
▸ Neighboring towns would know the town is alert.
▸ The towns with airmarkered buildings will be shown on a map to be given wide distribution by the State Department of Resources and Development.
▸ An aerial photograph of the airmarker will be taken.
▸ It will aid in cutting down accidents in flying.
▸ It will be a lasting memorial to the class.
▸ It will show that youth is interested in aviation.
▸ It will help boost Missouri, for the project is state-wide.

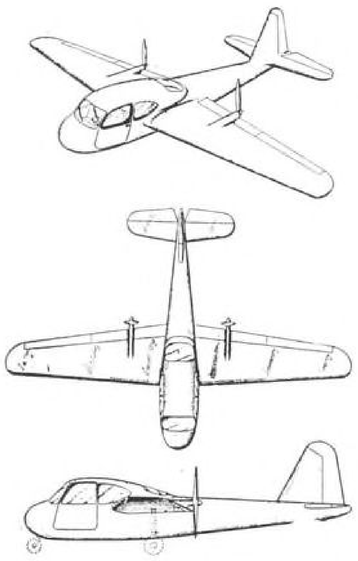
Harmon supplied every class agreeing to undertake the project with an airmarking kit containing complete instructions, a package of cardboard pieces forming parts of letters of CAA-approved size (10 ft. high) spelling out the name of the town, and other necessary letters, numbers and arrows to give latitude and longitude in degrees and minutes, an arrow pointing to true north, and a second arrow pointing to the nearest airport, with the number of miles to it.

The students piece the letters together on the gymnasium floor, then carry each letter to roof. After chalking around the letter, and removing it, they fill in the outline with yellow or orange street-marking paint. In case the roof is another color than black, they outline each letter, numeral and arrow with black asphalt paint in a 7½-in. border.

▸ **Civic Club Aid Suggested**—It was suggested that local civic organizations might contribute cost of paint and brushes, and that the girls of the class might provide coffee and sandwiches the day the work was being carried on.

The class president was asked to send in a report on completion of the work to Harmon. Cooperation of civic clubs in the project was asked in other letters.

Fryhoff and Harmon say the biggest advantage of the program is that the most hearty response has come from smaller communities where airmarkers will be of the greatest benefit to private flyers. By graduation time this spring they hope to see Missouri the best airmarked state in the country.



AERONCA FAMILY PLANE?

Peter Altman, Detroit aeronautical engineer and consultant to Aeronca Aircraft Corp., Middletown, Ohio, has obtained patents on 4- 5-place family-type plane design shown in three-view drawings here. The tricycle retractable landing gear design appears to be powered by twin pusher gas turbines driving propellers. Contours of the nose resemble closely the contours of the nose section of sketches of the proposed Aeronca Eagle family plane. Patent application was filed Aug. 2, 1945.

Gas Refunds May Be Overlooked

Many private flyers, it is believed, are failing to obtain refunds on state motor fuel taxes paid on gasoline used in planes. Registered Travel Service, "for the private flyer," New York concern, lists the following tax refunds which may be obtained from various states, if the flyer submits his receipts for gasoline purchases with his refund claims:

Arizona, 5 cents; California, 3; Colorado, 4; Connecticut, 3; Delaware, 4; Illinois, 3; Indiana, 4; Iowa, 3; Maryland, 4; Massachusetts, 3; Minnesota, 4; Missouri, 2. Montana, 5; Nevada, 4; New Hampshire, 4; New Jersey, 3; New York, 4; Texas, 4; Washington, 5; Wisconsin, 4; District of Columbia, 3.

▸ **Other Arrangements**—New Mexico will refund on minimum amounts of 100 gals. ($5) if purchased in lots of 50 gals. or more at one time, and if claim is submitted within four months from date of purchase.

Virginia refunds 5 cents per gal. if fuel is purchased in the state and used outside, or 2 cents if fuel is purchased and used in the state. West Virginia refunds are paid only on quantities of 25 gals. or more.

▸ **Will Provide Forms**—When Registered Travel Service (AVIATION NEWS, Feb. 4) begins operations, it expects to provide its clients with necessary forms and directions to apply for refunds from the various states listed.

CAA Officials Urge More 'Gripe Sessions'

An increase in local "gripe sessions" for private flyers and airport operators is expected to be one outcome of the recent conference of eight CAA regional private flying specialists with Administrator T. P. Wright and his Washington staff.

Following reports of William H. Berry, Ft. Worth, (Fourth Region), on success of the recent forum held in his region, it was recommended that additional localized meetings to sound public opinion on needs of private flying be held in the other regions.

▸ **Other Suggestions Listed**—Other recommendations by the specialists:
▸ Use of low-power, short-range, inexpensive radio transmitters at small airports, enabling the operator to increase safety of operations, and facilitating gathering of weather information for pilots.
▸ Installation of a distinctive, inexpensive flasher light signal, at small airports, which can be seen in the daytime, to guide pilots to fields. (This will be studied further by CAA technicians.)
▸ Preparation of additional CAA publications for the private flyer, including a publication pointing out local flying hazards in various sections of the United States; a booklet on promotion and operation of flying clubs, and a booklet on additional uses of the airplane by individuals and operators.

Administrator Wright told the group that full growth of private flying was dependent on creation of more airports, better planes, simpler regulations, and better aviation training.

▸ **Other Topics Discussed**—Other subjects included: Lessening the noise of the private plane; supervision by plane manufacturers of the charges for service made by their distributors and dealers; uniformity in sales and service; equal treatment of private and scheduled planes by traffic controllers, and aviation training for veterans.

John H. Geisse, assistant to Administrator Wright, in charge of personal flying development, conducted the sessions. Other specialists attending, in addition to Berry, were: Roland Rohlfs, New York, (Region 1); Carl W. Clifford, Atlanta, (Region 2); Charles E. Cox, Jr., Chicago, (Region 3); Lester B. Littrell, Kansas City, (Region 5); Marshall E. Beeman, Santa Monica, Calif., (Region 6); Wiley R. Wright, Seattle, (Region 7), and Virgil D. Stone, Anchorage, Alaska, (Region 8).

New Procedure Set

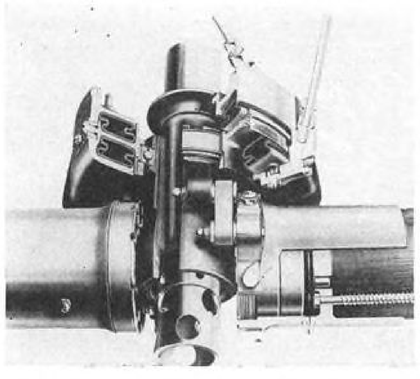
All private pilot flight examiners will be authorized to issue student pilot certificates as soon as distribution of forms can be made, William Moore, chief of CAA general inspection announced last week. The change is expected to be in effect by April 1.

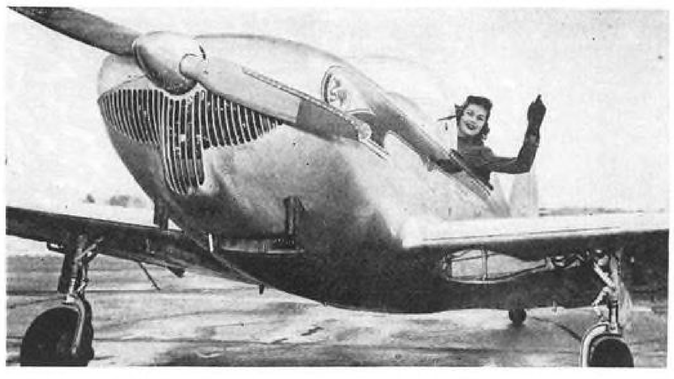
The new procedure removes the last direct necessary contact between CAA officials and the applicant for a private pilot's license, and follows a recent recommendation of the CAA Advisory Committee on Non-scheduled Flying. (AVIATION NEWS, Feb. 25.) Under the new plan, the flight examiner is authorized to issue the student permit to any applicant who presents an application, plus a properly endorsed medical examination form filled out by any licensed physician showing the applicant is physically qualified to fly.

Surplus PQ-14 Gets First CAA Flight Test

First CAA flight tests on a surplus Culver 150-hp. PQ-14, conducted at Bush field, Augusta, Ga., indicated that the radio-controlled target plane would require some elevator modifications before it could be certificated as a one-place plane for civilian use but it is expected that the plane eventually will be certificated, subject to modifications, as an approved type.

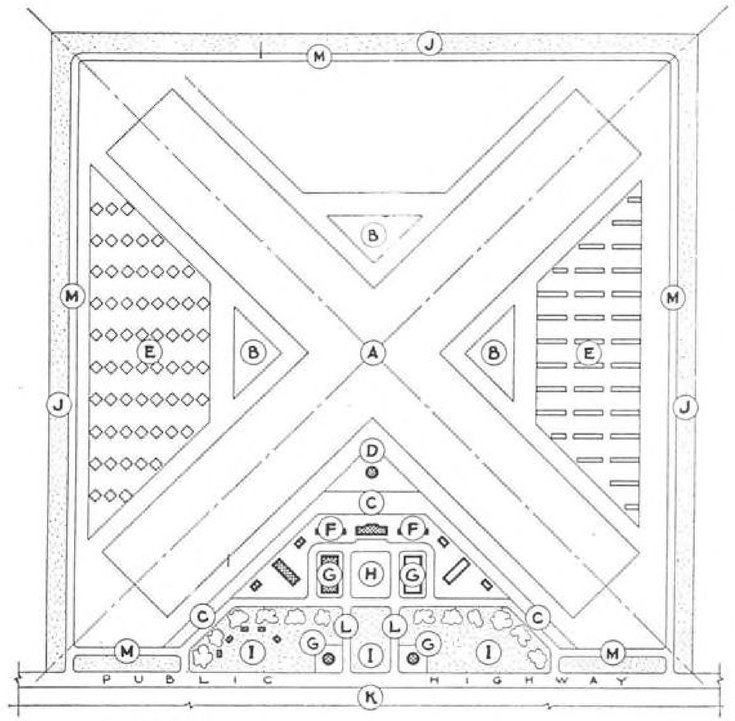
Since War Assets Corp. has given





NEW CONTINENTAL ADJUSTABLE-PITCH PROP:

New two-position hydraulic-control "Skypower" propeller, developed by Continental Aviation & Engineering Corp., shown on an 85-hp. Globe Swift. On the Swift, Continental says, the new prop cuts takeoff run nearly 20 percent, increases initial rate of climb more than 27 percent, and permits extensive fuel savings. The prop is expected to be standard equipment on several lightplanes. Cutaway drawing shows flexible expander rings, actuated by oil from engine oil system and controlled by four-way valve from instrument panel. Sliding collar between rings controls blade-pitch through linkage.



CAA AIRPORT PLAN:

Proposed layout for a personal plane airfield, taken from the new CAA publication, Airport Buildings, *shows how plane storage area would be set aside from other operations. Symbols are: (A) landing area, (B) plane parking, (C) apron, (D) plane service station, (E) personal plane storage, (F) administrative buildings (including operations, sales and maintenance), (G) revenue buildings (restaurant, overnight cabins, auto service station, etc.), (H) car parking, (I) parkland area, (J) perimeter planting, (K) zoned area, (L) entrance road, (M) perimeter road. The booklet may be obtained by community groups interested in starting an airfield by sending 20 cents to the Superintendent of Documents, Government Printing Office, Washington, 25, D. C.*

other larger planes higher priorities for CAA flight tests, it probably will be a matter of months before the target plane's tests and modifications are completed.

Has Interesting Possibilities—The plane has been regarded as an interesting possibility for a fast one-place personal plane since it has electrically retractable tricycle landing gear, a cruising speed of 160 mph., 480-mile range and 17,000-ft. ceiling.

While no reports have been received of sales of surplus PQ-14's in this country, seven of them have been sold in Manila. The AAF reports that approximately 2,000 of them were built, divided approximately equally between the Army and the Navy.

The CAA has approved the certification as a one-place plane of an earlier Culver radio-controlled plane, the PQ-8 which has fixed landing gear and a 90-hp. Franklin engine, and which is in surplus.

National Flying Farmers To Convene in August

Aug. 1-2 has been set as the date for the first annual convention of the National Flying Farmers Association, it was announced last week. More than 500 farmers who are combining aviation and agriculture are expected to attend the session which will be held at Oklahoma A & M College, Stillwater, Okla., at the same time as the Oklahoma Flying Farmers conference and the college's annual Farm and Home Week.

