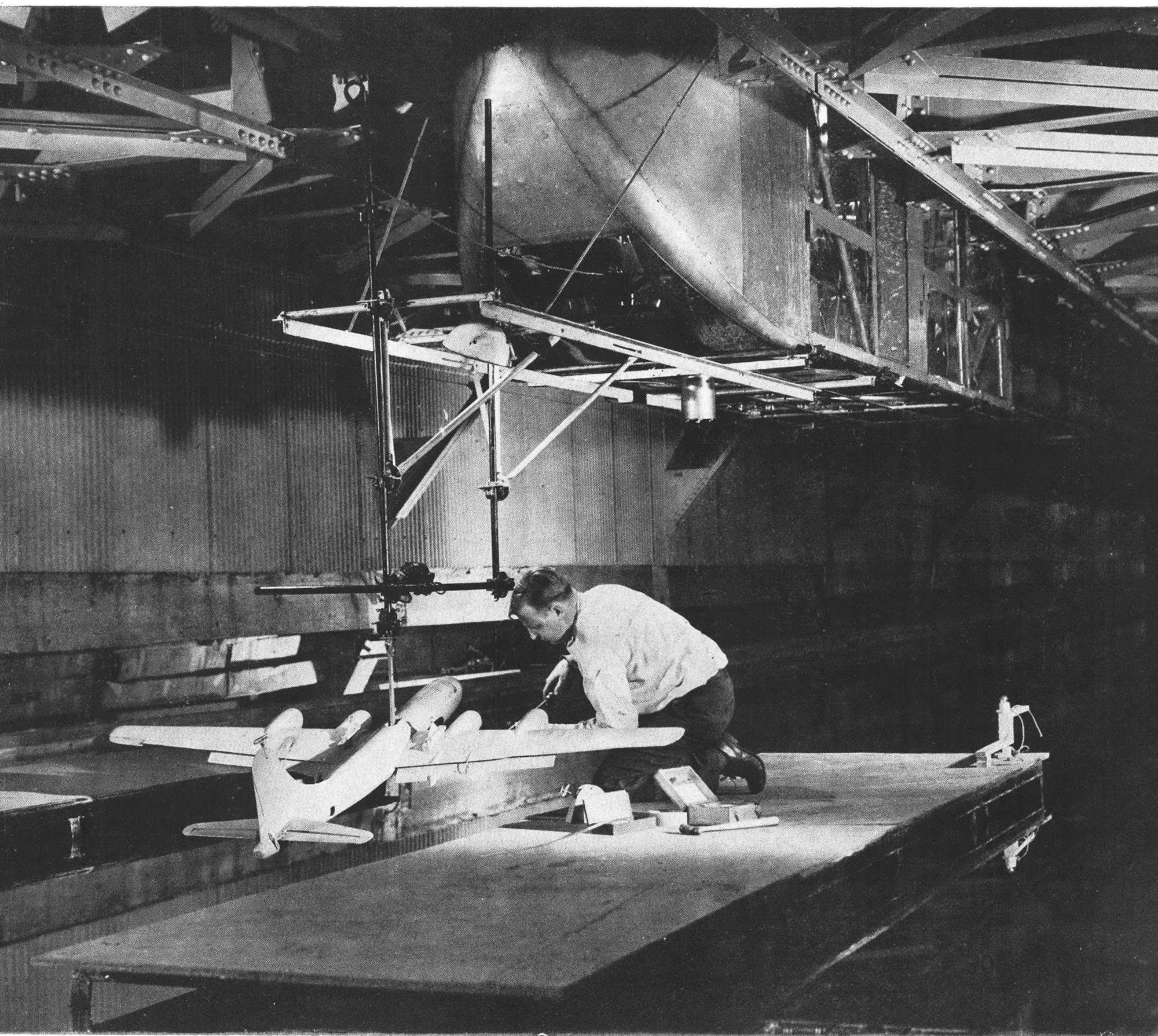


Aviation News

McGRAW-HILL PUBLISHING COMPANY, INC.

FEBRUARY 18, 1946



Langley Field Test Basin: Although research looking towards supersonic speeds is the prime project at the NACA's Langley Field, Va., laboratory, work is going forward in many other fields as well. Here an engineer makes final adjustments on a B-29 scale model which is to be put through "ditching" tests in one of the laboratory's tanks. The Langley Field laboratory was opened to aviation writers last week for the first time since before the war. (Story on Page 7)

Lockheed Shelves Its Personal Plane Projects

Big Dipper's crash crystallizes decision; personnel costs to be cut 10 percent.....Page 9

Campaign To Revitalize NATA Gets Underway

Plans to raise \$100,000 to launch national promotion drive are well received.....Page 13

after 1659 hours ON A DOUGLAS C-54

the Performance of this



3000 psi
VICKERS PUMP
is "AS GOOD AS NEW"

	PERFORMANCE REQUIREMENTS of Series PF-3911 Pumps at Factory	ACTUAL TEST PERFORMANCE of a PF-3911 Pump After 1659 Hours Flight Time On C-54
VOLUMETRIC EFFICIENCY AT 3000 psi AND 3600 rpm	95.0%	97.2%
OVERALL MECHANICAL EFFICIENCY AT 3000 psi AND 3600 rpm	88.0%	91.9%

Factory tests of this pump after completing 1659 flying hours on a Douglas C-54 proved that it would still pass inspection for a new pump—that it was still "as good as new." Test data reproduced above indicate that it is substantially better than the high minimum performance requirements for a new Vickers pump both in volumetric efficiency and in overall mechanical efficiency. Careful inspection after disassembly revealed that this pump required no replacement of parts. A synthetic rubber seal was replaced and the pump was then reassembled and returned to service.

This record of continuous service was made without

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overhaul; the pump kept right on supplying oil at 3000 psi without any difficulty at all. When finally removed, it was for inspection only.

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Vickers Hydraulic Aircraft Equipment served the Air Forces well on combat planes. It is now helping to increase utilization in peacetime aviation.

Engineers and Builders of **OIL HYDRAULIC EQUIPMENT**
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THE AVIATION NEWS
Washington Observer



BERMUDA PACT—The civilian aviation agreement between the United States and Britain is generally regarded in Washington as a victory for American air policies. It is based essentially on America's conception of freedom of the air and as a result United States airlines can hasten their expansion in every part of the world—with the exception, of course, of Russia.

MARINE CAMPAIGN—The Marine Corps is organizing a special campaign to recruit around 1,000 men a month for aviation units. It has its eye on civilian aircraft industries which are reducing their staffs and on personnel eligible for discharge.

WAR ASSETS ADMINISTRATION—The Senate Military Affairs Committee is taking more than a passing interest in President Truman's executive order establishing the War Assets Administration to dispose of surplus property in the United States. The Justice Department will be asked for a ruling on the legality of the order. There are some members who hold that the President must ask Congress for permission. Nomination of Lt. Gen. Edmund B. Gregory as War Assets Administrator has been held up pending a decision.

AIRPORT STALEMATE—Progress reported last week on the airport bill now must be discounted. It appears from the goings on on Capitol Hill that there may be no airport bill at all—at least in its present form. House and Senate conferees have failed to reach an agreement on the allocation of federal funds. Sen. McCarran and House conferees will not give in to a proposal to channel federal airport allocations through

state governments and at least three Senate conferees, led by Sen. Brewster, are adamant in that position.

BACKWARDS MOVE—Personnel of the National Advisory Committee for Aeronautics was reduced by 814 during the last three months of last year. In view of the strange and wondrous sights shown aviation writers at the Langley Field laboratory last week in a preview of things to come this reduction in personnel is a move back to horse and buggy days.

SUPERSONIC FULL-SCALE WIND TUNNEL—Need for a full-scale supersonic speed wind tunnel, which would require far more power and more reinforced construction than any existing tunnel and might cost around \$300,000,000, is being studied by top aviation people in government and industry. It is understood Wright Field and NACA each would like to have such a tunnel. It is likely that the next few years will see much new aviation research equipment added, since the supersonic speed research renders obsolete much equipment which has been useful for research on lower-speed aircraft.

UNIFICATION STRATEGY—It is clear now that the Citizen's Defense Council, in throes of organization, will be the spearhead of a campaign to arouse popular demand for unification of the armed forces. Gov. Robert S. Kerr of Oklahoma has accepted chairmanship of the council's advisory board, and announcement of the national head of the council itself is due shortly. Most of the leading aviation associations are behind the plan and will be represented on the executive committee.



The Republic Rainbow roars up the runway during first flight tests (AVIATION NEWS, Feb. 11)

ECONOMY THRU EFFICIENCY

SLIGHT PUSH—IT'S CONNECTED

CONNECTED

EASY PUSH ON SLEEVE—IT'S DISCONNECTED

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CONTENTS

	PAGE
Washington Observer.....	3
Industry Observer.....	5
Headline News Section.....	7
Private Flying.....	13
Production.....	19
Personnel.....	24
Special Air Services.....	27
Financial.....	30
Transport.....	33
Editorial.....	42

THE PHOTOS

U. S. Army Air Force, 10, 20; Press Assn. (top photo), 15; Official U. S. Navy photo, 22; Trans-Canada Airlines, 34; P. V. Engineering Photo, 40.

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Volume 5, Number 6

Advertisers Index

Aviation Associates, Inc.....	41
Beech Aircraft Corp.....	40
Bendix Aviation Corp.....	3rd cover
Consolidated Vultee Aircraft Corp.....	6
Continental Aviation & Engineering Corp.....	23
Darnell Corp., Ltd.....	39
Eitel-McCullough, Inc.....	35
General Electric Co.....	19
General Tire & Rubber Co., The.....	21
Goodrich Co., The B. F.....	31
Grand Central Airport Co.....	32
Hansen Manufacturing Co.....	4
Martin Co., The Glenn L.....	29
Mid-Continent Petroleum Corp.....	25
Parker Appliance Co.....	26
Romec Pump Company.....	41
Skylark Mfg. Co.....	39
Texas Company, The.....	4th cover
Vickers, Inc.....	2nd cover
Wright Aeronautical Corp.....	facing 18

News at Deadline

Surplus Engine Sale

Announcement by War Assets Corp. of the sale of 700 surplus Pratt & Whitney R-2800 engines to three airlines is expected shortly by the aircraft industry. The airlines—American, Braniff and PCA, are believed to be paying about \$10,000,000 for the engines which never have been used. The engines are from Navy stocks and are of a model no longer manufactured by P&W. They will be used to power new aircraft to be built for the airlines, among which will be the Martin 202. All airlines were circularized months ago by WAC, but only the three named responded favorably. The deal has been on the fire for some time, but the Navy's delay in issuing the surplus declaration has been holding it up. The transaction is being watched closely by the industry as it brings to the fore one of the most feared aspects of surplus disposal—encroachment on a manufacturer's market for new equipment. P&W has declined to sign an agency agreement with WAC under which it would have sole sales rights for all its surplus engines.

AAF to Test Navy XF8B-1

A Boeing XF8B-1, long-range Navy fighter, is being flown to Wright Field where it will undergo testing by the AAF's Air Technical Service Command. Three of the craft have been built. Demonstration testing of the plane by Boeing for the Navy will continue at Seattle. The plane is powered by a 3,500-hp, 28-cylinder Pratt & Whitney Wasp Major engine with dual contrarotating propellers.

Non-Stop Service Problem

Status of TWA's non-stop transcontinental service, given tacit approval by CAB last week, still is in doubt because of Civil Air Regulations limiting domestic pilot's flying time to eight hours on one hop. Hearing will be held soon, TWA says, on the carrier's application to put the cross-country hop under over-ocean regulation, which would permit longer pilot flying time. Otherwise the Constellations may have to land at Albuquerque on both East and West-bound flights to change crews.



Recent resignations of top executives of Hughes Aircraft Co. at Culver City will not jeopardize completion of company's eight-engined flying boat. A contract has been let for construction of the concrete docking basin at Los Angeles harbor, where hull and wing will be mated for test flights. Publicity concerning his differences with former officials has irked Hughes to the point that no announcements of the status of the project will be made until they are issued by him personally, and no more visitors will be allowed to examine the flying ship boat now in final assembly at the Culver City plant.

Latest reports filed with the SEC show these military backlogs for three companies as of Dec. 31: United Aircraft Corp., \$83,482,178, with military aircraft and engine sales in the fourth quarter of 1945 totaling \$68,934,220; Curtiss-Wright Corp. \$53,717,903 and military sales in the fourth quarter of \$35,482,498; Thompson Aircraft Products Co. military backlog \$13,700,000.

Acceptances of Army and Navy aircraft in January totaled 161, against 242 in December. Navy took delivery on 71, Army 90. Experimental aircraft are not included in these totals. Breakdown shows: Navy—three Martin PBM-5 medium bombers, 14 Grumman F7F-3 fighters, one Goodyear F2G, 21 Chance-Vought F4U-4's, 31 Grumman F8F-1 fighters and one Martin JRM-1 transport; Army—eight Boeing B-29A's, four Northrop P-61's, two North American P-82's, four Bell RP-63G's five Lockheed P-80A fighters, one Douglas C-54G, one Fairchild C-82A, seven Sikorsky R-5A's, three Sikorsky YR-5A's, 55 Culver PQ-14 special purpose (target) planes. January airframe weight was 1,152,000 lbs. as compared with a December output of 1,794,800.

P-V Engineering Forum's XHRP-1 Navy helicopter has again resumed test flights at Sharon Hill, Pa., following damage to a rotor.

National Fly-Ur-Self System, Inc., headed by Howard Ailor, continues organization work and its officials say that within 60 days it should be able to make announcements on type of aircraft to be purchased and bases to be used. J. H. Ringers is vice-president.

Air Transport Association has undertaken a detailed survey for a six-part publication, "Airport Specifications and Recommendations," to be distributed to state, city and other agencies contemplating airport construction. The first two parts will be ready about March 1, covering (1) location, requirements, classification, aprons, ground runway clearance and runway configurations, and (2) airport obstructions, approaches and zoning.

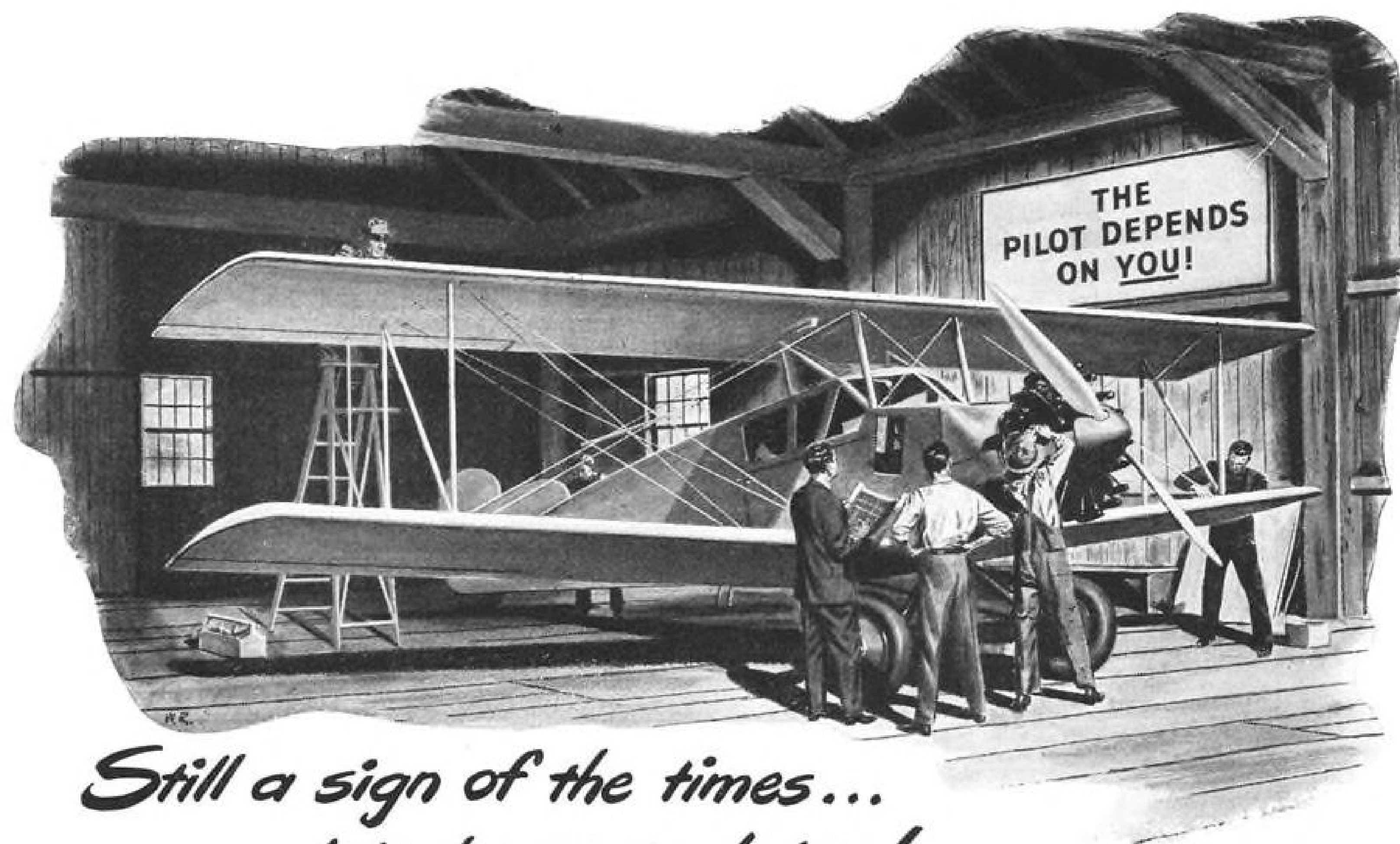
Appointment by Northrop of Lt. Col. Herbert Metcalf as assistant to the president and head of the company's patent department has no connection with atomic energy nor does it mean the company is considering work along those lines, company officials assert. A San Francisco press report said Metcalf, who had been associated with the atomic bomb project, would head a new Northrop department to study atomic energy possibilities.

Douglas is completing a mockup of the DC-8 and a spokesman says the prototype is tentatively scheduled to fly about August. Meanwhile, the DC-6 prototype will be flying "within a few weeks."

Engineers of other companies are expressing keen interest in the way Martin will overcome the noise problem which they expect will result from use of jet exhausts in the Model 202. Using a conventional transport, one company about a year ago installed units similar to those contemplated for the new Martin and decided the noise level could not be reduced satisfactorily by soundproofing.

Plans by the Army Air Forces to contract for a quantity of Republic OA-15's have been abandoned, at least for the time being. This was to have been an air-sea rescue version of the Seabee.

Top speed of the North American XP-86, AAF version of the Navy's XFJ, has been quoted by engineers at 582 mph.



*Still a sign of the times...
twenty years later!*

IN THE WINTER OF 1925, a newly formed company headed by Eddie Stinson rented a small loft factory in Detroit to build airplanes.

And Eddie Stinson set about to hire the few workmen needed to build a new kind of plane he had designed.

When those first Stinson craftsmen showed up at the "plant," they were greeted by a large sign that Eddie Stinson had hung on the wall:

"THE PILOT DEPENDS ON YOU!"

But Eddie Stinson didn't depend on this sign alone to get from his workers the kind of craftsmanship that made planes safe to fly. Men who made a Stinson were taken on the first test flight of the plane that they had built.

After the first Stinson plane was produced and proved in flight, the Stinson "factory" was moved to larger quarters.

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SAFETY IN FLIGHT is a tradition with Stinson designers and craftsmen!

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The power, speed, range, and maneuverability of the Voyager 150 make it a plane that you can fly anywhere. It cruises at 125 m.p.h., has a maximum speed of 133 m.p.h., and a range of 500 miles.

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VOLUME 5 • NUMBER 6

Aviation News
McGraw-Hill Publishing Co., Inc.

February 18, 1946

Attainment of Supersonic Speed By End of This Year Indicated

Concentrated research underway at Langley Field NACA laboratory on all aspects of high-speed flight; engineers forecast operation of 1,000-mph. airmail planes within next three years.

By ALEXANDER MCSURELY

Concentrated research on attainment of supersonic speeds with man-carrying aircraft now underway at the Langley Field, Va., laboratories of the National Advisory Committee for Aeronautics gives promise of early fulfillment. A plane now flying, or in the final stages of assembly, may leap the barrier of the speed of sound at any time within the next few months, and it is quite likely this will have happened by the end of 1946, laboratory research indicates.

► **Possibilities Listed**—On the basis of data already compiled in supersonic research with high-speed wind tunnels, dropping models from 40,000 ft. altitudes and shooting models at supersonic speeds from compressed air guns, NACA engineers are willing to predict:

► Planes operating commercially, carrying mail, may be flying at 1,000 mph. regularly within three years. Larger passenger and cargo transports probably will not attain such speeds until later.

► Sweepback wings appear the type most likely to support the supersonic plane, although NACA researchers are seeking means to combat the sweepback wing's disadvantages at low flying speeds which presumably will be necessary for landing. Triangular wings and low aspect ratio wings also have characteristics indicating they may be useful for supersonic flight.

► Sweepback propeller blades are likely to extend the useful speed range of the propeller well beyond 550-600 mph. which previously has been regarded as the upper speed limit for propeller-driven planes.

► Fuselage shapes will become longer and slimmer.

► Improved cowlings for propeller-driven gas turbine-powered planes will be another factor in increasing

speed, while improved cowl shapes also will be used in designing nose apertures for jet engines and air scoops.

► Flying boats will continue useful as long as the earth has such a large percentage of its surface water-covered, but a 300-mph. cruising speed within the next three years is about all the water-air craft may be expected to attain, indicating a rapid widening in the speed advantage of the landplane.

The NACA engineers voiced their opinions to the aviation press last week during the first news tour of the Langley Field laboratories since the war. Opened to inspection for the first time was the new West area of the laboratories where extensive new test buildings and equipment were constructed to meet the imperative increased demand for wartime experiment and research.

► **Present Planes Shelved**—Pressure for improvement of existing warplanes, the major war load of NACA, has been replaced with a pressure for long-range research to provide this nation with new airplanes far

surpassing the present crop. NACA, both at Langley Field, and at its other laboratories (Cleveland, Ohio, and Ames, Calif.) already has largely converted to its long-range program with primary emphasis on the problems of high-speed flight.

Results of the laboratory studies will be available for military, private and commercial aviation alike, John Victory, NACA secretary, pointed out, to serve as basic research from which the various branches of aviation may develop their own specialized projects.

► **New Research Outlined**—Research in connection with high speed flight is taking many forms at the Langley Field laboratory including:

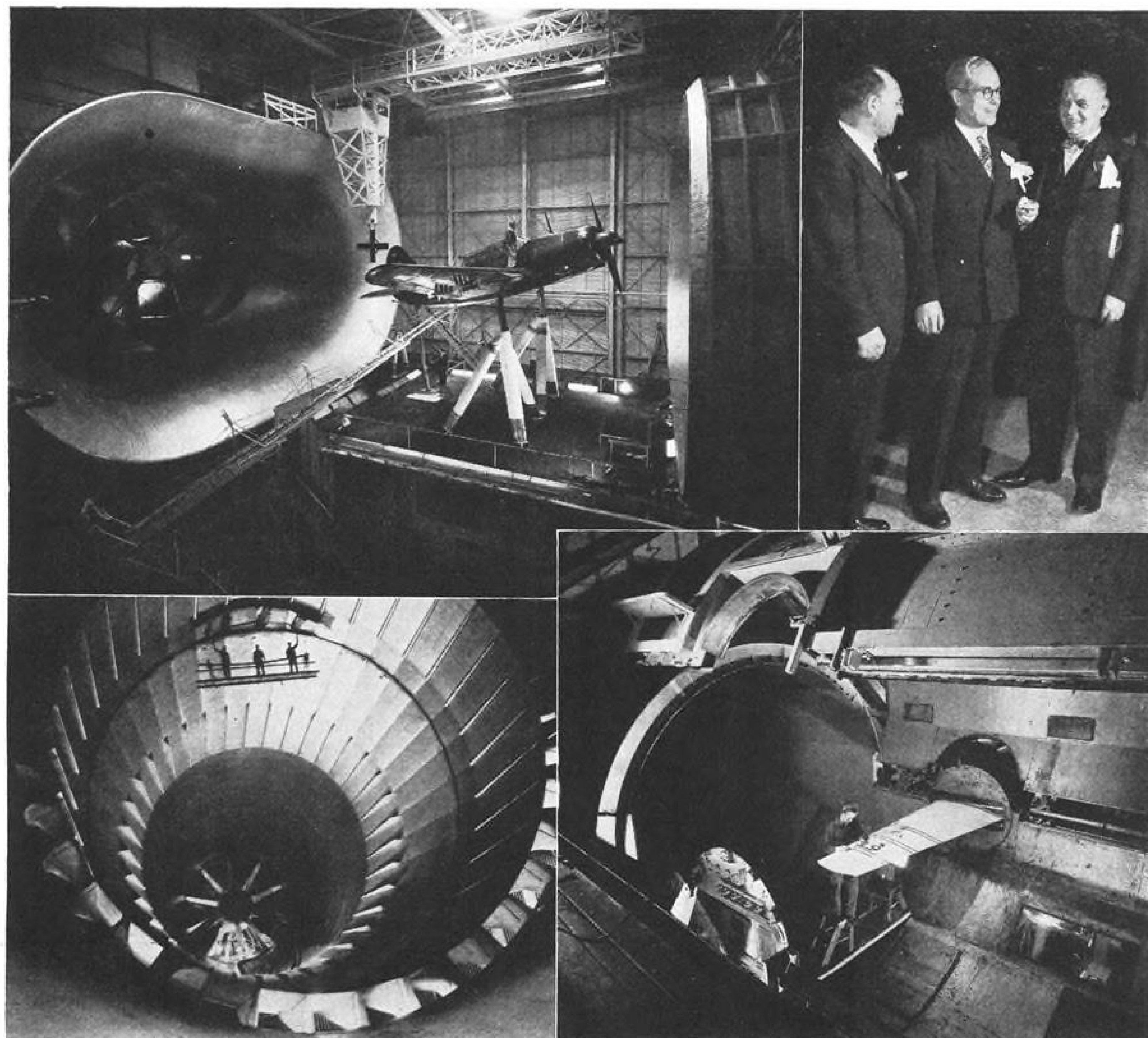
► Use of some 23 wind tunnels of various sizes and specialized uses, ranging from the full-scale wind tunnel with a 60- by 30-ft. throat which accommodates full-sized fighter planes to tiny supersonic speed wind tunnel with test section only 8¼ in. by 9 in. where models of airplane components are tested.

