

Aviation News

McGRAW-HILL PUBLISHING COMPANY, INC.

SEPT. 9, 1946

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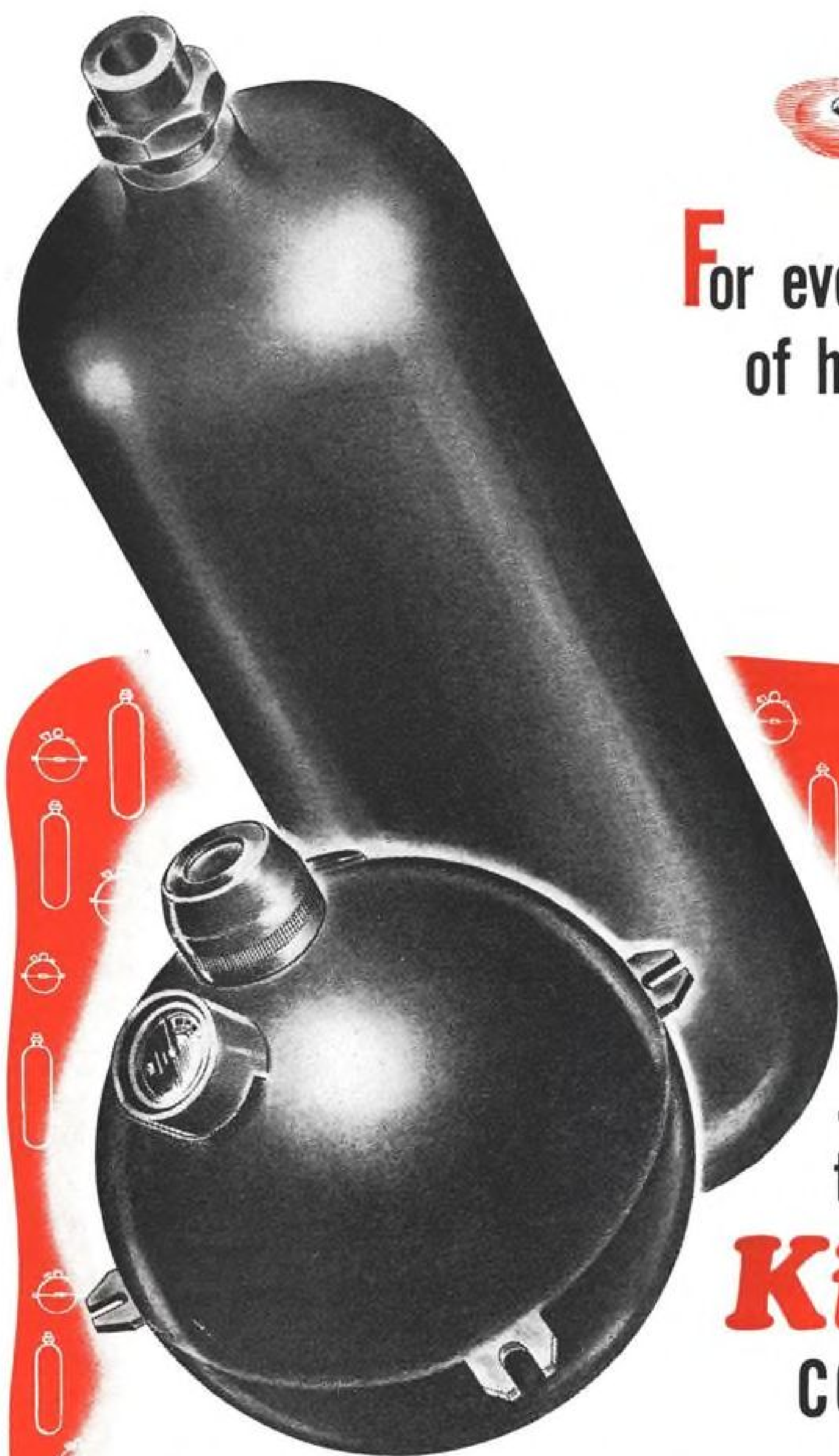
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Airline Executive Salaries Up

Slight gains registered in compensation paid top officers of domestic lines for '45, according to CAB.....Page 26



Thompson Classic Winners: Alvin "Tex" Johnston (right), Bell test pilot, flashes victory smile after winning reciprocating-engine-class top honors and \$19,200 by flying modified Bell P-39 at 373.908 mph. for 300 mi. during Cleveland Air Races' top event, the Thompson Trophy Race. At left is Maj. Gus Lundquist of Wright Field who took first place in Thompson jet division in a Lockheed P-80A at an average speed of 515.853 mph. over 210 mi. See story on page 7. (Press Assn. photo)



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THE AVIATION NEWS

Washington Observer



AAF'S STRANGE PUBLICITY ANTICS—AAF public relations confusion grows apace. Attempts to clamp a veil of photographic censorship over flight pictures of the XB-36 proved futile when the big bomber made its initial test hop over Ft. Worth, population 178,000. Similar attempts to restrict flight pictures of the Northrop Flying Wing came to grief when news photographers stood in cabbage fields off the end of the runway and snapped excellent shots as the bomber roared over them. Now AAF PRO top kicks are withholding details of the official speed course at Muroc Lake where AAF jet planes have been attempting to break the RAF world speed record of 606 mph. by more than five miles. In contrast, the RAF released maps and complete details of the course over which their records are set. AAF generals in the top PRO spot are shifted regularly, but the same strange policies continue, apparently dictated by higher authority than the PRO chiefs themselves.

SAFETY BUREAU SHIFT—There will be a new director of CAB's Safety Bureau soon. Joseph B. Duckworth, appointed last December, will return to the Army about Sept. 15. His decision was unexpected. No decision has been reached on his successor at CAB.

YOU'LL PAY FOR AIRMEN'S NOTICE—CAA will shortly announce its decision to make a charge for the twice-weekly Notice to Airmen, heretofore free. Present annual cost is running close to \$150,000, and there are insufficient funds to complete the current fiscal period without limiting the Notice's content, CAA authorities say. Meeting was held Wednesday with representative associations to tell them informally of the decision. In the past, Government investigators in their accident reports have condemned flyers who had not consulted the Notice. Aviation groups are sympathetic to CAA's financial problem but feel that a change to a subscription basis will cut circulation of the publication to a point where it will be unavailable at many points. Therefore, it is pointed out, CAA should abandon its contention that every flyer should check the Notice before taking off.

MEDICAL DIVISION UNDER FIRE—Dr. W. R. Stovall's Medical Division of CAA is under increasing fire. United Pilot & Mechanics Assn. is "seriously considering" court action if all other efforts fail to bring relief from recent arbitrary actions of the Divi-

sion in changing the examination for commercial pilots and raising the maximum fees which may be charged by physicians. UPMA reveals that CAB staff members were unaware that Stovall had revised the examination, and verified the fact that the change was ordered without any amendment whatsoever in the physical standards of Part 29 of the Civil Air Regulations. Nor was any representative of the thousands of commercial pilots consulted or advised in advance. UPMA tells members in its news letter that Al Koch, new chief of CAA Safety Regulations, should devote special effort to the Medical Division. "It has so completely disregarded the wishes of the Aviation interests and the general public for so long that nothing short of a wholesale housecleaning is apt to do much good."

SURPLUS SHIPS RUINING U.S.?—Authorized distributors of U. S. aircraft in South Africa have protested vigorously to the U. S. Legation at Johannesburg about advertisements describing American war surplus Taylorcraft, Piper, Aeronca, Stinson, Waco and Beech planes there. Indiscriminate importation of U. S. war surplus "can do nothing but harm American interests," the vice consul was informed. The U. S. agents contend that the reputations of U. S. plane manufacturers will suffer at the hands of British companies. Operating costs will be higher than new planes, it is pointed out, because of higher insurance costs due to reduced safety factor, spares will be more costly than for commercial models, no guarantees of service backing will be available, and depreciation and maintenance costs will be above average. Spare parts may not be interchangeable with postwar or prewar models. The distributors complain further that the rebuilders of surplus planes make the fewest possible repairs before selling.

SHUTTLE SERVICES AND DELAYS—Although an examiners report has recommended approval of new airport-to-airport aerial shuttle services by several applicants in the New York area, the major airlines are protesting in Washington that any such additional local flights in the congested metropolitan air can only mean cancellation or delay of more scheduled flights from distant points during instrument or difficult flying conditions. The examiners were unaware of the added traffic difficulties when they issued the report, it is understood. CAB is thus compelled to decide how to grant more local, pioneering services without further tying up long-distance flights.

HANGAR FLYING

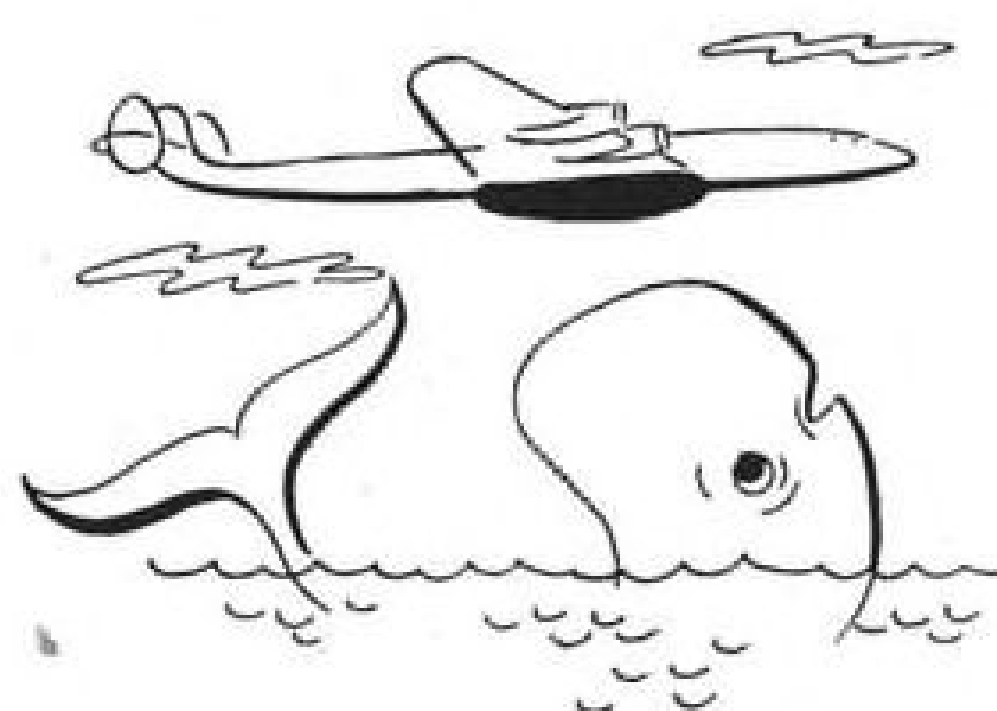


THE WHALEBOAT

In Building 82 at Burbank, engineers have been fussing over a remarkable object that looks like a dural whaleboat on wheels. It's the *Constellation's* new Speedpak and it's a lot more useful than a whaleboat, except maybe to whalers.

With the Speedpak, fast handling of air cargo is made possible for the first time.

This is the way it works: The Speedpak is loaded independently of the ship (which may be in service somewhere else at the time.) When the plane arrives, the Speedpak is attached to the bottom of the fuselage. Off



the *Constellation* flies with the Speedpak clinging to its belly, full of over four tons of additional cargo. At any stop the Speedpak can be lowered, loaded and lifted in a matter of minutes.

For all its 395 cubic-foot capacity, the Speedpak slows the plane down less than 10 mph, which is peanuts for the five-mile-a-minute *Constellation*.

The Speedpak is a new solution to the cargo problem. But new ideas are old stuff at Lockheed—ideas that make good hangar flying and better air transport.

L to L for L

Lockheed Aircraft Corporation, Burbank, California

AVIATION NEWS

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News Digest

DOMESTIC

Navy has developed an electrically driven catapult that will launch jet propelled and robot planes from shipboard or small airports. Tests at Patuxent, Md., launched a jet fighter in 34 feet.

National Aircraft Show at Cleveland has already sold space to 53 firms with 200 additional applications still pending.

AAF Commander Spaatz spent the Labor day weekend on the stump for a separate air force in a renewal of the air forces offensive for merger of the military services.

Air Traffic Associates has been organized at Seattle, Wash., by R. N. Laws and D. S. McDonald to book cargo for air shipment from Seattle to Alaska and the East.

PCA will reestablish half-fare for children under 12 Oct. 10, becoming the fifth American airline to do so.

A proposal by Sen. Magnuson (D-Wash.) that AAF planes be loaned temporarily to commercial lines so Alaska never again will be left improperly supplied with air transport has been endorsed by Linus Glotzbach, vice-president of Northwest Airlines, which is trying to obtain more planes for its northern route to Alaska and Tokyo.

FINANCIAL

Bendix Aviation showed a consolidated net loss of \$820,015 for the nine months ending June 30 against a net income of \$10,376,679 during the same period in 1945.

Garrett Corp. (AiResearch) declared a dividend of 10 cents a share payable Sept. 20 to stockholders of record Sept. 10.

National Airlines reported a net profit of \$226,538 for the fiscal year ending June 30 compared with a net profit of \$169,579 for the previous year.

FOREIGN

British South American Airways will organize a London-Mexico City service using Lancastrians. The route will operate via the Azores and the Caribbean.

TWA has reduced its fares to points east of Paris and Lisbon to a basic rate of 11.5 cents per mile. Samples: Paris-Cairo, was \$284, now \$234; Lisbon-Rome, was \$162, now \$134.



► First public glimpses of Bendix Aviation Corp.'s entries in the personal plane market will probably be at the November National Aircraft Shows, at Cleveland. Bendix has two spaces for exhibition of its two models, but still hasn't named the plant where they will be built.

► Bolstered by Allison performance in the Thompson race, Allison Engine division of GM, may offer two new DC-4s, Allison-powered, to airlines for service testing against present equipment. Representatives claim seven per cent more speed, and smoother operation and less vibration for greater passenger comfort than is provided in existing DC-4s.

► Technical know-how of aircraft manufacturers and their test pilots paid off in the Thompson race, as both Alvin (Tex) Johnston, first place winner, and Tony LeVier, who followed him in, are chief test pilots, of Bell and Lockheed respectively. Inspection of the Johnson Cobra II and LeVier's red P-38 showed superlative workmanship in modifications, and fairings, with a highly waxed and polished skin so smooth it added several mph.

► Predictions were made in Cleveland that next year's National Air Races will admit jet planes to the prize money competition and that British jets, and those of other countries, may be in competition.

► Air Commodore Frank Whittle, inventor of the Whittle jet engine, which started all this, was an Air Races visitor, and rather looked down his British nose at the American jet speed dashes. He pointed out that the British Gloster Meteor jet plane, holder of the 606 mph. world speed record, now about a year old, had not dived from 10,000 ft. to add to its speed, and that this was not in accordance with world record procedure.

► Frequently heard at the Air Races were bitter complaints of airline passengers who had experienced more than usual "pushing around" or evasion at the hands of airlines ground personnel. "Somebody ought to take that FORTUNE article and make it required reading for every airline employee for the situation is growing worse, not better," one ruffled passenger complained.

► One answer to the failure of the American jet flyers at Cleveland to come close to the British 606 mph. record is the obvious fact that the planes flown were tactical aircraft with full armament and armor plate, not modified for a special speed trial. AAF regulations in recent years have consistently prevented modifications of tactical planes for speed flights.

► Two demonstrations of reverse pitch propellers were available at Cleveland. One was presented daily during exhibition of the huge "bug-eye" Douglas C-74, with reverse pitch Curtiss propellers which backed up and waltzed around on the runway in a unique taxiing performance, under the guidance of Old Maestro Ben Howard, one time Bendix race winner. The other was given by the Republic Seabee amphibians which ran a taxi service from the pier at the foot of 9th Street, downtown, out to the Cleveland Airport. The Seabees, equipped with Hartzell reverse pitch propellers, also backed up very neatly on the water, and on the taxiways at the airport.

► Flight of the AAF's B-29 Dreamboat from Honolulu will cost the taxpayers \$3,000,000. Although the direct Great Circle course of the Dreamboat would take it over the heart of Russia and not far from Moscow the actual course to be flown will detour Soviet areas via Greenland, Paris, Rome and the Mediterranean.

► AAF is also developing an extensive Pacific-Arctic long range weather forecasting system that includes daily B-29 weather patrols over Alaska, the North Pacific and Japan.

► Second attempt by an AAF Thunderjet (P-84) to crack the world speed record (606 mph) by more than five miles failed last week at Muroc. Best speed recorded to date for the Republic manufactured jet fighter is 608 mph.

SENIOR *in Performance*
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For executive and feeder airline transports like the Beech Model 18, the new full-feathering Junior Hydromatic brings to power plants in the 200-800 HP range the dependable characteristics of the big Hydromatic propellers.

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ONE OF THE FOUR DIVISIONS OF UNITED AIRCRAFT CORPORATION

VOLUME 6 • NUMBER 11

Aviation News

McGraw-Hill Publishing Co., Inc.

September 9, 1946

Wartime Speed Boosts Smash All National Air Race Records

Paul Mantz wins Bendix with 425 mph.; Tex Johnston of Bell takes Thompson trophy in P-39 averaging 373 mph. AAF jets do 515 mph. in Weatherhead speed dash.

By ALEXANDER MCSURELY

Spectacular advances made in aviation speeds in the war years were brought home forcibly to the American public last week at the first renewal of the National Air Races at Cleveland, since the 1939 pre-war races.

Paul Mantz of Burbank, Calif., winner of the Bendix race from Van Nuys, Calif., to Cleveland, flying a flaming red North American P-51 with clipped wings, made the remarkable winning time of 435.501 mph. over the 2,048.55 mi. course, a speed 153.403 mph. faster than that of the 1939 winner Frank Fuller, in a Seversky. (282,098) Alvin (Tex) Johnston, Bell Aircraft Corp. chief test pilot, flew his yellow Bell P-39 Airacobra at a speed of 373.908 mph. around the 10 laps of the 30 mi. Thompson Trophy course, just 90.489 mph. faster than the fastest previous Thompson time, recorded in 1938

by Roscoe Turner in a Turner-Laird special, (283,419).