Herbert Graham, national executive secretary, said some 30 lightplane manufacturers will be invited to display their latest models.

License Change Due

Change in private pilot training requirements is expected to be made effective shortly by CAA Administrator T. P. Wright, on recommendation of his eight regional private flying specialists.

It is proposed that only five of the ten hours of dual instruction required for a private ticket be required from a rated instructor, and that not less than four of these five hours be after the first solo. This would make it possible for the student pilot to get five hours of his dual time from his friends who are rated pilots, but still leave the matter of judgment as to his ability to solo, and his ability after solo, to a rated instructor.

State Aero Association Projected By Coloradan

Organization of a Colorado Aeronautics Association is being undertaken by Robert Donner, temporary chairman, P.O. Box 117, Colorado Springs, he has announced.

The association is proposed as a non-profit organization to promote safe non-scheduled, private and commercial flying, foster a statewide system of airports, airways, and traffic control, coordinated with national plans; segregate state taxes on aviation fuels for state aviation uses; sponsor uniformity of state aviation legislation; encourage local intrastate air transportation, and oppose economic regulation of non-scheduled commercial flying by federal authorities.

AAF Veteran Planning Baltimore Seaplane Base

Application to establish a seaplane base for private flying and charter operations, within five minutes of the heart of Baltimore, has been filed by James B. MacDermott, Jr., former AAF fighter pilot, of Catonsville, Md. He has leased a 200- x 200-ft. tract on the south shore of the Middle Branch, two blocks from a Baltimore streetcar line, and proposes to build a cinder block hangar, connected to the water by a wooden ramp.

In a lagoon he has space for three "runways" of 3,000 to 4,500 ft. and if necessary, can taxi his seaplanes through the draw of the Hanover street bridge to gain almost unlimited "runway" on the Patapsco River.

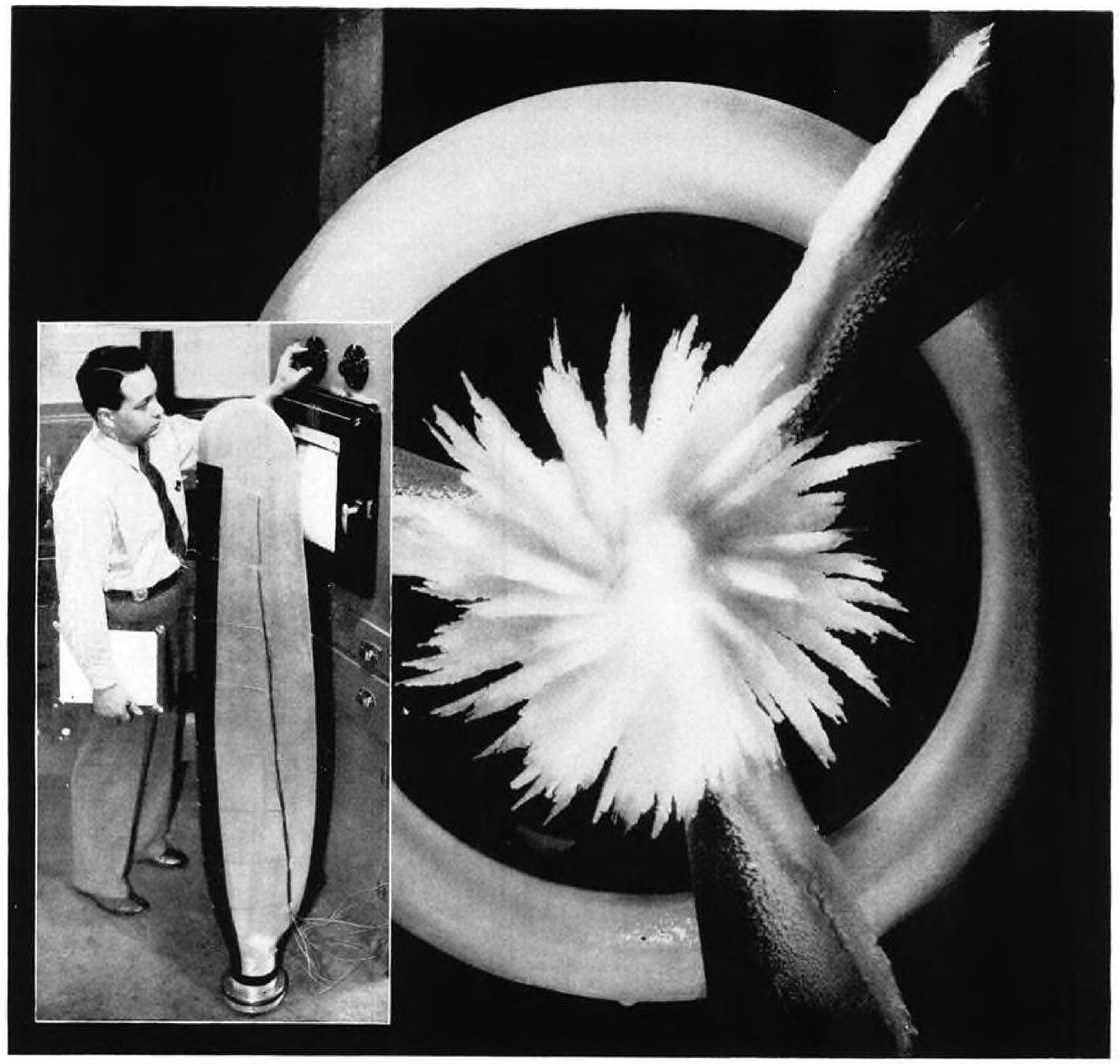
Ambassador of world trade

Pan American World Airways, veteran ambassador of trade, now makes one market place of the world . . . bringing the wares and wants of many nations together to create sales and prosperity . . . with Lockheed Constellations powered by Wright Cyclones.

WRIGHT Aircraft Engines

Wright Aeronautical Corporation Paterson, New Jersey, U.S.A.

DIVISION OF CURTISS WRIGHT FIRST IN FLIGHT



Push-button defrosting for planes

AN 80-MILE WIND, roaring through the B. F. Goodrich refrigerated wind tunnel, created the Jack Frost effect on the propeller model above.

The exaggerated ice flower on the hub isn't as serious as it looks; but fingers of ice, creeping up the blades, were a big worry to pilots for years. For in flight, ice on the blades means loss of power, bad balance, and excessive vibration.

To a pilot, the smaller picture looks a lot better. It's a propeller equipped with a new B. F. Goodrich development called an electrically heated propeller shoe. It's shown here being tested (the wires are part of the testing equipment; they are not on the blade in flight).

With these shoes on his propeller blades, a pilot can defrost them as simply as a housewife defrosts a refrigerator . . . and lots quicker. The pilot just touches a switch and electric current begins to generate heat in the shoe, which melts off ice.

B. F. Goodrich equipment protects many other parts of the airplane from ice. Best known are the De-Icers, which crack ice off as it forms on wings and tails, keeping these surfaces clean and smooth for safer flying. De-Icers were developed and are made exclusively by B. F. Goodrich.

Years of ice-fighting experience are back of this equipment. It means a safer, more comfortable flight if you fly today or when you fly tomorrow. *The B. F. Goodrich Company, Aeronautical Division, Akron, Ohio.*

Skyway or Highway

B.F.Goodrich

FIRST IN RUBBER

51 New Distributors Listed By Bellanca

Bellanca Aircraft Corp., New Castle, Del., has signed 51 distributors for the new *Cruisair Senior*, G. M. Bellanca, president, and H. A. (Buzz) Hershfield, Jr., sales manager, have announced. The company has deposits for over 1,300 airplanes. The distributors are:

W. E. Faulkner, Long Beach, Calif.; A. W. Whitaker, Portland, Ore.; John G. Pickard, Boise, Idaho; Charles W. Mayse, Douglas, Ariz.; G. W. Cox, Canyon, Texas; Walter D. Mauk, Blackwell, Okla.; James C. Johnson, Springfield, Mo.; E. J. Wells, Detroit; John Abiuso, New Cumberland, Pa.; William Simmerman, Williamstown, N. J.; E. H. Brockenbrough, Charlotte, N. C.; John F. Byrd, Blevins, Atlanta, Ga.; Max K. Aulick, Orlando, Fla.; F. P. Moore, Cooksville, Tenn.; Fred Romy, Ft. Wayne, Ind.; Leo P. Brennan, Des Moines; Merle Zuelke, Milwaukee; William Patey, Jackson, Miss.

George Mickelsen, Jr., Logan, Utah; Harold R. Schlesselman, Mankato, Minn.; Donald W. Pennertz, Alexandria, Minn.; Owens-Jordan Co., Austin, Texas; G. Bernard Fenwick, Jr., Eccleston, Md.; Graham-Bell Aviation Service, Albuquerque, N. M.; Oscar Hiers, New Orleans; Joseph F. Meyer, Houston, Texas; Ed Young, Huron, S. D.; Eli Ellison, Cleveland; Ray V. Barber, Chicago; W. F. Chastain, Prichard, Ala.; C. O. Thompson, Charleston, S. C.; A. E. Taylor, Birmingham, Ala.; Edgar Smith, Jr., Kansas City, Mo.; Gus Sherwin, Clareton, Wyo.

Bill Campbell, Dallas; Merel Eddleman, McCamey, Texas; Lowell White, Teterboro, N. J.; Gillette Welles, Jr., Elmira, N. Y.; George Crocket, Las Vegas, Nev.; Clyde Brayton, St. Louis; Hal Bazelt, Pittsburgh; Dick Henson, Hagerstown, Md.; Lou Reichers, Washington, D. C.; Ray Hylan, Rochester, N. Y.; Everett V. Hogan, Scottsbluff, Neb.; Henry M. Dingley, Jr., Auburn, Me.; John A. Clinch, North Platte, Neb.; S. A. (Buck) Frame, Chattanooga, Tenn.; Harold D. Keller, Dyersburg, Tenn.; John C. Bennett, Jr., Louisville.

Bill Asks New System Of Recording Sales

A proposed new federal system for recording ownership of aircraft, engines, propellers and appliances has been tossed into the Washington legislative hopper.

The system, proposed in H.R. 5502, by Rep. Bulwinkle (D., N.C.), is understood to have support of some of the airlines. However it would have a far greater effect on the owners of private planes, and on the dealers, distributors and manufacturers of these planes, because of the much larger number of planes in this class.

Provisions Outlined — It would provide that the Civil Aeronautics Administrator "shall establish and maintain a system for recording conveyances affecting title to, or interest in, any civil aircraft, engine, propeller or appliance." And it would provide that no conveyance made after June 30, 1946, shall be valid unless it is recorded with the Administrator.

Persons who have studied the bill assert it would be to surround any transfer of title of an airplane, engine, propeller or any accessory, instrument, with additional federal red tape.

CAA Is Behind Now — Currently CAA's system of recording of aircraft is several months behind, and the Bulwinkle bill would multiply CAA's task many times. The job of recording every accessory or piece of equipment on every one of the 40,000 airplanes which some estimates say will be sold in the first post-war production year, is staggering. What it might become if the number of civil aircraft expands to the predicted half-million within 10 years, is further food for thought.

It is reported the bill is an effort to meet requests of airlines for clearer records of airline equipment for use in financing purchase of new equipment. It is understood that companies which are expected to finance purchases of the new equipment are calling for a more accurate system of keeping tab on individual items of equipment.

Two New Propellers Approved By CAA

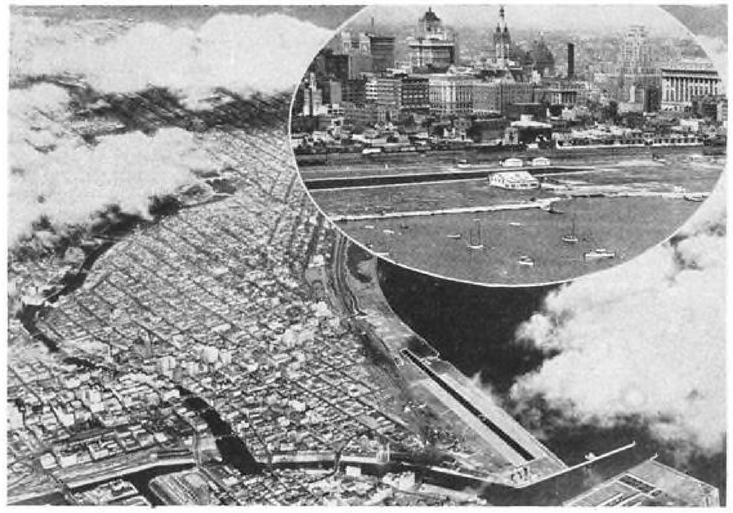
CAA has approved two new lightplane controllable-pitch propellers built by Sensenich Brothers and Continental Motors.