► A cylindrical free flight tank 100 ft. long and 8 ft. in diameter through which models are "shot" by compressed air guns at speeds up to 1,400 mph. far above the sonic speed (764 mph. at sea level). By filling the tank with Freon, a gas known to housewives as a refrigerator, the apparatus can simulate a speed three times as great, or approximately 4,200 mph., since the speed of sound in this gas is only one-third of that in air.

► A flutter tunnel with a 4½-ft. test



High-Speed Wind Tunnel: This 16-ft. high-speed wind tunnel at the Langley Field NACA laboratory is the scene of careful check-ups on flight characteristics of proposed planes.



Research Center: Three representative wind tunnels from the 23 which are in operation at the NACA Langley Field, Va., laboratories, give an indication of the widely varied research in progress there. The largest is a full-scale tunnel with a 30- by 60-ft. throat in which actual airplanes as large as the Curtiss-Wright Helldiver may be tested at wind speeds up to 120 mph. The 16-ft. high-speed tunnel (lower left) can test components such as propellers and nacelles at speeds up to 520 mph. and is expected to attain sonic speeds

when the power is increased from 16,000 to 40,000 hp. Size of the tunnel may be judged from the men on the scaffold. The third wind tunnel picture shows a wing section being prepared for test in the open test section. Present at the showing were three key executives (top, left to right): Smith J. DeFrance, engineer in charge of the Ames, Calif., laboratory; Henry J. E. Reid, engineer in charge of the Langley Field laboratory and Ray Sharp, general manager of the Cleveland laboratory.

section providing data for speeds up to three times the speed of sound, flutter at transsonic speeds, and for studying supersonic airflow on propeller sections.

► A supersonic sphere filled with Freon in which test models can be whirled at the equivalent of three times the speed of sound. This sphere also may be evacuated by a vacuum pump to simulate an altitude of 75,000 ft.

► Tip speed problems of helicopter

rotors, one of the most critical limitations on speed of rotary-wing aircraft, are being studied with a 40-ft. helicopter test tower with a motor-driven shaft which will turn full-sized rotors up to 60 ft. in diameter from the top of the tower, for whirl tests to study aerodynamic, flutter and vibration.

► An auxiliary island base a few miles away where supersonic missiles are being tested for stability and control. Newsmen were shown

color movies of one of the missiles being launched from the island, propelled by six cordite rockets.

► Testing of supersonic aircraft models by dropping from B-29's flown at 40,000 ft. The downward path of the models are followed by optical tracking units, and radar units, and instruments within the falling models send automatic reports to telemeter receivers on the ground.

► **Other Projects**—While first em-

phasis on Langley laboratory research is concentrated on high speeds, a wide range of other projects for improvement of aircraft are also being undertaken simultaneously, including:

► A gust tunnel in which models of 6-ft. wingspan are catapulted at speeds of 100 mph. to fly freely through controlled vertical airblasts to determine effect of severe updrafts or downdrafts on the model. Data obtained here is being supplemented with V/G (Velocity, Gravity) recorders which already have been flown over 35,000,000 miles under widely divergent conditions in approximately 2,000 civilian and military transport planes. NACA studies show a steady upward trend in gust loadings from 94 lbs. per sq. ft. for the Boeing 247 transport in 1932, to a loading of 567 lbs. on a jet plane now in design stage.

► Powerful hydraulic testing machines capable of exerting up to 600 tons stretch or crushing force on aircraft structural members, including a combined load testing machine designed at the laboratory which will apply a torque or twisting force simultaneously with a tension or compression.

► Hydrodynamic tanks where models of seaplanes and flying boats are towed to determine and improve stability, control, resistance and spray characteristics, and where landplane models are tested for "ditching" characteristics (See Cover).

► An impact basin into which models of seaplane floats are catapulted at speeds up to 70 mph. and dropped to simulate water landings, measuring impact load. A water-agitating device produces waves 3 ft. high to simulate rough landing conditions.

► A free-flight tunnel, believed the only one of its type in the world, in which remotely-controlled scale models are flown in a 12-ft. test section under their own power, making possible study of new configurations and designs of aircraft and guided missiles in actual flight.

► The pre-war spin tunnel in which spin tests are conducted on virtually every new military aircraft design (more than 175 types in the last five years) with a record of improved spin characteristics in 75 percent of the designs tested. Emergency escapes from spinning model planes are simulated by scaled and weighted dummy pilots, to determine the best method of bailout from each type.

Henry J. E. Reid, engineer in

Lockheed Shelves Personal Planes

Lockheed Aircraft Corp. last week shelved its personal airplane ambitions for the time being and took initial steps to trim its personnel overhead costs by 10 percent.

The crash a week ago of the company's two-passenger pusher lightplane, the *Big Dipper*, brought to a head the company's decision not to attempt an immediate invasion of the personal aircraft market.

► **Projects Division Wiped Out**—The Lockheed special projects division, as a result, has been wiped out by what is announced as a "merger" with the engineering department headed by Vice-President Hall L. Hibbard.

It may be assumed that the company's one-place *Little Dipper* and the *Big Dipper* never will be built commercially. However, the company may be expected to continue its helicopter research, initiated when the Special Projects Division was organized to separate from military engineering a limited amount of commercial research during the closing war years.

► **Continued Interest Stressed**—However, Lockheed top officials insist the company has not lost interest in the personal aircraft busi-

ness and still remains convinced that the future of airplane mass production lies in the personal plane market.

Lockheed's reduction of personnel will result in approximately 2,200 workers being laid off by the end of this month, and with further reductions to follow until mid-summer, when the company's payroll may be expected to level off at 25,000 production workers.

► **Factors Outlined**—Two factors are involved in Lockheed's employment reduction. One is a temporary production lull resulting from the company's switchover from production of 68 ordered units of the interim model 49 *Constellation* to the manufacture of the more luxurious model 649 *Constellation*, 39 of which are on order. More pertinent, however, is the contention of the company that since the end of the war production has not increased sufficiently to absorb the estimated \$16,000,000 overhead cost increase represented by the 15 percent pay raise to hourly employees last November. By reducing the size of its production staff Lockheed is expected to show an \$8,000,000 annual reduction of overhead expenses without impairing production.

charge at the Langley Field laboratory, since January 1926, has watched the laboratory expand into what is now one of the world's largest concentrations of aeronautical research equipment. At the beginning of the war the Langley equipment was valued at \$10,000,000 with 600 employees, while currently it has expanded to five times its pre-war size.

Arnold Reiterates Backing Of National Air Museum

Gen. H. H. Arnold last week reiterated his support of the Randolph bill to establish a national air museum in testimony before the House Library Committee. The NAA and NACA also indorsed the proposal to organize the air museum under the Smithsonian Institution.

The most controversial aspect of the museum, it developed at hearings, is its location. Arnold reported he has received 267 replies to queries regarding the development. All of them favor immediate establishment of the museum, but differ as to its location. The largest portion favors Washington, D.C. Arnold has urged a surplus aircraft factory be used.

Kellett Corp. Developing Twin-Engine Helicopter

What may be the first twin-engine helicopter to fly is under development at Kellett Aviation Corp., Upper Darby, Pa. It is the XR-10, originally planned as an ambulance plane for the AAF but now being considered as a 12-passenger feed-erliner.

Delayed by labor difficulties among subcontractors, the big Kellett machine is not expected to fly for several months. A mock-up of the transport version may be shown to airline representatives within a few months.

Sherman Gets New Post

John Sherman, who has been a special consultant to the Civil Aeronautics Board, acting as liaison between CAB and the State, War and Navy Departments, has been appointed Assistant Director of the Economic Bureau in charge of international affairs. Robert W. Oliver who has been Assistant Director of the Economic Bureau remains in charge of national affairs. Russell B. Adams is Director of the Bureau.

Spaatz Takes Over As AAF Commander

Warns of planes' obsolescence but cautions against shelving them until new ones are perfected.

Command of the Army Air Forces has passed from the wartime leader, Gen. H. H. Arnold to Gen. Carl Spaatz, who headed strategic air forces in the European and Pacific theaters.

"The air force of today is yesterday's air force," Gen. Spaatz said, "but we must keep it in being until we have perfected the air force of tomorrow."

► **Lauds Predecessor**—Spaatz is 54, five years younger than Arnold. His permanent appointment requires congressional approval, regarded as a foregone conclusion. He will serve as acting chief in the meantime.

At a farewell dinner in Washington for Gen. Arnold, his successor said that "Gen. Arnold accomplished what could not be accomplished. He forged an organization of enormous size and complexity. The Army Air Forces at its zenith was a lengthening mirror of its commander."

► **Independent AAF Opposed**—Almost coincident with the change in command, Kenneth C. Royall, acting secretary of War, sent a letter to the House Committee on Expenditures in the Executive Departments expressing opposition of the War Department to the creation of a separate department of the Air Forces without instituting unified over-all command for the Army, Navy and Air Forces under a single department of national defense.

Two identical bills before the committee have been considered by the War Department, Royall informed the committee, and it is the department's conclusion that these measures providing for a separate air force did not guarantee the most effective use of United States military arms.

► **Backed By Eisenhower**—He said his stand in opposing the bills was backed by Gen. Eisenhower, Army chief of staff, and Arnold.

The War Department, Royall said, "fully recognizes that one of the lessons in this war is that air power has come of age," and must have parity with land and sea power in time of peace as well as war. He added, however, the department believes this parity best can be attained by following President Truman's recommendation for a single department combining all three branches of the service.



Turning Over Command: Gen. Arnold and Gen. Spaatz shake hands at Pentagon ceremonies in which the former handed over the reins of the AAF to Spaatz who led the U. S. Strategic Air Forces.

Knerr Named Aide

Maj. Gen. Hugh J. Knerr, director of the Air Technical Service Command at Wright Field, has been named special assistant to Gen. Carl A. Spaatz, newly-appointed Army Air Forces commander.

Gen. Knerr is a veteran of research, technical and administrative work having been associated with this type of duty almost from the establishment of the AAF. Prior to his duty as Wright Field he was Deputy Commander of the U. S. Strategic Air Forces in Europe and deputy commander and commander of the Eighth Air Force Service Command.

He originally was commissioned an ensign in the Navy, later was appointed a second lieutenant in the Coast Artillery and then transferred to the Air Service and took pilot training in 1917.

► **Outlines Advantages** — Royall's letter contended that creation of a single department with three coordinate branches would produce these desirable results: 1. Establish an organizational structure providing for unified direction below the President and assuring an integrated military program and the highest measure of coordination and efficiency of our armed forces; 2. Assure air power an equal status

with the land and sea forces and 3. Achieve maximum economy in men, material and money.

"The inescapable conclusion from all our experience," Royall wrote, "is that separation at the top necessarily fosters separation all along the line, while unity at the top through the establishment of a single department for our armed forces will permit us to capitalize fully upon what we have learned."

Weather Study Bill Passed

Legislation authorizing the establishment of a network of meteorological stations in the Arctic region to promote the development of Great Circle trans-polar airways was approved by Congress last week and forwarded to the President for signature.

The bill, introduced by Sen. Owen Brewster (R., Me.) leaves details of the development to the Air Coordinating Committee of the Commerce Department. Senate Commerce Committee estimated that each meteorological installation would cost about \$200,000.

Conference Postponed

The Joint Air Defense Conference which was to be held Feb. 22-23 at the Mayflower Hotel Washington, D.C., under the sponsorship of the NAA Joint Airport Users' Conference has been postponed until March 29-30 at the same place.

Report on Bombing of Japan To Be Completed About March 1

Most of staff of 600 making study now are back in Washington to write up data which will figure in battle over unification of armed forces.

Reports on bomb damage to Japan will be completed about March 1, according to unofficial estimates by authorities in charge. There will be a number of vertical reports on cities, areas and industries, and some horizontal analyses of the overall Army and the Navy air attack.

The United States Strategic Bombing Survey, headed by Franklin D'Olier, president of Prudential Insurance Co., went to Japan after completing the German study and was on the job there from Sept. 13 to Dec. 1. Most of the staff of about 600 recently returned and is housed in the Air Forces Annex at Gravelly Point, Washington, D. C., writing up the data.

► **Significance**—President Roosevelt ordered institution of the survey in a letter to the Secretary of War, Sept. 9, 1944, to obtain data for the forthcoming attack on Japan, and for use in post-war planning and employment of the armed forces. On August 15, President Truman ordered the survey extended to cover Japan. A civilian was put in charge to assure impartiality.

In addition to making a record for future military reference, the reports will be used in the Allied control and rehabilitation of Japanese industry. They also will figure in the imminent Washington battle over the proposed unified command of the armed forces and co-equality of the Air Forces. The survey covers effects of atom blasts over Hiroshima and Nagasaki, although these targets had already been investigated by various scientists and bombing experts.

► **Scope of Survey**—The Jap survey is divided into several sections, such as oil and chemicals, over-all effects, transportation, physical damage, aircraft plants, and others. T. P. Wright, Civil Aeronautics Administrator, is chief of the aircraft division, and Capt. S. Paul Johnston, U. S. Navy, is deputy chief.

The Navy, which had very little interest in the bombing survey of Europe, had a large share in the air attack on Japan, and therefore is participating extensively in the in-

vestigation. The staff is made up of both Army and Navy personnel, with a sprinkling of civilians. Capt. Johnston was deputy chief of the aircraft section in Europe. Also, he was borrowed from the Navy upon request of Mr. Wright.

► **Congress Dubious**—The bombing survey of Germany and Europe did not accomplish its full purpose because it was not completed till long after the plan of strategy against Japan had been developed. Economy-minded critics of the study, some of them in Congress, do not believe it was worth what it cost, and they are specially dubious about the huge staff working on Japan.

They feel that a few experts could have obtained all the useful information. But Army and Navy are in the clear, because they did not order the investigations, and are not running them. But of course Army and Navy issued orders for co-operation with the survey, all the way down the line.

► **Job Easier**—Whereas the USSBS in Germany was hindered and embarrassed by a half-dozen other American and British industrial survey groups, uncoordinated and without over-all control, in Japan it was free to work efficiently. The Japs were more cooperative than

the Germans—even aggressive in their desire to help. In Germany the factories had been damaged by retreating Nazis, by vindictive displaced persons and by Allied troops fighting through. In Japan there were no such handicaps.

The Japs said they learned more than they ever knew before about their industry as a result of helping the Americans analyze it.

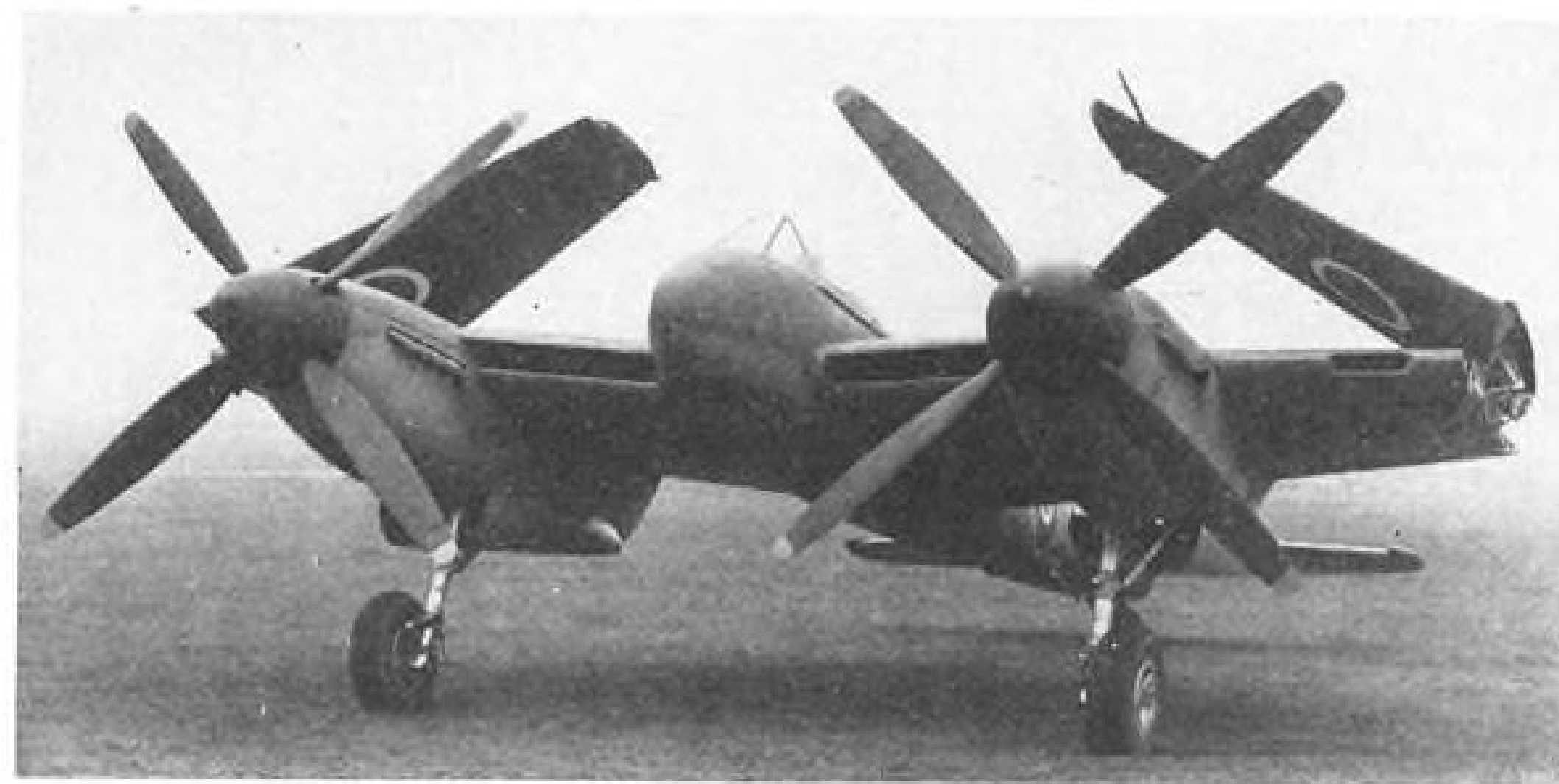
Ryan Announces Creation Of Stainless Steel Division

Ryan Aeronautical Co. has announced creation of the Stainless Steel Manufacturing division, indicative of the company's plans for expansion of peacetime production.

T. Claude Ryan, president, said the new division, formerly known as the exhaust systems division, will operate under the new and more appropriate title due to the broadening of its line of products. In addition to aircraft exhaust systems, parts for jet propulsion engines and allied accessories, which long have been in production, a number of non-aeronautical products of stainless steel which will fit the facilities and technique of this division have been developed.

Clearer Signals Urged

With steps already under way to standardize hand signals for airline ground operation, Aero Insurance Underwriters of New York is urging clarification of cockpit signals between captain and crew. Suggestion has been made that phraseology be studied to eliminate repetition of syllables and ambiguity.



HORNET ADAPTED FOR CARRIER USE:

The de Havilland Hornet, rated at "over 470 mph.," has been adapted for use aboard aircraft carriers by equipping it with hydraulic-operated folding wings, an "A" shaped arresting gear and JATO fittings. The Hornet has a 2,500-mi. range at 340 mph. at 30,000 ft. when carrying 930 gals. of gasoline, including a 200-gal. drop-tank under each wing.



Capt. S. Paul Johnston

Capt. S. Paul Johnston Named IAS Director

Capt. S. Paul Johnston, USNR, has been appointed Director of the Institute of the Aeronautical Sciences and will take over the post in April.

Widely known in the aviation field, Johnston was an Army cadet pilot in World War I, and after his graduation from the Massachusetts Institute of Technology he spent eight years with the Aluminum Company of America. In 1930 he joined the editorial staff of *Aviation* magazine, a McGraw-Hill publication and in 1936 became editor.

► **Coordinated NACA Research**—He was appointed Coordinator of Research of the National Advisory Committee for Aeronautics in 1940 and for a time served as executive assistant with the Aircraft Activities, WPB. For two years he was Washington manager for the Curtiss-Wright Corp.

He was commissioned a lieutenant commander in 1938 and was called to active duty in June, 1944. He served with the Naval Air Transport Service in the Pacific as engineering officer and was promoted to the rank of commander in January, 1945, when he became deputy director, aircraft division, U. S. Strategic Bombing Survey. After duty in England, Germany and France he was transferred to similar duties in Tokyo. He was made a captain last December.

Coast Guard Gets B-29's

The Coast Guard is acquiring 16 surplus B-17G *Flying Fortresses* to use in sea-search rescue work. Six will be stationed on the East Coast, six on the West Coast, and four on the Great Lakes.

IATCB Acts to Cut Down Number of 'Danger Areas'

The Interdepartmental Air Traffic Control Board has given the Army and Navy until June 1 to rejustify continuation of danger and caution areas in the U. S. presently barred to civil aircraft.

The number of such areas, which IATCB says changes daily, is being reduced as military operations decrease. Danger areas are those in which aircraft may not be flown without specific authority because of invisible hazards. Caution areas contain visible hazards to be avoided when practicable.

Although many of these areas will remain after the rejustification deadline, considerably more navigable air space is expected to become available for civil operations through the Board's action.

Wellwood E. Beale Gets New Position

Heads both engineering and sales at Boeing; Josephs named to C&S finance post; Cole to direct Timm modification center.

Appointment of Wellwood E. Beall, formerly vice-president in charge of engineering for Boeing Aircraft Co., to the new office of vice-president in charge of both engineering and sales highlighted changes in top personnel last week. Directly assisting Beall will be chief engineer Edward C. Wells. Sales Manager Fred B. Collins and Service Manager Robert A. Crawford. New subdivisions will be set up under the enlarged organization.

Col. N. Henry Josephs (photo) became vice-president in charge of



finance and administration for Chicago & Southern Air Lines. Col. Josephs has been executive assistant to the president and before joining Chicago & Southern was

special consultant to the Secretary of War. Prior to that he was with the Army Air Forces at Wright and Patterson Fields and other commands. He is an attorney.

Chester C. Cole has been appointed vice-president of Timm Aircraft Corp., Metropolitan Airport, Van Nuys, Calif., in charge of the modification division. He formerly

was coordinator of sales and service for Douglas Aircraft Co., and also served as maintenance superintendent for Eastern Air Lines. He has been with Pan American Airways, United Air Lines and Western Air Express.

College Flight Training

The University of Kansas City is offering a course in flight training, with instruction open to all students, including veterans. The Kansas City Flying Service and Air College, Inc., are cooperating.

AVIATION CALENDAR

Feb. 20-21—ATA airline treasurers' conference, Chicago.
Feb. 21—Sarasota Air Show, Lowe Field, Sarasota, Fla.
Feb. 25-27—Fourth region non-scheduled operations, second annual convention, Ft. Worth.
Feb. 26-28—Air Transport Association Engineering and Maintenance Conference, Detroit.
March 1-5—Pan American Aircraft Exposition, Dallas, Texas, reviving pre-war annual exhibit.
Mar. 4—Hearing on application of TACA de Colombia for foreign air carrier permit. (Docket 1824.)
March 4—SAE German Engineering Evaluation Meeting, Rackham Educational Memorial, Detroit, Mich.
March 4—PICAO route service conference on North Atlantic air navigation facilities starts at Dublin.
March 5—Exchange of exhibits on application of TACA, S. A. for foreign air carrier permit. (Docket 774.)
March 8-9—Airpark seminar sponsored by NAA Southern California Chapter, Los Angeles.
March 8-16—Southwestern Aviation Exposition, Ft. Worth, Tex.
March 11-12—Joint Air Transport Conference, Statler Hotel, Washington, D. C.
March 12-18—Second Annual Northwest Air Show, Minneapolis.
March 14-15—American Helicopter Society, second annual forum, Franklin Institute, Philadelphia.
Mar. 15—Briefs due in Mississippi Valley case. Postponed from Feb. 15. (Docket 548 et al.)
Mar. 15—Hearing on application of TACA, S. A. for foreign air carrier permit. (Docket 774.)
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. 745, 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 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.
June 1-2—National Air Carnival, Birmingham.
June 2-7—SAE Summer (Semi-Annual) Meeting, French Lick, Ind.
July 18-21—World's Fair for Aviation, Omaha.
July 19-20—NAA national convention, Omaha.
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.

PRIVATE FLYING

Campaign Begun to Revitalize NATA; Headquarters Moved to Washington

Plans to raise \$100,000 to hire executive director and launch national promotion drive are outlined at regional meeting in New York and get good reception.

By WILLIAM KROGER

A campaign to revitalize the dormant National Aviation Trades Association was started last week with the removal of headquarters of the association to Washington, D. C., and the holding of a regional NATA meeting in New York City.

Immediate plans call for a drive to raise \$100,000 to employ an executive director and staff and launch a public relations and promotional program to put NATA back on its feet as the national spokesman for airport operators and dealers.

► **Reaction Is Good**—The New York meeting of operators in NATA Region I, was the first of seven regional conferences which are being called to explain objectives of the drive. Although attendance was below expectations due to strikes in New York, reaction was reported favorable to the proposed financial arrangements.

The entire sum would be raised through greater membership, and increased dues. Rate for Class C operators, the smallest, probably will be upped from \$25 to \$50 annually. Class B dues are expected to go to \$100, and Class A to \$150. Associate membership would cost \$100 per year.

► **NAA Now Handling Work**—There was strong feeling, however, that regional organizations should be permitted to continue their local activities, with a certain percentage of dues being retained. An encouraging development was the ready reception by Class C members of the increased dues proposal.

Until the overall project has been explained through the other regional meetings, and approval obtained, NATA's affairs in Washington are being handled by the National Aeronautic Association on a three-month contract. Duration of the contract indicates that NATA officials hope results of the campaign will enable the Washington office to be in full swing before the na-

tional convention which has been tentatively set for this spring (AVIATION NEWS, Oct. 29, 1945).