Jets Set Pace—Even more spectacular than the money races, however, were the exhibition races flown by the Army Air Forces pilots in Lockheed P-80 Shooting Stars, powered with GE-Allison I-40 jet engines, and the show of maneuverability at terrific speeds, given by other P-80s in acrobatics. In a 180 mi. race over the Thompson course, Maj. Gus Lundquist, Wright Field, averaged 515.855 mph. to defeat two other army flyers, both of whom bettered 509 mph. while the fourth placer turned in a 470.048 mph. average. The army pilots "bent" the jet fighters around the pylons with apparent ease, although they were going more than 100 mph. faster than the money racers did later in planes with conventional power. The gap between jet and con-

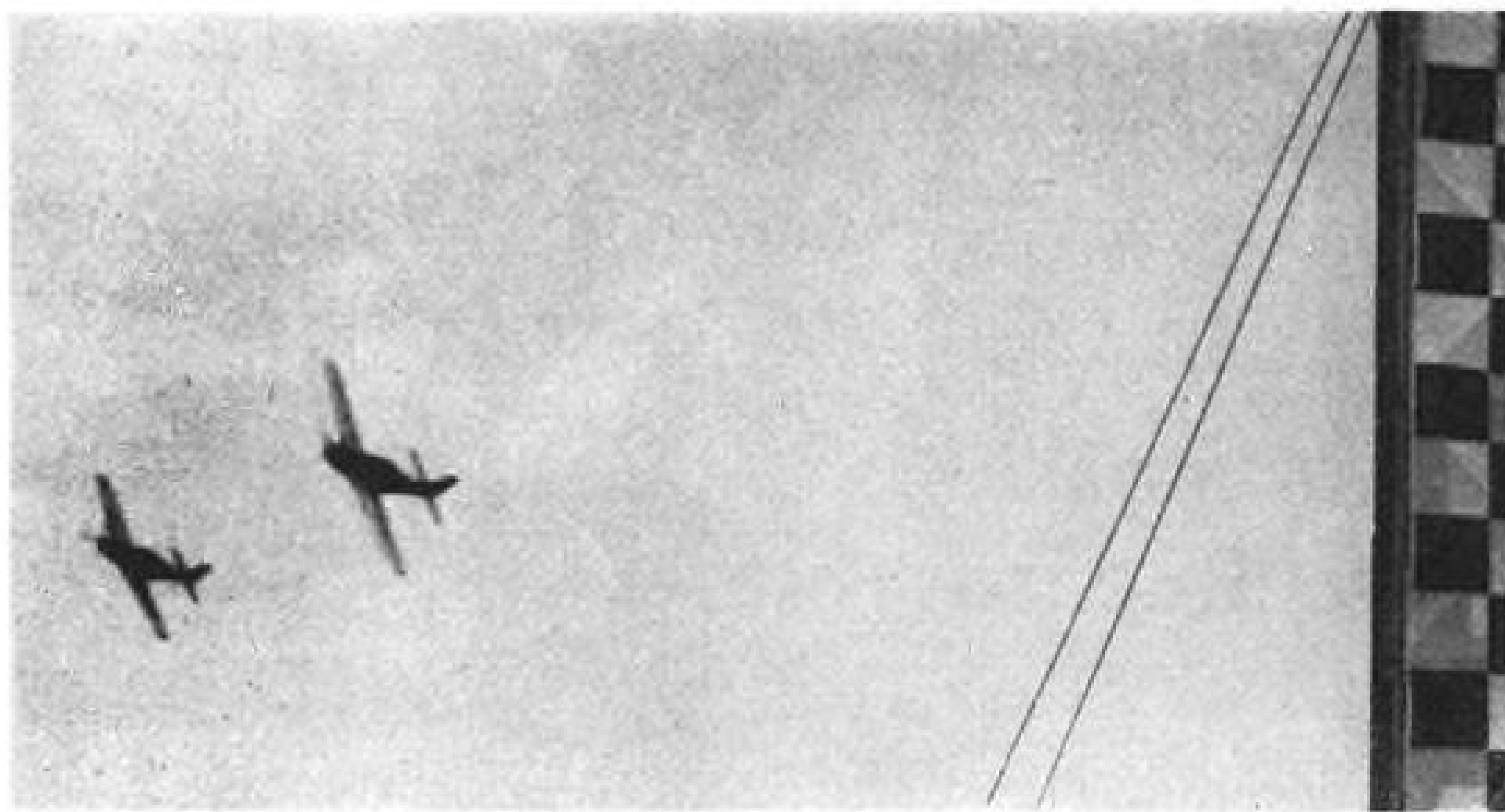


Bendix Champ: Paul Mantz, Burbank, Cal. mounts victors' stand to receive Bendix Trophy after averaging 435.6 mph. in 4 hr. 41 min. sky dash from Van Nuys, Cal., to Cleveland in a specially modified North American P-51. In addition to trophy he won \$10,000 in cash. (Press Assn. photo)

ventional engine speeds was not so great, but still marked in the Bendix race. Flying a special J-division, two army pilots, Col. Leon Gray, and Maj. George Ruddell, both of March Field, Calif., made the Bendix distance in little more than four hours, with aver-

National Air Races Summary

RACE	PLACE PIL T	PLANE	ENGINE	ELAPSED TIME	SPEED MPH	PRIZE
Thompson R Division 300 miles 10 laps of 30 mi. course	1 Alvin Johnston, Niagara Falls, N. Y. 2 Tony LeVier, Burbank, Cal. 3 Earl Ortman, Tulsa, Okla.	Bell P-39 Lockhd. P-38 No. Am. P-51	Allison Allison (2) Packard Rolls		373.908 370.193 367.625	\$16,000 8,000 4,500
Thompson Jet Division 180 miles 6 laps of 30 mi. course	1 Maj. Gus Lundquist, Wright Field 2 Maj. Robin Olds, March Fd. 3 Capt. A. M. Fell, March Fd.	Lockhd. P-80 same type same type	GE-Allison same type same type	20:56 20:58 21:12	515.855 514.715 509.382	No Prize Prize Money
Bendix RD Division Van Nuys, Cal. to Cleveland 2,048.55	1 Paul Mantz, Burbank, Cal. 2 Jackie Cochran, New York 3 Tom Mayson, Van Nuys, Cal.	No. Am. P-51 same type same type	Packard Rolls same type same type	4:42:14 4:52:00 5:01:05	435.501 420.925 408.28	\$10,000 5,500 3,000
Bendix J Division same course	1 Col. Leon Gray, March Fd. 2 Maj. George Ruddell, Southgate, Cal. 3 Only two of four entered finished race, others landing safely enroute.	Lockhd. P-80 same type	GE-Allison same type	4:08:25 4:18:51	494.779 474.836	No Prize Money
Weatherhead Jet Speed Dashes two runs in opposite direction over 1 mi. course best average speed	1 Lt. W. J. Reilly, March Fd. 2 Capt. J. L. Moutier, March Fd. 3 Capt. D. E. Eberhardt, March Fd.	Lockhd. P-80 same type same type	GE-Allison same type same type	12:450 12:570 12:636	578.36 572.792 569.801	\$25,000 to Army and Navy Relief
Sohio 240 mi. 8 laps of 30 mi. course	1 Dale Fulton, Washington, D. C. 2 Bill Ong, Kansas City, Mo. 3 Jack Hardwick, Durango, Cal.	No. Am. P-51 same type Lockhd. P-38	Packard Rolls same type Allison (2)	40:49:11 41:38:07 44:38:03	352.781 345.867 322.625	\$8,000 3,500 2,000
HalleWomen's Race 75 miles 5 laps of 15 mi. course	1 Margt. Hurlbert, Painesville, O. 2 Jane Page, Chicago 3 Ruth Johnson, Cleveland	No. Am. AT-6 same type same type	P&W Wasp same type same type	22:26:04 22:26:39 22:56	290.588 290.462 196.221	\$2,500 1,000 750



Mustang Racers Neck to Neck: Dale Fulton (left) of Washington, D. C., and William Ong, Kansas City, thrill Cleveland Air Races crowds as they vie for lead in second lap of Sohio Race. Fulton finally broke away to win, with Ong taking second place. Craft are stripped down war surplus North American P-51s. (Press Assn. photo)

age speeds respectively of 494.-779 and 474.836 mph. And the Weatherhead jet speed dashes, (two runs in opposite directions over a measured mile course for each plane) found Lt. W. J. Reilly, March Field, the winner with an average speed of 578.36 mph.

Even the preliminary Sohio Trophy race, held for pilots who were unable to qualify in the fastest 12 planes for the Thompson race, was won by Dale Fulton, Washington, D. C., TWA pilot, in a North American P-51 Mustang, at 352.781 mph. The race was also notable for the passing of the air-cooled engine from the high speed picture. Not an air-cooled racer placed in any speed event, while the liquid cooled Allison and Packard Rolls engines divided honors almost evenly, with six Packard powered planes and three Allison-powered planes dividing the spoils.

Companies Helped — Virtually every plane in the competitions were World War II fighters, modified and lightened of armament, and using water injections for higher power. Many of the entries had clipped wings but the first and second place Thompson winners, Johnston, and Tony LeVier, chief Lockheed test pilot, who flew a red P-38, did not curtail their wingspans. Both LeVier and Johnston had the aid of their companies' facilities in grooming their planes for the race, and both are familiar with the types they flew through long hours of test flying. LeVier, incidentally had placed second in the last pre-war Thompson race.

to another Airacobra which was to have been flown by the late Jack Woolams, predecessor of Johnston as chief test pilot, in the Thompson race. Woolams was killed in a preliminary test flight over Lake Ontario, when witnesses reported the tail dropped off the plane. This accident was responsible for the "beefing up" of Johnston's plane. Woodlam's death was the only tragedy to mar the races.

Thompson spectators had some anxious moments when Charles Tucker, pilot of a clipped-wing white Bell P-63 Kingcobra, disappeared on the back stretch after the start, and was not seen during most of the race, but he later came in for a landing. He had difficulty in retracting his landing gear on takeoff and so dropped out of the race. Tucker had previously finished seventh in the Bendix race in another Kingcobra which had P-80 wingtip tanks faired into the wingtips.

Murphy Retires — Jacqueline Cochrane (Mrs. Floyd Odlum) of New York, the only woman contestant in the major races, finished second in the Bendix, in a clipped wing North American P-51 Mustang, winning an award of \$1,000 to the woman pilot making the fastest Bendix speed, in addition to her \$5,500 second place money. Her flight averaged 420.925 mph. nearly doubling the speed which she made in 1938 when she won the Bendix race with 249.774 mph.

The 1946 National Air Races marked the retirement of Mike Murphy, of Findlay, Ohio, long recognized as the premier acrobatic exhibition flyer of this country, from the show. Murphy put on exhibition flights on each of the four days, with his Murphy special sweepback wing biplane, but announced it was his last show appearance. The first glider pilot to land a combat glider in Normandy, Murphy was seriously injured on D-day, and hospitalized for several months before he recovered. He is aviation manager for the Ohio Oil Company.

To clinch his retirement announcement, he sold his Murphy special to Beverly Howard, of Orangeburg, S. C., 1946 aerobatic champion of the Miami Air Races, who was another Cleveland exhibition flyer. Howard demonstrated precision flying in a clip-wing Piper Cub special.

Flypast Costly — A "flypast" of new private planes, for which the airshow management charged par-

ticipating manufacturers \$500 for each plane flown, was poorly handled from standpoint of planes exhibited, spot on the show, and inaccuracies of announcement. Biggest surprise was the maneuvering agility displayed by the Republic Seabee amphibian. The North American Navion, brought in to take part in the flypast, "stubbed" its nosewheel in a hole on the Cleveland field as it was being taxied on the second day and had to be withdrawn for repairs.

Daily demonstrations by AAF and Naval airmen exhibited formation flying, simulated fighter tactics against a bogus Japanese plane, the capacity of the huge Douglas C-74 and its ability to back up with reverse-pitch Curtiss propellers, the ability of the Fairchild Packet C-82 to perform on one engine, Paratroop drops and glider pickups. A show by the new Firestone helicopter and stunt flying by Tony LeVier, Sammy Mason and the Granier brothers coupe, were other features.

Nearly 100 Piper Cub J-3 trainers flown by WASP pilots, which were due to fly over Cleveland, the opening race day changed their flight plan to fly direct to their final destination, Akron. (See Private Flying)

Social highlight of the four-day race sessions was a garden party given by Frederick Crawford, president of Thompson Products, and also president of the National Air Races, at the University Club, which moved indoors to avoid a sudden rain. An Aviation Ball,

and numerous breakfasts and luncheons were held by various organizations, including the Early Birds, the Quiet Birdmen, the Ninety-Nines and the Aviation Writers Association.

Attendance for the four days was estimated at about 180,000 with Sunday probably the largest day with around 55,000. Large non-paying crowds of spectators watched the show from surrounding fields and highways.

Stewart Joins C & S To Replace Williams

Widman named budget director and Snedeker of CAA becomes asst. operations manager.

Sidney A. Stewart, former vice-president and general manager of Hamilton Standard Propellers division of United Aircraft Corp., joins Chicago and Southern Air Lines as executive vice-president Oct. 1 in one of three major personnel changes announced by the carrier's president, Carleton Putnam. Stewart has been with United Aircraft 17 years and general manager of the propellers division since 1940. He replaces Harvey Williams who recently resigned.

F. W. Wildman has been promoted from budget supervisor for C & S to Director of the Budget to start a program under which budgetary control will be expanded to include a work analysis section. The director of the budget also will control capital expenditures.



NEW CURTISS CARRIER BOMBER:

Ten of these experimental carrier based bombers—XBT2C-1—have been delivered to the Navy by Curtiss-Wright. Designed for use as either dive-bomber, rocket carrier or torpedo bomber this model features a fully enclosed bomb bay, external bomb and rocket racks and two 20-mm. wing cannon. It is powered by a Wright R-3350 engine with two speed supercharger and has a range of 1,400 mi.

The third development was selection of Monte H. Snedeker, formerly of Civil Aeronautics Administration, as assistant operations manager with direct supervision of maintenance, planning, engineering and communications departments, under Joseph A. Young, operations manager. Snedeker was with CAA 10 years. He was a maintenance inspector and part of the time served in South America. More recently he was chief of the air carrier branch of CAA's Fort Worth regional office.

Other personnel changes:

Aircraft Industries Association—Ken Ellington elected chairman of AIA's eastern region public relations advisory committee and Walter E. Bonney elected vice chairman. Ellington is director of public relations for Republic Aviation Corp. Bonney holds the same job with Bell Aircraft Corp. Former chairman was William L. Wilson, vice-president, Kellett Aircraft Corp.; vice chairman was Joseph E. Lowes, Jr., public relations director, Fairchild Engine and Airplane Corp.

American Airlines—Walter D. Peck appointed to new position of director of new route development in department of state affairs. Joseph D. Ryle appointed Eastern regional director of public relations.

Collins Radio Co.—Robert A. Parsons appointed export sales manager.

Braniff Airways—W. R. Walner, AAF veteran and Braniff senior pilot 10 years, named assistant chief pilot. Walner is a lieutenant colonel in the Air Corps reserve.

CAA—Elwood B. Cole has resumed his post as assistant to the administrator for state relations after wartime duty with the Navy.

Continental Air Lines—Carl E. Shaw becomes supervisor of communication service in CAL's flight service department. He formerly was with TWA. Roy F. Vincent, formerly of E. I. DuPont de Nemours, has been appointed personnel director.

Delta—J. J. Medaries, Atlanta, and Charles P. Knecht, Cincinnati, appointed assistants to the vice-president of traffic. Already with Delta, they will be stationed in Atlanta.

Fairchild—Brig. Gen. William W. Welsh has joined the Fairchild Aircraft Division of Fairchild Engine and Airplane Corp. as technical advisor to General Manager Richard S. Boutelle. During the war Welsh was chief of staff of the Training Command.

Fleet Aircraft Co., Fort Erie, Ont.—Paul P. Pierson, formerly with Lockheed Aircraft Corp., and until recently assistant manager in charge of sales of Lockheed Aircraft Corp. of Canada, Ltd., appointed sales manager.

Luscombe Airplane Corp.—James J. Brophy elected secretary-treasurer, succeeding Donald S. Grubb, resigned. Brophy for four years was district audit-supervisor in Duluth with the U. S. Steel Corp.

Matson Navigation Co.—Victor A. Kropff has joined Matson's Air Transport Division to coordinate passenger, freight and operational phases of the company's nonscheduled air service. He formerly was traffic manager of Pan American's Pacific-Alaska Division.

Mid-Continent Airlines—William D. Weller appointed chief reservations agent-system. Glenn M. Wilson and Wayne A. Sprague, Jr., appointed chief reservation agents-regional.

Northwest Airlines—D. J. King, veteran pilot and director of NWA's war activities in Alaska and the Aleutians, appointed general manager of the

Orient region. A. B. Hayes, former mayor of Juneau, Alaska, named regional traffic manager in the Territory. Col. K. D. McKenzie of Seattle, who directed all troop and supply movements in the Mediterranean theater during the last year of the war, named to the new post of agency and inter-line manager.

► **Pan American Airways**—Milton L. Patterson, for six years member of reservations and traffic departments, named passenger traffic manager of the Latin American division. John J. Lillis, who joined PAA this year after seven years in Latin America with Panagra, appointed reservations superintendent for the Latin American division, succeeding William Kerr, who has gone with Avensa, PAA Venezuelan affiliate.

► **Southwest Airmotive Co.**—Fred W. Zellmer, aeronautical engineer and research man, has joined Southwest's staff as coordinator of maintenance activities for the private flyer.

► **Trans-Canada Air Lines**—Has created three functional director, with segregation of executive responsibilities in line with expanding operations: H. C. Cotterell, director of research and economic control; E. H. Moncrieff, director of personnel and organization control, and F. T. Wood, director of facilities and supply control.

► **TWA**—Richard W. Roney named senior international traffic representative in Washington. He is a former agency representative at Philadelphia.

► **United Aircraft Products**—Samuel F. Baker, New York City, elected president and director, succeeding Frank G. Sorensen, who retired because of illness. With more than 30 years ex-

perience as engineer and chief executive, Baker will direct all operations of the company's plans in Dayton and Los Angeles.

► **United Air Lines**—O. C. Enge, district traffic and sales manager in Washington, appointed assistant vice president-passenger service at Chicago headquarters. Enge will be succeeded by Karl Hughes of the Washington office. William J. Moyer, publicity director for the Washington-Baltimore region, has resigned to join a Washington newspaper. His place is being taken temporarily by George Sorgatz of the New York staff. Donald G. MacDonald has been named manager of ground operations, eastern region. Stan O. Halberg, until recently assistant district traffic and sales manager at San Francisco, is on leave of absence as traffic manager for LAMSA, UAL Mexican subsidiary, at Mexico City.

► **University of Michigan**—Wilbur C. Nelson appointed professor of aeronautical engineering to specialize in pilotless aircraft research. Dr. Myron H. Nichols, formerly of Princeton University, appointed associate professor of aeronautical engineering to head upper atmosphere research for the Army Signal Corps and supervise instrumentation of a super-sonic wind tunnel to be built at Willow Run.

► **Western Air Lines**—Marvin Landes, former assistant to the vice president, operations, elected vice-president in charge of customer and station service. Richard A. Dick elected vice president, traffic.

► **Wiggins Airways**—Robert Jarrett, Jr., formerly of American Airlines and during the war with the Naval Air Transport Service, named superintendent of traffic and sales of Wiggins' airline division.

No-Show Plan Effective

Scheduled airlines, with CAB approval, have placed in effect the first part of their "no-show" plan, aimed at discouraging passenger failure to pick up or cancel space on which reservations have been made.

Space is subject to resale—
► If the passenger fails to pick up and pay for his ticket within the time limit specified when sale is made.

The reservation is subject to cancellation—

► If the holder of a ticket bought in one city for a trip beginning in another does not contact the airline office in the second city 3 hr. before departure,

► If the passenger does not notify the ticket office three hours before departure after a stopover, or

► If he does not give 3 hr. notice on starting the return portion of a round trip.

Colonial Airlines has its own no-show plan, which calls for 6-hr. notice under the same provisions.

The second part of the plan, effective Oct. 15 if CAB approves, will permit the carriers to deduct a 25% penalty service charge from refunds on tickets not cancelled before scheduled time of departure.

CAB Asks Comment On Proposed NL Rule

CAB's Safety Bureau has circulated for industry comment a proposed new Part 09 of the Civil Air Regulations which provides a means of certificating certain surplus military aircraft as "NL" (AVIATION NEWS, Aug. 12).

Part 09 provides a different method for determining the airworthiness of a model than that which is provided in the Parts of the CAR establishing the airworthiness of aircraft. The new Part specifies that a determination of airworthiness will be based on compliance with the airworthiness requirements of the military services and the record of military operation of the aircraft, whereas in the usual case a determination of airworthiness is based upon compliance with the specific airworthiness requirements of Parts 03 and 04 of CAR.

The limited category established by the proposed new part makes provision for the limited airworthiness certification of all classes of aircraft which have been in military service, including airplanes, gliders, rotorcraft and lighter-than-air craft.

Eligibility for certification under this Part requires that the aircraft be of a model manufactured for, and accepted for use by, the military services and that it may not be of a make and model which is basically the same as an aircraft for which a type certificate is now in existence. Also, aircraft certificated in the NL category are prohibited from carrying cargo or passengers for revenue or hire, and will have to be operated with such limitations as are imposed by the Administrator for the specific make and model.

Chennault Will Fly China Relief Supplies

Gets \$3,000,000 loan to organize intra-China airline; Prescott seeking share for Flying Tiger Line.

Claire L. Chennault, retired AAF Major General and former commander of the Flying Tigers and the 14th Air Force, has returned to China to organize a \$3,000,000 airline for the primary purpose of flying relief supplies from Chinese coastal ports to famine areas in the interior.

Chinese National Relief & Rehabilitation Administration has granted Chennault a \$3,000,000 loan for initial financing of the line and will request a \$2,000,000 grant from UNRRA to purchase 12 C-46 and C-47 surplus transports for the line. UNRRA's \$2,000,000 grant will be deducted from China's fisheries rehabilitation allotment.

► **Prescott in China**—With Chennault in China is Robert Prescott, president of National Skyways Freight Corp. and a former Flying Tiger under Chennault's command. Prescott's air cargo line, now one of the largest American air freight carriers, is seeking a share of Chennault's China plum and will probably assist him in setting up the relief line and handling its maintenance facilities.

If Prescott concludes his proposed deal for an interest in the Chennault project it will offer an opportunity to link the intra-China airline with National Skyway's network that already extends across the United States and into Mexico, with a nonscheduled service across the Pacific. National Skyways will furnish personnel, equipment, and additional capital for the China project if its participation is approved.

Chennault maintains an office in Washington and is linked with sev-

eral other export-import enterprises that may complement his air line activities. Under his contract with CNRRA, relief supplies get first priority, but he may use any cargo space not required by CNRRA for hauling cargo.

► **Pilots' Jobs**—Chennault is recruiting personnel from former Flying Tiger and 14th Air Force personnel who served with him in China and already has the nucleus of an organization in China. He is offering his former pilots who have green instrument cards jobs at \$1,200 a month.

CNRRA's decision to back the Chennault airline came after six months' heated controversy over the project and only after intervention by the highest Chinese Government circles on Chennault's behalf. UNRRA officials in China reported unfavorably.