Both are steel hub-wood blade combinations.

The Sensenich propeller (model C3FC3) has a 76-in. diameter and designed for a 125-hp. engine. It is hydraulically controllable. The Continental propeller (model PA-108A) has a 74-in. diameter, is hydraulically controllable for two positions, and is designed for an 85-hp. engine.

Others Approved—Type approvals also were given by CAA for a number of other fixed-pitch wood lightplane propellers including: Flottorp Model 74C, for a 130-hp. engine; and the following seven Sensenich models: 72CK, for 65-hp. engine; 74RR, for 150-hp.; 102CA, for 225-hp.; 86 CB, for 200-hp.; 86BB, for 200-hp; 85LYA, for 100-hp.; and 44K15005, for 190-hp.

Numbers in model designations indicate propeller diameter, for the fixed-pitch propellers, except the 44K15005, of 85-in. diameter.



MILWAUKEE AIR STRIP HAILED:

CAA Administrator T. P. Wright and William T. Piper, chairman of the Personal Aircraft Council, have written letters of congratulation to Francis J. Trecker, chairman of the committee which sponsored Milwaukee's downtown landing strip on Lake Michigan (above). The 3,000-ft. strip was constructed on the site of old Maitland Field, abandoned because it was too small for airline operations. City retained title to the land, however, and only $10,000 was needed to restore it to use. Run by a commercial operator, the field has two small hangars and a seaplane ramp. It will be the center of aviation activity at the Milwaukee centennial celebration in July.

Considerable Aero Stocks Sold By Firm Officials in December

Compilation released by Securities and Exchange Commission shows liquidation was broad in aviation group and airlines also were widely sold, apparently at advantageous market levels.

There was considerable selling of aviation shares among company officials during December, 1945, a recent compilation released by the Securities and Exchange Commission shows.

In the light of recent developments, selling appears to have taken place at advantageous market levels.

Fairchild Sells 24,800 Shares—Sherman M. Fairchild continued to lighten his holdings, selling 24,800 shares of Fairchild Engineering & Aircraft, retaining 142,700. Through the Mills Land Co. he owns an additional 26,100 shares. Also, he disposed of a total of 1,000 shares of Fairchild Camera & Instrument during November and December, keeping 79,270 (The Mills Land Co. owns 26,600 shares of this company), and 300 shares of Pan American Airways, of which he is a director, retaining 20,700 shares in the carrier.

I. M. Laddon and his wife disposed of a total of 5,600 shares of Consolidated Vultee common, retaining between them, 5,170 shares. Guy Vaughan sold 1,000 shares of Curtiss-Wright "A" stock, keeping 2,000. In September, he disposed of 1,000 shares of the common, holding 650.

Other Sales Listed — Other significant sales in the aircraft group are shown in accompanying table.

Many Options Granted—Belated reports show the granting of options to Convair officials to purchase Convair common at an undisclosed price were issued as follows: I. M. Laddon, 12,500; R. S. Pruitt, 5,000; Charles T. Leigh, 3,000; and W. M. Shanahan, 1,500.

Options also were in evidence in reports filed by Aviation Corp., Convair's parent. The options issued for the purchase of common, but with the consideration and the price exercisable not disclosed, are as follows: R. S. Pruitt, 20,000; Victor Emanuel, 28,500; L. I. Hartmeyer, 10,000. During the month of December, Pruitt sold 1,000 shares of Aviation Corp. common, retaining 45,568. Emanuel sold 900 shares of common, retaining 44,100 directly and 10,000 shares indirectly.

Company and Official		Sales	Holdings Retained
Areo Equipment			
J. C. Markey		260	100,360
Bendix Aviation			
W. M. Houghton		200	500
Breeze Corp.			
J. T. Maseuch		300 (gift)	18,002
Grumman Aircraft			
L. R. Grumman		4,160	50,000
E. W. Poor		1,000	8,000
L. A. Swirbul		1,800	6,150
Glenn L. Martin Co.			
Glenn L. Martin		2,000 (gift)	293,200
Northrop Aircraft			
L. T. Cohu	Dec.	700	5,100
	Oct.	300	
George H. Irving	Dec.	1,500	7,000
	Nov.	300	
John H. Northrop		200	13,684
Piper Aircraft			
J. E. Swan		1,000	8,000
Ryan Aeronautical			
Earl O. Prudden		600	6,500

Airline Stock Sold—In an interesting transaction, Aviation Corp. appears to have sold 25,000 shares of American Airlines common, privately, in November, 1945. This is the first sale in conformance with the Civil Aeronautics Board order to dispose of the bulk of such holdings. Aviation Corp. now retains 262,538 shares of American.

Almost two years after the authorization of its special Management Common stock, United Air Lines has now begun to issue such shares to key officials. This stock is sold to selected officials at book value, which is about one-third of prevailing market prices. After about five years, this stock is convertible into the regular common on a share-per-share basis.

Allocations Listed—The stock allotted United officials are as follows: R. F. Ahrens, 1,000; C. H. Blancher, 500; Harold Crary, 2,000; N. B. Haley, 500; S. V. Hall, 1,000; J. A. Herlihy, 2,000; R. W. Ireland, 2,000; D. F. Magarrell, 1,000; H. E Nourse, 1,000; S. P. Martin, 750; J. W. Newey, 1,000; and R. E. Pfennig, 1,000. Such awards aggregate 13,750 shares out of an authorized issue of 100,000.

Among the air line sales, G. T. Baker, president of National, sold 5,000 shares, retaining 141,178. Harry S. Parker liquidated 750, leaving 8,684 shares. Also, W. K. Jacobs, Jr., director, gave away and sold a total of 480 shares, retaining 1,980.

Other Airline Sales—Croil Hunter, president of Northwest, sold a total of 4,400 shares during November and December, leaving 4,100. Alonzo Petteys, director, sold 100, retaining 25,450. L. S. Rockefeller, director of Eastern, sold 300, keeping 11,700 shares of that carrier.

Significantly; L. H. Dwerlkotte bought 3,500 shares of Western Air Lines bringing his total holdings in his company to 14,600 shares.

EAL Split Draws Speculators

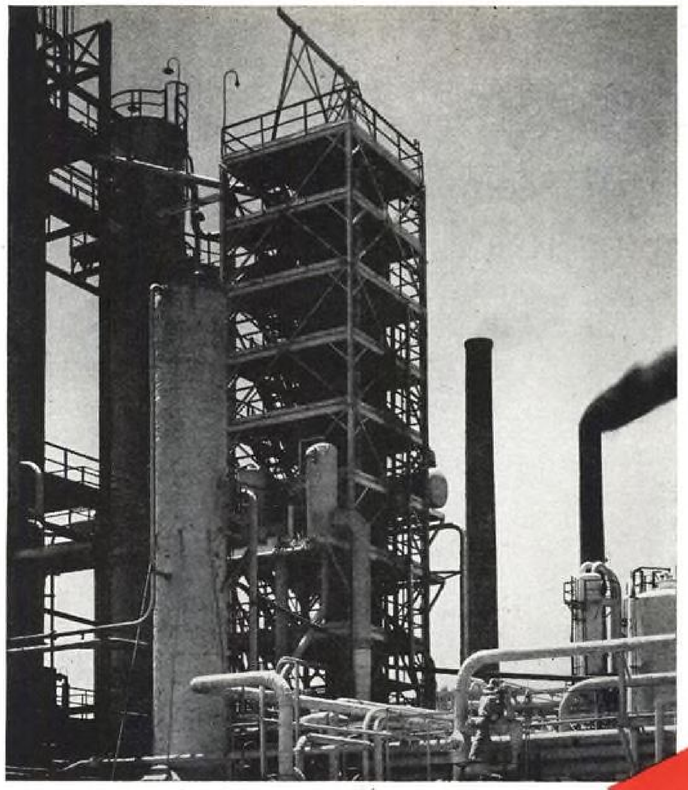
The four-for-one split proposed for the common stock of Eastern Air Lines has added speculative attraction to its shares. Actually, however, the stockholder will receive nothing which he did not have before. On consummation of this split, the identical equity now represented by one share, will be reflected by four.

The prime purpose of stock split-ups is to effect wider distribution and interest in a company's securities. For example, the average investor is more inclined to buy shares at $25 than at $100.

Advantageous In Past — The growing aspects of air transportation have caused previous stock dividends or splits to work out beneficially to the investors.

In 1933 and 1934, American's common stock was selling in the 70's. Late in 1944, a two-for-one split was effected. With the price again in the 70's, the stock has doubled in value since its stock dividend. Braniff had a four-for-one split in 1940 and on top of that a 50 percent stock dividend in 1943. Almost the same pattern is shown for Delta: a four-for-one split in 1941 and a 50 percent stock dividend in 1945. In the latter two instances, substantial appreciation in price has been effected.

Eastern, after its proposed split, will have 2,400,000 shares issued in place of its 600,000, which has ranged from 98 to 123½ this year.



D-X Aviation OIL

A GREAT LUBRICANT
FROM A GREAT MANUFACTURER

With the advent of war, the long-experienced Mid-Continent refinery soon developed D-X AVIATION OIL and became one of the leading suppliers to the United States and Allied Nations. Today, this superior lubricant is available to commercial aircraft owners. Its characteristics include maximum resistance to carbon, sludge and lacquer formations, maximum power performance. Its enduring film strength affords complete lubrication for fast-moving parts, and it performs under the widest of atmospheric temperature ranges. Suitable for large and small aircraft. Your inquiry invited.

MID-CONTINENT PETROLEUM CORPORATION

TULSA, OKLAHOMA

Efficient Use of Propellers Seen At Speed Well Into Sonic Realm

Leading American and British engineers say radical changes in design, including blade tip sweepback and two-speed engine reduction gearing, will make it possible.

Efficient use of propellers at speeds well into the sonic range is forecast by leading American and British engineers as the result of changes in design as radical as those now being effected on airframe and powerplants.

The combination of blade tip sweepback, constant speed and two-speed engine reduction gearing assures maximum propeller efficiencies at sonic speeds far in excess of those now operating.

Diameters Will Be Cut—The use of co-axial and counter-rotating designs will reduce diameters on high-power units to as little as one-half that required by single units. Present indications are that hollow-steel blade construction will dominate over solid steel, duralumin and wood.

John Stack, NACA supervisor of compressibility research, recently displayed examples of this radical propeller design. He disclosed that whereas the conventional three-blade constant speed design now in wide use on commercial and military aircraft has an efficiency of 84 percent at 200 mph. and only 60 percent at 530 mph., due to compressibility losses at tip and shank, a new model design by NACA researchers reveals an efficiency of 91 percent at 200 mph. and 88 percent at 530 mph.

Gain Is Important—Importance of this gain can be appreciated readily by the fact that an improvement of only 1 percent in propeller efficiency will pay for the original cost of the airplane during its service life.

This remarkable gain in efficiency is achieved by the use of a thin, wide blade extending directly into the root at only 12½ percent thickness and mounting a large spinner. Special tips with heavy sweepback produce efficiencies of more than 90 percent at even higher speeds.

More Efficient At Low Speed—Propeller experts have revealed that this form of propulsion delivers more than three times as much power at subsonic speeds as the turbo-jet unit. Propeller designs now being tested are capable of delivering 5 lbs. of thrust for each horsepower of engine output at 500 mph. as compared to 1.5 lbs. of thrust for each horsepower delivered by the turbo-jet at the same speed.

L. G. Fairhurst, chief engineer of Rotol Ltd., British propeller manufacturers, in a recent paper predicted continued usefulness of propellers made possible by war research and the solution to problems posed by the introduction of the aircraft gas turbine. Pointing out that the gas turbine's cruising rpm. is approx. 95 percent of its maximum (compared to about 50 percent in the piston engine), Fairhurst revealed a general opinion that two-speed engine reduction gearing is a necessity in the near future.

