ASSIGNATION OF THE SEPTEMBER 4, 1944

May Abolish APB, Reshuffle ARCO

WPB shakeup may bring end of board because production job is nearing finish; Tracy to head up Resources Office.....Page 7

Urge Speedy Study of CAR Changes

ACC Airworthiness Requireents Subcommittee and ATA group among major bodies seeking consideration.....Page 44

17 Lines Take Issue With Senators

Charge Bailey and Clark gave rong impression as to air transport industry's support of "community" proposal.....Page 57

"Anyone Can Solo in 5½ Hours"

Parks Air College survey shows average student can pilot plane in less time; operating expense less than light car. Page 18

Canada Asks Only Transport Orders

Army Tests Platt-LePage Dual Rotor

Airborne Paves Way for Allied Push

Beech Speaks of Its Post-War Plans



Forecasts Aircraft Contract Terminations: Maj. Gen. Bennett E. Meyers, deputy director of AAF Air Technical Service Command, who sees one-third of all contracts in the aircraft industry terminated with Germany's fall. Gen. Meyers is playing a vital role in renegotiation, contract termination and production cutback program. (Story on Page 16)

A Better RELIEF VALVE For Aircraft Hydraulic Systems

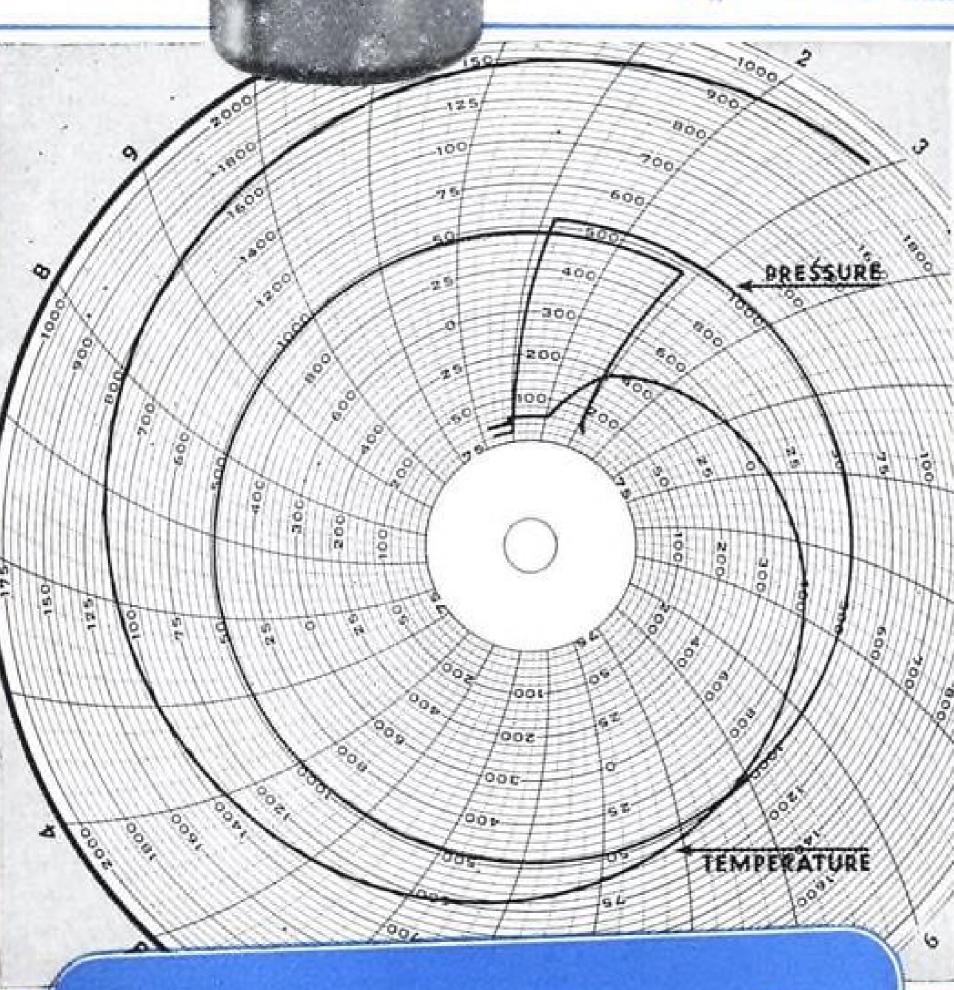


A pilot-operated piston is used in the Vickers Aircraft Relief Valve instead of the customary spring-loaded direct-acting mechanism. The result is smoother operation and geater accuracy throughout a wider range of pressure adjustment. Variation in pressure from cracking point of valve to its maximum capacity is negligible (see curves below).