The Chennault line will have its principal bases at Shanghai and Canton and operate through the chain of former 14th Air Force military fields in Kwantung, Kwangsi, Hunan, Kiangsi, Honan, and Yunnan provinces.

UNRRA has not yet received an official request from CNRRA for purchase of the 12 transports but indicated it would initiate action to buy them immediately on receipt of the Chinese request.

Plan 10,000 ft. Runway For Patterson Field Tests

Construction of a 10,000 ft. long runway 300 ft. wide, described as the largest of its type in the world, to accommodate flight tests of huge new forthcoming bomber types has started on the Patterson flying field area at Air Materiel Command headquarters, Dayton, Ohio. Lt. Gen. Nathan F. Twining, AMC commander, said the runway would cost \$4,000,000 and would contain 300,000 cu. yds. of concrete, steel reinforced. It is due to be completed about Dec. 1947.

Public Hearings

Public hearings on proposed rules and regulations for administering the Federal Airport Act will be held the week beginning Oct. 14, the Civil Aeronautics Administration announces. Three groups of proposed rules will be published in the Federal Register prior to the meetings. Copies of the Register containing them may be obtained from the Superintendent of Documents, Govern-

ment Printing Office, Washington 25, D. C., for 15 cents. Forms for project requests, which CAA will start receiving Oct. 1, will be available at field offices. CAA cautions that none of the request should be sent directly to the Washington office.

108 Airports Sought For International Use

A recommendation that 108 airports, including 32 in the United States and its territories, be utilized for international operations centering in the Caribbean area has been made at the Caribbean Regional Air Navigation Meeting of the Provisional International Civil Aviation Organization. The list was developed by the Aerodromes, Air Routes and Ground Aids Committee of the 21-nation conference, in session in Washington since Aug. 26.

Submission of the list opened the way for a speedup of work by committees concerned with air traffic control, meteorology, communications, search and rescue, and other facilities which must be located in relation to internationally-used airports.

Data assembled at the meeting show that 45 air carriers representing 14 nations soon will be flying commercially in the Caribbean region and that twelve countries now are operating services—either international or internal—in the area. These twelve are Brazil, Colombia, Cuba, the Dominican Republic, France, Honduras, Mexico, The Netherlands, Nicaragua, United Kingdom, United States and Venezuela. Canada and Peru plan to start service shortly.

Thirty of the expected 45 carriers are now operating and are

using a combined fleet of 189 civil aircraft of 23 different types, including Avro Ansons, Bellancas, Boeings, Douglasses, Fokkers, Fords, Junkers, Lockheeds and Sikorskys. Much new and larger equipment must be added to handle the tourist potential of 600,000 annually in the Caribbean area, a study shows.

The Caribbean Regional Air Navigation assembly is the third of a series of area sessions being held by PICAQ throughout the world, and more than 125 delegates, advisers and observers are participating. Charles I. Stanton, deputy Civil Aeronautics Administrator and chairman of the U. S. delegation, was elected president of the assembly.

Announcement was made at the meeting of the designation of Major General Laurence S. Kuter, commanding general of the Atlantic Division of the Air Transport Command, as the U. S. representative on the Interim Council of PICAQ. He succeeds Gerald B. Brophy.

Reveal Details of Kaiser Robot Bombing Planes

Details on four robot target-bombing planes, developed experimentally for AAF during the war, have been announced by Kaiser Fleetwings, Inc., Bristol, Pa. A fifth project, an attack fighter, XA-39, was designed.

Two of the robot planes, YPQ-12 and 12a, were powered by a single Lycoming 185 hp. engine, and were 20 ft. long with a span of 30 ft. The other two, XBQ-1 and 2a, were twin engine craft. The XBQ-1 had two Franklins of 280 hp. and the 2a two 280 hp. Lycomings. Length of both was 27 ft. and span 48 ft.



Kaiser Robot Attack Plane: First flight picture of the XBQ-1 Kaiser Fleetwings Inc. experimental, radio-controlled attack plane developed for the AAF during the war. Note radio control antenna on vertical stabilizer.

CAA Medical Quota Short of Pilots' Needs

UP&MA poll indicates few flyers satisfied with present medical examiner system despite increase in authorized doctors.

Efforts of CAA to designate sufficient medical examiners to meet the needs of commercial pilots are still falling far short of the mark on the basis of a poll of several hundred representative holders of commercial tickets by United Pilots & Mechanics Association.

Of those polled, 53% have to travel an average of nearly 46 miles to get to a medical examiner.

Meanwhile, CAA's efforts to obtain sufficient examiners have brought the total of designated doctors up to 1,926, according to one CAA estimate, with 400 more appointments being processed. This, if correct, represents a two-month increase of 296 since June when a CAA announcement put the figure at 1,630.

► **600 Ophthalmologists**—Of the 1,926, more than 600 are ophthalmologists to give the eye refraction test recently ordered by CAA when it raised the rates for the examination from \$6 to a maximum of \$15 including the eye test. This order instituting the special eye exam came in for the bitterest criticism by those answering the UP&MA survey who, in general, condemned the increase in fee.

Only 3% of those replying think the increase is justified, while only 4% believe it will mean better service. On the other hand, 75% feel that competition would improve the service by physicians to commercial pilots.

James W. Batchelor, general counsel of UP&MA, who has been asking CAA to reconsider the increase in rates, reported that eleven doctors replied to the poll. "While this total is too small on which to base any general statement about opinions of the medical profession as a whole," Batchelor says, "it might be significant that of those eleven, only four think the increase is justified, and only two believe it will result in better service."

► **53 Percent Travel**—Batchelor pointed out that while 53% of the pilots answering the poll have to travel to reach their designated medical examiner, a slightly higher number, 54%, desire the appointment of additional medical



TWIN ENGINE PERFORMANCE:

One of the Douglas C-74 Globemasters being delivered to ATC for long range cargo operations is shown in flight with both port propellers feathered during recent tests at Long Beach, Calif., Municipal Airport. (Schmidt photo.)

examiners. This reflects the opinion of those who live in the same city as an examiner that more than one examiner should be appointed for the larger places.

The poll also shows that the number desiring the appointment of additional examiners was lower than might have been expected because a great many pilots answered no to the question and then commented that they were opposed to the entire system of designated examiners for commercial pilots. These pilots feel the medical exam can be given just as well by any doctor, the system now in force for private pilots.

The poll indicates spotty distribution of designated examiners. Pilots were asked the number of commercial pilots based at their airports. There are numerous replies showing a larger number of pilots at fields miles away from an examiner than they are at fields in the same city as an examiner. At one field, 200 pilots must travel 40 miles to the nearest examiner; at another, 25 pilots travel 100 miles; there are 50 pilots that travel 26 miles. The poll does show, however, fields basing 100, 200 or more pilots at cities where there are examiners.

► **Time Rankles**—The time it generally takes to get a medical exam is another thing that rankles with the pilots polled by UP&MA. The average time of those replying to this question is 50 minutes. Bearing out the contention of numerous pilots that the exam often is a farce, are some of the times recorded for the exam: eight minutes, five minutes, ten, 15. The average time the doctors

who replied gave for the exam was just over 40 minutes.

In condemning the increase, one doctor wrote UP&MA: "Since when did CAA become an accrediting agency for physicians in general? . . . Just how does CAA acquire the authority to designate the price that a designated physician must charge?"

British Buy Boeing Craft for Atlantic

Total sales of Boeing Stratocruisers have been boosted to 55 with British Overseas Airways' purchase of six of the double-deck craft for use in its North Atlantic operations. Price of the 55 planes bought by six carriers aggregates more than \$75,000,000.

The order for the Stratocruisers—which are to be delivered during the second half of 1947—represents the second purchase of Boeing aircraft by BOAC. In 1941 the British line bought three 314A flying boats which combined to accumulate 596 Atlantic crossings during the war and which are now operating between Baltimore and Bermuda.

Airlines Buy Surplus

Sales of war surplus airplane engine parts by the War Assets Administration amounting to \$9,500,000 are being shipped in 140 carloads from Kansas City to major airlines throughout the world, according to John E. Kirchner, regional director. Buyers of the parts include airlines in the United States, Hawaii, South America, Holland and England.

PRIVATE FLYING

12,000 Plane Backlog Bolsters Piper Production Now 58 a Day

Lockhaven, Pa., manufacturer plans to make at least 10,000 lightplanes next year as Skysedan model and Ponca City Plant go into production.

By ALEXANDER MCSURELY

A backlog of more than 12,000 unfilled orders for the Piper Super Cruiser and Cub Trainer, in addition to the 5,501 airplanes already delivered since VJ-Day, is spurring Piper Aircraft Corp., Lockhaven, Pa., to increase still further its current production rate which last week had already reached 58 planes a day.

All except a small fraction of the planes are now being made in the 242,000 sq. ft. of plant space at Lockhaven. The new Ponca City, Okla. assembly plant is expected to bear an increasing share of production as that operation gets into high gear, although planes are already rolling from the Ponca City line. A tentative goal of 9,000-10,000 planes has been fixed for 1946, with production increase expected to continue in

1947, when possibly as many as 15,000 planes may be turned out. Eventually it is expected that the two plants if operated to their capacity, will be able to make 22,000 planes a year, although current planning projected on sales trends doesn't call for that high a rate.

► **Transfer Equipment**—Eventually it is expected that all Cub Trainer production except parts made with heavy machinery will be transferred to Ponca City, opening one of the two lines at the Lockhaven plant, to the new all-metal four-place plane, Skysedan, expected to go into production probably late in 1947.

The prototype (described in AVIATION NEWS, May 27) exhibits remarkably slow landing speed, very little faster if any than the Cub trainer, although it will step

along at a cruising speed of around 150 mph. The safety factor of the slow landing speed is likely to be one of the plane's most attractive features to family plane buyers, although the roomy cabin, convenience of entry, and other essentials are provided.

Latest tentative price for the Skysedan has been set at \$3,800, although Piper executives point out that rising costs of labor and material may alter this before the plane is placed on sale. The figure is significant, even if tentative, when compared with the prices quoted for the other four-place planes now or soon to be on the market, the Beech Bonanza 35, the North American Navion, the Stinson Voyager 150 and the Bellanca Crusair Sr., all of which are selling for over \$5,000, with the Bonanza, the highest priced, quoted at \$7,345.

► **Super Cruiser Favorite**—The three-place Piper Super Cruiser, with a 100 hp. Lycoming power plant, is currently the favorite of the Piper customers as the 7,074 unfilled orders for it attest. Only 337 Super Cruisers have been delivered, as of Monday Aug. 26. Now selling at \$3,205, a \$210 increase over the previously quoted price, the Super Cruiser still offers faster transportation for more people for the money than any other personal airplane produced.

Basically still the time-tested Piper Cub design, on enlarged scale the three-place plane is more



HELICOPTER COUPE:

"Hands-off" control in the new experimental GA-45 helicopter coupe produced by G & A Aircraft, Inc. (Firestone subsidiary) is demonstrated by the pilot in this unusual flight closeup picture. Trim lines of the

helicopter, and neat arrangement of controls may be seen in the ground photo. Firestone sees the GA-45 as forerunner to a personal helicopter. (AVIATION NEWS, Sept. 2, 1946.)



streamlined and attractively, if not luxuriously, fitted out. Planes rolling from the line, consistently will top 120 mph. top speed, and actually cruise at about 105, according to Piper officials, and one which hauled the writer from Williamsport to Cub Haven airport, at Lockhaven, handled the cruise rate nicely.

Friendly William T. Piper, 60-year-old head of the company, has often been called his company's best salesman, and is recognized in aviation circles as probably the most effective and realistic preacher of the doctrine of the light-plane's future. The fact that he flies one of his own planes on frequent trips over the country and that he learned to fly after he was 50, give middle-aged business men, who are the most likely to have the money to buy a personal plane, assurance that they aren't too old to learn. He is one of the most insistent advocates for "lots of little airports" instead of relatively few large expensive landing facilities. He plumps for the small field at every opportunity.

► **New Tooling**—A trip last week through the Lockhaven plant indicated that the company is installing new machine tooling to speed production, and at the same time in preparation for its all-metal Skysedan. This, in the production version, is expected to use a simplified construction with elimination or combination of many components, in order to cut down costs.

The company hasn't lost interest in the twin-tailboom pusher type of personal plane, despite the disappointing performance of the two-place experimental Skycoupe. A high-wing design, which has much to recommend it from visibility and safety standpoints, is being studied.

Experiments are going on with a slow-flying experimental Cub trainer, which has a full-span flap, and spoilers.

Version of the new airplane now flying has its tailwheel on a long "stilt" which gives the plane a tricycle landing gear, with level fuselage. Mr. Piper, himself flies this plane frequently, and is credited with the idea for the odd gear arrangement. The company is also investigating the principle of a swivelling rear seat in trainer planes, which would serve as a protection to the pupil or instructor in the back seat in the event of a crash. This feature has been recommended by Hugh De Haven

of Cornell University, in his studies on improving airplane design with respect to pilot safety.

The company now has 2,640 employees, many of whom are members of the Cub Fliers, employee flying club which has its own large hangar, with an attractive modernistic club lounge adjoining it on Cub Haven, and which provides flying time to members for \$2 an hour, with instruction up to solo.

St. Louis University Gets Parks College

Transfer of Parks Air College, East St. Louis, Ill., valued at approximately \$3,000,000, to St. Louis University, was announced last week by Very Rev. Patrick J. Holloran S.J., president of the university, and Oliver M. Parks, president and founder of the college.

The transfer was made possible by the gift from Oliver Parks of his holdings amounting to more than 43 percent of the college stock, and by acquisition, through other gifts and purchase of remaining outstanding shares by the university.

The East St. Louis college will become the Parks College of Aeronautical Technology of the university. Founded in 1927, the Parks college is known as the oldest fed-

erally approved aviation school, and confers degrees in aviation maintenance engineering, aviation operations engineering, and aeronautical engineering.

The college plant includes 113 acres of campus and airport, with 22 buildings including shop, classroom, laboratory and dormitory facilities. Present enrollment of 368 men is expected to be increased to 400 in the coming fall semester.

Parks will continue as dean of the college, serving without pay, while Niels C. Beck, superintendent of instruction, will serve as associate dean. Rev. George Bischofberger S.J. will be regent of the college, acting as liaison officer between the university and the college, and four university faculty members will be assigned to the college it is stated.

Parks will continue his activity as president of two other corporations, Parks Aircraft Sales & Service and Parks Air Transport. The sales and service organization is an airport operating and aircraft and accessories sales organization operating bases at Kansas City, Columbus, Cleveland, Chicago, Indianapolis and East St. Louis, while the other organization is an applicant to CAB for feeder airline service certification to 194 cities in 15 central and southwestern states, covering an area of 600,000 sq. mi.



PARKS AIR COLLEGE TRANSFERRED:

Oliver L. Parks, president and founder of Parks Air College, E. St. Louis, Ill., last week announced transfer of the oldest federally approved aviation school to St. Louis University, where it will continue in operation as Parks College of Aeronautical Technology of St. Louis University. Above: Parks, left, transfers title to Rev. Patrick J. Holloran S.J., president of St. Louis University.

Taylorcraft's Ace Will Sell for \$1,995

The two-place side-by-side Taylorcraft "Ace," a "stripped-down" version of the basic Taylorcraft BC12D models, will be sold at \$1,995, believed to be the lowest price in the industry on a plane now in production, it was announced last week.

Nash Russ, president, in announcing the new low-priced plane, said it was powered with the same 65 hp. engine, and had no changes in structural design and equipment. Standard equipment includes metal-tip propeller, safety control wheel, carburetor heat, steerable tail wheel, self-adjusting heavy-duty brakes, and dual rudder controls, altimeter, airspeed indicator, compass, oil pressure gage, oil temperature gage and tachometer.

Russ said he had been endeavoring to obtain cooperation of suppliers and equipment manufacturers in lowering the overall price of personal planes in order to tap the mass market, now blocked by existing price levels. Russ said he had offered to reduce his company's rate of profit on each plane for the immediate future as his share in a drive to cut costs of private planes. Despite the fact that he had received, he said, scant cooperation from the suppliers, he had decided to bring out the "Ace" at a price "considerably lower than any other aircraft on the market and comparable to that of medium priced automobiles."

Performance quoted on the Ace includes: Cruising speed 100 mph;

maximum speed 117 mph; range, 270 miles with 4 gals./hr. fuel consumption; service ceiling 15,000 ft.; takeoff with full load in 350 ft. (altitude not given) and landing speed of 38 mph.

Demonstrate New Firestone Helicopter

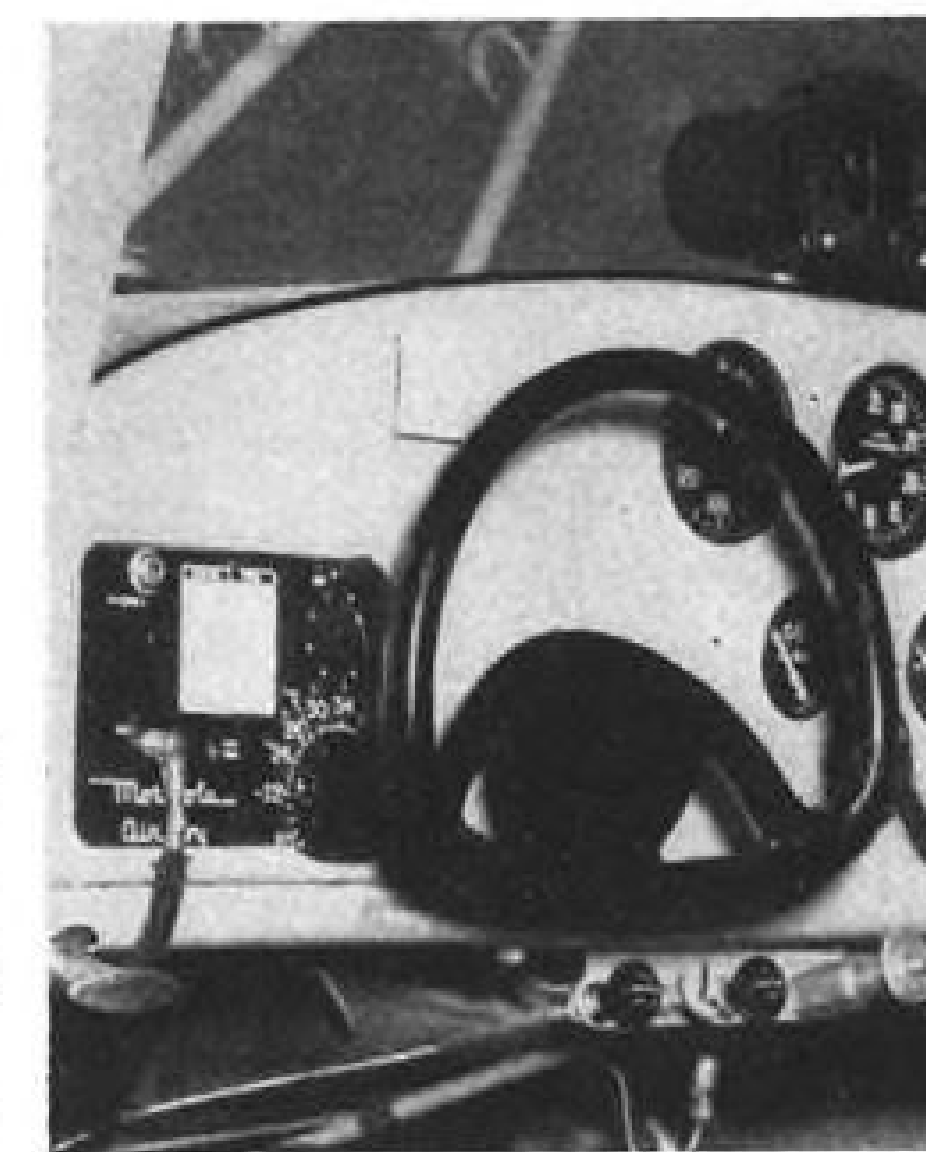
First public demonstration of the new Firestone two-place side-by-side helicopter coupe, Model GA-45, developed from the Army XR-9 helicopter, was made last week at the National Air Races.

Powered with a 125 hp. four-cylinder engine, the Model GA-45 has a 30 ft. diameter three-blade main rotor, and a small anti-torque tailrotor at the end of a tailboom extending from the Lucite-enclosed cabin.

Weighing less than half as much as a low-priced automobile, the coupe is described as free from jolting vibration, can be flown hands-off, and has good stability.

The commercial version, like the Army helicopter (AVIATION NEWS, March 11 and April 1, 1946), is a product of the G & A Aircraft, Inc., (Firestone subsidiary) at Willow Grove, Pa. While no performance data on the commercial version has been announced, the XR-9B will cruise at better than 80 mph. with fuel for more than three hours of flight, has a service ceiling of over 10,000 ft. and a rate of climb of more than 1,000 ft./min.