Air Flow Important—On the subject of co-axial and contra-rotating, he indicated their importance to smooth air intake flow for "prop-jet" units and the value of their torque elimination as a control problem. Tests have shown no difficulty, mechanical or efficiency, in feathering either unit of a co-axial design.

Fairhurst predicts an expanding future for the reverse-thrust propeller pointing out that increasingly "clean" design of modern transport planes will make some form of "air brake" a necessity. Another useful field for reverse-thrust is in the carrier-deck fighter plane where "braking" can reduce "floating" on landing to a marked degree.

Hollow Blade Preferable — Although the necessity for thin blade sections (16 percent thickness and less) indicates the use of solid steel, the problem of flutter in such a design is acute and the hollow steel, the problem of flutter in such shows more promise. Another advantage of the latter is its adaptability to "hot blade" anti-icing systems, a problem of importance with ever-increasing operating altitudes.

Propeller Test: *Use of a helix (spiral) or combination of two interlacing helixes for a physical research answer to a propeller problem which has not been solved mathematically, is a spectacular research study at the Langley Field, Va., NACA laboratory. The helixes are immersed in a cylinder filled with water (left) through which an electrical current is then passed. By measuring the voltages at difrent points about the helix, which represents the path taken by the blades of a propeller through the air, the researcher obtains a precise measurement of the pressures existing around the actual propeller.*

The inherently greater efficiency of the pusher installation is receiving serious study and this design has been rendered even more advantageous by the introduction of the "prop-jet" unit, which requires large, clear air entrance ducts in the wing leading edge. The pusher design also would permit the installation of large spinners, thereby making possible the use of round propeller shanks for greater strength. Such a pusher spinner, extending to the 16 percent blade thickness point, would combine great hub strength with maximum blade efficiency.

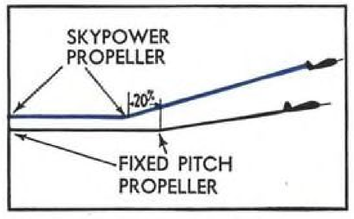
Advantage Seen—Fairhurst believes that, based on present knowledge, the propeller will prove superior on designs using up to 4,000-hp. piston engines, operating at up to 40,000 ft. and flying at speeds of up to 550 mph. Whereas fighter types have now surpassed these conditions, he hastens to point

NOW—A HYDRAULICALLY OPERATED CONTROLLABLE PITCH PROPELLER FOR LIGHT PLANES

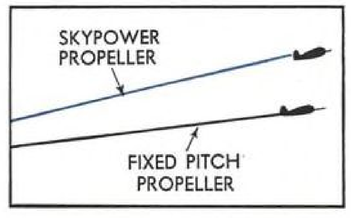
The Continental Aviation and Engineering **Skypower Propeller** operates from the regular engine oil pump pressure, on a closed system, without packing glands or gaskets. No spinning hydraulic parts. **Positive action for high and low pitch.**

HERE'S WHY YOU'LL WANT A CONTINENTAL AVIATION SKYPOWER PROPELLER ON YOUR PLANE

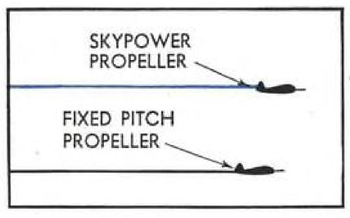
For thrilling new performance — the kind you pilots dream about — you'll want a Continental Aviation Skypower Propeller on your plane. It's the first hydraulically operated controllable pitch propeller for light aircraft in production. It means shorter take-offs, higher ceilings, increased rate of climb. It's simple in design and operation, low in price, and easy to install and maintain. Now in production for use with Continental A-65 and C-75-85 engines. Write to Continental Aviation and Engineering for literature.



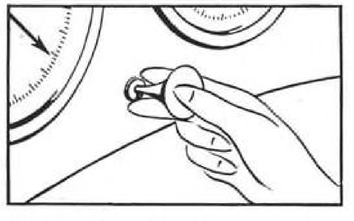
SHORTER TAKE-OFF — Use of the Skypower Propeller reduces take-off runs as much as 20% or more, permits you to land on or take off from smaller fields.



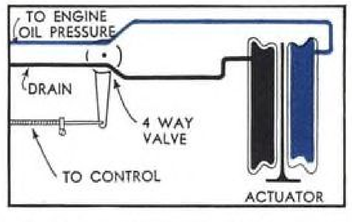
INCREASED RATE OF CLIMB — Tests with Skypower Propeller indicate as much as 27% or more improvement in initial rate of climb, giving new, higher performance to your plane.



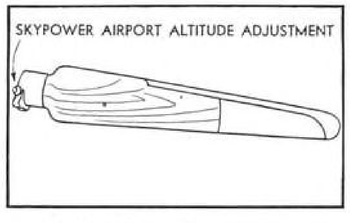
THE SKYPOWER PROPELLER brings higher ceilings or greater load capacity, as well as new fuel economy, to all personal planes. New horizons for your flying.



SIMPLE PUSH-PULL CONTROL on panel shifts prop to low-pitch angle for take-off and climb, high-pitch angle for cruising.



STATIONARY DOUBLE HYDRAULIC ACTUATOR — Exclusive with the Skypower Propeller — provides positive force to change pitch.



SPECIAL SKYPOWER BLADES are designed for high performance. Accessible control permits blade adjustment to local airport altitude for maximum performance.

CONTINENTAL AVIATION AND ENGINEERING CORP., Muskegon, Michigan

out that it will be several years before scheduled airliners will demand more rigorous design conditions.

Both noted engineers point out the great benefits to be gained by mutual cooperation between propeller, powerplant and airframe designers. Such problems as vibration, noise reduction, induction systems, control, strength and over-all efficiencies are best solved by coordination of these three major components in the design stage.

Trans-sonic Speed Problem Outlined

Greatest problem now facing aeronautical designers is the creation of aircraft able to get through the range of speed of from about 650 mph. to 900 mph., Wellwood E. Beall, engineering and sales vice-president of Boeing Aircraft Co., declares.

Aerodynamicists know "most of the rules which govern airflow at subsonic ranges of speed," he points out, and at speeds somewhat above that of sound, control, stability and more normal air flow are restored. But in the trans-sonic range, "air flowing around aerodynamic shapes now in use radically changes its nature with resultant disruptive effects; loss of lift, large increase in drag and loss of stability and control."

Future Plane? *Wellwood E. Beall, vice-president in charge of engineering and sales for Boeing Aircraft Co., and collaborator in the design of the* Flying Fortress, *the* Superfortress *and* Stratocruiser, *eyes what may be the shape of the plane of the future. It's only a paper plane, but Beall declares the ultra-high-speed aircraft of the future may resemble this toy in some respects.*

Canadian Lightplane: *The* Noranda, *tandem aircraft being built by Noury Aircraft Ltd., Stoney Creek, Ont., for personal or instruction use.*

Much Research Needed — New rules governing airflow behavior at trans-sonic speeds must be found Beall states, and applied to shapes which will either resist the destructive effects found in that speed range, or be able to penetrate it so fast the effects have no time to build up to the danger point.

This will involve a tremendous amount of testing in wind tunnels and analysis of the consequent calculations. The work must be undertaken separately for every part of the aircraft—wing, tail surfaces, fuselage, etc. After that, the separate results must be integrated.

"Days, weeks, and possibly years will pass," Beall writes in the Boeing Magazine. But, "at some point in the investigation, testing and analysis the answer will have been found."

Canadians Develop Device to Replace Oxygen Tanks

A machine to change liquid oxygen to oxygen gas during flight and so eliminate the deadweight of heavy steel cylinders of oxygen in bombers, was invented late in 1944 by two University of Toronto scientists, it was announced at Toronto this week, lifting another wartime invention off the secret list.

The machines weighed only 130 lbs. each and supplied the equivalent in oxygen of that carried formerly by 400- to 450-lb. steel cylinders. The invention is expected to have a peacetime application on passenger aircraft, eliminating the use of steel oxygen cylinders. Announcement of the invention was made in a paper read at the Banting Institute, Toronto, by Prof. Grayson Smith, who with Prof. F. E. J. Fry tested their apparatus in a RCAF Douglas-built Dakota flying across the Atlantic from Montreal in November 1944.

New Lightplane Being Produced in Canada

A new two-passenger high-wing monoplane, the *Noranda*, is being produced in Canada by Noury Aircraft Ltd., Stoney Creek, Ont. It has been fully approved by the Canadian Department of Transport for 75-, 85- and 65-hp. engines and for skis, floats and wheels.

Designed for personal or instruction use, it sells for $2,690 (Canadian) with a 65-hp. Continental engine, plus 8 percent sales tax. Standard equipment includes wheel undercarriage. It has a maximum speed of 110 mph., cruising speed of 95 mph., and cruising range of 450 miles. Takeoff speed is approximately 42 mph., stalling speed is 30 mph. It is reported to take off in 275 feet. Passengers are seated in tandem.

Construction—The *Noranda* has a 33-ft. 2-in. wing of wood with fabric covering. Fuselage is of steel tubing with fabric cover.

It is equipped with tachometer, oil pressure, oil temperature, air speed, compass and altimeter instruments. Gross weight on wheels is 1,383 lbs. It will carry two passengers and 80 lbs. of luggage.

Goodyear in Production On Farm Food Freezers

Reconversion at Goodyear Aircraft Corp. has taken an important step with production of the first farm freezer to be built under Goodyear's contract with Wilson Refrigeration, Inc. The new freezers, bearing the trade name "Zerosafe," are being manufactured under a contract of about $1,000,000.

The freezer is designed chiefly for rural homes and other establishments requiring large food-freezing and storage capacities and will be produced in 15- and 25-cu. ft. sizes.

GENERAL . . . "square deal for both flyer and supplier"

L. G. MASON
President
Aviation Supply Corporation

AVIATION SUPPLY CORPORATION
WHOLESALE DISTRIBUTORS
ATLANTA MUNICIPAL AIRPORT ✈ HAPEVILLE, GEORGIA

September 28, 1945

Mr. L. A. McQueen, Vice Pres.
The General Tire & Rubber Co.,
Akron, Ohio

Dear Mr. McQueen:

Our experience with the General Franchise certainly proves that General Tires have the square deal for both flyer and supplier.

As your Distributor here in Atlanta, we have found it a rare satisfaction to be always confident that the General tires, tubes and accessories we sell will deliver utmost safety, service and economy to our customers.

While we know your products to be a real boon to flyers...we also recognize that your square deal policy of protected sales areas...no factory-direct sales ...no factory stores...unique national advertising and constant Top-Quality, has helped us build a substantial, sound business that encourages us and enables us to better serve aviation.

We would like to be able to tell all pilots in America that there is no better buy for safety, dependability and overall economy than General Airplane Tires and Tubes. To men in the aviation supply industry and to fixed-base operators, we heartily recommend the General Franchise as the outstanding square deal of the aviation tire industry.

Yours sincerely,
L G Mason
President
AVIATION SUPPLY CORPORATION

The GENERAL AIRPLANE TIRE

Aviation Division • THE GENERAL TIRE & RUBBER CO. • AKRON, OHIO

HELICOPTERS—HOW SOON?

This Army XR-8 helicopter and its military successors, designed and produced by Kellett, are helping us prepare to produce advanced helicopters to fit the needs of commerce and industry. Sixteen years of aircraft manufacturing experience equip us to understand those needs, and to approach the helicopter's future confidently.

No longer is the helicopter's *flying flexibility* questioned. It is being demonstrated every day. Any well-designed helicopter is completely at home flying *forward, backward or sidewise*, taking off and landing *vertically* in open land or water space of tennis-court size—hovering *motionless* within talking distance of the ground. The same helicopter travels across country at speeds greater than your car can hold on an express highway.

The day may not be far away when helicopters, developed from present models, will perform many money-saving, time-saving tasks. Aerial surveys and patrols, crop-dusting, repair and relief missions, mineral and petroleum exploration and the transportation of passengers or goods will afford countless opportunities to *do the job better by helicopter*.

