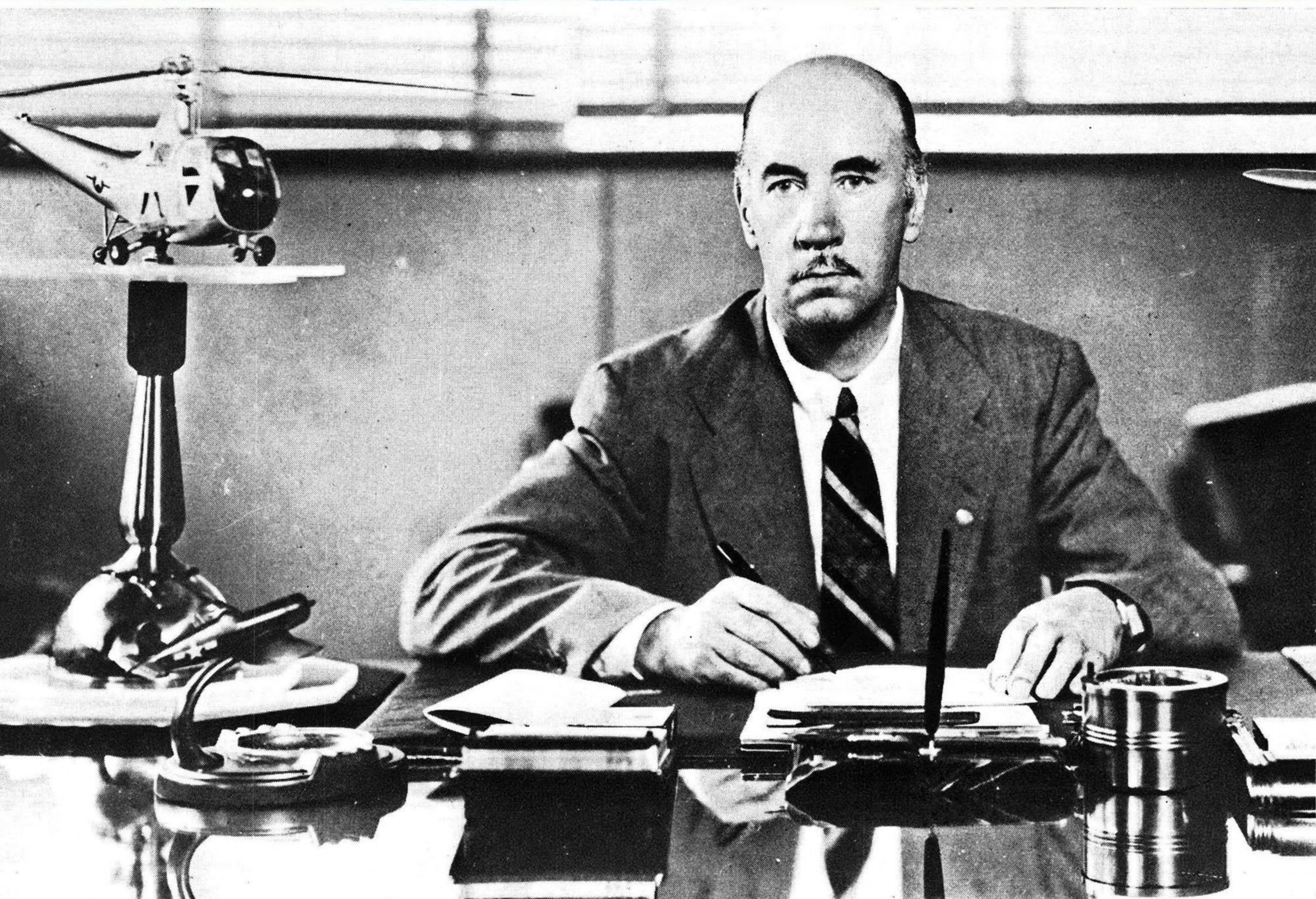


Aviation News

McGRAW-HILL PUBLISHING COMPANY, INC.

DEC. 30, 1946



Helicopter Pioneer: *Igor I. Sikorsky, brilliant Russian-born designer, opened a new vista in aviation with his development in 1939-40 of the little VS-300 helicopter whose main rotor and tail rotor configuration are still seen in most of today's successful machines. Seven years later, the helicopter industry is on its way to a carefully controlled expansion at the end of a year of significant achievement. (See story on page 7).*

CAB to Throw Spotlight on Freight Forwarding Field

Sixty firms slated to submit exhibits next month for largest Board economic proceeding...Page 11

New Ohio Charter Carrier Caters to the Industry

Cleveland-based Executive Airlines sells time on contract basis...Page 12

Ohio Court Decision Menaces Private Flying Fields

Judge rules planes trespass when below minimum altitudes; grants injunctions...Page 14

Buried Factories Found Advantageous in Sweden

Key industrial plants put underground during war report lower costs...Page 18

Low Cost Two-Place Helicopter Nearing Completion

Hamilton firm in Baltimore hopes to market 'copter for \$5,000...Page 19

Gael Sullivan Offered Post as Head of Air Cargo, Inc.

Airline program to expand freight business faces delays on several fronts...Page 21

As these
great names in
plane types
take to the skies...

KIDDE SYSTEMS STAND GUARD AGAINST FIRE!

With most of the leaders in aircraft manufacture, it's *Kidde* for protection against engine fires.

On many of the famous planes that are opening a new era in the Age of Flight, *Kidde* carbon dioxide extinguishing systems are *standard* equipment.

On still other designs, *Kidde* equipment has been installed on experimental models—and on these planes, too, may soon be standard.

Whatever the plane speed, the range, the service ceiling, *Kidde* engineers are prepared to tackle the fire protection problem. Inquiries are invited from manufacturers and transport companies.

Walter Kidde & Company, Inc., 1220 Main Street, Belleville 9, New Jersey



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Kidde



THE AVIATION NEWS

Washington Observer



AIA PULLS OUT OF ATA ADS—There is another reason Air Transport Association's budget may be lower in 1947: Aircraft Industries Association, which for years has contributed sizably to ATA's annual advertising budget, won't do it any more. Nor will AIA aid any other group's ad program, hereafter.

BRITAIN NEEDS TRANSPORTS—On this page Oct. 14 British European Airways was reported considering purchase of more U. S. airliners, in addition to the Stratocruisers and Constellations already announced by the Government. It was also forecast here that our report would bring a hullabaloo in Parliament. It did. A British Overseas representative in New York denied the story, said BEA would have 31 Vickers Vikings flying by year's end, asked *Aviation News* to correct the story. It didn't. Few weeks ago all Vikings were grounded. Now British lines face a critical equipment problem. They have no converted DC-3s, nor replacement parts even if Douglasses were available. Only alternative still seems to be purchase of U. S. transports, which will stand Parliament and British press on their ears again.

ARCTIC AIR FRONTIER—Keep an eye on the new Northeastern Area Command, to be organized by Joint Chiefs of Staff. It will be charged with defense of the eastern sector of the Arctic air frontier with the already existing Alaskan Command on the western flank. Both key commands will be headed by airmen. Maj. Gen. H. A. (Pinky) Craig already commands in Alaska. A top ranking AAF general will be moved into the Northeastern Command when it is formed. Mainstay of the new group will be heavy bombers from B-29s on up. And don't be surprised if the principal base is on foreign territory—at Goose Bay, Labrador. That is about 2,800 air miles from Berlin; 3,500 miles from Moscow.

WAR DEPT. CENSORSHIP—Despite war's end and close-down of Office of Censorship, some War Department officers in a few high echelons contend the press must submit for review everything that the Army itself considers classified. Virtually everyone in the Department, however, admits that almost everything is classified. So there is wide disagreement between press and Army on what, if anything, should be censored. Only agreement appears to be on atomic energy news. No law provides for censorship in peacetime. Press argues that review process is slow. Many Wash-

ington writers have observed that stories are mutilated or refused clearance on political grounds, not military security. Furthermore, military publicity offices "sit" on stories weeks on end because, on officers' own admission, they "haven't been able to get around to putting out releases." Security has nothing to do with it. War Department recently has been registering unhappiness about two publications, Los Angeles Times and *Aviation News*. The Times ran a couple of "artist's conceptions" of future military aircraft. Mechanix Illustrated has done that for years. The *News* ran stories of new aircraft. Immediately, publicity men at airplane plants were given stern warnings about releasing data. In at least one of these two cases, the War Department has launched an investigation, seeking "leaks" in its own ranks, if any. It even took a stenographic statement from an editor in his office, requesting identification of the writer of a news story and the source of information. The editor, of course, followed the journalistic practice of refusing to divulge such matter. He was told that if the War Department was unsuccessful in this investigation of its own personnel, it might turn the assignment over to the FBI. Meantime, Army asks press to submit "questionable material" to censorship.

FOREIGN SUBSIDIES? OF COURSE—CAB Chairman Landis makes no bones about the need of subsidies for U. S. international airlines for some time, regardless of whether there is "regulated competition" or a community company. But he is optimistic over ability of these carriers, like the domestic lines, to accomplish self-sufficiency eventually.

FUNDS FOR FLYING—AAF will ask Congress for legislation authorizing the Secretary of War to contract with civilian firms to provide "orientation" flying for the Air ROTC program now under way in 78 colleges and universities. AAF plan is to give all trainees 10 to 25 hrs. of orientation flying in their senior year in college preparatory to taking regular flight training as flying cadets. AAF wants civilian flying schools to do the job of providing flying time. Air ROTC enrollment is about 8,000 at present, with 2,700 ex-GIs in the advanced course scheduled for flying next year. If funds are available, AAF plans to double the number of participating colleges and boost the number of trainees considerably. Indications are fixed base operators will be able to use the same lightplane equipment used in GI and regular flight training.

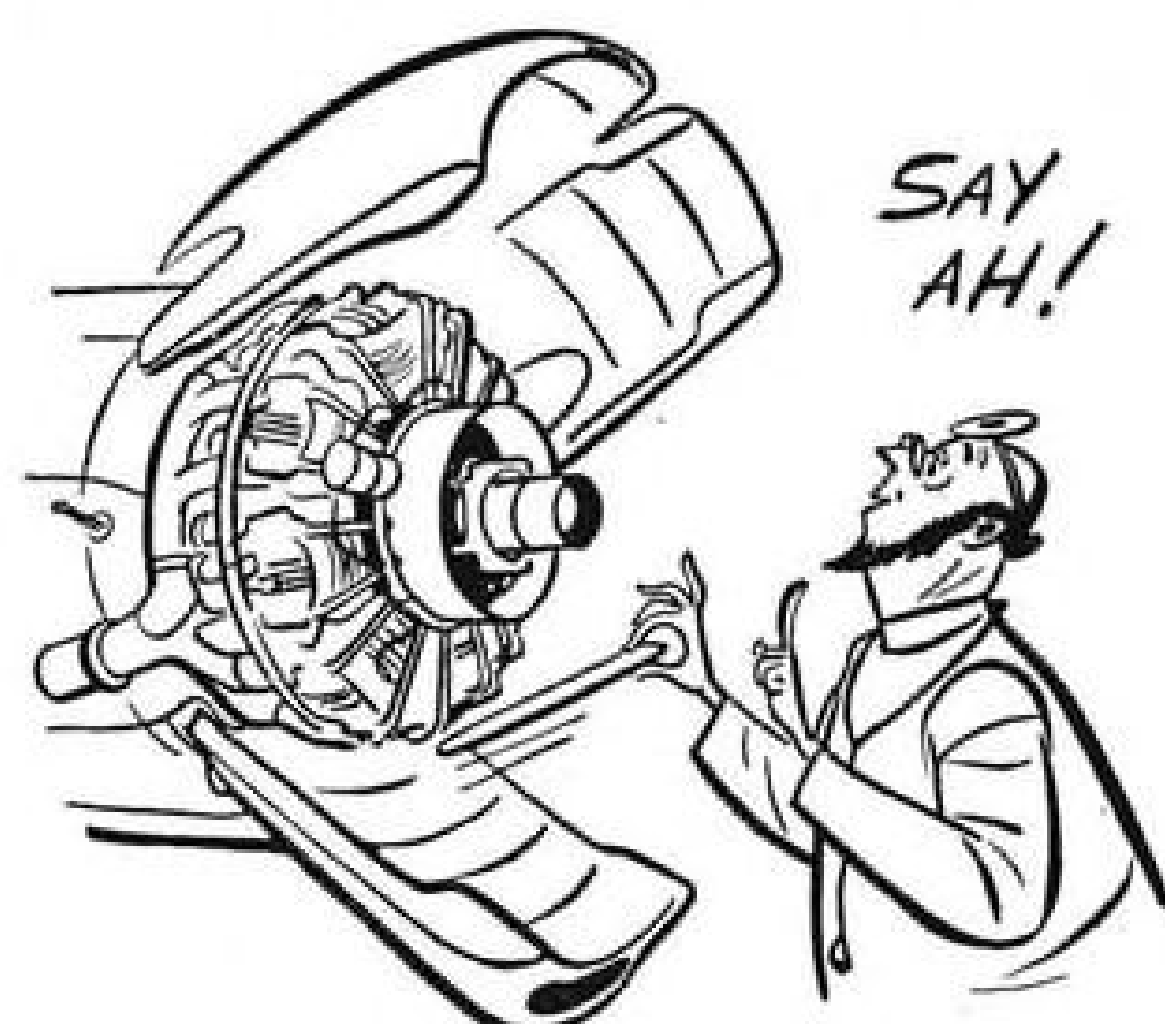
HANGAR FLYING



THE MECHANICAL MOUTH

It used to be like pulling teeth to get under an engine cowl. After a quarter-hour of yanking on rows of fasteners, you took down a truckload of Dural shingles. If you didn't lose or mash any under foot while you worked on the engine, you were plain lucky.

Now it's as simple as lifting the hood on the family bus. Lockheed engineers have worked out a new mechanical mouth for *Constellation* engines that opens up in two minutes flat. Unclasp and lift two small side panels, pull away the one-piece upper and lower hoods, and the engine's as bare as the tonsils of a six-year-old saying "Ah!"



The giant metal jaws stay open obligingly, and completely out of the way. Prying engine medics get plenty of elbow room and save precious minutes on routine inspections. And the mechanical mouth shuts just as fast. At Lockheed, so the story goes, they took turns saying "Jack Robinson" in timing it.

Everybody that sees the mechanical mouth says it's just common sense. And it's this kind of common sense that gets all the green lights at Lockheed and keeps refinements in step with aviation progress.

L to L for L

Lockheed Aircraft Corporation, Burbank, California

AVIATION NEWS

Washington Observer.....	3
Industry Observer.....	5
Headline News Section.....	7
Special Air Services.....	11
Fixed Base Operations.....	14
Briefing.....	17
Production.....	18
Transport.....	21
CAB Schedule.....	25
Editorial.....	26

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Volume 6, No. 27

Advertisers Index

Aircraft Components Corp.....	25
Beech Aircraft Corp.....	4th Cover
Chance Vought Aircraft.....	6
Continental Air Lines, Inc.....	24
Darnell Corp., Ltd.....	25
General Tire & Rubber Co.....	13
H. & E. Distributing Co., Inc.....	24
Lewyt Corporation.....	25
Lockheed Aircraft Corp.....	4
Kidde & Co., Inc., Walter.....	2nd Cover
Mercury Aircraft Corp.....	25
Phillips Petroleum Co.....	3rd Cover

News Digest

DOMESTIC

Edwin A. Locke Jr., special assistant to President Truman who specialized in aviation, resigned to return to the Chase National Bank in N. Y. as a vice-president.

G. Edward Pendray has been engaged by the Guggenheim Foundation as counsel on rockets and jet propulsion.

John Lyon Collier, president of the B. F. Goodrich Co. and Jack Frye, TWA president, were awarded the Medal of Merit for their wartime contributions in the development of synthetic rubber production and international air transport respectively.

The *Journal of Air Law and Commerce*, a quarterly published by Northwestern University will resume publication in January after a 4-yr. war-time lapse.

FINANCIAL

North American Aviation Inc. showed sales and other income valued at \$56,642,000 in unaudited reports for the fiscal year ending last Sept. 30. Net income after taxes was \$4,000,000.

Glenn L. Martin Co. paid a \$750,000 Christmas bonus to its employees. Bonus amounted to a week's wages for persons employed the full year.