► **Garside Sparks Campaign**—Moving spirit in calling the successful New York meeting was Joseph Garside, head of Wiggins Airways, and president of Region I. A leading advocate of NATA expansion and strengthening, Garside is expected to play an increasingly active role in the national organization.

One result of the campaign, if successful, will be to renew speculation regarding a merger between NATA and the Aeronautical Training Society. ATS members have been reluctant to consider the proposition, as financially and organizationally ATS has been stronger than NATA. At least one prominent NATA member believes the new campaign will put NATA in a much better position to approach ATS once again.

► **Speakers At New York**—The New York meeting was addressed by Rep. Jennings Randolph (D., W.Va.); Maj. Gen. Robert W. Douglas, Jr.,

Flies To Work

G. Bernard Fenwick, Jr., became Baltimore's first air commuter last week when he moved Pan-Maryland Airways' offices from the Munsey Building to the Municipal Airport and found he could save time and money by flying to work.

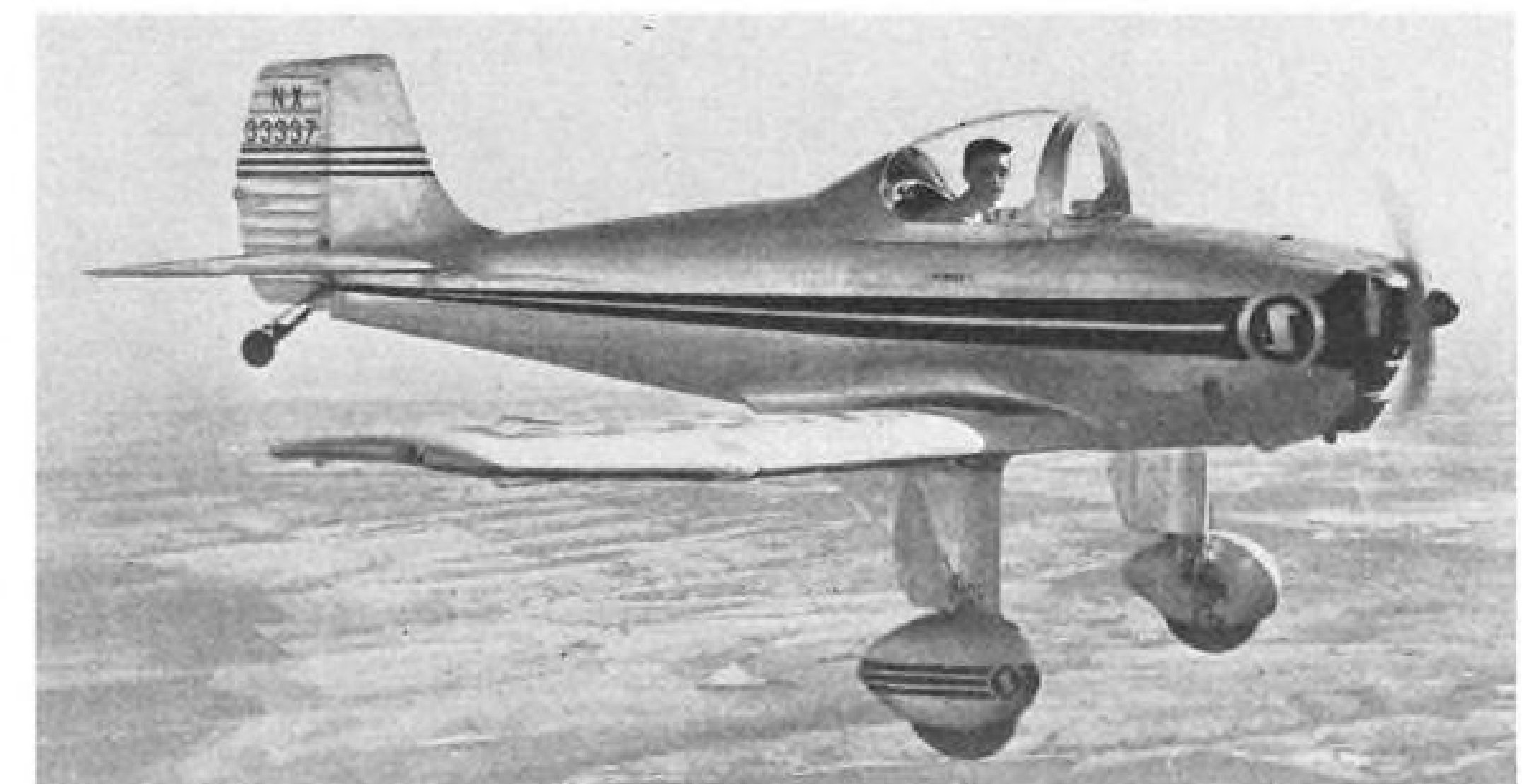
From Fenwick's home to the Municipal Airport by road the distance is 27 miles. On the other hand, it is only five miles from Fenwick's home to the Curtiss-Wright Airport where he keeps his Taylorcraft plane and only 15 minutes more to Municipal Airport. He estimates flying costs are barely half the auto costs.

► **Plans Charter Service**—Fenwick plans to operate intrastate and charter air service from the Municipal Airport and possibly from Curtiss-Wright as soon as he obtains new planes now on order. (See Page 28).

commanding general, First Air Force; Richard Depew, chief of aircraft disposal, War Assets Corp.; H. C. Thomas, of the components and parts section of WAC; and William Anderson, Pennsylvania director of aviation and president of the National Association of State Aviation Officials.

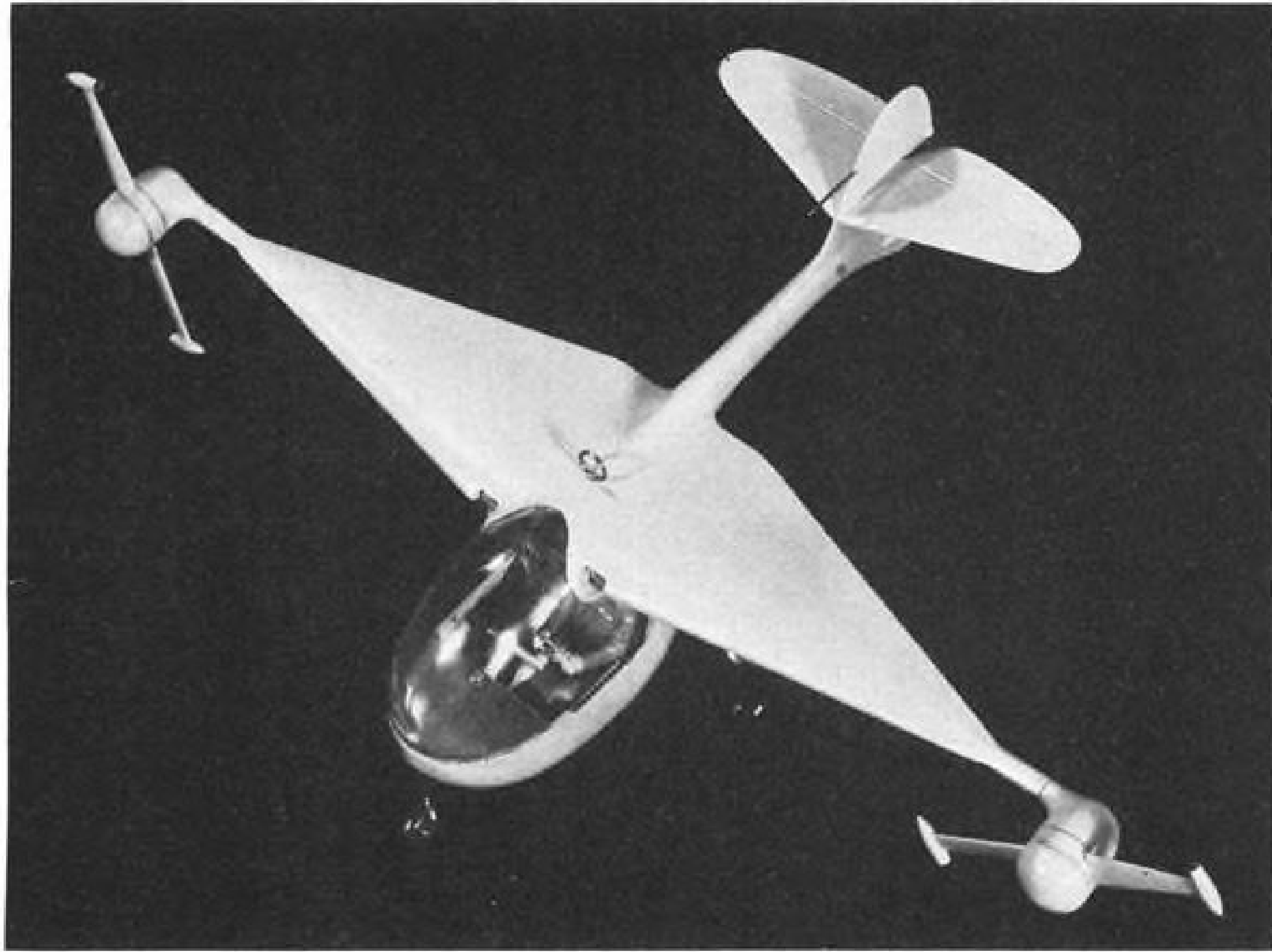
Graham Heads N. Mex. CAP

Lt. Col. Lewis W. Graham has been appointed commanding officer of the New Mexico wing of the Civil Air Patrol, succeeding Lt. Col. James L. Breese who has been placed on the CAP retired list.



LUSCOMBE MODEL 10:

Believed to be the fastest lightplane in its power class, the new experimental Luscombe Model 10, which has completed flight tests near its home plant at Dallas, has a top speed of more than 135 mph. and will cruise at 122 mph. (AVIATION NEWS, Feb. 11)



VERTICAL OR HORIZONTAL FLIGHT:

Possible use of the NACA-sponsored jet propeller (AVIATION NEWS, Aug. 13, Dec. 24, 1945) on an aircraft capable of either vertical or horizontal flight is shown in this NACA model. The propellers, driven by small ram jet engines in the blade tips, would be arranged so that they would pull the aircraft directly upward like a helicopter for takeoff, and then could be turned into forward rotation so that they pulled the aircraft forward in level flight. Such a design would eliminate a principal objection to existing rotary wing aircraft, which are held inefficient in horizontal flight as compared to conventional airplanes.

Eight Lose Certificates For CAR Violations

Four are penalized for reckless flying at low altitude; four licenses suspended.

Careless and reckless flying and illegal carrying of passengers prompted the Civil Aeronautics Board to revoke the certificates of eight airmen, according to latest Board investigations.

Summaries of these violations, and of four suspension cases, follow:

REVOCATIONS:

Daniel Stanley Wood, student pilot, for flying between Danielson and Plainfield, Conn., outside the local flying area of his instructor, Sept. 10, 1945, when he did not have at least ten solo flight hours, had not passed a written examination and when his student pilot certificate was not appropriately endorsed for such flight by an instructor. On the first flight, Wood circled and dove back and forth over his residence and made steep climbs and other hazardous maneuvers. **Actions violated CAR sections 43.52, 60.101, 60.105 and 60.104. Certificate revoked.**

Johnny Benjamin Pettey, student pilot, for flying at altitudes varying from 30 to 400 ft. over the heads of several hundred persons bathing on Vero Beach, Fla., abruptly altering the speed of the aircraft, spinning, skidding, circling and performing steep turns, Sept.

14, 1945. **Actions violated CAR sections 60.101, 60.105 and 60.104(b). Certificate revoked.**

Elsworth Quam Boomer, commercial pilot, for doing wingovers at an altitude varying from 20 to 100 ft., diving below roof-top levels of buildings and over the heads of an assembly of persons near Willmar, Minn., Aug. 14, 1945. **Actions violated CAR sections 60.101, 60.105 and 60.104(b). Certificate revoked.**

Theodore Hansen Robinson, private pilot, for flying at altitudes of not more than 400 ft. over a congested area of the South Highland section of Shreveport, La., while abruptly altering the speed of his aircraft by advancing and retarding the throttle, Aug. 31, 1945. **Actions violated CAR sections 60.101, 60.105 and 60.104(b). Certificate revoked.**

The certificates of the following student pilots were revoked for carrying passengers, thus violating CAR section 43.50:

Alex John Esselman, between Green Bay and West Bend, Wisc., Sept. 16, 1945.

William Eugene Taylor, near West Plains, Mo., July 20 and 30, 1945.

Lawrence Everett Williams, near West Plains, Mo., April 15 to June 23, 1945.

Glen Edmond Smith near Noble, Okla., June 12, 1945. Smith's flight outside of the operating base of his instructor (CAR section 20.71(a)), resulted in an accident demolishing the aircraft and causing injuries to Smith and his passenger.

SUSPENSIONS:

Lee Parmer Davis, commercial pilot, for flying an aircraft in which he did not carry and for which there was no currently effective airworthiness certificate, and on which additional brack-

Airpark Seminar Set

West Coast industry, government, and educational leaders will attend the region's first airpark seminar March 8-9 in Los Angeles. It will be sponsored by Southern California chapter of the NAA.

Rep. Jennings Randolph (D., W. Va.) will be a principal speaker, and sessions will cover public reaction to airparks, planning of airparks, technical influences, economic aspects, utility and small plane demonstration flights.

ets along the Aaron Control Housing were not installed, causing the throttle action to operate in such a manner as to fail to actuate the carburetor butterfly valve which resulted in a forced landing and accident, Aug. 30, 1945. **Actions violated CAR sections 43.101, 43.1010, and 43.20. Certificate suspended for 30 days.**

Donald Tilden, private pilot, for piloting an aircraft in which there were carried no registration, airworthiness or special authorization certificates, Sept. 16, 1945. **Actions violated CAR sections 43.1010, and 43.20. Certificates suspended for 30 days.**

Forest Envor Rippee, private pilot, for flying over congested areas of Tampa, Fla., at altitudes between 30 and 300 ft., July 19, 1945. **Actions violated CAR sections 60.3503 and 60.3500. Certificate suspended for six months.**

Walter James Konantz, commercial pilot, for ignoring traffic control instructions issued by a certificated air traffic control tower operator on duty at Allegheny County Airport, Pittsburgh, Pa., July 24, 1945. Instructions were at first communicated by radio to Konantz as he taxied from the ramp to runway, informing him to return to the ramp, and when the instructions were not acknowledged a flashing red light was focused on the airplane. He flew within a control zone when the visibility was one-half mile, carried passengers in instrument weather when he was not qualified for such operation and when the aircraft was not properly certificated as to equipment for instrument flying. **Actions violated CAR sections 60.33, 60.440, 60.50 and 60.51. Certificate suspended for three months.**

Carstairs Group Appeals For Support of Airport

A newspaper advertising campaign urging residents of the Miami Beach area to call on the City Council to approve the use of Lummus Island for a proposed \$1,000,000 private airport is being carried on by the Four Winds Air Association, Inc., sponsor of the airport.

The association, headed by Betty Carstairs, British-American sports-woman, points out in the advertisement that the field will be more than a half-mile away from any Miami Beach residence. The construction of the airpark has been opposed by some property owners, because of the noise nuisance of airplanes (AVIATION NEWS, Jan. 14, 21)

Kaiser-Hammond Passes First Test; Looms As Family Plane Contender

All-metal, 4- 5-place low-wing monoplane with 210-hp. Lycoming engine expected to cruise at 130 mph., may sell in \$4,000-\$5,000 class; follows design of pre-war Stearman-Hammond.

First public showing of the new 4- 5-place Kaiser-Hammond experimental plane—a development of the easy-to-fly pre-war Stearman-Hammond two-place plane—at Oakland, Calif., airport recently, placed the enlarged safety plane up in the front row among possible contenders for the family plane market.

While most personal plane manufacturers have concentrated their development on two-place planes because of the price factor, Henry J. Kaiser, West Coast industrialist, and Dean Hammond, designer of the original Stearman-Hammond, have gone ahead to develop an all-metal aircraft which is expected to cruise at 130 mph., and which may sell for between \$4,000 and \$5,000. It will carry four persons with luggage or five without luggage.

Pilot Hails Performance—Test Pilot James Nissen demonstrated the plane in a flight to about 200 ft. altitude, the highest it has flown so far, and showed its takeoff, banking characteristics. He told an AVIATION NEWS representative that the plane handled "wonderfully" for a prototype.

It has fixed tricycle landing gear with the familiar "humps" on the wing to house the shock absorbers which travel clear through the wing, as on the old Stearman-Hammond. It also has the same fabric wing covering.

Will Have Retractable Gear—The production model, however, is expected to have retractable landing gear, and metal wing covering. An innovation for a private plane is an emergency handle which jettisons the door instantly, if needed. Similar doors were used on the Bell P-39 Airacobra and other fighter planes.

Kaiser told AVIATION NEWS that his production plans for the plane had not been completed, and that he hadn't decided where it would be manufactured. It was suggested that the Kaiser-owned Fleetwings plant at Bristol, Pa., where stainless steel amphibians and other planes were built, might be a likely spot, but Kaiser reiterated that he didn't know. Determining factor on the plane's price will be the

production quantity, but it may be around \$4,000 to \$5,000, he "guessed."

Specifications Compared — Comparison of the new plane's specifications with that of the pre-war Stearman-Hammond shows the wingspan is the same, 40 ft., while the new model is 28 ft. long, as opposed to 26 ft. 10 inches for the old one. Most of the difference apparently is in the longer, streamlined five-place cabin of the new plane. Gross weight has been increased to 3,000 lbs. for the revised model, as against 2,250 lbs. for the old plane. Weight empty is 1,800 lbs. for the new plane, as against 1,482 for the old.

The new plane uses a 210-hp. Lycoming engine. The 30 pre-war Stearman-Hammonds that were built had various powerplants. The first was a 90-hp. Menasco, while later models were equipped with 125- and 150-hp. Menascos.

Flies Somewhat "Hotter"—While a landing speed was not announced for the new plane, its take-off speed was quoted as 50 mph. indicating that it lands and takes off a little "hotter" than the pre-war plane which had a 42-mph. landing speed. This difference would be attributed, naturally, to the heavier wing loading on the new plane.

Photographs indicate that the new plane, like the pre-war model, is a two-control aircraft, with fixed vertical fins instead of rudders. Ailerons and elevators are controlled by the wheel, while there is one pedal in the cockpit floor for a foot brake.

Cooling System Changed — Only serious "bug" in the development of the plane thus far, has been the cooling of the pusher engine, because of an inadequate air scoop. This has been replaced by a larger airscoop, placed under the cabin, which seems to have remedied the defect.

The Kaiser-Hammond experimental plane is of keen interest to the aviation industry, and to the potential private flyers for two reasons:

The pre-war Stearman-Hammond (as reported in AVIATION NEWS May 7, 1945) had a remarkable set of testimonials from its owners as to



Post-War And Pre-War Hammonds: Sleekly streamlined, the new post-war Kaiser-Hammond, pictured above, will carry five persons, or four with luggage. The two-control plane now is being test flown at Oakland, Calif. It is an enlarged version of the pre-war two-place Stearman-Hammond (below), first plane built to CAA safety specifications, which made a brilliant safety record but was found unprofitable commercially.





Kaiser Takes Wheel: Henry Kaiser, West Coast industrialist (right), gets pointers from James Nissen, test pilot, in the cabin of new Kaiser-Hammond personal plane. Kaiser taxied it around the Oakland, Calif., Airport prior to successful flight tests. Other seats were removed for the tests.

its safety, ease of operation. Several of the remaining planes are now in the possession of other aircraft manufacturers for study of tricycle gear, flaps and other advanced design features of the 11-year-old craft.

► **Kaiser's reputation** as a production manufacturer, and his willingness to pour generous financing into products which he undertakes indicates the plane may be produced on a large scale if Kaiser decides to go ahead with it.

NAA Division Plans 'Better Airports' Drive

Plans for a formal award of a certificate of good practice to every airport in the United States which meets minimum standards and suffers no fatality or serious injury are being developed by the air safety division of the National Aeronautic Association, headed by Jerome Lederer, safety engineer for the Aero Insurance Underwriters and former CAB safety bureau head.

Plans call for notification of all Class 1, 2, and 3 airports of the proposed awards, with invitation to participate. It is expected that local newspapers will encourage community airports operators to bring them up to standards.

► **Possible Scope of Standards** — While final details of the standards to be set have not been completed, it is expected that they will include airport marking, fences, traffic pat-

terns and rules, wind indicators, refueling facilities, fire prevention, provision for spectators, cleanliness of restrooms, lounge, hangars; rescue equipment, personnel neatness, efficiency, prompt service and courtesy.

The airports would be visited by volunteer inspectors, and state aeronautics officials are expected to assist.

► **May Be Continued**—The move is seen as a first attempt to develop uniform minimums for safety and service for small airports and is expected to contribute much by educating the operators on what the public has a right to expect at an airport. If the contest proves successful it will continue as an annual event.

Southern Aircraft Roadable Based on Californian's Plane

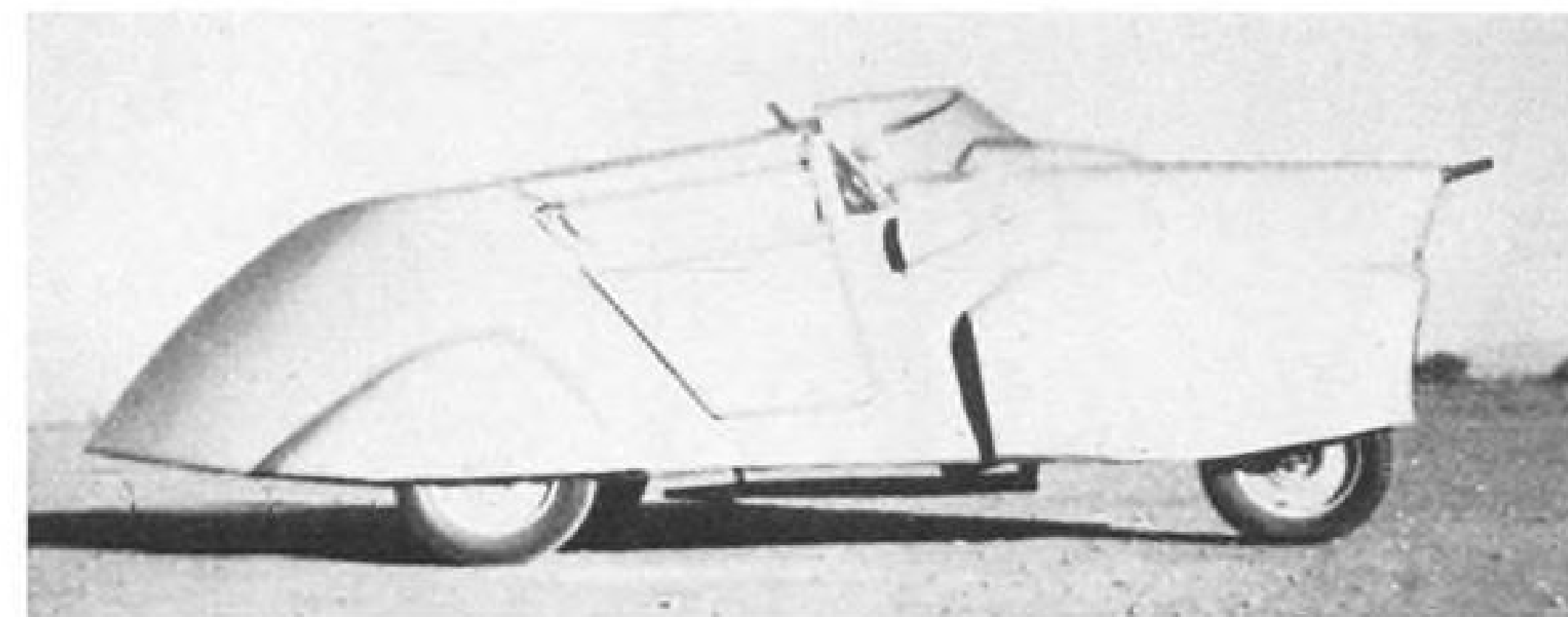
Although Southern Aircraft's clean-tailored roadable airplane (AVIATION NEWS, Feb. 4) came as a "post-war" surprise to many, actually it was the result of more than five years of development after its prototype flew over San Diego, Calif., in 1939.



Father of this roadable aircraft is Theodore P. Hall (photo), chief of design and research for Consolidated Vultee. He designed and built it in spare time, and

through 1939, 1940 and 1941 made improvements and secret test flights at Linda Vista Airport.

► **War Halted Work**—The war halt-



Pioneer Roadable Plane: The Southern Aircraft roadable plane shown on the cover of AVIATION NEWS, Feb. 4, goes back to this roadable plane of Theodore P. Hall, chief of design and research at Consolidated Vultee. The Hall roadable, shown here in its ground vehicle version, was road tested and flown in the San Diego area in 1939. War demands on Hall's time caused him to turn the project over to Southern Aircraft for additional development.

ed his work on the project as he turned his energies into primary development of Convair's heavy military aircraft series and, more recently, Convair's 204-passenger Model 37.

He turned his roadable plane over to the Southern Aircraft Division of Portable Products Corp., Garland, Tex. for final development into the experimental model now flying.

Airfield Information Book Planned For Private Flyers

A private flying information service on airfields and landing strips similar to the Airway Manual now published for airline pilots, is planned by Jeppesen & Co., Denver.

Capt. Elrey B. Jeppesen, head of the company and UAL pilot, expects the two-volume manual, which attained a 12,000 circulation during the war, will attain a far wider circulation in its private flying edition. The current manual includes only transport fields, and is kept up to date by loose-leaf sheet revisions which are sent out as changes at the various fields are noted. He began his manual as a personal memorandum of route information in his own looseleaf notebook, and later began duplicating it for other pilots.

State Air Tour Planned

Plans for a state-wide tour of 150 private planes are being drafted by the Oklahoma Aviation Association, President Al Guthrie announced. The tour, to be held later in the spring, is expected to visit various airports throughout the state to encourage building of additional community airfields in Oklahoma.

Change to UNF Will Be Easy On Private Flyers, Wright Asserts

Points out that switchover will be gradual and "painless," eliminating need for immediate expense of replacing present equipment; current system will be continued for several years.