Kellett's immediate objective is to develop helicopters with adequate range, capacity and stamina to meet exacting requirements. That is a goal worth reaching. We intend to attain it as rapidly as possible.

KELLETT AIRCRAFT CORPORATION, UPPER DARBY, PA.

KELLETT
HELICOPTERS

Salmon Stresses Need Of Lighter Jets, Better Fuel

Two most important factors which will extend the economical advantage of the airplane in the opinion of Ben T. Salmon, chief engineer of Ryan Aeronautical Co., are further refinement of the gas turbine engine and development of new super-fuels of high chemical energy in relation to weight.

"The two principal possibilities open to science to improve airplanes beyond what they are today from an economic standpoint are reduction of the installed powerplant weight and reduction of fuel requirements in pounds," he told the San Diego section of the Institute of Aeronautical Sciences.

▸**Cites Gas Turbine**—"The lighter powerplant weight is with us now in the form of the gas turbine, both in its jet propulsion and propeller driven forms," he added. "Because this type of powerplant is still in the development stage, its present disadvantage of poorer thermal efficiency and higher fuel requirements will be overcome in the near future."

Salmon said that perhaps of even greater importance is the fact that the gas turbine will operate on almost any substance as a fuel which can be blown through a nozzle and which will burn in air.

Speed Limitations

While speed in the subsonic range has paid rich dividends to airlines in the past, some observers believe the point of diminishing returns has been reached. They predict that supersonic speeds will be practical only in military craft where economy is of secondary importance.

The cost of speed, which increases smoothly in the subsonic range, suddenly climbs to almost prohibitive proportions in the supersonic range, NACA engineers point out.

▸**Example Given**—Drawing the example of a coast-to-coast flight made at 30,000 ft. at cruising speed, H. C. Bailey, of the Flight Research division points out that about 10 standard drums of gasoline would be burned if the flight were made at 385 mph. Made at a speed of 675 mph. the flight would require twice this quantity of fuel, although the speed would be less than two and one half times as fast.

★ ★

Nine Uncertificated Operators Organize To Promote Business

Announce high safety and maintenance standards will be established to forestall criticism; joint cargo, packaging and rate policies are being considered.

Nine federally uncertificated cargo and passenger operators have organized the **Institute of Air Transportation, Inc.**, as a cooperative, non-profit organization. Equipment of the members varies from Lockheed *Lodestars* to Douglas DC-4's totalling 75 planes at present with 30 more on order.

Taking action to forestall rising criticism of unstandardized operations and maintenance by some uncertificated carriers, the association's acting board chairman, Sigfried O. Samuelsson, announced that "For a maximum of saftey, standards above the government's levels are being established and a network of inspection and maintenance points throughout the country will be sponsored."

▸**Mutual Policies Proposed**—Mutual policies regarding cargo routing, rates and packaging are being considered, and an educational program "to stimulate the use of air transportation" is being proposed.

"Returned veterans to a great extent are the organizers and personnel of companies forming the Institute," Samuelsson said. "Aircraft released by the government and new planes soon to be available will provide opportunities for great expansion in charter, contract and non-scheduled air transportation. It is conceivable that in a few years several thousand planes can be profitably operated in these services."

▸**Charter Members Listed**—Charter members of the association, which has headquarters at 500 Fifth Avenue, New York City, are: **American Air Express & Importing Co., Inc., National Skyway Freight Corp.; Pacific Air Cargo Co., Inc.; Trans-Caribbean Air Cargo Lines, Inc.; Trans-Marine Airlines, Inc.; U. S. Airlines, Inc.; Veterans' Air Express, Inc.; Veterans' Air Lines, Inc.; Willis Air Service, Inc.;** Boochever, Cameron & Bobrick, Esqs. (attorneys); Cannon & Smith, (insurance brokers).

Other developments in the non-scheduled, charter, and contract cargo and passenger field were:

▸**National Skyway Freight Corp.,** transcontinental non-scheduled cargo carrier, signed a contract assuring return loads for three weekly Los Angeles-NewYork cut flower flights. Return shipments of assorted cargoes, principally garments and furs, have been contracted in the East with Gilbert Air Freight, shipping consolidators. Popularly identified as the "Flying Tiger Line," the company now operates nine planes and has shifted its headquarters from Long Beach Municipal Airport to Los Angeles Airport.

The company this month will resume gladiola shipments from Tampa, Fla., to Los Angeles to the extent of three plane loads weekly. Orders are increasing for the movement of race horses and brood mares, and the ending of the Santa Anita Park racing season probably will bring a series of shipments from this West Coast racing center to the eastern seaboard. Passenger charters include the movement of military personnel and the flying of United Auto Workers (CIO) delegates to their national convention at Atlantic City, N. J., and return after the convention. At the company's West Coast headquarters Domestic Air Express, consolidators, has contracted for a weekly shipment of mixed freight to eastern points. Experimental fruit shipments to eastern cities will be resumed this month.

▸**Northern Airlines,** which began twice-weekly cargo flights between Seattle and Alaska in February, carried capacity cargoes northbound every trip during its first month of operation, Arthur F. Johnstone, president, reports. Line is negotiating for a second DC-3. Northbound cargoes totalling 3,500 lbs. each trip consist of meat, vegetables, and some fruit. Stores report sell-outs shortly after arrival in Anchorage and Fairbanks. Southbound cargoes, largely furs, mining and aircraft equipment in need of repairs, have been growing steadily and now average about 1,000 lbs. Freight rate is 40 cents a ton-mile.

▸**West Virginia Air Express,** Baltimore Airport, dispatches a plane thrice weekly with fresh seafood to Beckley, W. Va., as a result of an idea of H. L. Sessler, manager of Beckley Municipal Airport, who contracted with a Baltimore seafood firm for 500 lbs. of fish in early February and sent a plane to Baltimore to pick it up. As a result of the special advertising, local promotion (and the excellent flavor of the seafood) the cargo was sold out in a few hours. The plane now makes each trip loaded with 3,000 lbs. of fish, oysters and lobsters. Service will be extended soon to

WESTERN OPERATOR'S FLEET:

Three of the Boeing 247-D's operated by Zimmerly Airlines in the Northwest which recently was taken over by Empire Airlines. Both firms are headed by Bert Zimmerly.

Charlestown, Bluefield, and Princeton, all in an isolated mountainous section of the state. A Noorduyn *Norseman* is used; a DC-3 will be bought soon. Emergency passengers are carried.

▸ **Air Cargo Transport Corp.** lost three C-47's when fire destroyed its Newark hangar, but operations will not be curtailed. Seven other craft remain in service and ten more will be purchased soon, H. Roy Penzell, president, announces. Company is concluding an arrangement to fly ACT planes into Havana for Expreso Aereo Inter-Americano S. A.

▸ **Robinson Airlines,** Ithaca, N. Y., in February carried 345 passengers, against 346 in the longer month of January. The community airline, operating non-scheduled services out of Ithaca to New York City, completed eleven months of operations late in February. A new service between Ithaca and Buffalo, which started Jan. 21, brought new business. Twin-engine Cessnas, carrying four passengers, are being used.

▸ **Nationwide Air Transport Service, Inc.,** Municipal Airport, Ocala, Fla., has been organized with maximum stock capitalization of $100,000, to operate a non-scheduled passenger and freight service. Four former service pilots and a Western businessman hold all of the company's stock. Robert C. Renneker, spokesman for the company, was a lieutenant commander in the Navy. Company owns a converted C-47 and has applied for two more.

▸ **Empire Air Lines,** of Lewiston, Idaho, has taken over the intrastate scheduled airline operations and three Boeing 247-D airplanes of Zimmerly Airlines, which company is abolished. Bert Zimmerly, president of both companies, organized Zimmerly Airlines in 1944 to operate intrastate and establish traffic data on which to base an application to CAB for an interstate system in the region. He then organized Empire Air Lines, which filed application for a certificate to serve 33 communities in Idaho, Oregon, Washington, and Nevada. Hearings were held in San Francisco in November, and in July, 1945, the examiner reported favorably.

▸ **Suported By Public Counsel—** After oral argument at Washington, October, 1945, Public Counsel Robert Hankins supported the examiner's conclusion and added a plea for extension of the Zimmerly operations to San Francisco, Salt Lake, Idaho Falls, Portland, Seattle, and Spokane. Zimmerly's purpose in activating Empire Air Lines is to be prepared for interstate operations if the long-delayed CAB certificate is granted.

Utah Airline Officials: *Standing beside the first 10-place Beech transport delivered to Challenger Airlines, Salt Lake City, are Challenger President George Snyder, Jr., Chief Pilot Floyd Ririe and Treasurer William W. Eastman, Jr.*

Intrastate Air Service Inaugurated in Utah

Challenger Air Lines, based at Salt Lake City, also will serve Albuquerque and Phoenix with Beechcrafts.

Utah's first intrastate air service —Challenger Air Lines, Salt Lake City — began survey operations March 1 with the first of a fleet of Beechcraft D18-S 10-place transports.

Besides linking nine Utah communities, Challenger plans non-scheduled interstate service south to Albuquerque, N. Mex., and Phoenix, Ariz. There now is no direct rail or air connection between Salt Lake and these other two state capitals.

▸ **Routes Listed**—Scheduled intrastate routes to be served by the new line are:

▸ North from Salt Lake City to Ogden, Brigham City and Logan.

▸ South from Salt Lake City to Provo, Delta, Richfield, Milford, Cedar City and St. George.

The non-scheduled interstate operations will be:

▸ South from Salt Lake City to Vernal and Price, Utah; Grand Junction and Durango, Colo.; and Albuquerque.

▸ South from Salt Lake City, via the southern Utah points, to Flagstaff, Prescott, and Phoenix, Ariz.

▸ **Officers Listed**—Officers of the line are: George W. Snyder, Jr., of Salt Lake City, president; Lowell M. Burrell, of New York City, vice-president; Morell Mackenzie of New York City, vice-president; Douglas A. Busay, of Reno, secretary, and William W. Eastman, Jr., of Burbank, treasurer. The same men also act as the board of directors.

Snyder, formerly a flying school and charter operator, was operations chief of a Beechcraft squadron with the Western Technical Training Command during the war. Eastman, also an Army pilot, was with Consolidated as a test pilot.

▸ **Rates Will Be Low**—Challenger is projecting a 5-cent-a-mile passenger rate. On the runs to Albuquerque and Phoenix this will make the fare comparable to train costs, but will cut travel time from 36-48 hours to less than five hours.

Capitalized at $250,000 as a Nevada Corporation, the line is completely financed under the Claude Neon Lights Corp., New York City.

Lodestar Prices Revised

New prices on surplus C-60 Lockheed *Lodestar* transports range from $20,000 to $35,000, instead of from $22,500 to $30,000 as previously reported. Price range for passenger version is from $25,000 to $35,000. All paratrooper models are priced at $22,500, and all trainer types at $20,000.

Private Pilots Carry Mail

Pilots of the Richmond, Idaho, Flying Club dropped mail by plane to isolated ranches in snowbound Lincoln County recently when blizzards brought RFD mail to a standstill.

