

Aviation News

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OCT. 28, 1946

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From Planes to Picket Line: Symbol of last week's walkout of TWA pilots, who want fatter pay envelopes for four-engine operation, is this little group of Air Line Pilot Association members, trudging in methodical circles before the airline's maintenance hangars at Kansas City. Picture was taken the first day of the strike. Next morning the nattily-uniformed pickets failed to reappear, and shop workers and maintenance men who had refused to cross the line were back at work. See story on page 7. (Press Assn. Photo)



American Airlines DC-4's

The 3000 psi hydraulic system of the DC-4's operated by American Airlines has the Vickers Units shown below.

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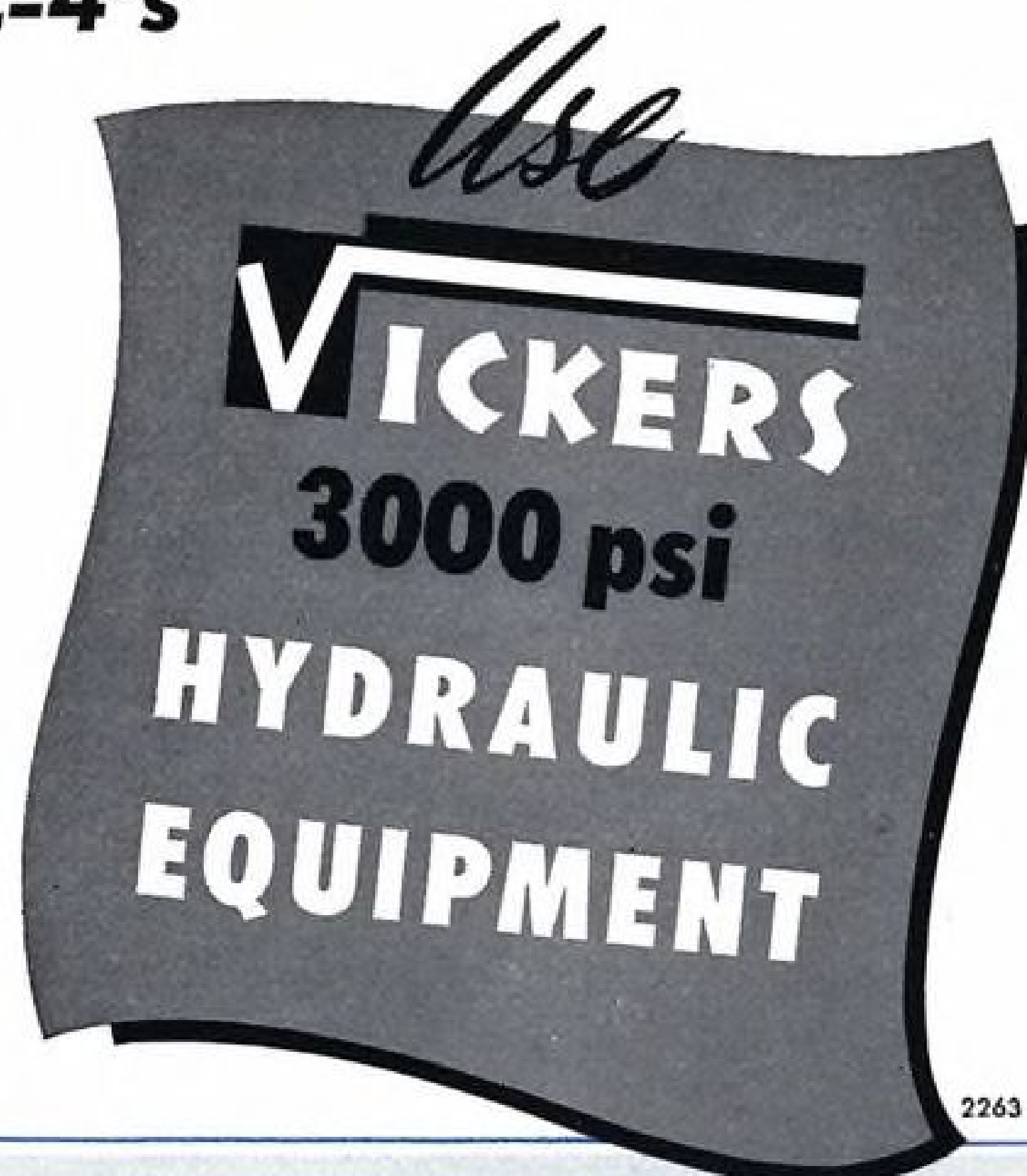
The 7 1/2" Vickers 3000 psi Accumulators assure maximum safety because of their forged construction. Other important features are large capacity and light weight.

The Vickers Motorpump serves as an additional hydraulic power source for operation of the hydraulic system in emergencies. The pilot is then able to give undivided attention to flight maneuvers under emergency conditions.

Vickers Bulletin 45-41 gives additional information about the most complete line of 3000 psi hydraulic equipment for aircraft.

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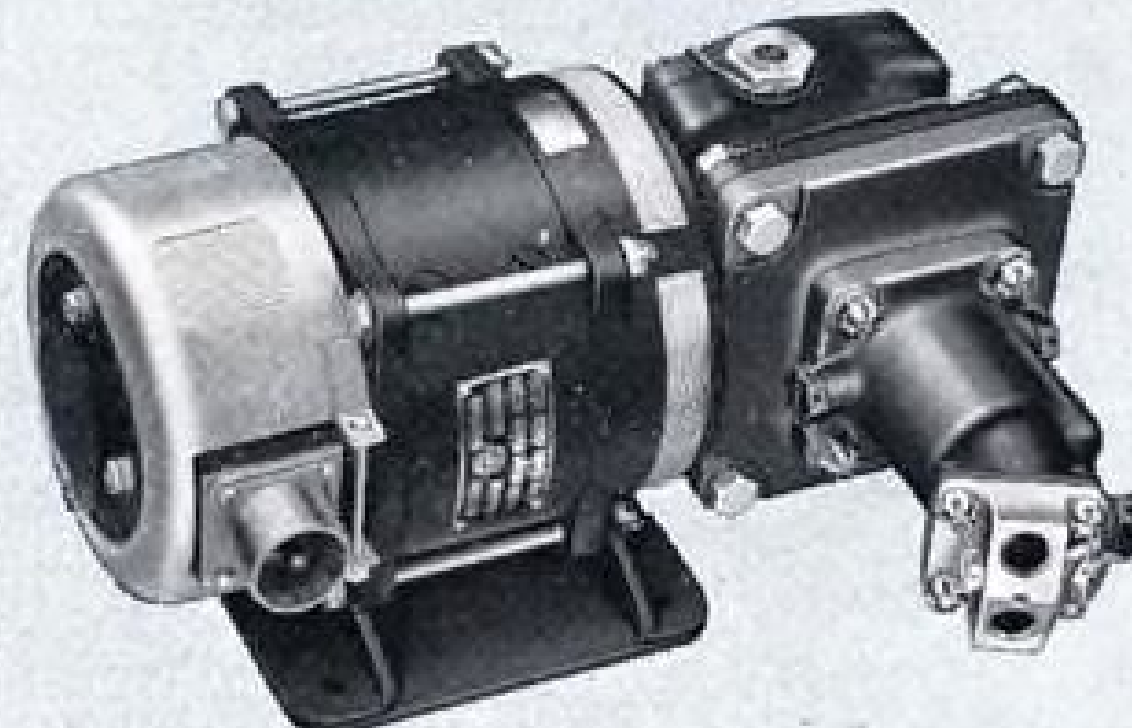
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Vickers 3000 psi
Accumulator



Vickers 3000 psi Constant
Displacement Piston Type Pump



Vickers Motorpump for maximum
operating pressure of 3000 psi

THE AVIATION NEWS

Washington Observer



PAA'S DOMESTIC BUILD-UP—Pan American's national ads promising five-hour transcontinental non-stop service next year with new Republic Rainbows won the public's attention. But PAA dwelt little on the fact that it doesn't have the routes. The copy made no friends for PAA at CAB. Actually, CAB "asked" PAA to tone down its series after appearance of the first insertion. CAB feels it has been put on the spot. In the past such strategy on the part of a brash carrier has been followed frequently by adverse decisions.

WHAT WILL JUSTICE DO?—Assistant Attorney General Berge and other Anti-Trusts are pondering: Are they obligated to intercede on PAA's behalf in its domestic route case? Juan Trippe's Washington operatives point out quietly, and with some satisfaction, that the department in its report to Congress on international aviation recommended domestic routes for Pan American if domestic companies were given international routes. Although PAA has asked Justice to follow through, Berge informs *Aviation News* he doubts if the department will.

WHAT IS AN AIRLINE?—The certificated carriers are fuming over the advertising campaign of nonscheduled services. As CAB Chairman Landis pointed out at the National Aviation Clinic, uncertificated operators are not airlines, in the eyes of CAB, sole certificating agency. How is the public to be told the difference, so they can understand it? ATA President Emory Land suggests that each certificated airline president write letters to the editors of all newspapers along their routes, emphasizing how nonscheduled and scheduled companies differ.

BILLION DOLLARS A YEAR—Under-Secretary of State Clayton's forecast that within a few years Americans will be spending a billion and a half dollars annually on travel abroad added flames to the steamship lines' passion for air transportation. It was hardly two years ago that steamship executives were telling newsmen that they had nothing to fear from the infant air transport industry. What they and the railroads now fail to realize is that the issue would never have arisen if they had already been in air transportation when the Civil Aeronautics Act went into effect.

UNIFICATION WINS AT CLINIC—The resolution favoring unification of the armed services adopted at the National Aviation Clinic had its special interest for insiders. Some weeks before the Clinic, Assistant

Secretary of War for Air, W. Stuart Symington, was invited to appear as a speaker. He accepted on condition that he could choose his own subject—unification. Clinic authorities hastily back-tracked on the somewhat surprising theory that controversial questions should not come up on the program. Symington did not appear, but the resolution was duly presented to the Clinic by the official resolutions committee and went through.

RESEARCH BOARD SURPRISE—Army and Navy, which are financing or are concerned in most Government-sponsored research, were surprised by formation of the Presidential Research Board, headed by John R. Steelman, director of the Office of War Mobilization and Reconversion. The services were not advised in advance, although both—as well as NACA—are represented on the Board. The Board is not an executive substitute for the National Science Foundation which was proposed and defeated last session, but it will study the need for coordination in contract letting so that industrial research facilities and personnel can be used to best advantage.

SHOW POLICY STILL JELLING—The solid-sounding announcement that the Aeronautical Show Council (composed of most private and Government bodies in aviation) has adopted a policy on air shows, meets, races, and exhibitions actually means little. In essence, the "policy" adopted was the decision to permit a three-man committee to establish standards and rules for encouraging and participating in shows. These rules will comprise the policy. Committee is William P. MacCracken, general counsel of the National Aeronautic Association; John E. P. Morgan, executive director, Aircraft Industries Association, and Lowell H. Swenson, executive vice-president, NAA.

MR. ARNOLD WARNS THE AIRLINES—ATA's vice-president for operations, Milton W. Arnold, has told the airlines they are short-sighted in their unwillingness to schedule regular flights into a third New York terminal—Floyd Bennett Airport—to ease congestion in the area this winter. Traffic executives apparently still underestimate the crucial problems they will meet during instrument conditions, with this year's unprecedented traffic. An additional limousine ride of 15 minutes for passengers should be preferred over cancellation of from 10 to 50 percent more flights than at present, Arnold says. Furthermore, if the industry fails to make this sacrifice, it must take the consequences of any restrictions ordered by CAA.



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THE STAFF

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DR. J. C. HUNSAKER.....Editorial Consultant

Editorial Offices
National Press Bldg., Washington 4, D. C.
Publication and Executive Offices
330 W. 42nd St., New York 18, N. Y.

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News Digest

DOMESTIC

CAA will open 44 new district offices to administer the federal airport program.

Curtiss-Wright Corp.'s airplane division at Columbus has been awarded subcontracts totaling nearly \$6,000,000 by Republic Aviation for major assemblies and parts for P-84 fighters and Rainbow transports.

Sherman M. Fairchild has resigned as chairman of the board of the Fairchild Engine and Airplane Corp. He indicated he had no immediate plans for other activity in the aircraft industry.

Brig. Gen. Marvin E. Gross, commandant of the AAF Institute of Technology was killed in the crash of his P-80 jet fighter near Brooksville, Ky.

RCAF Wing Commander K. C. Maclure was awarded the Col. Thomas Thurlow navigation award by the Institute of Navigation for his work on polar navigation.

Navy has awarded Bendix Radio Division a contract to produce a minimum of 26 ground control approach systems and other auxiliary equipment.

Victorville, Calif., Army Air Field Auxiliary No. 3 has been sold to the Briegleb Aircraft Co., Van Nuys, Calif., for \$12,000 by WAA.

FINANCIAL

Foreign Liquidation Commission reports sales of surplus aircraft and parts overseas for August of \$5,011,406 on stocks originally purchased for \$42,747,569. Included were 303 aircraft. Total FLC sales as of Aug. 31 were \$42,357,014 of stocks; original cost: \$241,781,196.

Northrop Aircraft Inc. reported a consolidated net loss of \$25,261 for the year ended July 31, 1946, in contrast to a net income of \$747,501 for 1945.

Fairchild Aircraft Ltd. of Montreal reported a net loss of \$613,507 for the year ending June 30, 1946, against a net profit for 1945 of \$165,033.

FOREIGN

Establishment of an interim Royal Australian Air Force of 15,000 men has been approved by the Australian Parliament. This force will be charged with maintaining an occupation force in Japan and providing an air transport service between Japan and Australia.



► AAF orders for the B-50 have stimulated a new Boeing employment upswing that will add 5,000 new workers in the next six months and bring total company employment to 16,000.

► NACA is currently operating 11 supersonic wind tunnels in its all out research attack on the problems of supersonic flight by guided missiles and piloted aircraft.

► CAA is looking for testing engineers with jet experience with an eye to the day when a jet transport category will have to be included in Civil Air Regulations. CAA test pilots are already getting jet experience in AAF and Navy planes.

► RAF Group Captain Frank Whittle reporting in Britain on his American lecture tour, said American jet engines are currently about two years behind British models in basic developments but overhaul periods were amazingly lower (50 hours for American jets compared to 270 for British engines).

► AAF and Navy accepted 135 planes in September compared with 130 in August. Airframe weight was 1,019,000 lb. against 718,000 lb. in August. The following planes were accepted: (Navy) 2 Martin PBM-5E; 1 Lockheed P2V-1; 3 Douglas BT2D-1; 5 Grumman F7F-4N; 20 Chance Vought F4U-4B; 1 Chance Vought 4FU-4P; 21 Grumman F8F-1; 5 Grumman F8F-1B; 4 Grumman F8F-1N; 1 Curtiss Sc-2; (Army) 30 Lockheed P-80A; 27 Lockheed FP-80A; 4 Northrop F15A; 2 Douglas C74; 7 Fairchild C-82A and 2 Sikorsky R-5D.

► Sir Geoffrey deHavilland has indicated that the death of his son while testing a swallow-winged DH-108 will not interfere with further development of the plane which is a flying test model of a jet propelled airliner to be built by deHavilland.

► American Airlines will make test of Jato assisted take-offs on its DC-4 cargo liners with an eye toward bigger payloads. American particularly wants to use Jato to get off the mile high mountain ringed field at Mexico City. For \$500 (the cost of four Jato units) payloads could be increased 7,000 lb. giving the plane a gross of 73,000 lb.

► Uncertificated cargo carriers are placing some of the blame for the rate war in the air freight business at the door of American Airlines Contract Air Cargo which early in June announced an 11 cent a ton-mile rate. The nonscheds had to come down to that rate or lose their customers. Now traffic trends lead them to believe that American has secretly raised its rates leaving them to hold the bag with an unprofitable 11 cent rate. Under CAB economic regulation air freight rate wars would be impossible.

► Helicopter Air Transport Inc. of Philadelphia has taken on a job transporting Gubernatorial Candidate Alfred E. Driscoll and Republican Senator H. Alexander Smith on their New Jersey election campaign in a chartered helicopter.

► Chicago & Southern Airlines has asked the CAB for a temporary mail pay of \$1.73 an airplane mile for the New Orleans-Havana segment of its Caribbean run from Houston and New Orleans to San Juan and Caracas.

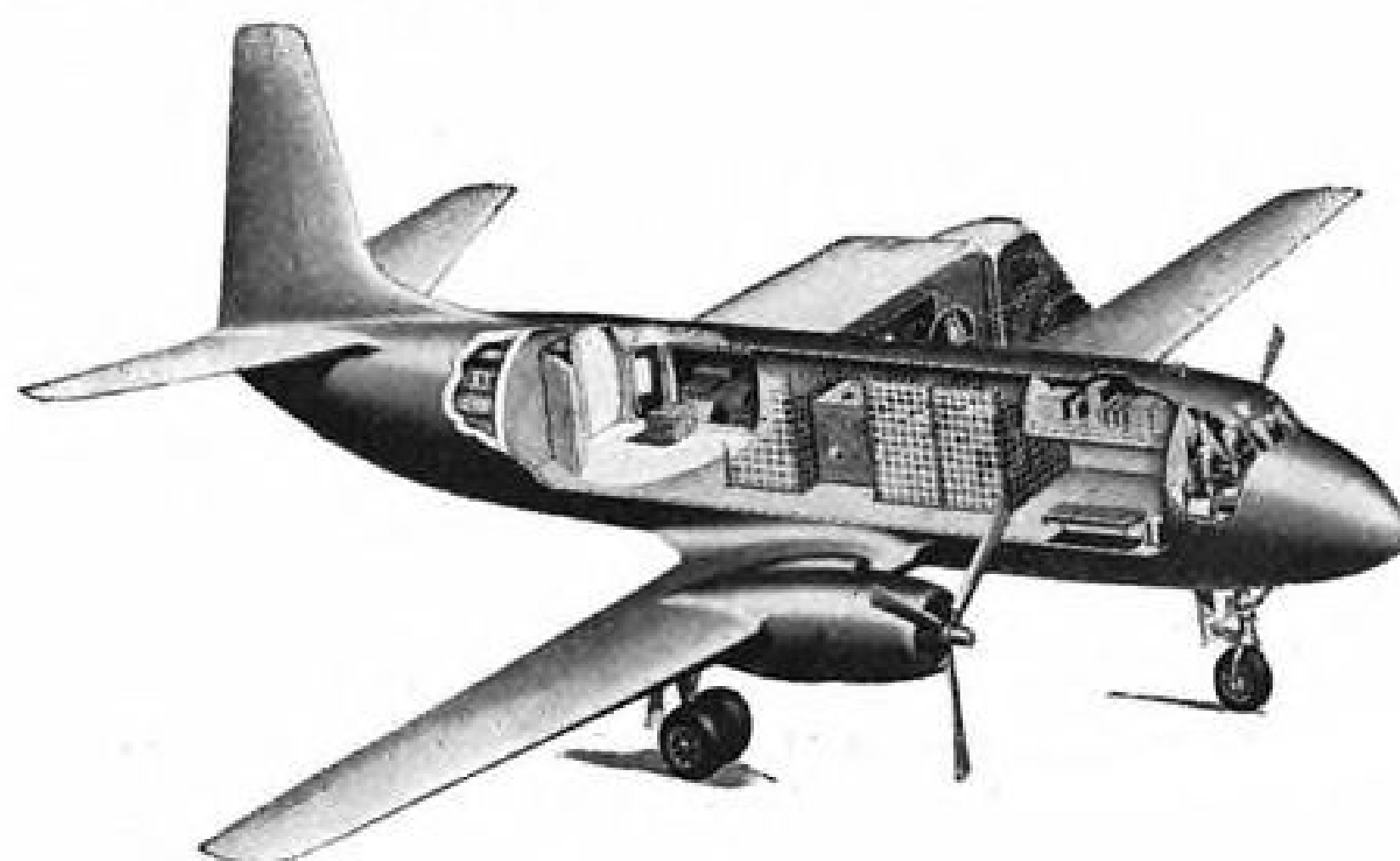
► John Geisse, former CAA personal flying consultant, hopes to have his projected rent-a-plane service in operation by next spring. It will be started on a small regional basis in the east to work out development problems before expanding on a national scale.



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TWA Pilot Strike Forecasts Wage Pattern For Airlines

Carrier estimates weekly loss at \$2,000,000 as dispute forces layoff of 15,000 ground employees; ALPA extends demands to American Airlines on DC-3 flights.