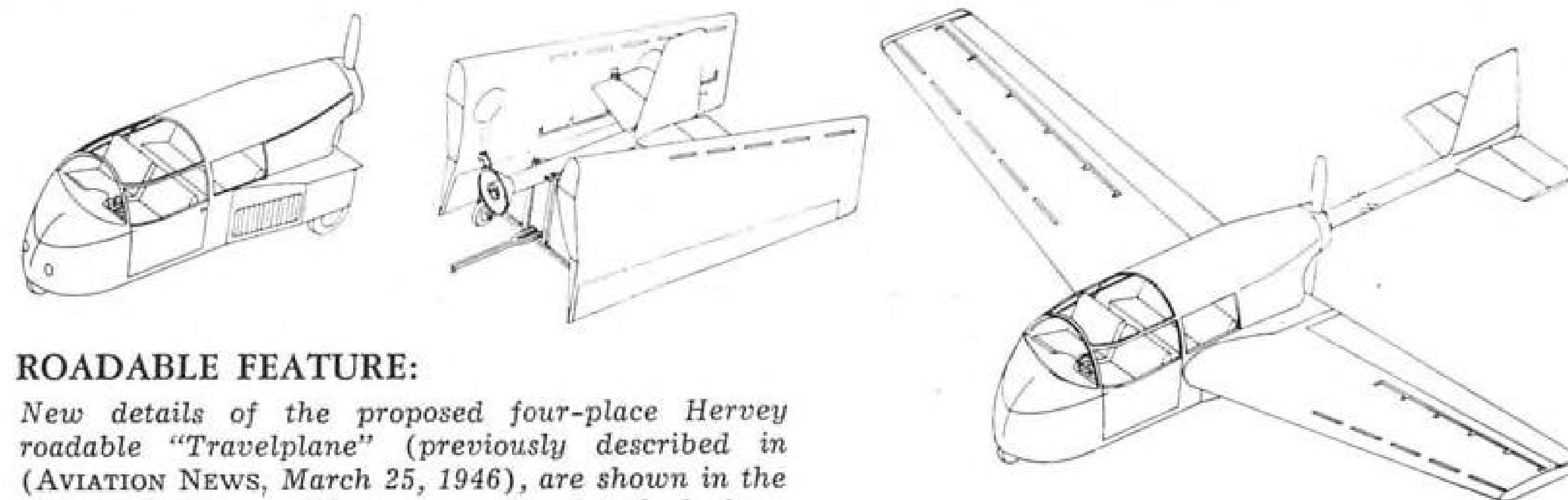
The Model 45 is equipped with dual controls, for training helicopter pilots, and has 270 degree visibility from the cabin.



SAFETY WHEEL:

In line with recent recommendations of safety engineers, Taylorcraft has recently developed control wheel pictured here, which is going on company's standard two-place plane. "Dish-type" wheel is designed to distribute equally, any possible impact with pilot or passenger, in event of forced landing or other difficulty. Photo also shows Motorola Airboy radio which is standard equipment in the deluxe two-place Taylorcraft.

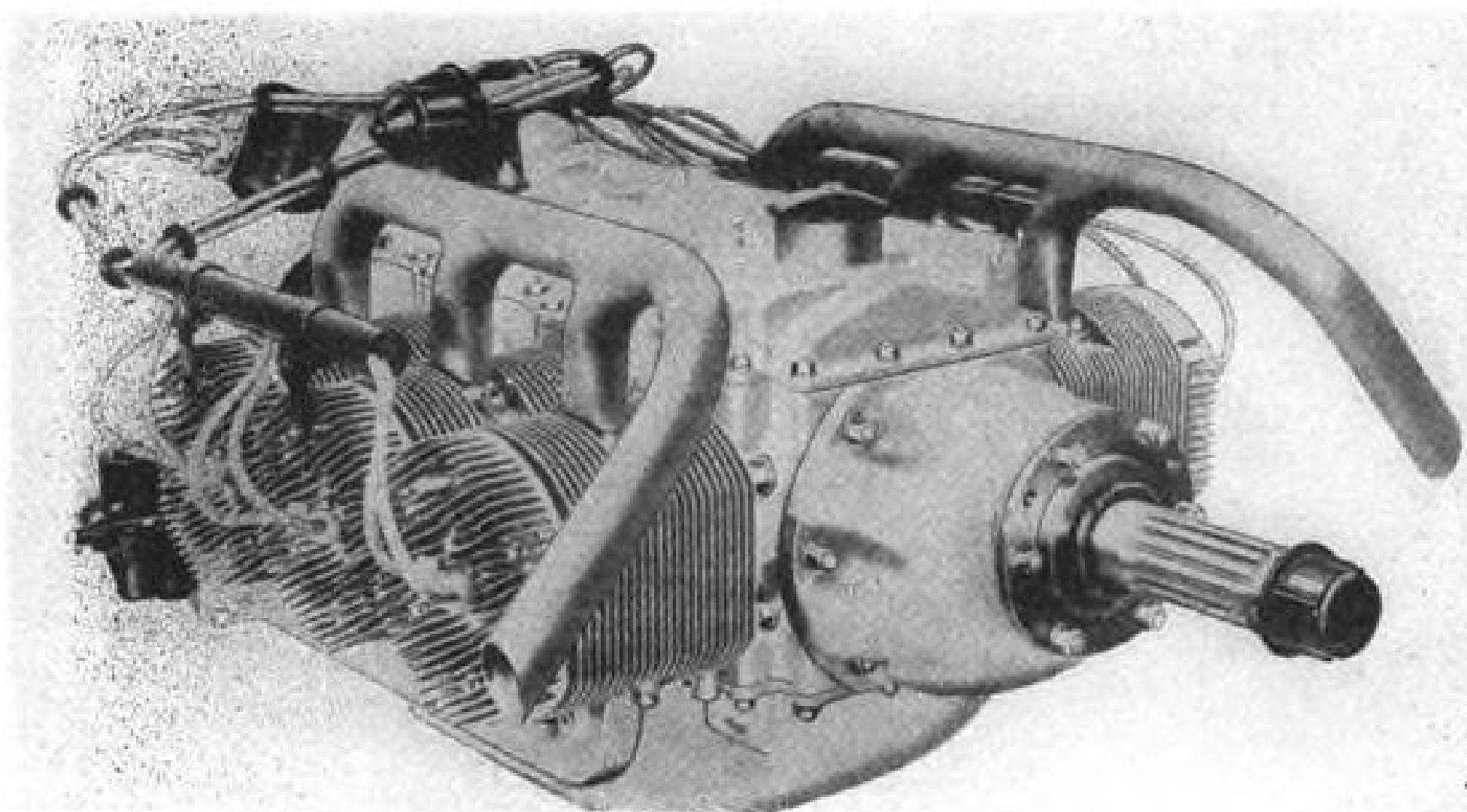
Extensive flight tests are planned with the Model 45, results of which will influence development of a four-place helicopter sedan, Model GA-50, also projected by Firestone. (AVIATION NEWS, July 8 and 29, 1946). Commercial possibilities of the G & A helicopters for taxi service, crop dusting, forest and coastal patrols will be investigated.



ROADABLE FEATURE:

New details of the proposed four-place Hervey roadable "Travelplane" (previously described in (AVIATION NEWS, March 25, 1946), are shown in the above sketches. Wings may be detached from fuselage and folded back against tail boom, and connecting bars, fittings and wheels are pulled out of the wings so that the empennage and wings form a trailer which may be stowed in a hangar, or towed down the highway behind the fuselage, which has

become an auto. George Hervey, Roscoe, Calif., the designer, is forming a corporation which expects to make a prototype Travelplane within six months, and go into production on the type as soon as CAA approval is obtained.



DIE-CAST ENGINE:

Jack & Heintz, Cleveland, is developing this six-cylinder air-cooled aircraft engine, as a part of the company's new die-cast engine program. The engine consists essentially of six individual aluminum or magnesium die castings: the crankcase, including half the cylinders; cylinder head, oil pan, accessory cover, front and rear covers. The engine has 126 cu. in. displacement, and is credited with 95 hp. maximum power, or 75 hp. rated power. It weighs approximately 200 lbs. A companion six-cylinder automotive engine, and four- and two-cylinder power plants with interchangeable parts are also under development.

Seattle Wants Plan For 12 Airport Sites

Development of 12 airport sites in the Seattle-King County region of Washington, and large expansion in facilities for private flyers, is called for in a master airport plan announced by the King County Aviation Council, appointed last spring by board of county commissioners.

Since needs for larger planes will be served for the next few years by

existing large air terminals, Seattle-Tacoma Airport, Boeing Field, and Renton-Boeing airport, Ben V. Ehrlichman, council chairman called for concentration of airfield development on smaller fields for private flyers and non-scheduled commercial operators.

Establishment of four emergency air strips in the vicinity of the Snoqualmie Pass in the Cascade mountains, was urged, with a citation of recent plane crashes in that area as indication of the need.

Seabee Takeoff Tests

West Coast tests flown by Tex Rankin, of Rankin Aviation Industries, Inc., Tulare, Calif., with the Republic Seabee amphibian showed excellent performance in takeoffs from Klamath Lake, Ore. (4130 ft. altitude); Diamond Lake, Ore., (5184 ft.) and Lake Tahoe on the California-Nevada boundary (6225 ft.).

Carrying full load, four persons and 42.4 gal. of fuel, the plane made takeoffs from Klamath in average takeoff time of 50 sec.

At the 2½ mi. long Diamond Lake, with a 15 mi. wind, the Seabee left the water, carrying four persons averaging 180 lbs. each, and 45 gals. of fuel, in 1½ min. After Rankin's first landing, he put the Seabee's Hartzell

propeller in reverse pitch and "backed" the plane one mile to shore, as a demonstration.

On Lake Tahoe, under unfavorable conditions with only a 3 to 4 mi. wind, and near-glassy water the Seabee took off with two persons in a 2,000 ft. run, and with three persons and a 40 gal. gas load got off without difficulty. Rankin estimated that if Tahoe's usual 20 mi. wind and choppy water had been present the plane would have taken off easily with full load.

He expects to make additional tests with the Seabee from lakes with even higher altitude, to establish clearly what performance may be expected from it. His company is West Coast distributor for the Seabee.

The council asserted that fields now planned by private capital would not be sufficient and urged that unsettled areas with good potential airfield sites be zoned to permit airport operations. It warned that there are 300 small planes now operating from existing bases, and that the number in the Seattle area is expected to expand to 2,500 in 5 yr., and to as many as 4,000 in 10.

Sites recommended include, in addition to the four emergency strips, three fields north of the city, the Kirkland municipal airport, east of Seattle; Seattle Midlakes site, only remaining area available for a Class 4 or 5 airport; south Mercer Island, Burton field on Vashon Island in Puget Sound, and North Bond.

Geisse Heads New Plane Rental Service

Delivery of enough planes to begin service will probably be the first headache of the new proposed National Airplane Rental Service, which John H. Geisse, long time CAA personal flying consultant, will manage. Headquarters of the organization will be tentatively in Washington, later in Camden.

Backers of the organization, according to Geisse are prepared to invest approximately \$2,500,000 in the enterprise to get it underway. Several of them are aviation "names" and the organization will be revealed in more detail when it is incorporated next month.

Geisse expects the service to cover approximately 300 cities when it's in full operation. A main objective is to make it possible for a customer to rent his plane for a one-way trip and turn it in at airport arrival point, without having to fly it back.

Geisse, who resigned from CAA to operate the new venture expects the company will operate in one section of the country experimentally for about six months, probably the Northeast, before opening up on a national scale with all 300 cities and about 1,000 planes. He sees possibilities that the service eventually may use as many as 10,000 planes, within 10 years after the start. And he anticipates that the company eventually may operate its own dude ranch and seaside resorts with airfields to attract vacationing flyers who will rent the company's planes.

It is planned eventually to es-

tablish regional control centers which will keep a record of plane distribution at all times. It is planned to use aircraft service operators as agents who will be paid for plane storage, maintenance and rentals.

Using a basis of 500 hours use per year per plane, Geisse estimates that the company probably will charge about five cents a seat mile. Thus a 100 mile trip in a two place plane would cost \$10 while the same trip in a four-place plane would cost \$20. In case of a special attraction at one spot, the company would have to charge premium rates to prevent a loss from return ferrying trips in case the customers leave the planes at the destination because of weather or some other reason, and return by other transportation. Under ordinary circumstances it is expected the operation will balance itself closely, so that only about 10 per cent of the plane's time will be used in non-revenue ferrying flights.

The company will own its own planes, turning them in frequently for new ones, and will use only new postwar models, no Government surplus aircraft, Geisse said.

Shoppers Airport

A score of manufacturers and distributors have petitioned the Atlanta, Ga., city council for conversion of the James L. Key golf course into a "shoppers' airport" for private planes, emphasizing Atlanta's needs for a good airport located within a few minutes of its downtown section. Such a field, the petitioners say, would stimulate special shoppers' airlines to Atlanta from communities throughout Georgia and neighboring states.

Record Pilot Total

Issue of 21,935 student pilot certificates in the month of July by CAA, set a new record, exceeding any previous month in history. For the first seven months of 1946, CAA has issued 86,188 certificates to the beginners, as compared to a total of 74,000 issued throughout all of 1945. The increase is attributed partly to the civilian increase in interest in private flying since war's end, and partly to the GI bill of rights which is making flight training available to many veterans without cost to them.

Briefing For Private Flying

OPERATION FIFINELLA—A mass flight of nearly 100 Piper J-3 Cub Trainers, from Lockhaven, Pa., their home town, to Akron, Ohio, piloted by former WASP flyers last week was a significant demonstration of today's lightplane, and the place that women are taking in private flying. The Cub Trainer might well be called the typical minimum postwar plane, since it sells for less than any other now on the market and still is a safe, easy-to-handle aircraft. There are probably more of them in the air than any other one type of plane today.

WOMEN PILOTS—The women at the controls of these planes were not average private flyers. Many of the held multi-engine ratings, a number were instructors. Tiny Nonnie Horton, of Washington, D. C., an instructor at Art Hyde's Congressional Airport, has every pilot's rating in conventional aircraft. Yet quite a number of others had flown but little since they left the military ferrying service. Some of them had had scant time on 65 hp. planes since their primary training days. Yet they formed into four flights of twenty-odd planes each, flying in elements of threes, and made a very creditable showing as they filed over Pennsylvania's hill and down across Ohio's rolling country.

RENDEZVOUS POINT—All the flights made a rendezvous landing at Newcastle, Pa., at the Wilson airport, after which they formed in a single flight, still in three-plane elements, and went on to Akron municipal airport. Despite a confusing windshift at the Akron field which resulted in an intricate circling of the field, the entire flight came in to complete the "Operation Fifinella" as the trip was called, without a single mishap.

VIEWPOINT—Sitting in the back seat of one of the Cubs, in the fourth and last flight, we watched the flying of our own element and the other planes ahead and in the rear. It was a ragged formation at first, in spots, although Jean Howard, Washington, D. C., my pilot, and the two other girl flyers in the element, held their respective positions consistently. But soon our whole flight had straightened up and looked not much less precise than some of the formations flown by the Army and Navy pilots at Cleveland the next day.

PRELUDE—We had joined with the flight at the end of a three-day meeting of the Order of Fifinella (the Wasp symbol created by Walt Disney) at Lockhaven, in which the girls did lots of flying including flour-sack bomb dropping, and spot landing contests. Champion Wasp, who placed highest in these contests, Jackie Hughes, of Fresno, Calif., won a trophy for her skillful flying.

SKIPPED CLEVELAND—The Wasp flight had planned to fly over Cleveland, to give the National Air Races fans one more spectacle, but this was omitted since the flight made a late start, and was coming into Akron close to sundown. The flight was made one day later than intended, due to those Pennsylvania mountain fogs. But the flight was completed according to plan, without incident. The only minor difficulties reported were a drop in oil pressure in one plane's engine at a waypoint, quickly taken care of, and the scraping of the tailwheel of another plane against a low wind tee, at the end of a runway, which damaged neither plane nor tee.

INTERPRETATION—The place of women in private flying, as instructors, and possibly at some later date as scheduled transport pilots, is a matter of considerable dispute even yet, among men flyers despite the showing of the WASPS in ferrying and tow-target work during the war. We had always been inclined to be on the side of the skeptics, frankly. But this demonstration by 100 girl flyers, was rather overwhelming in its conclusiveness. There seems no valid reason why thousands of other young women, and older women too, will not fly equally well. And the sooner other manufacturers, as well as Piper, and aircraft sales organizations too, include women flyers in their planning and aim their products to please them, the faster personal aviation will advance. It will be remembered that the American motor car market never amounted to a great deal until the American woman became an enthusiastic, if sometimes unconventional automobile driver. Now look at it.

—Alexander McSurely

LABOR DAY • 1946

—Time for wise union leadership

LABOR DAY, 1946, finds one hopeful element in the relations between American management and labor which was not there on Labor Day, 1945. It comes in recent expressions by a number of national leaders of organized labor that increased "real"

wages depend upon *increased productivity*, i.e. increased output per man-hour. Increased money wages which are promptly offset by higher prices do nobody any good.

If these expressions, which still remain to be substantiated by practical performance, come to be accepted by the rank and file of labor in each community, Labor Day, 1946, can usher in a period of great and perhaps unprecedented improvement in the economic wellbeing of wage earners—as well as the wellbeing of the country at large. If, on the contrary, they remain merely window dressing and there is a continuation of the post V-J Day process of increasing wages and then prices, the outcome can only be the bursting of an inflationary bubble, with attendant suffering for workers and the community generally.

Competition requires management to bear down heavily on increased labor productivity as a prelude to wage increases. Management, however, has rarely made a more forthright statement on the importance of increasing labor productivity than that contained in a recent issue of **LABOR'S MONTHLY SURVEY**, an official publication of the American Federation of Labor.

William Green, the Federation president, led off with a "message to American workers." He remarked, "Our major need is increased volume of production." Observing that "wage increases this spring have been paid for by raising prices," the

survey itself goes on to say that "Today America's ability to raise wages without increasing prices and living costs depends on increasing productivity in civilian industries . . . Here is the challenge to free labor and free enterprise today: *Cooperate to increase productivity and raise living standards without strikes.*" (Italics supplied.)

The importance of increasing production was also recently stressed by Walter Reuther, President of the United Automobile Workers, C.I.O., who remarked that his union "is just as eager as management to get the (automobile) industry into maximum production." In taking this general line he was in accord with the position of Philip Murray, head of the C.I.O., who in a book,

"Organized Labor and Production" written with Morris L. Cooke, remarks that, "The modern labor leader also realizes that to receive a good day's pay a man must do a good day's work and that *increased productivity has been the vital factor in the country's industrial supremacy and its relatively high wage scale.*" (Italics supplied.)

In citing increased productivity as the key to increased "real" wages these labor leaders—and management—have the historical record entirely on

their side. In the 40 years prior to the outbreak of World War II output per man-hour for the country as a whole was approximately doubled. Over the same period the "real" hourly earnings of industrial workers were also approximately doubled. There were, of course, great variations in the increase of output per man-hour from one line of activity to another. Also, there were periods when increases in "real" wage rates lagged behind increases in productivity. But for the 40 year period as a whole and the economy as a whole there is no mistaking the fact that the route to increased "real" wage rates was increased productivity.

Three economic factors played major roles in this doubling of production per man-hour which has made America the industrial marvel of the modern world. One was the skill and diligence of American workers. A second was the skill and diligence of American management in organizing production. A third was the improvement of machinery and the increased application of power to it.

Wartime Record

During World War II this sustained increase in the productivity of labor in civilian manufacturing industries, which had averaged about 3 per cent a year, was brought to an abrupt halt. Much of the most efficient segment of the nation's labor force went to war or war industry. Also, civilian industry was starved for new equipment while we equipped our arsenals. The result was that the productivity of labor in those civilian manufacturing industries for which the government keeps records actually declined throughout most of the war. By 1945 it was no higher than in 1941, whereas, if it had maintained the long run average, it would have been about 12 per cent higher. In the meantime, however, average hourly wages in these civilian industries had increased about 40 per cent.

In war industry, which started from low levels of production at strange tasks, there were substantial increases in output per man-hour. Many of these increases involved new processes, improved techniques, and better machines which can be adapted over a period of time to the improvement of productivity of labor in civilian industry.

Since V-J Day, however, labor, led on by a misguided government, has had its sights on higher money wages instead of improving productivity which would have laid the foundation for increased "real" wages. Consequently, debilitating industrial strife ended in a round of wage increases which, in

the absence of increased productivity, is being washed out by higher prices.