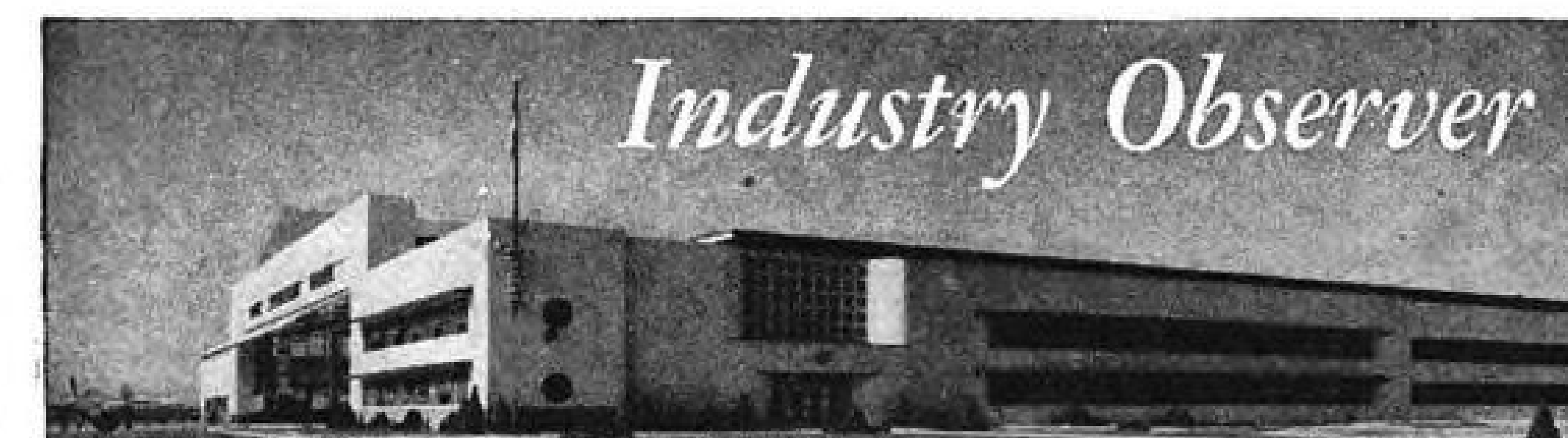
Continental Motors Corp. has withdrawn the registration statement filed with the SEC last July for 250,000 shares of 44 percent preferred stock at \$50 par. The recent \$10,000,000 loan from banks and insurance companies eliminated the need for the stock issue, the company said.

FOREIGN

A C-47 transport of Winged Cargo Inc. of Philadelphia has been missing since Dec. 19 on a flight from Kingston, Jamaica, to New York. Plane carried five passengers, two crewmen and a cargo of cattle.

Legislation which will implement for Great Britain the terms of the Chicago International Civil Aviation Convention was passed by the House of Lords.

TACA Airways made the first use of Jato on a commercial passenger plane on four test takeoffs from watersoaked, small Nicaraguan landing strips.



▶ Chance Vought's new Navy jet fighter—XF6U-1—will be called the Pirate. Ed Owen, chief experimental test pilot for Vought, is now flying the fighter at Muroc Lake.

▶ Eventual goal of Army Ground Force planners is an infantry division that will be completely transportable by air. In their latest modifications of the World War II ground force division the lightplane complement of each division has been increased from 12 to 16 with three "grasshoppers" assigned to division headquarters.

▶ Watch for sparks to fly in the rapidly developing rivalry between China National Aviation Corp. and Central Air Transport Corp. in China. Since Pan American Airways reduced its holding in CNAC to 20% the line has become the personal plum of Premier T. V. Soong while the politics-plagued Chinese Air Force has taken CATC—formerly the German controlled Eurasia line—under its wing.

▶ Miles Aircraft Ltd. of Britain will soon get a production contract from the British Ministry of Supply for an undisclosed number of its four-engine feederliner, the *Marathon*. Both the Mark I, powered by de Havilland Gypsy engines, and the Mark II, powered by Armstrong Siddely Mamba prop jets, will be built.

▶ Navy BuAer is asking for substantial funds to build an extensive jet engine testing laboratory to do for jets what the Naval Air Experimental station at Philadelphia does for reciprocating engines. Navy spokesmen claim present jet testing facilities are woefully inadequate in this country and point out that Germany had 16 complete jet engine testing stations operating at the end of the war.

▶ Indication that Empire Airlines, New York intrastate carrier, may remain inactive for a considerable length of time was contained in a letter sent by Dean Alfange, Empire's board chairman, to Buffalo Municipal Airport officials. Alfange requested termination of the company's three-year lease of office and counter space in the airport administration building. Empire grounded its Beech D-18s Dec. 10 pending CAA investigation of bearing failures in the engines.

▶ Appearance of a two-unit railroad streamline Diesel locomotive at the factory of Northrop Aircraft, Inc., has aroused speculation. Momentary best guess is that the company has acquired the rail equipment for power-plant studies. Company spokesmen decline comment on Northrop's acquisition of the unit. There has been no indication that Northrop might attempt development of a new type of railway locomotive.

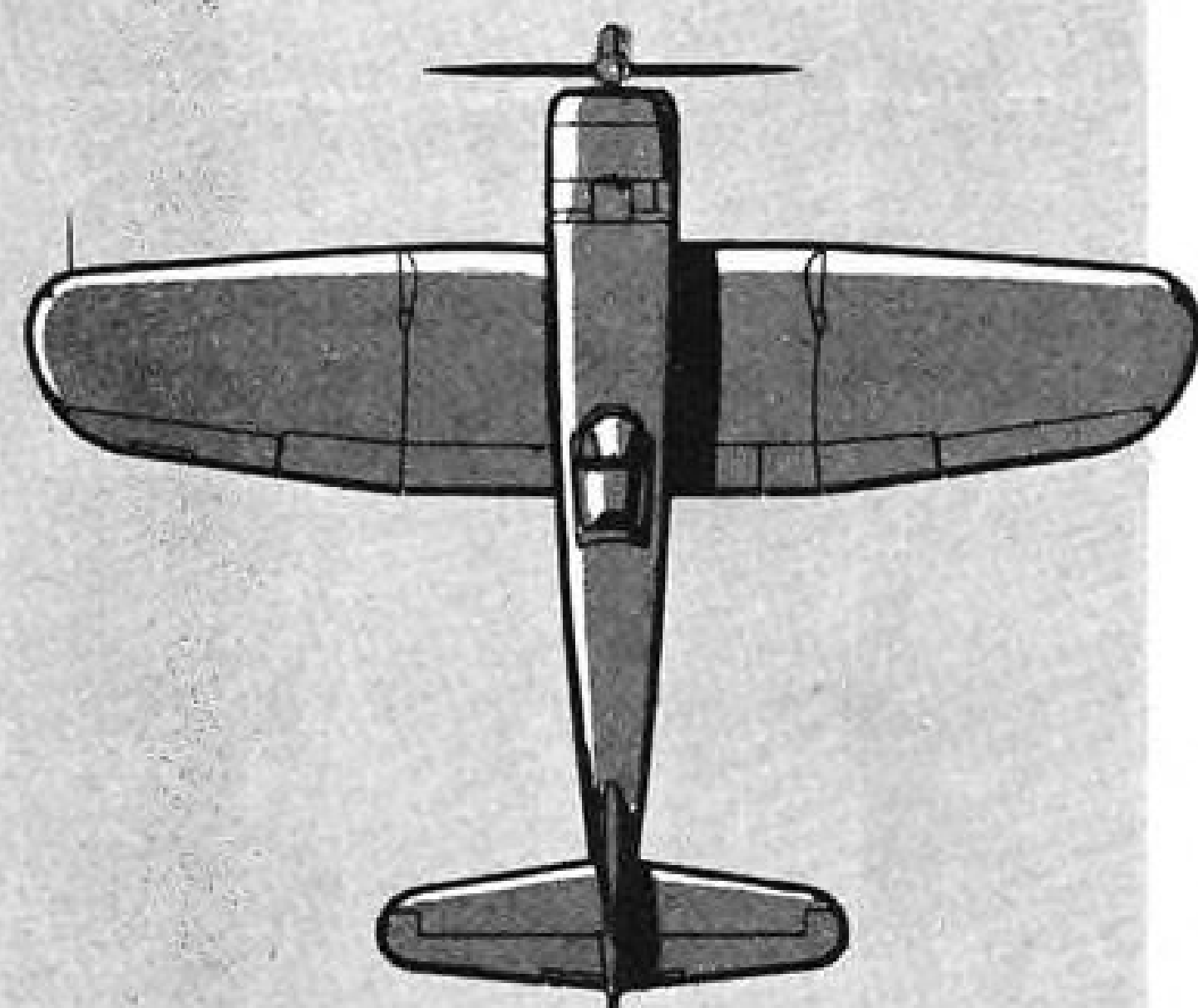
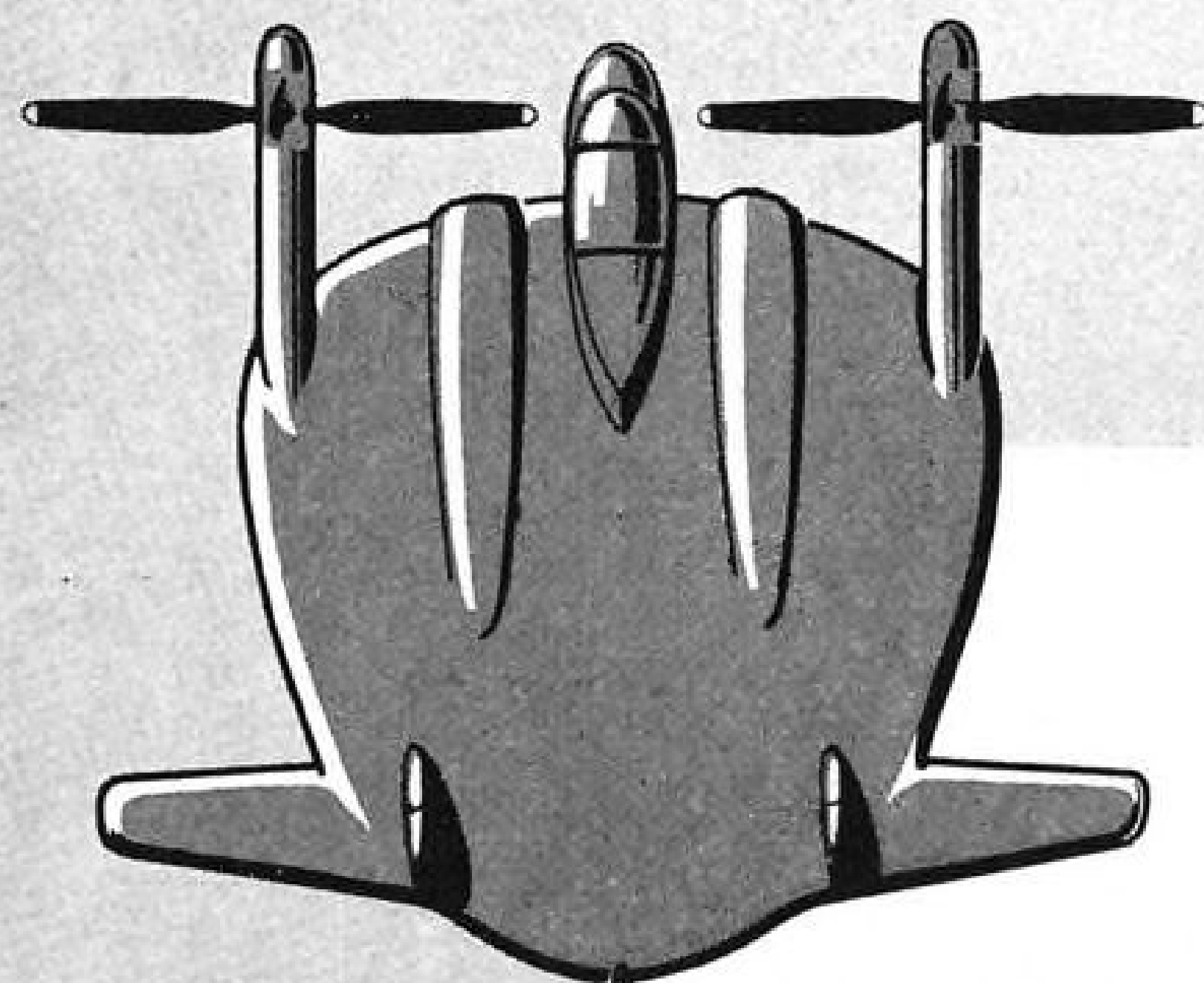
▶ Lockheed-Convair merger prospects are getting dimmer. The stock market slump was no help and despite several months of merger planning by officials of both companies no firm commitments have been made and the conversations are still not on the formal negotiation level.

▶ Navy now has nearly 300 research contracts with industrial laboratories, universities and specialized research institutions.

▶ British are making arrangements to use RAF installed Fido fog dispersal system, at Blackbushe Airfield to be used as a bad weather alternate for the international terminal at Heathrow, 25 miles away. If the Blackbushe costs prove reasonable Fido will be installed at Heathrow.

▶ Rear Admiral Lawrence B. Richardson, formerly Assistant Chief of the Navy's BuAer in charge of research and development, now executive assistant to Curtiss-Wright president Guy Vaughan, is being groomed as Vaughan's successor. He has already taken Vaughan's place on the Aircraft Industries Association Board of Governors.

3 "musts" for Aerial Supremacy



Chance Vought Aircraft, typical of the American aircraft industry, is continually engaged in three separate and distinct phases of research and development work:

1. Constant refinement of existing types.
2. Experimental building and testing of new and advanced types.
3. Work on the designs of still later types, probing far into the future of flight.

Only through such a program of three-fold development can America be assured of keeping its strength in the air today, tomorrow and the day after tomorrow.

CHANCE VOUGHT AIRCRAFT

STRATFORD, CONNECTICUT

ONE OF THE FOUR DIVISIONS OF UNITED AIRCRAFT CORPORATION

VOLUME 6 • NUMBER 27

Aviation News

McGraw-Hill Publishing Co., Inc.

December 30, 1946

New Helicopter Council Maps Future of Rotary Wing Aircraft

Lawrence Bell heads group charting long range program for development of helicopters unique characteristics.

By ALEXANDER McSURELY

American helicopter manufacturers, encouraged by achievements of rotary wing aircraft in the year just closing, are looking forward to greater demonstrations of the helicopter's practical utility in 1947 under the guidance of the newly-formed Helicopter Council of the Aircraft Industries Association.

While, to many, the helicopter is still little more than a sensational novelty, to the few who have flown in the sturdy, attractive helicopters commercially licensed in the past year, they have proven useful vehicles which can perform some specialized functions better than any carrier type.

Formation of the Council at year's end, follows such other 1946 helicopter milestones as:

► **Certification** for commercial operation of two helicopters, the Bell two-place Model 47, and the four-place Sikorsky S-51.

► **Flights** of the first twin-engine helicopter, the McDonnell Aircraft Corp.'s XHJD-1, experimental Navy craft which will lift a useful load of up to 4,000 lb.

► **Important** experimental developments including the Firestone two-place GA-45 (Army XR-9) soon expected to complete CAA certification; the Kellett twin-engine Army XR-10, also planned in a commercial 10-place version; the Bell five-place Model 42; the Sikorsky two-place S-52; the double rotor Piasecki reversed Model PV-3; and many other experimental craft.

► **Announcement** of Civil Air Regulation Part 06, rotorcraft airworthiness, setting out tentative criteria for flight requirements, strength, design and construction power plant installation, equipment and operational procedure, but subject to change in light of

future helicopter developments.

► **Numerous** demonstration flights, including a race won by the Sikorsky S-51 point-to-point against a Lockheed Lodestar and an automobile; various airmail roof landing demonstrations at Los Angeles, Cleveland, Akron, and other cities; setting of new world speed and non-stop records for helicopters by Sikorsky Army R-5s. (Speed record of 110 mph. over 12-mile course and non-stop flight from Boston to Dayton.)

► **First** bulk delivery of helicopters for commercial use, three Sikorsky S-51s to Helicopter Air Transport, Camden, N. J.

► **Quantity** orders for 27 commercial helicopters announced by Bell Aircraft Corp. at the Cleveland aircraft show, including first exports.

► **First** commercial all-helicopter operations by Helicopter Air Transport.

► **Great Lakes Case**—CAB examiners' recommendation that use of helicopters by Yellow Cab Co. of Cleveland be authorized by CAB. (Final decision pending.)

With this 1946 background and with production mounting at the two plants which already have commercially licensed helicopters, the year ahead is likely to see important progress in obtaining further public acceptance.

First chairman of the Council, president Lawrence D. Bell, of the company bearing his name, has asked L. Welch Pogue, former CAB chairman, and attorney for the Bell Company, to draft a long-range program for logical development of the helicopter industry.

While the suggested program is still in its preliminary stages, Council delegates representing Bell, Sikorsky, Firestone, McDonnell and the Aircraft Industries Association, have three things clearly in mind.

► **They** want to dis-associate the helicopter from fixed-wing type aircraft because its peculiar flight



SCANDIA TAKES THE AIR:

The 24-32-passenger transport plane developed by Sweden's Svenska Aero-plan A-B is shown on its first test flight. Initial experience has confirmed its builders' performance expectations (AVIATION NEWS, Oct. 21)—top speed of 250 mph., and a minimum flying speed of 70 mph. Delivery of production models is set for 1948, with the Swedish airline, ABA, and practically every European airline, except those of England, expressing interest. (McGraw-Hill World News photo)

abilities give it an entirely new flexibility of operation competitive more to surface vehicles than to other aircraft. (Examples: It is calculated that a helicopter flying at 80 mph. forward speed can be brought to a dead stop in mid-air in 75 ft. The slowly turning rotor does not create a noise problem such as the rapidly turning airplane propeller, since the rotor noise is more of a gentle "swishing" sound.)