By BLAINE STUBBLEFIELD

Whatever increases may be gained by pilots in their \$2 million-a-week strike against Trans-World Airlines will be used as a yardstick by Air Line Pilots Association in demands practically across the airline system board.

Negotiations already begun by American Airlines and ALPA before the National (Railway) Mediation Board are the second phase of the pilots' pay campaign, including a demand for a 30 percent hike on DC-3 flying pay. ALPA hopes the other operators, observing the grim shutdown of TWA, will come across without a strike. **▶TWA Bears Brunt.** Thus TWA is bearing the brunt of ALPA's push on the whole system. Jack Frye, TWA president, said the company cannot meet the union pay demands out of profits, because it has none. This means the company is vulnerable to strike action. Statisticians are working on an accurate count of strike cost, following unofficial estimates of \$2 million per week.

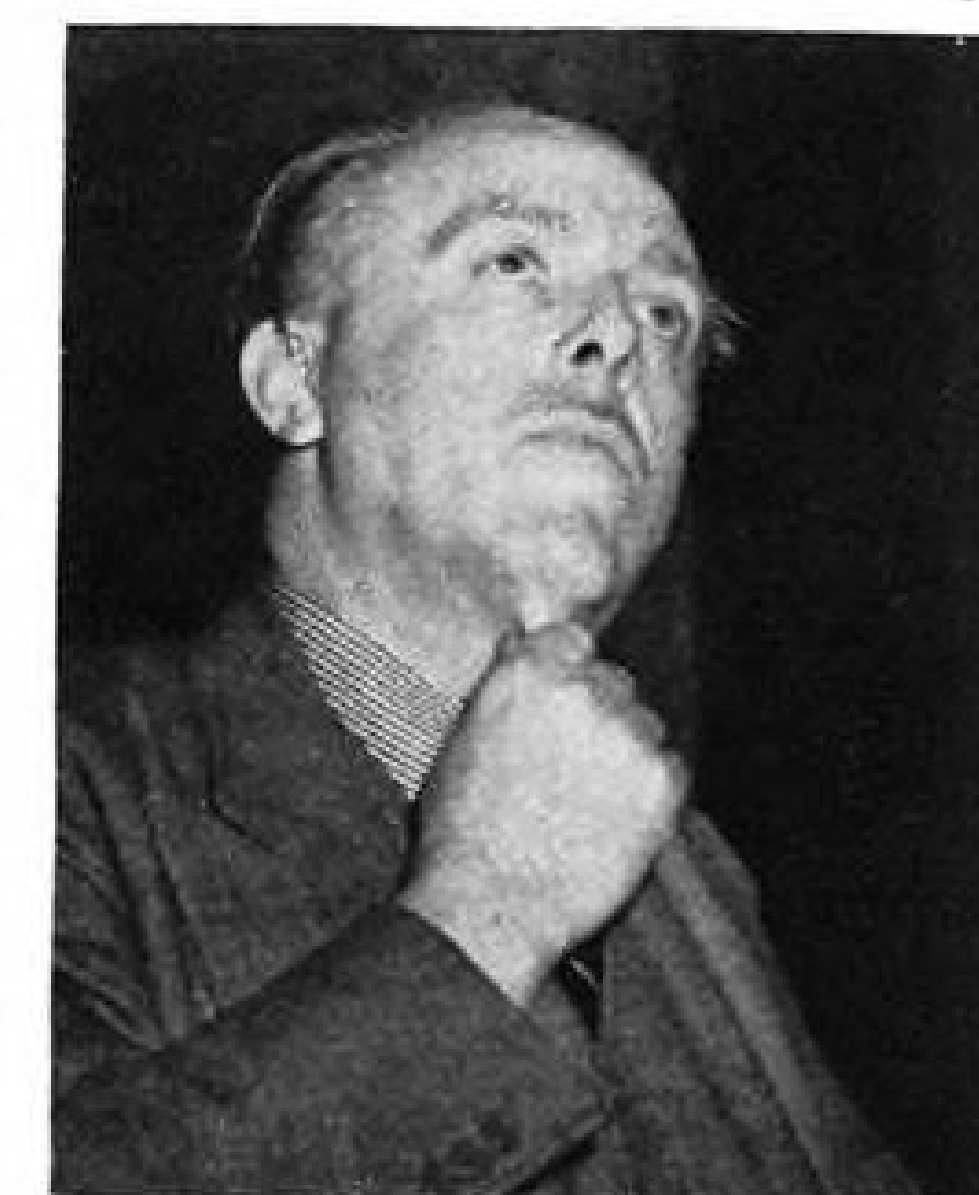
CAB attorneys had no precedent for opinion. But the Board will have to decide eventually whether the Government is responsible for TWA's strike losses. A certificate of convenience and necessity is in effect a guarantee against financial failure of a route operation, and one way or another the taxpayers will foot the bill.

Frye said he could not meet the pilots' pay demands except with more revenue. The obvious source of such additional income would be mail, on which rates are set by CAB. TWA would not raise passenger and cargo rates unless other airlines did.

▶CAB Hands Off. CAB and CAA,

after a hasty huddle, announced they had no legal authority to interfere in the strike. CAB can influence pilot pay and other airline cost items on a long-term basis, in connection with rate cases. But inflated costs, and forced costs as in strikes, cannot be charged to imprudent management.

Resumption of TWA-ALPA negotiation under auspices of the National (Railway) Mediation Board, as recommended by the White House, held little promise, not only because it is repetitious, but because Board members repeatedly expressed irritation with ALPA during the year-long effort at settlement. Failure of mediation finally led to appointment by President Truman of an emergency



Behncke Ponders: David L. Behncke, president of the Air Line Pilots Association, as he paused for questions at ALPA's Chicago headquarters after his announcement of the union's strike against TWA.

board, whose findings were accepted and put into effect by TWA. But because ALPA rejected the recommendation, it has no legal standing.

Though Frye in effect has asked that his airline be seized and operated by the Government, such action seems unlikely. The shutdown is a staggering blow to TWA, on top of its heavy expenditures on Constellations and their later grounding, but it is not a national emergency. Furthermore, the Administration has loosened its grip on the wage-price line, and is not disposed to interfere in any more strikes.

After three strike-grounded days Frye announced the immediate furlough without pay of 15,000 TWA employees in 23 states and 15 countries. He said that, with the company's income cut off, it could not afford to continue the enormous wage expense. The payless multitude immediately began raising political pressure against ALPA.

Frye said he and his staff were working 24 hrs. a day to end the strike either by Government seizure or negotiation, and again invited the union to "sit down and discuss our problem sanely."

▶Claims Vary. Facts and figures of the opposing camps varied widely during more than a year of controversy over 4-engine pilot pay. TWA says it put the Emergency Board's recommended wage into effect on August 8, and though Behncke was invited after that to confer, no more was heard from him till October 19, when he walked into Frye's Washington office and demanded an answer to an ultimatum.

Frye said Behncke's proposal, if complied with, would leave several matters still unsettled, and he was compelled to refuse, with the result that his fleet of 100 planes, on 28,270 miles of airways from California to Arabia, were grounded as 1400 pilots walked away, leaving themselves and hundreds of passengers stranded. Only 400 4-engine pilots' pay rates are at issue in this strike.

Behncke says he has traveled every avenue of mediation, that a strike was the only means of meeting TWA's "procrastinating tactics." He says he rejected the Emergency Board's recommendation because it amounted to an alleged pay slash as high as 24.7 percent for some pilots, and was 12.1 percent less than the company had already offered.

ALPA says it wants \$980.31 per month for first year captains, and \$1,096.98 per month for most senior pilots on Skymasters. On Constellations the equivalent demands are \$1070.76 and \$1187.43. TWA says that union demands, figured on 77 flying hours per month, half day and half night, for men of top seniority, are \$13,163 per year on Skymasters and \$14,249 on Constellations. Present pay, in accordance with the Board's recommendations, is \$10,230 and \$11,015 respectively. Previous pay was \$9,745 and \$10,114 respectively, all with variations for overseas. Frye said present pay for co-pilots is 36 percent above previous rates.

Ex-Service Pilots Offer to Man Planes

TWA expressed immediate interest in a proposal by the Military Pilots Association that its members break the ALPA strike by manning TWA planes. MPA was organized several months ago from Army and Navy air force pilot veterans to battle ALPA on seniority rights for ex-service pilots on the airlines.

MPA said it could supply TWA's needs for DC-3 and DC-4 pilots immediately with 5 to 10 hours' checkout time per pilot required for Constellations. A long term contract was offered at terms suggested as \$1,200 a month for first pilots on foreign runs and \$1,000 a month on domestic runs. Co-pilot pay would be \$350 a month for foreign duty and \$300 a month for domestic. MPA spokesman emphasized that these terms were merely suggestions and not definite commitments.

Only hitch in the MPA proposal would be that CAA would have to recognize green instrument cards for airline operations temporarily since not enough MPA pilots have airline pilot ratings. MPA spokesmen emphasized that Army and Navy qualifications for green instrument cards were comparable

to flight tests and route checks for the airline ratings and pointed out that the bulk of its membership were former Air Transport Command and Naval Air Transport Service pilots with world wide route experience.

MPA spokesmen said that in order to get enough pilots to fill TWA's demands a long term contract would be necessary since its members would not want to risk their present careers for short term settlement of a wage dispute.

MPA has been at odds with ALPA over alleged discrimination against ex-service pilots on the airlines due to the ALPA-imposed seniority system. MPA has a membership of 5,000 pilots at dues of \$5 a year compared with ALPA's annual dues of \$100 for first pilots and \$25 for co-pilots.

CAB Crack-Down Hits Five Carriers

CAB cracked down on five of the country's most important uncertificated carriers last week in a move expected to shake the foundations of nonscheduled air transport.

Airlines told by the Board to show cause why they should not be ordered to "cease engaging in scheduled air transportation in violation of sections 401 (A) and 610 (A) (4) of the Civil Aeronautics Act" are: American Air Export and Import Co., Miami Springs, Fla.; Caribe Airways, Miami; Trans-Caribbean Air Cargo Lines, New York; Trans-Luxury Airlines, New York; and Texas Air Lines, Houston.

All carry persons and property, and, except for Texas, which operates scheduled intrastate service, all have been flying interstate and outside the continental limits.

The carriers cited will be given a public hearing before a CAB examiner.

National Airmail Drive is Launched

National Airmail Week, launched yesterday by presidential proclamation, is another high spot in the campaign by the airlines and the Post Office to sell the public on the greater use of this type of service.

The department has printed and issued a postmaster's manual on 5-cent airmail promotion and the

airlines, cooperating with it, have placed advertisements in 1,562 daily papers in 1,391 cities and towns, with total circulation of 51,000,000. In addition, some 100,000 business mail users are being contacted through a direct airmail program.

Air Transport Association and representatives of individual airlines in more than 400 municipalities also are furthering the cause.

Scattered airline reports on results of the early days of the new nickel domestic rate, effective Oct. 1, are optimistic. Western said its airmail volume had increased 100 percent over already record loadings. Northwest officials forecast that the line's mail loads will increase 50 percent in the next three months and 100 percent in six months. United's airmail volume increased 6 percent from 139,324 ton-miles during the last week of 8-cent postage to 147,996 for the first week of the new rate.

Second Assistant Postmaster General Gael Sullivan looks for the ratio of non-local letters sent by air to increase from last year's one out of 15 to one out of three a year from now, and predicts that by 1948, 3,000 commercial planes will be needed to carry the mail, about four times as many as at present.

Pan American will dramatize reductions being made in the foreign field Nov. 1 with a public test of the new 10 cents a half ounce rate to Latin America. The public was invited to send a letter with 10 cents postage affixed to "Pan American World Airways system, airmail test" at the capital city of any of 28 Latin American capitals, where PAA offices will return the letter airmail, postage paid and stamped with the date of receipt, to the sender whose name and address are shown on the envelope.

August Production Jumped 39 Percent to 4,790

Deliveries of completed aircraft in August totaled 4,790 valued at \$22,403,502, the Census Bureau reports. Of that, military planes numbered 107, valued at \$9,738,385. Total August shipments increased 39 percent over July, although value increased only 7%.

Backlog on Aug. 31 was 49,604, a decrease of 3 percent during the month, although dollar value of the backlog, \$1,121,016,501, was slightly over the July 31 figure of \$1,120,408,218.

Surplus Connies

Army Air Forces has cleared its remaining 10 Lockheed Constellations (C-69) surplus and turned them over to War Assets Administration.

WAA spokesmen indicated the planes would probably be placed on priority sale and estimated it would cost \$400,000 to convert them for civil use.

Gen. Carl Spaatz, AAF commander, said the AAF was getting rid of the Connies as an economy measure because acquisition of stock of spares and modification to meet present Connie safety standards would be too expensive. The 10 surplus planes were the first to come off the Lockheed line and have been in service with the ATC for over a year.

Kochel Wind Tunnels Are Rebuilt by Navy

White Oak Md. ordnance laboratory gets vacuum powered supersonic tunnels from Germany.

Germany's most famous set of wind tunnels, the birthplace of the V-2 rocket bombs, have been dismantled, shipped to this country and are now being reassembled by the Navy at its White Oak, Md. ordnance laboratory.

The three tunnels, originally at Peenemunde and later moved to Kochel in Bavaria, are being studied closely by U.S. engineers more because they illustrate again the excellent results German scientists were able to achieve by "ersatz," than because there is much to be learned from them.

Although the tunnels have speeds of up to Mach number 4.4 (about 3,300 mph.), equal to the performance of the best tunnels in this country, their overall performance is not as high and because of the method of construction and operation, tests of long duration cannot be made.

Differences Listed—Main difference between U. S. tunnels and the Kochel tunnels is that the former are "blow-down" types wherein air is pushed down the tunnels at terrific speed by great force. This requires a tremendous power source. Lacking the power available in this country, Germany utilized the principal of air rushing into a vacuum to get great speeds in the Kochel tunnels.

Central object in the Kochel nest is a giant sphere 52 ft. in diameter which is pumped free of air. When valves are opened between the tunnels and the sphere, air rushes in and thus provides the means to get wind tunnel observations. While operation of this "suck-in" type of tunnel is far cheaper than utilization of a blow-down tunnel, observations of test sections must be made quickly and then interrupted for a lengthy period of time while the sphere is pumped free of air.

Intermittent Operation—Two of the tunnels are intermittent in operation, with a quick-acting valve beyond the test section permitting rapid closing once desired readings are taken. In this way, pressure in the sphere is kept low enough to assure supersonic flow for a number of short intervals. Test sections of both of these tunnels measure about 15 3/4 in. square.

The third tunnel has a test section about seven in. square and is continuous in operation until the

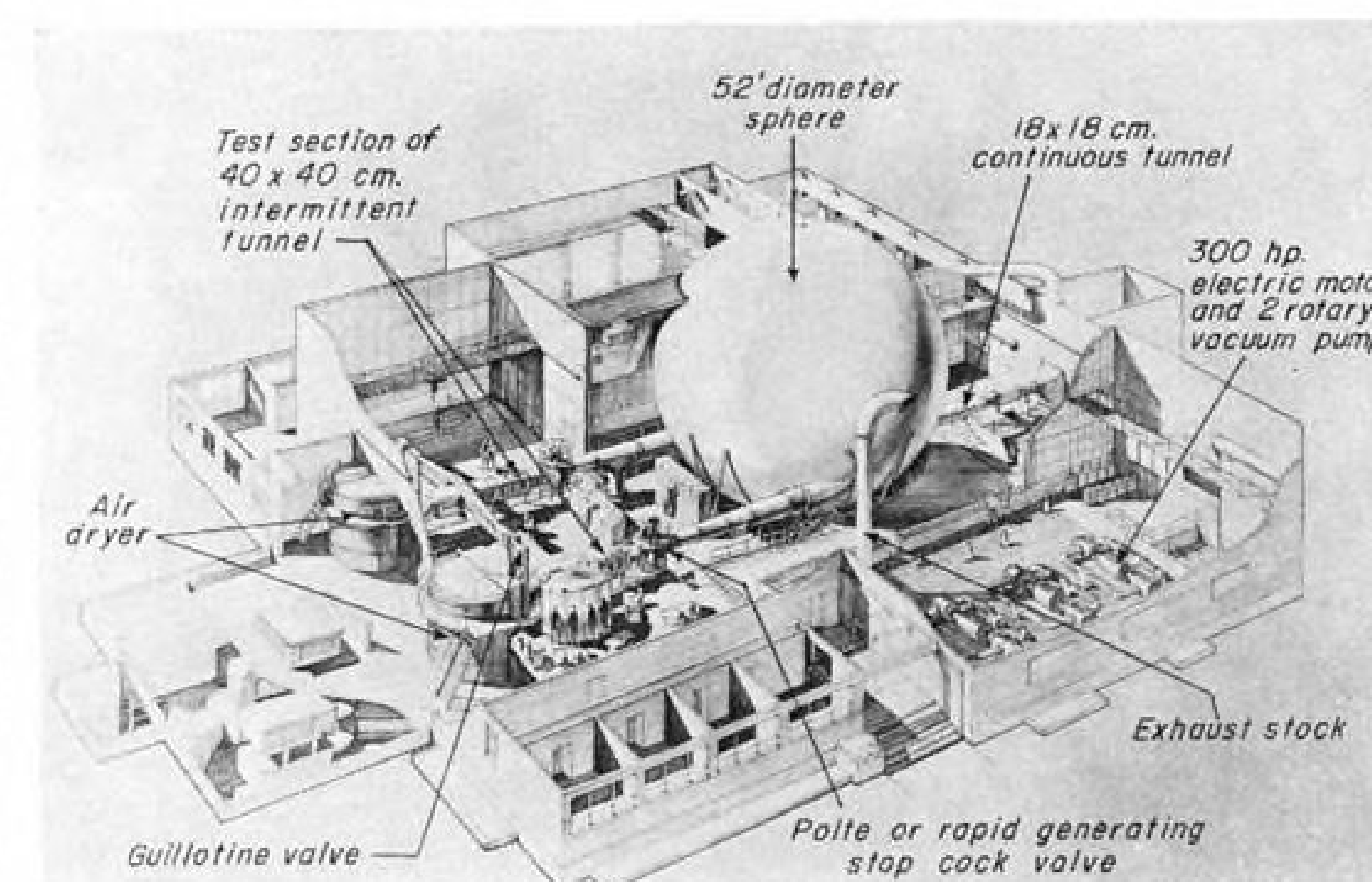
sphere is filled. Continuous operation is possible because of the smaller size of the tunnel.

All of the most efficient German aerodynamic and ballistic devices were tested in the Kochel tunnels which were manned by the best scientists in that country. Nine of these key German staff men have been brought to this country and are assisting in the reconstruction of the tunnels which are expected to be in operation next year.

Sherman Gets Post With New Air Group

John Sherman, formerly assistant director of the economic bureau of CAB, has been appointed executive secretary of the reorganized Air Coordinating Committee (AVIATION NEWS, Sept. 30). Myron A. Tracy, former working secretary of the old ACC, will be assistant executive secretary of the new group.

Members of ACC, in addition to



Navy's Transplanted Wind Tunnels: Now being installed at the Naval Ordnance Laboratory, White Oak, Md., is this nest of three German wind tunnels which was originally erected at Peenemunde, later moved to Kochel, Bavaria, and was dismantled to be brought to this country. Key item is the mammoth 52 ft. diameter sphere in which is created a vacuum into which air flows from the tunnels. In these tunnels V-2 models were tested as well as models of many other German projectiles, some of which are shown in the other photo. (Navy photos)

co-chairman Will Clayton, under-secretary of state and James M. Landis, CAB chairman, are: William A. M. Burden, Assistant Secretary of Commerce for Air, who will be vice-chairman; W. Stuart Symington, Assistant Secretary of War for Air; Gael Sullivan, Second Assistant Postmaster General; John L. Sullivan, Undersecretary of the Navy. Budget Bureau, which has non-voting status in the committee, is represented by Paul T. David.

Invitations to join the Aviation Industry Advisory Panel, an innovation with the reconstituted ACC, have been extended to the Institute of the Aeronautical Sciences, Aircraft Industries Association, Air Transport Association, CIO, A. F. of L., and National Aeronautic Association. Later, the committee will invite representatives from education, nonscheduled flying and other segments of aviation.

Three divisions have been established within ACC. A technical division will have subcommittees on aids to air navigation and landing, aviation meteorology, airspace, air safety and aeronautical charts. An economic division will have subcommittees on facilitation of international civil aviation, area aviation policy, financing air services, and aviation information and statistics. An industrial division will have at the start subcommittees on aircraft production and aviation research.