To Keep Production Rolling

However, as indicated by the summary of a McGraw-Hill sampling of the current experience of industry in increasing output per man-hour, which appears in the center of the page, there is hope that the situation ahead can be improved. After agonizing delays because of work stoppages, material shortages, and reconversion complications, industrial production is beginning to roll again. Allowed to roll it will not be long before it will be making those advances in productivity which are the only true basis for increased "real" wages.

If the process of keeping American industry rolling to new highs of productivity is to be resumed, management must see that the past practice of translating increased output per man-hour into increased "real" wages is not only sustained but wherever possible accelerated. For its part organized labor must abandon its manifold feather bedding rules and other production-restricting practices which afflict considerable segments of American industry. Further it must give incentive systems of pay, honestly conceived and honestly administered, a fair break. *Management and labor and government and the community at large must collaborate in removing that specter of working one's self out of a job which has been one of the greatest causes of restriction of output.*

The current emphasis by leaders of organized labor on the economic truth that increased output per man-hour is the only road to increased "real" wages is important. The next step is to see that recognition of this truth seeps into the rank and file of labor and industry and becomes the basis of a program of action at the local level. If it does, and quickly, Labor Day, 1946, may mark a tremendous turning point toward sustained prosperity not only for labor but the community at large. If it does not, union leadership will fail in its responsibility and must answer to the American people for the consequences of such a failure.

James H. McGraw, Jr.

President McGraw-Hill Publishing Company, Inc.

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SPECIAL AIR SERVICES

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Cut-Throat Competition Among Cargo Carriers Scored by Penzell

Charges Independent Airfreight Association began rate cutting spree resulting in severe setback for flying freight.

Cut-throat competition among uncertificated air cargo carriers came under sharp criticism from one of the largest operators in the industry last week when H. Roy Penzell, president of Air Cargo Transport Corp., called for equitable government regulation to control the current rate war.

At the same time, Penzell took issue with statements he attributed to Robert W. Prescott, president of National Skyway Freight Corp. (The Flying Tigers), and attacked the policies of the Independent Airfreight Association, which Prescott heads. Penzell asserted that members of IAA had indulged in a rate cutting spree which had lowered their tariffs to 10½ cents a ton mile and that Prescott had called the reductions "good for business." Actually, Penzell stated, it is impossible to show a profit even at 12½ cents a ton mile with present cargo equipment and safe payloads.

► **Cites Setback**—In a letter to CAB, Penzell declared the air cargo industry had received a severe setback by "the wildcatting tactics of some of the carriers, which obviously are operating without consideration of cost." He said ACT (which operates 14 C-47s) would not accept freight at less than 17 cents a ton mile, adding that the company was only able to offer this reduction from its 20-cent rate because of increased payloads made available on cargo C-47s by CAA.

"It was ACT," Penzell continued, "which first lowered rates from 30-40 cents a ton mile to 20 cents a ton mile and at the same time consolidated the multiple rate classification into one. At this figure, with the equipment which is utilized today by most of the carriers—the C-47 or C-54—an air cargo company operating 10 planes would show a profit with a daily

utilization of between four and one-half and five hours.

► **Cost High**—"The direct operating cost of a C-47, the most economical cargo plane in use today in view of the present stage of the industry where a certain amount of deadheading is still necessary and full payloads are not always available, is \$54 an hour, or 12 cents a ton mile. When you add to this the indirect cost of from 4½ to 6 cents for sales, traffic, advertising, promotion and other executive expenses, it makes a total cost of 16½ cents a ton mile."

CAB Petitioned

The Government of Puerto Rico has asked CAB to reopen Docket 1501 (classification and exemption of nonscheduled air carrier operations) and has requested permission to intervene in the case.

French Decision

The French Secretariat-General for Civil Aviation has decided in principle that private companies may be licensed to carry on charter services until further notice, and probably permanently. Such

Carriers Register

Approximately 500 registrations under Section 292.1 of CAB's Economic Regulations were filed by uncertificated carriers by the Sept. 3 deadline. The reports, listing financial and traffic figures, equipment on hand, company officers and other data, are now being analyzed by the Operations Division of CAB's Economic Bureau. Less than one-quarter of the registrations came from operators using transport-type equipment—Lodestar craft or larger.

concerns—with certain reservations—are to use French equipment and may operate even scheduled services if they engender no competition with Air France, the state controlled carrier.

Nonskeds Offer Help In Rail Car Shortage

A suggestion that the air cargo facilities of uncertificated carriers be used extensively to help alleviate the current railroad freight car shortage has been made to John R. Steelman, reconversion director, by the Independent Airfreight Association. IAA said the airfreight industry can carry up to five million ton miles daily.

In a telegram to Steelman and in copies sent to J. M. Johnson, director of the Office of Defense Transportation, and CAB Chairman James M. Landis, IAA said air cargo carriers now have available considerably more capacity than last May when ODT signified its intention of using nonscheduled airlines during the railroad strike. At that time it was estimated the uncertificated airfreight companies could handle four and one-half million ton miles a day.

► **Little Need Seen**—While ODT officials have declared that the transportation crisis might compel some factories to shut down or curtail operations this fall and winter, most observers saw little prospect that airfreight would benefit substantially unless the rail situation deteriorates further. Currently, the greatest need is for freight cars adapted to hauling such commodities as grain, coal, lumber and heavy finished steel products, all unsuitable for air shipment.

It is pointed out, however, that should the need for maximum utilization of all freight car space reach a point where shipment of less than carload lots is restricted the facilities of the airfreight carriers would be greatly in demand.

Other industry developments: ► **National Skyway Freight Corp.**, Los Angeles, (The Flying Tigers), has asked CAB certification of an extensive domestic route network for scheduled airfreight operations. Links between each of 20 western bases and each of 19 eastern, central and southern bases are sought along with 56 non-transcontinental point-to-point routes. As an alternative to the specified routes, authority is requested to operate between and within six large domestic geographical areas, each encompassing a concentration of products suitable for airfreight shipment. NSFC now owns 16 DC-3s and two DC-4s and has placed orders with Douglas Aircraft Co. for five additional

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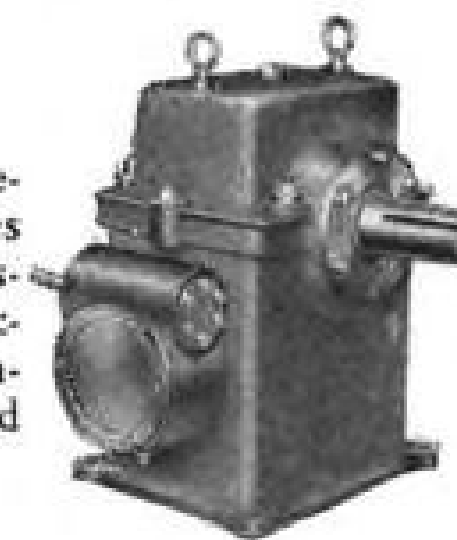
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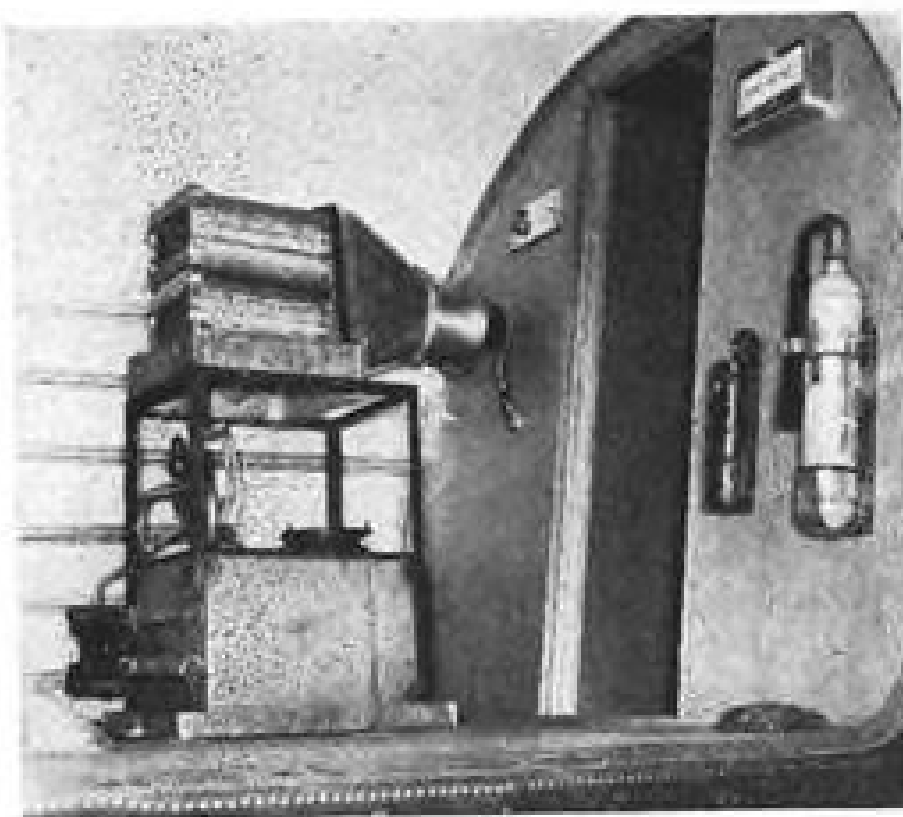
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COOLING UNIT:

Interior of a Santa Fe Skyway C-47 cargo plane shows the rear bulkhead with a cooling unit installed for transporting perishable freight. Using alcohol and dry ice, the system is designed to keep the temperature around 35 to 40 degrees. After the alcohol is cooled in the lower tank, it is pumped into the upper chambers where a fan blows air across it and out into the cargo compartment. The refrigeration unit was developed by Douglas Aircraft Co. Santa Fe Skyway is a subsidiary of Santa Fe Railway Co. and began contract cargo flights a month ago (AVIATION NEWS, Aug. 12).

DC-4s for delivery about May 1, 1947. **Slick Airways**, San Antonio, during the first 15 days of August flew 642,570 revenue ton miles, compared with 378,512 revenue ton miles during the same period in July.

Air Cargo Transport Corp., New York, has signed contracts to fly both the New York Times and Herald Tribune nightly to Cleveland, Detroit and Chicago. Company has also announced an agreement with the U. S. Navy to use the Naval Air Station at San Juan, Puerto Rico for carrying on cargo movements.

AirBorne Cargo Lines, New York, recently used seven of its ten DC-3s to move the first section of 90,000 lbs. of the company's maintenance shop and operations facilities from a temporary base at Baltimore to the ex-Army base at Millville, N. J.

American Air Express Corp., New York, completed the largest mass movement of race horses by air recently when it flew twelve thoroughbreds valued in excess of \$150,000 in three specially padded and stalled DC-3s from Saratoga to Los Angeles. Carrier has flown 38 race horses to date in addition to its regular transcontinental cargo flights, according to John C. Lambert, president. Present three-ship DC-3 fleet may be increased to as many as 15 planes, Lambert recently reported to CAB. Wesley R. Bunker is vice president and Francis J. Rollins, secretary-treasurer of the company, which began revenue operations May 1.

Waterman Airlines, Mobile, was slated to provide Tampa, Fla., with its first direct air connection with San Juan, P. R., last week. A new 18-passenger DC-3 was to open the New Orleans-Tampa-San Juan run, which has a refueling point at Camaguey, Cuba.

Long Island Airlines has changed the location of its principal offices from

New York City to Southampton, N. Y. **American Air Export & Import Co.**, Miami Springs, Fla., and New York, has requested a CAB certificate authorizing scheduled carriage of persons, property and mail between Quebec, Canada, and the co-terminals Miami and Havana, Cuba, via New York, Atlantic City, Norfolk and Tampa.

Global Airways, Inc., Vineland, N. J., (principal operating base Philadelphia) flew 10,800 plane miles for total revenue of \$3,000 during June and July. Company recently has been converting its DC-3 equipment to "de luxe type." Officers include Joseph Bolnick, president and treasurer; Raphael Bolnick, vice president; and Simon Bolnick, secretary.

Coast to Coast Air Lines, Inc., Houston, Tex., and Wilmington, Del., (successor to Coast to Coast Air Cargo Lines) has applied to CAB for a non-scheduled air carrier certificate. Company has been a non-scheduled contract carrier since April 1, according to David L. Wells, president.

Bluegrass Airlines, Bowling Green, Ky., during the first six months of 1946 carried 1,638 revenue passengers. Total scheduled mileage from Oct. 23, 1945 (when twin-engine Cessnas were put in operation), to June 1, 1946, was 182,400 with 164,430 completed—a performance factor of 90 percent.

Braathens South American & Far East Airtransport, Oslo, Norway, has requested a foreign air carrier permit from CAB authorizing non-scheduled transportation of persons, property and mail between Oslo and Miami via Geneva, Marseilles, Casablanca, Bathurst, Natal, Para (Belem), Caracas and Haiti. SAFE is headed by Ludvig G. Braathen, Oslo shipowner.

Trans-Caribbean Air Cargo Lines, New York, has announced establishment of an "international feederline system" with Services Aereos Cruzeiro do Sul, Brazilian carrier, whereby Trans-Caribbean Cruzeiro would feed each other international traffic for further distribution in each other's territory. According to the contract, Trans-Caribbean will fly its freight and passengers destined for South America as far as Belem, Brazil, where they will carry them to points it regularly serves in Brazil and Argentina. Cruzeiro will deliver northbound traffic to Trans-Caribbean at Belem, where Cruzeiro's maintenance and traffic facilities will be used by Trans-Caribbean.

Continental Sky-Van, Inc., Oakland, Cal., has requested a CAB certificate authorizing scheduled passenger/property service between San Francisco-Oakland and Seattle-Tacoma via two separate routes. Other route applications were filed previously (AVIATION NEWS, Aug. 5).

Kansas City Southern Railway Co. has bought two C-47s and all ground equipment of National Air Express Co., Marshall, Mo., for its subsidiary, **Kansas City Southern Skyways**, according to W. M. Huston, NAE business manager.

Standard Airlines, Inc., Long Beach, Cal., (successor to Fireball Air Express) has applied for a CAB certificate to carry cargo or cargo and mail on a scheduled basis between Long Beach-Los Angeles and Boston; San Diego and Seattle; and Kansas City, Mo., and Brownsville, Tex., via intermediate points. Authority was also requested to operate as a common carrier of cargo between general areas in Southern California, the Midwest, East, Northern California, Pacific Northwest and Texas.

Mercury Airlines, affiliate of Continental Bus System, has started intrastate passenger service between Fort Worth, Dallas, Austin and San Antonio.

Buffalo Baseball Team Flies on Long Road Trips

The 24 members of the Buffalo Baseball Club of the International League are flying on their longer trips in a chartered, reconverted C-47 of the Great Lakes Airline, a Rochester, N. Y., charter line formed by two former Pan American Airways captains, Irving Herman and Max Stell.

In a typical trip, the Buffalo team left Baltimore recently after a night game and arrived at Syracuse in less than two hours, saving 10 hours' travel time. Plane travel will be used the remainder of the season.

Main activity of the Great Lakes line is a daily roundtrip charter run from Rochester to New York City. Passengers are charged \$16 plus tax for the non-stop, one-way flight, which requires 1 hr. 32 min. The firm is planning tentatively on a Rochester to Miami run when it acquires a second C-47.

Other pilots of the line are William H. Gould and James Kane, also Pan American veterans.

New Service

Skyway Enterprises, Inc., Beaver Dam, Wis., has inaugurated twice daily service from the Beaver Dam airport to Maitland Field, Milwaukee. A new 1946 4-passenger Stinson Voyager is used. President of the recently organized firm is Russ Hopf, a pilot for 19 years and veteran of World War II, in which he served as captain in the AAF.

Race Flights Boom

Nonscheduled and charter airlines operating out of New York City carried nearly 10,000 persons to the horse races at Saratoga during the 24-day meet which ended Aug. 31. A dozen to twenty transports were engaged in the intrastate traffic by the last week of racing.

Horse followers have asked the fixed base operators to establish similar service from New York to Havre de Grace and Pimlico this fall, making it possible, as at Saratoga, to leave after noon, arrive in time for the first race, and be back in the city for a late dinner.

Some operators have been reluctant to engage in this service, pointing out that it involves interstate flights on a fairly rigid schedule, possibly bringing it under CAB scrutiny.

PRODUCTION

Double Wasp Makes Commercial Debut

CA series first power plant to get CAA approval for water-injection boost; will be used on DC-4, Martin 202, 303 and Convair 240.

The Pratt & Whitney Double Wasp, wartime workhorse of the AAF and Naval Air Service is making its commercial debut as the first CAA approved aircraft power plant with water injection emergency power boost.

Commercial version labeled the CA series will power the Douglas DC-6, Martin's 202 and 303 and the Convair 240. Present airline orders for these planes involve 1,500 engines exclusive of spares.

Four Models—The CA series comes in four models—the CA 3 and 5 with single speed superchargers and the CA 15 and 17 with two speed superchargers to operations up to 20,000 feet. Water injection will deliver 2400 hp. on takeoff in all CA series engines.

Power without water injection is 2100 hp. for takeoff and 1800 hp. for continuous cruise using 100/130 grade fuel. The CA 5 and 17 with carburetor modifications and 115/145 fuel have been certificated for 2300 hp. at takeoff and 1900 hp. for continuous operation. Dry weight of the CA series engine ranges from 2327 to 2360 pounds.

In addition to built-in provisions for the use of water injection, the "CA" Double Wasp incorporates two position spark advance to provide fuel economy at cruising powers; spinner fuel injection to eliminate icing tendencies due to fuel evaporation in the induction system; forged, deep-finned, lightweight cylinder heads and cylinder barrel cooling sleeves to provide ample cooling under all operating conditions; built-in torqueometer to provide the pilot or flight engineer with accurate information on power output under all conditions.

Features Listed—It also has cone clutches and creeper desludgers, in the two-speed engines, to prevent clutch fouling; lead-silver-indium bearings to resist erosion and contamination while carrying heavy bearing loads and providing good

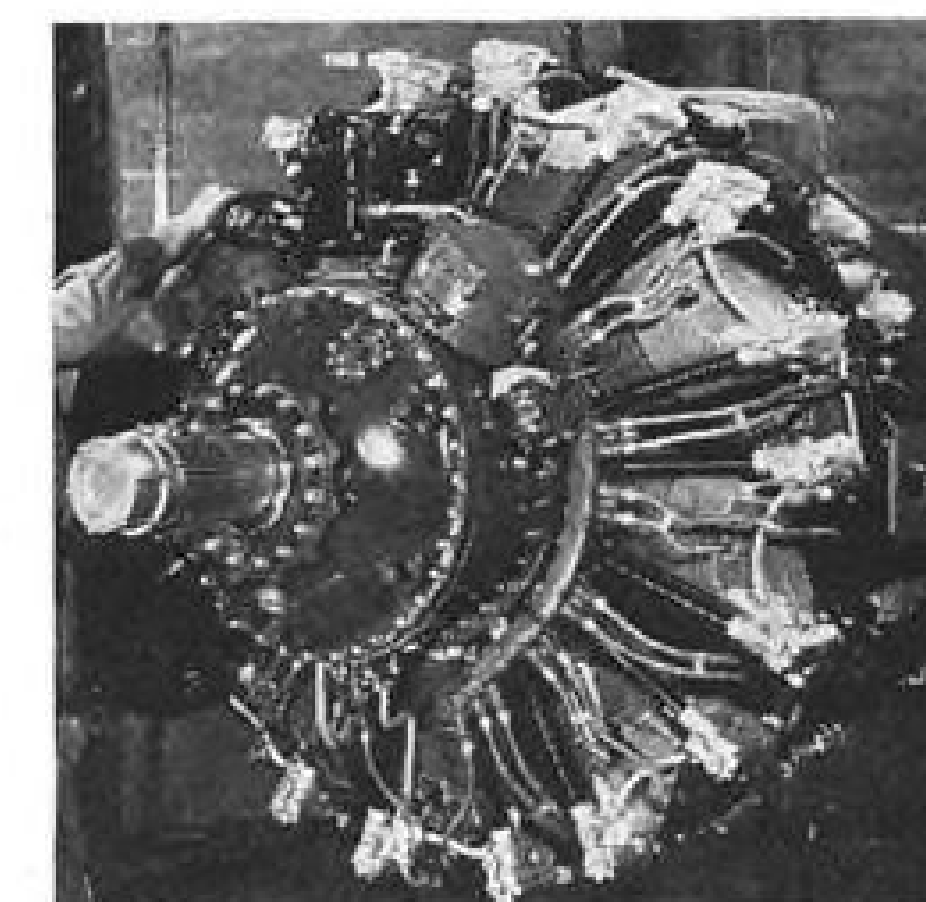
lubricating characteristics, and second order counterbalances to oppose the second order forces and couples which normally produce vibration along and about the vertical and lateral axes of the engine.