► **They are unanimous** in seeking to avoid extravagant uses of the helicopter and uses where the safety angle is marginal, in order to insure a sound growth of the helicopter in uses matching its current stage of technical development. Nobody knows better than they, that the helicopter is not yet "the dream aircraft for everyman." In trained hands it is already a useful vehicle but they are anxious to keep the helicopter from attempting more than it is now ready to do.

► **They would like** to see technical regulations, of all types, federal and local, carefully planned so as not to hinder the utility of the helicopter by limiting weather minimums, traffic patterns, etc.

Recommendation for establishment of the Council as a permanent AIA activity will be presented at the next meeting of the AIA board of governors.

Present at the organization meeting besides chairman Bell, and Pogue were: Leston P. Faneuf, Walter T. Bonney and George Neal, all of Bell Aircraft; Roger S. Firestone, president, and R. H. Isbrandt, R. V. Guelich and J. P. Perry, all of Firestone Aircraft; W. Wallace Kellett, president, and L. L. Douglas of Kellett Aircraft; Lawrence E. Williams, McDonnell Aircraft; B. L. Whelan, manager and E. M. Benham, of Sikorsky Aircraft Division, United Aircraft Corp., and John E. P. Morgan, Joseph T. Gueing, Jr., William G. Key, and I. C. Peterson, of Aircraft Industries Association.

First Jet Flying Boat Is Built in Britain

First jet flying boat, a twin-engine, high-wing single-seat fighter being built by Saunders-Roe, Ltd., of great Britain, is expected to make its test flight next month. It is expected to be in the 500-mph. class.

Designated the SR/A1, it will

be powered by two Metro-Vickers F2/4 axial flow jet units each of 3,500 lb. static thrust. Air intake is through an opening in the nose of the hull which feeds to the two engines located in the fuselage. Gases are expelled from nozzles aft of the wing roots.

Tank testing is claimed to have shown the bow opening is free from adverse spray effects under normal operating conditions. A simple trap prevents entrance of water into the intake.

Aim of the builder is to combine the high-speed benefits of jet propulsion with the advantages of a

plane that needs no laboriously-constructed landing fields. With the war in the South Pacific in mind the builders point out that the high performance fighter planes have been land planes and that the use of land planes entails construction at every step forward in a campaign. If seaplane performance can be stepped up by using jet power, some of the difficulty regarding bases could be eliminated.

The Saunders-Roe boat has a span of 46 ft., length of 50 ft. and height of 17 ft. Wing area is 415 sq. ft.



Twin Jet Flying Boat Fighter: Model of Saunders-Roe SR/A1 design which is to be powered by two Metro-Vickers F2/4 axial flow jets of 3,500 lb. static thrust each. A high wing single-seat flying boat fighter, the SR/A1 will have pressure cabin and pilot ejection equipment, semi-retractable wing floats. Tank tests are said to show air intake at bow is free from adverse spray effects under normal operating conditions; a trap would prevent entry of sea water under abnormal circumstances.

Tri-Motor Tested With Single Pilot

Northrop Aircraft, Inc. is expected to press its commercial aspirations strongly as the result of flight tests, now under way, of its tri-motor passenger-cargo transport, the "Pioneer."

The first flight, Dec. 21, demonstrated the transport's possible one-man operation as test pilot Max Stanley, who commanded the test flight of the XB-35 Flying Wing bomber, flew it alone.

Lightly loaded to 17,500 of its 25,000 lb. designed maximum gross weight, the Pioneer was off the runway at 80 mph. after a roll of 1,000 ft. using full takeoff power of its three temporary 600-hp. Pratt & Whitney Wasp engines.

► **Held It Down**—Stanley said he

had held it down; believed he could have been airborne after using only 500 ft. of the runway. He told AVIATION NEWS: "From today's performance I would say that the plane will exceed designed performance."

At full gross, with 8,000 lb. payload, the Pioneer is designed to take off in 700 ft. and land in 750 ft. Using C.A.A. measurements, it should take off and clear a 50 ft. obstacle in 1000 ft. and land over a similar obstacle in 1200 ft. Take-off over an obstacle with one engine failing at takeoff speed should be in 1380 ft.

Northrop probably will test the plane with present engines until the latter part of January, and then, with Wright 800-hp. engines (which are recommended to buyers), seek C.A.A. certification.

Immediately after certification,

Northrop may be expected to fly the Pioneer on an extended sales tour through Central and South American countries.

► **Interest Shown**—Interest already shown by Latin American commercial missions has indicated to Northrop that the plane will find a wide open market for a transport capable of landing in small and frequently rough airports; a plane able to tap air freight and passenger business barred to American Aircraft requiring long runways and served now by a hodge-podge of planes that are small, slow, and costly to maintain and operate.

As soon as preliminary engineering flight tests are completed Northrop will begin, at small and rough Southern California airports, proving tests of the Pioneer's rough country operating ability.

CAB Censures CAA Inspection Technique

Figuratively raising an eye-brow at the inspection procedures and cooperation among CAA, the aircraft manufacturers and the airlines, CAB in its report of the Reading, Pa., crash of a TWA Lockheed Constellation, confirmed the previously-published information that the fire which led to the accident originated through the short-circuiting of lead-through studs carrying current through the wall between fuselage and wing.

During the investigation, the Board found that the condition of the through-studs, and the leakage of hydraulic fluid within the forward baggage compartment—presumably the cause of the fire—was prevalent in the Model 049 Constellation.

These defects, as well as others that might have been involved, have since been corrected on all Constellations.

The Board added: "It is difficult to understand that such a situation could have been permitted to persist over an appreciable period of time without corrective action having been taken. The Lockheed Model 049 provides ample accessibility for ground inspection of the forward baggage compartment and failure to observe such a condition as must have existed . . . indicates the inadequacy of inspection policies then in effect."

"That the above situation was not an isolated incident became readily apparent after this accident when similar conditions in forward

baggage compartments were observed in several such aircraft. It was observed that insufficient coordination existed between the Civil Aeronautics Administration, the aircraft manufacturers and the air carrier operators, and that in several instances field inspectors were insufficiently informed as to malfunctioning observed within newer aircraft."

The Board then pointed out that while the Constellation had been provided a "service test" when used by the AAF, aircraft now being developed for commercial use will not obtain the benefit of that operation.

Schildhauer Asks Flying Boat Route

Capt. C. H. Schildhauer, USNR, pioneer in long-range seaplane operations and leading figure in development of Naval Air Transport Service, asked CAB last week for a round-the-world commercial air route to be operated from the start with Martin Mars type flying boats.

The widely-known flying boat proponent announced he would form U. S. Flying Ships, Inc., to conduct the operation, and would obtain flight and ground crews from U. S. military reserve groups. He emphasized the defense hazards of complete dependence on landplanes for international air transportation and promised to conduct his enterprise in a manner suited to military or naval needs in time of national emergency.

Schildhauer would use eight Mars planes, each carrying large cargo loads plus about 40 passengers, flying two trips weekly eastbound and westbound from New York or Baltimore.

Aviation Hit Top Year During 1946

With lightplane manufacturing, and airline expansion setting the place, U. S. civil aviation had the biggest year in its history in 1946, according to CAA Administrator T. P. Wright. Personal plane shipments were expected to reach 34,560 by the year end, and certificated domestic and international air carriers were expected to fly 7,258,000,000 passenger miles and carry 13,819,000 passengers.

The number of registered air-

craft more than doubled in 1946 over 1945, from 37,789 to 85,000. Number of certificated pilots likewise shot up, from 296,895 to an estimated 400,000. The increase went all down the line. In 1946, about 170,000 student pilots certificates were issued, as against 77,188 in 1945.

► **Nonscheds Boom**—The burgeoning in the nonscheduled field was indicated by the fact that under the regulation promulgated last summer regarding the obtaining of operating certificates, 3,061 air services applied.

The tremendous surge in traffic on certificated airlines was accompanied by a greatly improved safety record. Passenger fatalities per 100,000,000 passenger miles flown in 1946 were 1.47 compared to a 1945 rate of 2.31.

Wright's forecast for 1947 is "iffy": "The great number of student pilots certificated during 1946 can be converted into active private pilots if personal flying is made more attractive by better aircraft, more airports and sensible regulations. On the other hand, we can repeat the prewar cycle of disillusioned pilots selling their aircraft because they lacked utility proportionate to cost. I look forward confidently to continuing gains."

Pearson Heads C-W Airplane Division

C. C. Pearson has been appointed general manager of the Curtiss-



C. C. Pearson

Wright Airplane Division at Columbus, Ohio, effective Jan. 1. Pearson has been with the Douglas Aircraft Co. for 16 years, most recently as eastern representative with

headquarters in New York. During the war he managed the Douglas plant at Oklahoma City which produced over 5,000 DC-3 type transports for the Army and Navy.

Other industry personnel changes are:

► **TWA**—Hal F. Blackburn was named assistant general manager of the International Division. Kemper Jacks takes his place as manager of the Atlantic Division. M. E. Sheehan will direct the airline's Far East Division with headquarters in Shanghai. C. R.

Springer succeeds W. G. Golien as director of operations for the International Division. Golien has been promoted to a new and as yet unannounced position with the division.

► **American Airlines**—C. W. Jacobs, secretary, has been elected vice-president and a member of the board of directors to fill the vacancy caused by resignation of Terrell C. Drinkwater who now heads Western Airlines. R. E. S. Deichler, vice-president of both American and American Overseas Airlines, is a new director of AOA succeeding H. K. Ruilson, American treasurer, who resigned as a director of AOA. Walter Sternberg was named director of American's passenger sales. ► **Fairchild E & A**—Louis W. Davis was named assistant to the general manager of the Personal Plane Division at Strother Field, Kans. He was formerly director of public relations for the Ranger Engine Division and most recently for United Services to China Inc.

► **SAS**—George Held has resigned as public relations director of the Scandinavian Airlines System in this country. He was formerly with TWA.

► **Braniff International Airways**—D. B. Myers Jr., Navy veteran and former North American Aviation executive, was named assistant to T. E. Braniff, president. John T. Plunkett, formerly assistant to the president of Aerovias Braniff, is now assistant to the general counsel at BIA.

Miami Air Show Will Feature Distance Races

The second postwar edition of the All-American Air Maneuvers at Miami, Fla., Jan. 10-12, will be touched off, under preliminary plans, by a special handicap race from Brazil and Alaska to Miami.

The maneuvers, the 15th in a series that began before the war, will to a large extent, be built around lightplane races and exhibitions, with a Gulf Oil-sponsored mass lightplane flight to the

Florida city as show's prelude.

Scene of the show will be the airport at 119th street and N.W. 27th Avenue, where five runways, ranging from 5,332 ft. to 7,389 ft., will be available. The races will be officially sanctioned by the National Aeronautic Association which means that any records established will be entitled to consideration as national marks.

Tigers Get Contract

National Skyways Freight Corp. of Los Angeles (The Flying Tiger Line) was awarded the Air Transport Command Pacific route contract now held by United Airlines.

The Tigers will begin operations between Fairfield, Calif. and Tokyo on Jan. 17, the day after United's contract expires. Spokesman for National Skyways said the ATC contract would mean a \$6,000,000 annual addition to the airline's payroll of which 90 percent will be spent in L. A. area. About 1,200 additional employees will be hired for the contract operation.

Route to Tokyo calls for two trips a day with 32 C-54s provided by ATC.

Fleet Sold Again

For the second time this year, Fleet Aircraft Ltd., Fort Erie, Ont., has changed hands. Harrison Securities Corp., Toronto, has bought control from Vincent Mining Corp.

with which Fleet was merged last summer. Tom Y. Smith remains as managing director, and production of Fleet aircraft and Cabinair trailers continues. A new board, comprised of representative Canadian industrialists, will be selected shortly.

Hourly Wages Rise

Although weekly "take home" of production workers in aircraft and aircraft engine plants is down from the January, 1945 peak level—the level which CIO consultant Robert Nathan maintains should be re-attained by workers in a new wage-increase drive, hourly wage rates are markedly up.

According to the Bureau of Labor Statistics, workers in aircraft and parts plants averaged \$53.51 "take home" for a 40.8-hour week in September. This compared with \$57.35 "take home" for a 47.7-hour week in January, 1945. Average hourly earnings of aircraft workers in September was 131.3 cents, compared with an average rate of 120.3 cents hourly in January, 1945.

Workers in aircraft engine plants averaged \$56.67 "take home" for a 41.7-hour week in September. This compared with \$62.63 "take home" for a 46.4-hour week in January, 1945. Aircraft engine plant workers averaged earnings of 135.8 cents hourly in September, compared with 134.8 cents hourly in January, 1945.

Aircraft assembly, parts and engine plant workers are among the highest paid production workers, according to BLS. The average "take home" of all production workers in September was \$45.41 weekly. The average hourly rate was 112.6 cents.

G I Flying Schools Offered Loan Plan

Flying schools engaged in training veterans to fly under the G.I. Bill of Rights can now borrow up to 95 percent of funds due from the Government each month under a plan devised by United Pilots & Mechanics Association. The rate of interest is one-half of one percent a month and the loans are repaid from the monthly checks received from the Government.

UP&MA has arranged for several banks to handle the loans. The loan papers and vouchers are examined and approved by James W. Batchelor, Washington attorney and aviation counsellor.

SPECIAL AIR SERVICES

CHARTER

NONSCHEDULED

INTRASTATE

CAB Set to Throw Spotlight On Freight Forwarding Field

Sixty companies slated to submit exhibits next month for largest economic proceeding in Board history; major revelations may wait until hearing now scheduled for Feb. 17.

By CHARLES L. ADAMS

First comprehensive data on the increasingly-important but heretofore unpublicized operations of airfreight forwarders will be in the hands of CAB early next month when more than 60 companies are slated to submit exhibits in the Board's largest economic proceeding, Docket 681, et al.

Current lack of information concerning forwarders is comparable to the obscurity surrounding operations of the contract and non-scheduled airfreighters themselves prior to their registration under Section 292.1 of the Economic Regulations last summer and opening of the airfreight hearing in the fall.

► **Shed New Light**—While considerable light will be shed on the new industry with submission of exhibits Jan. 6, not many major revelations are expected until the hearing, scheduled to start Feb. 17. Some of the operating applicants are reluctant to reveal the scope and details of their services both because of their uncertain legal status under CAB's interpretation of the Civil Aeronautics Act and because of their fear of giving away business secrets in a highly-competitive business.

A number of late applications are expected in the case due to CAB's recently-proposed revision of the nonscheduled exemption, which would give virtually free rein to forwarders as well as air freighters until the Board acts on pending bids for certificates (AVIATION NEWS, Dec. 2).

The more than 130 applications (from 60 companies) already filed include requests to conduct domestic and foreign freight forwarding services both scheduled and non-scheduled. At least 10 of these 60 companies are now actively forwarding by air. A few are for-

warding by both surface and air, a considerable number by surface only, and others are paper organizations.

► **Affiliates Listed**—Companies affiliated with two of the "big three" in surface freight forwarding are already in the case—Acme Air Express, Inc., affiliated with Acme Fast Freight, Inc.; and Universal Air Freight Corp., controlled by Universal Carloading and Distributing Co. National Carloading Corp., third of the trio, may also participate in the proceeding.

New freight forwarding companies, organized since the war as a natural adjunct to the booming independent air cargo business, are fearful of competition from well-established surface forwarders. Majority of airfreight forwarders began active operations in 1946, starting on a shoestring.

Not all of the certificate applicants propose complete forwarding service, covering business solicitation; collecting, assembling and consolidating shipments to take advantage of plane-load rates; furnishing surface transportation to the airport; loading; securing additional insurance above that provided by the airline; unloading and breaking the consolidated shipments at the destination, and delivering to individual consignees. Such operations would give the forwarder complete responsibility for the shipments and would find him performing all functions except flying the planes.

► **Some Merely Agents**—A number of the newly-organized, self-styled airfreight forwarders are as yet little more than freight solicitation agents, or brokers, who receive an average commission of 5 percent for obtaining business for contract and nonscheduled airlines. Addi-

tion of complete ground handling services is contemplated by these firms when their resources permit.

Of the 13 actively-operating uncertificated airlines in CAB's airfreight case, at least 10 are using freight forwarders to some extent. For the most part, airfreighters believe forwarders may be the means of tapping an estimated potential of one to five billion cargo ton miles annually by 1950.

Testifying in the airfreight case, officials of Airborne Cargo Lines, New York, admitted receiving 40 percent of their business through forwarders, and some smaller carriers obtain up to 90 percent of their traffic from this source.