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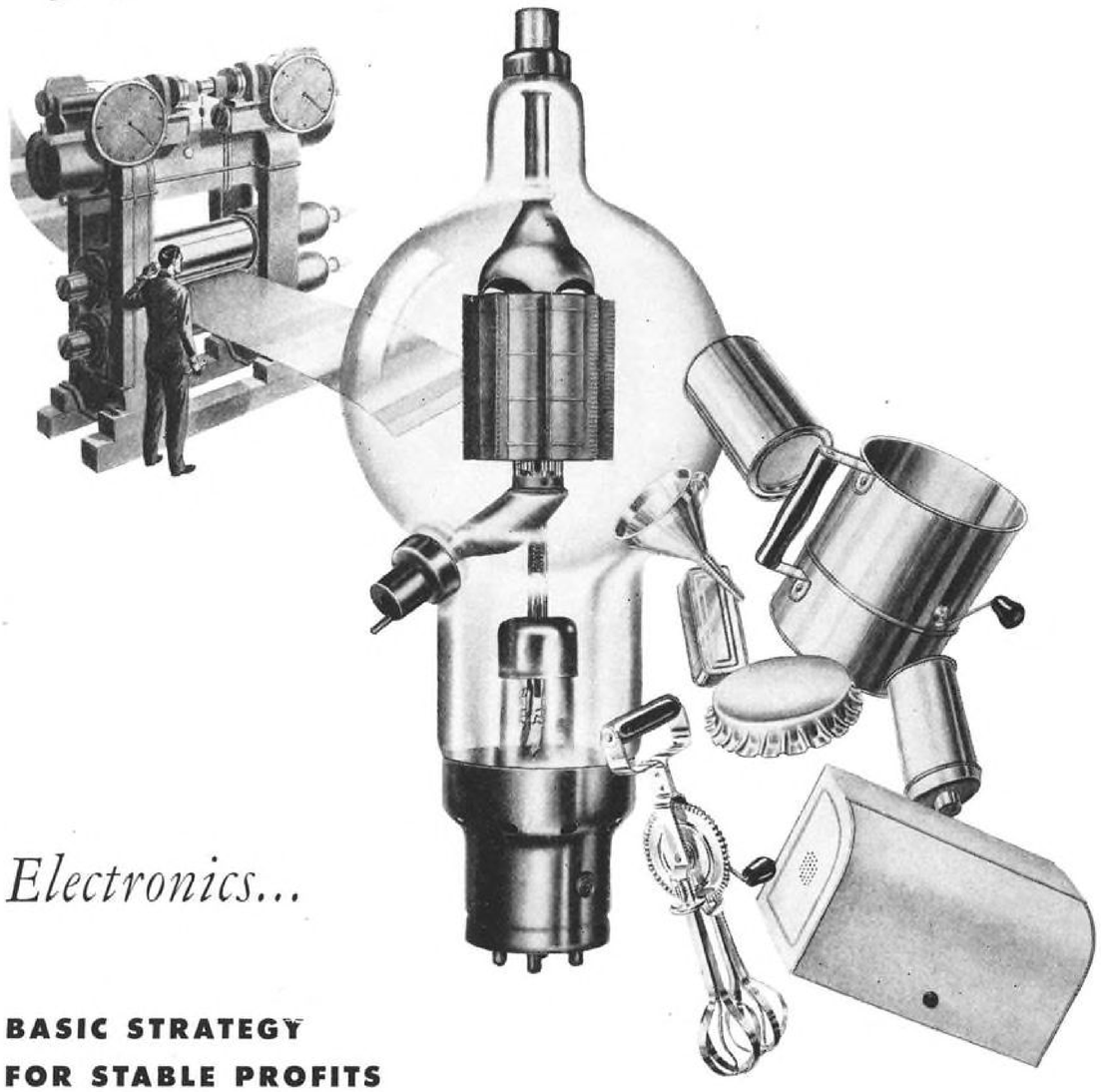

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PERSONNEL

★ ★

Paul E. Burbank Named UAL Cargo Sales Head

Paul E. Burbank (left) has been named manager of cargo sales for United Air Lines in line with the integration of air cargo sales and promotion activities into the traffic-

sales department. Burbank was formerly development manager for the air cargo department. **Dr. George Kidera** (right) has become regional medical director for United at Chicago. **Robert K. Buckle,** who served as personal pilot for Lord Louis Mountbatten in India, has returned to United as a flight captain at San Francisco.

R. O. Smith (photo), PCA superintendent of maintenance and overhaul, has been appointed assistant to the executive vice-president of the airline. Succeeding him in the maintenance post is **Harry D. Estey,** formerly his assistant, while **Paul Humphreys,** previously supervisor of PCA's maintenance training program, becomes assistant superintendent.

Robert W. Fleming has joined the Washington public relations staff of Pan American Airways, following his release from the Navy. Just prior to leaving the service, Fleming was a special assistant to the undersecretary of the Navy. He will be associated with **William J. McEvoy,** assistant vice-president of Pan Am.

Ronald S. Gall has been appointed director of publicity for National Airlines, Inc. Gall will have charge of the entire airline system with headquarters in New York. Formerly a newspaperman, Gall has served as manager of public relations for Wright Aeronautical Corp., Curtiss-Wright Corp. and Brewster Aeronautical Corp.

James M. Cox, Jr., vice-president of the James M. Cox chain of newspapers and radio stations, has been elected to the board of directors of Eastern Air Lines, Inc. Cox has been serving with NATS.

Charles DeWitt, formerly personnel analyst, has been promoted as manager of employment for PCA and will have full responsibility for employee recruitment and personnel records. DeWitt formerly was with Glenn L. Martin Co., as assistant to the personnel director.

Thomas W. Marshall, Jr., former district traffic manager at Butte, Mont., has returned from military service and will resume his duties as Northwest Airlines' district traffic manager at Spokane, Wash. **R. D. Beaulieu** will remain there as assistant district traffic manager.

A. R. Thomas is the new general manager of the plant operated by the Jacobs Aircraft Engine division of Republic Industries, Inc. in Pottstown, Pa., succeeding **Harold B. Knerr. Kenneth N. Thompson** has resigned as assistant secretary of the division.

J. D. Lewis, formerly superintendent of military operations for American Airlines, has been appointed manager of operations at New York for the domestic division. Lewis joined American (then Universal Airlines) in 1929. **Walter H. Johnson, Jr.,** has been named eastern regional cargo traffic manager for American replacing **Robert K. Warner** who has been appointed general air freight agent. Johnson has been on military leave with the Marine Corps.

Marshall H. Jones (left), recently discharged from the Navy, has been named assistant to **R. L. Anderson,** superintendent of engineering for Chicago & Southern Air Lines. **Joe W. Clement, Jr.** (right) has joined

Chicago & Southern as assistant to **Thomas M. Miller,** director of economic research. Prior to joining the AAF Clement was with the Civil Aeronautics Board in Washington as assistant to the secretary of the Board.

CAA APPOINTMENTS:

Donald R. Harvey (left) is the new personnel officer for the Civil Aeronautics Administration; M. Justin Herman (center) becomes assistant administrator for aviation training succeeding Bruce Uthus who has resigned to join TWA, and William E. Kline (right) has been named assistant administrator for federal airways (AVIATION NEWS, March 11).

Edwin L. Zivi (photo) has been appointed chief engineer of Edo Aircraft Corp. Zivi went to Edo from the Glenn L. Martin Co., where he was engineering manager. He helped design the all stainless-steel version of light Savoia-Marchetti amphibian built by the Budd Manufacturing Co.

Stratford W. Rice, who has served with Eastern Air Lines for more than 10 years, recently was appointed northern division cargo representative. **Edwin V. Smith** has been named Brooklyn sales representative for Eastern. He was formerly assistant chief agent at LaGuardia Airport.

Maj. Gen. John F. Curry, former commander of the Western Technical Training Command, has been named new aviation director for the state of Colorado. The new post has just been created by the legislature in a special session.

R. H. Puffer, former industrial relations manager of the Buffalo plants of Curtiss-Wright Corp., has been appointed laboratory superintendent of the Cornell Aeronautical Laboratory, recently donated to the university by the Curtiss-Wright Airplane division.

Brig. Gen. Erik H. Nelson has retired from the Army to become technical adviser to Swedish Intercontinental Airlines. A member of the Army round-the-world flight in 1923, Gen. Nelson's World War II assignments included all maintenance arrangements for the first B-29 squadrons in India and China.

TRANSPORT

★ ★

General Use of Radar By Airlines Considered Still 2-3 Years Away

Experts say public is misled as to its current commercial adaptability, see much development necessary before it can be applied safely and successfully.

By MERLIN MICKEL

The war feats of radar have led to a public misconception of its immediate adaptability for commercial airline use, in the opinion of specialists in the field, and another two to three years will elapse before it can be installed universally for airline traffic control and safety application.

The question why this war-born device is not in use on the airways is being asked more and more frequently of airline officials by persons outside the industry. The best answer, according to the Air Transport Association, is simply that radar has not been perfected for commercial use.

▸ **Tests Underway**—The commercial operators are intensely interested in radar development but the program has been geared to the military. One of the best evidences that it still is primarily a military function lies in the fact that the War Department intends to spend several million dollars on radar and all-weather flying studies during the coming fiscal year.

ATA, CAA, CAB and some individual airlines are making radar tests. Among these is American, which for nearly a month has been flying a C-47 fitted with APS-10 radar equipment. The ship is to be brought to Washington soon for experimental flights with CAA and CAB observers.

▸ **Detects Thunderstorms** — Greatest value of this equipment, weighing 170 lbs., is said to be in detection of thunderstorms. Range is about 100 miles under ideal conditions, with a normal maximum of half that distance.

Plane radar, which readily detects a shoreline or other major feature of the terrain, has not reached the point where it can pick one mountain peak out of a range, for example, and ATA operations officials feel that it has not been developed to the extent that general installation as a safety device would be practical. Such a step would be viewed with more favor if it were not for the fact that accidents to aircraft in flight are usually a combination of many factors, any of which radar might not preclude.

▸ **Ground Use Eventual**—In airport traffic control, the consensus is that ground radar to monitor plane movements will be the eventual solution, but not until a method is devised to obtain a positive energy return from aircraft whereby they can be identified. Furthermore, no present-day radar scope gives the three essentials of altitude, range and bearing, or azimuth. Those that show altitude and range do not show azimuth, and a two-dimensional picture is the best obtainable on a single scope.

This was satisfactory in military use, where bombers and fighters followed a set, preordained flight pattern. But for commercial use, the system must be simplified and made adaptable. A method must be provided for identification of incoming craft.

Two possibilities are being studied in this connection, involving use of color or code letter combination on the scope to identify the plane as well as give its location.

▸ **Conference Cited** — Some indication of the work yet to be done may be gained from last month's conference called by the AAF (AVIATION NEWS, Feb. 11) to discuss all-weather flying. Fifteen manufacturers sent representatives, but the sentiment of the meeting was that while marked progress had been made, more experience was necessary and no single system was yet ready for official endorsement.

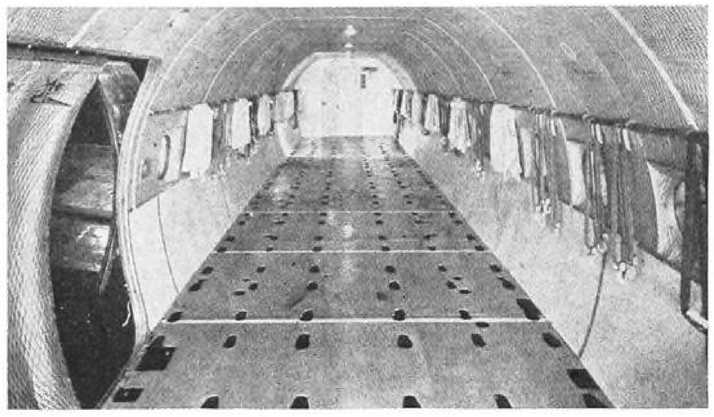
National Criticized In Tart CAB Order

"Wilful" violation charged in ruling that it must drop control of Caribbean-Atlantic Airlines.

Sharply rebuking National Airlines for "wilfully and knowingly" violating the Civil Aeronautics Act, and indirectly warning other carriers against similar offenses, CAB has ordered National to divest itself of all control over Caribbean-Atlantic Airlines, Puerto Rican carrier.

The tartly-worded opinion also disapproved an agreement providing for use of National's personnel and equipment in Caribbean's operations.

▸ **Stock Deal Cited**—The Board declared "the conclusion is inescapable" that National has held the power to control Caribbean since



CARGO CONVERSION FOR AMERICAN:

Interior of the first C-54 converted at the Glenn L. Martin plant for air cargo use. It was delivered to American Airlines.

May 15, 1945, when 33,500 shares, or more than 80 percent of the latter's stock, was turned over to the U. S. carrier in return for future delivery of a smaller number of National shares.

Further, the Board continued, George T. Baker, National president, expressed willingness to take the risk of not obtaining prior approval of the transaction from the Board, even though such action might be deemed a violation of the Civil Aeronautics Act.

▸**Other Findings**—Aside from finding the control agreement illegal, CAB saw a lack of integration between the two carriers which "precludes approval of the acquisition as not creating a sound transportation system." The Board also revealed a disproportionate stock exchange, indicating that the Caribbean shares, especially those of Dennis Powelson, Caribbean president, were over-valued in the transaction.

National was granted 60 days to comply with terms of the Board's order dissolving all relationship with Caribbean.

Northwest Contracts For 10 *Stratocruisers*

Becomes first domestic carrier to order giant Boeing craft; American negotiating for eight.