Wartime version of the Double Wasp powered the Republic P-47, Martin B-26, Vought F4U, Douglas A-26, Lockheed Ventura, Northrop P-61, Grumman F6F and Curtiss C-46.

United Aircraft Plans Jet Development

Entry of United Aircraft Corp., whose Pratt & Whitney division has long been one of the industry's outstanding producers of piston type aircraft engines, into the field of jet and turbine type power plants was announced by F. B. Rentschler, chairman of the board, in a special statement to stockholders.

Rentschler said United's directors have authorized "substantial" capital expenditures for new engineering facilities to be devoted exclusively to developing jet and gas turbine type engines. He said United was counting on continued broad use of piston type engines for another five years before being superseded by jets.



Double Wasp Goes Commercial: The 2,400-hp. CA Double Wasp, an improved version of the wartime workhorse for the AAF and Naval Air Service, is first CAA approved commercial engine offering water injection for emergency power. It will power the Douglas DC-6, Martin's 202 and 303 and Convair's 240.

United also plans to acquire government owned additions to its main plants at East Hartford and Stratford, Conn.

Net profit of \$3,101,327 for the first half of 1946 was reported by Rentschler. After preferred dividends this is equal to 92 cents a share on common stock. Net income for the quarter ending in June after \$5,238,836 in tax credits, was \$3,607,288 or \$1.23 a share for common stock.

Southwest Airmotive Handles Engine Deal

Large-scale conversion and sale of \$4,000,000 in surplus military aircraft engines has been undertaken by Southwest Airmotive Co. at Love Field, Dallas, which for several months has been making similar conversions on a smaller scale for airlines in many sections of the country.

The power plants are 1,200-hp. Pratt and Whitneys, such as are used on airline DC-3s. They will be sold by Southwest to Dominican World Airlines, Dominican Republic, and Trans-Tropic Airlines, Miami. Eight already have been shipped—five by air. The company was advised the engines would be resold by the airlines to private aircraft owners and operators in Latin America and Europe.

While the exact total of engines was not announced, vice-presidents Winston C. Castleberry and George W. Jalonick, III, said there would be "hundreds" with delivery at the rate of 50 per month. Contract for the engines was signed in Dayton by Castleberry and Roger Carley, for the two airlines. Carley flew to the U. S. from the Dominican Republic.

Southwest is being assisted in finding and purchasing the surplus engines by the L. and L. Trading Co., operated by L. H. Lucky and W. F. Long, both of Dallas. Conversion involves replacement of carburetors, magnetos, ignition harnesses and rear cases to comply with civilian flight standards.

New Chutes Coming

The Irving Air Chute Co. of Buffalo expects to start making its first "radically different" parachutes in the near future for use in aircraft flying at supersonic speeds.

Vice-president William H. Schwinger said "the parachutes will have to be radically different

compared to conventional chutes to withstand shock." Engineering data on the new supersonic chutes, compiled by the company, will be combined with that of AAF.

Lear Lightweight Auto Pilot Is Tested

A light, compact automatic flight control system, weighing 27 pounds, designed by Lear, Incorporated, of Grand Rapids, Michigan, in cooperation with the Control Equipment Branch, Equipment Laboratory of the U. S. Army Air Forces, Engineering Division, Air Materiel Command, has been under flight test at Wright Field, Dayton, Ohio.

Originally developed for fighter aircraft, the C-2 Fatigue Relief Pilot is capable of operating heavier aircraft. In addition to weight and space saving features, the Lear C-2 offers added improvements over similar systems now in use. Being all electric, it is easily interconnected with other control devices such as used for altitude control, instrument landing and radio homing. It operates from a 24-28 volt system with an extremely low battery drain.

The Lear C-2 requires only three working units: a controller, located on or near the instrument panel; a control unit or amplifier, which contains both the vertical and directional gyroscopes; and a

triple output friction drive servo-unit directly controlling the cables operating the airplane's ailerons, rudder, and elevators. An outstanding feature of this installation is that no "plumbing," bleeding of lines, nor adjustment of follow-up mechanism is required. The three units are simply bolted in place and plugged into the electric power source of the airplane.

Universal Copter Firm Producing Rotor Blades

With orders received from several firms, including the Bendix Helicopter, Inc., and numerous inquiries from others, the recently-formed Universal Helicopter Corp., Buffalo, has produced its first helicopter rotor blades and plans to expand production facilities and increase employment.

G. P. Martin, vice-president, disclosed that Universal is working on a new all metal rotor blade with tip lights that will aid helicopters to fly at night.

The first set of blades will go to the Bendix firm which has placed an order for five sets, Martin said. Lou Leavatt, operations manager for the Helicopter Air Transport Corp. of Philadelphia, visited the Universal plant recently to discuss replacement rotor blades for Sikorsky helicopters, which the Philadelphia company is now using, Martin declared.

Other firms which Martin said placed orders for the rotor blades

are the G&A Aircraft Corp. of Willow Grove, Pa. and the DeLackner Helicopter, Inc. of Tucka-hoe.

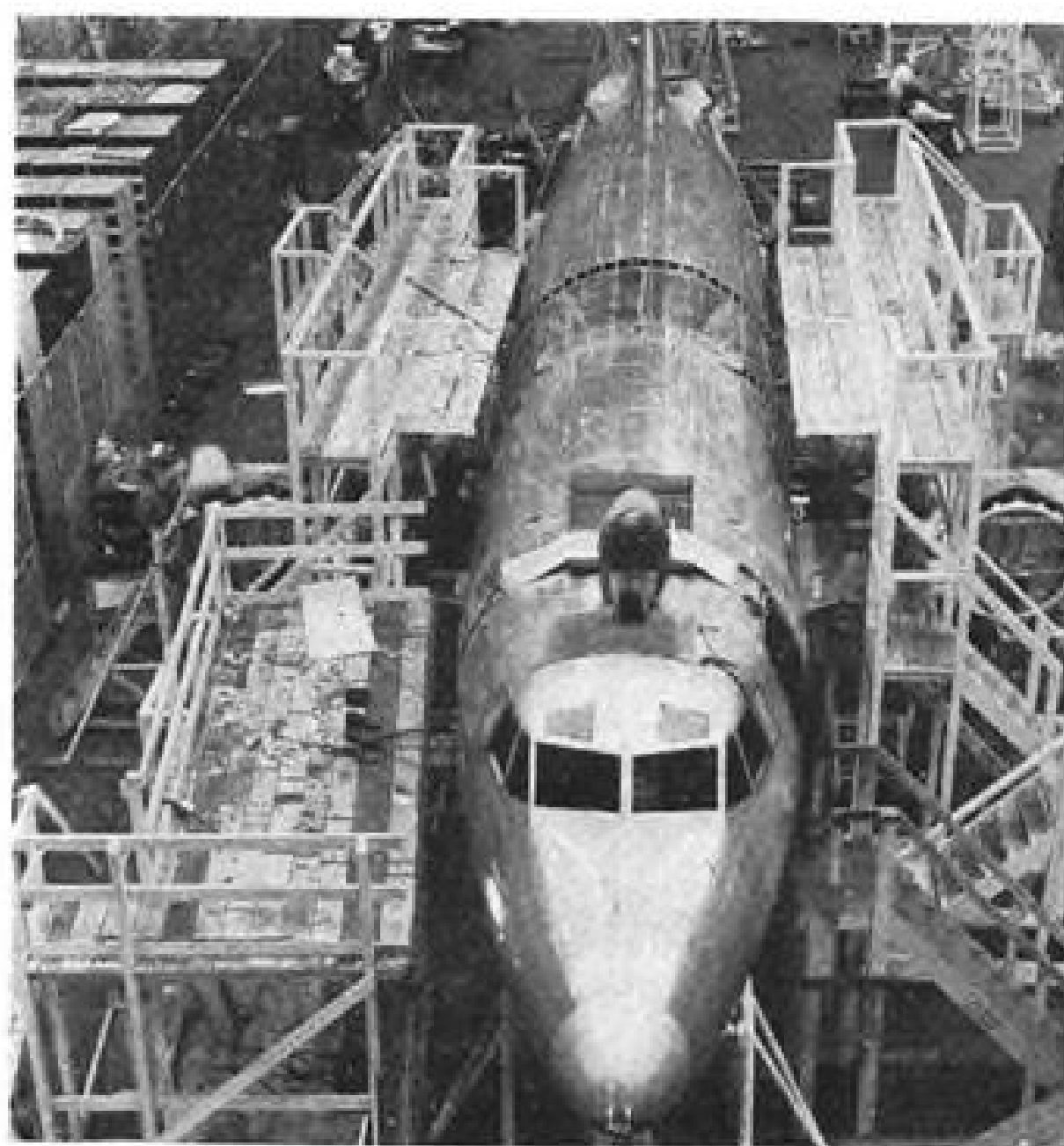
High Speed Camera

A new, ultra high-speed camera capable of taking photographs at the rate of 200,000 frames a second has been developed by the National Advisory Committee for Aeronautics. Developed for the purpose of visually "slowing down" the rapid combustion in an aircraft engine cylinder for leisurely study, the new camera will take ten photographs in the space of fifty millionths of a second. This is more than sufficient to stop the motion of an object traveling at 4,760 miles an hour. Inventor of the camera is Cearcy D. Miller, an engineer in the Aircraft Engine Research Laboratory of the National Advisory Committee for Aeronautics, in Cleveland, Ohio.

Chute Test Success

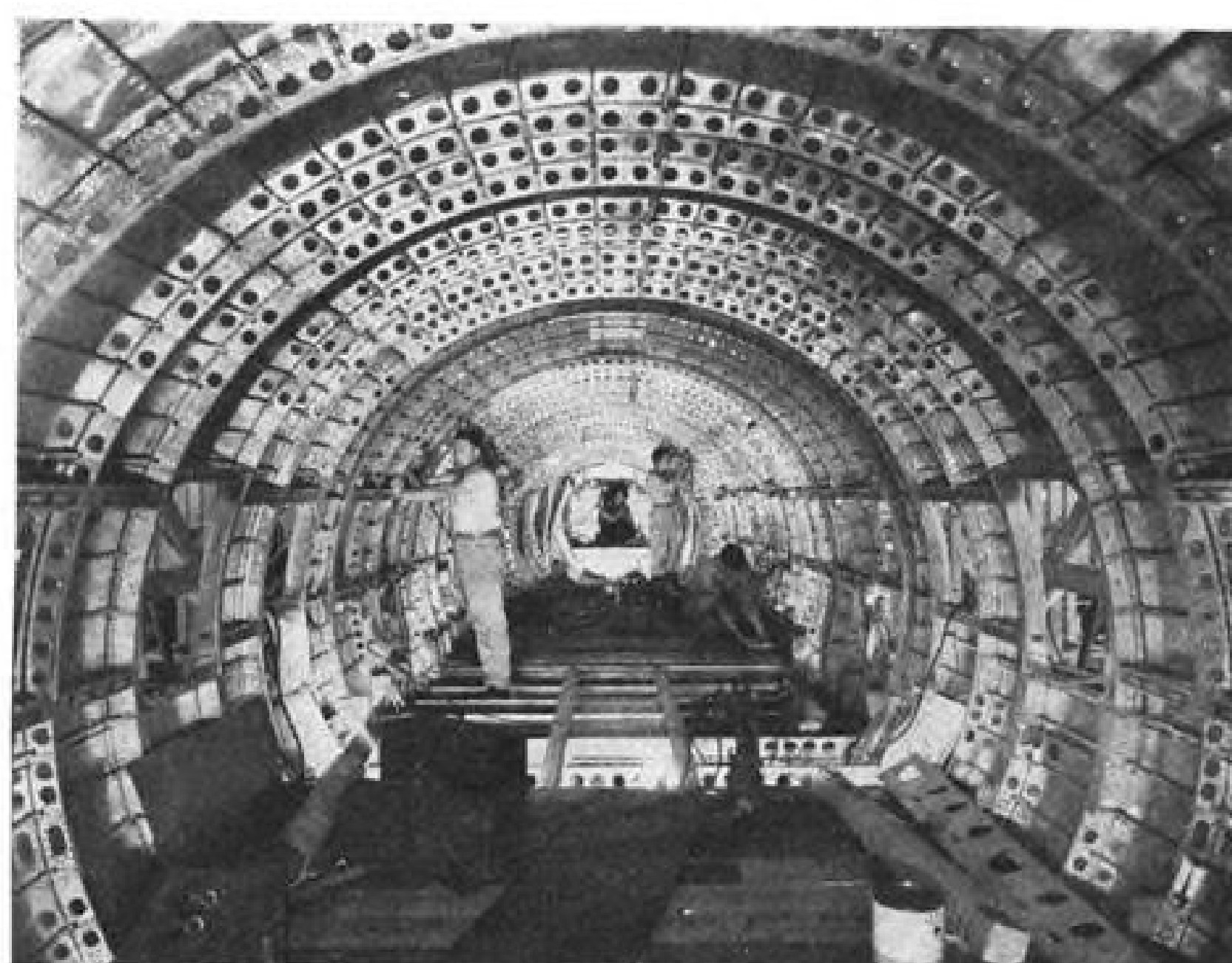
Second AAF test of a high speed pilot ejection seat and automatic parachute release with a human subject was successful last week at Wright Field.

Corp. Harry Brickheimer, veteran paratrooper with 57 previous jumps, was catapulted from a P-61 flying 300 miles an hour at 5,000 feet and landed safely showing no ill effects from his 40 mph injection into the slip stream.



FIRST PICTURES OF MARTIN 202:

First pictures released by the Glenn L. Martin Co. of its Model 202 show the ship nearing completion at Martin's Middle River, Md., plant. One shows the fuselage exterior, and the other the interior, looking aft from the entrance to the cockpit. Note



large square windows. The plane will make its first test flight this month or early next, with airline deliveries to start early in 1947. Purchasers to date include Braniff, Delta, Eastern, PCA, Cruzeiro do Sul (Brazil) and Doderio (Argentina).

FINANCIAL

Good Future Seen for Market Value of Aircraft Industry Shares

Investment advisory service analysis claims exceptional growth possibilities in air field offer investment opportunities at current low levels.

A constructive view of selected aircraft shares is taken in a current analysis released by United Business Service. In the opinion of this investment advisory service, the industry on the whole is on the threshold of accelerated peacetime growth. Companies enjoying well balanced demand for military and commercial planes offer attractive investment opportunities at current relatively low levels.

The exceptional growth possibilities in aircraft shares are largely unrecognized, according to the service, because of the fallacy of comparing current operations with wartime peaks. The war did not set the industry back, as present prices would indicate. On the contrary the war telescoped some 15 to 25 years of scientific progress in aviation into a short 5-year span. Air travel was popularized; over 250,000 pilots were trained at government expense; a far larger number became expert in maintenance; over 2,000,000 war workers in aircraft factories now form an invaluable reservoir of skilled labor and mass production techniques were greatly perfected; plant capacity was expanded and modernized partly at government expense and retention of a sizable part of wartime earnings has enriched aircraft company treasuries.

► **Capital Comparisons**—Before the war Douglas had \$9,060,000 in net working capital or about \$15 a share. As of March 31 last, it had \$65,700,000, or \$109 a share—\$20 a share more than the recent selling price of the stock. Boeing's net working capital rose from \$1.40 a share in 1939 to \$42.15 in 1945; Lockheed's from \$2.80 to \$39.65 a share; and Martin's from about \$8 a share to more than \$40.

These disparities in market prices are attributed by United Business Service to the fact that investors have not as yet correctly appraised the earnings future of

the industry. This stems from the startling drop in volume from \$17,800,000,000 (1944 peak) to an estimated \$750,000,000 for 1946. Leading aircraft companies earned good profits in 1939 on a volume, including engines and parts, of some \$250 million.

► **Sales Tripled**—This year even with business upset by reconversion and model changes, sales will be nearly 3 times this figure. A number of companies are expected to show a profit this year equivalent to a "ten times earnings basis" on the current selling prices of their stocks. However, profits in 1946 will not constitute a fair test of earnings ability under normal conditions. Many companies will take advantage of the carryback provisions of the tax law to write off reconversion charges and heavy development expense of new models.

The various markets of the industry are analysed by United Business Service—military, commercial transport, personal planes, helicopters and engines.

An annual revenue potential of \$1 billion seems a logical expectation for military business, according to this review. Any appraisal the possible recipients of this business will obviously depend upon the technological "know-how" in meeting performance requirements, operating efficiency, competitive costs and similar elements.

► **Evaluate market**—Evaluating this billion dollar military aircraft market, in terms of the ratio of potential sales to the current market value of the total common shares, United Business Service rates the military speculations in the following order: (1) Northrop; (2) Lockheed; (3) Boeing; (4) Convair; (5) Douglas; (6) Grumman; (7) Republic; (8) Martin.

In looking at the air transportation market, the service believes that the pessimism as to the larger

planes has been overemphasized, and too little attention been given to the potentialities for feeder and cargo planes. It is indicated that substantial orders have been placed by the air carriers not in a fever of wild overexpansion, but more for protective purposes. Technological advances are so rapid that no one can tell which new model will be the real value.

To assure its competitive position, each airline must place orders in such a way as to guarantee an adequate supply of the right planes. Orders are in a substantial degree on an option basis. Even the so-called "firm orders" are subject to the meeting of required specifications of performance. Eastern has already announced an order cutback, and other lines may do likewise, in United Business Services opinion.

On the basis of aggregate commercial business of \$250,000,000 annually, the \$30,000,000 level is expected to be reached by Boeing, Douglas, Lockheed, Martin and possibly Convair, according to the survey. In terms of the ratio of potential airline sales to the current market value of the total common stock, United Business Service rates the commercial aircraft speculations in the following order: (1) Beech, (2) Boeing, (3) Martin, (4) Northrop, (5) Lockheed, (6) Douglas, (7) Convair, (8) Republic.

TWA Slashes Second Quarter Loss to \$117,986

Trans World Airline reports a net loss of \$117,986 for the second quarter this year as compared with loss of \$1,492,972 in the first quarter.

Operating revenues reached a record total of \$18,506,333 in the second quarter, an increase of 69 percent over the first quarter, while operating expenses increased only 39 percent.

Jack Frye, TWA president, noted that high initial cost of a long range expansion program was the principal factor in operation deficits the first six months but said that steady improvement has been shown since January and February.

Although the airline showed a profit during June, a \$136,000 adjustment of mail revenues contributed substantially to the second quarter deficit. Frye said the government had been asked for a retroactive increases to "a more economically sound rate."

TRANSPORT

Top Airline Executive Salaries Gained Slightly, Survey Shows

United's Patterson paid most in 1945 with boost to \$56,086; Damon of American raised to \$47,499; Jack Frye of TWA took cut to \$35,225; C. R. Smith paid \$43,750.

With three exceptions, compensation paid top executives by the nation's domestic airlines in calendar 1945 remained close to 1944 levels, according to figures filed with CAB. Among 14 representative carriers, the presidents of six were paid more in 1945 than in 1944, four were paid less, and salaries of four others remained the same.

United's president W. A. Patterson had the highest remuneration in 1945—\$56,086, compared with \$35,000 in 1944. R. S. Damon, president of American, received \$47,499 in 1945 against \$46,000 in 1944; Croil Hunter, Northwest president, \$36,000 in both years; Jack Frye, TWA president, \$35,225 compared with \$42,600 in 1944; E. V. Rickenbacker, Eastern president, \$35,000 in both years; and C. Bedell Monro, PCA, \$32,583 in 1945 and \$22,833 in 1944.

Compensation of other airline executives during calendar 1945 (with some figures low where the office was not held the entire year):

► **ALL AMERICAN**—Halsey R. Bazley, pres., \$10,675; Charles W. Wendt, v-p., \$10,424; Harry R. Stringer, v-p., \$9,378; William B. Moore, v-p., operations, \$7,790; Edward E. Minor, v-p., manufacturing and development, \$9,627; Austin M. Zimmerman, secretary and general counsel, \$7,907.

► **AMERICAN**—C. R. Smith, chairman of board, \$43,750; A. N. Kemp, pres. (resigned June 12, 1945), \$17,999; O. M. Mosier, v-p., \$28,280; C. A. Rheinstrom, v-p., traffic, \$26,280; W. Littlewood, v-p., engineering, \$26,280; H. L. Smith, v-p., operations, \$26,280; A. Culbert, v-p., properties, \$19,000; T. C. Drinkwater, v-p., \$20,248; L. G. Fritz, v-p., \$6,499; H. K. Rulison, treas., \$18,680; C. W. Jacob, sec., \$13,499; P. G. Larie, comptroller and assistant treasurer, \$10,687; V. J. Long, asst. treas. and asst. sec., \$9,100; W. G. Lipscomb, asst. v-p., traffic, \$12,660; W. H. Miller, asst. v-p., operations, \$15,000; L. W. King, regional v-p., \$10,104; M. D. Miller, regional v-p., \$10,841; W. M. Bump, regional v-p., \$9,208; A. R. Bone, regional v-p., \$9,166; C. R. Speers, regional v-p., \$3,305; Carlene Roberts, asst. v-p., \$7,859.