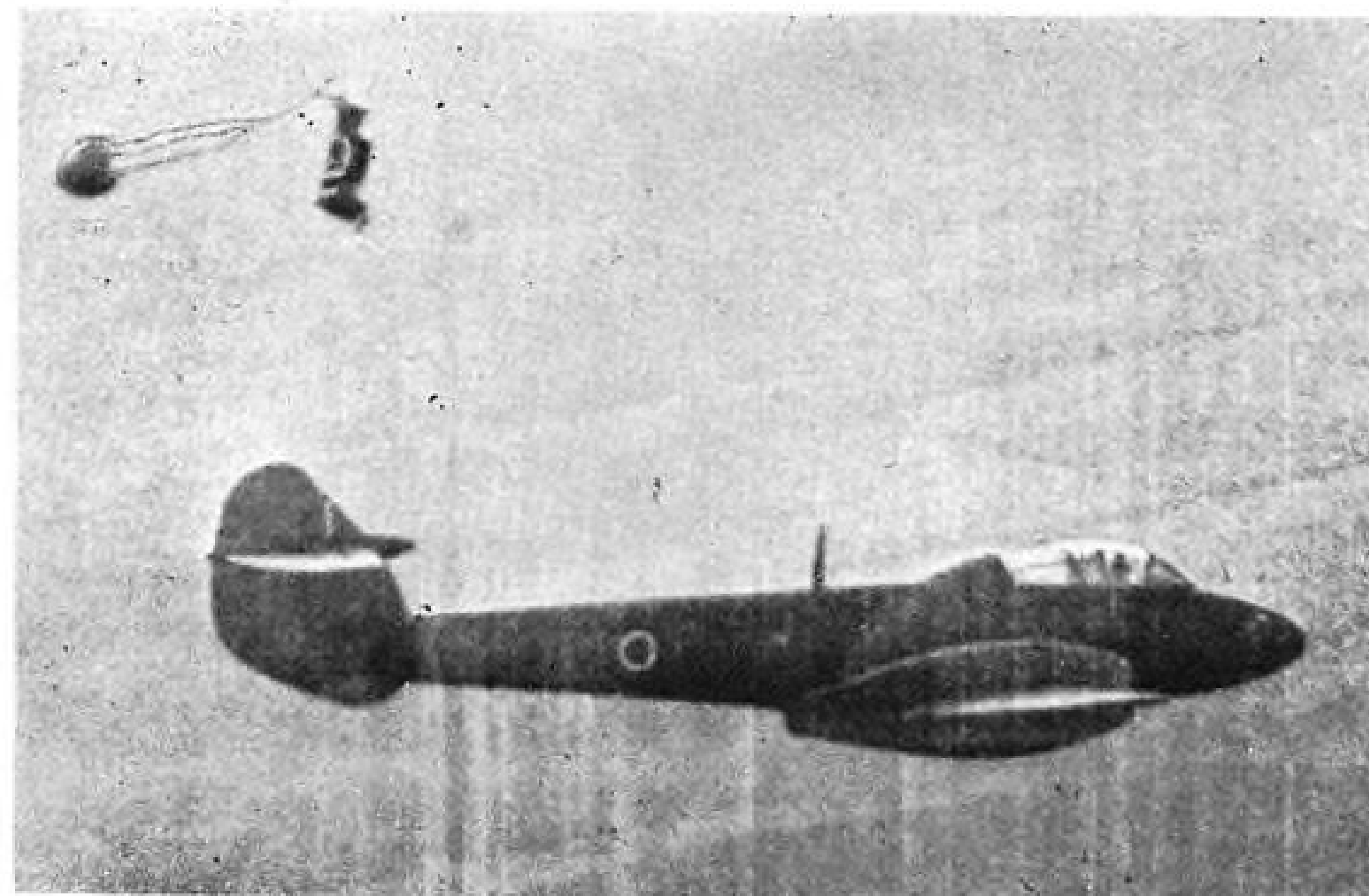
Replying to a query from a CAB public counsel, an Airborne executive expressed the belief that dealing with freight forwarders is legal under the Civil Aeronautics Act. The forwarders themselves claim to operate on a contract rather than common carrier basis, thus putting themselves beyond CAB regulation.

No statistics are available yet on business volume currently being handled by airfreight forwarders. One of the largest indirect carriers admitted, however, that it had to turn down 1,592,000 lb. of air cargo in October and November because planes of uncertificated carriers were not available.



20,000 SWEETPEAS:

American Air Export and Import Co., Miami Springs, Fla., recently flew a load of 20,000 sweetpeas from Haiti to LaGuardia Field for Pan American Agricultural Enterprises, a new firm organized to bring fresh, Haiti-grown products to the New York market. The flowers were raised on plantations at Kenscoff, Haiti, and shipped from Port au Prince to New York in ten hours via an unrefrigerated AAXICO DC-3. AAXICO has an exclusive contract with the firm.



HIGH SPEED BAIL OUT:

RAF photographers catch a test bail out from a Gloster Meteor at 450 mph. using an ejection seat with automatic parachute opener. Shot just after the pilot chute opened, this picture shows clearly how the ejection seat throws the subject clear of the tail. (INS photo)

New Ohio Carrier Caters to Industry

Cleveland-based Executive Airlines sells time in 50 or 100-hour blocks on contract basis.

A new approach for aircraft charter work that gives northern Ohio business firms the advantages of a privately-owned airplane was undertaken recently by Cleveland-based Executive Airlines.

Maintaining a fleet of six twin-engine Cessnas, the carrier sells subscribers flying time on a contract basis in blocks of 50 or 100 hours, charging only for time aloft, computed to the nearest minute from takeoff to parking at the destination. Under present contract terms, a 100-hour block of flying time is sold for \$4,290.

► **O'Neil President**—President of Executive Airlines is William M. O'Neil, president of radio station WJW. Directors are Robert Cries, a broker and former general manager of Cleveland's largest department store, the May Co.; Roger Ferger, publisher of the *Cincinnati Enquirer*; Morton Stone, partner in Prescott & Co., and Bernard E. Rand, Cleveland attorney.

Incorporated in February of this year, the line made its first contract flight in September. Yearly contracts with Executive Airlines have been made by Cleveland Graphite Bronze Co., Ohio Rubber Co., Cleveland Indians (baseball team), Cleveland Browns (football team), North American Coal Corp., Yellow Cab Co., Burrows

Brothers (office supplies), Gabriel Co. (shock absorbers), Buffalo Hockey Corp., and Corday & Gross Printing Co.

As selling points for the service, the line claims it can give subscribers fast, personalized transportation to any point in the U. S. or Canada and 100 miles into Mexico on an hour's notice. Although operations headquarters are at Cleveland's municipal airport, Executive Airlines planes can use any of nine fields in the Greater Cleveland area.

► **Pickup Service**—If a client on the city's east side wants a plane the line will pick him up at the airport nearest his home or office and return him to that field saving hours of ground transportation time.

Subscribers can utilize the Cessna's four-passenger seats or use the space for cargo. Users pay an additional \$20 per night for each night the pilot and plane is away from Cleveland. In such cases, a minimum charge of not less than 2½ flying hours per day is made against the block of time contracted for.

Executive Airlines flew 60,000 passenger miles during November and made trips to both coasts and to Florida. Three more Cessnas will be added after the first of the year.

Future plans call for taking over the operation of corporation-owned planes, relieving owner companies of the need for keeping their own pilots and maintenance facilities. Executive now has eight full-time pilots and two mechanics.

Wisconsin Central Cancels Daily Intrastate Service

After seven months of scheduled intrastate operations with twin-engine Cessnas, Wisconsin Central Airlines, Clintonville, has discontinued daily service between Milwaukee, Oshkosh, Clintonville, Wausau, Rhinelander and Land O' Lakes.

Snow removal problems during the winter months together with lack of radio and navigational aids were cited by James Mulva, airline president, as reasons.

Wisconsin Central reported its most successful month trafficwise during August when it flew 55,439 passenger miles. The company will continue contract and charter service throughout the winter.

Mail Order Company Eyes Air Cargo Plan

An airfreight contract being negotiated between U. S. Airlines, St. Petersburg, Fla., and Aldens, Inc., Chicago mail order house, has attracted the keen interest of Post Office Department officials who are backing an air parcel post system.

Under the proposed contract, each day's orders received by Aldens from customers in Georgia and Florida will be flown by U. S. from Chicago to Atlanta for further dispatch to smaller cities and towns by rail. The parcels, averaging 5 lb., would leave Chicago daily at 11 a.m., arrive at Atlanta at 3 p.m., be delivered to the Atlanta post office at 4 p.m., and be in rural customers' hands by the next morning.

Aldens officials state that parcel post packages mailed in Chicago require three days to reach the same points which the new arrangement will serve in one and a half days at no extra charges. After Jan 6, when the operation is slated to start, the company hopes to give the same speed in delivery that is provided by competing mail order houses with branches in Atlanta.

U. S. will haul the packages at about 14.8 cents a ton mile and expects about 3,000 lb. of small packages daily from Aldens, which is the third largest mail order house in the nation. Gael Sullivan, second assistant postmaster general, said the Post Office is watching the project to observe time-saving factors and to obtain cost figures.



CAA. No R-1

FIRST C.A.A. ROCKET MOTOR CERTIFICATE GOES TO...

AEROJET JATO

Another dramatic chapter in the fast-moving history of aviation has begun. Headed "R-1", it starts with the issuance of the first C.A.A. "Approved Type Certificate" for an aircraft rocket motor to the Aerojet Jato motor. This recognition by C.A.A. is a logical se-

quel to the stirring chapter covering the fighting history of the Aerojet Jato in World War II.

Certification by C.A.A., following a long period of exhaustive tests and inquiry, means that the Aerojet Jato may be used on any licensed aircraft, including those flown for scheduled passenger operation. Approval also sanctions Aerojet-designed installations for mounting the rocket motors on DC-3 and DC-4 type aircraft.

★ ★ ★

The leader in rocket motor development and perfection, Aerojet has also pioneered in research and production of various types of jet propulsion units. Aerojet experts are available for consultation on any allied power projects.

Airline operators can now take immediate advantage of exclusive Aerojet benefits:

- Greater take-off safety factor
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Aerojet will be glad to answer questions promptly concerning your own problems. Write today to Aerojet Engineering Corporation, Azusa, California.



Serving Ohio Industry: Executive Airlines, recently-activated charter carrier operating out of Cleveland municipal airport, offers business firms the advantages of a privately-owned plane through sale of flying time on a contract basis in blocks of 50 or 100 hours. The company maintains six twin-engine Cessnas and plans to add three more early in 1947.



AEROJET ENGINEERING CORPORATION AZUSA, CALIF. • SUBSIDIARY OF THE GENERAL TIRE & RUBBER CO.

AIRPORTS

PRIVATE FLYING

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Ohio Court Decision Menaces Future of Private Flying Fields

Judge rules planes are trespassing when below CAA minimum altitudes; grants injunction against operations from two airports near Akron.

Another in a growing list of precedents which if not checked by legislation or a higher court ruling could wipe out airports located close to cities has been handed down by a State Court in Ohio which has granted an injunction against operations from two private flying fields near Akron.

Following a tendency that has become more and more general in the past several years, Judge Stephen C. Colopy of the Summit County Court of Common Pleas adopted CAA minimum altitude regulations as the "floor" of navigable, free airspace, and ruled that planes flying below the CAA minimum were trespassing.

► **Airports at Stake**—At stake in the decision of Judge Colopy is the future of Chamberlain and Stony Hill airports (AVIATION NEWS, Oct. 17). Stony Hill is a small field used chiefly by its owner. Most interest centered around Chamberlain Airport, recently established for private flying. Adjacent property owners, led by Russell Firestone, son of the late Harvey Firestone, founder of the rubber company which also deals widely in aviation products, petitioned the court to enjoin operations at the field on the ground it was a nuisance and a "menace to the safety" of a nearby school.

The judge found that (1) operation of the planes from the airport will amount to "trespass of a repeated and continuing nature" of adjoining properties; and (2) "operation . . . will amount to a nuisance that will substantially interfere with the use and enjoyment of the plaintiffs' homes and properties."

Aviation attorneys, studying the case, concede that Judge Colopy's finding that the field is a nuisance

will have wide acceptance and probably is valid as a finding of fact. This aspect of the case perhaps will be hardest to overcome. Most concern and annoyance, however, is reserved for the finding that the planes in landing and taking off are "trespassing." Judge Colopy cited as a precedent, the Burnham case decided by the Massachusetts Supreme Court in 1942. In this case, the court allowed an injunction and nominal damages of \$1 on the basis of "technical trespass," while recognizing that the flights under 500 feet were not "such as to affect



ON-THE-SPOT SERVICE:

A truck carrying Firestone aircraft supplies and accessories provides quick service to plane owners on the flight line at Washington National Airport. The truck is operated by Sky Supply, Inc., Washington Firestone aircraft equipment distributor. Similar service to plane owners at many other airports will be a logical outgrowth of intensified merchandising programs projected by progressive service operators.

the health, habits, or material comfort of a normal person."

The net result is that even though flights over property adjacent to an airport do not disturb residents, there is still ground for an injunction on the basis of trespassing.

► **Need 16 Miles**—J. M. W. Chamberlain, owner of the Akron field, comments in regard to that thesis that if "CAA's recommendations as to clearance at a glide angle of 30-to-1 were followed, the minimum area required for the airport would be roughly 16 square miles. Such restrictions would sound the death knell for small airports either privately or publicly owned."

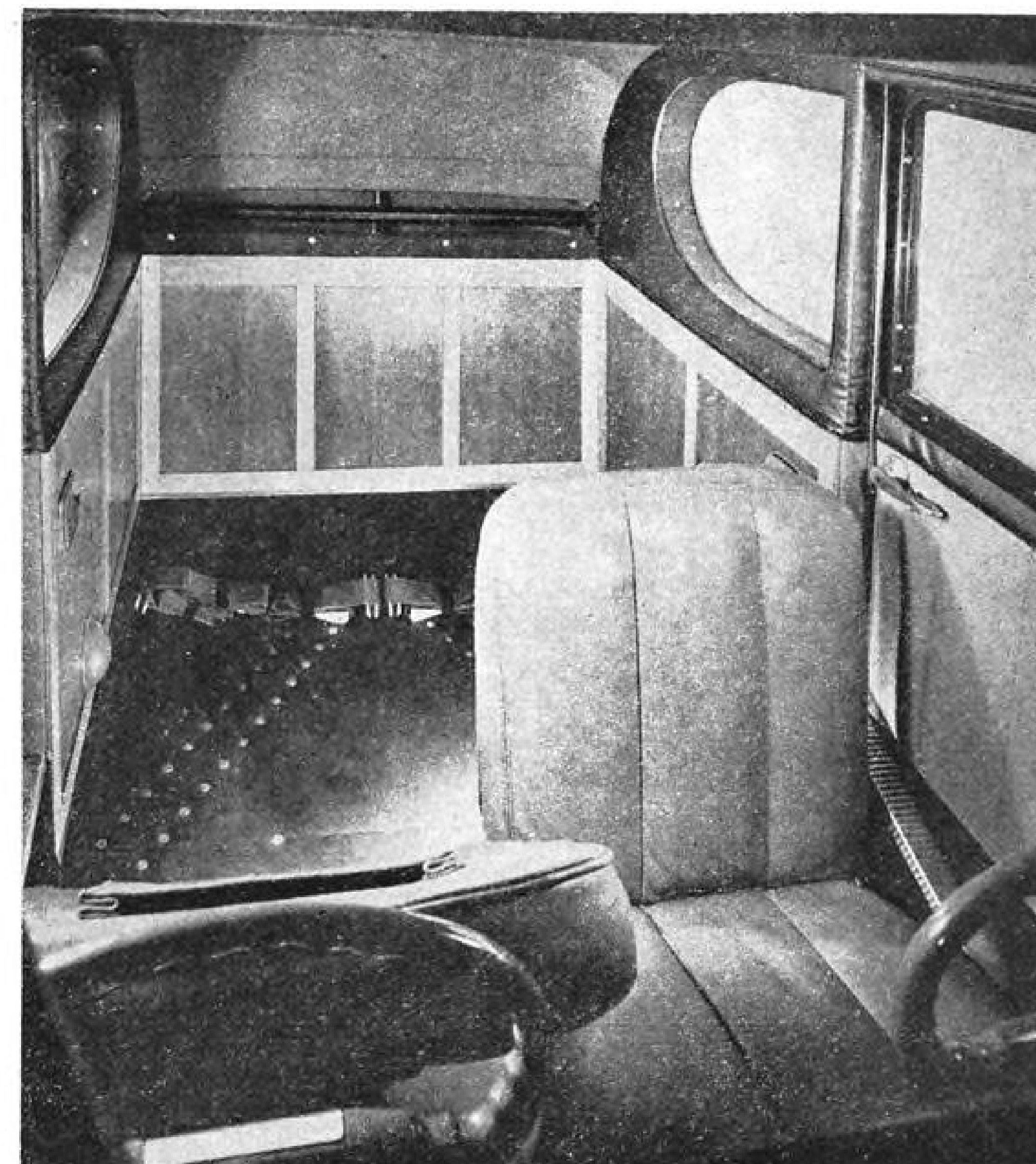
In the Burnham, Akron and other cases, the courts have generally based rulings on the altitude minimums prescribed by CAA for safety alone, and it is at that point that puzzles and exasperates attorneys friendly to aviation. CAA has the power to change the minimums and the lawyers state that would change the court rulings. That line of thinking, according to an outline prepared by attorneys, "converts a governmental safety regulation, carrying penal consequences, into a substantive rule of law governing the private ownership of property. To say that flight below the 500 ft.

line is a trespass and above it is not, appears to say that ownership of the airspace extends only to the 500-ft. level . . . whereas there is nothing in the statutes or regulations which prevents landowners from making any actual use they choose of the airspace about 500 ft."