Northwest Airlines last week became the first domestic carrier to purchase *Stratocruisers* when it signed a $15,000,000 contract with Boeing Aircraft Co. for 10 of the long-range double-decked airliners. The announcement came as American Airlines was completing negotiations with Boeing for purchase of eight *Stratocruisers* (Model 377) costing $10,000,000 for use in New York-London flights and other overseas service.

Completion of the American contract would bring total *Stratocruiser* purchases to 42, Pan American Airways previously having bought 20 and Swedish Intercontinental Airlines (SILA), four.

▸**Other NWA Committments** — Northwest's new plane commitments now aggregate $22,000,000, including $7,000,000 for 15 DC-4's. Delivery of the *Stratocruisers* early in 1947 would enable Northwest to establish seven-hour, coast-to-coast non-stop flights, company officials say. The Boeings also would be used on Northwest's proposed Northern Pacific route to the Orient, now awaiting CAB decision after having been recommended by Board examiners.

Northwest Orders "Stratocruisers": *Northwest Airlines will make its bid for fastest coast-to-coast service early in 1947 when Boeing will deliver the first of ten* Stratocruisers *ordered last week. Besides seven-hour, nonstop transcontinental schedules, Northwest intends to offer 36-hour* Stratocruiser *service from New York to Shanghai if CAB approves a proposed Northern Pacific route to the Orient, which has already received the favorable recommendation of Board examiners.*

▸**Ready To Begin** — Croil Hunter, president and general manager of Northwest, states that operations along the Alaska-Tokyo-Shanghai-Hong Kong-Manila route would begin with DC-4's within a few months after the Board's approval, with *Stratocruisers* added as they become available. *Stratocruisers* could fly New York-Shanghai in 35 hrs., 45 mins., and the same eastbound route in 28½ hours, compared with pre-war air time of 5½ days.

For Northwest's operations, the *Stratocruisers*' interior will be arranged to seat 70-105 passengers and will be capable of conversion to sleep 16 persons in double berths and eight in single berths, besides 43 in seats. American would have a model providing berth space for 45 passengers or 60 daytime seats.

Airlines Flew 94.26% Of Schedules in '45

Domestic airlines in 1945 carried new peak loads of passengers, mail and express and flew 94.26 percent of scheduled mileage, CAB reports.

The 20 carriers increased revenue miles flown to 217,499,338, 50.57 percent above 1944; revenue passenger miles to 3,490,386,076, up 54.14 percent; mail ton miles 65,266,926, up 27.63 percent, and express ton miles 23,133,010, up 30.67 percent.

▸**American Leads**—Average plane load in 1945 was 17.33 passengers, 632.6 lbs. of mail and 213.1 lbs. of express. Passenger load factor dropped slightly from 89.38 percent in 1944 to 88.12 percent last year.

American flew the most revenue passenger miles, 801,219,311, followed by United, 598,978,698, and TWA, 513,038,895. Except for Hawaiian, United reported the highest revenue passenger load factor, 93.40 percent.

United Kingdom-Baltimore Service Dropped By BOAC

British Overseas Airways discontinued its five-year-old flying boat service between the United Kingdom and Baltimore last week after completion of 590 trans-Atlantic crossings.

The veteran Boeing 314-A's used in the service will be used to step up Baltimore-Bermuda flights to three weekly. Trans-Atlantic service continues between Montreal and Britain.

UAL Speeds Up Service

United Air Lines cut almost four hours from its East Coast-Pacific Northwest service March 16 when it placed DC-4's on a daily round-trip between New York and Seattle-Tacoma. At the same time a daily DC-4 flight was added to the Los Angeles-Seattle and Los Angeles-San Francisco runs. Use of DC-4's also is expected to shave Pan American Airways' Miami-Balboa and New Orleans-Balboa schedules shortly.

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PRECAUTION — PRECISION — SAFETY

Shelving of Multilateral Basis In U. S. Foreign Air Policy Seen

Replacement of Chicago conference's Five Freedoms philosophy by bilateral negotiations seems inevitable in light of Senate Commerce Committee hearings on Bermuda agreement.

Replacement of the Five Freedoms multilateral philosophy of the Chicago civil aviation conference with bilateral negotiations as the keystone of U. S. foreign air policy seems inevitable in the light of statements at recent Senate Commerce committee hearings on the Bermuda Anglo - American air agreement.

Aside from the U. S., no major nation has ratified the Chicago Five Freedoms agreement, although there were several signatories at the conference and some smaller countries have accepted it.

▸**Baker Indicates Switch** — The switch to the bilateral approach was indicated after George Baker, chief of State Department's Office of Transport, stated that the plan of the Department is to proceed with bilateral negotiations with individual nations, and Sen. Brewster (R., Me.) pointed to complications which might arise because of U. S. participation in both the Five Freedoms and Bermuda agreements.

Brewster pointed out hypothetically that if Russia were to sign the multilateral Five Freedoms agreement she could operate a New York-Orient route at her own rates and frequencies, while U. S. carriers might be bound by rates fixed under the Bermuda agreement. Baker agreed with the Senator's conclusion that should such a condition arise, the U. S. would "have to reject the Five Freedoms agreement" formally and outright.

▸**Sees Senate Rejection** — Senator Bailey (D., N. C.), chairman of the committee predicted that the Senate, in ratifying the Chicago convention, will strike out the Fve Freedoms provision.

Endorsing the State Department's plan to proceed along bilateral lines to obtain Five Freedom rights for U. S. carriers in other countries, Bailey proposed bilateral agreements with the Netherlands, Norway, Russia, France, and "probably Brazil and China," in addition to Great Britain. He suggested that the U. S. negotiate "some type of general agreement" with all smaller nations through which U. S. planes will want to fly but which have no commerce of their own to extend into the U. S.

▸**Policy - making Change** — From opinions expressed at the hearings, it is apparent that the only provisions of the Chicago convention which will be cleared by the Senate are those subscribing the U. S. to membership in a permanent international civil aviation organization and those establishing international air safety regulations.

Testimony brought out that up to the time of the Chicago conference the State Department had decided U. S. air policy, with the Civil Aeronautics Board playing the role of technical advisor. Baker said this relationship now has been reversed, with CAB acting as the policy-formulating agency and the State Department functioning as negotiator, with constant close liaison beween the two.

PAA Martinique Crash Blamed on Rough Water

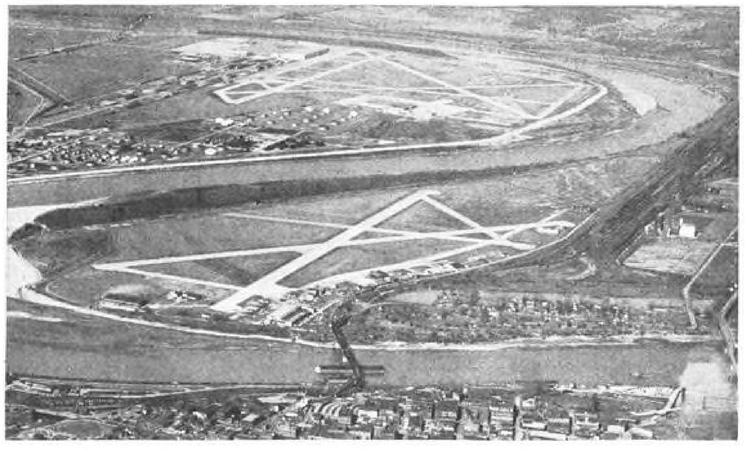
Crash of PAA's S-43 amphibian at Fort de France, Martinique, last August probably was caused by the pilot's attempt to land the plane on excessively rough water, according to a CAB accident report.

Four passengers were drowned and six passengers and the crew of four saved when the Trinidad-San Juan flight landed on the crest of a high swell, capsized and sank. CAB noted that PAA ground personnel were not alert to existing hazardous weather and failed to advise the flight that landing would be difficult.

Hearing Records Set

New records both in scope of services proposed and length of hearing were set at the recently concluded Middle Atlantic area proceeding in Philadelphia. Representatives of 19 uncertificated applicants, 11 scheduled carriers and numerous interveners required almost six weeks to present their respective cases for new routes and services.

Requests of major trunklines for additional local services in the industrial East were attacked sharply in final sessions by officials of regional carriers who indicated they will view the decision in the case as a touchstone of CAB's policy toward the transcontinental carriers' drive for short-haul business.



Kansas City Airport Puzzle: *The proximity of two Kansas City airports can be seen in this new air view of the area. In the foreground is the Kansas City, Mo., municipal field, a five-minute drive from downtown Kansas City. Beyond, across the Missouri river in Kansas, is the Fairfax Airport. A plan to reroute the river and join the two airports into one large field was tabled recently because of cost. TWA, meanwhile, has served notice that because the "saturation point" is being reached at the Municipal airport, some of its flights will start using Fairfax field, where it has a modification center for its* Constellations.

AIRPORT ROUND-UP

CAL Leases Hangar At Denver Center

Continental Air Lines has leased one of the two hangars at the modification center recently leased to the city of Denver by the Government, and Western Air Lines is taking about half of the other. United Air Lines is negotiating for lease of the half-hangar not occupied by Western.

The city pays $1 a year for the whole facility. Continental will pay the city about $70,000 a year rent and Western $33,000, or $103,000 in all. Completion of the United lease will bring the city's income from the center to nearly $150,000 yearly, virtually enough to operate Stapleton Field, the municipal airport.

▸**Plans Outlined** — Continental, which operated the modification center during most of the war, will consolidate maintenance, repair, overhaul and conversion operations in its hangar, and house its general office forces there. Western will use its space for maintenance and storage. The city will supply hangar maintenance and heat, and clear working spaces on the aprons surrounding the hangars in winter.

Airport news elsewhere:

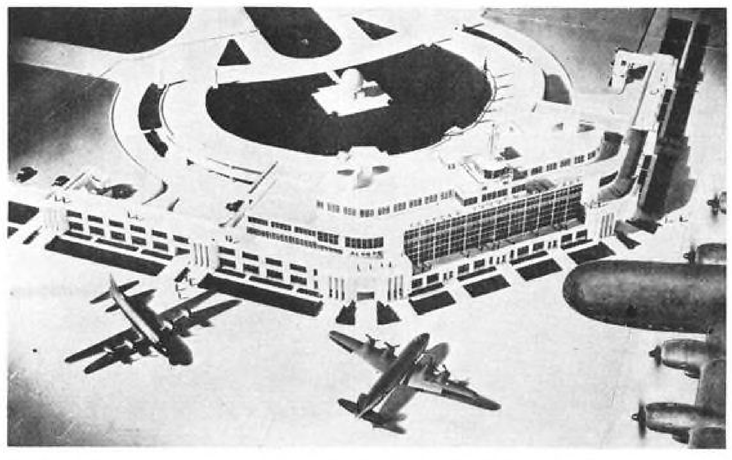
▸**Oakland, Calif.**—Restoration of the Oakland Airport to commercial status is under way, with building improvements planned and a new schedule of landing fees for non-scheduled operations approved by the city's Board of Port Commissioners. Public hearings will be held soon on rates for scheduled air transport operations.

The airport is one of the San Francisco-Oakland bay area's major terminals and will be important in expansion of both passenger and freight air services. Throughout the war its commercial use was limited to United Air Lines schedules. Naval Air Transport Service occupied a large section for command headquarters, overhaul and maintenance, and operation of its California-Honolulu service.

Reopening of the port's restaurant, taken over by the Army during the war, is planned. Bids for the concession, on a percentage basis with a base rental of $400 a month, are being opened today. At the same time bids will be opened for construction of a 50 x 100 ft. hangar extension to be occupied by Pacific Airmotive Corp. for engine overhaul service.

▸**Kansas City, Kans.**—Under terms of the lease agreement under which TWA, when it chooses, would use Fairfax Municipal airport, the airline would pay Fairfax the same scale for scheduled landings it now pays at the Kansas City, Mo., municipal field across the Missouri river—$100 for the first landing each month, $50 for the second and $25 for each subsequent landing in the same month. These fees cover a maximum of 2,000 landings a year, and those in excess of that number would cost the company $25 each. TWA will also pay $150 a month for the use of Fairfax runways by aircraft put through or tested at the modification center at the field.