Private flyers will find the forthcoming change from low frequency to high frequency radio for civil aircraft communications and signals a gradual, "relatively painless" and ultimately beneficial affair, according to CAA Administrator T. P. Wright.

An interim period of several years in which both low frequency and VHF equipment may be used obviates the necessity for a sudden sizeable investment in new VHF equipment by all civilian flyers. But eventually, all airway communications and signals for radio navigation will be in the VHF bands, eliminating the serious static problem.

► **Will Continue Present Service**—The CAA plans to continue to operate its present services using 3105 kilocycles for private flyer transmission to CAA ground stations, and 278 kilocycles for traffic control broadcasts to private flyers.

In addition the existing low frequency ranges will be available to the private flyer's use, since his present receiver covers the 200-400 kilocycle band. Any plane with approved low frequency equipment has all CAA airway aids and communications available now and they will continue available for several years.

► **Change Will Be Complete**—However CAA's plans do call for eventual complete change to VHF. Already ground transmitters are installed which can be received by planes fitted with VHF equipment, which not only gives better reception but relieves the 3105 kilocycle band in many areas already overworked.

Radio manufacturers generally are planning to build a five-channel transmitter covering the 131 megacycle band. Only two frequencies will be used at first, 131.9 kilocycles for communication from plane to traffic tower and 131.7 kilocycles from plane to airways station. Later, as these channels become crowded, three other channels can be used by the same transmitter, simply by installation of one crystal for each channel.

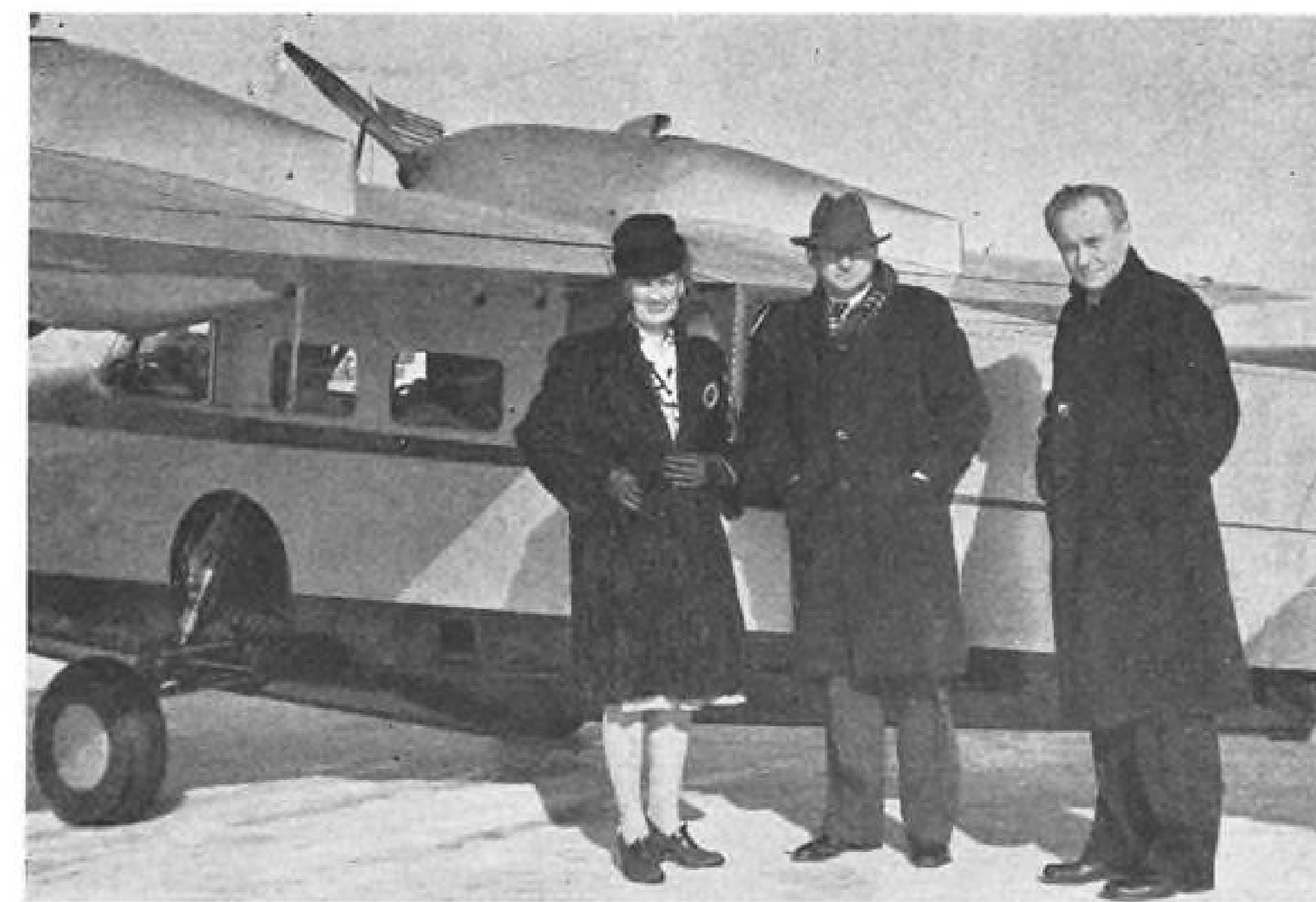
► **Towers Now Using VHF**—Ground

transmitters in VHF, for talking to planes, will use the 118 megacycle band. Transmitters already are installed at CAA towers and are being used to communicate with planes which have VHF equipment, especially in congested areas, to relieve low frequency channels. At CAA airway stations, transmitters will use 111.1 megacycles.

Wright emphasized that the transition was being planned to make its effect as gradual and as inexpensive as possible.

Beech Put in Service

Hawthorne Flying Service, Orangeburg, S. C., has placed a new D18S Beech twin-engined executive transport in charter operation. The company is regional representative for Beech in the Carolinas, Virginia, District of Columbia and parts of Maryland and Georgia. Hawthorne has bases at Columbia, Orangeburg, Greensboro - High Point, Fayetteville, N. C., Albany, Ga., and Washington, D. C.



LINK BUYS AMPHIBIAN:

Edwin A. Link, president of Link Aviation Devices, is planning a six weeks' business trip through Cuba and Mexico next month with his wife, in the new Grumman Widgion amphibian he purchased recently. Mr. and Mrs. Link are shown above at Tri-Cities Airport, Binghamton, N. Y., with Lee Warrender, right, Link sales representative in New York.

Piper Feels Strike

Approximately 1,900 employees of Piper Aircraft Corp., at Lockhaven, Pa., were "furloughed" last week because of lack of materials. Company officials said the steel strike was the cause but added that the workers would be recalled to resume operations as soon as materials and components again became available.

A study of the first week's operation for the new incentive wage plan at the Piper plant indicates the efficiency record throughout the plant has climbed to 93 percent, with some 350 workers from all departments collecting bonus pay.

CAP Will Continue As Auxiliary to AAF

Gen. Carl A. Spaatz, AAF commanding general, last week announced the Civil Air Patrol would continue as an auxiliary to the AAF, even though the federal appropriations to finance CAP would be ended as of March 31.

AAF leaders have indicated CAP can continue to be useful as an aid to discharged veterans as well as in supporting AAF cadet training and other AAF programs. Whether the auxiliary status will continue indefinitely, or only until such time as

CAP becomes a chartered civilian organization, was not disclosed.

► **Headquarters Moved**—Meanwhile, national headquarters of CAP was moved to Washington last week from Ft. Worth, Tex., and was to be established either at the Pentagon or at Bolling Field.

A committee of state CAP representatives met at the Pentagon last week, also, to draft plans for the continuance of the organization as a civilian group. Methods of financing CAP through membership dues or other means is one of the principal problems.

Pittsburgh-Butler Airport Sold to Flying School

Graham Aviation Flying School, Inc., of Pittsburgh, has purchased Pittsburgh-Butler Airport, one of the largest privately-owned fields in Pennsylvania, and plans to develop it into "a country club of the air."

The former owner of the field, Transcontinental & Western Air, Inc., previously had leased the field to the school. William J. Graham, president of the school, said he had held an option on the field for some time.

► **Operates Other Fields** — Graham said the Scholter Aviation Co. will continue to operate the field. Opening of the field to other operators and sales organizations also is scheduled.

Graham operates airports in Pennsylvania, Georgia and Maryland including commercial fields at Johnstown, Pa., and Cumberland, Md. He operated a string of war service training fields in the South during the war.

Socony-Vacuum Presses Airport Development Drive

Sound motion pictures designed to stimulate development of airports in communities not now having them, and to aid in growth of existing airports, are being circulated by Socony-Vacuum Oil Co., Inc., national marketing organization for Standard Oil of New York, Magnolia Petroleum Co., Standard Oil of Kentucky, and General Petroleum Corp., of California.

The first film, "Ceiling Unlimited" depicts progress in transportation and seeks to encourage proper airport design and better service to the public. A second film will show dealers how they can give better service to private aircraft. Socony-Vacuum also has prepared two manuals showing how to plan airport development.

Briefing For Private Flying

Mass flights of private flyers, which were beginning to create widespread interest among sportsmen flyers before the war, are being resumed in many parts of the country as more private planes become available and more private pilots get their tickets. If the interest in personal aviation continues to mount it is likely that local flights far larger than any pre-war will become a usual event in a week-end at the private airport. One of the best known Midwest pre-war breakfast flight organizations was the Michigan Dawn Patrol, which held its first post-war rally at Adrian, Mich., airport on a recent Sunday. Tribute was paid to the late Ken Morey of Adrian, father of the Dawn Patrol, who was killed in a CAP plane crash two years ago.

► **FRIGID FLIGHT**—The Wisconsin Civil Air Corps recently put a new angle on the conventional breakfast flight when its members arranged a "Frigid Flight" from Milwaukee to Sturgeon Bay, approximately 150 miles by air, during near-zero weather. An unanticipated snow storm added to the fridity as the tourists neared the Bay, but all planes arrived safely and the 60 visitors participated in a winter sports party after presenting a charter to the Door County unit of WCAC. The state corps, organized in 1935, now has 17 chapters and more than 2,000 members.

► **NEBRASKA FLYING FARMERS**—A recent Organized Agriculture conference at Lincoln, Neb., brought in a number of flying farmers and ranchers in their own planes. They landed at Union Air Terminal and were provided with transportation to the conference, held on the University of Nebraska campus. Speakers at a special Flying Farmers session included W. T. Piper, Sr., president of Piper Aircraft Corp.; John Reynolds, Chase County flying agricultural agent; Max Kier, member of the State Aeronautics Commission. A number of farmers recently discharged from military service indicated they intended to take flight instruction under the GI Bill of Rights, if this could be arranged.

► **GLOBE'S ACES**—Two of the top fighter pilots of World War II, Maj. Don Gentile, of Piqua, Ohio, and Maj. John T. Godfrey, Woonsocket, R. I., are planning a national air tour flying Globe "Swift" two-place low-wing personal planes, representing Globe Aircraft Corp., Ft. Worth, Texas. Purpose of the tour is to publicize aeronautical activity in Texas.

► **\$230 A MONTH TO BUY AND FLY!**—A *Kansas City Times* reporter interviewed William A. Ong, local Piper distributor, and came up with the rather discouraging information that it would cost approximately \$230 a month, after the prospective plane owner had laid down a \$700 down payment, to buy and fly a *Cub Trainer* priced at \$2100 there. Ong's figures went like this: Balance on the airplane, \$1,400; insurance (10 percent deductible) \$283; carrying charges (6 percent) \$100, totalling \$1,783. To pay it out in a year makes the monthly payments \$148.50. Hangar rent increases this to \$168.50 a month before the pilot can turn the propeller over. Ong figures gasoline and maintenance at \$3 an hour, so that if the pilot flies as much as 20 hours a month, he adds another \$60 a month to get a total monthly cost of \$228.50 while the *Cub Trainer*, one of the lowest priced private planes on the market, is being purchased.

► **NO AIRPORT ON SWAN ISLAND**—Efforts of private flyers and operators in the Portland, Ore., area to have Swan Island, in the Willamette River, restored to use as an airport have been defeated by opposition of the Portland Chamber of Commerce foreign trade and industry committee. The Port of Portland Commission rejected the proposal to restore the island to its pre-war status as an airport. It had been used by all commercial lines operating out of the city until construction of a larger airport east of Portland. The island was leased to the Maritime Commission and was used during the war as a Kaiser Industries shipyard. It is expected to remain an industrial site.

► **D. C. FLYING**—Four hundred and twenty-eight Washington, D. C., residents own their own planes, a recent CAA tabulation shows—an increase of 117 planes over pre-war days. There are 1,146 residents holding pilots licenses, approximately 1,625 students are taking flying lessons at the six principal airports in the area and there are 30 organized flying clubs with a total membership of more than 880. —Alexander McSurely

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planting, producing... renewing its trade with all the world
... a resurgence speeded on the wings of
Lockheed Constellations, powered by Wright, flown by TWA.

WRIGHT

Aircraft Engines

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FIRST IN FLIGHT

AIRCRAFT INSTRUMENTS

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INDICATORS

Magnetic-drag Tachometers

For the measurement of aircraft-engine speed, more than half a million tachometer indicators and generators have been supplied to the armed forces alone by General Electric. (Additional thousands were built to G-E drawings by other manufacturers.) Such demand reflects recognition of the following factors:

RELIABILITY—Less than one out of every thousand instruments shipped from the factory has been returned because of malfunctioning.

ACCURACY—An instrument with a full-scale reading of 3500 rpm indicates within plus or minus 10 rpm in the operating range.

VERSATILITY—These instruments are available in a variety of ratings.

● An explanation of the magnetic-drag principle and its application is contained in Booklet GET-1215. Get your copy from the nearest G-E office or write to: Apparatus Department, General Electric Co., Schenectady 5, N. Y.



GENERATORS



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- Ammeters and voltmeters
- Position-indicating equipment
- Pressure-indicating equipment
- Temperature-indicating equipment
- Liquid-level-indicating equipment
- Remote-indicating compasses
- Electric gyroscopes



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PRODUCTION

Priority Given Housing in Britain Hampers Production of Aircraft

Airport development also hindered as former building trade workers are transferred from aviation industry to speed reconstruction of heavily damaged areas.

High priority given to new housing in Great Britain has hampered both the manufacture of new civil aircraft and the preparation of landing fields for civil use. Britain is continuing many wartime controls during the reconversion period and now that war no longer has top billing, workers have been drawn from airports and factories to rebuild homes in heavily-populated and hard-hit Southern England.

A shortage of design draftsmen and similar workers has been the greatest industry bottleneck, according to Sir William Hildred, Director General of Civil Aviation, who will shortly become secretary general of the International Air Transport Association. Getting a new plane through design, he said, "is the devil's own job."

► **Labor Force Shifted**—Illustrating some of the reconversion troubles of British industry, Sir William said that 348 workers employed on a single new transport plane project were found to have had pre-war experience as carpenters, bricklayers, plasterers or plumbers and were forthwith reassigned to construction work.

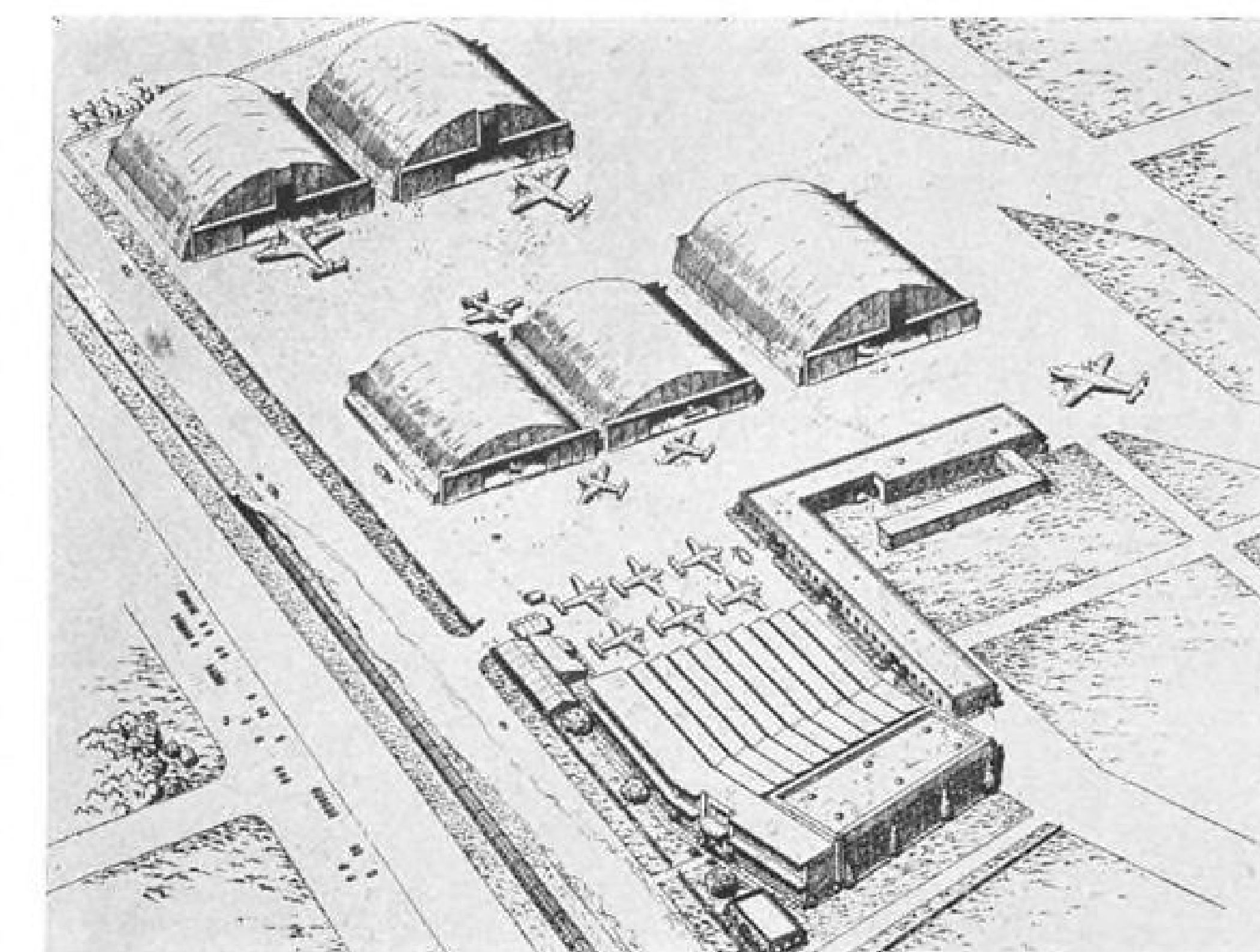
In all, he said, there now are approximately 500,000 persons employed in British airframe and engine manufacturing, as compared to more than 2,000,000 at the peak of wartime activity.

► **Heathrow Problems Cited**—Scarcity of labor also is one of the factors that has made it difficult to put airports into shape for the new overocean transports which already are flying, Sir William said. He was particularly concerned about progress at Heathrow, some 35 miles northwest of London, which is to be the main field for international operations, but said he was confident it would be the equal of any airfield in the United States.

Work at Hurn, now used as a trans-Atlantic terminus, is similarly handicapped, he declared. It has

been impossible to get heat for the hangars and labor must be transported from homes miles away. Some have managed to find lodgings in the nearby resort town, but as soon as the holiday season comes, their landlords oust them in favor of better-paying vacationers.

► **Still Using Croydon**—Meanwhile, he said, British transport is forced to be content with fields like Croydon which is "not ideal, but usable." Badly blitzed, Croydon has had several hangars and half of its administrative block destroyed. It has only grass runways and there is a large depression in the middle of the field, but while "nobody likes it," Sir William declared, it still handles 1,000 flights a week.



SERVICE CENTER PROJECT:

Lockheed Aircraft Corp. will show an inventory of \$11,500,000 when this heavy plane service base is completed at Lockheed Air Terminal, Burbank, Calif. Ground has just been broken for the three large hangars which will complete the center. One will be outfitted to handle planes larger than the Constellation class, presumably of the size of the Lockheed Constitution, now in the final phase of construction.

WAC Announces Sale Of Two War Plants

Sales of two plants engaged in manufacture of aeronautical production during the war, and the leasing of a third have been announced by the War Assets Corp.

The Chicago factory formerly occupied by the Minneapolis-Honeywell Regulator Co. for the manufacture of aircraft electric control systems has been purchased by the Leaf Building Corp. for the production of chewing gum and candies. Price was \$1,101,500. Reproduction cost of the facility, which was built in 1929, is estimated at \$1,318,804.

► **Nash Plant Sold**—The Nash-Kelvinator plant at Lansing, Mich., used during wartime for production of propellers, has been sold to the Motor Wheel Corp. for \$1,137,526. Original cost was \$2,718,444. The new owners expect to make alterations costing \$400,000.

In one of the few long-term leases yet negotiated for a wartime aircraft plant, the Detroit facility operated by the Republic Aircraft Products division of Aviation Corp. has been leased for three years to the Federal Motor Truck Co. at an annual rental of \$36,500, which is roughly 8 percent of valuation of \$468,986.

Guided Missiles Unit Established By AAF

Indicative of the AAF's continuing and expanding interest in robot air weapons, the First Experimental Guided Missiles Group has been formed to develop tactics and techniques for the revolutionary weapons.

Under command of Col. Harvey T. Alness, former commander of the Seventh Bomb Group in India, the guided missiles work will be undertaken at Eglin Field, Fla., home of the AAF's school of applied tactics. Here, such techniques as "skip-bombing" were tested, and rocket-launching emplacements, similar to those of the Germans in France, were built and destroyed in order to find a method of attack.

► **Objectives Outlined** — Objectives of the First Experimental Group are development of tactics and techniques of guided missile operations, unit testing of missiles organizations and equipment, development of training requirements and standards, training of personnel, development of personnel and organizational requirements and demonstration of guided missiles in the AAF program.

While one guided missile, the Azon bomb, saw combat service in the war, insufficient data exists for the AAF to decide the various components—men, equipment, supplies, etc.—of a guided missiles force. Thus, formation of the first Ex-

Link Building Canoe

Link Aviation devices is manufacturing a plastic sectional canoe which can be packed in the trunk of an automobile or stowed in the cabin of an airplane.

The portable craft can be carried in two small zipper bags and assembled into a 14½-ft. canoe in less than ten minutes. It weighs 65 lbs. Much of this lightness results from the use of molded plastic in each of the craft's ten sections. This plastic is non-absorbent, does not warp, and is impervious to salt water, oil or gasoline.

perimental Group may be considered a "pilot model."

Origination and testing of guided missiles will remain under the control of the Guided Missiles Division of the AAF, and the Air Technical Service Command at Wright Field.

Ryan May Reenter Commercial Field

An informal letter sent to stockholders by T. Claude Ryan, president of Ryan Aeronautical Co., gives the first indication that Ryan is planning to reenter the commercial and private airplane manufacturing field.

Ryan's letter said studies of new designs, production and markets for private and commercial planes have been under way since the

war's end. At the same time he added that he did not feel that it was sound policy to fully reveal the firm's plans in the competitive commercial field at this time.

► **Continuing Military Work**—Ryan is continuing actively in the development of advanced military aircraft types, it also was disclosed. This is evidenced, Ryan pointed out, "by the high employment in the engineering, laboratory and experimental departments where much in new and advanced development work is being carried on." Importance of the activities in new design is illustrated by the nature of the work being done in advanced applications of jet propulsion, supersonic speeds and electronics.

Bendix Buys Beechcraft For 'Flying Laboratory'

Purchase of a Beechcraft 18S twin-engine plane as the latest addition to the "flying laboratories" of the Bendix Radio Division has been announced by W. P. Hilliard, general manager of the Towson, Md., plant.

The Beechcraft will be based at Baltimore Municipal Airport, Hilliard said, and will be used in radio and electronic research. It will carry both experimental and standard Bendix radio equipment, as well as the Pioneer Electronic Pilot.

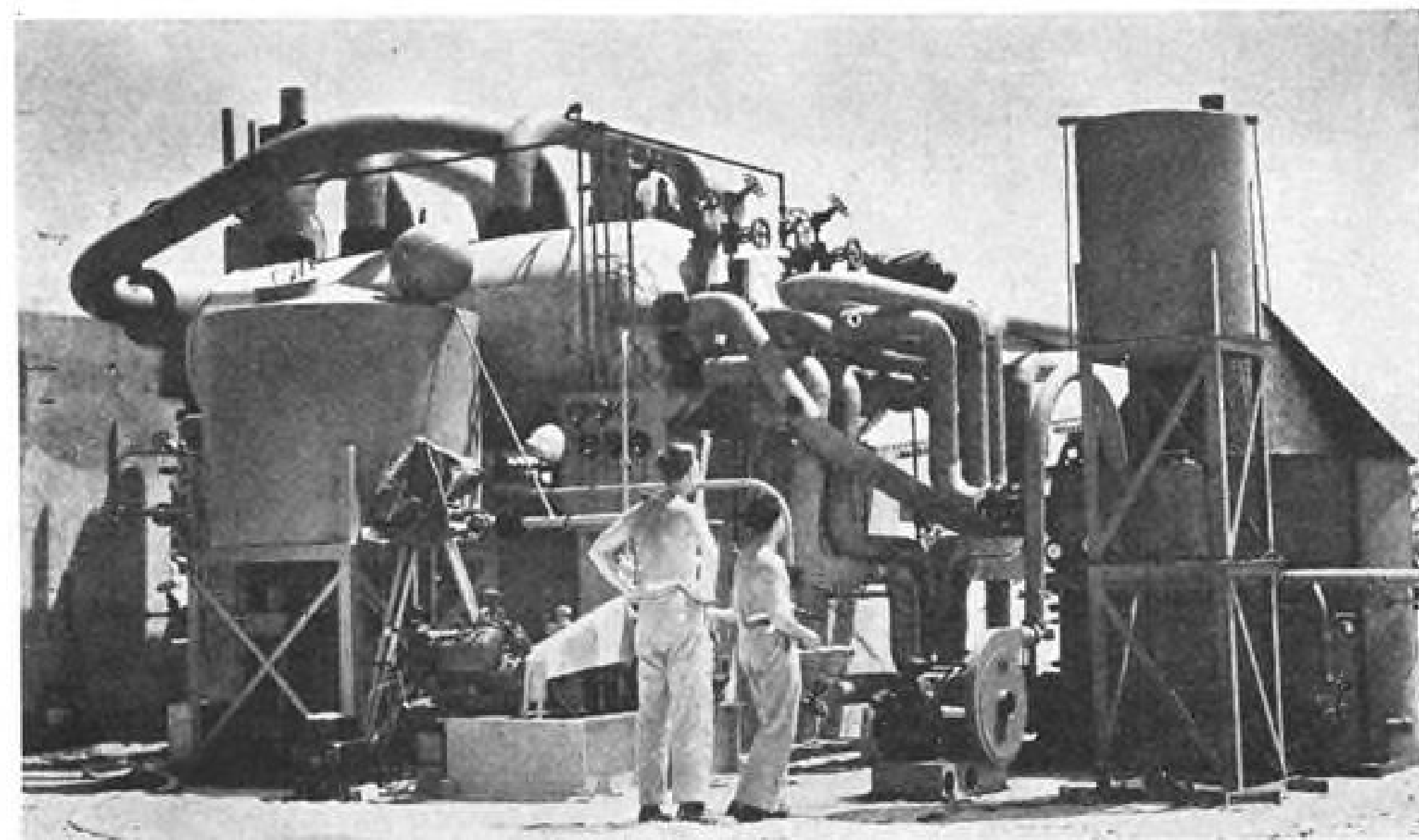
► **Special Interior Planned** — The new plane will be specially designed as a "flying laboratory" for all phases of radio research, with adequate work benches and testing equipment built into its interior design. The research activities will be under the direction of Ruel Colvin, flight research engineer.