► **AMERICAN OVERSEAS**—J. E. Slater, chairman of board, \$6,250; Sumner Sewall, pres., \$16,708; H. R. Harris,

v-p. and general manager, \$7,800; J. M. Eaton, v-p., \$15,000; J. G. Flynn, Jr., v-p., operations, \$3,550; J. S. Robbins, v-p., traffic, \$677; J. C. Gardiner, secretary-treasurer, \$9,316; R. G. Rose, asst. treas., \$975; H. D. Starr, asst. sec., \$7,548.

► **BRANIFF**—T. E. Braniff, pres., \$24,000; R. C. Shrader, v-p., \$15,405; C. E. Beard, v-p., \$15,470; C. G. Adams, sec. treas., \$15,474.

► **CARIBBEAN-ATLANTIC**—Dennis C. Powelson, pres., \$9,375; Manuel S. Rivera, treasurer, \$4,800.

► **CHICAGO AND SOUTHERN**—Carleton Putnam, pres., \$20,170; Bruce E. Braun, v-p., \$15,170; H. R. Bolander, Jr., v-p., \$10,003; Albert J. Earling, v-p., \$6,690; Richard S. Maurer, sec., \$5,390; William J. Byrne, treas., \$10,000; Erma Murray, asst. sec., \$4,265; Robert S. Scrivener, asst. treas., \$5,040; M. J. Brown, asst. treas., \$4,665.

► **COLONIAL**—Sigmund Janas, pres., \$19,125; Edward S. Ridley, v-p., \$10,958; Branch T. Dykes, v-p., operations, \$12,250; Alfred M. Hudson, v-p., traffic, \$8,181; John V. Flanagan, treas., \$4,476; K. Hamilton, sec., \$4,425.

► **CONTINENTAL**—Robert F. Six, pres., \$17,916; O. R. Haueter, v-p., operations, \$12,000; S. R. Shatto, v-p., maintenance, \$9,000; Joseph A. Uhl, sec. treas., \$1,750.

► **DELTA**—Not available.

► **EASTERN**—P. H. Brattain, first v-p., \$27,500; S. L. Shannon, second v-p., \$22,500; L. P. Arnold, v-p., \$12,500; M. M. Frost, v-p., \$9,249; S. de J. Osborne, v-p., \$15,000; T. F. Armstrong, sec. treas., \$14,299; J. W. Moore, asst. sec. and asst. treas., \$9,100.

► **ESSAIR**—W. F. Long, pres., \$4,500; L. H. Luckey, v-p. and general manager, \$9,000; E. J. Holt, v-p., \$4,500; E. W. Bailey, sec. treas., \$2,012.

► **HAWAIIAN**—Stanley C. Kennedy, pres., \$7,080; Alex Smith, v-p. and sec., \$9,823; Ford Studebaker, v-p., \$13,033; Raymond G. LaClergue, assistant treasurer, \$4,242.

► **INLAND**—See Western.

► **MID-CONTINENT**—J. W. Miller, pres. and general manager, \$14,393; J. A. Cunningham, v-p., operations, \$8,643; J. C. Collins, v-p., and sec., \$8,068.

► **NATIONAL**—G. T. Baker, pres., \$20,012; H. S. Parker, v-p., \$10,012; G. E. Gardner, exec. v-p., \$690; J. D. Crane, v-p., engineering and maintenance, \$8,079; J. C. Brawner, treas., \$7,206; R. P. Foreman, sec., \$5,862; T. A. Prevost, asst. v-p., \$5,542.

► **NORTHEAST**—Paul F. Collins, pres., \$12,300; Milton H. Anderson, v-p., \$13,520; H. LeRoy Swimm, treas., \$9,566.

► **NORTHWEST**—E. I. Whyatt, v-p. & treas., \$19,499; K. R. Ferguson, v-p., engineering, \$16,350; R. O. Bullwinkel, v-p., traffic, \$12,000; A. E. Floan, sec., \$14,250; L. S. Holstad, asst. treas., \$11,850; C. L. Stein, asst. sec., \$7,125.

► **PCA**—J. H. Carmichael, v-p., \$11,208; Robert J. Wilson, v-p., \$18,833; J.

J. O'Donovan, v-p., \$20,583; R. G. Lochiel, v-p. and treas., \$18,124; Luther Harris, v-p., \$5,291; Hayes Dever, sec., \$8,750.

► **TWA**—T. B. Wilson, chairman of board, \$32,104; Paul E. Richter, executive v-p., \$17,612; E. Lee Talman, senior v-p., \$26,418; John A. Collings v-p., transport, \$21,135; Otis F. Bryan, v-p., operations international division, \$17,535; E. O. Cocke, v-p., traffic, \$12,701; J. C. Franklin, v-p., engineering and maintenance, \$17,228; C. E. Fleming, v-p., 13,256; Julius C. Holmes, v-p., \$887; John M. Lockhart, treasurer, \$6,288; A. M. Jens, Jr., secretary, \$8,033; E. C. Peet, comptroller, \$7,781; C. A. Gress, assistant secretary and assistant treasurer, \$7,868; M. W. McQueen, assistant treasurer, \$7,781.

► **UNITED**—J. A. Herlihy, v-p., operations, \$33,542; R. W. Ireland, v-p., administration, \$4,331; Harold Cray, v-p., traffic, \$18,576; J. W. Newey, v-p., finance, \$18,576; Hal E. Nourse, v-p., economic controls, \$13,242; R. F. Ahrens, v-p., personnel, \$13,242; D. F. Magarrell, v-p., passenger service, \$13,533; S. V. Hall, regional v-p., operations, \$15,401; R. E. Pfennig, regional v-p., operations, \$8,489; S. P. Martin, secretary, \$10,080; N. B. Haley, treasurer, \$14,299; Curtis Barkes, comptroller,



EASTERN OVERHEAD:

Airline passengers who have dashed for a plane in the rain may have wondered when they saw this Eastern Air Lines umbrella hoisted over President Truman as he alighted in Washington from his personal C-54, the Sacred Cow, after a recent flight. Through fortuitous circumstance, an EAL public relations representative was present with the protection when the plane landed. Coincidentally, the steward attached to the President's plane formerly worked for Eastern. The chain of good luck broke a moment after the picture was taken, however, when a gust of wind collapsed the umbrella and two generals aboard the Sacred Cow had to sprint from the plane to the terminal building—just like airline passengers.

ler, \$10,080; C. H. Blanchard, auditor, \$7,560.

► **WESTERN**—William A. Coulter, pres., \$14,741; L. H. Dwerikotte, exec. v-p., \$17,267; Charles N. James, v-p., operations, \$13,174; Thomas Wolfe, v-p., traffic, \$9,649; Paul E. Sullivan, v-p. and secretary, \$8,507; J. J. Taylor, treasurer, \$6,737.

BOAC Using Connies Doubles Schedules

British Overseas Airways, with its Constellations back in service, has increased its New York-London schedules to four roundtrips weekly, double the frequency in effect last July 12 when the Connies were temporarily grounded. One of the new weekly flights is being routed via Prestwick, Scotland, instead of Rineanna, Eire.

The increased schedules will make available approximately 80 additional seats eastbound and 60 westbound. In order to accommodate passengers when last minute space becomes available, BOAC has made arrangements to accept reservations 24 hours before flight time and to accept ship-side bookings of those willing to take a chance on last minute "no-shows."

Meanwhile, a new Australia-Canada service is in prospect shortly following the signing of an air transport agreement between the two countries. Familiarization flights on a fortnightly basis are to be started this month.

The route from Sydney to Vancouver via Fiji, Canton Island, Honolulu and San Francisco will be operated for Australia by Australian National Airways under contract to British Commonwealth Pacific Airlines. A route between the same terminals will be operated for Canada by Trans-Canada Airlines, probably with Canadian-built DC-4Ms.

Other new services:

► **American Overseas**—Plans to double its present one-trip weekly schedule between New York and Berlin next month.

► **Air France**—Has reestablished service on all its prewar international routes and has instituted operations on a number of new links, company officials state. Carrier now flies to 51 countries and territories in Europe, North and South America, Africa and Asia.

► **Sabena**—Has been authorized to make ten Brussels-New York flights with DC-4s prior to opening regular DC-6 service in March, according to officials of the Belgian carrier.

► **Cia Mexicana de Aviacion**—This month will start daily six and one-half hour service between Mexico City and Havana with 54-passenger DC-4s.

► **Northwest**—Within 60 days expects to begin flights on the "inside route" from New York and Chicago, through the Twin Cities and Edmonton, to Anchorage, Alaska. Flights to Anchorage on



SAILBOAT CARGO:

TWA employees loosen the lashings on 15-ft. sailboat flown in one of the carrier's cargo planes from a California builder to Kansas City for delivery to a boat racing enthusiast.

the "outside route" via Seattle began Sept. 1.

► **National Airlines**—On Sept. 1 inaugurated service to Valdosta, Ga., with one Lodestar flight east and one flight west daily. City is 24th to be placed on NAL's routes.

UAL Spent \$3,000,000 On LAMSA Since Purchase

Hearings on the last of 11 regional route cases have been concluded at Albuquerque, N. M., with CAB Examiner Ralph L. Wisner presiding. The nine applicants heard in the Arizona-New Mexico case were Air Transit Co., American Airlines, Arizona Airways, Border Airlines, Southern Arizona Airlines, Southwest Airways, TWA, United Air Lines and Western Air Lines.

W. A. Patterson, UAL president, testified on behalf of his company's application for a route from San Diego to Nogales, Ariz., to connect with Lineas Aereas Mexicanas, S.A., owned by UAL. He said United had spent more than \$3,000,000 in LAMSA since it purchased that airline in 1943.

Route Change Sought

Colonial Airlines has asked CAB to consolidate its newest route application—Detroit to Washington via Cleveland, Akron, Youngstown and Pittsburgh—in the Detroit-Washington service case (Docket 679 et al.), which already includes bids by Eastern, Northwest, United, PCA, TWA and National.

Twin City Airport Deadlock Resolved

Deadlock between the Twin Cities Metropolitan Airports Commission and the Veterans' Administration over expansion of Wold-Chamberlain airport has been resolved.

Gen. Omar N. Bradley, VA head, indicated a willingness during a personal visit to Minneapolis to negotiate transfer of some land in the Fort Snelling military reservation adjoining the field for airport use, if it would not interfere with care of hospitalized veterans.

Bradley said plane noise would prevent actual landing field installations any closer to the hospital, but suggested place might be found for other airport facilities, such as administration and office buildings, on the reservation. ► **Ask Redesign**—The Commission directed the Aviation Services Co. of Minneapolis to redesign airport enlargement plans.

The aviation committee of the Minneapolis Civic and Commerce Association, meanwhile, has called for action to develop a "suitable" primary commercial airport north of the Twin Cities, and relegate Wold-Chamberlain to a secondary role. Acquisition of land for a new airport in the New Brighton-University area would cost less than additional land for Wold-Chamberlain expansion, the association contended. It made no recommendations on ground transportation, although an airport at New Brighton would be twice as far from the heart of the Twin Cities as is the present field.

Late last month, the Commission authorized three new secondary airports in the Twin Cities area, two northwest of Minneapolis, the other east of St. Paul. Specific sites have not been selected, though each area is 10 miles from downtown.

Other airport developments:

► **New York**—The Port of New York Authority named four air traffic specialists to aid in its study of requirements at LaGuardia Field, Idlewild and Floyd Bennett Field. The four: Hervey F. Law, manager of Washington National Airport; J. Earl Steinhauer, former operations manager at National Airport now plant operations manager for the Fairchild Engine and Airplane Corp.; Maj. Albert E. Blomquist, Ringoes, N. J. transportation engineer, and Thomas P. Smith, former Assistant Commissioner of Borough Works in Brooklyn.

► **St. Louis**—Municipal Airport Commission has decided to restrict operations at Lambert-St. Louis Municipal Airport to major airline traffic "as far as reasonably possible." Result will

be gradual reduction of private and military aviation at the airport. . . . Contracts for grading and drainage work (estimated \$488,000) and construction of a 5,000-ft. concrete runway (estimated \$1,250,000) are being let this month. Expenditures for improvements since Jan. 1, 1945, have totaled \$4,322,800, compared with \$3,000,000 the previous 25 years. The city has acquired 1,815 of the 4,000 acres needed for a proposed second major airport at Columbia bottoms.

► **Kansas City**—Representatives of the four commercial airlines operating through Municipal Air Terminal, have submitted plans for its future development. Recommendations included a new and larger terminal building with at least eight loading ramps. The airlines' committee foresees 210 daily arrivals and departures at Kansas City by 1951 and 374 by 1960. Committee members: Chairman R. M. Huber, TWA; R. M. Lewis, Braniff; R. F. McKee, Continental, and J. A. Cunningham, Mid-Continent.

► **Syracuse, N. Y.**—The city has taken over the Syracuse Army Air Base under an interim permit covering all aviation, landing and taxi facilities, buildings and equipment. A survey has been ordered to determine what is needed to open the field.

► **Rochester, N. Y.**—Construction of four nine-plane hangars at a cost of \$60,000 and improved lighting, paving and drainage at another \$40,000 has been approved by the Common Council.

► **Burbank, Cal.**—More outbound passengers flew from Lockheed Air Terminal during July than from any other airport west of Chicago. Total was 66,957. San Francisco airport was second with 49,782.

► **London**—The British Ministry of Civil Aviation has designated Bovingdon Airport, the Air Transport Command's London terminal during the war, as London's fourth commercial airport, for use primarily as alternate to the other three. Others are London Airport at Heathrow, for trans-Atlantic services; Croydon, for domestic and London-Paris routes, and Northolt, for other services to and from the Continent.



FRESH SHRIMP, NO ICE:

Packaged in a new-type container (AVIATION NEWS, Aug. 26), the first load of fresh shrimp shipped from the Gulf Coast without ice was carried in this Chicago and Southern plane from Biloxi, Miss., to Detroit. Ralph Duncan (right), processor and distributor, plans to make such shipments daily to Chicago, Detroit and other inland cities. With him is Dr. Spencer A. Larsen, director of air cargo research, Wayne University, who helped develop the container.

New Hydraulic Fluid

The U. S. Navy's recently-announced non-inflammable hydraulic fluid, to be used in all new Navy planes, is being tested for airline adaptability in a C-54 by Douglas Aircraft, while CAB has asked for comment on a proposed requirement that non-inflammable fluid be required in airliners.

The test is the first under 3,000-lb. pressure—that on a DC-4 — although Navy has tested it successfully in low pressure systems of 1,000 and 1,500 lb., such as that of the DC-3.

The new fluid, on which Navy has given details to airlines and manufacturers, was developed at Naval Research Laboratory. It has a water base and components which lubricate, prevent corrosion and lower freezing point. Inflammable hydraulic fluid has a mineral base.

Deadline for comment on CAB's proposed requirement is Dec. 1.

CAB Refuses Pan American Request for Case Delay

CAB has refused to grant Pan American Airways' request that reconsideration of the Latin American case be deferred until approval of the PAA-Panagra joint operating agreement covering service between the Canal Zone and the U. S. (AVIATION NEWS, Aug. 12) is ready for decision.

The PAA move was vigorously opposed by other airline parties to the Latin American proceeding. Filed concurrently with Eastern Air Lines statement opposing delay was an EAL motion to dismiss the PAA petition for approval of the operating agreement on the ground that the contract is illegal and in restraint of trade.

Ask U. S. Entry

Lineas Aereas Mexicanas, subsidiary of United Air Lines, has asked CAB authorization to operate between Torreon, Mexico, and Houston, Tex., on two different routes, one via San Antonio and the second via Monterrey, Mexico. The application is in addition to other UAL and LAMSA requests which would link United's Pacific coast route and LAMSA's Mexican route at Nogales, Ariz., San Diego and Los Angeles.

C&S Seeking Probe Of Waterman Flights

Steamship lines' application for temporary certificate to San Juan opposed by certificated carrier.

Waterman Steamship Corp., in applying for a temporary certificate to operate between New Orleans and San Juan, P. R., has stirred determined opposition from Chicago and Southern Air Lines and possibly has inspired a Board investigation of its own "non-scheduled" activities.

Chicago and Southern has petitioned CAB to probe Waterman's status in the light of narrowed definitions of nonscheduled operations contained in the Page Airways and Trans-Marine opinions issued several months ago and to issue a cease and desist order.

► **Spoiling for Fight**—Spoiling for a fight with the "subsidized airlines," and eager for publicity in its battle for surface carrier participation in air transportation, Waterman said it welcomed an investigation. Attorneys for the non-scheduled operator asked that the investigation be consolidated with the San Juan route application in order to get immediate hearing.

Chicago and Southern also requested dismissal of Waterman's route application, branding it as "frivolous and capricious" and the fourth attempt by Waterman to obtain a certificate upon the same facts and issues presented futilely in the Latin American case.

Waterman said in its application that it had conducted survey and nonscheduled trips over the New Orleans-San Juan route and that it had the personnel and equipment (DC-4, DC-3 and Lodestar) to begin flights immediately to meet demands for service tantamount to an emergency.

► **Cite Urgent Need**—In contrast, Waterman declared, Chicago and Southern will not be able to inaugurate its operations to Puerto Rico (authorized in the Latin American decision) until late in 1947 except by withdrawing aircraft from its domestic routes and "thereby diminishing its already inadequate service there." Existence of an urgent need for immediate direct service between New Orleans and Puerto Rico was denied by Chicago and Southern.

In its petition for an investigation of Waterman, Chicago and Southern presented a schedule of published flight times and depar-

ture dates of the non-scheduled operator's "air cruises" between New York and San Juan and New Orleans and San Juan during July and August. C&S said they clearly indicated violation of the non-scheduled exemption order.

Waterman, according to Chicago and Southern, held itself out to the public to perform a regularly-scheduled operation through newspaper advertisements in which departure dates were announced from four to 23 days in advance and by arrangements with its travel agents who were notified up to 34 days in advance of the day, hour of departure and arrival, flight numbers, fares and regulations governing the air cruises.

Meanwhile, Waterman went ahead with plans for flights from New York to London Sept. 5 and 11, at a one-way fare of \$337.50 plus tax. Two round trips from the West Coast to Honolulu were recently completed with demand for seats so great that officials said the DC-4 utilized could have been kept in that service indefinitely.

The company also is looking forward to operating flights to the Union of South Africa and European points.

AOA Doubles Foreign Flights on ATC Contract

American Overseas Airlines' trans-Atlantic contract operations for the Air Transport Command have been doubled, Harold R. Harris, AOA vice-president and general manager, has announced AOA is the only airline now conducting flight operations across the Atlantic for ATC.

In addition to daily service to Berlin, the complete schedule of 13 weekly flights includes two flights weekly to Vienna, three flights weekly to Paris and one flight weekly to Meeks Field, Iceland. Also concurrent with the doubled schedule, all of AOA's maintenance operations for ATC are being transferred from LaGuardia Field to Westover Field, Mass. The ATC fleet of C-54s has been increased to 14 to handle the stepped-up schedule.

C&S Asks Route

Chicago and Southern Air Lines has asked CAB for a new route from New Orleans to Los Angeles and San Francisco via San Antonio, Phoenix and other intermediate points.

39 Cent Mail Rate Is Asked by Empire

Florida Airways requests 1,084 additional route miles as feeders see need for expansion.

Predictions that the nation's new area feederlines would require mail pay well over 25 cents a mile (AVIATION NEWS, July 22) and that they would not long be satisfied with the extent of the systems originally certificated are already confirmed.

Empire Air Lines, certificated for 695 route miles in Idaho, Washington and Oregon in CAB's West Coast decision, is the first new feeder to apply for mail pay and requested 39.04 cents a revenue plane mile on its AM 78. Florida Airways (formerly Orlando Airlines), certificated for 476 route miles in the Florida decision, requested AM 75 additions totaling 1,084 miles, bringing the entire system to 1,560 miles.

► **Extend Routes**—The requested links would extend Florida's present routes to Pensacola, St. Petersburg and Miami. At present, Florida is the Nation's smallest feeder. Neither Empire nor Florida has yet begun operations on a certificated basis, although Empire hopes to start this month.

Empire's request for 39.04 cents a mile temporary mail pay (which would give a 10 percent return on investment) compares with an estimate made in its exhibits in 1944 that 7.80 cents a mile mail pay would be necessary to break even. The sharp rise in mail pay requirements resulted almost entirely from radical increases in estimated expenses from both flying and ground operations and reflected only slight revised estimates of revenues.