There have been court cases in which the thesis of ownership to the 500-ft. level has been rejected, but none in recent years. Although Judge Colopy declared that the Supreme Court of the United States has not passed on the matter, actually it appeared to uphold the philosophy expressed in Burnham and Akron cases last spring in the Causby case (AVIATION NEWS, June 10), which involved a suit for damages over diminution in value of land adjoining an airfield. Interpretation of the court's opinion is that airspace below the CAA minimum is owned by the landholder.

Cannon CAA Attorney

John A. Cannon, former legislative attorney in the Department of Commerce, has been appointed CAA attorney for Region 3, with Chicago headquarters. He is a veteran of both World Wars.



STINSON STATION WAGON:

New step in small airplane utility is the Flying Station Wagon version of the Stinson Voyager 150. With two back seats removed a cargo compartment is provided as shown lined in wood paneling with floor stressed to carry 600 lb., complete with tie-downs. Installation of back seats converting the plane to a four-place cabin plane takes only five minutes. Aimed at the farm flyer market the plane is well adapted to small field operations with a 620 ft. takeoff fully loaded, with 560 ft./min. rate of climb, and with 125 mph. cruising speed.

Baltimore Firms Are Using Planes

Nine Baltimore companies, most of them not connected with aviation, are using fourteen planes for business transportation, while a number of other Baltimore companies have indicated they, too, soon will be using executive transports, according to a recent AVIATION NEWS survey.

Petrol Corp. has carried company personnel in business flights over 25,000 miles since the company's twin-engine Beechcraft Model 18S was purchased in June. Other twin-engine Beech 18S are owned by Mt. Vernon-Woodberry Mills, American Totalisator Co. (maker of race track machines); and Bendix Radio Division, Bendix Aviation Corp.

Other firms and their planes: J.



AUSTRIAN "FLYING BELT":

Paul Baumgartl, Vienna, exhibits his Heliofly, a two-blade helicopter device which straps to his back, weighs about 30 lb., bears marked resemblance to the original American-built Pentecost Hoppicopter. Baumgartl asserts the device will enable wearer to takeoff from any point where he stands, and climb to an altitude of 3,000 ft. When motorized aviation is again permitted in Austria, he hopes to start mass production of the Heliofly. (Acme Photo)

E. Greiner Co. (engineers); Globe Swift; Bartlett Hayward Division, Koppers Corp., (aeromatic propellers maker) Bellanca Cruisair Sr., four-place Waco biplane, and two-place surplus BT-13; Oles Envelope Co., Beech G-17-A five-place biplane; F. G. Schenuit Rubber Co., Grumman Widgeon amphibian; Chase Engineering & Manufacturing Co., twin-engine Cessna; Austin Packing Co., Stinson; and Bendix Radio, four-place Cessna Airmaster and two-place Ercoupe in addition to the twin-engine Beech.

Washington, Arkansas

Name Air Officials

Two state aviation operators groups elected officers in Arkansas and Washington.

Newly organized Arkansas Air-

craft Operators Association, meeting at Little Rock, elected Fred W. Kingdom, president; Bernard DeWeese, Pine Bluff, vice-president; Mrs. Floyd Al Williams, Little Rock, secretary-treasurer; and Kenneth Starnes, Conway; F. A. Williams, Little Rock, E. E. Terry, Helena; Howard Webb, and Paul Burns, of Texarkana, were named directors.

A proposal to be introduced in the Jan. 14 meeting of the Arkansas Legislature, to establish a State Aviation Board, supported by a tax on aviation gasoline, was discussed by Claude Holbert, Little Rock. Bernard DeWeese, Pine Bluff, led a flight training talk.

Washington State Aviation Association elected Ben Smith, operator of Kent Airport, president; Fred O. Schweitzer, of Schweitzer Aircraft, Yakima, vice-president, and H. William Blake, of Washington Aircraft & Transport Co., Seattle, secretary-treasurer. The Association voted to establish a liaison committee to coordinate activities of aviation groups within the state, and endorsed a proposal that Swan Island, former airport site at Portland, be restored to its prewar airport status.

Bradley Field Opens For Private Flyer

Formal opening of Bradley Field, new de luxe private flyers airport, at Boise, Idaho, drew a crowd of more than 5,000, to what is expected to be the finest small airport in its area when completed, at a cost of about \$500,000.

The field is operated by Aircraft



HELICOPTER GLIDER:

This single-place rotating wing glider has been built by Harris L. Woods, Route One, Dover, Pa., who has completed ground runs and rotor run-up tests and hopes to make the first flight soon. Designated the W-Copter, it was begun about a year ago for experimental purposes for a future helicopter which Woods intends to build. Fully loaded it weighs 285 lb., has a rotor of 17 ft., and steerable landing gear connected with the rudder.

Poll Favors Air Show

Favorable general reaction to the First National Aircraft Show at Cleveland by aircraft accessory and parts manufacturers has been indicated in a poll of 42 of these manufacturers conducted by Thomas D. Tynan, Philadelphia, show committee chairman of the Aviation Distributors and Manufacturers Association.

Twenty-one of those polled were exhibitors at the show, and an equal number were not. Five exhibitors said the show was excellent, 9 called it worthwhile, 3 said it was questionable, 3 said it was not worthwhile and one did not answer. Of non-exhibitors, 10 said it was excellent, 9 worthwhile, and one each, questionable

and not worthwhile. This tallies 33 who considered it excellent or worthwhile, 4 who saw its value as questionable, and 4 who found it not worthwhile.

Asked if they would exhibit at a similar show next year, exhibitors replied: yes, 12; no, 1; undecided, 8. Non-exhibitors responded: yes, 3; no, 16; undecided, 2. A tally of replies shows that 15 of the 42 are prepared to exhibit next time, and 10 others are prospects, while 17 have decided against it. The opinions were based on attendance at the show by 221 representatives of the exhibiting accessory manufacturers, and 116 representatives of the non-exhibitors.

Service Co., subsidiary of the Bradley Mining Co., which has a fleet of 29 company planes. President of the mining company, John D. Bradley, of Burlingame, Calif., flies a unique low-wing Fairchild 45 five-place plane, powered with a 450 hp. Wasp engine. Phil Cox, vice-president and general manager of the operations company, who flew for many years as a mining company executive and private pilot, now has every CAA rating but transport pilot.

Fifty T-hangars are under construction at the field, many of them already being occupied. The airport has a 3,000 ft. runway, 400 ft. wide, all surfaced, with long clear approaches.

Planes flown by private pilots and operators from Utah, Wyoming, Montana, Washington, Oregon,

Nevada and California, flew in for the celebration. A census of approximately 100 planes on the field included more than 25 different types from twin-engine Beeches and Grummans, to Piper Cub trainers. Adverse weather grounded many additional planes which were on their way to Bradley Field.

Closer Credit-Sales Co-ordination Urged

Closer co-ordination between credit and sales departments in the aviation industry was urged at the Aviation Distributors and Manufacturers Association convention in Chicago, by E. B. Moran, manager, National Association of Credit Men, Chicago, Illinois.

Moran called for advance investigation of credit standing of sales prospects, before the selling effort begins in order to determine how much the prospect can afford to buy and whether he is likely to pay for it. Proper coordination between credit manager and sales manager will mean that credit ratings of prospects will actually set sales quotas, he said. Moran warned of the danger of lost repeat sales by offending prospects through accepting their orders and then scaling them down because of credit department findings.

A recent meeting of petroleum industry credit men in Chicago, reviewed the credit status of various phases of the aviation industry. Generally speaking, he reported, they consider the airlines of the country good credit risks. They

expect many of the nonscheduled and feederlines to fall by the wayside. They consider that the personal airplane market in the immediate future has been overrated and that sales within the next few years will be considerably under the optimistic predictions which have been made. Therefore, they do not rate personal plane manufacturers and the fixed base operators who sell their planes too highly in credit. It was pointed out there are many sound dealers, distributors, and manufacturers who all should be judged according to their individual ratings.

A co-ordinated public relations and advertising program for the whole aviation industry with national network radio shows and full use of magazines, newspapers and other media, to reach the mass public market which is still apathetic to aviation, was urged by Albert L. Harting, director of public relations, Southwest Airmotive, Dallas. He asked ADMA to take the leadership in interesting other industry groups in such a program.

Louisiana State Will Offer Air Training

An aeronautical training program at Louisiana State University, Baton Rouge, which eventually will accommodate 2,200 students a year receiving instruction in commercial, air mail, and private flying operations, and in aeronautical engineering and airport administration has been approved by the university board of supervisors.

To begin a flight training program as the first step, the supervisors have appropriated \$200,000 from current funds surplus and have authorized president W. B. Hatcher to request matching federal funds. This will begin an air field on Ben Hur Plantation owned by the school.

A three stage plan for the aeronautics program calls for a total expenditure of \$2,605,742 which will include a development of six satellite fields in East and West Baton Rouge, Iberville and Ascension Parishes, in addition to the main university airport. The plan has been developed by V. J. Bedell Co., New Orleans consulting engineers, and calls for expenditure of \$670,478 to complete the first stage, \$1,136,022 for the second, and \$799,242 for the final stage.

Briefing For Dealers and Distributors

SEABEE CHARTER FLIGHT—A Baltimore business executive used combined modern facilities of a ship-to-shore telephone and a Republic Seabee amphibian, recently, to reach an important business conference in Washington in less than 45 minutes after he was cruising on a friend's yacht in Chesapeake Bay. On learning of the conference from his secretary by radio-telephone, he telephoned Pan Maryland Airways, which operates a Seabee for charter service. Soon the plane flew out from Baltimore municipal airport, landing in the water a few yards from the yacht. He boarded the Seabee, from a dinghy, and 11 minutes later, landed on Washington National Airport. The charter flight illustrates the unique advantage of an amphibian in flexibility of landings, that frequently overshadows any advantage that superior speed and range may give a landplane of comparable power.

BELLANCA PERFORMANCE—Sweeping claims about superiority of the Bellanca Cruisair Sr. in rate and angle of climb, cruising speed, are being heard from proud owners of the triple-finned 150 hp. four-place plane. Reports of recent unofficial performance competitions between a Cruisair Sr. and a 185 hp. Navion, at Reading, Pa., and between a Bellanca and some 185 hp. Johnson Rockets at a California airfield, are being circulated. In both tests the story goes, the Bellanca came out best on most counts. Eventually, we suppose, somebody will conduct additional match races, establishing performance comparisons between the planes mentioned and the 165 hp. Beech Bonanza and the 165 hp. Piper Skysedan, which will give the dealers and the owners something more to talk about.

FLY-YOUR-SELF—Two new locally operated Fly-Your-Self services announced recently at Kansas City, and Cleveland municipal airports apparently are independent of national plane rental systems which have been in organization stage for several months. C. R. McDonald Co. at Kansas City, has leased the former CAA hangar, and is making an initial investment of approximately \$10,000 in the service. Sky Travel, Inc., at Cleveland, headed by Robert D. Thum, was incorporated for 400 shares no-par stock.

15,000 WATCHED—Haskell A. Deaton, operator of Plaza airport at Charlotte, N. C., drew a crowd estimated by newspapers at 15,000 persons to his airport when he brought Santa Claus in by airplane over the field. The red-coated Saint (Jumper J. D. Edwards) bailed out at 2,000 ft. and floated down to a successful parachute landing. The promotion stunt was keyed with the local newspaper's Christmas drive for funds for gifts for disabled service men and women. It brought Deaton front-page pictures and stories in the Charlotte Observer inoculating many non-air minded Charlotte youngsters and their parents with a new aviation interest.

OIL COMPANY PLANE FLEETS—Probably the largest group of executive and business planes used in any single industry, is the fleet of planes employed for business travel by the oil companies. Gulf Oil Company is sending part of its fleet of company planes on the Gulf Air tour to Miami next week, along with the nation-wide cavalcade of lightplanes of 125 hp. and less which may reach the 2,000 mark this year. Naturally, Al Williams, Gulf aviation manager, will lead the oil company's business flyers with his Grumman Gulfhawk while other company planes will include a Douglas DC-3, Lockheed Lodestar, Lockheed A-12, a Beech 18, and eight Stinsons. The company is again furnishing free gas and oil for the Miami roundtrip to all lightplanes registered for it in the 125 hp. and less class. Tour dates are Jan. 2 to 26. Planes will be routed over four airways, converging at Orlando and branching out again to east and west coast Florida locations.

WANTED: AIRPORTS—Speakers at the ADMA annual dinner in Chicago thumped repeatedly on the necessity for more airports to give personal planes some more utility. And they warned of rising property-owner sentiment against close-in airparks which may seriously handicap the small plane's utility unless a concerted effort to educate the airport opponents is carried on. It was to be expected that Lowell Swenson, NAA executive vice-president, would urge the need for small fields. But it was an interesting indication of growing unity in aviation, to hear managers of three large transport terminals making vigorous appeals for many more little airports. Hervey Law, manager of Washington National Airport, Doug Langstaff, manager of New Orleans airport, and Al Near, manager of Louisville municipal airport, all joined the chorus of warning that aviation cannot grow, until the small airports multiply.

—Alexander McSurely

PRODUCTION

Buried Factory Construction Found Advantageous in Sweden

Key industrial plants put underground during war report lower maintenance, repair, and fire protection costs; construction costs about 15% greater.

While AAF's industrial planning officers are studying a report on underground factories in Germany and considering this type of establishment in this country, several unexpected advantages of buried installations are reported from Sweden where key industrial plants were put underground during the war.