Bendix Corp. Unveils Automatic Plotter

A navigational device that holds promise of easing a great many flight worries is under development by the radio division of Bendix Aviation Corp. Designated the Bendix Automatic Plotter, it was demonstrated to delegates of the Provisional International Civil Aviation Organization meeting in Indianapolis to study radio navigational aids.

Details of the workings of the device were not disclosed, but its performance as described by its maker approaches the fantastic.

Before starting the flight, the pilot places a standard flight map on a small "light table" in the cabin of the plane. He adjusts his two automatic direction finders to conform to the course to be flown, and a spot of light appears on the map. That is the plane's position. As the plane follows the course, the spot of light moves over the map, showing the plane's actual position at all times.

John W. Hammond, sales manager of Bendix radio division, stated that the automatic plotter is not yet in production, but is still under development. It was shown to the delegates at Indianapolis "for the sake of world development in air navigation."

The PICAQ representatives gathered at the Indiana city after

a similar meeting in England where the British displayed their radio, radar and electronic navigational aids. A future meeting will be held in Montreal to try to determine some world standardization of aircraft navigational devices.

AVIATION CALENDAR

Oct. 29—International Air Transport Association meeting, Cairo, Egypt.
Nov. 7-8—SAE National Fuels & Lubricants Meeting, Mayo Hotel, Tulsa, Okla.
Nov. 15-24—National Aircraft Show, Cleveland.
Nov. 20-22—National Aviation Trades Association convention, Cleveland.
Nov. 21—Personal Aircraft Council Meeting, Cleveland.
Nov. 22—AIA Board of Governors Meeting, Hotel Statler, Cleveland.
Nov.—International Aeronautic Exhibition, Paris, France.
Dec. 2-4—SAE National Air Transport Engineering Meeting, Edgewater Beach Hotel, Chicago.
Dec. 12-15—International Aviation celebration, El Paso, Texas.
Dec. 17—Anniversary dinner, Washington, D.C. Aero Club, Hotel Statler.
Dec. 17—Wilbur Wright Memorial Lecture—Dr. Theodore Von Karman, Hotel Statler, Washington, D.C.
Jan. 10-11-12—All American Air Maneuvers, Miami, Fla.

Record Attempts Feature Air Show

A variety of attempts on existing world air records, weather permitting, are being scheduled in connection with the National Aircraft Show at Cleveland, Nov. 15-24.

Included will be the round-the-world speed flight, which has been reported for some time. This, however, probably is more tentative than the other events because of the difficulty in obtaining foreign landing rights.

The Navy, under present plans, will try for a new aircraft altitude record with a Grumman F8F, and an attempt to break the helicopter weight-lifting record will be made. Two jet speed events are planned, one a straight dash, the other a trophy race between six jet planes over a circuit of six midwestern cities.

Heavy participation by the Army and Navy is on the schedule, the AAF demonstrating its jet pilot-ejection seat, push-button take-offs and landings, and pilotless aircraft. The Navy will feature the McDonnell FD-1 Phantom jet plane, its record-breaking Lockheed P2V "Truculent Turtle," a demonstration of air evacuation of wounded by Naval Air Transport Service, and the dropping of supplies by parachute.



Study in Helicopter Control: New approach to a worrisome helicopter problem, delaying of the stalling point in retreating blades of the rotor, is being made by French-born Jean de Chappedelaine, of Reading, Pa., with this helicopter utilizing boundary layer control for the rotor blades. The venturi on the tips of the rotors suck away the air along the upper surfaces of the blades.

New Rotor Plane Tested at Reading

A possible solution to a problem vexing helicopter engineers has been presented by a new rotor craft built and test flown in Reading, Pa., by a French-born engineer and inventor, Jean de Chappedelaine.

For what is believed to be the first time in helicopter design, de Chappedelaine attempts to use boundary layer control to delay the stalling point of the retreating blades. The problem tackled in this novel way by the French inventor arises from the fact that in order to retain lift, the angle of attack must be constantly increased on the blades moving away from the helicopter's forward flight, while being decreased on the advancing blades.

Should this angle of attack be increased too greatly, stalling results. However, if the boundary layer, or air lying next to the upper surface of the blade, be siphoned off, the danger of stalling is far less.

► **Venturis on Tips**—To accomplish this, de Chappedelaine has mounted venturis on the tips of the two blades of the rotor. The blades are hollow and divided into two sections by a partition running through the hub. The venturis give a suction effect which is applied to slots on the upper

surfaces of the blades about one-third of the distance along the chord from the trailing edge. The venturis are connected with the slots in such a manner that the suction produced in the venturi on the advancing blade is applied to the retreating blade, and vice versa.

It is hoped that through this system lift equalization may be obtained in forward flight so that cyclic changes of angle of attack can be considerably reduced. Also because of the greater lift efficiency expected, a relatively smaller rotor is used. The power required to produce the suction is small, estimated to be about 2% of the power to propel aircraft.

► **130 Hp Engine**—The helicopter is powered by a six-cylinder Franklin 130 hp. engine. Gross weight is 1,700 lb. and empty weight 1,200 lb. The rotor is 30 ft. in diameter and has a maximum speed of 280 revolutions per minute, giving a tip speed of 440 ft. per second. It has made 25 successful hovering tests.

Jean de Chappedelaine came to this country in Jan., 1940 as a member of the French Air Commission and chief inspector at the Curtiss-Wright Buffalo plant which was producing aircraft for the French Army. After the fall of France, he remained here, working first for Curtiss-Wright and, lately, for the American Tool and Die Co. in Reading which

financed the original helicopter experiments. He is now an American citizen.

I. A. S. Transport Group Hears T. P. Wright

Civil Aeronautics Administrator T. P. Wright was guest speaker at a dinner in connection with the National Air Transport meeting of the Institute of the Aeronautical Sciences at Hotel Statler in Washington Oct. 24.

Presentation of the Col. Thomas L. Thurlow Navigation Award was made by Sherman M. Fairchild, ex-chairman of the board, Fairchild Engine and Airplane Corp.

The day's speakers included Bruce Del Mar of Douglas Aircraft Co. on transport plane air conditioning; A. Experet and P. A. Puvrez of the Provisional International Civil Aviation Organization on international airworthiness standards; Jerome Lederer of Aero Insurance Underwriters on aircraft rescue requirements; Joseph Lyman of Sperry Gyroscope Co. on application of microwaves to instrument landing, and L. F. Jones of Radio Corp. of America on the teloran system of air navigation and traffic control. A joint session with the Institute of Navigation also was held.

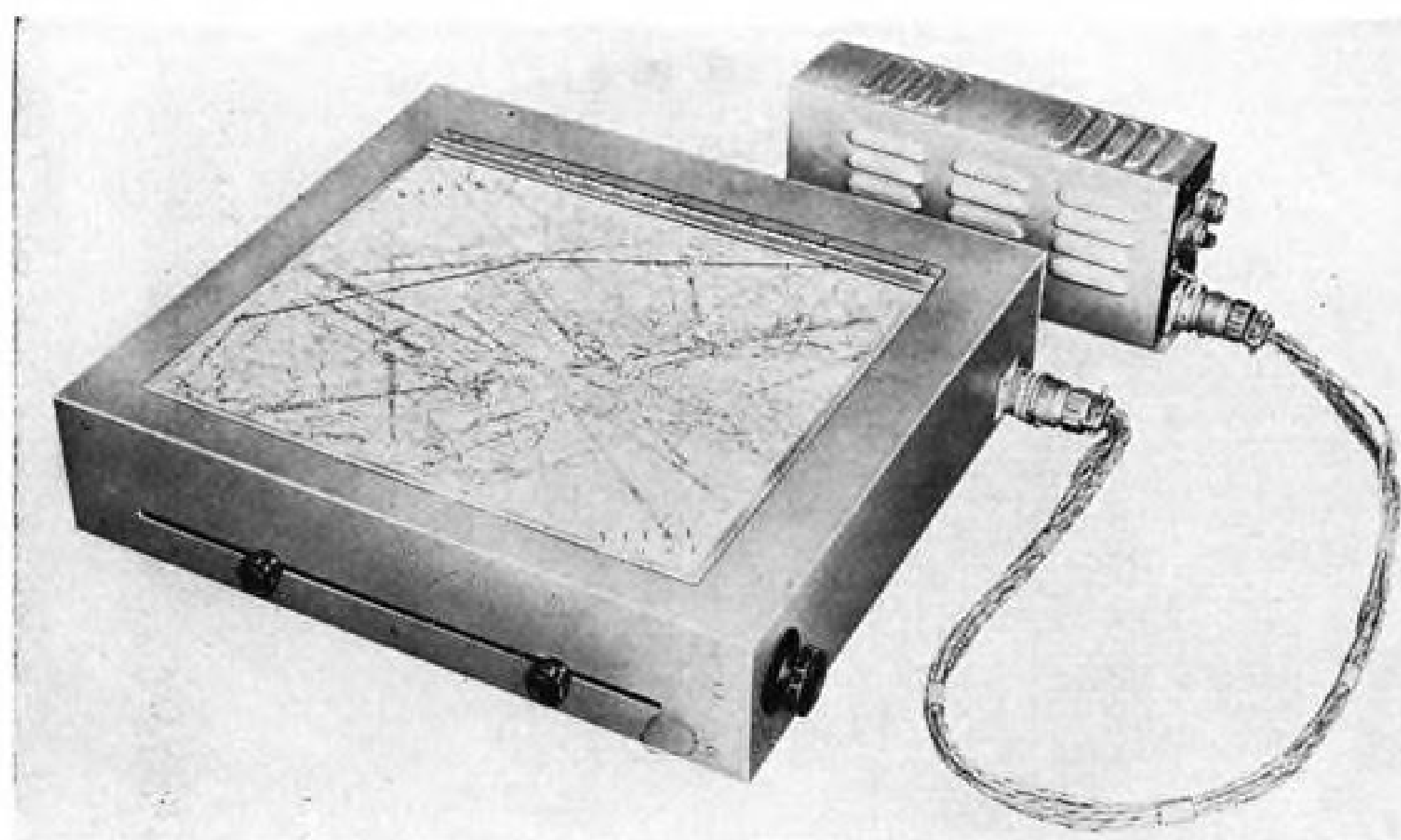
Racing Rules

(McGraw-Hill World News)

LONDON—The International Aeronautical Federation (F.A.I.) has appointed a small committee consisting of representatives of Britain, France, and the United States, to consider alterations of the rules governing world records.

The main proposal relating to speed records, which was put forward by the Royal Aero Club, is that instead of covering four laps (two in each direction) over a course of 1.8 miles in future records should be attempted over two laps (one in each direction) over a six-kilometre course.

At present world speed record attempts are officially observed on behalf of the F.A.I. by representatives of the national aero club of the country making the attempt. It is now proposed that for subsequent attempts there should be observers from another country. For long-distance non-stop flight records it is proposed that the planes be permitted to make two changes of course, instead of one as at present.



Light Marks the Spot: Latest dream gadget to take chance out of navigating is this device now being developed by the radio division of Bendix Aviation Corp. An ordinary flight map is placed on a "light table." When the automatic direction finders are adjusted, a spot of light on the map shows the pilot his position. The spot moves along the course with the plane. Device was shown at the Indianapolis navigational aids meeting of the Provisional International Civil Aviation Organization.

Clashes Between Rival Factions Enlivens Final Clinic Sessions

Contract freight carriers and scheduled airlines tangle on CAB regulation; operators and private pilots argue on forced landing practice.

By ALEXANDER MCSURELY

Two debates, one between scheduled airlines and contract air freight carriers, and one between operators and private flyers, marked the final session of the Fourth National Aviation Clinic at Oklahoma City.

Most unusual was discussion over a resolution, finally passed, asking CAB deferment of economic regulation of non-scheduled air carriers, and that air freight carriers "be classified as a distinct and separate category for the purpose of both economic and safety regulation." The resolution was strongly supported by James Wooten, head of American Airlines air cargo division, who said that as a result of recent accidents he had been presented with a list of four pages of changes to make in cargo C-54s, which were "totally unnecessary" for freight.

► **Lone Dissent**—The resolution was passed with only one dissenting vote, by Robert J. Smith, Pioneer Airlines, who said the resolution should not be proposed since it was a subject of disagreement between two groups of delegates. Following the passage, representatives of the other scheduled airlines present, also voiced themselves as in accord with Smith. This put American Airlines Vice-Pres. O. M. Mosier in the odd position of dissenting from the resolution which his own company representative, Wooten, had previously supported. Other airline representatives dissenting included: Russell Cantwell, TWA; A. E. Amlong, Continental, and Robert Moreland, Mid-Continent.

Another dispute arose over a resolution calling for eliminating practice of simulated forced landings in private pilot training and examinations. Arthur Curry, Galesburg, Ill., operator, rose to protest the complete abandoning of simulated forced landing practice, in the interest of safety. His position was challenged by Clarence Cornish, Indiana aeronautics director, who cited statistics showing that of 10 fatalities in non-scheduled aviation in Indiana last

year, three resulted from crashes during simulated forced landings. Other operators supported Curry, and private flyers and other state officials contested their arguments. The resolution was finally tabled after it was pointed out that its effect had largely been accomplished already by CAB relaxation of the requirement.

► **Resolutions Listed**—Other resolutions asked for: CAB to expedite action on the "many hundreds" of applications for extension of air carrier service and on the backlog of violations, calling on Congress and Bureau of the Budget for additional funds to improve quantity and quality of CAB personnel; War Assets Administration to expedite return of leased airports, turning over surplus military airports to political sub-divisions best able to use them; life insurance companies to eliminate restrictive aviation clauses in new and existing policies; a coordinated national program for studying flying safety. Encouragement of aviation education in the states, by providing adequate funds, qualified personnel and suitable material, and by aiding teachers to obtain personal knowledge of aviation.

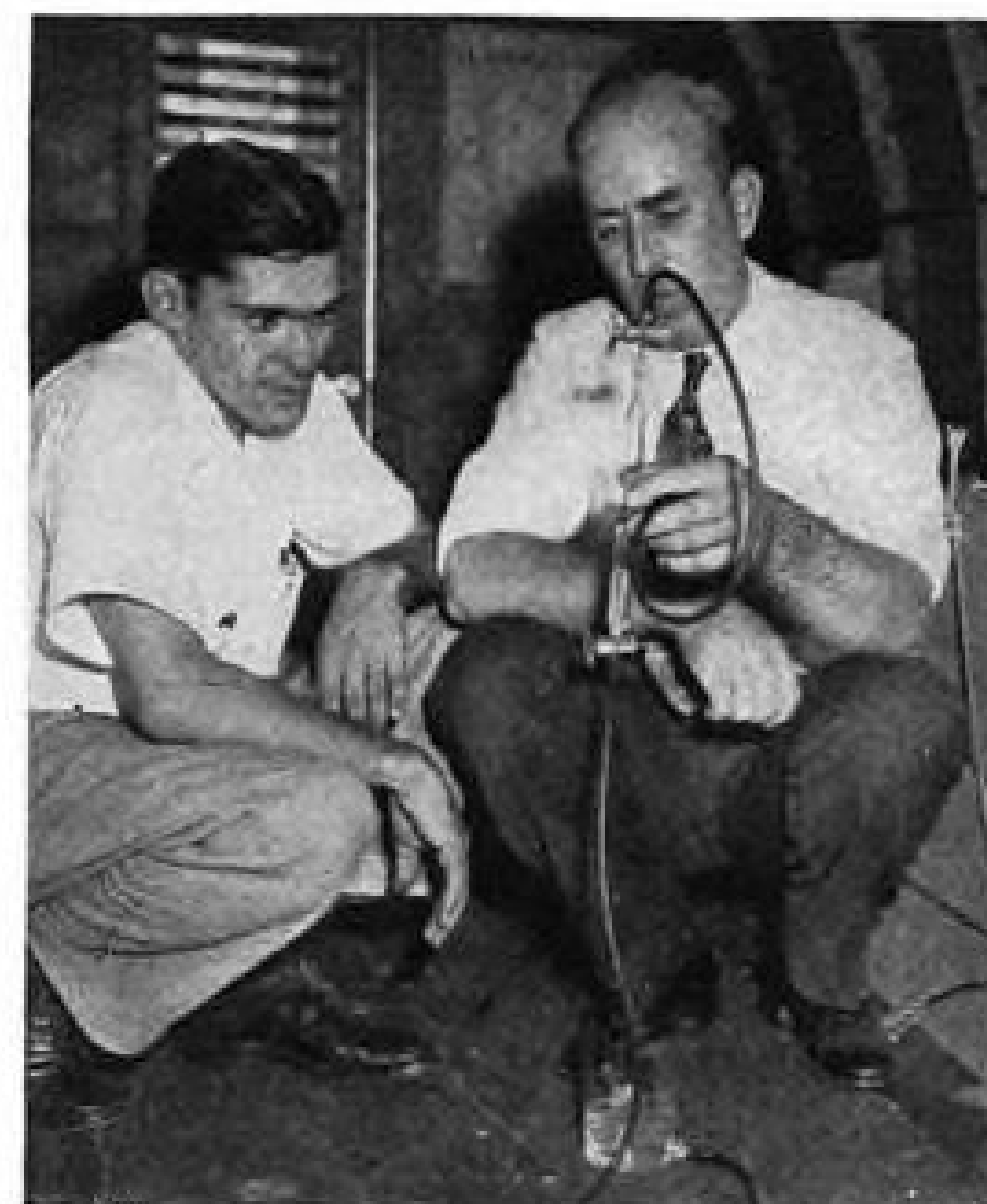
Easing of international flight clearances between U.S. and bordering countries, for non-commercial planes, and provision of annual permits for such flights; continued operation of airport traffic control towers by the Federal government; full recognition of glider pilot training under the GI flight training program, by Veterans' Administration and state educational agencies.

► **Standing Committees**—Establishment of standing legislative committees on aeronautics in all state legislatures and both houses of Congress; approval of PICA action seeking unification and simplification of laws relating to immigration, quarantine, customs and clearance; towns, cities and counties to establish uniform air markers; NACA to accelerate research to improve aircraft with

priority to noise reduction studies; Congress to provide a strong air power program including strong manufacturing industry, strong transport system, civil flying and research; Congress to provide aeronautical research funds; every town and city to develop one or more landing facilities, federal aid or no federal aid.

Still other resolutions:

Reiterated the recommendation of previous Aviation Clinics for unification of the armed services with a Secretary of Defense, and undersecretaries for Army, Navy and Air; condemned as "unpatriotic and unwise" individual actions to obstruct development or use of public or private airports; demanded that no additional charges be placed on the private flyer by or at any level of government, pending a careful study of proposed charges by universities, foundations and government officials; challenged the regulation of aviation by any commission or agency involved in regulating any other form of transport or industry; urged deferment by Selective Service of scientists and engineers engaged in aeronautical work.



DRY ICE TESTS:

Air shipment of dry ice in large quantities, hitherto considered impractical because of its high volatility, was found feasible in recent tests by Pan American Airways. PAA announced that the Liquid Carbonic Corp. of America, at whose request the tests were made, will air express large shipments regularly to Latin America. Picture shows PAA Chemist O. R. Jackson (left) and the manufacturer's research engineer, Robert G. Matheii, sampling carbon dioxide content of air inside the test plane.

SPECIAL AIR SERVICES

CHARTER

NONSCHEDULED

INTRASTATE

Nonscheduled Operators Ponder Landis Warning at Clinic

CAB head cautions carriers against skimming cream of luxury trade without providing dependable public service.

Windup of the recent fourth National Aviation Clinic at Oklahoma City found nonscheduled operators pleased with resolutions adopted by the assembly in support of their interests but still pondering the full portent of CAB Chairman James M. Landis' realistic and somewhat chastening speech, which dwelt at length on their problems.

Landis described the future regulation of uncertificated air carriers as one of the most urgent, important and troublesome matters now before the Board. He said, however, that CAB had been studying comments on the proposed revision of the nonscheduled exemption—Amendment No. 3, Section 292.1 of the Economic Regulations—and that "the Board may be able to take further action in the very near future."

► **Challenges Criticism**—The CAB chairman criticized loose talk about the proposed revision, declaring that some of the comment which described the amendment as a move "to perpetuate selfish monopolies" ignored the principle—underlying the Civil Aeronautics Act. This principle, he explained, assures benefits to the public through intelligent and regulated competition in air transportation sufficient to stimulate the development of services and techniques, but at the same time limits the growth and extent of that competition in order to provide a minimum of economic subsidization.