Surface Combustion Corp. Develops New Heater

Development of an aircraft heater which the manufacturer, Surface Combustion Corp., reports will effect decided economies in the operation of Douglas DC-3 aircraft has been announced by the company. The unit is called the Janitrol.

Surface Combustion says the new heater package adds approximately 50 lbs. payload to the DC-3 since the 100-lb. package complete with blower weighs 50 lbs. less than the systems used on planes of this type.

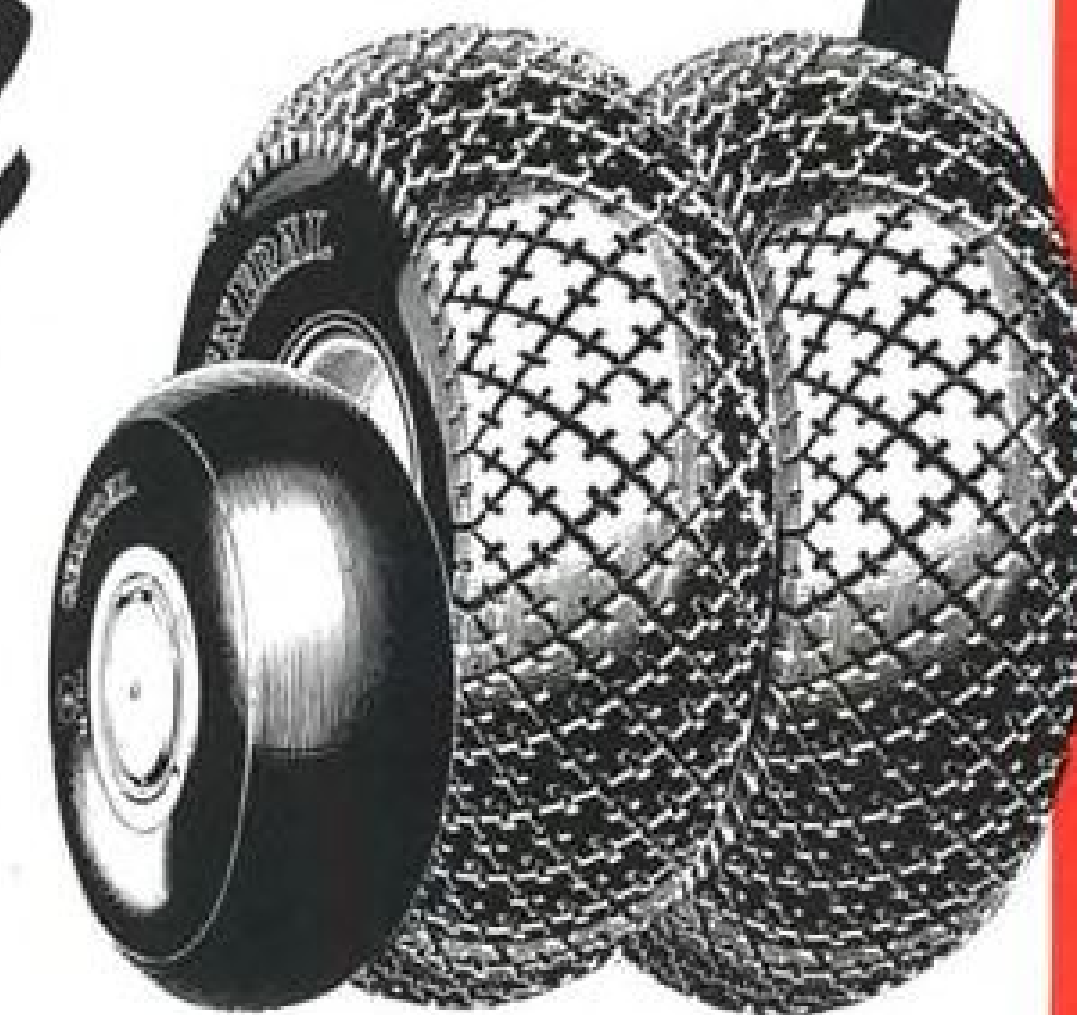
► **Dimensions**—The unit, contained in a 12-in. by 15-in. by 49-in. fabricated aluminum alloy jacket, can be replaced for servicing and inspection in 15 min.



Buzz Bomb "Booster": At Eglin Field, Fla., the AAF is experimenting with steam-launched guided missiles, using this generating plant. Pressure is built up to 1,000 lbs. per sq. in. and a large quick-acting valve snapped open for eight-tenths of a second. The steam thrust gives the V-1 type robot bombs a speed of 240 m.p.h. by the time they reach the end of the 160-ft. special launching ramp.

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Trust a pioneer distributor like Air-Parts, Inc., to sell only the best in aviation supplies . . . and trust seasoned pilots and commercial operators to buy the best. *Quality pays in aviation!*

General's famous aviation tires . . . pioneers, too . . . are built to a *single* exacting standard—Top Quality! In any weather, on any field, General's *extra* quality means . . . *extra* protection on landings and take-offs . . . *extra* dependability . . . *extra* service . . . and lower operating costs.

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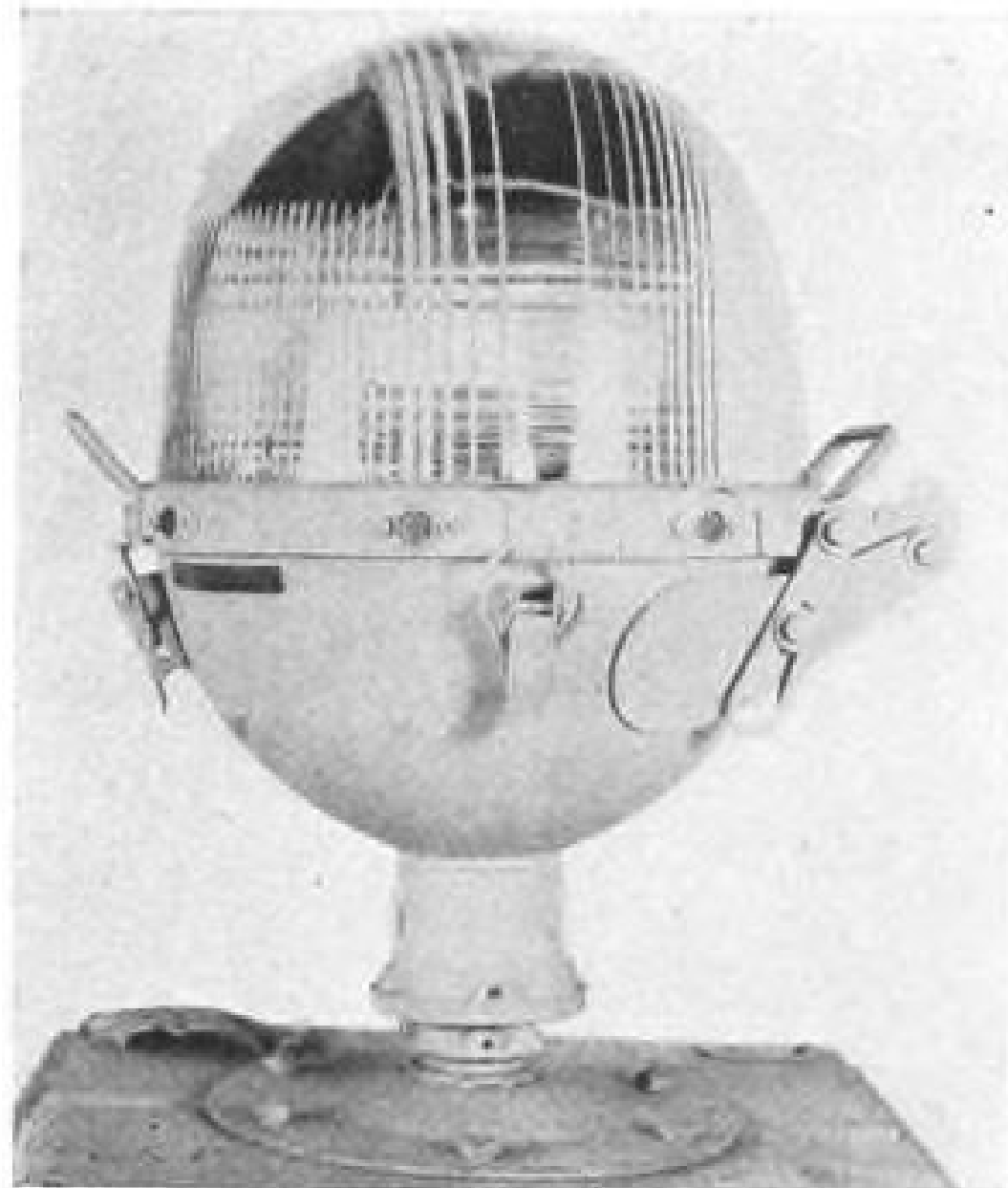


NORMAN K. HAWKINS
Domestic Sales Manager



ARTHUR C. HARVEY
Business Manager





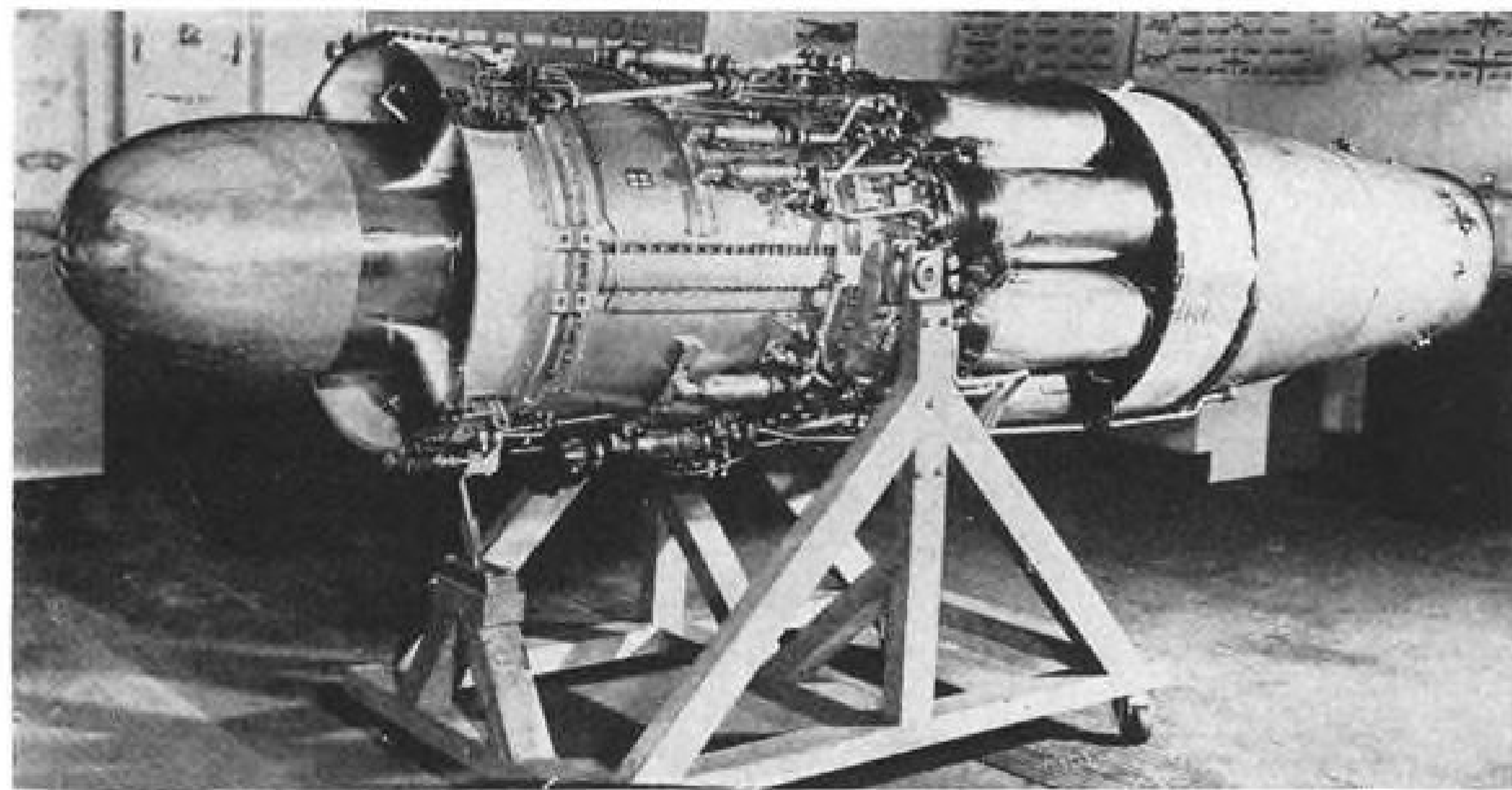
Navy Runway Light: High-intensity lights like these were developed by the Navy to aid foul-weather landings. Placed both on approaches and at 200-ft. intervals along landing strips they permitted operations to continue in visibility as low as one-fourth of a mile.

Navy Cites Value Of Runway Lights

The Navy is convinced of the value of using high intensity lights to aid "all-weather flying" on the basis of 295,737 landings and take-offs and months of operations in the Aleutians area.

High intensity lights not only were installed on the approach areas, but also at 200-foot intervals along the full length of the runway on some airports in the United States and on all those in overseas theaters.

► **Results Are Good**—A Navy report which should be of interest to com-



New GE Jet Power Plant: General Electric's newly-developed axial flow turbo-jet engine, the TG-180, is designed for sustained high-speed, long-range aircraft.

mercial air transport shows:

Where high intensity lights are installed along a runway, the number of accidents involving aircraft striking the lights is very small when compared to the number of landings and takeoffs. Furthermore, the number of such mishaps decreases as the runway width is increased. Here are the figures compiled at four stations:

► **Station A**—150-ft. runway—one collision in 2,745 landings and take-offs.

► **Station B**—150-ft. runway—one collision in 645 landings and take-offs.

► **Station C**—200-ft. runway—one collision in 12,855 landings and take-offs.

► **Station D**—300-ft. runway—one collision in 17,180 landings and take-offs.

► **Damage Is Slight**—Damage resulting to aircraft in such accidents varies with the weight. Heavy single engine and multi-engine aircraft sustain little or no damage. Light single-engine planes sustain greater damage, but not sufficiently severe to cause personnel injuries.

Lower Fuel Consumption Claimed For New GE Jet

A new axial flow turbo-jet engine has been developed by the General Electric Co. to drive military and civilian planes at great speeds on long flights.

Sustained high speed is possible for planes powered by the new jet since these engines function most economically when running at nearly full throttle. This means that cruising speed of an axial flow jet engine is practically top speed.

► **Improvements Claimed**—Known

in the AAF as the J-35 and industrially as the TG-180, the new jet, according to General Electric, is more powerful at high speeds than any conventional engine in the air today and marks definite improvement in aerodynamic design and fuel consumption.

Commerce Department Research Unit Set Up

A production research and development division has been established in the Commerce Department to initiate and conduct research and development work on such materials, processes and inventions as will advance the technological productivity of the nation.

The new unit will carry out generally the functions of the former Office of Production Research and Development transferred to the Commerce Department from the Civilian Production Administration.

► **Activities Outlined In Order**—By terms of the executive order effecting the transfer the division will, among other activities, arrange for the development of meritorious inventions and proposals received from the National Inventors Council, other agencies and individuals. The division also is charged with sponsoring the coordination and use of technical knowledge, patented or unpatented, wherever such use would promote technological production.

Kidde Smoke Detector Uses Photo-Electric Cell

A smoke detector for airplane cargo space which works on a standard 12-, 16-, 24- or 28-volt circuit and utilizes a photo-electric cell has been developed by Walter Kidde & Co. engineers.

Detection of smoke by photo-electric means requires an instrument which functions on slight changes in illumination on a photo-electric cell, caused by the presence of smoke. These changes in illumination ordinarily are so slight as to require extreme sensitivity in the detecting instrument, although this sensitivity does not necessarily mean extreme delicacy.

► **Principle Explained**—The Kidde detector has a light directed on a photo-electric cell with clear air between the cell and the light source. The introduction of smoke into the light path reduces the light intensity reaching the cell and unbalances the electric circuit, setting off either audible or visible alarms.

CONTINENTAL AVIATION ANNOUNCING THE NEW **SKYPOWER** PROPELLER

A HYDRAULICALLY OPERATED CONTROLLABLE PITCH PROPELLER FOR LIGHT PLANES

Now, your plane can have shorter take-offs, faster rate of climb, and higher ceiling—improved performance factors made possible by the new Continental Aviation Skypower Propeller, a hydraulically operated controllable pitch propeller for light planes. The Skypower Propeller is simple in design and operation, and has been tested and proved in thousands of miles of flight. If your new plane or your present plane is powered with a Continental A-65 or C-75-85, your base operator can install a Skypower Propeller quickly, at low cost. For literature and details, write Continental Aviation and Engineering.

THE SKYPOWER PROPELLER IS THE 'GEAR SHIFT' OF YOUR PLANE! NOTE THESE ADVANTAGES:

- SKYPOWER PROPELLER operates hydraulically from the regular engine oil pump. Hydraulic actuator is stationary — no spinning parts — no packing glands or gaskets to leak.
- PUSH-PULL control on panel shifts prop for take-off or cruise.
- POSITIVE hydraulic action sets Skypower Propeller in either position.
- SIMPLY DESIGNED results in light weight.

SHORTER TAKE-OFF
A high-performance plane with C-85 engine and the SKYPOWER PROPELLER reduces take-off runs as much as 20% or more. It utilizes the Continental engine's full take-off power rating.

RATE OF CLIMB increased by as much as 27% or more with the SKYPOWER PROPELLER. You can fly from smaller fields or shorter landing strips.

With given load, the SKYPOWER PROPELLER increases the ceiling or increases load capacity at former ceiling.

SKYPOWER PROPELLER

FIXED PITCH PROPELLER

SKYPOWER PROPELLER

FIXED PITCH PROPELLER

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FIXED PITCH PROPELLER

CONTINENTAL AVIATION AND ENGINEERING CORP., Muskegon, Michigan

PERSONNEL

Chicago & Southern Names Maurer General Counsel

Richard S. Maurer (photo) has been appointed general counsel of Chicago & Southern Air Lines, to succeed **H. R. Bolander, Jr.**, vice-president and general counsel, who resigned to join Delta Air Lines in an administrative capacity. Maurer had been secretary and assistant general counsel. Prior to that he served with the Civil Aeronautics Board.

Bolander succeeded **Amos A. Culbert** who now is an American Airlines vice-president.

J. A. Williams has been appointed general manager of the Dayton division of United Aircraft Products, Inc. He formerly was general manager of the Curtiss-Wright Airplane division plant in Columbus, Ohio, and held various executive posts in the Curtiss-Wright Corp. in Buffalo.

Maurice Perrier has been named manager of the eastern division of Fairchild Aerial Surveys, Inc., after three years as chief of the photogrammetric division of the Army Map Service. He succeeds **Max A. Phillips**, who has gone into Fairchild's foreign service.

Ralph Greenwood has been appointed superintendent of the propeller department of the Burbank branch of Pacific Airmotive Corp. Greenwood was service engineer for Hamilton Standard Propeller Co. and previously was supervisor of the propeller department of Douglas Aircraft Co.'s overseas operation in Africa.

N. F. Vanderlip (photo) has joined Kellett Aircraft Corp. as works manager in charge of all production activities. Vanderlip has been with Curtiss-Wright as executive engineer, general manager of the Buffalo airplane plants and factory manager of the Columbus

plant. He also has been president and general manager of Bellanca Aircraft Corp. and continues as a member of the board of directors of Bellanca.

C. H. Kibbee has been appointed assistant treasurer of American Airlines. Kibbee has been in the investment field since 1929. **Maj. Thomas L. Morton** has returned to American to resume work in the agency department.

The board of directors of Blackburn Aircraft, Ltd., England, have appointed **W. S. Farren** as technical director of the company. Farren has been director of the Royal Aircraft Establishment at Farnborough. During World War I, he was in charge of aerodynamic design and experiment at the Royal Aircraft Factory. In 1918 he joined **Maj. F. M. Green** at Armstrong Whitworth Aircraft. He was one of the early contributors to gas turbine and jet propulsion. After 25 years as a director of Blackburn, **E. Hudson** has retired. The present secretary **A. F. Jopling** will replace him on the board.

Charles R. Hussey (photo) has been appointed system superintendent of reservations for Northwest Airlines. He had been staff assistant to the general superintendent. His new work will be on all problems of reservations. **Carl A. Nelson** has been

named chief auditor of Northwest, succeeding **J. F. Rowland**, who has resigned to enter the automobile business. Nelson formerly was with an accounting and auditing firm.

Eight Veterans Return To Positions With CAA

Eight veterans have returned to the Civil Aeronautics Administration.

Col. Howard F. Rough, formerly regional manager at large, returns to his assignment and will serve as special consultant to Administrator **T. P. Wright**. **Col. Russell W. DeLany**, formerly chief of air carrier inspection in the fifth CAA region, rejoins CAA as chief of flight operations service. **Col. John Marshall** has been named coordinator of safety regulation. He was a trial examiner. **Col. Bennett H. Griffin**, director of the CAA's standardization center at Houston, now is awaiting assignment.

Four former regional managers of the CAA have returned to their jobs, now called regional administrators. **Col. George W. Vest** is head of the third region at Chicago, **Col. Joseph**



CAA OFFICIAL RESIGNS:

Dr. Edgar Fuller, who has resigned as acting chief of the aviation education division of the Civil Aeronautics Administration, to become state commissioner of education for New Hampshire. In 1944 Dr. Fuller won the Frank G. Brewer Trophy, awarded for outstanding contributions to the education of youth in aviation.

S. Marriott is with the sixth region at Santa Monica, **Lt. Col. Robert D. Bedinger** is manager of the seventh region at Seattle, **Lt. Col. Leonard W. Jurden** takes up his post at the fifth region in Kansas City.

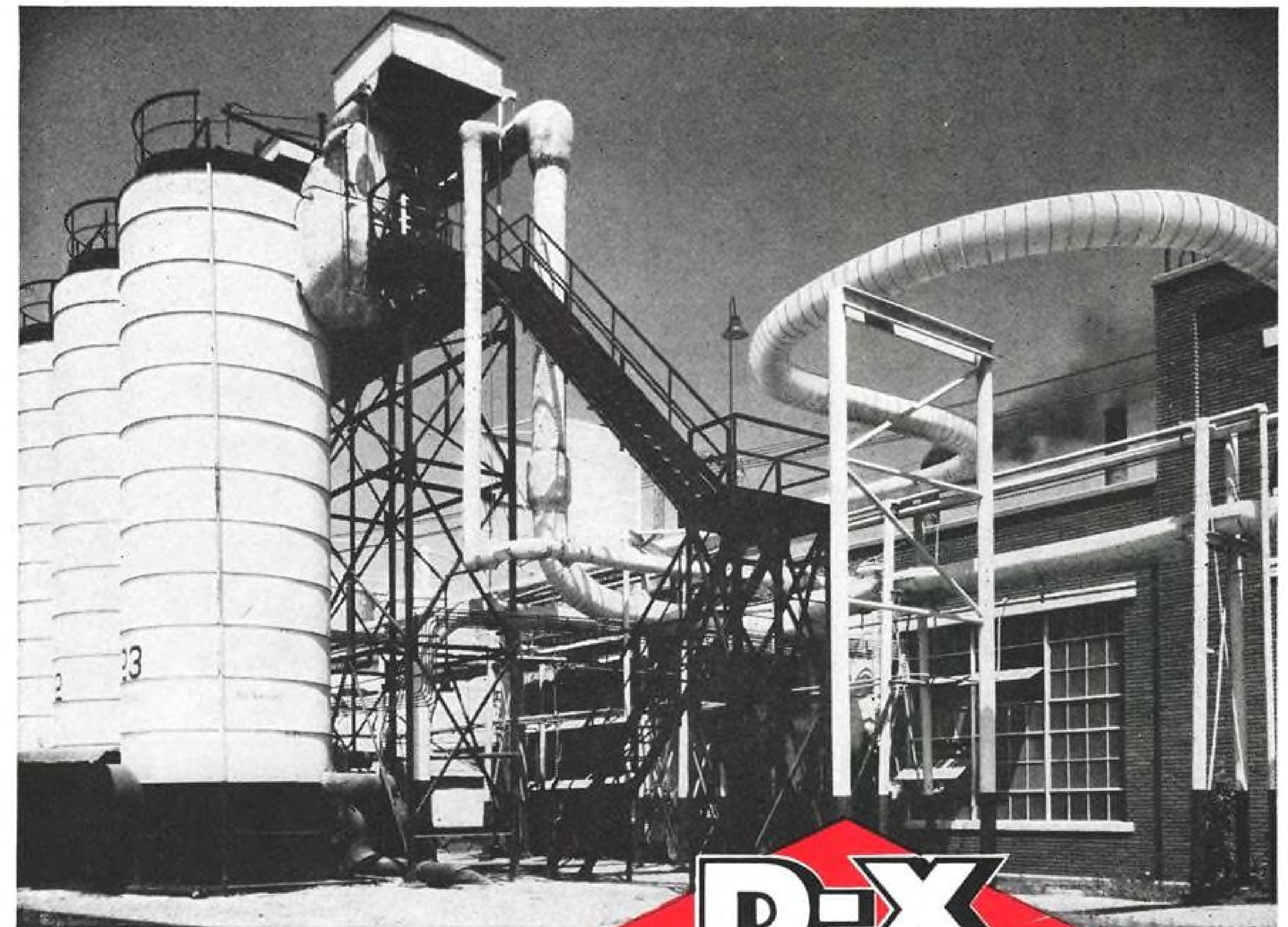
Col. Glynne M. Jones is joining other CAA representatives in Germany to assist in reorganizing civilian flying.