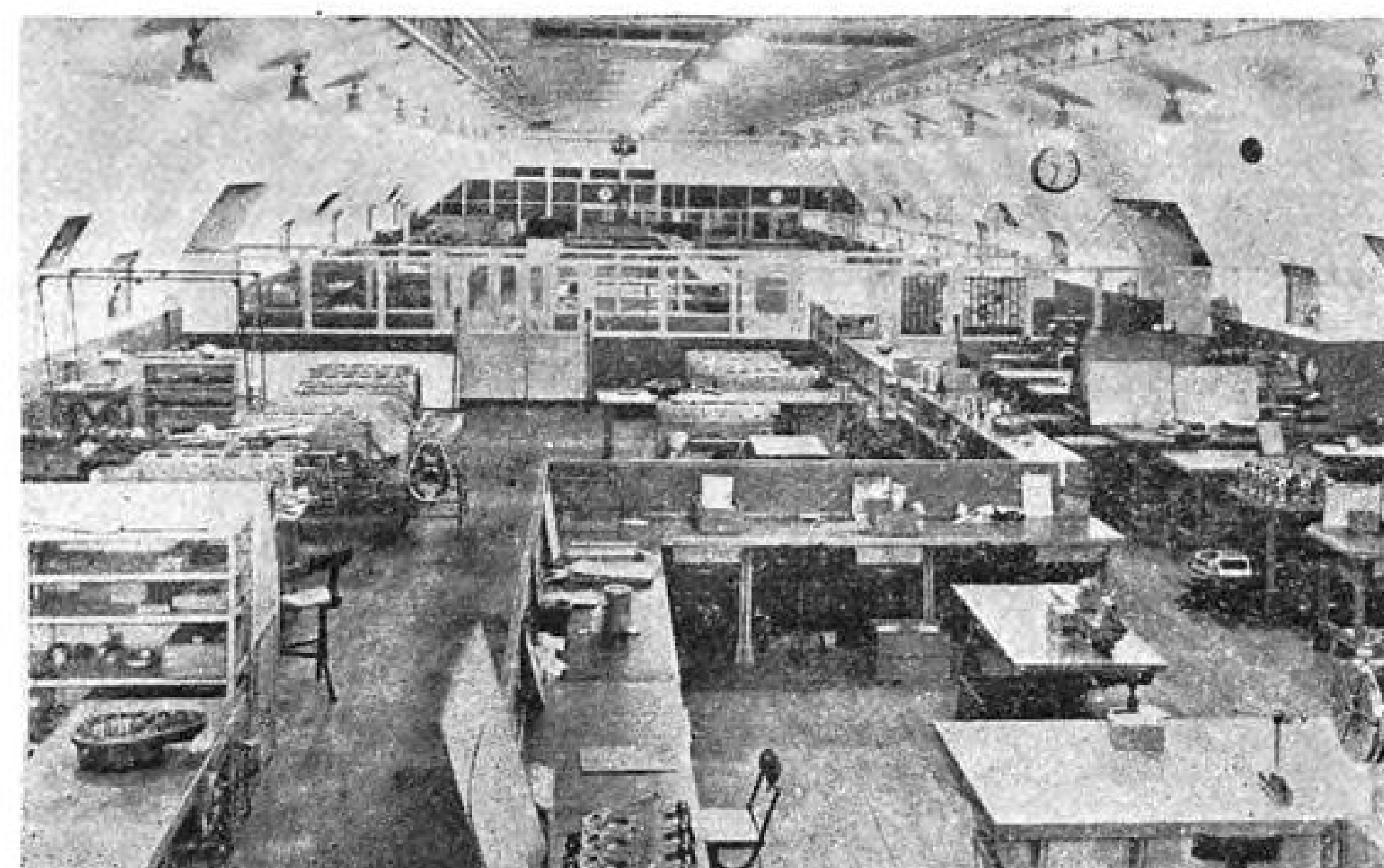
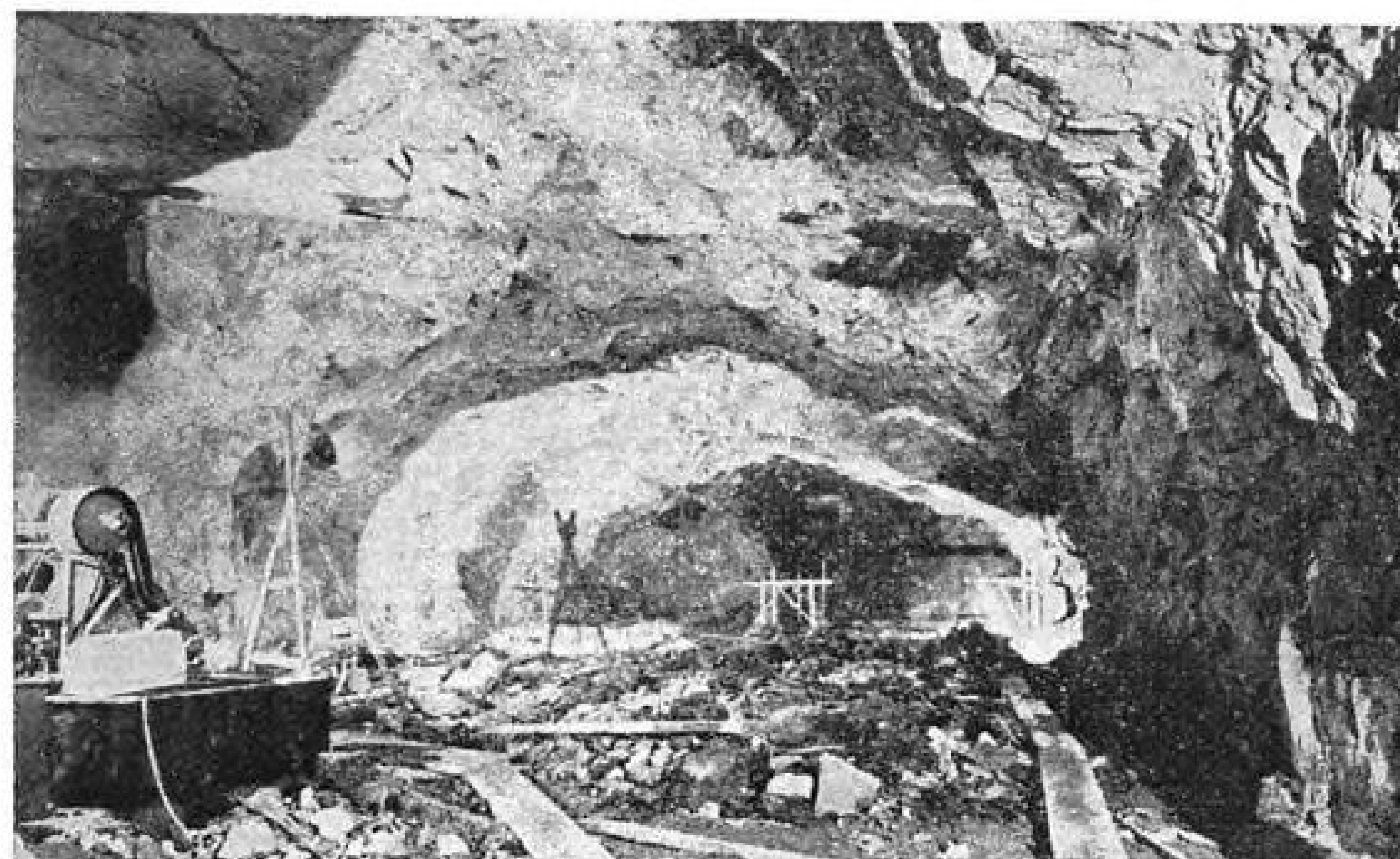
With no windows, weather-resisting walls and roofs, or fences to maintain and repair, maintenance costs are low. Heat is seldom necessary, even in Sweden, as the building is so far below the earth the temperature is constant. Fire protection costs are low as, when the workers have been evacuated from any section of the plant, the air intakes can be closed and the fire smothered in a few minutes.

► **Workers Don't Object**—Probably the most important point, from a productivity view, is that the workers do not object to working in a plant 40 or more feet underground. Some prefer it to an above-ground plant, others claim it's more healthy, and tests have indicated that eyesight actually has benefited.

Although pointing out that windows in most factories do not admit sufficient light, and sometimes are never opened, the Swedish engineers have attempted to give the workers the "feel" of windows by cutting large niches in the walls, about the size of and spaced like windows. Workers generally put potted flowers in these niches.

Next the engineers concentrated on the lighting and color. As a result of experience with modern interior design in general, it has been found that the best way to avoid a closed-in feeling is to keep the walls and ceilings light throughout. The way to achieve a light and airy atmosphere, it has been found, is to use the color of light itself—white. This does not

mean dead white, but a warmer shade more akin to sunlight. While there is some belief that strong colors have a stimulating effect,



Solid as Rock: Swedish underground factory builders have found that the more solid the rock, the better. Construction cost may be more, but materials and operating costs are less. When the walls are of solid, hard rock, the walls of the building itself may be of beaverboard, and heating is seldom necessary. Roof of the excavation, such as is shown above, is arched. Designers of Sweden's underground plants, by concentrating on lighting and color, have managed to produce a cheerful atmosphere which, combined with air-conditioning, provide conditions workers prefer to those in above-ground plants. Visible in this section of the Bolinder-Munktell engine factory are the niches in the wall—most of which contain pots of flowers—which simulate windows and help overcome a closed-in feeling.

Swedish opinion is that they may have this effect in small areas, but in large masses, strong colors are generally oppressive.

► **Artificial Lighting**—To this light color, the Swedes added artificial lighting that is a mixture of fluorescent and ordinary incandescent electric lights.

Construction costs for an underground plant are estimated to be about 15 percent greater than for a conventional factory because of the necessary excavation. But operators of the Bolinder-Munktell airplane engine company, located in central Sweden and carved out of solid rock, state that construction costs are very much dependent upon the quality of the

rock in which the excavation is made. Faults and cracks, for instance, can add to the expense in much the same way as bad ground for foundations in normal structures. At present the prerequisite for good construction seems to be solid rock close to the surface of the earth.

With granite rock, such as surrounds the Bolinder - Munktell plant, no bracing is necessary. The building itself is constructed of beaverboard on a wood frame, and with parquet floors. Two air inlets are cut through to the top of the hill under which the plant lies, and air conditioning equipment controls humidity and temperature.

Low Cost Helicopter Nearing Completion

Hamilton firm in Baltimore hopes to market two-place, 125 hp. 'Copter for "around \$5,000."

A two-place 125-hp. helicopter which the maker hopes to market for "around \$5,000" is nearing flight test stage at the Hamilton Helicopter Inc. plant, 6005 East-

ern Avenue, Baltimore, Maryland.

S. E. Hamilton, president, wants to conduct test flights in Baltimore Municipal Stadium, early in January. The machine has been under construction for nearly two years, and is now assembled except for one gear bed which a manufacturer is completing.

The all-metal aircraft will have a gross weight including two persons, and fuel, of only 1,200 lb., Hamilton says. He expects it to climb at the rate of 1,650 ft./min., to cruise at 90 mph. with a top speed of around 110 mph.

► **Hydraulic Controls** — Hydraulically operated controls are mounted in the rotor head above the cockpit, and are operated by a wheel instead of rudder and two sticks as is customary. Simplification of controls will make the helicopter easy to fly, and the hydraulic operation will reduce vibration to a minimum, he believes.

Hamilton hopes that CAA engineers and inspectors who have worked closely with him during the machine's development, will approve a temporary license which will enable him to start production before 100 hours of flight test are completed. He has made

arrangements with six manufacturers, four in Baltimore, to build sub-assemblies for the helicopter, and will perform the assembly work at the Baltimore plant. Sub-contractors now have blueprints and specifications and are ready to begin work upon notification of CAA approval.

► **Personnel Listed** — A native of Alabama, Hamilton has been studying rotary-wing flight since 1925, was a mechanical inspector at Bendix Aviation Corp. Radio Division, at Baltimore, from 1941 until he left to give full-time to his new project, in 1944. Others in the company include Robert Axe, engineering consultant, who is a Glenn L. Martin Co. engineer; Herbert Hamilton, brother of the president, business manager and C. J. Harris, sales manager. Project has been financed thus far by sale of stock to friends, to obtain sufficient funds for the experimental development.

Other details of the experimental helicopter: fuel is in nose; (production design places tank behind seats, and uses nose as baggage compartment. This will permit use of tanks up to 60-gallon capacity without affecting center of gravity). Plexiglas nose provides excellent visibility. Landing gear is tricycle type. Rotor features automatic feathering, full constant pitch control and cyclic pitch control. Fuselage is 16 ft. 6 in. long and about 6 ft. 6 in. wide. A four-place design on the boards is similar, with elongated fuselage.

In event Hamilton can produce a useful two-place helicopter salable at \$5,000 he should find a ready market. Lowest price yet mentioned by other helicopter makers is the \$15,000 tentative pricetag on the new experimental two-place Sikorsky S-52.

Testing Speedy On Martin 202

Completion of the first phase of flight testing on the new Martin 202 twin-engine 40-passenger airliner, has been made possible well ahead of schedule, by good weather, and by the fact that the plane required only a few minor adjustments and changes between flights. Following the first flight Nov. 22, a series of almost daily flights were made in the following two weeks.

The first 202, which itself is a production airplane, is being fol-



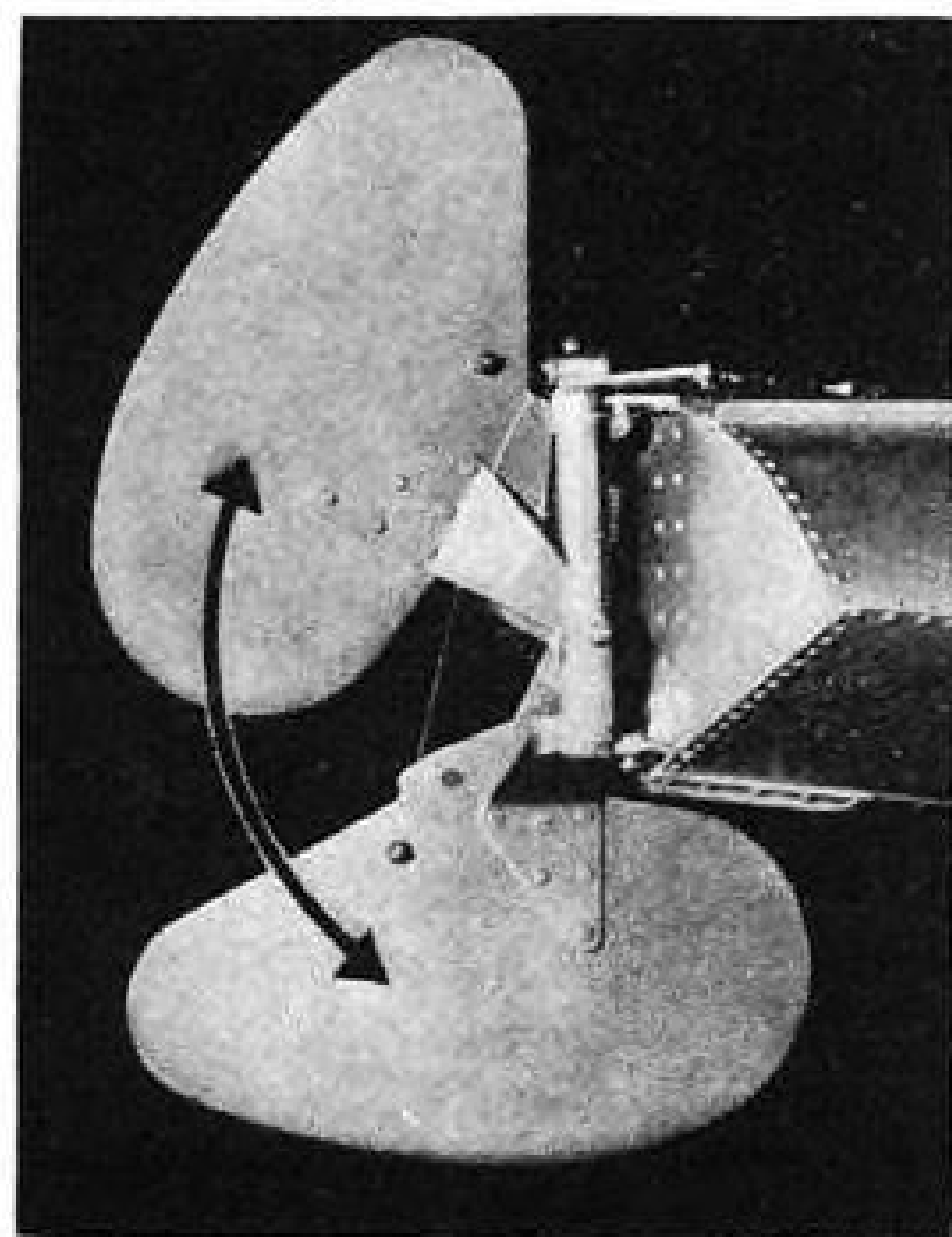
POWER FOR BEECH:

Walter H. Beech (center), president, Beech Aircraft Corp., inspects the Lycoming S-580 320 hp. engine that will be used in the Beechcraft Model 34 feederline transport. Four of these engines, arranged in tandem sets of two, will drive two propellers. Fully supercharged, the eight-cylinder engine is rated at 375 hp. for take off at a rated 3,400 rpm. The Model 34 is designed to carry 20 passengers at a cruising speed of 200 mph. and top speed of 220 mph. Left in photo is Irving B. Babcock, president of The Aviation Corp., parent concern of Lycoming, and right is R. E. Posthaver, general sales manager, Lycoming.

lowed by at least eight others now nearing completion on the Glenn L. Martin Co. assembly line at Baltimore. The first plane is now being equipped with seats and other fittings which were not installed during initial flights. Meanwhile engineers, headed by W. K. Ebel, Martin vice-president in charge of engineering, are making a full check of the plane, preceding CAA certification tests for which the plane is now being prepared.

Chandler-Evans Corp. Merger Announced

Merger of Chandler - Evans Corp., effective Jan. 1, with its parent company, Niles-Bement-Pond Co., West Hartford, Conn., has been announced by Charles W. Deeds, president of Niles-Bement-Pond. B. H. Gilpin, vice-president and general manager of Chandler-Evans Corp., becomes vice-president of the parent company, and continues as general manager of the Chandler-Evans Division. M. E. Chandler, becomes division manager of engineering and research instead of vice-president in charge of engineering. The corporate structure change does not affect Chandler-Evans business operations. The division since the war has been developing fuel control mechanisms for aircraft, particularly for jet engines. It now has a backlog of approximately \$2,000,000 in orders for this equipment with additional new business forthcoming.



RETRACTABLE RUDDER:

A patented feature of Edo lightplane floats is this rudder which is coordinated with airplane controls to aid maneuverability in taxiing. In flight, the rudder is raised, such as the one part that is at the top in the photograph.

Radarange Cooker

Said to cook foods in a few seconds, which under normal conditions take many minutes or even hours, the Raytheon Radarange, made by Raytheon Mfg. Co., Waltham, Mass., was demonstrated recently at a press show in New York.

Based on the magnetron tube, heart of all wartime radar, the new electronic range can grill frankfurters on a roll in 8 seconds or bake biscuits in 29 seconds. Pre-cooking preparation is exactly the same as for standard stove cooking except in the case of frozen foods, in which case no thawing is necessary: just place frozen food under the "burner" and add a few seconds to the cooking time.

Unit consists of a power supply, magnetron, and an applicator or "horn" through which energy is concentrated into the food. Two production models are offered: one for use aboard airplanes, and the other a sandwich-size model. Former model is capable of handling a complete meal.