"This idea of protection," Landis declared, "does not mean protection for the selfish benefit of the carriers involved, but protection for the benefit of the public. Many of the noncertificated carriers who clamor for unrestricted opportunity to serve what they see as an important public need are actually demanding the privileges of air

transportation without offering to assume the obligations to the public which should appropriately accompany those privileges.

► **Skim Cream**—"Thus many of them seek to skim the cream of peak traffic potentials which may exist between points for limited periods of time while avoiding the burden of providing a service upon which the public can rely between these same two points when the travel market appears less lucrative."

During closing sessions of the clinic, and several days after Landis' speech, the assembly adopted a resolution favoring the deferment of nonscheduled air carriers from the CAB Economic Regulations now applicable to certificated lines pending further

experience in the nonscheduled field. The resolution also recommended that airfreight carriers be classified as a separate and distinct category for the purposes of both safety and economic regulation.

Other industry developments:

► **Empire Airlines, Inc.**, New York intrastate carrier, announced the resignation of Elliott Roosevelt as president. Roosevelt, who had held the position less than two months, said in a letter to Dean Alfange, chairman of the carrier's board, that other activities and personal obligations prevented him from devoting his efforts to Empire.

► **Trans Caribbean Airways** of Cuba, associate company of Trans Caribbean Airways, New York, was granted a certificate by the Cuban government for a route between Havana and Montreal, according to O. Roy Chalk, president. Chalk also reported that during the month ended Sept. 21—Trans Caribbean's first month of operations with DC-4 equipment—the company had a record monthly gross revenue of \$121,348.

► **Far Eastern Air Transport, Inc.**, Manila, Philippine Republic, asked CAB for a foreign air carrier permit authorizing scheduled operations from Manila to Oakland and Los Angeles via Guam, Kwajalein, Johnston Island and Honolulu. FEATI recently inaugurated scheduled operations from Manila to Hong Kong, Shanghai and Bangkok, and since May has had Philippine Government authority to operate nonscheduled between Manila and the U. S.

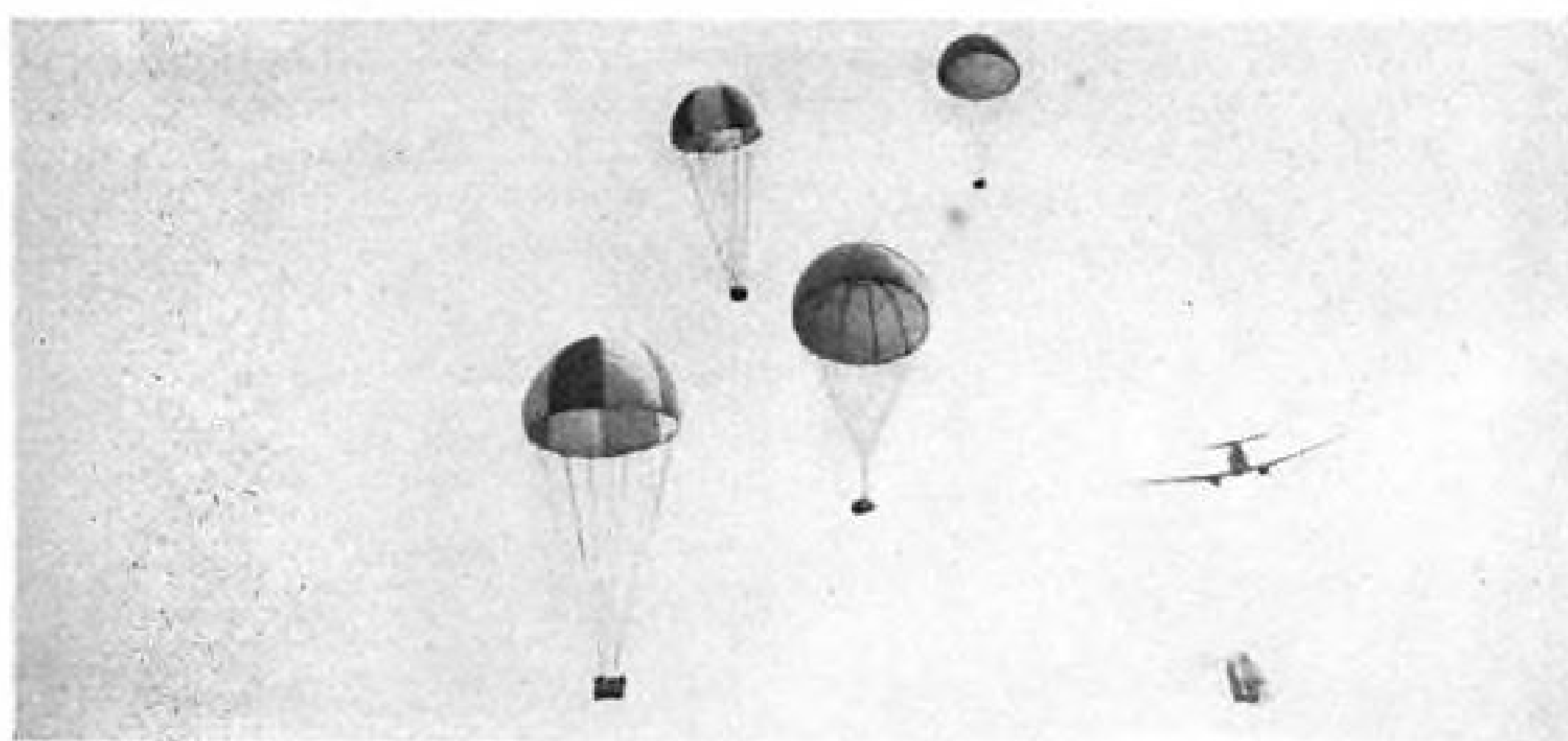
► **Pacific Overseas Airlines**, Ontario, Cal., purchased two more PBV Catalina flying boats. After overhaul and conditioning, an NL license will be sought for the planes and they probably will be stationed at strategic bases along POA's routes to the Orient for sea-air rescue purposes.

► **Mt. McKinley Airways, Inc.**, Anchorage, Alaska, asked CAB authorization to conduct scheduled service between Anchorage and Los Angeles via inter-



FORD TRI-MOTOR DROPS 'SMOKE JUMPERS':

Recent field day demonstrations by the U.S. Forest Service before 300 members of the Society of American Foresters featured a parachute jump from a Ford tri-motor by the four-man fire fighting team pictured above. The "smoke jumpers" bailed out over a mountain meadow 7,800 ft. above sea level some 20 miles northeast of Salt Lake City. The Ford is owned by the Johnson Flying Service, Missoula, Mont.



NEWSPAPER DROP DEMONSTRATION:

Commercial possibilities of the "baseball" type non-oscillating parachute in delivering newspapers by air were demonstrated at a recent Teterboro, N. J., air show. The parachutes were dropped from a Meteor Air Transport C-47 and fell within 80 feet of a panel marker placed on the field.

mediate points. Company proposes to use four C-47s, two of which are now owned, according to Jack Scavenius, president.

► **Great Lakes Airlines**, Rochester, N. Y., is advertising New York-Miami service.

► **Kentucky Court of Appeals** has affirmed a decision by the Kentucky Aeronautics Commission giving **Bluegrass Airlines** an intrastate franchise, thus ending litigation instigated by **Commonwealth Air Transport, Inc.**, Covington. Over Commonwealth's protest, the commission last month awarded Bluegrass certificates authorizing service between Paducah and Louisville via Madisonville and Owensboro, and between Bowling Green and Ashland via Louisville and Lexington. In upholding the action, the Court of Appeals said that the General Assembly of Kentucky gave the commission power to make such decisions and limited the court's authority to review them.

► **Lone Star Air Cargo Lines, Inc.**, Love Field, Dallas, during July and August flew 137,810 revenue plane miles carrying 34,414 lb. of cargo 59,363,800 pound miles and 1,096 passengers 976,100 passenger miles for total revenue of \$68,558 and net profit of \$833. Three DC-3s are in operation, and employees on Sept. 1 numbered 43.

► **Skyfreight Airlines, Inc.**, Dallas, has withdrawn its route application from CAB's airfreight case.

► **Slick Airways**, San Antonio, reports its load factor has been raised to 80 percent and that it is approaching a break even point on costs. Company officials have denied rumors that Slick intends to merge with any other uncertificated operator.

► **Northern Airlines**, Seattle, has contracted with Sears, Roebuck & Co. for weekly shipments of airfreight from Seattle to Alaska.

► **Universal Airline, Inc.**, Miami, is advertising air tours from New York to Miami Beach using 74-passenger, four-engine Boeing 314 flying boats which the company recently purchased from war surplus.

► **Veterans Air Lines**, Newark, is offering immediate reservations on de luxe 21-passenger DC-3s from New York to San Francisco and Los Angeles at \$118.30 plus tax. Company is also accepting reservations for December flights to Ecuador, Guatemala and Athens, Greece, with DC-4 equipment.

► **U.S. Airlines**, St. Petersburg, Fla., has extended its operations to the West Coast and plans to operate three times weekly to California, one flight

originating at New York, one at Chicago and one at St. Petersburg.

► **Leading Airways**, Syracuse, N. Y., has temporarily abandoned its Syracuse-Binghamton-New York intrastate run, reporting that operations with seven-passenger planes were unprofitable. Company intends to reinstitute service upon acquisition of larger equipment.

► **Pacific Air Lines**, Los Angeles, has added a daily Los Angeles-Red Bluff roundtrip to its intrastate operations, which include Los Angeles-Sacramento and Los Angeles-San Francisco services.

► **Dollar Air Lines, Inc.**, San Francisco, has been organized with \$300,000 capitalization to engage in airfreight operations. Company is headed by Robert S. Dollar, Jr., son of the steamship line founder.

Crash Investigation

A CAB investigation into the crash of a NATS Air Transportation Service DC3 near Laramie, Wyo., Oct. 17 continued through last week, and a hearing was to be held Saturday at Laramie. All ten passengers and the crew of three were killed in the accident, which occurred during a heavy snowstorm. Among the dead was Clarence R. V. Abernathy, pilot and secretary of the fixed base carrier. The company has headquarters at Oakland, Cal.

Court Injunction Knots Sale of WAA Surplus C-54s

An injunction issued by a judge of the U. S. District Court for the District of Columbia has tied up indefinitely the disposition of 38 surplus C-54 aircraft which the War Assets Administration made available to the overseas airlines despite veterans' protests (AVIATION NEWS, Sept. 23.)

The injunction petition was filed

by George W. Thompkins, president of Air Travel, Inc., San Francisco cargo carrier, and Ralph Cox, Jr., New York, who asked the court to prevent disposition of the planes until the U. S. Court of Appeals can rule on a District Court decision. The District Court (AVIATION NEWS, Oct. 14) had dismissed a suit which sought to restrain WAA from selling the planes to the certificated airlines instead of to veterans.

Tompkins' attorney, in another action, is seeking a mandatory order in the District Court to compel WAA to sell 10 of the surplus C-54s to veterans immediately. Pan American Airways, which was allocated 16 of the 38 C-54s, has relinquished its right to these ten since they are not now needed.

Plan Tree Flights

Federal Air Freight Co., Los Angeles, is contemplating shipment of Christmas trees by air from Washington state to Los Angeles this December. Company plans to offer the public freshly-cut trees that will last from five to ten days longer than those shipped by rail.

Air Delivery Cheaper

A twelve-month study showing that airplane delivery of newspapers is cheaper than motor truck distribution probably will result in expansion of the Macon, Ga., News' plane carrier routes, according to Publisher Carmage Walls.

One economy, Walls explained, was in wages—the services of the higher-paid pilot being required only two hours a day, while those of the truck driver were needed full time. In middle Georgia, he said, an estimated 15 days out of the year have weather that prohibits flying, and at these times papers are distributed by bus or automobile. No flying days have been missed since March of this year.

The News began daily distribution of its papers by plane to four Georgia towns to the south and east of Macon on Sept. 4, 1945, and since then has added four more communities to the route. Papers are dropped over a designated spot at seven towns, and a stop is made at the eighth. With other new route points now planned, a second plane may be placed in service.

When History Repeats Itself.....

STANLEY won't take eight months to find Dr. Livingstone... he'll **FLY** to Ujiji in eight hours



THE intrepid Stanley did it the hard way when he set out from Zanzibar in March, 1871, to find the esteemed Dr. Livingstone. It was October of that year before Stanley located the great explorer and uttered that deathless phrase: "Dr. Livingstone, I presume." Today, instead of hacking his way through the jungle, Stanley would **FLY** over it in a Stinson Voyager, 150, find the good doctor and have him back in Zanzibar the same day.

The use of OSTUCO Steel Tubing to gain extra structural strength without increasing weight has enabled American small plane manufacturers to provide even greater safety and economy of operation for those who would fly their own planes. And, as designers continue to strive for still greater safety and efficiency, they will find, as always, that The Ohio Seamless Tube Company has kept pace with progress. Experienced craftsmanship and the highest standards of quality, an OSTUCO tradition, will assure that progress.

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Aeromatic owners are better buyers of your other goods and services. They buy more . . . because they fly more . . . because they get more fun out of flying their Aeromatic-equipped planes.

4 Customers Sell Their Friends

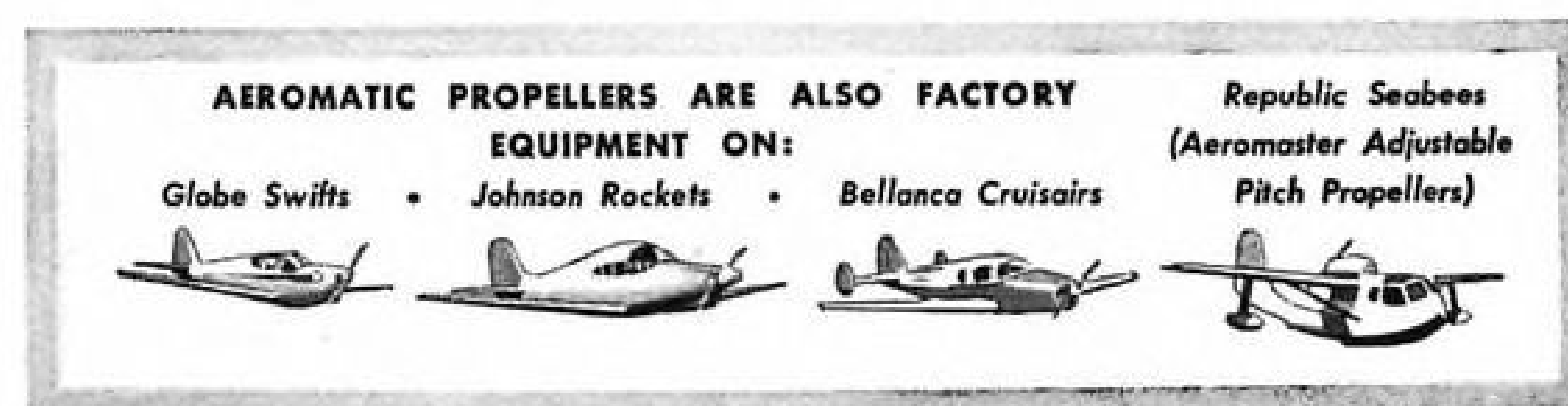
Better take-offs, climbing, cruising and landings make enthusiastic Aeromatic owners eager to convince their fellow pilots of these benefits.

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Air-controlled automatic propeller



PRODUCTION

BUSINESS OUTLOOK

Aircraft Industry Has Sharp Eye On November Election Returns

Drastic cuts in national defense budget will affect procurement that now means difference between profit and loss for backbone of manufacturing strength.

By WILLIAM KROGER

For an industry that ordinarily is not—and in theory never should be—dependent upon the political adherence of the congressional majority, aircraft manufacturing may be sharply affected by the results of the forthcoming election. This is the view of a great many observers in Washington, both within aviation and outside, to whom aircraft manufacturing is merely one segment of U. S. industry, and who gauge the health of any enterprise by profit and loss statements and not by the size of backlogs of orders.

These observers are torn between two theories, both having to do with military and naval procurement. Item one is the view that should the Republicans dominate the next Congress they will be intent upon making a record on economy. This means lower budgets across the board, but particularly in that large, rather ambiguous field labelled "national defense."

Item two is the fact that the present administration already is committed to sizable economy cuts. The question mark is whether these cuts are a flash in the pan—whether they will be forgotten if the Democrats retain control of Congress. To date economies in the sphere of national defense have been in terms of personnel. Careful inquiry still shows no inclination to cut back existing procurement contracts. It is admitted that this last resort may come, but if it does it will not be for many months.

► **Bet on Public Works**—If the heat continues to be applied to economy, there may be another development, the shadow of which may have been the recent go-ahead

given to federal public works projects. Such projects are politically popular. If the only choice were to be maintaining them or trimming national defense expenditures, capital observers would lay their bets on public works.

Military and naval procurement from the aircraft industry becomes so important to industry analysts because they forecast that the eventual state of the industry depends upon a sort of inverse race between dwindling military business and fulfilment of commercial needs. In other words, to be a permanent, stable industrial force, aircraft manufacturing must draw

most of its sustenance from the commercial market, or at least have sufficient commercial business that government contracts will not mean the difference between a profit and a loss. It is foreseen that, eventually, the industry will be able to exist on commercial business alone. But until that day, military and naval orders are practically vital.

► **Lockheed Report**—Particular significance is being attached to the semi-annual report of Lockheed Aircraft, wherein President Robert E. Gross reported in effect that non-delivery of more than 150 P-80s made the difference between an anticipated \$1,800,000 profit and the loss of \$424,502 that was actually incurred. This was on sales through June 30 of \$69,199,747. Observers are inclined to agree with Gross's prediction that Lockheed will not turn up with a loss for the entire year. Nevertheless, the Lockheed report is seen as the prime example of the philosophy stressing the commercial angle.

On the other hand, Lockheed's troubles were due to causes outside the control of the company—shortage of essential parts—which might have been just as worrisome if the company were engaged primarily in filling commercial orders. Lockheed's delivery delays are due primarily to the strike in General Motors plants, makers of the P-80 engines, which occurred



HELICOPTER TEST TUBE:

A later version of Bendix Helicopter's Model K (AVIATION NEWS, Sept. 30) with an enclosed fuselage. Earlier test machine had an uncovered fuselage. This model is a laboratory for a four-place helicopter on which the firm is now working. In more recent tests of the Model K, it has made many flights at better than 200 ft. altitude and at speeds up to 60 mph., although no maximum speed and altitude trials have been made. Model K has an 85 hp. Continental engine, while the larger Model J will have a 450 hp. Pratt & Whitney power plant.



ROCKET POWER:

W. L. Wilkinson, sales manager, Solar Aircraft Co., San Diego, displays the Solar-built rocket motor which powers the Army's WAC Corporal test high-altitude rocket. One of the first successful rocket motors, this welded steel engine is cooled by liquid fuel that is spiraled around the firing chamber. (AVIATION NEWS photo).

early this year. While Allison is presently on schedule, production fell behind during the strike.

► **Billion Backlog**—The fact that the entire industry has a large backlog of more than one billion dollars—great enough ordinarily to assure health—is being disregarded in present calculations of the industry's immediate future. Even some industry statisticians are beginning to assert the need for figures stressing current income rather than backlog. They point to Lockheed and to the instance of Kellett Aircraft, which has retired from production because of the drain on its working capital due to inability to finish work in progress, to bolster the argument that backlogs do not meet payrolls.

Deliveries are believed to be increasing—the latest official figures, for August, show a sizable gain over July—with a general feeling that in the final two months of the year, the rate will continue upward. However, the chief progress in deliveries so far has been on the part of the lightplane manufacturers and it is expected that this condition will continue. Manufacturers of large planes are not figured to produce much for the commercial market until spring and summer of 1947. This leaves those examining the relation of military orders to the industry's business outlook with another fear.

It is a possible cutback of those airline orders which at present would be expected to enable the industry to fare reasonably well should military procurement be curtailed next year. United Air Lines President, William A. Patterson, said frankly that he doesn't look for many airlines to make a profit this year. The airlines are dipping into working capital probably faster even than the manufacturers. Airline securities are showing market weaknesses.

► **Bad Weather Threat**—If bad weather curtails airline revenue this winter as much as it has in the past, there is some opinion that the carriers might be forced to re-examine their orders for transport aircraft on a basis of ability to pay rather than a need for equipment.