Marvin J. Parks (photo) has been named export manager for Fairchild Engine & Airplane Corp., with headquarters in Washington. Parks has been an executive on the C-82 Packet project at the Fairchild Aircraft division in Hagerstown. He has served with

Pan American Airways, Panagra and American Airlines. In 1940 he was chief test pilot of the St. Louis plant of Curtiss-Wright Corp.

Two other active pilots with foreign aviation experience will assist Parks as export representatives. They are **Alfredo de los Rios**, founder and present chairman of the Inter-American Escadrille, and **J. Harvey Gray**, who was with Curtiss-Wright.

Gordon R. McGregor, recently with the RCAF, has been appointed general traffic manager of Trans-Canada Airlines.



AVAILABLE TO OPERATORS OF LARGE AND SMALL AIRCRAFT

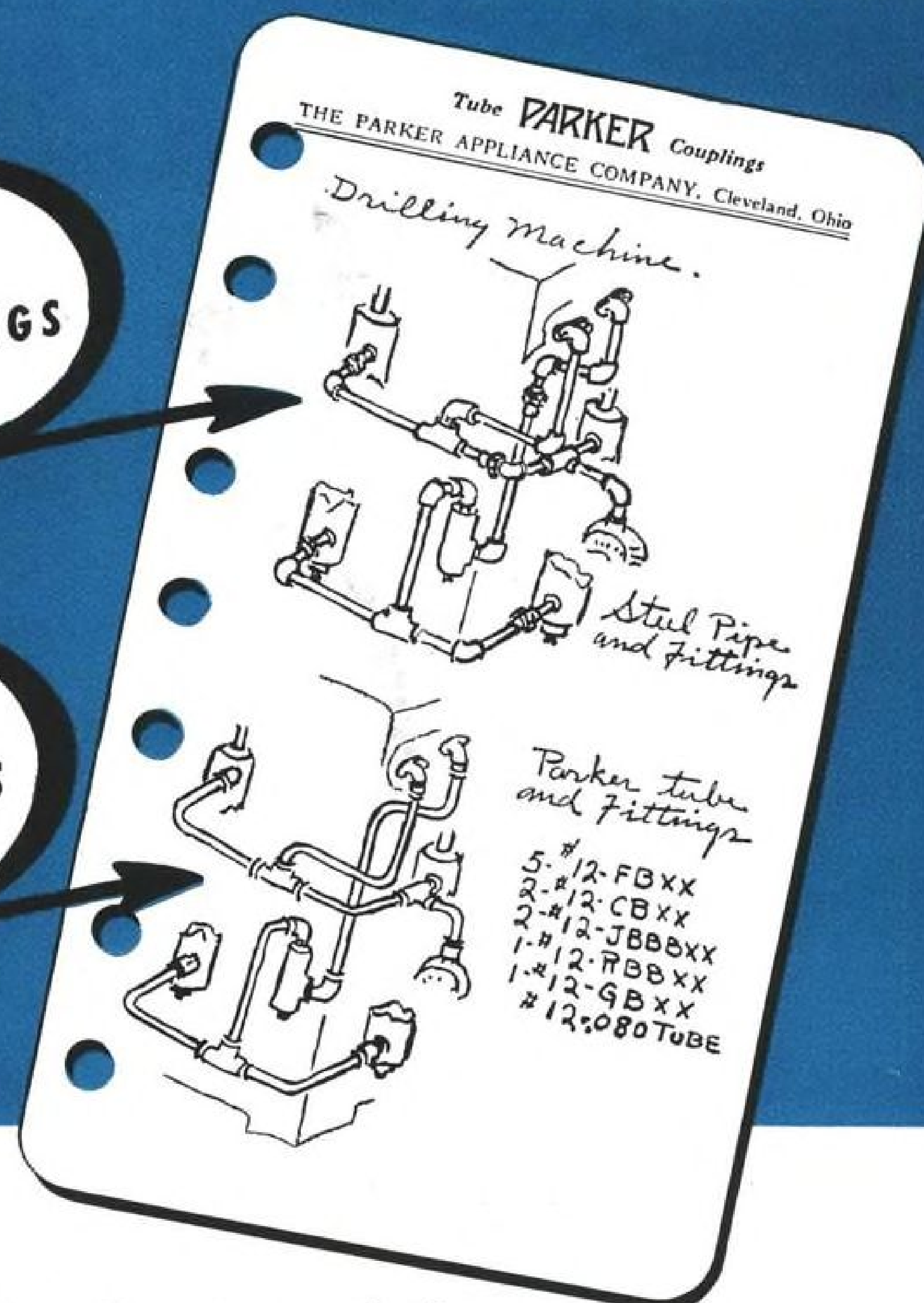
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INTRASTATE

Revision of Proposed Part 42 For Further Study Is Indicated

Redraft either will be recirculated or made subject of conference with industry representatives next month but CAB is firm in plans to proceed with regulation.

With CAB's Safety Bureau still coordinating industry comments on the projected Federal safety regulation of non-scheduled air carriers—Part 42 of the Civil Air Regulations—prospects are that a modified redraft either will be recirculated or made the subject of a conference with the industry early next month.

While the redraft will eliminate some features considered burdensome by operators (AVIATION NEWS, Aug. 20, 1945), non-scheduled carriers have won only a minor victory in their long fight to stave off economic regulation.

Board Firm In Plan—As previously reported in AVIATION NEWS, CAB is firmly resolved to proceed with regulation of non-scheduled carriers under what it believes is the intent of the Act of 1938. Under consideration has been two-fold control: economic and safety. Public hearings on lifting the exemption order and instituting economic regulation were held two months ago. Safety regulation was not considered at that time.

The Board considers the Part 42 draft only one aspect of the two-fold control, that of safety, with a completely separate action due on economic regulation. However, Part 42, as written, would eliminate certain types of services and increase operating costs on others. Operators contend, therefore, that it is, in effect, economic regulation, and much of their comment stressed this fact.

Single Engine Ruling Scored—Most of the 110 replies received at CAB by the Jan. 31 deadline were from operators who asserted the prohibition against use of single-engine aircraft at night or under instrument flight rules, effective Dec. 31, 1947, would put them out of business.

Maxwell W. Balfour, vice-president of Spartan Aircraft Co. which, in addition to building a single-en-

gine transport, operates non-scheduled service, termed the proposed ban against single-engine aircraft a "backward step."

He stressed that his organization has thousands of hours' experience in night and instrument flying of this type of plane without an accident.

ATS Hits Curbs—The split on this question was along expected lines, with operators of multi-engine equipment favoring Part 42 in toto.

Wayne Weishaar, secretary of the Aeronautical Training Society, stated that "this is not the time to freeze entrance into the air carrier business at the level of \$5,000,000 or \$50,000,000 corporations, which alone may be capable of purchasing multi-engine equipment."

Pilot Time Plan Hit—Likewise roundly condemned was the suggestion that pilot time in other than a commercial operation be counted against the allowable pilot hours. This would mitigate against a pilot's

Division On 'Chutes

Answers to the questions, attached to the proposed Part 42, regarding the carrying of parachutes when operations are conducted in single-engine aircraft surprised both industry and CAB's Safety Bureau. There was practically an even split among the 110 replies received.

While some among the 50-odd classed as favorable were not outright endorsements, they said the matter of parachutes deserved consideration. One slightly acid comment was that the idea had merit not only with respect to single-engine aircraft, but to multi-engine planes during instrument flight conditions—and not only for non-scheduled operators, but for scheduled carriers as well.

flying his own plane for pleasure, it was asserted. Another of the questions—whether a carrier should be required to have its own ground communication facilities—was almost unanimously opposed on the basis of unnecessary expense in duplication of existing set-ups.

Joseph T. Geuting, responding on behalf of the Personal Aircraft Council, expressed opposition to any type of regulation, stating, "It is our conviction that non-scheduled air carrier operations must not be stifled in any way. This whole field is new and must be given every opportunity to develop." Regulation, he added, is not needed and is not in the public interest.

No Comment From ATA—While replies received to the Board's questionnaire covered a cross-section of the industry, even including manufacturers of parts and accessories who supply aircraft service operators, the Air Transport Association did not submit comments. ATA has been among the proponents of economic regulation for non-scheduled carriers.

Full text of the proposed Part 42, first draft, appeared in AVIATION NEWS, Aug. 27.

Four Alaskan Carriers Plan Integrated Service

Merger of four Alaskan carriers is contemplated by Northern Consolidated Airlines, Anchorage, which has asked CAB approval for acquisition of properties and certificates of Ray Petersen Flying Service, Northern Airways, Walatka Air Service and Northern Air Service.

Incorporated by the four carriers, Northern Consolidated seeks to integrate service from Anchorage and Fairbanks to interior points. Ray I. Petersen, co-partner of Ray Petersen Flying Service, is president.

Otto Aviation Reorganized

Otto Airlines, Inc., Newark Airport, has acquired all assets of Otto Aviation Corp.'s airline division and will continue its charter and contract flying, according to Bowman R. Otto, president. Directors of the new company, which has applications pending for routes radiating from Newark and New York to points in Eastern Pennsylvania, Southern New Jersey and New York state, include Gill Robb Wilson, aviation consultant and former New Jersey Aviation Director, and Eugene L. Vidal, president of Vidal Research Corp.

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Funerals from \$70

NEW CHARTER FIELD:

This advertisement is appearing in Los Angeles area newspapers. Several operators of charter transports have talked about contracting with mortuaries, but this is believed to be the first time an air carrier has acted. Paul Williams of Domestic Air Express approached Pierce Brothers Mortuaries with the idea. DAE has contracted with Pierce to air ship a casketed body, with a 700-lbs. weight limit, from Los Angeles to Dallas for \$115; to Kansas City for \$145; to New York City for \$195. Special railway express arrangements are made to ship to destinations beyond DAE's terminal points.

Other State Codes Studied by Arizona Commission

Arizona Corporation Commission is reviewing codes of other states as a guide for proposed legislation to strengthen its supervision and regulation of intrastate air carriers. Its present authority over aviation is derived from an old law, passed before aviation's development.

The contemplated state commercial aviation code would broaden the commission's authority over air carriers by setting up statutes and specific regulations governing such factors as safety, description of routes, fares and rates and procedures for obtaining operating certificates, according to Wilson T. Wright, ACC chairman.

Maryland Line Planning to Use Amphibians

Permission to use amphibian aircraft until suitable airports are available in towns he is franchised to serve has been requested of the Maryland Public Service Commission by G. Bernard Fenwick, Jr., president of Pan-Maryland Airways, Inc.

Fenwick told the commission that the outlook for construction of airports at most of the small towns he is authorized to serve on intrastate air routes is "pretty dark." On the other hand, he pointed out, at least two-thirds of the towns are on waterways where amphibians could operate, frequently into the business center of the community. Service to these points probably could be opened this spring, he said.

Pan-Maryland is franchised to serve Annapolis, Easton, Cambridge, Chestertown Crisfield, Centreville, College Park (near Washington, D.C.), Brandywine, Elkton, Frederick, and Westminster.

Fenwick said he had ordered 20 Republic Seabees and expected deliveries to start this spring. He indicated he was not abandoning his intention of using some Bellanca Cruisairs for land-based operation.

Five More Lines to Seek Routes in Southwest

Arizona-New Mexico area case prehearing conference disclosed intention of five additional carriers to make route applications and a request by Braniff Airways for the consolidation of the Amarillo-Los

Angeles portion of its transcontinental application in that proceeding or one held concurrently.

Western Air Lines, Southwest Airways Co., Challenger Airlines, Arizona Airways and Texas-New Mexico Airlines were to file for routes by Feb. 19.

Hearing of the case, last assigned of the regional feederline proceedings, was tentatively set for June, possibly in Albuquerque or Phoenix in accordance with participants' requests.

Use of Large Cargo Gliders in Canada Is Predicted

Large freight planes towing loaded gliders which will be released over their destinations are anticipated in the Canadian north country within a year or two, in the opinion of C. H. "Punch" Dickins, president of the Air Industries and Transport Association of Canada.

The tow planes would land at terminal communities which have airports of sufficient size to accommodate large aircraft. The gliders would be brought down at small clearings in remote communities.

Louisiana Service Renewed

Regular intrastate service between New Orleans and Monroe, La., has been resumed by Southern Airlines, a division of Southern Trailways. Flights were discontinued in early January because of airport conditions at Monroe. Stops at Alexandria and Baton Rouge are also made. Cessna transports are used.

'Flying Showroom' Tour Scheduled

A new conception of aviation as an export marketing aid will be put into action by Trans-Caribbean Air Cargo Lines, Inc., about April 15. The company will operate a DC-3 fitted out with manufacturers' samples and displays through 11 Latin American countries, stopping at 16 major cities.

The "flying showroom," in addition to crew, will be manned by trained demonstrators speaking both Spanish and Portuguese. The plane will carry 28 specially-fitted booths, each 2½ ft. deep, 2 ft. long and 8 ft. high. Each manufacturer is assigned a booth for his products. The display can be augmented with colored slides, using projectors furnished by Trans-Caribbean.

▶ All Booths Booked — All 28

booths have been booked for the initial flight which will begin and terminate at Newark Airport, covering 16,975 miles in 35 days. Emphasizing that the enterprise is not a stunt, the company has slated a minimum of four similar flights this year.

Products to be carried on the first run include jewelry, pipes, plastic products, sun glasses, perfumes, chemicals, hardware, gloves, stockings, drugs and cosmetics.

▶ Agency Planned—The airline is establishing a subsidiary, Trans-Caribbean Air Cargo Products, Inc., to act as distributor and agent for products carried in the "flying showroom." This organization, through branch offices, will handle advance arrangements for the plane's visits.

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AVIATION NEWS • February 18, 1946

FINANCIAL

Convair Purchase of ACF-Brill Keynotes Trend to Diversification

\$7,500,000 deal acquiring transit equipment company control is bold step in general effort to utilize surplus production facilities by entering non-aviation fields.

Aircraft builders are rapidly diversifying their activities by entering non-aviation pursuits as a sharp curtailment of military orders confronts them with the problem of utilizing surplus production facilities. As the successful companies have comfortable bank balances, it has not been difficult to buy into other enterprises.

Perhaps the boldest step yet in this direction was taken recently by Consolidated Vultee Aircraft Corp. in its initial commitment of \$7,500,000 in acquiring control of ACF-Brill Motors Co. Earlier this year, Convair also entered into a contract with its parent, Aviation Corp., which owns almost 30 percent of its stock, to produce durable consumer goods such as kitchen stoves and farm implements.

► **Details of Acquisition**—In the ACF-Brill acquisition, Convair initially will own 445,139 of the 962,378 shares and 160,464 of the 280,044 outstanding warrants. Each warrant carries the right to purchase one common share at \$12.50 until Jan. 1, 1950, and at \$15 until Jan. 1, 1955.

ACF-Brill, together with its wholly-owned subsidiary, Hall-Scott Motor Car Co., is principally engaged in the production of motorized transit equipment and engines for buses, trucks, marine and other purposes. The company is currently reported to have a backlog of some \$50,000,000 in orders. ► **Recapitalized in 1944**—This enterprise was a subsidiary of the American Car & Foundry Co., freight car builders. The Brill properties were recapitalized in July, 1944, after a turbulent corporate existence. Prior to the war, this company operated at deficit levels. Minority stockholders, with regularity, sued ACF for accountings, charging mismanagement. The parent, in turn, maintained that the company was a strain on its major operations, requiring frequent transfusions.

War earnings helped the motor company through and permitted the simplification of the capital structure that followed in 1944. In the recapitalization, \$4,500,000 in 6 percent income debentures also were issued of which almost \$2,000,000 were received by ACF in settlement of old claims. It is not unlikely that ACF is relieved to be free of control and management of this property. ► **May Expand Holdings**—It is probable that Convair will augment its holdings in ACF-Brill.

Aviation Corp. financial policy appears to favor owning as much of the equity of controlled subsidiaries as possible. This was clearly evident in the case of American Central Manufacturing Corp. now 61 percent owned by Aviation Corp. It is clear in the consistent purchases of the common stock of the Crosley Corp. When Aviation Corp. acquired control of Crosley in August, 1945, it obtained approximately 400,000 shares. These holdings have now been increased to 490,936 out of the total 545,800 shares outstanding for Crosley.

► **Purchased Implement Firm**—Last October, Aviation Corp. purchased control of New Idea, Inc., manufacturers of farm machinery and implements. Convair's Nashville plant is in the process of being converted to manufacture gas and electric ranges for Aviation Corp. which will handle distribution and sales. Later, this plant will produce farm machinery for New Idea, Inc.

With the Civil Aeronautics Board decree ordering Aviation Corp. to sell the bulk of its American Airlines' holdings, and with Convair entering extensive non-aviation fields, it is clear that Aviation Corp.'s primary interest will no longer be in the aeronautical industry. It is ironic to note that the predecessor unit of Aviation Corp. in 1938 sold its entire holdings of Bendix Home Appliances, Inc., for 15,000 shares of founders' stock of

the New York Shipbuilding Corp. ► **Lockheed**—Lockheed Aircraft Corp. is feeling its way towards diversification very slowly. The company recently purchased the total capital stock of Pacific Engineering Corp. of Los Angeles and proposes to merge this property with the Airquipment Co., recently formed by Lockheed to make ground handling equipment. During 1943 and 1944, Lockheed acquired control of Pacific Finance Corp. ► **Curtiss-Wright**—Curtiss-Wright Corp. has also branched out moderately into the non-aircraft field. A number of months ago, it acquired the L. G. S. Spring Clutch Co. of Indianapolis and more recently the Marquette Metal Products Co. of Cleveland.

► **Martin**—Glenn L. Martin Co. is also nibbling for non-aviation markets. The company has recently announced that it will construct a \$1,500,000 building in Cleveland to manufacture its new elastic plastic, *Marvinol* resin, for commercial purposes. The company has formed a plastics and chemicals division and presumably will venture further into the field. The plant will manufacture only raw materials, not finished plastic products.

► **Beech**—Beech Aircraft Corp., in association with Fuller Houses, Inc., (formerly Dymaxion Dwelling Machines, Inc.) is proceeding with plans to construct a new type metal and plastic house, and is investigating automobile production (AVIATION NEWS, Feb. 11).

► **Grumman**—Grumman Aircraft Engineering Corp. last year demonstrated a new type of aluminum canoe. It is too early to determine the extent of this company's participation in the manufacture of this product. Unlike most of the aircraft builders, Grumman did not expand unduly to meet war production schedules and does not have the relative large production facilities to contend with.

Not all aircraft builders, however, are attempting to diversify—as yet. United Aircraft Corp., Boeing Airplane Co. and Douglas Aircraft Co. are examples of those which thus far have shown no signs of straying from the aircraft field.

► **May Incur Deficits**—Some observers believe that diversification in foreign fields will not automatically assure profitable operations. In fact, certain projected activities may incur heavy deficits and subsequently liquidated at considerable loss to the stockholders. In the last analysis, the success of any surviving aircraft company will be dependent on the quality of its management.



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The man in the picture above is testing airplane hose in the extra-cold chamber. The hose has to be able to flex in stratosphere cold. B. F. Goodrich

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TRANSPORT

Ratification of Bermuda Agreement Breaks World Transport Bottleneck

U. S. representatives satisfied with results of conference which frees traffic to and through U. S. and Britain; multilateral agreement along same lines seen possible through PICAQ.

With the possible exception of Pan American World Airways, U.S. government and airline representatives returned from Bermuda last week highly satisfied with the results of their four weeks of work at the Anglo-American Civil Aviation Conference.

Following ratification of the Bermuda agreements by Washington and London, international air traffic between and through the two countries and their possessions now will move without frequency limitation, with virtually unlimited rights to Fifth Freedom traffic and with rates subject, for the next year, to regulation by the International Air Traffic Association under the eye and veto power of both governments.

► **Breaks Bottleneck** — In addition, the agreement breaks the bottleneck that has kept American carriers from completing their route structures in Europe and the Near East.

The U.S. now confidently expects that bilateral agreements on the same liberal terms as the Bermuda accord can be reached with such countries as India, Egypt and Greece. These are key points in U.S. international routes which have been in the British orbit and with whom no satisfactory agreements have as yet been reached.

► **Multilateral Agreement Seen** — There now is a possibility that the Provisional International Civil Aviation Organization at Montreal will be able to draft a multilateral agreement along the Bermuda lines that will be acceptable to most nations. This may greatly simplify completion of the framework of international agreement on which the air transport system depends.

The route structure agreed on by the two countries is the first palpable demonstration that the Fifth Freedom works both ways. U.S. lines will have the right to pick up traffic in Britain for a large num-

ber of European and eastern points, and British Overseas Airways routes from England will have access to seven major American cities besides the one—Baltimore—now served. These other cities are New York, Chicago, Detroit, Philadelphia, Washington, Boston and San Francisco.

► **Effect On PAA**—In addition, along some of the routes, BOAC will be able to pick up U.S. traffic destined for other countries—an agreement

U. S., U. K. Exchange

As a result of the Anglo-American negotiations at Bermuda, the British Government has invited the Civil Aeronautics Board to post a representative in London for constant consultation with the Ministry of Civil Aviation. The Ministry, similarly, will have an office with CAB in Washington.

which is a fly in the Pan American ointment for these third countries are almost entirely Caribbean and Latin American nations which it now serves.

BOAC, for instance, will be able to take on American passengers at New York for Mexico City, Cuba, Panama, Colombia, Ecuador, Peru and Chile. Rights accorded to BOAC on lines through the U.S. from the Caribbean to Montreal, or across the U.S. to Hong Kong and Singapore, are not expected to conflict as much with U.S. lines.

► **Mitigating Factors Cited**—Mitigating factors are the probable time lag in activating these BOAC routes, and the agreement's provision that traffic picked up in this way under the Fifth Freedom must be incidental to the long-haul payload from the country of origin to the final destination.

Domestic criticism of the agreements so far, however, has centered on the rate regulation features, rather than on the route structure. Sens. Burton K. Wheeler and Pat McCarran, the latter a leading advocate of the single U.S. flag line proposed by Pan American, have questioned the authority of the State Department and the Civil Aeronautics Board to ratify the Bermuda accord as an executive agreement. Wheeler also has criticized the procedure for rate fixing through IATA as an international cartel.

► **Authorities Confident**—State Department legal authorities, however, are confident that their agency has all of the authority necessary, while the CAB is expected to issue a formal ruling confirming the in-



ATA CHIEFS SEE LANGLEY LABORATORY:

Three Air Transport Association executives were among the group who visited the NACA laboratory at Langley Field, Va., when it was opened to public inspection recently for the first time since before the war. (See Page 7.) In the picture (left to right) are Henry J. E. Reid, engineer in charge of the laboratory; Robert Ramspeck, executive vice-president, Emory S. Land, president, and Milton W. Arnold, operations vice-president, of ATA; and John F. Victory, NACA secretary.

Treaty Bill Offered

As a sequel to his Senate speech criticizing the Bermuda conference agreement reached at the Anglo-American conference in Bermuda, Senator McCarran has introduced legislation (S.1814) requiring all international air transport agreements to take the form of a treaty.

formal statement at Bermuda that it has the legal power to approve intercarrier agreements on rates and, by approving, exempt them from the operations of the anti-trust laws.

Beyond this, however, the Bermuda agreement stipulates that CAB will ask Congress, as it has before, for clear and direct authority to fix rates. Each government reserves the right to make final judgment on the fairness of rates and to refuse to abide by the agreements of the carriers' IATA conferences. Until CAB acquires direct rate fixing powers, each country can, in the case of a rate dispute, prevent the running of services at the rate complained of.

After they have been acquired, however, a proposed new rate will go into effect automatically at the end of a 30-day notice period,

pending settlement of disagreement by consultation between governments or by PICAQ arbitration.

This latter clause, plus the general provision that any dispute over points covered by the Bermuda agreement shall be referred to PICAQ for an advisory report, somewhat strengthens that body's position in economic matters. Failure of U.S. and Great Britain to agree at the Chicago Conference which created PICAQ left it with virtually no economic powers.

► **Lines Support CAB**—U. S. North Atlantic carriers—Pan American, American Overseas, and TWA—as well as the State Department have agreed to support the request of CAB for direct statutory power to regulate the rates charged by international U.S. flag carriers.

Terrell C. Drinkwater, vice-president of American Overseas and advisor to the U. S. delegation at Bermuda, said on his return to this country that "no cartel is involved in this agreement at all. You can't hold prices up in a public utility when the government is fixing rates."

► **Will Propose Lower Rate**—Drinkwater said his company will propose a rate substantially lower than the present \$375 to London at the forthcoming meeting of the IATA rate conference, and will ask limitation on time with a view of reducing it further later.

New Device Permits Automatic Landings

Minneapolis-Honeywell announcement overshadows results of all-weather flying conference.

Nature of the instrument landing system that may be used commercially for the next few years was indicated in the announcement last week of a completely automatic landing device that in its implications overshadowed the week-long conference on all-weather flying and landing that had just been concluded.