► **Expenses Rise**—In its 1944 estimates, as presented to CAB, Empire listed prospective first year operating revenues of 41.31 cents



CELEBRATION:

William B. Stout (seated), well known aviation figure, participated in recent ceremonies at Grand Rapids, Mich., observing the 20th anniversary of the start of his Stout Air Services, which pioneered continuous scheduled all-passenger airline service. Stout retraced the original Grand Rapids-Chicago route in a special plane of United Air Lines, of which Stout Air Services was a predecessor. Serving him in the picture is Pete Berger of United, who was a flying mechanic with Stout and claims to be the country's first air steward. Stout now is chairman of the Michigan State Aeronautics Commission.

a mile and total expenses of 49.10 cents a mile, including 31.61 cents for flying costs and 17.49 cents for ground costs. New figures, presented with the application for a temporary mail rate, estimate first year operating revenues of 39.24 cents a mile and total expenses of 70.61 cents a mile, including 38.09 cents for flight and 32.52 for ground costs.

Empire's petition suggested that both the temporary and final mail

Feeder Statistical Comparisons

Feeder	Towns to be Served	Total Pop.	Average Pop.	Points not Before Served	Total Route Miles	Average Mileage Between Stops
Monarch	22	704,296	32,013	16	1,550	67.4
Summit	16	596,697	37,294	11	1,613	101
Florida	10	294,535	29,453	7	476	47.6
Southwest	23	2,519,267	109,533	16	1,152	50.1
West Coast	21	1,002,161	47,722	15	870	41.4
Empire	15	282,776	18,852	9	695	49.6
Wiggins	22	2,273,553	103,343	14	657	27.4
Pioneer	6	608,397	101,399	1	683	136

(Compiled by Cecil A. Beasley, Jr., Mills & Kilpatrick, Washington, D. C.)

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rate fixed by the Board be a base rate for the first 25 lbs. of mail or fraction thereof, plus 2.5 percent of such rate per plane mile for each additional 25 lbs. of mail or fraction. Such a base poundage, Empire said, would furnish feeders with "a real incentive to emphasize the use of airmail in the course of development of their territory."

Besides the heavy increases in equipment and construction costs and soaring wages since the 1944 estimates were made, Empire's figures were thrown off by its certification for a system considerably smaller than that applied for.

Panam Will Get 23 DC-4s From AAF

Delivery of 18 more Douglas DC-4s to Pan American Airways in October and November will bring the carrier's Latin American fleet to 41. Acquisition of 23 of the planes—entirely new but built for the Army and hence requiring reconversion—now is being completed.

Ten of this group went to Pan American's Latin American affiliates—Avianca (3), Panagra (3), and Compania Mexicana de viacion (4). Panair do Brasil received one for use while Lockheed Constellation's were grounded. Conversion was done by Douglas, who delivered one of the ships

every three days during July and August.

The 41 four-engine planes in the Latin American Division will be supplemented by about half PAA's present fleet of DC-3s, which will be used primarily for local service in Central and South America. At least three of the DC-4s and seven or eight of the twin-engine planes will be all-cargo planes.

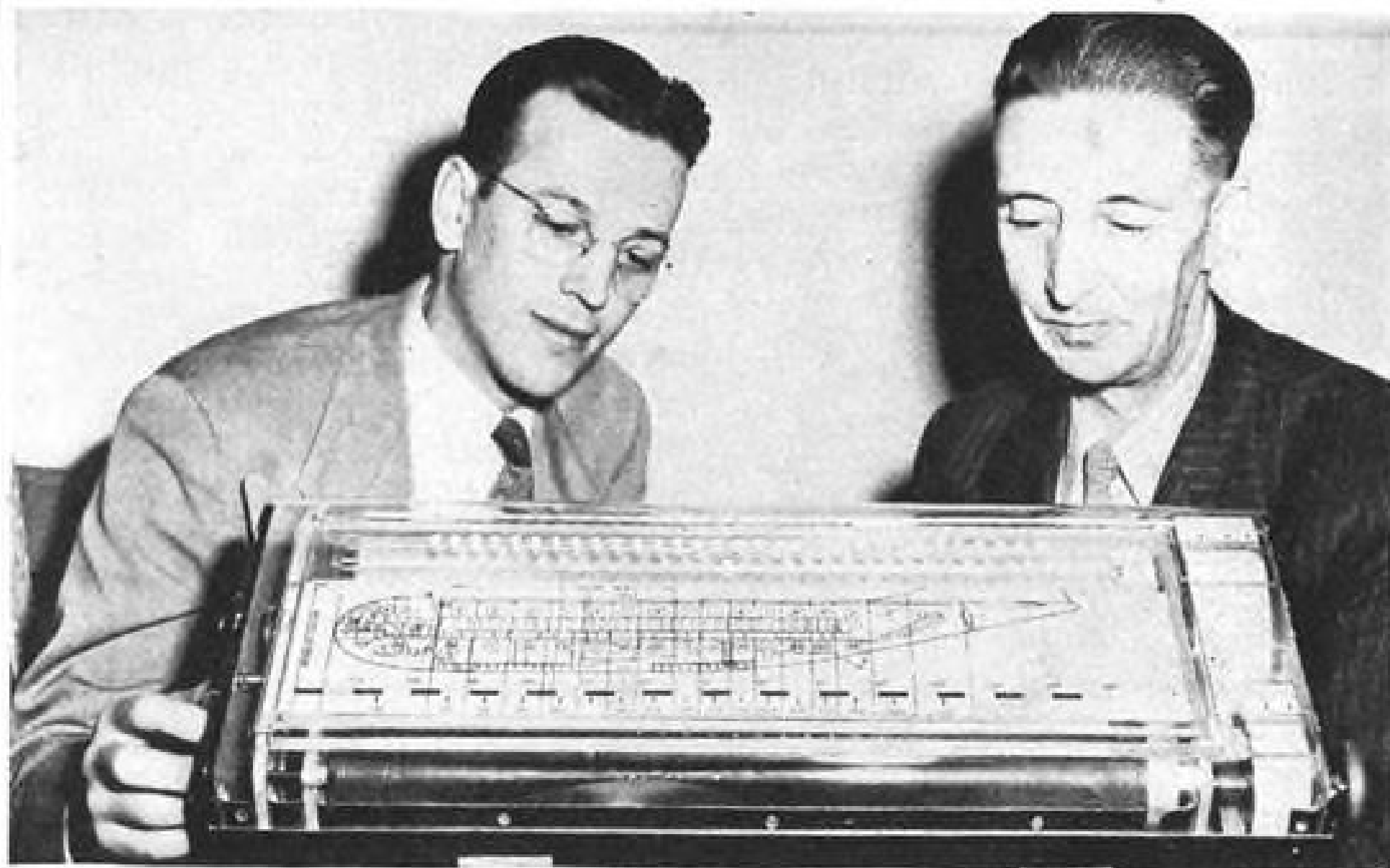
Freight Market Forecast

Nearly 20 percent of all drugs and pharmaceuticals may be shipped by plane if air freight rates are lowered to 10 cents a ton mile, according to a study made in the air cargo research program of Wayne University, Detroit.

Continental Air Lines Orders Fleet of 15 Convair 240s

Continental Air Lines becomes the fourth air carrier to order Convair 240s from Consolidated Vultee Aircraft Corp. with its recent purchase of 15. This brings the total on order to 155, including the largest single purchase by American, which early this year signed for 100, and Western and Pan American orders of 20 apiece, each with options for 30 more.

Consolidated also is in the final stages of negotiation with KLM, but no announcement has been made of the exact number of 240s



AIR LOAD COMPUTER:

Two Boeing Aircraft Co. engineers—Berger Anderson, left, and Cliff Heckart—have invented this load computer to keep track of weight totals and center of gravity changes on the Stratofreighter (AVIATION NEWS, Aug. 26), and Stratocruiser. After basic weight and known center of gravity are set, a pointer is moved to indicate on the profile chart the section in which cargo is being stowed and the weight of the new load "rung up," whereupon the machine automatically registers the new total weight and cg.

involved. Other purchases are being discussed, some with foreign lines and some with domestic, Convair officials say.

Continental expects to get its fleet in service next summer. The new planes are to start coming off the line next April. The operator predicts that the twin-engine, 40-passenger 240s, with their pressurized cabins and cruising speed of over 300 mph., will cut Denver-Kansas City travel time a third to 2 hrs. 10 min. and result in other proportionate reductions elsewhere on the system.

TWA Asks Dublin

TWA has asked CAB for authorization to serve Dublin, Eire, in addition to Foynes, on its trans-Atlantic route.

CAB ACTION

The Civil Aeronautics Board:

- Permitted Northwest Airlines to serve Anchorage, Alaska, through Elmendorf Field, and Seattle, Wash., through Boeing Field on its international route.
- Consolidated helicopter route applications of Southwest Airways Co. (Docket 896) and Los Angeles Airways, Inc., (Docket 1821) in same proceeding and permitted the Post Office Department, TWA, Western Air Lines and United Air Lines to intervene.
- Dismissed Detroit-Washington route application of Chicago and Southern Air Lines at applicant's request (Docket 2394).
- Reissued temporary certificate of Ray Wilson, Inc., for AM 73 to reflect new corporate name, Monarch Air Lines, Inc.
- Dismissed applications of Norseman Air Transport, Inc., (Dockets 2301, 2302 and 2303) from air freight case (Docket 810 et al.) at applicant's request.
- Permitted American Airlines to intervene in Board's investigation of Railway Express-Northwest Airlines freight agreement case (Docket 2340).

CAB SCHEDULE

Sept. 9. Reargument on portion of Hawaiian route case. (Docket 851 et al.)

Sept. 10. Exchange of exhibits in Pan American Airways domestic route case. (Docket 1803.)

Sept. 11. Briefs due in route consolidation applications of TWA, American and United Extended from Sept. 4 (Docket 2142 et al.)

Sept. 11. Oral argument on question whether CAB should grant petition by steamship lines for study of competitive effect of recent international air agreements and review of Board policy on steamship company participation in air transportation. (Docket 2411.)

Sept. 16. Exchange of exhibits in air freight case. Extended from Aug. 30. (Docket 810 et al.)

Sept. 16. Exhibits due on TWA's Italian agreement. Postponed from Aug. 16. (Docket 2337.)

Sept. 16. Exchange of exhibits in Royal Dutch Air Lines' (KLM) application for foreign air carrier permit. Extended from Sept. 9. (Docket 2324.)

Sept. 16. Reargument on portion of Latin American route case. (Docket 525 et al.)

Sept. 18. Hearing in Los Angeles helicopter service case. Postponed from Sept. 16. (Docket 896 et al.)

Sept. 20. Briefs due in Cincinnati-New York route case. (Docket 221 et al.)

Sept. 20. Comments due on Board's pilot hour investigation. (Docket 2241.)

Sept. 20. Hearing in Board's investigation of TWA's trans-Atlantic rates. (Docket 2375.)

Sept. 23. Briefs due in PCA-Northeast merger case. Extended from Sept. 3. (Docket 2168.)

Sept. 23. Exchange of rebuttal exhibits in Royal Dutch Air Lines' (KLM) application for foreign air carrier permit. Extended from Sept. 16. (Docket 2324.)

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Sept. 26. Hearing in Royal Dutch Air Lines' (KLM) application for foreign air carrier permit. Postponed from Sept. 19. (Docket 2324.)
Sept. 26. Rebuttal exhibits due on TWA's Italian agreement. Postponed from Aug. 26. (Docket 2337.)
Sept. 27. Prehearing conference on Royal Dutch Air Lines' (KLM) application. (Docket 2348.)
Sept. 30. Exchange of exhibits in Continental Air Lines' San Antonio-Hobbs certificate amendment case. (Docket 2087.)
Sept. 30. Briefs due in Boston-New York-Atlanta-New Orleans route case. Extended from Sept. 16. (Docket 730 et al.)
Oct. 8. Exchange of rebuttal exhibits in Detroit-Washington route case. Extended from Sept. 15. (Docket 679 et al.)
Oct. 14. Exchange of rebuttal exhibits in air freight case. Postponed from Sept. 28. (Docket 810 et al.)
Oct. 14. Exchange of rebuttal exhibits in Pan American Airways' domestic route case. (Docket 1803.)
Oct. 15. Hearing in Detroit-Washington route case. Postponed from Sept. 23. (Docket 679 et al.)
Oct. 21. Hearing in air freight case. Postponed from Oct. 14. (Docket 810 et al.)
Oct. 21. Exchange of rebuttal exhibits in Continental Air Lines' San Antonio-Hobbs certificate amendment case. (Docket 2087.)
Oct. 28. Hearing in Continental Air Lines' San Antonio-Hobbs certificate amendment case. (Docket 2087.)
Oct. 29. Hearing in Pan American Airways' domestic route case. (Docket 1803.)

SHORTLINES

► **American** has contracted with Consolidated Produce, Los Angeles, for regular 20,000-lb. produce flights from Los Angeles to Alaska. Alaskan seafood will be carried on return trips.
► **American Overseas** is offering 1,049,895 additional capital stock

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shares to its stockholders at \$12 per share, with negotiable warrants good until Sept. 18 distributed to stockholders of record Aug. 21 on the basis of one and a half new shares for each share now held . . . AOA Pres. C. R. Smith says the company has \$100,000,000 orders for new planes, on which peak of production will be near the end of next year.
► **Braniff** officials are making a six-week survey flight of the line's Latin American routes, certificated in May. The group includes V-Ps. Charles E. Beard and Ray C. Shrader. . . Braniff's director of research and planning, Col. J. B. Bennett, has been conducting a six-week survey of Brazilian facilities.
► **Chicago and Southern's** increases in revenue passengers and revenue passenger miles for the first eight months of this year over the same period of 1945 were 95 and 73 percent respectively. Passengers numbered 227,200. Passenger miles totaled 90,929,000. . . A plane load of 50 folding wheel chairs for paralyzed war veterans was flown free by C & S from Toledo, Ohio, to Memphis, Tenn.

► **Colonial** has become an issuing carrier in the Universal Air Travel Plan.

► **Northwest** may call this month for construction bids on proposed 9,000 sq. ft. expansion of its Portland, Ore., terminal. Architects have been commissioned.

► **Pan American's** passenger miles for the second quarter of 1946 totaled 280,183,101 against 227,646,065 in the second quarter of 1945. . . PAA planned to resume Constellation service on the Los Angeles-Honolulu route two days ago.

► **PCA's** net loss of \$747,763 in the first six months of this year was attributed to the line's expansion program. Same period last year showed net profit of \$411,549. Revenue passengers were up 82 percent (596,647) 86 and 127 percent gains, respectively, reported in revenue miles and revenue passenger miles. . . Of PCA's 394 captains and first officers, 232 are former military pilots.

► **TWA's** agency agreement with American Express Co. has been expanded to include 35 foreign offices, adding Europe, Middle East, India, Central and South America, the British Isles and the Orient to former representation in the U. S. and Canada. . . The carrier's net loss of \$117,986 for the second quarter of this year compared with a loss of \$1,492,972 in the first quarter. Operating revenues in the second quarter set a new high of \$18,506,333, a gain of 69 percent over the first quarter. Operating expenses were 30 percent above the first quarter. . . Carrier now employs 5,538 veterans, including 61 captains and 388 first officers. . . University of Illinois chartered TWA planes to keep several football dates this fall.
► **United** reports nearly 11,000 employees, compared with 7,704 when the war ended. Planes in service include 23 DC-4s and 69 DC-3s, against 60 DC-3s a year ago. Route miles have increased in the same period from 6,046 to 9,359. . . Net earnings for the second quarter were \$1,353,601, compared with \$1,425,915 in the same period of 1945.
► **Western's** July passenger miles were 113 percent higher than the same month a year ago.

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What Did We Gain?

ADVANCE APPREHENSIONS of the industry, and AVIATION NEWS, over possibility of a Roman holiday at the National Air Races proved unnecessary. We were never wrong on a better subject. The actual races resulted in no crashes, nor was one pilot seriously injured, despite unprecedented higher speeds. One pilot crashed his P-51 in a preliminary test run, but walked away.

Nevertheless, the big show cost aviation the life of Jack Woolams, Bell's chief test pilot. He was the man who had been training for many weeks to fly the nation's first plane designed to attack the barrier of sonic speed. He died when his over-powered P-39 entry dived into Lake Ontario during a test run. Woolams' death will probably set this country's vital supersonic aircraft program back several months, at a time when there was promise of an early flight.

The Races were unnecessary evidence both in safety and speed of the improvement in high speed aircraft. They proved nothing else. There was a time when the National Air Races were described as the "test tube of aviation." That day is long past, as anyone will tell you who has peered into the wondrous efforts of the National Advisory Committee for Aeronautics, for example. The most modern planes taking part—the Lockheed P-80s—are outmoded. The Army knows it; the manufacturers know it. In these days tests by the Government and manufacturers are far more grueling and valuable than any commercialized stunting.

There is another intangible hazard of the Races most of us have given too little consideration. How many youngsters will return to their Cubs, Aeroncas, and Taylorcrafts from the Races and imitate the stunt flying? Only the accident reports will give us the answer.

What did the Races contribute to the advancement of aviation that will offset the death of Jack Woolams, and the inspiration for a lot of potentially foolhardy pilots to put their own stunt exhibitions at the price of their own lives and those of others?

Amazing Lack of Signals

VIRTUALLY EVERY MODE of transportation has its own set of visual signals, except aviation. A few months ago, a News editorial pointed out that there is no way for a pilot to indicate to another plane that he is lost, or that he requires direction to the nearest airport. One ingenious operator in New England suggested flying a handkerchief or shirt from a plane as a "lost" signal.

This strange lack of a simple signal system was given international significance the other day when the Yugoslavs pointed out that they knew of no international visual signal to order an aircraft to land. This was shortly after they had shot down the second U. S. transport in a short period.

• This incident must not have been impressed on the

Caribbean Regional Air Navigation Meeting, for it was apparently not considered important enough to merit attention at the two previous regional PICAQ meetings.

On Sept. 3 a document was presented to the session in Washington calling for adoption by the 21 nations of a set of signals. If adopted, the system probably would be recommended by PICAQ for world-wide application.

Memorizing of a simple set of signals for international and domestic use would be a far more valuable requirement for every new pilot than most of the complex requirements in the Civil Air Regulations. Let's get busy.

Air Travel Is Cheaper

THE News in an editorial June 24 contended that the Federal Government is wasting untold thousands of taxpayers money because of obsolete regulations which restrict much travel by public servants to surface carriers.

An encouraging precedent, however, was set a few days ago by a memorandum sent to heads of all departments of the Government of the District of Columbia. The memorandum quoted a report prepared by the Property Survey Officer on comparative costs of travel by air and rail. The Property Survey Officer had been instructed to compile the figures "so that where practicable air travel may be utilized when it has been determined to be more economical than other methods of travel."

As in most municipal and federal offices, it has been the practice in the District of Columbia Government to draft travel orders on the basis of railroad use. Authorization of air transportation has required proof that the best interests of the Government would be served. This, of course, required additional time and much red tape. However, the Property Survey Officer says:

"There appears to be a popular impression that travel by air is much more costly than travel by airmail. Recent reductions in air travel fare, however, have now made it possible to travel more economically by air than by any other method."

The report further shows not only that the round-trip fare from Washington to Chicago results in a net cash saving to the District of \$8.90, but that travel time shows a reduction of 29 hr., representing a saving of \$7 more in travel allowances, for a total saving of nearly \$16.

"To this must be added the intangible saving of more than a day's time and salary of the official performing the travel. . . . The Chicago destination is merely used as a typical example. Obviously, potential savings resulting from air travel will vary in proportion to the distance traveled."

The officer's conclusion, therefore, is: "In the interest of economy, it is suggested that District employees engaged in official travel be encouraged to resort to air travel wherever feasible."

This memorandum deserves the widest dissemination in federal offices and in every municipal, county, and state government in the country.

ROBERT H. WOOD.



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But before you take off, we think there're two things you ought to know. One . . . the best investment you can make for your Ercoupe is the best in fuels and lubricants. Two . . . we think you'll find that, where fuels and lubricants are concerned, the best in the Mid-West come under the heading PHILLIPS AVIATION PRODUCTS!

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Hope to get better acquainted with you. Let's make our meeting place the "66" pump! The Aviation Department, Phillips Petroleum Company, Bartlesville, Okla.



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• This brand new Beechcraft product which has been tested and re-tested for many months is ready for public inspection. The *Bonanza* sets new standards of performance and economy that have not been approached previously. In order to believe the engineering achievements incorporated in this airplane it must be seen. A *Bonanza* demonstrator is, or shortly will be, available at the Beechcraft Distributors listed at right. We suggest an early contact for an appointment.

Basic *Bonanza* Performance

Cruises at 175 mph . . . Consumes 10 gallons per hour . . . Range 750 miles at 165 mph . . . Carries 4 people and 100 pounds of baggage . . . Lands at 46 mph . . . Has a direct operating cost of as low as 1 cent per passenger mile . . . Radio and night equipment is standard.

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