Whether or not this situation will develop depends in some extent on the ability of manufacturers to speed production of transports now on order. Douglas can be expected, at this point, to begin deliveries of DC-6s shortly after the first of the year. Martin will have the first 202 off the line probably in December—if not before—with the first delivery, to PCA, early in January. Using the same technique of no prototype, Boeing anticipates its model 417 will be flying possibly in April with deliveries to airlines a few months later. Its Stratocruiser will be ready in late winter or early spring. Lockheed's new Constellation, model 49, should be going to buyers before year's end.

Here again, the big "if" is the material and parts situation. Aluminum is expected to become looser before the year closes. The Kaiser

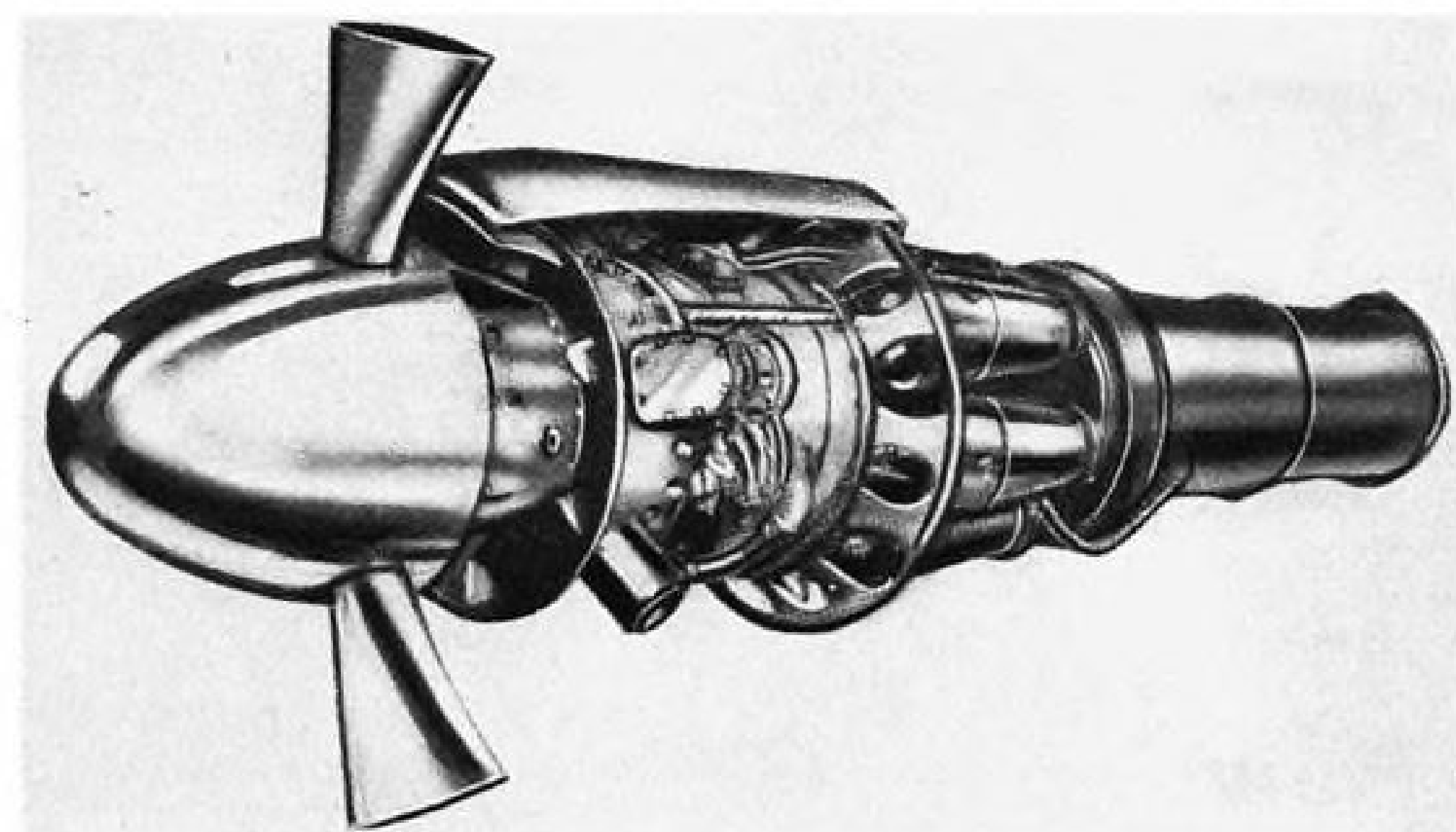
plants are delivering about 12,000,000 lb. of sheet this month, and Alcoa is striving to meet all its commitments. But there is some thinking that after the first of the year more aluminum will be directed into housing channels. There is also the likelihood of a shortage of alumina as war-built reserves are eaten up.

Another factor that might retard deliveries is a further round of strikes for wage increase, not necessarily in aircraft plants as much as in suppliers factories. Already the United Automobile Workers are talking of demands for pay raises and many of the parts and fixtures necessary for aircraft manufacturers come from companies which would be affected by any general UAW work stoppage.

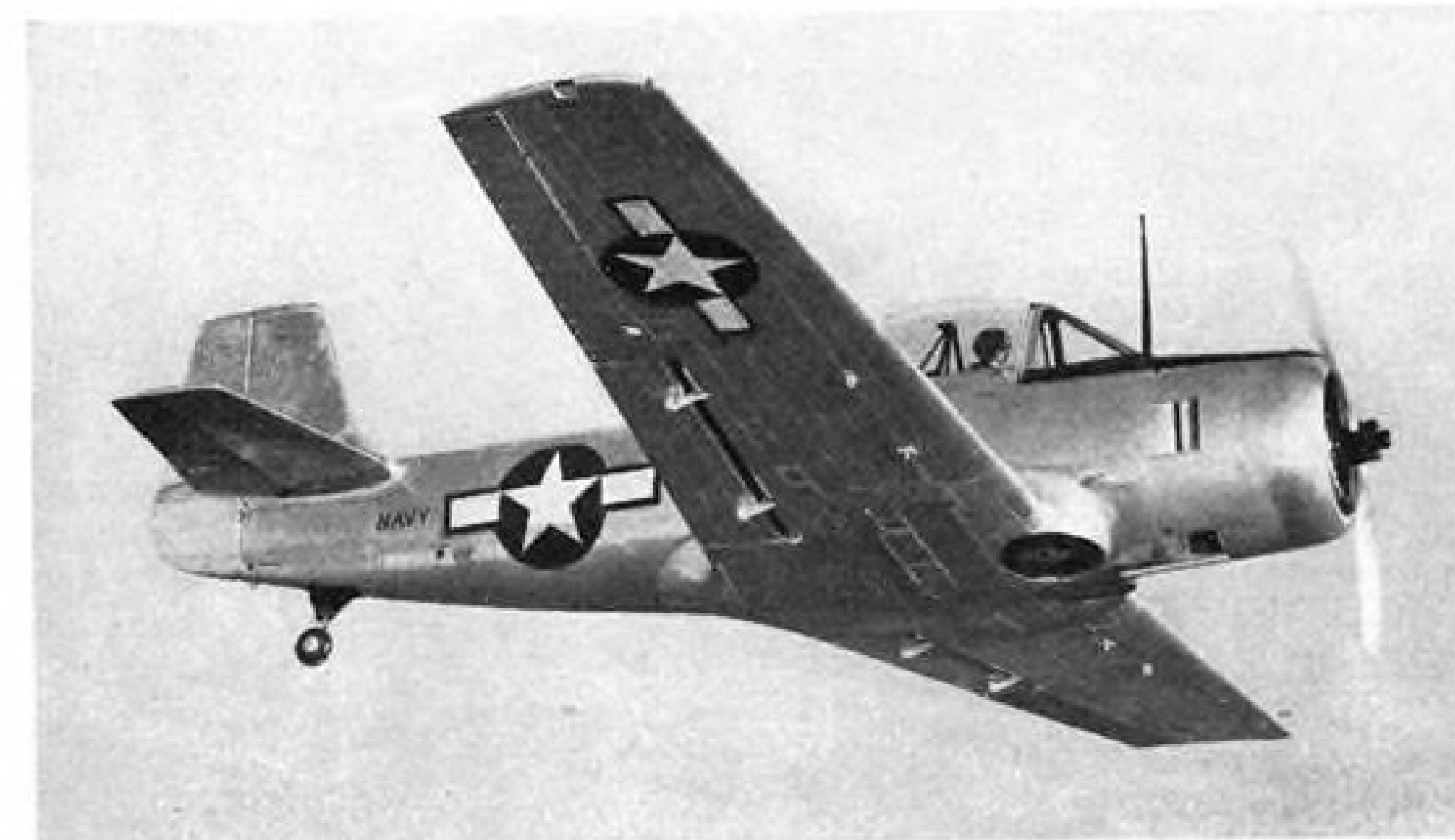
British Mamba Has Tiny Power Package

One of the smallest and lightest aircraft engines for its power ever built is being readied for flight testing by Britain's Armstrong Siddeley Motors Ltd. It is the Mamba, a propeller turbine which for take-off develops 1,000 hp., plus 320 lb. of thrust, or roughly 1,120 hp.

Weight of the Mamba is 750 lb. and its diameter is 27 in. Overall length, including jet pipe, is nine feet, three in. It is also noteworthy among British jet engines for being an axial-flow type. British jets have been generally of the centrifugal flow type, the design originally developed by Frank Whittle and which he insists is superior to the axial-flow jet which



Little Giant: Armstrong Siddeley Motors Ltd.'s Mamba, propeller-turbine engine gives a take-off thrust equivalent to 1,120 hp., although it is only 27 in. in diameter and weighs but 750 lb. This is the engine which will be installed in the jet versions of the British-built Viking and Marathon transports, as well as a projected Royal Air Force trainer.



Fairchild Trainer Flight Tested for Navy: New primary trainer, XNQ-1, going through its paces at the Fairchild Aircraft Division plant in Hagerstown, Md. Equipped with flaps and electrically retractable landing gear, outstanding features of this trainer are the controllable pitch propeller and bubble canopy which gives both instructor and student maximum visibility.

was favored by the Germans and now also by U. S. builders.

First service use of the Mamba is expected to be in the Miles Marathon, four-engine transport. It will also power a later model Viking and a new R. A. F. trainer.

Meanwhile, Bristol is bench testing a much larger propeller-turbine engine, the Theseus, which is designed to develop 2,350 hp. at sea level at 300 mph. Flight testing on a four-engine Avro Lincoln bomber, where two of the engines will replace the outboard reciprocating engines, is due to begin shortly. Theseus has already completed more than 200 hours on a test block.

Vapor Car Heating Co. Allied With AiResearch

Vapor Car Heating Co. of Chicago, producing high precision temperature regulators, has gained a strong opening in the aircraft field by alliance with AiResearch Mfg. Co., Los Angeles, which will act as exclusive distributor for Vapor Cycle Modulation Controls.

The distributorship was announced in Los Angeles by L. H. Gillick, vice-president of the Chicago concern, and Cliff Garrett, president of Garrett Corp., of which AiResearch is a division.

Vapor Car Controls will be engineered by AiResearch to meet individual requirements of aircraft manufacturers in a broad market covering electric power units controlling oil and cabin temperatures, and de-icing equipment.

Flight Test XNQ-1

New Navy primary trainer, the Fairchild XNQ-1, which was flight tested recently at Hagerstown, Md., is a low wing, all metal two-place tandem model powered by a 9-cyl. Lycoming engine rated at 320 hp.

Outstanding features are the Hamilton Standard controllable pitch propeller and the one-piece bubble canopy, offering all-round visibility to both instructor and student. The canopy design was sponsored by the Bureau of Aeronautics to provide a standard for all carrier-based aircraft.

The XNQ-1 has a gross weight of 3,700 lb. Rate of climb is more than 1000 ft. per min. and maximum speed about 170 mph. Wing span is 41 ft. 5 in., overall length is 27 ft. 11 in., and the height 9 ft. 10 in.

Link Raises Pay

Approximately 400 hourly-paid employees of Link Aviation Devices, Inc., Binghamton, N. Y., have been given pay increases ranging from 5 cents an hour upward, according to Edwin A. Link, president of the company.

All hourly employees receive 5 cents-an-hour cost of living increase. "Certain other" wage adjustments based on evaluation of jobs were made. The two increases will add about 15 percent to the Link payroll, it was said.

The 5-cent cost of living raise is the first general increase Link has granted since September 1945

when the company gave a 10-cent-an-hour increase to compensate for the post-V-J Day reduction of the work week from 48 to 40 hours.

McDonnell Backlog Reaches \$34,000,000

With the first production model of the FD-1 Phantom, Navy jet fighter, off the line, McDonnell Aircraft Corp. has started its second year in its new plant at St. Louis with its backlog at \$34,000,000, highest in the company's history.

Indicative of the rapid growth of McDonnell, the backlog has jumped from \$22,000,000 since the end of June. Entering the war a small company with no popularly-known plane designs (June 30, 1941 backlog was \$2,408,669), McDonnell parlayed an interest and contracts in the new field of super-sonics and guided missiles into a healthy business.

► **Acquire Plant**—Shortly after V-J-Day, the once-small St. Louis company had the work to fill, and the cash to acquire the huge 1,200,000 sq. ft. Government-owned plant that had been used during the war by Curtiss-Wright Corp. At this plant, the Phantom is being produced and experimental projects in new, high-speed fighters for both the Army and Navy are being carried on.

With the exception of its twin-engine helicopter for the Navy, McDonnell is almost completely engaged in exploiting the new field of super-sonics and controlled missiles. A possible indication of the direction of the company's whole efforts is the series of ads it has been running in AVIATION NEWS for design engineers to work on "piloted and pilotless aircraft of transonic and supersonic speeds."

Another tip-off on the extent to which McDonnell is depending upon research for future profits is the recent announcement of a joint research program of the company and Washington University of St. Louis. The staff for this venture will consist of eight full-time engineers, presumably from the company, and twelve university engineers working part-time.

► **Theoretical Research**—Exact nature of the research to be undertaken was not disclosed, although Dr. Frank W. Bubbs, head of the department of mechanics of the university's engineering school, states that the preliminary work will be theoretical and mathema-

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2B20-229-6135A-15
2D30-227-6101A-15
2D30-233-6101A-12
2D30-237-6167A-15
2D30-247-6101A-12

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BLADES

6101A-6 6353A-12
6101A-12 6353A-18
6101A-13 6379A-0
6101A-15 6477A-0
6135A-9 6491A-0
6135A-15 6507A-0
6167A-15 6511A-9
6339A-12 6565A-18

GOVERNORS

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1P12-A 4K11-G0U
4G8-G23D-1 4K13-G0B
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Many other items including replacement parts for propellers and accessories on hand.

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947-9A Type C-20
1257-2 Type G-16
1257-8 Type G-14
JH3R
JH4ER

GENERATORS

S-24225 Type M-2
S-24502 Type E-5A
S-24504 Type L-3
S-24510 Type O-1
S-24525 Type L-2
S-22602 Type O-1
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5362404-A Type O-1
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MISCELLANEOUS ACCESSORIES

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9135 Fuel pumps
TFD-12900-6 Fuel Pumps
3025-1 Relay Switch
46725A Deicer pumps
744-6A Anticer pumps
3GTR72C1A Relays
323-1B Panel assemblies
1042-6 Voltage Regulator

tical in nature. McDonnell, however, is probing far ahead on many projects, with two radical AAF fighters in the works, as well as a reso-jet engine.

In negotiating the research deal with Washington U., James S. McDonnell, Jr., founder and president of the company is employing the same technique long found valuable by West Coast manufacturers who in times past have benefited from the facilities of the big Coast engineering schools. He is also following the formula that has proven successful for his company to date.

AVCO Consolidates Three More Firms

In a move seen preparatory to closing the merger between Lockheed Aircraft Corp. and Consolidated Vultee Aircraft, which is expected to be announced shortly, Aviation Corp. has formulated plans to take over completely three companies it controls but which have been operating separately.

The companies are Crosley Corp. and New Idea, Inc., of which Avco owns 90% of the stock, and American Central Manufacturing Corp., of which it owns 61%. In an exchange of stock, these companies will be consolidated with Avco and operated as divisions.

This move is regarded as confirmation of previous reports that (AVIATION NEWS, Sept. 16) that Avco intends to withdraw from the aviation field and concentrate on consumer goods and transportation equipment. No announcement has been made as to the future of the Lycoming engine division of Avco which is not included in the merger of Consolidated with Lockheed.

Crosley, in addition to operating Cincinnati radio station WLW, manufactures home radios and refrigerators. New Idea manufactures farm implements and machinery, and American Central steel kitchen sinks and cabinets, and civilian jeep bodies. Avco, it is understood, will retain Consolidated's ACF-Brill Motor Co. and Hall-Scott Motor Car Co.

Ryan Adds Workers

Ryan Aeronautical added 200 workers during September, bringing the total to 1,925. Year-end goal is 2,000. Practically all the new employees were for the experimental and casket divisions.

PRIVATE FLYING

SALES

FIXED BASE OPERATIONS

SCHOOLS

Improved Merchandising Answer To Personal Plane Sales—Parks

Veteran St. Louis Ercoupe distributor warns against "planless retrenchment" in face of diminishing lightplane market.

By ALEXANDER MCSURELY

Improved merchandising of personal planes is the subject of an intensive effort by Oliver L. Parks, president of Parks Aircraft Sales & Service, Inc., seven-state Ercoupe distributor in the middle-west with headquarters at E. St. Louis, Ill., and with five other fixed base operations in the area.

Parks sees evidences of a declining market for personal planes now appearing, but asserts that better merchandising and not "planless retrenchment" is the answer.

"The market today for light airplanes is, even though seemingly stagnant, really far better than are the prospects for supplying it," he believes. "The tremendous appeal which flying has for all people, young and old alike, overrides all considerations including the economic. It makes everyone a customer. All that is needed is the right airplane and the right approach."

► **Conduct Sales School**—Parks last month conducted an intensive two-weeks sales school with his own sales force, on the fundamentals of selling personal planes, including selecting prospects, approach, obtaining interviews, conducting demonstrations and closing sales. Most lacking today, among airplane salesmen, he asserts, are good judgment of prospects and the ability to close sales.

To insure that new Ercoupe dealers named in his distributor territory are using the correct methods, he is requiring that new dealers and their salesmen must agree to attend a similar school which he conducts, or must conduct a school of their own, in cooperation with him. Dealers will be appointed in four groups, classified according to physical facilities and inventory at their bases. The quota of planes allotted to

them, for sale, and the amount of discount they receive varies depending on their category.

During the 1920s, before entering the aviation business Parks was one of the top salesmen of the nation for Chevrolet, and he draws a clear parallel between problems of 20 and 30 years ago in merchandising and servicing automobiles, and those now being met in the light aircraft field. The aviation industry can benefit most by attracting to itself executives who once had a part in developing the automobile market by aggressive sales efforts, he says.

► **Urges Proper Merchandising**—Current high prices for lightplanes will be no substantial deterrent to volume sales if proper merchandising is used, he believes, and lower prices can come only with increased production.



EXECUTIVE PLANE UTILITY:

Example of the utility of the executive transport planes which are being purchased by an increasing number of business firms, was the recent use by St. Louis Post Dispatch's Television Station KSD, of the newspaper's twin-engine Beechcraft to speed newly manufactured RCA television pickup equipment from Central Airport, Camden, N. J., to St. Louis. Another air delivery on the equipment was taken by Capt. Bill Eddy, manager of Balaban and Katz television station WBKB, Chicago, in his converted military trainer plane.

He predicts a rapid decline in prices of used light aircraft "of all types except Ercoupes" during the coming winter. The drop is likely to be as much as 50 per cent he believes. Meanwhile he hopes that improved factory techniques added to increased production, may make possible lower new aircraft prices in 1947.

Sales effort must be aimed principally at the higher income brackets until lower plane prices open a wider market among prospects with less income.

► **Selecting Salesmen**—Most important single factor in lightplane merchandising is selecting salesmen with good character and real ability. Second is correct sales training. Other salient points which he cites are: character of the product, ability of the sales organization to service the product, availability of facilities for use of the product, and finally, the price.

Parks' personal sales formula developed during his automobile selling years, calls for: "Spending 60 per cent of your time with old customers as soon as your list attains sufficient volume. Good service to them in aiding them to use the product purchased, makes them salesmen for you. And by becoming familiar with their gripes you learn how to make new sales more smoothly."

Piper Cub Record

A total of 1,046,263 air miles have been flown in delivering 1,715 Piper Cubs from June 1945 to September of this year, according to

Ed Jahelka, in charge of the factory ferrying system at the Piper Aircraft Corporation, Lockhaven, Pa.