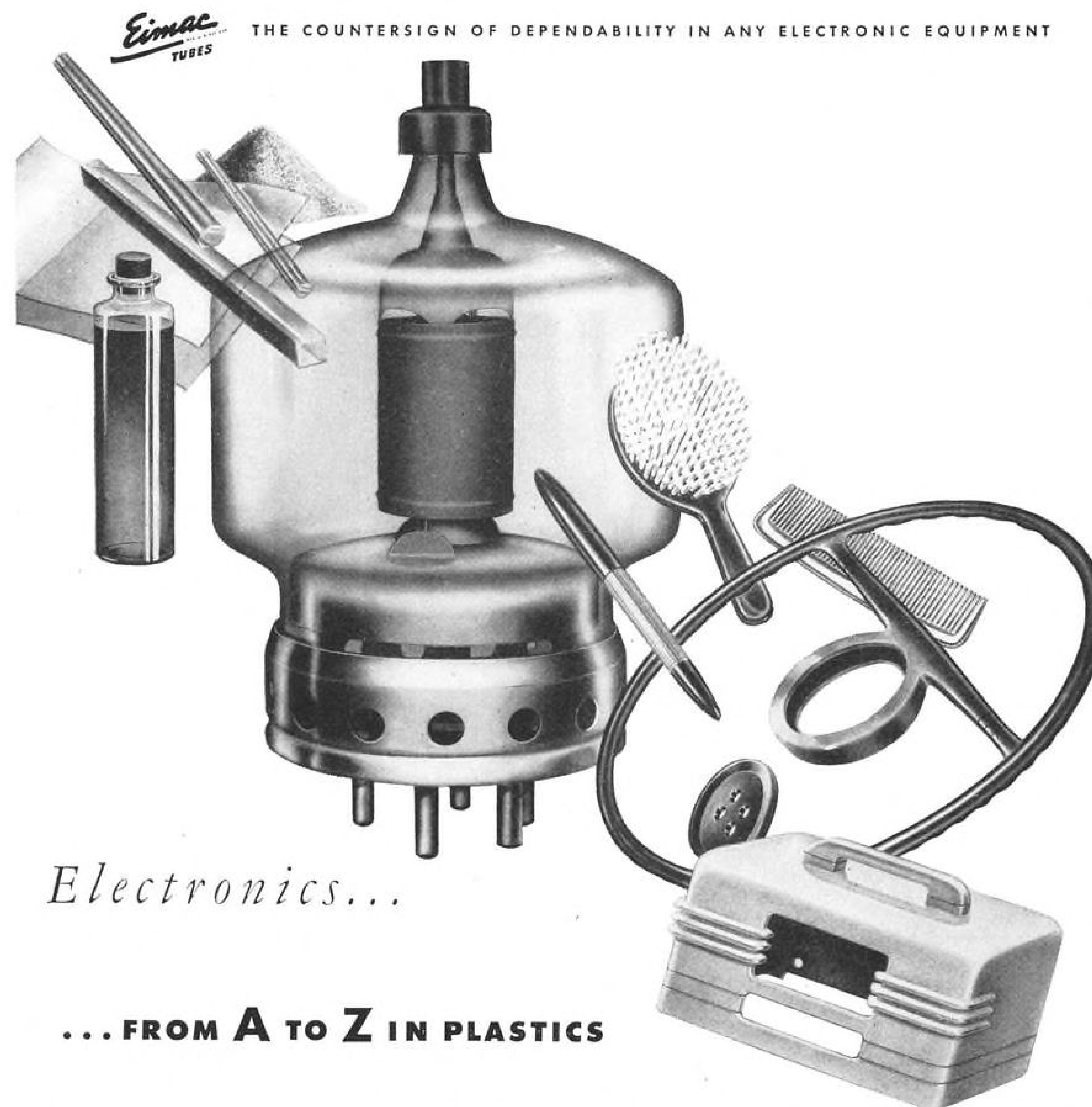
Minneapolis-Honeywell Regulator Co., which developed the automatic blind landing device in cooperation with CAA, did not give an exposition of its operation at the conference, although the firm was represented at the sessions. The meeting was sponsored by the AAF (AVIATION NEWS, Feb. 11).

► **Couples Two Instruments**—The device couples the company's electronic "Autopilot" with a glide path indicator and localizer receiver tuned to the standard SCS-51 approach system being installed by CAA. The pilot does not touch the controls. CAA reports many successful completely automatic landings at its station at Indianapolis. The device also fared well in Army tests, it is reported.

Because of this, informed opinion is that CAA will not change plans to build its instrument approach system around SCS-51, despite thorough tests being made at Indianapolis with the Ground Control Approach all-radar system. The automatic coupler is said to overcome many of the alleged shortcomings of SCS-51.

► **Conference Hears 15 Reports**—At AAF's conference, emphasis was on adaptations of SCS-51, GCA, the IFF (Identification, Friend of Foe) instrument used during the war, and LORAN (Long-Range Navigation). Fifteen companies presented outlines of their systems, which ranged from a complicated "block-to-block" set-up, based on railway procedure—suggested by General Railway Signal Co.—to refinements in switching SCS-51 to VHF.

As a result of the discussions, a committee to be headed by Col. Ben S. Kelsey of Wright Field will recommend navigation and landing systems for tests on a projected AAF experimental all-weather "airline." Late last week neither the committee nor the route of the line had been decided.



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LANCASTER INTERIOR:

Photo shows the interior of one of the converted Lancaster bombers being used by Trans-Canada Air Lines on its thrice-weekly service from Montreal to Prestwick, Scotland. The ships have fluorescent lighting, electrically heated kitchens, and steward-purser service. Some of the conversions carry eight passengers, others ten.

ALPA Reported Forced to Deal With Airline Negotiating Group

All 13 of affected carriers said to be in on National Mediation Board sessions over continued protest of Behncke.

By BLAINE STUBBLEFIELD

Reports from meetings at the National (Railway) Mediation Board are that the Air Line Pilots Association has been compelled to recognize and deal with the airlines' wage committee on ALPA's demand for more than 50% pilot pay increase on 4-engined equipment.

These reports say that all 13 operators in the 4-engined program are now in the negotiations, over the continued protest of David L. Behncke, ALPA president, who has insisted he would deal with the companies one at a time and not with the committee at all.

► **CAB Approves Agreement**—Approval by CAB of the airlines agreement creating the wage negotiating committee merely releases the operators from liability under the anti-trust laws. Since the Justice Department already had stated it had no objection to the agreement, CAB's approval is of no legal impor-

tance but does weight the controversy to some extent on the operators' side. Activities of the committee in the interim were in no wise illegal CAB counsel told AVIATION NEWS.

The fact that pilots are being hired by non-scheduled carriers of both passengers and cargo at rates far lower than those paid to airline union pilots is being cited by airline officials and others who think that union rates demanded are unjustifiable.

► **Non-scheduled Comparison**—Pilots on the non-scheduled operations are required to have commercial ratings (minimum 200 hours) only, yet according to CAB certification officials such pilots already, and will increasingly, fly the same kinds of equipment as that flown by the scheduled lines, including four-engined craft. Thus the required skill and responsibility is about the same in either type of operation.

Facilities provided on the scheduled lines are in most cases superior, which should make the pilots' jobs easier.

► **Ruling Near**—In writing the order under Title 4 of the law, exempting non-scheduled operators from certain economic and safety controls, the Board specifically indicated that such exemptions did not apply to the labor provisions of the Act—"insofar as such provisions now apply to the non-scheduled lines." CAB legal sources say CAB apparently now is or soon will be confronted with a decision whether pilot pay and other labor disputes on the non-scheduled lines shall be referred to the Mediation Board.

Proposed Part 42 of the Civil Air Regulations would raise the requirements of pilot qualifications on non-scheduled lines. CAB sources readily admit that the public is entitled to the additional safety that would result. (See Page 27). Qualifications still would not be as high as on the certificated lines, however.

The Mediation Board, the airlines committee and the pilots are holding the lid tight on their negotiations on the theory that public discussion jeopardizes the chances of successful conclusion. But persons on the inside say the fight is a bitter one.

Michigan Cities Seek Better Air Service

Fifteen Michigan communities, seeking to get the state's air transportation "out of the spur line stage," plan to file with CAB a petition for more service. All are members of the State Air Transport Association.

City Manager Carl H. Peterson of Saginaw, Association president, says "airlines serving Michigan have been too particular where they want to go." He sees definite need for a route from Chicago to Northern Michigan. (PCA has not flown its AM 41 north from Flint since wartime service pattern took effect in 1942.)

► **Outlines Complaints**—He said PCA had promised resumption of service in the Saginaw, Bay City and Midland tri-city area "in or shortly after" February, but the airline's officials failed to appear for a meeting recently scheduled with city officials from that area.

Peterson has been authorized by MATA's board of directors to obtain the services of Col. Floyd E. Evans, director of the State Department of Aeronautics, to assist the Association in working out a statewide pattern for air service.

Airport News Highlighted by Start Of ATA Survey of Operations

Baltimore plans or new municipal airport meet opposition from property owners; Detroit base at Windsor, Ont., favored with Willow Run as interim terminal.

By MERLIN MICKEL

The study of airport terminal operations throughout the country authorized by the Air Transport Association—one of the major developments in recent airport news—started recently at Memphis, Tenn., less than three weeks after the survey was approved by ATA directors.

Joseph D. McGoldrick, former New York City comptroller who is directing the survey, and other airport specialists associated with him talked with Memphis city officials and airline executives and investigated local airport facilities. Memphis terminal problems, McGoldrick said, are typical of other airports because it is an important point on north-south as well as east-west flights.

► **Other Cities To Be Studied**—Other cities to be studied are Albuquerque, Boston, Chicago, Dallas, Denver, Detroit, Kansas City, Miami, Peoria, San Francisco and Tulsa.

Selected for their variety, plus the fact that they are served by one or more of most of the major airlines, airports at these places will be the source of information on present activities and present and future costs and revenues; need for expansion and equipment investment and prospects for local government financing; and the possibility of savings through a combined operation by an airline terminal corporation. Recommendations on the latter point probably will be months in coming, and will depend on the outcome of the first two.

► **Many Problems Arise**—While the study was progressing, municipalities in various parts of the Nation were experiencing airport growing pains with differing degrees of severity.

At Detroit, where after long controversy sentiment was in favor of an international airport near Windsor, Ont., for the Detroit Metropolitan area, Willow Run, once the airport for Ford's famed B-24 bomber plant, was slated for interim use until the international field is completed. Both Wayne County Airport and the proposed Northwest site were out of the picture, although there was a possibility that

the former might be expanded to become Detroit's cargo airport.

► **Baltimore Plan Hit**—In Baltimore, a protest against the location of a proposed new municipal airport and a formal demand for public hearing was filed with the State Aviation Commission by a woman attorney, Mrs. Frankie Wilson, who claimed to represent 94 citizens owning 1,864 of the approximately 2,500 acres in the tract under consideration.

The protest was filed the day before expiration of the 30-day posting period required by state law, and came as a surprise to the Baltimore Aviation Commission. Not anticipating any such objection, it had employed a firm of consulting engineers which had made an aerial survey and map of the property and had a topographical survey nearly completed. Hearing on the protest will be held late this or early next month.

► **Bond Issue Approved**—Baltimore voters have approved an initial bond issue of \$3,000,000, with a similar

Better Airports Urged

Lack of an adequate nationwide airport system is seen by C. Bedell Monro, president of PCA, as the chief factor limiting commercial aviation.

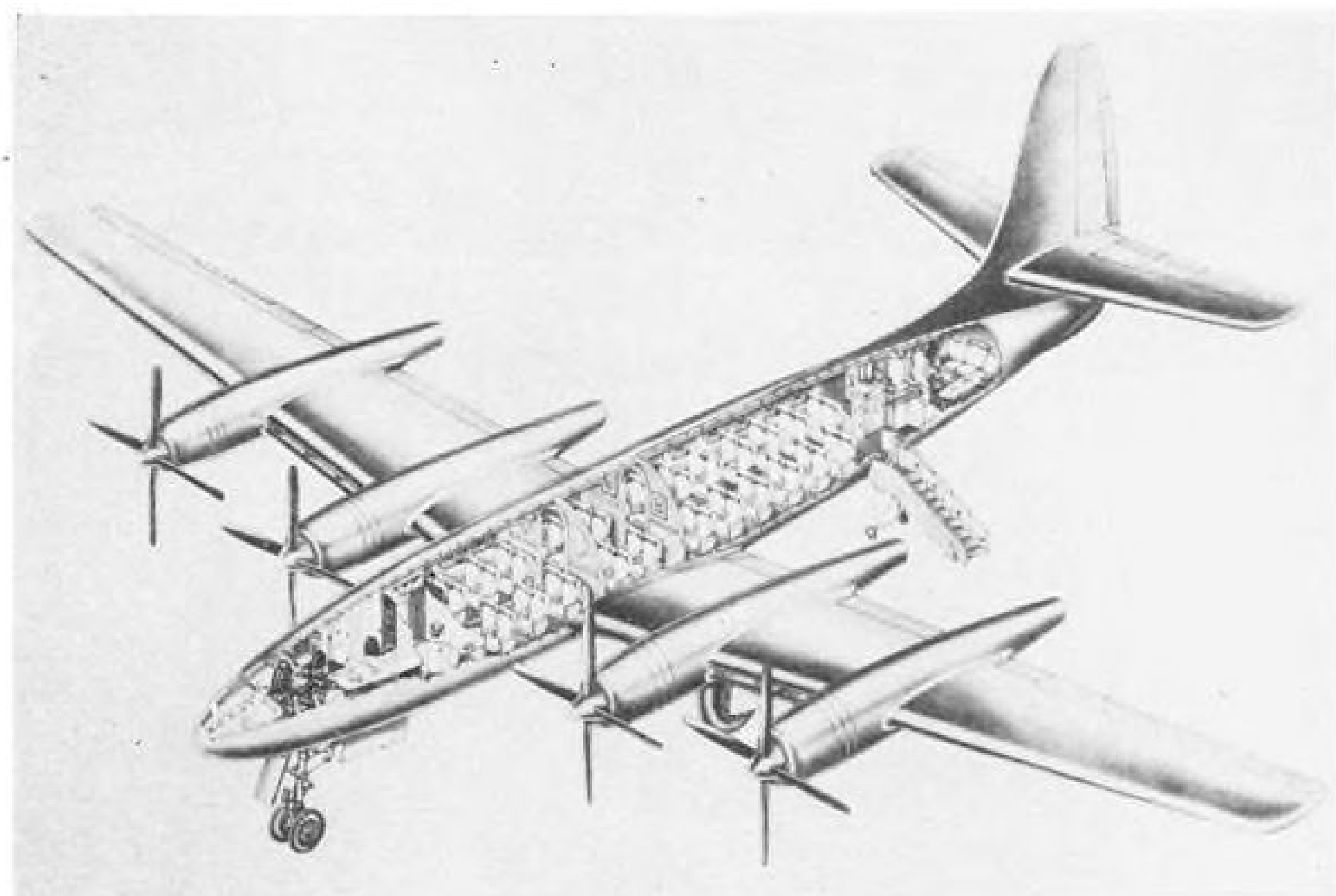
In a talk before the Boston Advertising Club, he cited Boston and Detroit as examples of cities which have not kept pace with aviation. Neither airport can accommodate four-engine equipment.

► **Warns Against Politics**—Monro cautioned against political interference and bickering, and said city planners have not visualized aviation's potential growth. Speed and action is needed in airport planning and construction, the PCA executive asserted, but this does not mean that modern airports cannot show "substantial profits for communities" if properly developed and merchandised.

issue to be voted on probably this year. Matching federal funds will be sought. Meanwhile, an easing of the space situation at the Baltimore airport is in sight with three hangars now on Logan Field, the original municipal airport, to be moved to the present field.

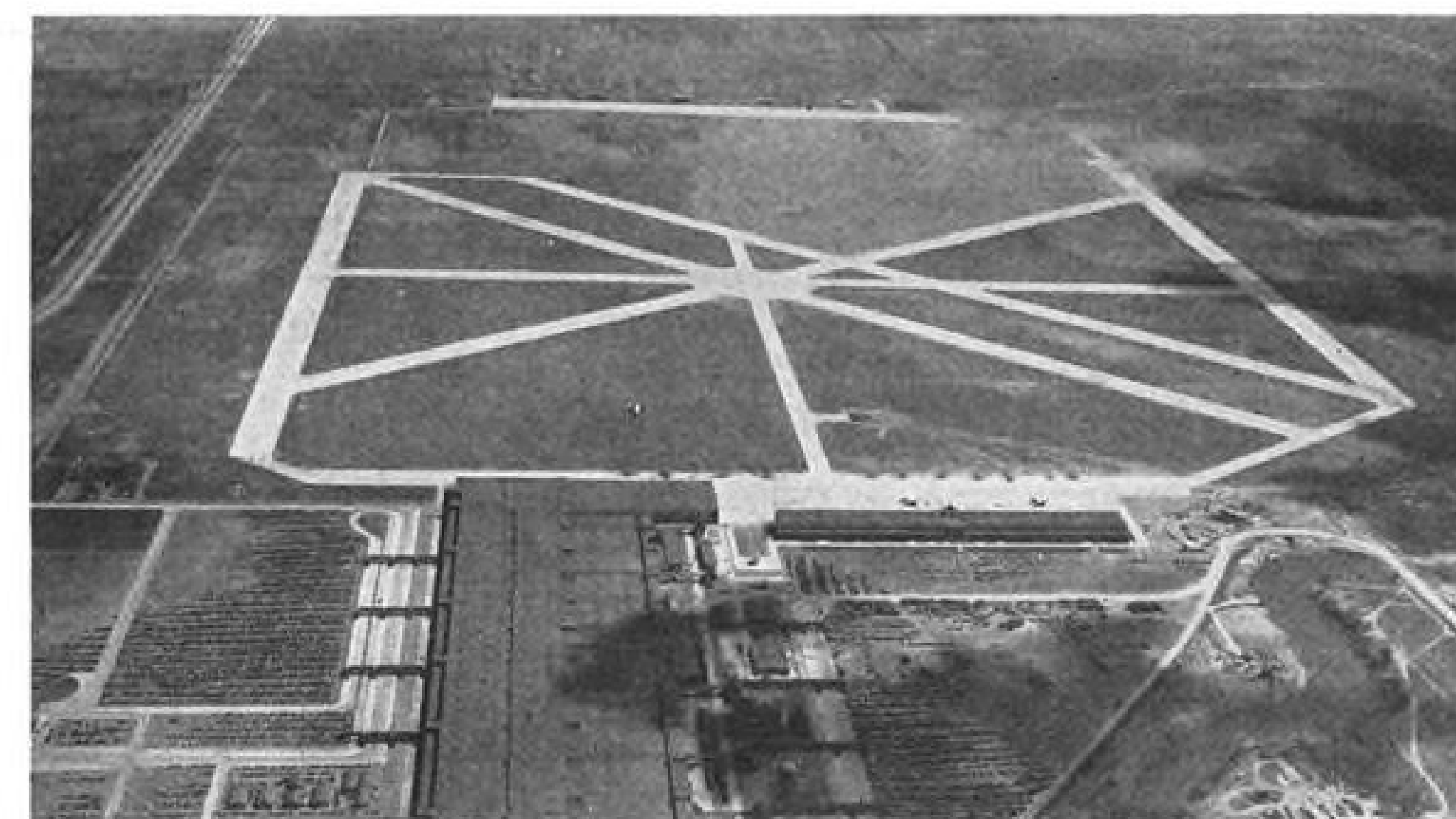
Elsewhere, there were the following developments:

► **Miami**—Miami's Port Authority and the Dade County Commission, stirred perhaps by recent newspaper



RAINBOW CAPACITY INCREASED BY SIX SEATS:

This cutaway drawing of the proposed Republic Rainbow shows revision of seating to increase passenger capacity from 40 to 46. In the original arrangement (AVIATION NEWS, Sept. 3, 1945), eight seats faced backwards and the section between the wings was used as a lounge. The military (XF-12) prototype has flown, and the commercial version is to be ready—late in the summer of 1947. Pan American intends to buy six at a cost of \$1,250,000 each. Republic has promised the airlines that the Rainbow transport (RC-2) will have at least 450 mph. top speed. It will cruise at 400 mph. at 40,000 ft., with a range over 4,100 mi. The transport ship will be 103 ft. 9 in. long—5 ft. longer than the XF-12. (Photo on Page 3.)



Airlines to Use Willow Run: Plans are being made by airlines serving Detroit for use of Willow Run airport, 28 miles from the city, as an interim field until the proposed international airport at Windsor, Ont., is completed. They may lease the field from the University of Michigan, which hopes to acquire the \$7,000,000, 1,450-acre installation free from RFC for use as an aeronautical laboratory. The university's only obligation would be to keep the field in top condition for military use should the need arise. If the university proposition is not accepted (about three weeks remain in which other governmental subdivisions may bid for the property) the carriers expect to negotiate for the field themselves.

references to inadequacies of the city's recently purchased Pan American Airways 36th St. airport, have disclosed plans for development of a vast new airline terminal through utilization of adjoining property.

Without giving cost or construction details, Port Director Marcel Garsaud said the 36th St. field would be extended to include the Miami Army Air Base whenever the port authority can acquire it. The Army runways connect with the 36th St. field, which recently was described in the Miami press as "probably one of the worst in the western hemisphere as a port of entry."

► **Planes Must Cross Road**—Lack of hangar space at 36th St. has forced National Airlines to construct a new maintenance hangar across the road from the field's eastern boundary. To close off traffic while planes are being taxied across Le Jeune Rd., stop lights and gates will be installed and a watchman will be stationed at the crossing.

National plans to bring 600 additional employees and their families to Miami after the new hangar and overhaul facilities are completed.

Newark, N. J.—Newark Airport, after four years of Army control, reopened to commercial airlines with 85 flights daily to start and 125 predicted by March 1, 150 by June 1 and 200 by Aug. 1. First users included American, Eastern, PCA, TWA and United, with National and Northwest due to follow in mid-month and Colonial and Northeast March 1.

Denver — City planning a new terminal building, to cost more than \$1,000,000, with preliminary conferences held between the Denver Advisory Committee on Airport Construction, Aeronautical Radio, Inc., air lines communications organization, postal authorities, CAB and others. Terminal would be built on land owned by the city just west of the present airport.

Kansas City—W. T. Brown, director of airports, predicts conversion of Grandview Airport into an air freight depot, citing six scheduled arrivals and departures of cargo planes in Kansas City daily, in addition to many non-scheduled flights of freight-carrying planes.

Milwaukee—Steps taken to request the War Department to cancel the Army's lease on Billy Mitchell field, with Sen. LaFollette announcing that return of the airport to Milwaukee county was likely in the near future.

St. Louis—Travel time between



TACA'S BIG THREE:

TACA's top executives are shown discussing the Latin American Airline's policies in its new offices at Miami. Left to right they are Thomas O. Hardin, executive vice-president; Charles L. Gallo, traffic vice-president, and Silas R. Richards, vice-president and general manager.

the city and Lambert-St. Louis Field expected to be reduced about 10 min. from the present 1 hr. through widening of Natural Bridge road. The widened highway is expected to be ready for use next year.

Toledo—Ground to be broken in April for a new \$200,000 administration building. Feature will be extensive use of glass, in large windows giving a view of the field, and glass block partition.

Ogden, Utah—Sketches for additions to the \$120,000 main unit of Hinkley Airport's administration building have been given United Air Lines and Western Air Lines engineers for study and suggestion. The building is to be completed this year.

Salt Lake City—Joe Bergin, Utah state director of aeronautics, announced after conferences with government officials in Washington that the \$1,000,000 AAF facilities adjoining Salt Lake Airport probably will be made available to the city.

Riverside County, Calif.—County Board of Supervisors has approved a Master Airport Plan for the county, including 27 commercial and one military airport in the county and an additional commercial airport in adjoining San Bernardino County to serve the western part of Riverside.

Salem, Ore. — Surplus McNary Field was in process of formal transfer as the first Oregon airport returned by military authorities to

municipal use. Although sole user of the field at present is United, which has been operating under an agreement with the Army, the transfer order stipulates that the airport remain open and unrestricted to public use.

Continental To Inaugurate AM 29 Service March 5

Continental Air Lines will inaugurate service over its recently certificated Tulsa-El Paso AM 29 via Oklahoma City, Wichita Falls, Tex., Lubbock, Tex., and Hobbs and Carlsbad, N.M., on March 5, according to Robert Six, president.

Two round trips daily will be operated along the route, inauguration of which was postponed from Feb. 15 when strikes slowed shipment of necessary aircraft parts.

Other new services:

► **American Overseas**—Starts regular weekly flights to Amsterdam Feb. 19, trips leaving New York 10 a.m. Tuesdays, arriving Amsterdam Wednesday mornings; leaving Amsterdam Wednesday afternoons and arriving New York Thursday mornings. The new service increases AOA's trans-Atlantic flights to nine weekly.

► **TWA**—Adds third weekly Washington-Paris flight today (Feb. 18). Second trip was added Feb. 14; route inauguration was flown Feb. 5.

► **United**—Added new flight San Francisco-Los Angeles on AM 11 Feb. 16.

AAA Requests Cincinnati As Alternate on AM 49B

All American Aviation, claiming that American Airlines' suspension of service to Huntington, W. Va., has depreciated the value of its airmail service on two route segments, has asked CAB to designate Cincinnati as temporary alternate terminal on AM 49B.

Extension of the route from Huntington to Cincinnati would reestablish trunkline air connections, thus eliminating delays now incident to use of surface transportation to trunkline points, AAA states. American will resume service to Huntington when improved airport facilities permit.

Price Ceilings Extended

Office of Price Administration has extended through June 30 ceiling prices for fresh fruits and vegetables shipped by air on an experimental basis. Originally issued for last August and September, the ceilings were found to be fair and equitable and therefore were extended through January. Further extension will give more time for experimentation with these perishable shipments.

Increased Mail Funds OK'd by House Group

Early expansion of both domestic and foreign service indicated in new appropriations.

The \$49,000,000 allocated for domestic airmail and \$5,000,000 for foreign airmail in the fiscal 1947 Post Office appropriation bill reported out of House Appropriations Committee last week forecast expanded services during the coming months. These allocations compare with appropriations for the present fiscal year of \$43,315,000 for domestic and \$4,836,000 for foreign.