The agreement, approved by the Kansas City, Kans., city commissioners and submitted for federal approval, also provides 6000 sq. ft. of space in the Fairfax terminal building for TWA office and school purposes. If the line starts scheduled operations at the field, which it expects to do soon because of crowded conditions at the Kansas City, Mo., airport (AVIATION NEWS, March 11), the space will be reduced to 1,000 ft. to make way for other lines which may wish to use Fairfax.



Seattle-Tacoma Terminal Project: *Construction is to start in 60 days on this $2,000,000 administration building at the Seattle-Tacoma Airport at Bow Lake. The structure will cover 90,000 sq. ft. Underground storage for cars will be a feature. Other improvements at the airport will include three additional secondary runways to supplement the four mile-long primary runways now in use. Loading space on the apron will be supplied by eight plane spotting positions, each 150 ft. in diameter, with five more contemplated when need arises.*

Lima Field Expansion

Panagra reports that steps are being taken by the Peruvian Government to make the airport at Lima 2½ times as large as at present, to accommodate the *Constellations* the airline expects to put into service soon. A $500,000 passenger terminal, four stories high and covering more than a city block, is nearing completion.

▸**Omaha**—A new administration building has priority among improvements planned for the municipal airport. Local and consulting architects will be hired by the city Airport Commission to make design recommendations. With $400,000 of a $1,250,000 bond issue already spent for a new runway, commissioners say federal aid will be needed for other major improvements.

▸**Springfield, Mass.**—Future Springfield, Inc., research civic promotion group, has recommended use of Bradley Field, in Connecticut between Springfield and Hartford, Conn., as joint commercial airport for the Springfield-Hartford area. Estimates are that the $15,000,000 field, 12 miles from Springfield, would serve an estimated 900,000 population.

▸**Detroit**—The proposed International Airport site has joined the Northeast and Northwest sites in the list of rejects by the Detroit Common Council. The vote was 5-3 against the Windsor proposal. Wayne County Airport is next site on the Council's agenda, despite the fact that major airlines operating in and out of Detroit are against it as a permanent proposition.

SHORTLINES

▸**American's** overseas operation showed a passenger load factor of 78.44 from July, 1945, through December. Mail and express load factor was 77.75.

▸**Chicago & Southern** flew 83 percent more revenue passenger miles during the first two months of this year than in the same period of 1945. Number of revenue passengers was 106 percent higher. . . . The company, which will move its executive offices to Chicago next fall, is enlarging its general offices, overhaul and maintenance base at Memphis.

▸**Continental** directors have declared a 15-cents-a-share dividend, payable April 1 to stockholders of record March 5. . . . Fare reductions effective March 1 between some major points on Continental's system ranged up to 19 percent. That between Kansas City and Denver was cut from $27.95 to $24.95.

▸**Delta** expects to have seven converted DC-4's in service by June 1. First was to start between Chicago and Miami last week with a 3 hr. 23 min. non-stop to Atlanta. Chicago-Miami time is 8½ hrs., with stops at Atlanta, Savannah and Jacksonville.

▸**Mid-Continent** blames a $19,049 net loss in January on increased labor costs and unfavorable weather con-

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ditions that limited completion to 89 percent of scheduled operations. Mail pay was 21.86 cents per mile, against 35.14 in January, 1945. Last January's operating revenue of $316,964 was 95 percent over the same month a year ago. Revenue miles were up 67 percent and passenger miles 94 percent. Revenue passengers numbered 15,340 against 5,924 in January, 1945.

Western reports that January, 1945, showed revenue passenger miles 57.86 percent and express pound-miles 8.11 percent above the same month last year.

CAB ACTION

The Civil Aeronautics Board:

- Granted Pan American Airways temporary exemption to permit continuation of New Orleans-Guatemala City service until date of decision in Latin American case (Docket 525 et al.)
- Authorized Western Air Lines to inaugurate service between Los Angeles and Denver, via Las Vegas, Nev., and Grand Junction, Colo., on new AM 68.
- Permitted United Air Lines to inaugurate non-stop service between Ogden, Utah, and Elko, Nev., and between Chicago and Iowa City, Iowa, on AM 1, and between Salem, Ore., and San Francisco on AM 11.
- Permitted Delta Air Lines to inaugurate non-stop service between Atlanta and Savannah on AM 24 and between Chicago and Atlanta on AM 54.
- Permitted PCA to inaugurate Baltimore-Akron non-stop service on AM 14.
- Permitted United Air Lines and Southwest Airways Co. to intervene in Arizona Airways' case for acquisition of TWA's AM 38 (Docket 2005).
- Denied All American Aviation temporary exemption to fly mail between Huntington, W. Va., and Cincinnati, Ohio.
- Granted Continental Air Lines, Mid-Continent Airlines and American Airlines permission to intervene in route consolidation cases of Braniff and Chicago & Southern (Docket 1154 et al.).

CAB SCHEDULE

Mar. 18. Hearing in Arizona Airways' application for acquisition of TWA's AM 38. Postponed from Feb. 25. (Docket 2005.)
Mar. 20. Hearing in Universal Air Travel Plan case. Postponed from Mar. 11. (Docket 1939.)
Mar. 20. Prehearing conference on route applications of John W. Foreman, Northern Airlines, Great Northern Airlines, G.I. Airlines and North Coast Airlines. (Dockets 1303, 1602, 1811, 2188 and 2214.)
Mar. 24. Briefs due in American Airlines' non-stop case. (Docket 2136.)
Mar. 25. Exchange of exhibits in PCA-Northeast merger case. (Docket 2168.)
Mar. 25. Prehearing conference on freight service applications. (Dockets 810, 867, 910, 952, 973, 1129, 1149, 1267, 1409, 1564, 1569, 1572, 1663, 1669, 1675, 1695, 2004, 2186 and 2153.)
Mar. 25. Tentative date for hearing in TWA, American and United route consolidation cases. (Dockets 2142, 2187 and 2207.)
Mar. 26. Briefs due in Pan American Airways' North Atlantic amendment case. (Docket 2076.)
Mar. 27. Prehearing conference on freight forwarding service applications. (Dockets 681, 1479, 1560 and 1561.)
April 1. Briefs due in Mississippi Valley case. Extended from Mar. 15. (Docket 548 et al.)
April 2. Prehearing conference in Northwest Airlines' route consolidation case. (Docket 2018.)
April 4. Briefs due in North Central States case. (Docket 415 et al.)
April 8. Briefs due in Kansas City-Memphis-Florida case. (Docket 1051 et al.)
April 15. Exchange of exhibits in Pan American Airways' application for domestic routes. (Docket 1803.)
April 17. Rebuttal exhibits due in PCA-Northeast merger case. (Docket 2168.)
April 29. Hearing in PCA-Northeast merger case. (Docket 2168.)
May 15. Briefs due in Middle Atlantic area case. (Docket 674 et al.)
May 15. Rebuttal exhibits due in Pan American Airways' application for domestic routes. (Docket 1803.)
May 20. Exchange of exhibits in Boston-New York-Atlanta-New Orleans case. Extended from April 19. (Docket 730 et al.)
May 29. Exchange of rebuttal exhibits in Boston-New York-Atlanta-New Orleans case. Extended from Apr. 29. (Docket 730 et al.)
June 3. Hearing in Pan American Airways' application for domestic routes. (Docket 1803.)
June 10. Tentative date for hearing in Boston-New York-Atlanta-New Orleans case. Tentative. (Docket 730 et al.)

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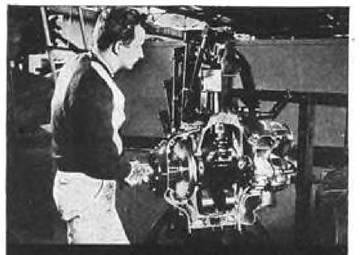

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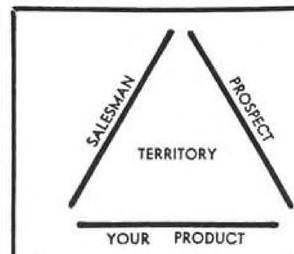

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Feeder Airline Applicants—The Forgotten Men

THE CIVIL AERONAUTICS BOARD'S delay in permitting establishment of a responsible Nation-wide feeder airline system not only is denying the public the advantages of air service in scores of communities. It is costing the several scores of applicants in the eleven feeder cases inestimable expense in lost business quite apart from the heavy costs already met for preparing for and appearing in the regional hearings. The first feeder hearing opened Sept. 5, 1944.

Ten of the eleven regional feeder line proceedings have been held. The hearing date for the eleventh will be set shortly. Examiner's reports and arguments have been completed on four, and these cases have been submitted to the Board. But not one feeder line decision has been issued. Status of each of the remaining cases is shown in this box score:

Rocky Mountain Case—Hearing held, arguments completed, now in the hands of the Board.

West Coast—In the hands of the Board.

Florida—In the hands of the Board.

Northeast—In the hands of the Board.

North Central—Hearing held, examiner's report issued Feb. 28.

Texas-Oklahoma—Examiner's report in preparation; expected soon.

Southeast—Examiner's report expected shortly after the Texas-Oklahoma report.

Mississippi Valley—No estimate as to probable date of report.

Great Lakes—No estimate as to date of report.

Middle Atlantic—No estimate.

Arizona-New Mexico—Date of hearing to be set shortly.

Current Washington opinion is that the decisions probably will be issued in the general order in which the cases were held. It is known that since the Board members returned from Bermuda they have concentrated on domestic rather than foreign transportation matters. Tempo of the entire CAB staff has quickened with the completion of the Bermuda conference, which took such a toll of time and effort to the neglect of national problems.

This speed-up is encouraging, of course, but prospects appear slim that it will be reflected in any appreciable output of decisions for a matter of months. If the Board does not soon step up its pace, it would be an optimist indeed who could forecast the operation of as many as three certificated feeders by midsummer of 1947, the peak of the second post-war travel season.

At the present amazing rate of development of air transportation, another year's set-back can represent incredible loss. Yet it appears that only a few applicants can look forward to as little deferment as that.

An indication of this air travel boom is the mushrooming of scores of independent passenger and freight carriers throughout the country in the last six months alone. The pace continues. None of these companies is operating under a federal certificate of convenience and necessity. All of the planes are certificated by CAA, but they are not under CAA air carrier supervision. Many of the intrastate carriers are advertising regular schedules. How many will go into bankruptcy, or prove to be unsafe public carriers can be determined only by time. That some of the better operated lines are serving the public cannot be denied. Some will continue, but without mail payments as a back-stop they must be content at most with a slim margin of profit, and without reserves for contingencies unless they come from "angels." Many must inevitably go broke, losing stockholders' money, some of it from the communities served. This will do aviation no good in such communities. In the tradition of this world bulwark of private enterprise some companies will weather the economic storms. The NEWS wishes them well.

But in the meantime, what about the feeder lines which already have shown their interest and their financial ability to progress through the labyrinth of CAB procedure? They are helpless to start operations, or make definite plans to start them. Fearing to arouse prejudice in the CAB by entering the nonscheduled or intrastate fray, which undoubtedly is in a haze of legal uncertainty, they watch the rising newcomers invading their territories.

"We are missing an opportunity to get people started to use air service at a very opportune time," one executive writes the NEWS from a company which participated in a regional case and awaits a decision. "Also, there are a lot of pilots who should be put to work, and in general an expansion of transport flying should take its place as a necessary part of our reconversion activities. We are beginning a new era which everyone is expecting to be a real age of flying, but because of these delays in the granting of franchises we are beginning this era for most of our smaller cities and towns without air transport service.

"Of course, we can see why it is taking the Board so long to reach these decisions. Each of its members has to participate in each decision and, because they are conscientious men, it is necessary for each member to investigate thoroughly every problem that comes up before the Board, and there is no doubt that many of their problems are very complicated now. . . . Though we can see why the delays are occurring, I think it is in order to examine the damage the delays are causing."

The NEWS publishes the extract above from an official whose company losses due to CAB delays run into many thousands of dollars because, despite those losses, here is a sample of a sympathetic and constructive attitude toward the Board. Vituperative public charges and speeches, and published insults directed at individuals, always are more interesting reading, of course. But we submit this case of the long-suffering feeder airline companies in the hope that it may suggest to the Board the necessity of reshuffling its agenda to accelerate legitimate feeder line development.

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