The longest delivery, 4,063 air miles, was flown to Anchorage, Alaska. The average trip is 610 air miles.

Irving Air Chute Co. Names Distributors

Fourteen distributors recently named for Irving Air Chute Co., Buffalo, N. Y., as a result of a recent tour of the country by Harold G. Rogers, Irving vice-president in charge of sales, flown in an Ercoupe, are:

Prewitt Aircraft Sales Co., New Orleans; Northeast Aviation Co., Portland, Me.; Omaha (Neb.) Aircraft Co.; Roscoe Turner Aeronautical Corp., Indianapolis; Southwest Parachute Co., Dallas; Philadelphia (Pa.) Aviation Corp.; Gillies Aviation Corp., Hicksville, Long Island; Capitol Aircraft Sales, Clinton, Md.; Buffalo (N. Y.) Aeronautical Corp.; Hamilton Flying Service, Delano, Calif.; Santa Barbara Flying Service, Goleta, Calif.; National Airmotive, Inc., Chicago; Bohmer Flying Service, Lexington, Ky.; Modern Aircraft Corp., Detroit.

The distributors will handle and service the complete line of Irvin Air Chutes including the new Chair Chute, which fits into the back of the airplane seat, and need not be worn, but is immediately available for emergency use.



SPECIAL EVENTS BROADCASTS:

New York Radio Station WOR has an arrangement with Safair Flying Service, Teterboro, N. J., to use a new three-place Super Piper Cruiser for covering special events by broadcast from the plane, relayed, of course by the ground station. Installation of airborne transmitting facilities can be made in a matter of moments, on the back seat of the plane, from which Paul Killiam, WOR announcer, supplies the "bird's-eye-witness" account of what goes on. Similar arrangements may be worked out by other aircraft dealers with their local radio stations, provided they have available planes a little larger than the minimum two-place 65 hp. equipment which probably would not carry the combined load of pilot, announcer and necessary equipment.



LUSCOMBE 85:

A new de luxe 85 hp. two-place all-metal Luscombe Silvaire, which has a maximum speed of more than 125 mph., and cruises at 112 mph., has passed CAA type approval tests and is in limited production at the Dallas Luscombe plant, L. H. P. Klotz, president, announced recently. Resembling in many respects the 65 hp. Silvaire which is continuing in production at the rate of 15 a day, the de luxe 1947 plane has electric starter, generator, wheel pants, landing and position lights, sound-proofing and improved flight instruments as standard equipment. New side windows give 25 percent more visibility at sides and rear. The 85 hp. Silvaire lands at 48 mph., has 600-mi. cruising range, and 550-lb. useful load.

Minnesota Air Operators Form New Trade Group

Fixed base operators on Minnesota's airports, giving flight instruction, selling aircraft, maintenance and repair, have formed the Minnesota Aviation Trades Association with Minneapolis headquarters at 813 Northwestern Bank building. Frank B. Cliff, formerly with Minnesota department of aeronautics, is executive director.

Elected to the first board of directors are: E. H. Croft, Gopher Aviation, Inc., Rochester; C. W. Hinck, Hinck Flying Service, Minneapolis; G. J. Towle, Air Activities, Inc., South St. Paul; Harold Schlesselman, Mankato Aero Service, Mankato; Millar Witig, Arrowhead Airways, Hibbing; Robert Young, American Aviation Corp., Minneapolis; J. P. Lysdale, Lysdale Flying Service, Minneapolis.

Flying Salesman

Walter Thompson, Milwaukee cosmetic salesman, has expanded his sales territory to six states since he acquired his Aeronca Chief and hopes to take in additional territory soon. He makes the rounds to cosmetic supply houses in Wisconsin, Minnesota, Iowa, North and South Dakota and Utah, in a six weeks' flying trip. Besides the advantage of quicker transportation, Thomson reports that his plane advertises his business to his customers.

Navion Deliveries

North American Aviation last week began delivery of seventeen Navions to dealers throughout the United States. Following initial dealer deliveries 250 of the personal aircraft will go to customers who have ordered directly from the factory. Subsequently all production will go to dealers.

Red Tape Snarls Border Air Travel

International air touring by private planes is being hindered by official red tape on both the United States and Canadian sides of the border, Canadian sources reported recently.

American air tourists coming to Canada and Canadians going to the United States have to meet ship customs regulations, requiring filling out of many forms in duplicate and triplicate, examination of all aircraft by agricultural department inspectors in the United States for possible importation of plant insects, as well as all other border regulations. In each case customs and immigration officers must be notified ahead of time of arrival of aircraft and passenger manifesto.

In Canada airports charge \$1 landing fee for private planes, but customs and immigration officers are on duty at major airports 24 hours a day. Notification to some Canadian airports must be made three days in advance.

Week-ending Canadian air tourists find that customs and immigration officers do not work week-ends in the United States, that the private plane pilot must pay costs of officers coming to airport as well as transportation, usually involving a minimum of \$40 at each port. Chambers of commerce and other business organizations are endeavoring to have the border air red tape eased, to give private pilots flying their own planes the same advantages in



AERONCA CHUM IN FLIGHT:

The two-place simplified-control Aeronca Chum, shown in flight, will go into production early next year at a new Aeronca plant at an undisclosed location. The Chum has 115 mph. top speed, cruises at 105 mph. and lands at 49 mph. Its two-control system is built under license from the Weick Ercoupe patents. Powered with an 85 hp. Continental engine, it is all-metal construction except fabric wing-covering, has 400 mile range with 22 gallon capacity wingtanks. (See AVIATION NEWS, July 1, June 17, 1946, and March 5, 1945.)

crossing the border that the motorist enjoys. Typical of many irritating regulations is the fact that in Canada U. S. private pilots cannot take Canadian friends for a trip without obtaining special permission.

Reading Air Show Draws 50,000

More than 50,000 spectators watched the two-day Reading, Pa. air show, recently which included one of the most complete showings of personal aircraft, yet

to be seen. Planes exhibited included: several Aeroncas, Belanca Cruisair Sr., Culver Model V, Ercoupe, North American Navion, several Piper Cubs, Republic Seabee amphibian, Rocket, Stinson Voyager 150, two Canadian-built Canucks, and a British-built Perceval Proctor.

The show also included an hour's performance by 18 Navy planes, and flight exhibitions by civilian aerobatic experts. Melvin H. Nuss, airport manager, and assistant show director, said it was planned to hold the shows annually at Reading, probably earlier, in the future, to take advantage of warmer weather. Show director was Steadham Acker.

FCC Will Accept Word On Aircraft Radio Check

Federal Communications Commission will now accept a manufacturer's certificate that radio equipment installed in new aircraft has been inspected and is operating properly, as a temporary 30-day authority for operation of the aircraft radio pending action on the pilot's formal application for a permanent station license, it was announced last week. The action was taken after a number of aircraft manufacturers advised that they were planning to market planes equipped at the factory with standard radio equipment. The new regulation (Rule



ESTES PARK STRIP:

Mountains surround the Estes-Rocky Mountain National Park (Colo.) airstrip, which makes a specialty of tourist flights to see and photograph the scenery. (See AVIATION NEWS, May 20.) Photo shows a Cessna two-place 140 in foreground, with V. C. Rasmussen operator of the airstrip, and of Aviation Associates, Chicago, standing in the gateway with tourists in background.

9.24) requires that a copy of the certificate be posted in the plane, and that the original be sent in to FCC with the application for permanent license.

Mattaponi Sky Club Offers Carriage Service for Pilots

The Mattaponi Sky Club, on the old Robert Bowie estate, at Croom, Md., is believed to be the first aviation country club in the state and the only facility of its kind within a 200 mile radius. A 3,000 foot turf runway is provided, with the novelty of carriage service for fly-in visitors, from the field to the manor house. Recreational facilities include tennis, swimming, softball, steam baths, hunting and fishing, and dinners. The owner, C. Elwood Sager, has been using the strip for his own flying for several years, and was urged by friends to convert the facilities into an aviation club, he said.

Shell Oil Develops Fuel 'Beaver' for Airport Use

A 200-gallon mobile airplane refueling unit, called "the Beaver," has been developed for the Shell Oil Co., at Houston, Tex., to replace or supplement stationary pumping units and large trucks, for greater servicing efficiency to small and medium-sized planes.

Designed to travel over any surface on which a plane can land, the unit is 48 inches wide, 48 inches high and 130 inches long. Since an average lightplane refueling is approximately 10 gallons, Shell officials expect the Beaver will handle approximately 20 jobs without refill. It requires only one man to operate it, and will bring the fuel to the planes in the field without necessity for long taxiing by pilots.

No Sudden Changes

No sudden or drastic obsolescence of the planes now being used in private flying, is expected by Gordon Sleeper, Republic Aviation Corp. personal plane sales manager. The planes may change hands but for every buyer at today's list prices, he expects many new buyers at reasonable discount. He expects public interest to overcome handicaps of inadequate landing facilities, lack of hangars, and high cost of service.

Briefing For Private Flying

LIGHTPLANE "BELT"—A swing through Kansas, Oklahoma and Texas shows this flat middlewest region is the home of a large part of the nation's personal aircraft industry. Wichita long has been an important aviation center, with Beech, Cessna and Culver among the personal plane builders, and also Boeing-Wichita, which is now making a radical little army liaison plane and might well turn from this into personal aircraft. Then there is Fairchild at Strother, Kan., and Funk at Coffeyville. On down the line is Piper at Ponca City, Stearman at Enid, and Spartan at Tulsa, Okla. While Texas has Luscombe, Texas Engineering & Manufacturing, Southern Aircraft, Weatherly-Campbell and American Eaglecraft at Dallas, and Globe and Rocket at Ft. Worth. The 16 companies range from producers of minimum aircraft to de luxe twin-engine executive transports. A check with manufacturers establishes the follownig reasons for the concentration in this area: Location midway between coasts for convenience of shipping or flyaway; good flying weather and terrain; good labor market; at the heart of the best current personal plane market in the nation.

MARKET TREND TIPOFF—Tipoff that the seller's market for personal aircraft, is easing off, and that real personal plane salesmanship will be needed from now on, may be taken from the advertising columns of some of the little local aviation newspapers which have sprung up about the country. Besides listing increasing quantities of 1946 airplanes for resale, the local sheets are carrying ads of distributors and dealers promising immediate delivery on planes which a short time ago had a considerable waiting list. This is due in large measure to increased production of planes in recent months, and to the fact that the big market for GI trainer planes is being well filled-up. A number of manufacturers are making no effort to seek any higher production than current levels and are following a policy of watchful waiting.

HELICOPTER HOPPING—The first case of using a helicopter to hop airshow passengers, that has come to Briefing's attention, was the use of Helicopter Air Transport's Sikorsky S-51 four-place helicopter to haul sightseers at \$5 a head, at the recent Reading, Pa., Air show. Passenger hopping has always been a good auxiliary source of income to operators, and a means of making new converts to the ranks of the air-minded. The obvious advantages of the helicopter as a hovering aerial platform from which to sightsee, over the conventional aircraft indicate it may have a bright immediate future for this type of flight, which will at the same time give the public passenger experience with the rotary-wing craft from which such great things are expected in the next few years.

AUTO-PLANE STATION—Plans for the first automobile-airplane filling station airpark in Ohio, are being prepared by Columbus Aircraft Sales & Service, now operating at the Parks hangar at Port Columbus. The station will front on North Cleveland avenue and Route 161, so that autos can fill their tanks there, while planes taxi up from the field to the other side of the pumps. The new field will be opened after the first of the year, and will include cabins for overnight air and motor tourists, a sports field and picnic grounds.

CURB FOR HOT PILOTS—New York city police department has 61 pilots and 11 mechanics among its personnel and is asking for money from the city for four new airplanes, including two amphibians, one small landplane and one transport plane in addition to the Stinson Reliant already owned by the department. The new planes would be used to take license numbers of pilots violating air regulations such as reckless or unsafe low flying, as well as to unsnarl traffic jams below, in city streets by radioed instructions to traffic squad cars. Trend toward more and more aerial police patrols, both state and local, is expected within the next few years, throughout the country, as additional planes take to the air and more control of air traffic is required. Recent conference held by CAA to train state police is a step in the same direction.

—Alexander McSurely

FINANCIAL

Airline Shares Suffer Sharpest Setback in Stock Market Drop

Declines range from 31 to 63% below top 1946 prices as steady four year rise of air securities ends.

In the general market liquidation of the past few months, air line equities suffered one of their sharpest set backs in history. Declines ranging from about 31 to 63 percent from top 1946 prices were recorded for the leading air carrier shares.

During the past four years, air transport securities had experienced a meteoric rise and out-distanced other industrial groups in the markets. The growth trends and future prospects of the air lines were being capitalized at liberal levels. It was only natural, therefore, that in any adjustment process of the market, air transport equities would be particularly vulnerable.

Eastern Loss 30%—Eastern Airlines showed the smallest decline, with a loss of only 30.9 percent. The consistent good earnings of Eastern, particularly when other carriers were running substantially in the red, proved to be a potent market sustaining force. This is further proof that in the final analysis, earning power of a company is one of the most important elements in determining market levels. The company's four-for-one stock split in May, 1946 has also added speculative flavor and broadened ownership and market interest in Eastern's shares.

The greatest decline was experienced by TWA, off 62.6 percent from its best 1946 prices. The unfortunate experience of the company with its Constellations has taken a heavy toll of earnings. For the first five months of 1946 the company lost more than \$1,500,000. TWA has \$40 million in debentures outstanding and which provide considerable leverage in reverse and endanger the equity when deficits mount. It appears likely that TWA will finish the full year 1946 in the red. The company does have valuable world wide routes which together with its domestic properties affords the

company's stock considerable intrigue among speculative investors. **Colonial Decline 60%**—Colonial had one of the largest declines—some 60.5 percent. The thin market in Colonial's stock has previously accounted for its wide fluctuation. Including the 91,400 shares sold last January there are only 365,600 shares outstanding with large blocks privately held. The recent decline demonstrates that thin markets operate in both directions in influencing price movements.

It is interesting to observe that in letters of complaint to the Securities and Exchange Commission, the company was criticized for the manner in which it handled its last stock sale. Stockholders were given a very short period in which to subscribe for additional shares at \$20 per share when the stock was selling around \$40. All unsubscribed shares were taken up by Pres. Janas and associates at \$20 per share. Any advantage accruing from this purchase has since been lost with the stock selling below \$20 per share. Colonial is another carrier which will probably finish 1946 in the red.

One of the surprises was the extent of the decline in Western Air Lines common stock—some 60 percent from its 1946 peak. About

40 percent of the 520,507 shares outstanding are owned by one stockholder with other large blocks reportedly in strong hands. The company has always enjoyed a fine record as one of the better regional carriers. Opening of the West Coast case has given Western some favorable implications in obtaining a Seattle-San Francisco route. Evidently the deficit operations of the first half—\$667,196, compared to a profit of \$276,734 for the same period a year ago—has had its depressing effect.

American Common Down—American Airlines common stock declined less than half in market value. The company's earnings have made a remarkable recovery after deficit operations the earlier part of the year. The company's stock has developed to be one of the most active on the New York Stock Exchange, frequently appearing among the first ten in the point of volume. American also has the largest common stock capitalizations in the industry—6,452,836 shares. This was a direct result of the five-for-one common split in April, 1946. It is of interest to note that C. R. Smith's option on 250,000 shares of common stock at \$11.90 per share, once worth approximately \$2 million is under water at the present time. However, this call on stock retains its tangible value and potential profits with any resumption of market appreciation in the price of American Airlines common stock.

Despite the recent declines in airline stock values, prices, for the most part, are still above the low points of 1945. And during 1945, prices were generally higher than in previous years.

The future trend of air line share values is largely dependent upon general market conditions.

1946 Market Range Listed Airline Securities

	High	Low	Last*	Decline to low point
American	19%	10 1/4	11	49.1%
Braniff	34%	16	18	53.8%
Colonial	43	15	16 1/2	60.5%
Eastern	31 1/2	21 1/4	23 1/4	30.9%
National	34%	17 1/2	18 1/2	50.1%
Northeast	21 1/2	8 1/2	10 1/2	60.0%
Northwest	56 1/2	23 1/4	26	59.8%
PAA	27	14	14 1/4	48.2%
PCA	45%	19 1/4	22 1/2	57.5%
TWA	71	26 1/2	29 1/2	62.6%
United	54 1/4	25 1/4	27	53.7%
Western	35	13	15 1/2	60.3%

* To October 14th, 1946.

TRANSPORT

Air Cargo Carriers Seeking To Stake Vast Freight Claim

CAB hearing exhibits reveal expansion plans for leading contract carriers on scale of major airline operations; see 80,000,000 ton-mile-years.

By CHARLES L. ADAMS

Drawing their lines for a battle of survival with the certificated airlines, the nation's largest contract and nonscheduled cargo carriers have disclosed for the first time their plans for continued dominance in the airfreight industry.

Their blueprints for the future contemplate common carrier all-cargo operations of a scope that would soon give them positions well up among the leading domestic airlines, both from the standpoint of plane miles flown and gross revenues.

Buttressing their claims with comprehensive statistical records, the cargo lines, in exhibits prepared for the all-important airfreight case hearing next month, have taken full credit for the phenomenal growth of the industry since the war's end. They will attempt to show CAB that but for the initiative and energy of the uncertificated companies—in stinging the scheduled carriers to action during recent months—airfreight still might be a nonentity in airline operations.

► **Cargo Battle**—Looking forward to common carrier scheduled service, several of the airfreight applicants have envisioned traffic potentials—and their own share in the total—which undoubtedly will be subject to sharp challenge by the presently-certificated airlines. The airlines, with an uneasy eye on slumping passenger load factors, are counting on cargo to take up some of the slack and will continue to contend that airfreight can be handled more efficiently and economically in conjunction with passenger service.

Magnitude of the all-cargo services proposed by the airfreighters during their first years as certificated scheduled carriers is pointed

up by a comparison with current operations. Slick Airways, San Antonio, largest cargo carrier in the country, is now operating ten C-46Es (Curtiss Commandos) and in September was flying freight at a rate of about 15,000,000 ton miles annually. During its first year as a certificated operator Slick proposes to use 30 C-46s to fly 87,257,800 ton miles.

By contrast, the nation's certificated airlines in aggregate flew only 1,670,000 freight ton miles during August—a rate of 20,000,000 ton miles annually. Slick estimates cargo revenues of \$10,907,200 (and \$673,900 net operating income before taxes) for its first certificated year, when it would carry freight at 12.5 cents a ton mile. The \$10,907,200 figure is

only about \$72,000 less than the total operating income of PCA for 1945 and is more than the income of Northwest Airlines for the same year.

► **Slick Plans**—During its second year of certificated operations, Slick hopes to fly 145,429,700 freight ton miles with an enlarged fleet of 50 C-46s at an average tariff of 12 cents a ton mile; and during its fourth year 403,781,200 ton miles with an unspecified new type of plane at an average tariff of 9 cents a ton mile. The plane with which Slick wants to replace its C-46s by 1950 would have two or four engines, a 20,000-lb. payload capacity, a 1,500-

Zimmerly Resigns

Bert Zimmerly, founder of Empire Air Lines, has resigned as president of the company to devote his time to his fixed base flying school and charter operation at Lewiston, Idaho, but will continue to serve on the board of directors. New president is Joe Lux, Nez Perce railroad man and farmer. Joe Rosencranz, Lewiston agricultural machinery dealer, became vice-president. The airline operated as Zimmerly Air Transport prior to CAB certification to serve Idaho, Oregon and Washington communities as an interstate carrier.



Cargo for India: National Skyway Freight Corp., Los Angeles (The Flying Tiger Line), recently flew a \$1,000,000 cargo of Reynolds ball pens from the Chicago factory to LaGuardia Field, where they were trans-shipped to Karachi, India, via British Overseas Airways. The shark-toothed cargo plane (above) which carried the pens to New York is one of 15 C-47s operated by NSFC. The Flying Tigers will make their bid for a certificate authorizing scheduled common carrier operations in CAB's airfreight case hearing next month.

mile operating range, and a 300 mph. cruising speed.

Slick foresees an overall domestic airfreight volume in 1947 of 1,200,000,000 ton miles at a 12.5-cent rate and 5,000,000,000 ton miles in 1950 at a 9-cent rate. The 12.5-cent tariff, Slick states, would be comparable to a surface carrier rate of 10.5 cents a ton mile due to the reduced mileage by air.