A much bigger boom in foreign air mail service than is indicated by comparing the 1946 and 1947 fiscal year appropriations is anticipated by the Post Office Department. The \$5,000,000 for foreign service is regarded as a "token" appropriation to permit the Department to make mail payments to carriers during the interim until the Civil Aeronautics Board sets mail rates for foreign routes and a year's appropriation can be approximated.

► **Supplemental Allocation Anticipated**—The \$49,000,000 approved for domestic service undercut the Budget Bureau recommendation by \$1,000,000, but supplemental domestic airmail allocations during the year, as the volume warrants, are anticipated by members of House Appropriations Committee. The Committee's cut was predicated in some measure on the fact that Post Office officials estimate that out of the \$43,315,000 allocation for the present fiscal year, only \$42,598,000 will be obligated.

► **Foreign Routes Covered**—The \$5,000,000 appropriated for interim foreign airmail operations is allocated over nine routes and, in addition, includes \$300,000 for airmail service in military planes and \$3,000 for charges at the Canal Zone.

Pan American's New York-London-Lisbon route is allocated \$245,550 of the foreign mail appropriation, and American Overseas Airlines' New York-London route is allocated \$187,672. No airmail payment allocation is included for TWA, third airline certificated for the North Atlantic route.

► **Other Allocations**—The remainder of the \$5,000,000 is apportioned as follows:

Colonial Airlines' New York-Montreal route, \$147,749; PAA's Miami-Brownsville and New Orleans-Central and South America routes, \$2,164,334; PAA's Seattle-Fairbanks route, \$726,677; Northeast

Airlines' Bangor-Moncton route, \$45,318; American Airlines' Ft. Worth/El Paso-Mexico City route, \$35,431.

Testimony introduced at hearings by Post Office officials showed that foreign airmail operations grew from a loss of \$8,204,142 in 1940 to a profit of \$70,924,000 in 1945. Domestic airmail operations, which showed a loss in operation of \$8,916,344 in 1940 fiscal year, were carried on at a profit of \$30,692,000 in 1945, it was reported.

► **Several Contracts Increased**—The \$49,000,000 allocated for domestic airline mail contracts will provide for sizeable contract increases with several airlines. The \$50,000,000 approved by the Budget Bureau for airline contracts for the 1947 fiscal year was allocated by the Post Office Department among the airlines, as follows (present fiscal year allocations in parentheses):

United Airlines, \$14,648,622 (\$12,207,185); American Airlines, \$9,356,991 (\$7,797,492); TWA, \$9,293,566 (\$7,744,638); Eastern, \$4,062,703 (\$3,385,586); PCA, \$802,113 (\$668,429); Western, \$1,215,015 (\$1,012,512); Northwest, \$3,217,040 (\$2,680,867); Chicago and Southern, \$471,473 (\$392,894); Delta, \$1,176,042 (\$980,305); Braniff Airways, \$1,041,347 (\$867,789); Hawaiian Airlines, \$16,472 (\$13,727).

These eight lines, whose rates are based on mileage rather than on poundage carried, will receive the same allocations during the coming year as received during the present year: Midcontinent, \$938,011; Inland, \$634,086; Continental, \$906,592; National, \$522,265; Northeast, \$907,395; Caribbean-Atlantic Airlines, \$42,041; Essair, Inc., \$141,057; and All American, \$647,708.

PCA Merger Vote Set

PCA stockholders will meet March 21 to vote on the proposed merger of Pennsylvania-Central and Northeast Airlines. Northeast stockholders will hold a similar meeting March 7. The merger, which will be subject to CAB approval, already has been sanctioned by directors of the two companies.

Hearing Postponed

Dates for exchange of exhibits and hearing of Royal Norwegian Air Transport's application for a foreign air carrier permit (Docket 2145), originally scheduled this month, have been postponed indefinitely at RNAT's request.

Adams Joins Aviation News

Charles L. Adams has joined AVIATION NEWS as transport assistant, succeeding Raymond Crosier. Recently discharged after four years in the Navy, Adams formerly was employed by the Des Moines Tribune and American Aviation.

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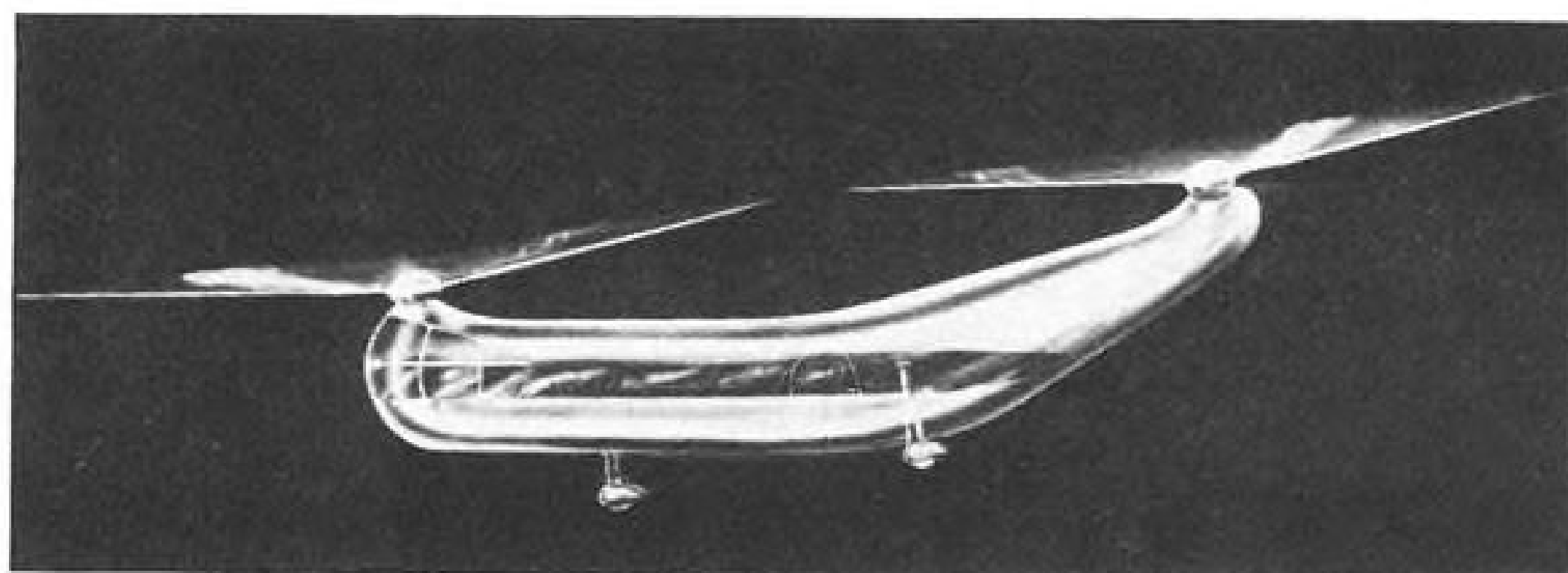
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Commercial Helicopter Version: Drawing of the commercial version of P-V Engineering Forum's PV-3, shows a 10-passenger helicopter with a cruising speed of over 100 mph. P-V's president, F. N. Piasecki, told examiners in CAB's Middle Atlantic hearing in Philadelphia that the ship could be available commercially in nine months. The prototype flew for the Navy last year.

Cheaper Travel Plans Told at Philadelphia

Mass air transportation without frills and priced close to bus and train fares was projected for the Pittsburgh-Washington-New York triangle by officials of two carriers testifying at the Middle Atlantic area hearing in Philadelphia.

Frederick R. Crawford, newly-elected president of Columbia Airlines, Inc., and co-founder and former executive vice-president of

Pennsylvania-Central Airlines, proposed a 3-cent-a-mile "day coach" service without seat reservations or luxurious plane appointments.

► **Solomon Offers Plan**—Samuel J. Solomon, president of Atlantic Airlines, Inc., outlined a plan to reduce fares through increased seat capacity of aircraft, elimination of free meals, doing away with stewards and hostesses and drastic simplifications in reservations, passenger ticketing and baggage checking (AVIATION NEWS, July 9, 1945).

Atlantic officials believe that

coach-type service can be initiated at 3½ cents a mile, the fare including transportation from center of city of origin to center of city of destination. When new-type planes now proposed become available, they will be used to replace DC-3 equipment and possibly permit reduction of fares to 2½ cents a mile, the Atlantic exhibit says.

► **Columbia Eyes Martin 202**—Columbia representatives said they had regarded the achievement of a 3-cent-a-mile fare as economically unsound until the announcement by Glenn L. Martin of the Model 202 transport, seating capacity of which Columbia would raise to 48.

Now operating intrastate and charter service out of Baltimore, Columbia has applied for routes radiating from Baltimore to Pittsburgh, Atlantic City, Newport News, Va., and Maryland's Eastern Shore; from Washington to New York via Baltimore, Reading, Pa., and Allentown, Pa., and from Washington to New York via Baltimore, Wilmington, Philadelphia or Camden, N. J., and Trenton, N. J.

Rates would be below bus fares between some cities in mountain areas and around Chesapeake and Delaware Bays, Columbia officials declare. Between Baltimore and Atlantic City, for example, proposed fare is \$3.03 and flight time 33 minutes, compared with \$3.25 and over six hours by bus.

Will Test Risky Cargoes

The new Shippers' Research Division of The Air Transport Association will devote one of its first studies to the movement of hazardous commodities, particularly the packaging of nitrate motion picture film, on which shipments are expected to increase materially. Before the war metal containers were used, but a spark-proof fibreboard was adopted subsequently. Safety of carriage of this type of material under existing regulations has been questioned.

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Ireland Awarded DSM

For his work during the war as head of the priorities and traffic division of the Air Transport Command, Col. Ray W. Ireland, now United Air Lines vice-president in charge of administration, has been awarded a Distinguished Service Medal by Lt. Gen. Harold L. George, ATC commanding officer.

African Route Asked

First application by a U.S. carrier to provide service for the east coast of Africa has been made by TWA in a request to CAB for a 4,492-mile route extension from Cairo to Johannesburg, South Africa, via Jidda, Saudi-Arabia; Asmara, Eritrea; Addis Ababa, Ethiopia; Mombasa, Kenya Colony; Dar es Salaam, Tanganyika, and Mozambique and Lorenzo Marques, Mozambique.

CAB ACTION

The Civil Aeronautics Board:

- Permitted Eastern Air Lines to inaugurate Newark-Washington non-stop service on AM 5 and 6 and Northeast Airlines to start Boston-Bangor non-stop service on AM 27.
- Dismissed from Middle Atlantic case (Docket 674 et al.) applications of Aircar Service Co. (Docket 1866), Kendall W. Everson and John T. Daugherty (Docket 2147), Lincoln Air Lines (Docket 957), Mohawk Lines (Docket 963), Page Airways (Docket 674), Public Service Interstate Transportation Co. (Docket 1338), Rockland Coaches (Docket 1865), Thompson Airways (Docket 1826), Union Airways (Docket 956), Norfolk Northern Airlines (Docket 2151), Empire State Airlines (Docket 1301) and John P. Carey (Docket 1887), at applicants' request.
- Permitted National Airlines and State of Minnesota to intervene in American-Mid-Continent merger case (Docket 2068).
- Permitted Pacific Northern Airlines to intervene in 14 proceedings involving applications for certificates of public convenience and necessity or exemption orders in Alaska (Dockets 2035, 2036, 2037, 2038, 2040, 2041, 2046, 2047, 2049, 2085, 2130, 2134, 2154 and 2161).
- Dismissed application of Peck and Rice Airways for permanent certification, on applicant's request (Docket 1832).
- Permitted cities of Miami, Fla., and Kansas City, Mo., to intervene in Kansas City-Memphis-Florida case and refused intervention to city of Tifton, Ga. (Docket 1051 et al.).
- Permitted Alaska Coastal Airlines, Ellis Air Transport and Petersburg Air Service to intervene in application of Alaska Airplane Charter Co. for certification or exemption order (Docket 2091).
- Granted city of Galesburg, Ill., permission to intervene in Great Lakes area case (Docket 535 et al.).
- Permitted Pacific Northern Airlines and Ray Peterson Flying Service to intervene in application of Leon R. Alsworth for certification or exemption order (Docket 2129).
- Dismissed application of Alaska Flying Service for certification or exemption order following failure of applicant to appear at proceeding (Docket 2048).
- Granted Commonwealth of Massachusetts, Levy Court of New Castle County, Del.; Pennsylvania Aeronautics Commission and Mayor and Council of Wilmington, Del., permission to intervene in Middle Atlantic area case (Docket 674 et al.).
- Dismissed applications of Robert D. Greenley and Sam D. Weil, Jr., (Docket 2098) and William Edward Hann (Docket 1162) for certification at applicants' request.

CAB SCHEDULE

Feb. 18. Exchange of rebuttal exhibits in Arizona Airways case for acquisition of TWA's AM 38. Postponed from Feb. 4. (Docket 2005.)

Feb. 18. Exchange of exhibits in Universal Air Travel Plan case. Postponed from Jan. 28. (Docket 1939.)

Feb. 18. Exchange of exhibits in TACA de Colombia's application for foreign air carrier permit. (Docket 1824.)

Feb. 18. Hearing in Kansas City-Memphis-

Florida case. Postponed from Feb. 5. (Docket 1051 et al.)

Feb. 18. Exchange of exhibits in route consolidation cases of Braniff Airways, TWA, Chicago and Southern Air Lines, and American Airlines. (Dockets 1154, 2142, 2177, 2187.)

Feb. 19. Briefs due in route consolidation case. Extended from Feb. 12. (Docket 932 et al.)

Feb. 20. Briefs due in Great Lakes area case. Postponed from Feb. 1. (Docket 535 et al.)

Feb. 25. Hearing in Arizona Airways' application for acquisition of TWA's AM 38. Postponed from Feb. 14. (Docket 2005.)

Feb. 26. Hearing in Pan American Airways Latin American and Miami-Leopoldville mail rate cases. Postponed from Feb. 4. (Dockets 1593 and 1909.)

Feb. 27. Prehearing conference in PCA-Northeast merger. (Docket 2168.)

Mar. 1. Hearing in Pan American Airways-Panair do Brasil, S. A. agreement case. Postponed from Feb. 11. (Docket 2032.)

Mar. 4. Hearing in TACA de Colombia's application for foreign air carrier permit. (Docket 1824.)

Mar. 4. Hearing in route consolidation cases of Braniff Airways, TWA, Chicago and Southern Air Lines, and American Airlines. (Dockets 1154, 2142, 2177, 2187.)

Mar. 5. Exchange of exhibits in TACA S.A.'s application for foreign air carrier permit. (Docket 774.)

Mar. 11. Hearing in Universal Air Travel Plan Case. Postponed from Feb. 18. (Docket 1939.)

Mar. 11. Hearing in All American Aviation's case for acquisition of control of Equipamento All American Aviation, S. A. (Docket 1969.)

Mar. 15. Hearing in TACA S.A.'s application for foreign air carrier permit. (Docket 774.)

April 15. Exchange of exhibits in Pan American Airways' application for domestic routes. (Docket 1803.)

Apr. 19. Exchange of exhibits in Boston-New York-Atlanta-New Orleans case. Postponed from Feb. 18. (Docket 730 et al.)

Apr. 29. Exchange of rebuttal exhibits in Boston-New York-Atlanta-New Orleans case. Postponed from Mar. 1. (Docket 730 et al.)

May 6. Hearing in Boston-New York-Atlanta-New Orleans case. Postponed from Mar. 11. (Docket 730 et al.)

May 15. Rebuttal exhibits due in Pan American Airways' application for domestic routes. (Docket 1803.)

June 3. Hearing in Pan American Airways' application for domestic routes. (Docket 1803.)



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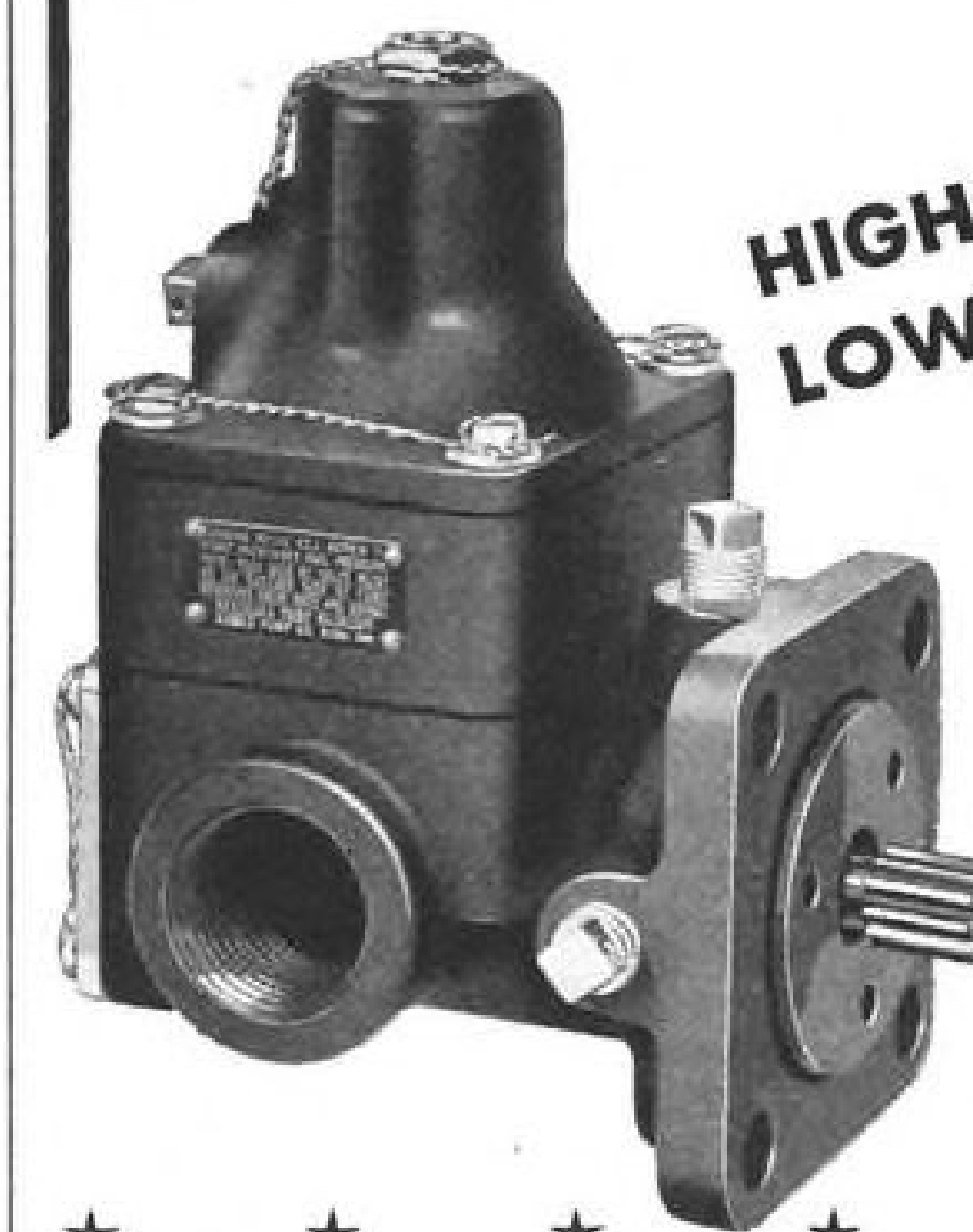
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Don't Forget The Private Flyer

AFTER the close of the all-weather flying conference at the Pentagon Building CAA opinion was that papers delivered at the conference support CAA's plans to proceed with the installation of its SCS-51 landing system—as reported on Page 34 of today's News.

It is true that several of the speakers commended SCS-51, but it should be emphasized that the theme of the conference was transport flying. It is also true that SCS-51 is effective in transport operations, although some complaints about its reliability seem to apply in that sphere as well as others.

However, when CAA decides on a standard instrument approach and landing system to be installed nationally, it should seek a system that will prove practical and useful for all types of flying—private as well as transport. And there is great dissatisfaction among many private pilots with SCS-51. But the private pilot was excluded from any expression of his opinion during the week-long conference at the Pentagon.

Among complaints of private pilots are that SCS-51 requires far more equipment in a plane than is possible in a personal aircraft; that the glide-path beam is unreliable and that when the transmitter is inoperative the indicator in the plane registers a correct approach; that too much experience is necessary for a private pilot to use the system safely.

The last complaint would appear to be the one to be given most consideration by CAA. Flying is the profession of airline pilots. They must keep up with

Watching An Industry Disintegrate

JANUARY military aircraft deliveries slumped to 161, plus one glider. This is an annual production rate of well under 2,000. British schedules for 1946, at latest information, call for about twice as many aircraft as United States schedules. Australia, with less than a tenth of our population, will produce at least half as many military aircraft as we.

As far back as last October Great Britain built 666 warplanes, contrasted with our total, including gliders, of 470. In November the British score was 347 against our 256.

A rate of 2,000 aircraft a year is hardly two-thirds of the lowest level recommended by the Air Coordi-

all developments and be proficient in all aspects of their profession. This, however, is not true of most private flyers. Few will venture to start a flight when they know with certainty that a landing must be made under instrument conditions. Despite this, there already are good chances that there are one or two occasions a year when many private pilots will have to make such a landing. In preparation for an emergency that may never come, must every private pilot perforce undergo the rigorous training that is necessary to acquire the skill of a transport pilot?

Certainly, if we have as many private aircraft flying by 1955 as CAA says we shall have, it would seem that the agency might well start planning realistically for them.

CAA now is undertaking tests at its Indianapolis experimental station on the radar ground control approach system which, advocates claim, can be used by anyone, and with no special equipment in a plane other than a transceiver. The agency is to be commended for thus exploring the chief alternative to SCS-51. But the minds of private flyers would be relieved if CAA also would take cognizance of their doubts and publicly answer now how much consideration private flying will be given in this vital matter.

Such a course also might relieve a growing fear that CAA is neglecting the interests of private flyers in its entirely worthy endeavor to aid transport aviation.

nating Committee in its report last fall, and little more than one-third of the upper level recommended. Although, fortunately, research is well underway, the Nation's diversified aircraft industry cannot be maintained as a strong national defense arm on the present slim appropriations or commercial orders.

Month by month our production of service-type aircraft so necessary to our national security sinks lower and lower and what was once the world's greatest aviation plant disintegrates still further. The Army, Navy, Congress and the White House still do nothing about a national air policy.

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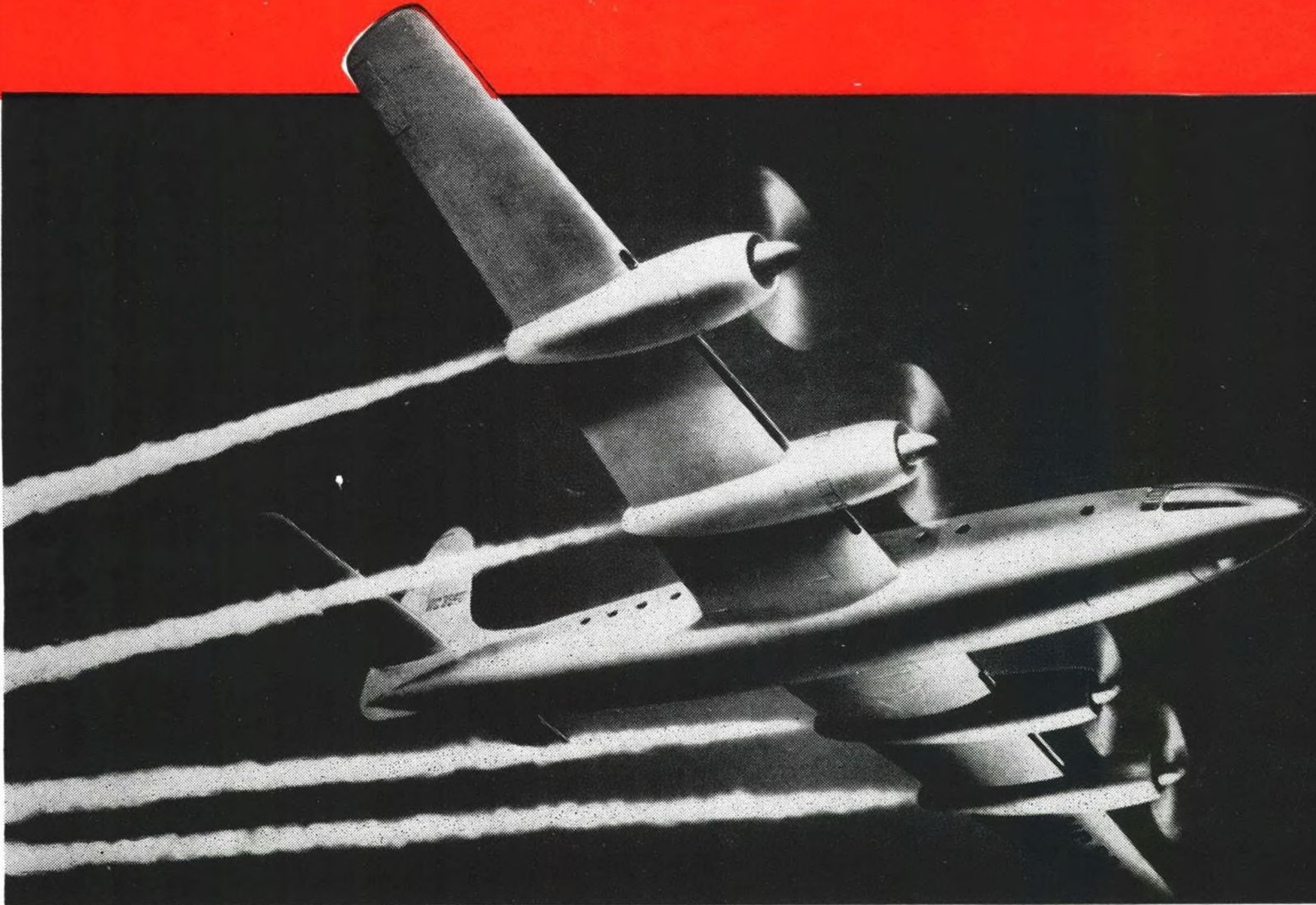


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