Master Cylinders

Scott Aviation Corp., Lancaster, N. Y., announces three new models of master cylinders for light aircraft. Headed by the B-711, 350 lb. psi. operating pressure with .8 displacement, new cylinders are Model 4000 with 250 psi. operating pressure and 1.2 cu. in. displacement; Model 4350 (basically the same except that the 4350 allows attachment to remote additional reservoir), and Model 4100-D, .38 cu. in. displacement and 350 psi. operating pressure.

New VHF Transmitter

Radio Receptor Co., Inc., 251 W. 19th St., New York 11, N. Y., announces new Radio Receptor TV-50-A VHF transmitter for ground-air communications. Constructed of welded steel cabinet with removable inverted T transmitter unit it has frequency range of 100 to 162 mc. Power output: 50 watts at 100 to 140 mc., 40 watts at 140 to 162 mc. Power input: 600 va. 115 volts 60 cycles. Antenna cable: Feeds into 50 to 75 ohm concentric cable. Modulation capability: 95 percent modulation at 400 c.p.s., with less than 10 percent distortion. Frequency response: 150 to 4,000 c.p.s. within 3 db of 1,000 c.p.s. response. Audio peak lim-

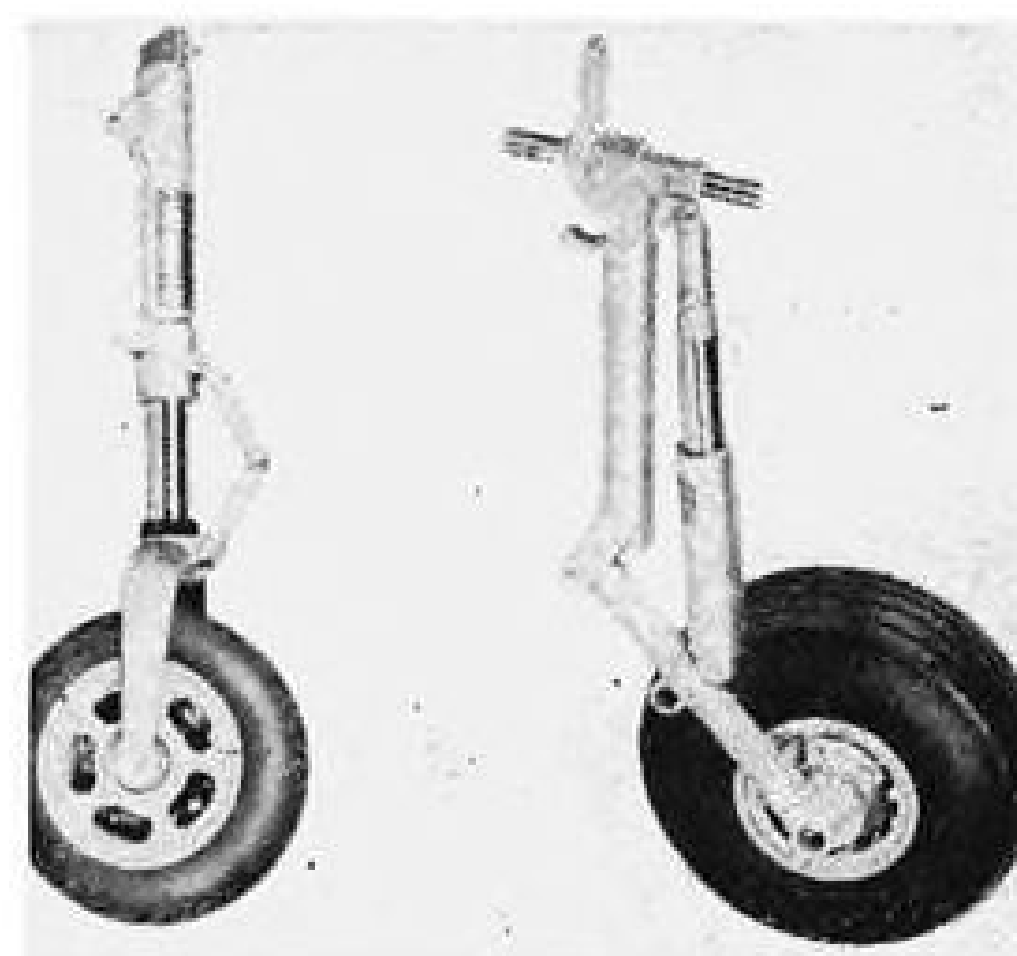
New Products

iter: With gain adjusted for 85 percent modulation at normal audio input, 12 db increase in input level is said not to cause over modulation or more than 5 percent increase in total distortion. Speed of limiting action: 1/100 second. Metering: One switched meter reads all strategic currents and voltages on direct scales.

Lightplane Gear

Bendix Products Division, Bendix Aviation Corp., South Bend, Ind., has put into production a complete landing gear assembly, for lightplanes grossing between 1,500 and 3,000 lb.

The main gear is retractable, with levered suspension. The shock absorbing element utilizes an air-oil shock strut. The nose wheel assembly is designed for both retraction and steering, although it is adaptable for non-



steering use. The brake, contained entirely within the wheel, is the segmented rotor type announced some time ago by the company, and which operates by the pressure of a stator plate against the moving rotor.

Auto Rig Disconnect

The "Auto Rig Disconnect," maintenance device claimed to reduce a complete main power plant change on Boeing Stratocruiser by two and a half hours, is announced by Boeing Aircraft Co., Seattle 14, Wash.

New tool speeds throttle and mixture cable installation which previously required 30-40 minutes of one man's time for each engine, is said to shave this time to just one minute. Device can, according to company, be used on any aircraft engine or on any installation where quick cable break is desired.

TRANSPORT

Gael Sullivan Offered Post As Head of Air Cargo, Inc.

Airline program to expand freight business faces delays on several fronts; CAB decision on tariffs awaited.

By MERLIN MICKEL

Despite eagerness of the schedules airlines to bring their booming air cargo activities to full stature as a big revenue producer, it will be well after the first of the year and possibly next summer before they can effect the entire program under which they hope to do so.

Some delay in the final organization of Air Cargo, Inc., as a service unit to serve the airlines in their cargo drive will result from the offer of the presidency of that agency to Gael Sullivan, Second Assistant Postmaster General. Sullivan has until Jan. 15 to decide whether he will take the job, and apparently will not announce his decision before that date.

► **Await CAB Decision**—An unexpected time-consumer came in CAB's move to investigate the consolidated air freight tariff agreement proposed by the operators as a step towards offering complete and nation-wide interline airfreight facilities to shippers. The airlines have filed separate tariffs conforming to the agreement, but full benefits of the arrangement, its sponsors say, can not be realized until they are consolidated under one cover as the agreement contemplates.

The schedule of moves that need to be made to make the eight-point program fully effective (AVIATION NEWS, Oct. 14) has advanced in only one regard, that being agreement on the handling of interline shipments. Not subject to CAB approval, this already has the required ten airlines' signatures, and has been placed in operation. To be filed soon with the Board, it covers uniform air bill of lading and other procedural and book-keeping details.

The offer to Sullivan was understood to involve a minimum salary of \$25,000. The second Assistant Postmaster General, who has established a reputation for enter-

prise through his activities in behalf of lower airmail postage and helicopter mail experiments, probably will find it a challenging assignment difficult to refuse, since it means an extensive effort in a comparatively new field.

► **Sullivan May Stay**—Since Sullivan's big objective now is air parcel post, it may be that until Congress legislates to make this possible he will withhold a decision on this and other offers he has received, although the report persists that he expects to resign from his present post at the end of January. Investigation of the consolidated air freight tariff proposed under the agreement already filed (AVIATION NEWS, July 8) apparently will be part of CAB's full dress study of the entire air freight picture. The Board's order pointed out that since the agreement was submitted hearings have started on air freight applications, and others soon will begin on applications by freight forwarders.

The airlines are hopeful that the investigative procedures may be expedited, since another step in their cargo program—the publication of joint rates where economically justified—hinges on success

of the agreement proposal, which all the carriers have signed or promised to sign.

Until all do so, action will be withheld on a proposal to cancel existing contracts between the airlines and Railway Express Agency for pickup and delivery. Some alternative for the present arrangement with REA must be provided, either through newly-activated Airargo, Inc., a new contract with REA, or some other means. Elimination of the distinction between air express and air freight one of the most important changes contemplated will await this step.

► **Progress Made**—Some progress is being made on through surface or interchange agreements with surface transportation companies, including REA and major truck lines. Although this will fall in the purview of Air Cargo, Inc., once that organization is established, airline cargo people are meeting next month with the Air Cargo Development Committee of the American Trucking Association. Discussions also have been held with the Cartage Conference of the Development Committee, and may result in a standard contract for pickup and delivery. Preliminary copies of a suggested agreement to cover pickup and delivery will be exchanged at a meeting of the air and surface cargo men January 14.

Feeder Lines Will Get \$3,007,308 Mail Pay

Seven feeder airlines certificated during 1946 will receive \$3,007,308 in mail payments during fiscal 1948, according to estimates prepared for the Budget Bureau by the Post Office Department.

Based on a rate of 30 cents a



SCOTTISH AIRLINES VISITS U. S. FIELD:

The Consolidated Liberator shown above, one of the first to be converted for passenger usage, is shown at LaGuardia Field where it was flown by Scottish Airlines out of Prestwick, Scotland. Line is now flying about three times weekly from Glasgow to New York. It flies under KLM charter to Iceland and then for Icelandic Airways to New York. (Martin & Kelman photo)

plane mile, and assuming two roundtrips daily over their entire systems, the carriers' mail compensation for the year beginning next July 1 would be: Summit Airways, \$683,280; Monarch Air Lines, \$671,892; Southwest Airways, \$501,072; West Coast Airlines, \$378,432; Empire Air Lines, \$303,096; Wiggins Airways, \$273,312; and Orlando Airlines, \$196,224.

Payments to feederlines recently certificated in the Texas-Oklahoma area and to other carriers which may begin operations before the end of fiscal 1948 will come from deficiency appropriations.

China-U.S. Pact Provides For TWA, PAA, NWA

Consummation of the previously-initialed bilateral air transport agreement between the U. S. and China (AVIATION NEWS, Dec. 9) was signed last week. Three American flag lines—Northwest, Pan American and TWA—will serve China, PAA and TWA going to Shanghai and Canton and Northwest to Tientsin and Shanghai.

TWA was making final plans last week for inauguration Jan. 5 of service to Bombay. Lydda, Palestine, will also be served for the first time en route. Flying time to Bombay from Washington, U. S. terminus, will be 42 hr. 40 min., elapsed time six or seven hours longer. Company will try to start the new service to China by early Spring.

Mail Pay Fixed

Orders fixing temporary overseas mail pay for Pan American Airways and American Overseas Airlines were issued by CAB last week.

For their trans-Atlantic routes, both AOA and Pan American will receive a temporary rate of 75 cents a mail ton mile on and after

Jan. 1, 1946. Temporary rate for PAA's Pacific operations on and after Nov. 16, 1945, was set at 85 cents a mail ton mile.

Delta Plans \$5,000,000 Expansion Program

Delta Air Lines has announced a two-year \$5,000,000 expansion program for new equipment, route extensions and new building facilities, through a credit plan in which 17 banks, 14 in the South, are participating. Repayment is to begin at the end of the two-year credit period and extend through five years at 2½ percent interest.

Delta carried 45,752 revenue passengers during November, 26,660 more than the same month a year ago, plus 272,238 lb. of air-mail and more than 250,000 lb. of air express. Air freight, inaugurated last August, has grown to more than 88,000 lb. monthly.

CAB Rate Stand

Further indication that CAB will establish a temporary mail rate pattern of 25 cents per revenue plane mile for new feederlines (AVIATION NEWS, July 22) is seen in a Board show cause order which contemplates fixing the 25-cent figure for Empire Air Lines, Lewiston, Ida. Empire had filed a petition Aug. 22 requesting a temporary rate of 39.04 cents per revenue mile pending determination of a final rate. The carrier started operations Sept. 28.

CAB Will Probe Mid-Air Collision of Transport

Attempt to fix responsibility for the midair collision of an Eastern Air Lines DC-4 and a Universal Airlines DC-3 near Aberdeen, Md., Dec. 19 will be made by CAB at a hearing Jan. 8 in New York.

Evidence will be presented to indicate whether the large gash ripped in the top of the DC-3's cockpit was from front to rear or vice versa, since this would establish whether the Eastern Airliner overran the DC-3, or, as EAL claimed, the planes met almost head-on. Universal, based at Miami, is a nonscheduled and contract operator.

Both planes were bound from New York to Miami, the DC-4 carrying 56 passengers and four crew members and the DC-3 carrying 21 passengers and a crew of three. After the collision, the more lightly-damaged Eastern plane landed at Washington, and the Universal plane at Aberdeen. There were no serious injuries.

National To Ask For Fare Increase

Sentiment for raising the current 4½-cents-a-mile airline passenger fare is slated to pass from the discussion stage to action this week when National Airlines asks CAB approval for a tariff instituting a 5-cent rate, effective February 1.

The increase is necessary, according to G. T. Baker, NAL president, in view of rising costs and wages and because of the Board's refusal to increase National's mail compensation several months ago. The half-cent-a-mile fare boost would yield NAL nearly \$100,000 additional income monthly based on recent gross revenue figures. In disclosing plans for a higher passenger fare, Baker also indicated that National may cancel orders for two of six Douglas DC-6s.

The National president had previously emphasized the difficulties in store for the domestic airlines during his testimony at CAB's hearing on Pan American Airways' domestic route application. Pointing to the current drive for exclusively cargo routes and the certification of new feederlines, he said it is doubtful whether NAL could function effectively in competition with specialists in feeder service, specialists in freight service and a specialist in terminal-to-terminal service (PAA).

C. Bedell Monroe, PCA president, told the CAB hearing that he still believes lowering of passenger fares to 4½ cents a mile in September, 1945, was a catastrophe. He said a combination of higher costs and lower fares have hit PCA

hard financially, adding that the carrier may reduce its Martin 202 order from 35 to 20.

The Pan American hearing was recessed Dec. 20 until Jan. 6.

Prosecute Remedy

Mothersills Airsick Remedy and its 35-yr.-old companion product, Mothersills Seasick Remedy, are being prosecuted in Federal Court in Los Angeles for misbranding. Seizure of a \$1,200 shipment of the drugs to a West Coast wholesale druggist was instituted by the Food and Drug Administration on the ground they are dangerous to the user when used as directed in the labeling.

TWA Meeting Postponed

Last week's meeting of TWA stockholders, which was to consider a request that stock authorization be increased from 1,000,000 to 3,000,000 shares, was postponed from Monday until Saturday because of lack of a quorum. Company sources reported that negotiations with RFC for a loan were still in the discussion stage.



PART OF 1,000:

This planeload of ewe lambs is one of four shipments carried by American Airlines' contract air cargo division from San Angelo to Guatemala City. The lambs weighed 60 lb. each and the DC-4 carried 260 on each flight.

Gander Airport Costs Split by Eight Airlines

Immediate cost of improvements at Gander Airport, Newfoundland, has been divided among eight participating airlines on a basis of trips a day at the field, amounts

being checked off against future rental charges.

Additional details on the joint terminal project pictured in AVIATION NEWS, Nov. 18 disclose how the carriers were separated into groups. Those in Class A, with at least one trip a day, agreed to pay twice as much as Class B lines with less than one a day.

Together the carriers contacted the Newfoundland government, and under arrangement therewith advanced the money for the new facilities. Two-thirds of the cost was assessed the airlines and the remainder was assumed by the government.

Since a hangar already in place lent itself to conversion as a terminal and nearby barracks were adaptable to development as hotel facilities, actual cost to the airlines was about \$150,000, though the value placed on the completed terminal is around \$3 million.

About 5 yrs. will elapse before rental charges will absorb the \$150,000 and the airlines have to pay full rental fees for use of the field.

PAA Hotel Chain

Pan American Airways has announced organization of a wholly-owned subsidiary, International Hotels Corp., to carry out a program of hotel construction and expansion primarily in Latin America. Chairman of the board of International Hotels Corp. is Lucius Boomer, who is also board chairman of the Waldorf-Astoria Corp. Wallace S. Whittaker, former GM executive, is president.

Norwegian Line Gets Landing Permit in U. S.

Norwegian Air Lines, Inc. (DNL), has been granted a foreign air carrier permit to operate between the co-terminal points Oslo and Stavanger, Norway; and the alternate terminals New York and Chicago via intermediate points in the United Kingdom, Eire, Iceland, the Azores, Labrador, Newfoundland and Quebec.

CAB's decision on the route application was made with presidential approval and was in accordance with the reciprocal provisions of the U. S.-Norwegian bilateral air transport agreement of Oct. 15, 1945. American Overseas Airlines was authorized to operate between the U. S. and Norway over similar routes last year.



FOR COLD WEATHER:

Among service features developed by Trans-Canada Air Lines to improve winter flying conditions is this plywood front cover, used to keep engines warm when aircraft are parked outside during cold weather. The attached sticks make installation and removal easy without ladders or special equipment.