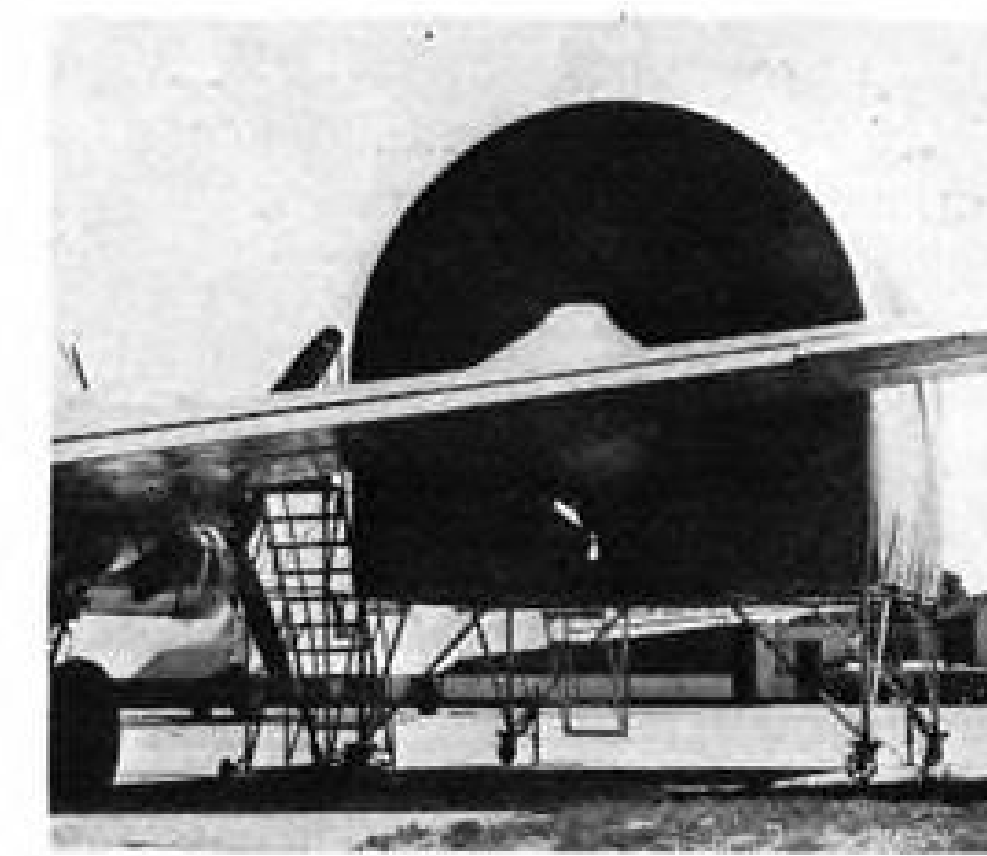
Similarly, a 9-cent rate would be comparable to a 7.6-cent surface charge. At the 12.5-cent tariff, Slick said airfreight could compete directly on a price basis for a substantial volume of trade now moving via Railway Express. "At the 9-cent figure, airfreight could compete directly for the bulk of Railway Express and for a substantial portion of less-than-carload rail freight."

► **Flying Tiger Schedule**—National Skyway Freight Corp., Los Angeles (The Flying Tiger Line), which operated 553,082 freight ton miles and 1,343,357 passenger miles in August and now has 15 C-47s in operation, hopes to fly 40,032,000 freight ton miles with 16 C-47s and four C-54s during 1947. Average tariff would be 13 cents a ton mile, and net income before taxes would be \$427,404.

U. S. Airlines, St. Petersburg, Fla., which owns 12 C-47s, has made estimates for common carrier operations on the basis of flying around 20,000,000 scheduled plane miles annually using 30 DC-3s, 25 Martin 202s or 28 DC-4s. (In July, U. S. was flying at a rate of about 1,900,000 plane miles annually.) Using DC-3s, U. S. estimated it would fly 49,290,000 ton miles annually assuming a 75 percent load factor—re-

Argument Strikebound

Washington's hotel strike was interfering last week with CAB proceedings. Oral argument in the PCA-Northeast Airlines merger case (Docket 2168) was indefinitely postponed because of lack of rooms for visiting participants. The case had been set for Oct. 21 and later Oct. 22. Some thought was given to postponement of hearing in the Detroit-Washington route case, but since many of the witnesses were in Washington and the Board desired to interrupt its calendar no more than necessary the hearing was held.



MAINTENANCE SHELTER:

Weather-proof canopies such as that shown above will be used by United Air Lines this winter in line maintenance on its DC-4s. Outfitted with portable heaters and lighted with an auxiliary power supply, the canopy consists of a canvas on a tubular frame. Plane-side cover fits around the engine nacelle with a draw string, and mechanics inside the shelter can reach engine parts and accessories back of the fire wall while under its protection.

sulting in a \$181,467 operating loss at 15.5 cents a ton mile.

► **Want Martin 202s**—With Martin 202s, U. S. estimated 19,967,376 plane miles would result in 82,460,000 ton miles annually (75 percent load factor)—yielding a \$1,832,894 profit at the 15.5-cent rate. With DC-4s, the company estimated 19,456,320 plane miles would result in 135,300,000 ton miles annually (75 percent load factor)—yielding \$6,196,802 at the 15.5-cent rate. U. S. also believes it can make a small profit (\$108,302) operating the DC-4s at a 75 percent load factor with an 11-cent rate—assuming the same annual scheduled mileage.

Willis Air Service, New York, which presently operates five C-47s and two C-54s, predicated its estimates for scheduled service on a fleet of 12 C-54s flying 38,282,878 revenue ton miles (5,485,714 plane miles) at an average rate of 15.23 cents a ton mile. (Willis was flying at an annual rate of about 1,150,000 plane miles in July.) Estimated profit before taxes for the proposed certificated service is \$553,909 annually.

All four carriers have made application for area to area routes and will push for authorization of this type operation to meet the need for flexibility in cargo service. Slick wants routes connecting four airfreight areas (Califor-

nia, Texas, Middle West industrial, and Eastern industrial); NSFC has designated six areas; U. S., seven; and Willis, four. Service would be provided between any point in one area and any point in another area, but not between points in the same area.

A dozen operating uncertificated airlines, together with a number of paper companies and PCA have applications pending in the airfreight case. Twelve scheduled airlines will provide active opposition to the all-cargo route bids.

Seek Passengers

All American Aviation, Inc., the nation's only certificated pickup operator, last week asked CAB for a certificate to carry persons, property and mail over five helicopter routes in the Philadelphia-Camden and Pittsburgh areas.



PASSENGER PROBLEM:

When Martin Levy, 640-lb. wrestler also known as The Blimp, asked at Western Air Lines' Denver terminal for a ticket to Grand Junction, Colo., Traffic thought he should buy two tickets. Levy thought otherwise—one person, one ticket, he insisted. Engineering's slide-rule calculations showed that his 640 lb. on one seat would unduly strain fuselage floor members. Cargo suggested a passenger seat or two be blanked out. Solution: an arm rest was removed, Levy occupied two seats at one fare, and got to Grand Junction in time for his match.

Airline Executives Challenge Patterson

United President predicts increased fares to meet 40% bulge in carriers' costs and traffic drops; Frye, Smith and Rickenbacker reply.

Top executives of Eastern Air Lines, American Airlines and TWA challenged recent predictions by United Air Lines President W. A. Patterson that air fares will have to be raised to meet a 40 percent bulge in costs and a dip in traffic.

Two of the three officials who publicly contested Patterson's remarks, however, indicated that continued increases in wages and costs of materials and equipment might change their own viewpoint in coming months.

Patterson, in a statement at Portland, Ore., forecast that all commercial airlines will be losing money by next summer and declared that last quarter 1946 holds little promise of profitable operations. He said his company's traffic was off about 4 percent during a recent three-week period and that cargo space was not being used.

Need 80% Load—Before the war, Patterson stated, United could break even on a 65 percent load factor, but now requires 80 percent. He asserted that airline service this winter would be the poorest in years because of cancelled flights resulting from poor weather and the "stacking" of planes for landing at principal traffic centers.

Replying to the UAL executive, C. R. Smith, chairman of American, said that the volume of airline traffic would surprise some operators by its size in 1947 just as it had in 1946, provided the charges for air transportation are kept within the reach of the average citizen. "I am convinced," he continued, "that it is not yet apparent that we must now seek higher fares."

Jack Frye, TWA president, declared he could not agree with Patterson's gloomy forecast for the future. He admitted there had been evidence of a downward trend in traffic during recent weeks, but said it was no surprise—rather one of the first indications of a return to normalcy in the airline business.

Don't Need Pessimism—"We do not feel the situation calls for pessimism," Frye continued. "The new 5-cent air mail rate should produce a substantial amount of increased revenue. It is probable that the traffic demand on our foreign routes will remain heavy for several years."

Frye admitted that TWA expects to show a loss for the third quarter of this year but said it has hopes for profitable fourth quarter operations. TWA's forecasts indicate that 1947 operations should be well in the black, based on present costs and rates, Frye added. His statement was issued before a pilots' strike tied up TWA operations.

E. V. Rickenbacker, EAL president, declared his company had ordered new equipment and ini-

tiated new schedules to create more space for passengers "The fact that seats are increasingly available—as has long been planned—does not mean we will be losing money next year," Rickenbacker stated.

Northwest Profits For First Six Months

Improvement in the financial position of Northwest Airlines, despite a downward turn in airline revenues generally, is disclosed in CAB records covering the first six months of 1946.

NWA's January-June revenue was 99.7 cents per revenue mile, against operating expenses of 96.6 cents per mile. Company officials say the 3.1 cent profit differential is well above the industry average. Net profit of the carrier was \$242,631 for the period. Of the total \$8,323,784 in operating revenues, \$7,467,236 was passenger revenue, \$598,182 mail and \$173,292 express.

Croil Hunter, NWA president and general manager, said passenger revenues represented the major increase. With additional equipment and more frequent service, passenger loads exceeded 70,000 in both August and September.

The carrier is amortizing the cost of its DC-4s in two years instead of four as planned by some of the other major airlines. The line has 11 DC-4s and six more on order.

Money to finance the company's expansion into the international field, additional facilities, and fleets of Boeing Stratocruisers and Martin 202s and 303s on order will come from this month's sale of 271,935 shares of additional \$10 par value common stock to shareholders, at the rate of one share for every two held of record Oct. 16. After 15 days all remaining shares of the new issue will be offered to the public.

NWA officials estimate that total operating revenue will exceed \$30,000,000 in 1947, or 50 percent above 1946's total. They predict that revenue passenger miles will jump from an estimated 440 million this year to around 635 million in 1947, and probably reach 770 million in 1948, during at least part of which the new aircraft now on order will be operating.

Joint Terminal Group Plans New Operation

Washington National Airport is the likely third site for experiments in consolidated airline terminal service by the newly formed Airlines Terminal Corp., which is preparing to launch the cooperative venture at Willow Run airport, Detroit, and Greater Cincinnati airport, Kenton County, Ky.

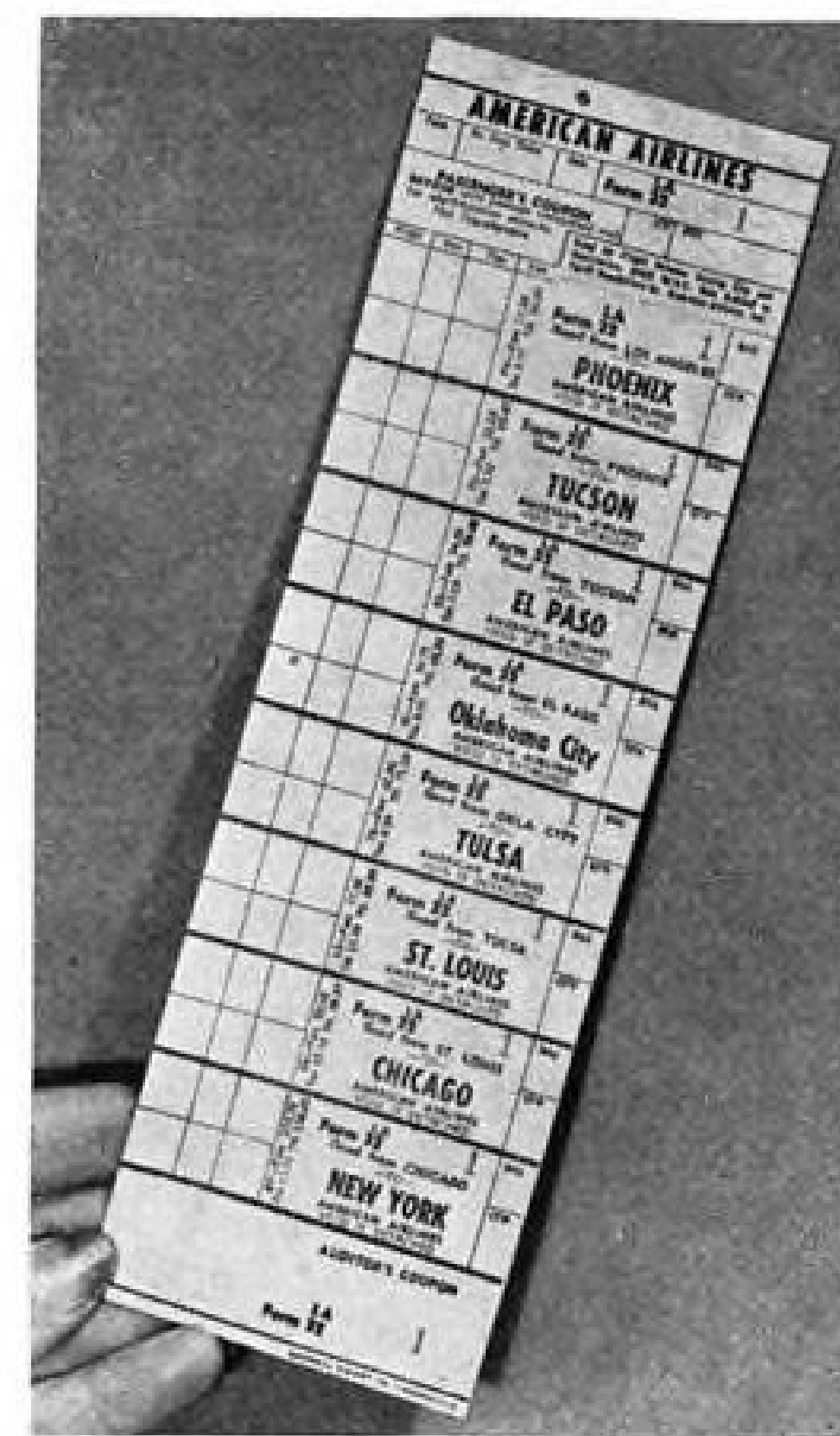
Roy Callahan, general manager of the organization, has gone to Willow Run to set up an office from which to direct the first operation in the test series, aimed at greater economy and efficiency through elimination of duplication of effort in handling services on fields and in terminal buildings.

Initial capitalization of the corporation is \$500,000, on the basis of 5,000 shares at \$100 each. Stock will be held by the airlines. The interline agreement under which the organization is being effected was proposed to the carriers at a recent meeting of the Air Transport Association. Enough commitments were received to assure the required minimum subscription of 3,750 shares of stock, and the organization was started.

Other airport developments:

New York—Commercial airline use of most of Floyd Bennett Field was believed less than two months away, following completion of arrangements with the Navy by the city for immediate occupancy. The field is twice as large as LaGuardia.

Binghamton, N. Y.—More than 5,000 Tri-Cities residents flew in or out of the Tri-Cities Airport during its first summer of scheduled airline operation. Officials credited pioneering by



NEW TICKET FORM:

American Airlines is using the new ticket form shown above on most of its routes. Face of the ticket features a listing of multiple destinations in route sequence. Agent writes in flight number and departure date and time. Reverse side contains fare list and printed statement for refunds for unused portions. A counter test showed 18 seconds required to fill out the new ticket against 55 for the old form.

Empire Airlines, which started operations at the airport March 14, and Robinson Airlines, which started to serve the area May 23. Empire carried 2,757 passengers in and out of the field during its seven months of operation. Robinson carried 1,778 during less than five months of regular schedules.

Baltimore-Washington—Baltimore's proposed new airport will be considered an adjunct instead of a competitor to Washington National Airport, said Hervey Law, manager of the latter. More good airports are needed in the area, Law asserted.

Washington—Bids were sought for construction of five large hangars to supplement the six already in use at Washington National Airport.

Akron, Ohio—The 1,180-acre Akron-Canton airport, former war emergency base, is being prepared for commercial use. Dedication ceremonies were held this month.

Chicago—Douglas airport at Park Ridge was to be opened for commercial planes last week, but was expected to affect municipal airport traffic only slightly. American, United and TWA have plans for a \$150,000 terminal building on the Army ramp and are negotiating for use of part of Army's parking area and refueling facilities, but will not begin regular trips pending radio range installation. Negotiations for the installation are being conducted by Carl McCluer, assistant regional director for CAA.

Kansas City—City has called for plans for enlargement of municipal

air terminal to about four times its present size. Part of the cost would be covered by \$40,000 in Federal funds allotted for a new terminal building. . . . Plans to make Fairfax Municipal Airport at Kansas City, Kas., the "union station of the air" for the Kansas City metropolitan area have been filed with the Kansas City, Kas., board of public utilities. Plan calls for relegation of the Kansas City, Mo., airport to a subordinate role of use for feederlines and charter and non-scheduled operators, with Fairfax used exclusively by the scheduled airlines and large freight planes.

Atlanta, Ga.—City will ask \$3,000,000 in federal funds to help finance a \$6,000,000 airport expansion program. Plans contemplate parallel runways up to 7,000 ft. long, new administration building, new equipment for instrument and contact flying, and a circular loading ramp to handle 20 airliners simultaneously.

Kalamazoo, Mich.—Assumption of municipal control of the city airport, previously managed by the Western Michigan Flying Service, points to expansion of the Class 3 field. A manager and assistant manager will be hired and four large hangars will be built to supplement 22 small hangars already authorized.

Oklahoma City—Will Rogers municipal airport may not be returned to the city for a long time, according to W. A. Karpenko, CAA acting district airport engineer for Oklahoma. Karpenko said the federal government was making an over-all study of all municipal airports in relation to national defense and hence was in no hurry to return fields used by the Army and Navy.

Helena, Mont.—Gov. Sam Ford has been advised by T. P. Wright, Civil Aeronautics administrator, that \$797,733 in federal funds has been apportioned for Montana under the Federal Airports Act.

Oakland, Cal.—Expansion plans of Oakland Municipal Airport (Aviation News, Sept. 2) were jeopardized when the Oakland Board of Port Commissioners learned that the town of San Leandro has filed surprise condemnation proceedings on tidelands south of the airport for a sewer extension. San Leandro officials previously had indicated agreement with the airfield development. The 265 acres involved extends into San Francisco Bay directly across projected new terminal facilities and four of the proposed three sets of parallel 10,000-ft. runways and is owned by private individuals.

Seattle—A lease between Boeing Aircraft Co. and King County for Boeing use of facilities at Boeing Field, county airport, has been approved by county commissioners. Retroactive to June 15, it calls for annual lease of \$22,500 and runs 10 years. It is the first agreement between the county and Boeing since 1929, when the company began paying \$1,000 a year for the use of its original hangar. King county agreed to dismiss a suit begun several years ago to collect a fee from the company for every Boeing ship landing on the field.

St. Catharines, Ont.—City Council will make formal application to the Federal Transport department to lease the 235-acre airport north of the city as a municipal airport. It is understood that the lease is set at \$1 per year.

Melbourne, Australia—Within a year work will begin construction of a new civil airport at West Beach, four miles from Adelaide, to cost over \$6,000,000. The site will cover an area of almost 1,500 acres. Plan calls for construction of four single runways which later will be lengthened and parallel to give double runways.

Lebanon—The Lebanese Government plans early construction of an air-



WESTERN'S DENVER TERMINAL:

Pictures show exterior and interior views of Western Air Lines' terminal at Denver, a 110 x 20 ft. remodelled Quonset hut with a 60 x 19 ft. passenger waiting room in one end. Other end is used for freight and other purposes. Cost of the project was about \$19,000. As eastern terminal of Western's route to Los Angeles, the Denver office handles about

750 passengers daily, against 200 a few months ago. Six flights daily over the mountains carry about 500. A seventh is delayed only because of equipment shortage. The carrier decided on the Quonset hut installation after it appeared that the growing passenger load would overcrowd the already congested terminal building at Denver Municipal Airport.



AIRCRAFT...

The War Assets Administration, as a disposal agency for government-owned surplus, has a large inventory of both planes and component parts. This stock-pile is being added to frequently by the Armed Forces as more and more aircraft and equipment is being declared surplus.

If you are interested in buying a plane or in

keeping your present plane flying, it will be to your advantage to keep W.A.A. in mind. Because our inventory is wholly dependent on those items declared surplus, we may not always have what you need. However, you are urged to send in your inquiry—you may be sure of prompt consideration.

We have available, from time to time, flyable planes in three general classifications. For instance:

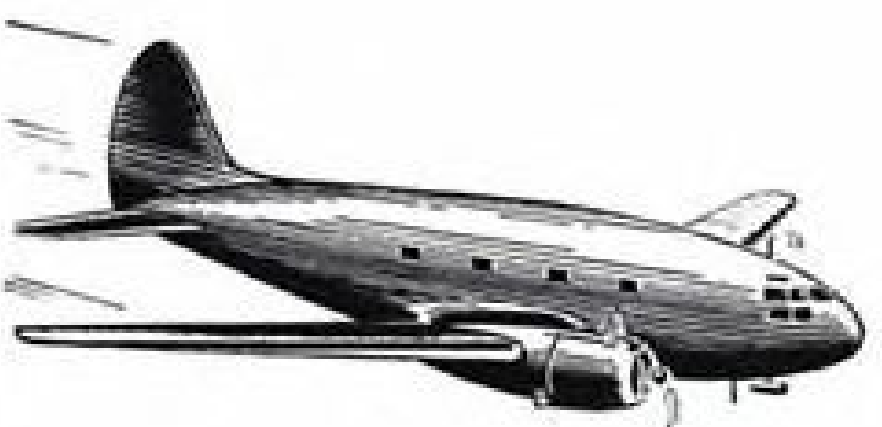
LIAISON PRIMARY TRAINER PLANES

These aircraft are adaptable to private-plane ownership and many have long hours of pleasure or business flying still at the command of the buyer.



TRANSPORT PLANES

Individuals and companies engaged in air freight or passenger transportation have purchased a number of surplus planes which they have found suitable to their purposes.



ADVANCE TRAINER PLANES

These are generally twin-engine aircraft which can be converted to 5-place planes. They have great possibilities for executive or feeder-line transportation.



Detailed information regarding the sale of aircraft can be obtained from any W.A.A. Regional Office.

Tax-supported and non-profit institutions may acquire surplus aeronautical property at nominal prices for use in instruction and research from the Director, Educational Aircraft Division, Room 319, Annex 2, 425—Second Street, N. W., Washington 25, D. C.

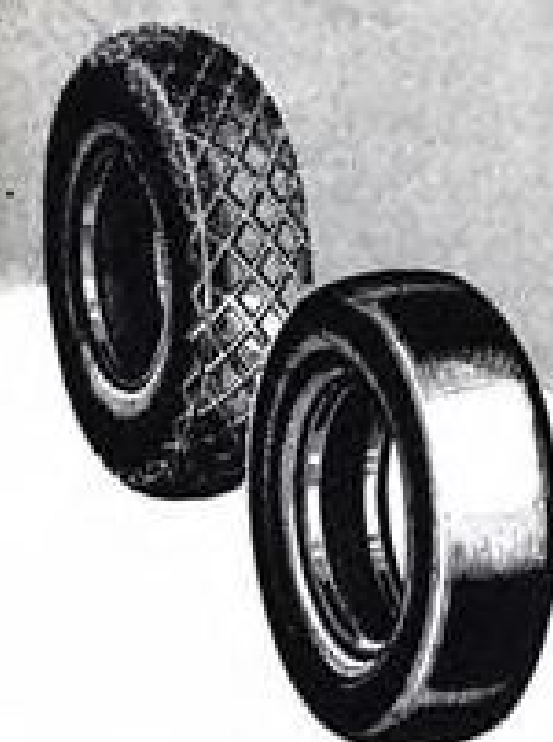
...AND PARTS

In order to obtain the widest availability possible—and for your convenience—in the sale of aircraft component parts, War Assets Administration has designated approximately 75 dealers as approved W.A.A. distributors.

These dealers are strategically located nation-wide and have adequate stocks of war-surplus parts at attractive prices. You will find them a valuable aid in your maintenance and replacement problems.

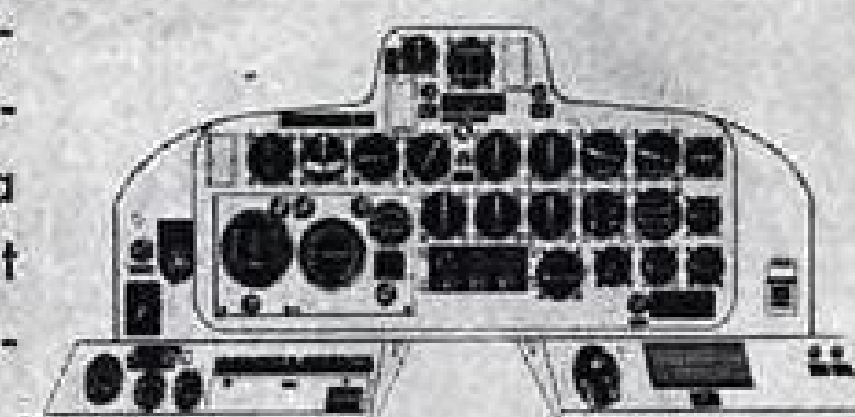
TIRES

Both dealers and National Aircraft Components Sales Center have large stocks of tires and tubes in a variety of sizes, treads and cords at attractive prices.



INSTRUMENTS

W.A.A. has a quantity of precision aircraft instruments including altimeters, airspeed indicators, gyro horizons, etc., and a choice of different types of engine instruments.



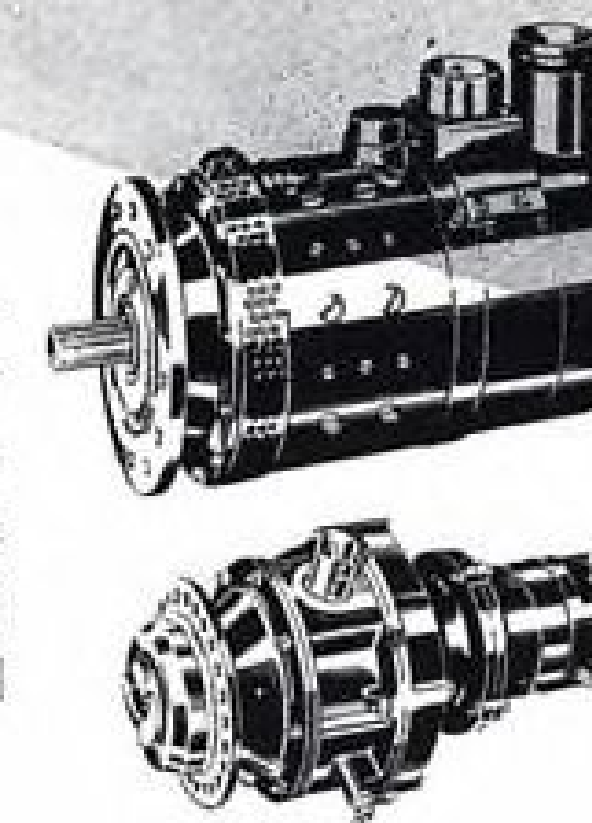
PROPELLERS

Airplane propellers in certain sizes and specifications can be purchased now. They are adaptable to aircraft ranging from light planes to transports.



MISCELLANEOUS EQUIPMENT

Do you need a starter—generator—wheels—or other accessories? W.A.A. has a large inventory of such items immediately available and at substantially reduced prices.



Any W.A.A. dealer will be happy to serve you in any item including tires. If, however, it is more convenient, please contact:

National Aircraft Components Sales Center
6200 Riverside Drive
Municipal Airport
Cleveland 32, Ohio

WAR ASSETS ADMINISTRATION

OFFICE OF AIRCRAFT DISPOSAL
425 SECOND STREET, N. W., WASHINGTON 25, D. C.

drome at Khaldeh, seven miles from Beirut; \$48,000,000 has been voted for the work.

► **Oklahoma City**—Expansion of Will Rogers field to handle 20 planes an hour by 1950 and 50 an hour by 1960 has been recommended in an airport survey completed for the city planning commission. Development of two secondary airports, one near the downtown area, also was proposed. . . . The city's right to use lands condemned for public park purposes as an airport has been upheld by the state supreme court.

SHORTLINES

► **American** top officials took a demonstration flight in Army's XF-12, prototype of the 20 Republic Rainbows the carrier has on order. On the trip were C. R. Smith, board chairman; Ralph Damon, pres.; William Littlewood, vp. engineering, and James H. Douglas, Jr., counsel. . . . The airline's Award of Merit was presented to A. N. Kemp for his service as wartime president of the company.

► **Braniff** executives, returned from a South American tour, expressed the belief that Latin American governments and business will support their plan for route expansion into South America. Eleven made the

survey trip. . . . In preparation for the Latin American expansion, Braniff will expand its pilot personnel more than 25 percent by Jan. 1 with the addition of 50 new flying officers.

► **Chicago & Southern** revenue passenger miles for the first nine months of the year were 73 percent higher, for a total of 105,713,000, than the same period last year. Passengers numbered 267,000, against 136,477 a year ago, an increase of 95 percent. . . . A survey flight from New Orleans to Havana over the route the line expects to open early next month carried 25 American press representatives, among them Robert Wood, AVIATION NEWS Editor.

► **Delta** carried its heaviest passenger load during September. The 54,031 revenue passengers exceeded August's total by 1,924. The line carried 275,000 lb. last month in its airfreight service, inaugurated Aug. 15.

► **Eastern** will inaugurate air freight service on its entire system Nov. 1. Airport-to-airport tariffs have been filed, and pickup and delivery service will become available when arrangements can be made. . . . Directors of the company met recently



HEAVY PAYLOAD:

Picture shows one of two loads of cigarettes, each more than 20,580 lb., carried recently by an American Airlines contract air cargo division DC-4 between Richmond, Va., and LaGuardia Field. American claims that each flight was the biggest payload ever carried in this country by commercial airliner. Usually trucked, the cigarettes were shipped by air to catch a steamer bound for South American ports.

at Tampa. . . . Company flew 320,086 lb. of air express out of LaGuardia Field in September.

► **KLM** Royal Dutch Airlines has cut travel time on its Amsterdam-Batavia service to four days, instead of 4½, previous time over the 9,000-mile route. Planes stop at Bangkok instead of night stops at Singapore and Calcutta.

► **Mid-Continent** reports increases in travel to South Dakota because of the pheasant hunting season. . . . Juvenile literature has been added to MCA's plane reading racks.

► **Northwest's** total operating revenue for the third quarter was \$6,272,988, against \$4,554,090 for the second quarter. Net profit of \$536,914 after deduction of all charges compared with \$301,616 for the second quarter. . . . A new express record was set in September, when NWA flew 371,521 lb. a total of 235,942,500 pound miles. Previous record of 350,919 lb. and 214,990,847 pound miles was set in May month of the railroad strike.

► **United**, which recently added DC-4s to its cargo fleet, reports that September's freight and express ton miles were 211 percent above the same month last year for a total of 980,000. . . . Company is leasing 90,000 sq. ft. of office space in the former Dodge plant at W. 74th St. and South Cicero Ave. in further expansion of its Chicago office. The location is near UAL's general offices. Number of Chicago employees has grown to about 2,700 from 855 in late 1941 and 1,800 a year ago. . . . United's entire fleet of 25 DC-4s is now in operation, after an 8-mo. conversion job. Total of twin- and 4-engine equipment is 95 planes.

CAB ACTION

The Civil Aeronautics Board:
 • Ordered Pacific Northern Airlines (formerly Woodley Airways) to show cause why the Board should not revoke its certificate authorizing transportation of persons and property between Anchorage, Alaska, and Seward, Alaska.
 • Dismissed route application of Ohio Intra-State Airlines at applicant's request.

CAB SCHEDULE

Oct. 28. Briefs due in Arizona-New Mexico area route case. (Docket 968 et al.)
 Oct. 28. Exhibits due in Royal Dutch Air Lines' (KLM) application to serve Ciudad Trujillo, D. R. (Docket 2348.)
 Oct. 28. Hearing in Continental Air Lines' San Antonio-Hobbs certificate amendment case. (Docket 2087.)
 Oct. 28. Prehearing conference on TWA-Delta equipment interchange agreement. (Docket 2346.)
 Oct. 29. Hearing on National Airlines' application to include Key West as intermediate point on route between co-terminals Tampa and Miami and terminal point Havana, Cuba. (Docket 2356.)
 Oct. 30. Hearing in Pan American Airways' domestic route case. Postponed from Oct. 29. (Docket 1803.)
 Nov. 1. Briefs due in Universal Air Travel plan case. (Docket 1939.)
 Nov. 2. Exchange of rebuttal exhibits in air freight case. Extended from Oct. 19. (Docket 810 et al.)
 Nov. 4. Briefs due in Kansas City-Memphis-Florida case. Postponed from Oct. 21. (Docket 1051 et al.)
 Nov. 4. Hearing on Royal Dutch Air Lines' (KLM) application for service to Ciudad Trujillo, D. R. (Docket 2348.)
 Nov. 13. Hearing in air freight case at Fort Worth, Tex. Postponed from Nov. 12. (Docket 810 et al.)
 Nov. 15. Exchange of exhibits in freight forwarder case. (Docket 681 et al.)
 Dec. 20. Exchange of rebuttal exhibits in freight forwarder case. (Docket 681 et al.)
 Jan. 10. Hearing in freight forwarder case. (Docket 681 et al.)

Air France Plans Routes Through Caribbean Area

As a prelude to inauguration of Caribbean service, Air France has assigned Roger Poirier to Pacific Airmotive Corp. shops at Burbank, Cal., to study American propeller and accessory overhaul and maintenance.

Poirier will supervise maintenance of Catalina flying boats modified by Consolidated Vultee Aircraft Corp. to carry 22 passengers from Martinique to Puerto Rico, Venezuela, Colombia, Trinidad and other Caribbean ports. Air France soon will place in service its new six-engine Latecoer transport on the route from Bordeaux to Dakar and across the Atlantic to Fort De France in Martinique.

TWA Mail Rate

CAB has set a temporary mail rate of 75 cents a ton mile for TWA's North Atlantic route pending availability of sufficient data on which to base a permanent rate. The 75-cent figure is the same as

that proposed in the Board's show cause order of last July (AVIATION NEWS, July 29).

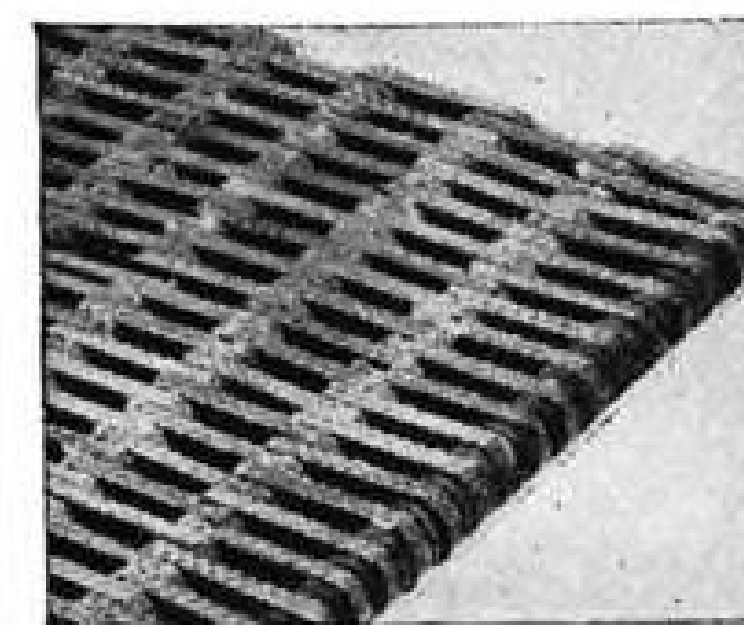
Airlines Levy No Show Charge of 25% on Tickets

The nation's domestic airlines placed in effect this month a service charge of 25 percent on tickets not cancelled by flight departure time. The penalty represents the second phase of a program designed to provide more airline seats by alleviating the "no show" problem.

Passengers not intending to use their tickets may avoid the service charge by informing the airline either in person, by telephone, telegram or mail—providing the information reaches the airline office in the city from which the departure was to be made prior to flight time. First phase of the airlines' attack on the "no show" problem was initiated later in August. At that time, passengers were required to inform the airline office a specified number of hours prior to departure of their intention to use the reservations previously made. Failure to do this resulted in cancellation of the reservations.

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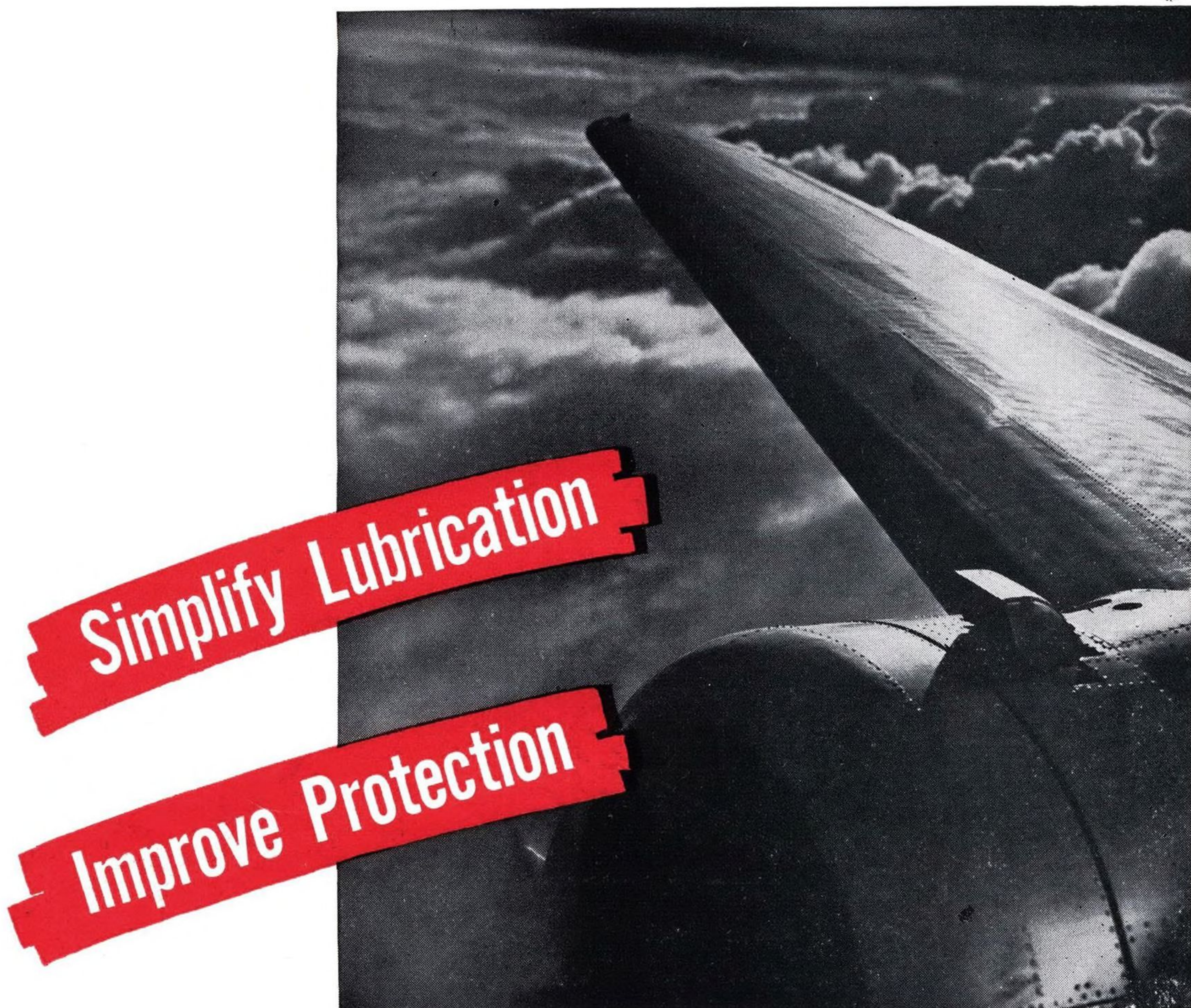
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