Insurance Firms Urged To Promote Air Safety

Insurance companies which pay losses from airplane accidents must work to eliminate "unsafe practices" by the airlines, William H. Rodda, secretary of the Mutual Aircraft Conference, Chicago, said in a recent talk to the National Association of Mutual Insurance companies at Buffalo.

Declaring that "airlines described in Civil Aeronautics Board accidents reports as guilty of lax practices have been continuously insured," Rodda said the "tremendous power for improvement" that insurance companies can exert has not made itself felt sufficiently in the aviation industry.

"Some aircraft manufacturers have continued to build planes with features which may kill the pilot, even in a minor crackup," he asserted. "Insurance companies have accepted a bad loss ratio as something to be expected.

"Operation pilots and maintenance pilots are safety-minded. Top management is interested in volume and is sales-minded. When the unsafe aviation risk learns that it must pay the cost of its carelessness in higher premiums, it will clean house and make itself a good risk."



DOVE IN CENRAL AFRICA:

Central African Airways will use de Havilland Doves of the type shown above at Heathrow Airport, London, on its delivery flight to Salisbury, Southern Rhodesia. (Aeroplane photo.)

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Electronics

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SCR-269, MN-26Y
BC-357, BC-1206
BC-733D, BC-221

Auto Pilots

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Engines

1830-43
1830-65
1820-97
2600-13
2800-43
V1710-81
V1710-99
Rolls Royce

Starters
915-4F
JH3R
JH4ER
JH5F
E-80

Magnetos

SF14LU-7
SF14LU-8
SF14LC-7
SF14LC-8
SF9LU-3
SF9LU-7
SF9LU-8

Generators

O-1, P-1
M-2, M-4

Oxygen Eqp.

K1 Cylinder
A12 Reg.
A8 Reg.
G1 Bottles

Valves

3V216H, 217H 4K11-GOJ, 4K11-GOL

Carburetors

PD-12F2, PD-12F5
PD-12H2, PD-12K6
PT-13G1, PT-13G5
1900-CPB-3

Fuel Pumps

G-9, G-10
TFD-8100
TFD-8200
TFD-12000

Vacuum Pumps

3P211J
119626-610-2

Prop. Fthr. Pumps

54772-2, 280-BHC
54772-21

Alcohol Pumps

744-6A, 565-3
D-13382, 744-4
D-7818

Inverters

MG-149F, MG-153
MG-149H, MG-153F

Propellers

23E50-505/6477 AO
23E50-473/6353-18

Prop. Governors

4G8-G23G, 4G8-G-15

4K11-G1J, 4G8-G-13

3V216H, 217H 4K11-GOJ, 4K11-GOL

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Changes Authorized

U. S. air carriers abroad may change communications frequencies to match day-to-day changes by military and civil authorities, the Federal Communications Commission has ruled, without obtaining FCC's prior approval.

SHORTLINES

► American reports increased air export of this country's products on American, American Overseas and American Airlines de Mexico. The 68,000 lb. carried by AOA in November compared with less than 4,000 lb. in the same month a year ago.

► Capital Airlines (PCA) will supervise its operation for Air Transport Command (AVIATION NEWS, Dec. 23) through a new International Contract Division.

► Empire is moving its maintenance, communications and purchasing departments Jan. 1 from Lewiston, Idaho, to Boise, already the line's operations headquarters.

► Monarch is now part of the Railway Express Agency's air express system. Twenty-two Colorado, Utah and New Mexico cities are affected.

► Pan-American announces its fourth reduction since V-J Day in fares to

Latin America, effective Jan. 20. Sample cuts: New York to Rio de Janeiro, from \$472 to \$446; New York to Buenos Aires, \$547 to \$526. Saving to travelers during 1947 is estimated at \$2,500,000. . . . Company reports it has restored nearly all of its prewar routes and more than doubled schedules over most of them.

► TACA Miami maintenance facilities have been expanded to serve as major overhaul terminal for TACA's Central and South American companies and affiliates.

► TWA has applied no-show penalties on its international flights in line with International Air Transport Association recommendation. . . . Company reported the biggest pre-Christmas cargo flow in its history—about 40 tons daily aside from air-mail. . . . Pres. Jack Frye was awarded the Medal of Merit, Government's highest civilian award, for TWA's wartime operations.

► United estimates a 260 percent gain in freight and express ton miles flown in November over the same month last year.

CAB ACTION

The Civil Aeronautics Board:

The Civil Aeronautics Board:
• Granted Thomas E. Gordon (Orlando Airlines) temporary exemption to permit use of such aircraft and equipment of Florida Airways, Inc., as may be required to enable Orlando to conduct operations under its AM 75 feeder certificate.
• Granted Pan American Airways temporary exemption to permit service to Willemstad, Curacao, N.W.I., as an intermediate point on

its operation between Ciudad Trujillo, Dominican Republic and Caracas, Venezuela.
• Reopened for further hearing case involving Alaskan certificate application of Christensen Air Service.

CAB SCHEDULE

Jan. 6. Exchange of exhibits on CIA. Mexicana de Aviacion's foreign air carrier permit application. (Docket 1992.)

Jan. 6. Prehearing conference on route applications of Western Washington Airways, Alumni Island Stage Lines and Island Airways. (Dockets 1503, 1703 and 2368.)

Jan. 6. Resumption of hearings in airfreight case and Pan American domestic route case. (Dockets 810 et al. and 1803.)

Jan. 6. Exchange of exhibits in freight forwarder case. Postponed from Dec. 20. (Docket 681 et al.)

Jan. 6. Oral argument on proposed amendment to Section 292.1 of CAB's economic regulations.

Jan. 7. Hearing on BOAC's application to use MacArthur Field, Islip, L. I., N. Y., as co-terminal with LaGuardia Field on trans-Atlantic flights. Postponed from Dec. 19. (Docket 2674.)

Jan. 8. Prehearing conference on Mid-Continent's proposed service between Minot, N. D., and Regina, Saskatchewan. Postponed from Dec. 19. (Docket 628.)

Jan. 13. Exchange of exhibits in TWA-Delta equipment interchange agreement. (Docket 2346.)

Jan. 13. Oral agreement in Cincinnati-New York route case. Postponed from Dec. 9. (Docket 221 et al.)

Jan. 27. Hearing on Cia. Mexicana de Aviacion's foreign air carrier permit application. (Docket 1992.)

Feb. 3. Exchange of exhibits in case involving additional Florida area service. Postponed from Dec. 20. (Docket 1668 et al.)

Feb. 15. Exchange of exhibits in Caribbean-Atlantic Airlines' foreign route application. Postponed from Jan. 1. (Docket 2246.)

Feb. 17. Hearing in freight forwarder case. Postponed from Jan. 10. (Docket 681 et al.)

Feb. 18. Hearing on TWA-Delta equipment interchange agreement. (Docket 2346.)

Mar. 1. Hearing on Caribbean-Atlantic Airlines' application for foreign routes. Postponed from Jan. 15. (Docket 2346.)

Mar. 10. Hearing in case involving additional Florida area service. Postponed from Jan. 20. (Docket 1668 et al.)

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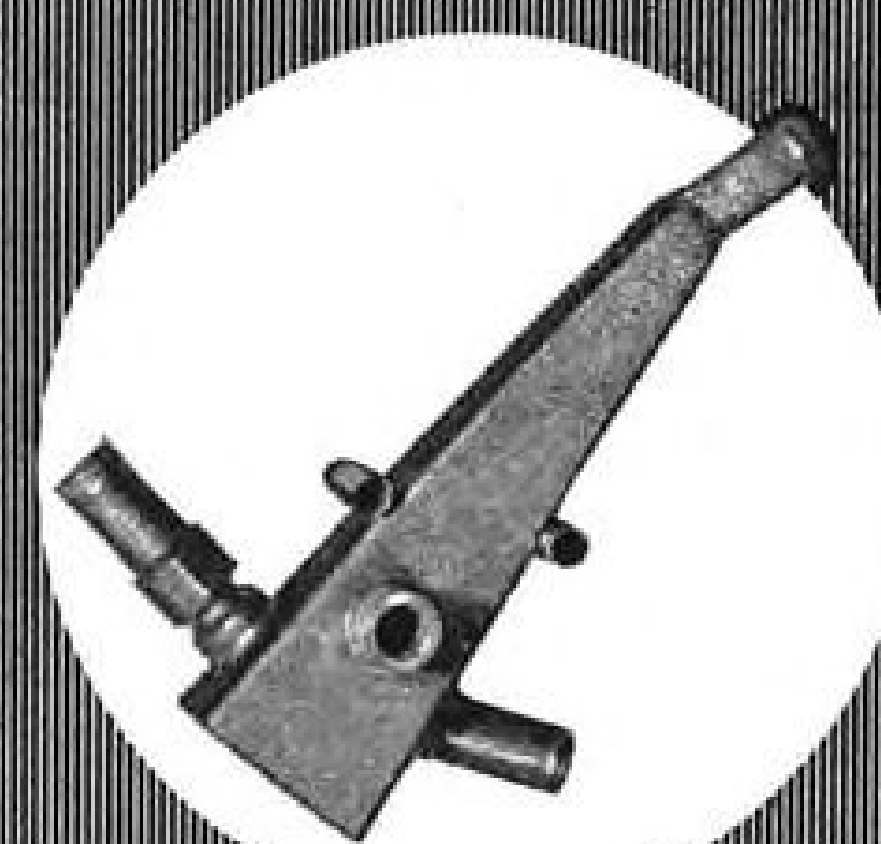


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A Weak Appointment

Aviation must be perpetually alert to combat bad political appointments affecting it in government. We have all been asleep since President Truman nominated John Nicholas Brown as Assistant Secretary of the Navy for Air. Regardless of other qualities he may possess, Mr. Brown is inexperienced and unknown in aviation. He does have some reputation as a philanthropist, however, according to the Aviation Writers Association newsletter, which reports on his past role as a Democratic campaign contributor.

In business, he was formerly vice-president and chairman of the Lonsdale Co., textile manufacturer; later he was president of Brown Land Co., real estate firm. Then he served on the federal advisory board of Public Works Administration. He is a past chairman of Rhode Island Planning Board, was on the state port authority and state civil service commission. His only contact with aviation apparently was during his port authority assignment.

During World War II, the global air war, he was sent to Europe by the War Department as chief of the monuments, Fine Arts and Archives Division of the U. S. Group, Allied Control Council, Germany, with the assimilated rank of colonel. He served in England, France, Italy and Germany, in the latter country as cultural advisor to the U. S. Military Governor.

This is the nomination of the President of the United States for the top civilian aviation job in our Navy Department. We hope that Capitol Hill does not confirm it.

Helicopter Council Is Needed

Aggressive cooperative action by the Aircraft Industries Association's newly organized Helicopter Council will accelerate this baby industry's proper development, especially in the vital, but still misty, realm of regulations. For once we have an industrial group forming a solid front in its earliest commercial days to promote and guide the Government in promulgating standards. For once it may be possible to gear regulations to technical developments in the art, as they unfold, rather than allowing mushroom growth of over-regulation which retards or stifles healthy improvements in product. The CAA and its technical staff responsible for protecting the public by defining necessary regulations doubtless welcome the new association and the opportunity it presents to deal with a group which speaks and acts for all its members. Organization of the Council is a timely example of forward thinking in a field which holds tremendous possibilities for public service.

Education Does Pay Off

Some of aviation's so-called hard-headed business men have had a tendency to sniff at air education as another one of those fluffy causes which might demand a financial handout sometime.

Last week Kenneth E. Newland, who heads Stephens College's progressive aviation courses, had some concrete evidence for hard-headed business men. "Do the airlines get any return from air age education?" he telegraphed. He supplied his own answer:

"Five hundred Stephens College students used the airlines yesterday to reach their homes for the Christmas holidays."

Red Tape Can be Slashed

We haven't inspected the site recently, but by this time the mountain of Washington red tape under Gael Sullivan's window must almost reach his fifth floor office. He has been throwing it out furiously ever since he took office Oct. 1, 1945, as second assistant postmaster general. This is remarkable in Washington. It's remarkable in the conservative Post Office Department. And especially in the second assistant postmaster general's office where so little happened for so long.

Mr. Sullivan is still at it. In January the Post Office will start its most extensive helicopter mail service test, in the New York City region. Other precedent-setting tests near Los Angeles and Chicago were highly successful—for the public, aviation, and government. They inspired numerous applications for regular short-hop helicopter mail service, they have increased public confidence in the helicopter, and they have accelerated beginning of certificated operations by at least a year.

Mr. Sullivan has been praised on this page before. This fact does not mean that we feel everything he has done is perfect. But his batting average is phenomenal. Despite what some of our friends at CAA say, it's more satisfying to congratulate a doer than to raise a rumpus with those who are so frequently overcome with their own inertia. He has shown that a bureau chief can accomplish things in Washington.

Evidence that the airlines appreciate Gael Sullivan's abilities is their definite offer that he head up their reactivated Air Cargo, Inc. Mr. Sullivan has also received a railroad industry bid, which he will surely turn down. Despite his value to the airlines as mainspring of the air cargo organization, we feel he is needed by all aviation for a while longer in the Post Office Department to complete his program there.

ROBERT H. WOOD.

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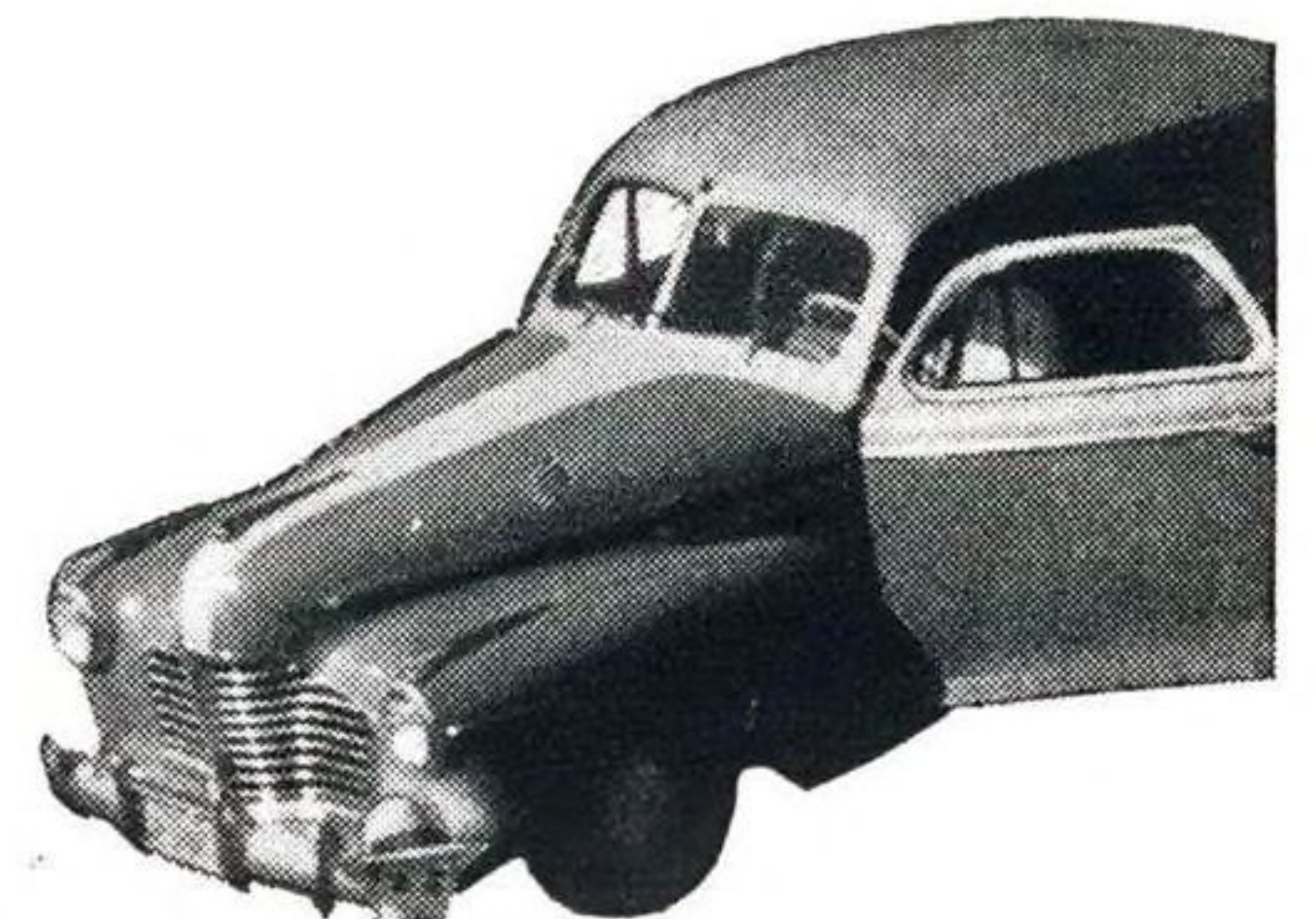
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