Vickers Balanced Piston Relief Valves (Model AA-11200 Series) are available in four sizes having rated capacities of 1.2, 3.5, 6.0 and 16 gpm, conforming to AN specifications. Actual capacities are, however, far in excess of these rated minimums. Without parts change all valves have operating pressure ranges from 300 to 2100 psi; adjustment is easy and simple. They comply with Winterization requirements of the Army Air Forces; their dimensions comply with the AN-6200 envelope.

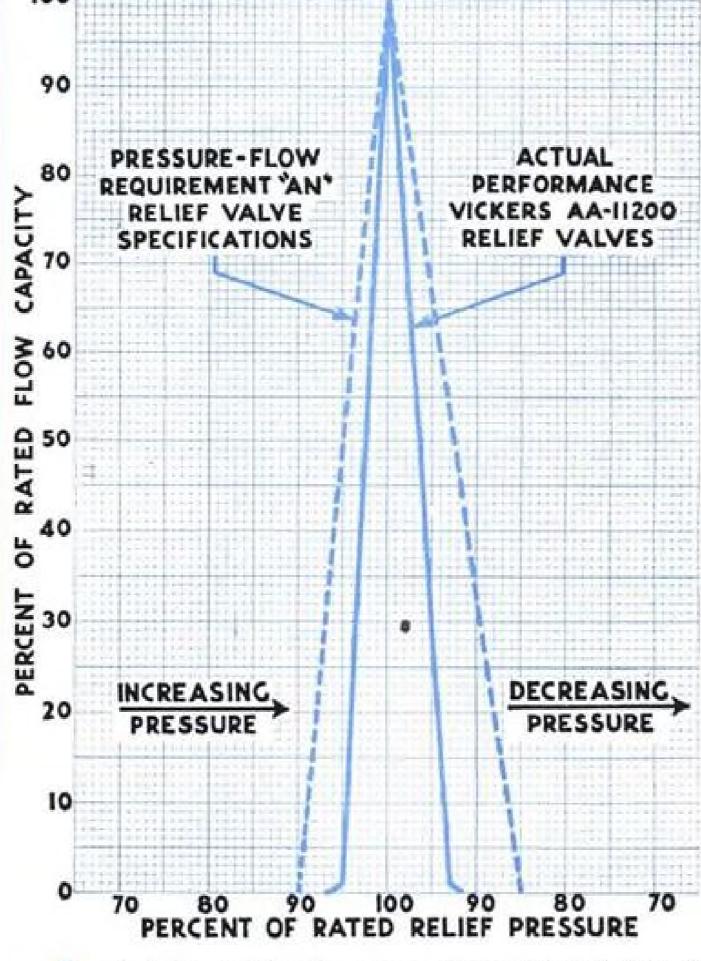
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Representative of the exhaustive and severe tests to which these valves have been subjected is the Cold and Increasing Temperature Test recorded on the chart. The temperature increased from $-65^{\circ}F$ to $160^{\circ}F$ in 26 minutes (one revolution of chart = 24 min.)



As indicated by the curves above, the variation in pressure from cracking point to maximum rated capacity of the Vickers Balanced Piston Relief Valve is considerably less than permissible under AN Standards. Consequently, less pressure differential is required be-tween relief valve setting and unloading valve pressure. THE AVIATION NEWS

Washington Observer

X-DAY PLANS-Officials in Washington are concerned over what may happen to war production on the day that Germany is defeated. The situation is receiving the attention of production as well as military men in the capital. Some aircraft companies are proposing that they release all employes on "X" day, lose one or two days' production and then return to the job that still will remain before Japan is brought to its knees. The Navy is particularly concerned about possible production interruptions which may follow the fall of Germany.

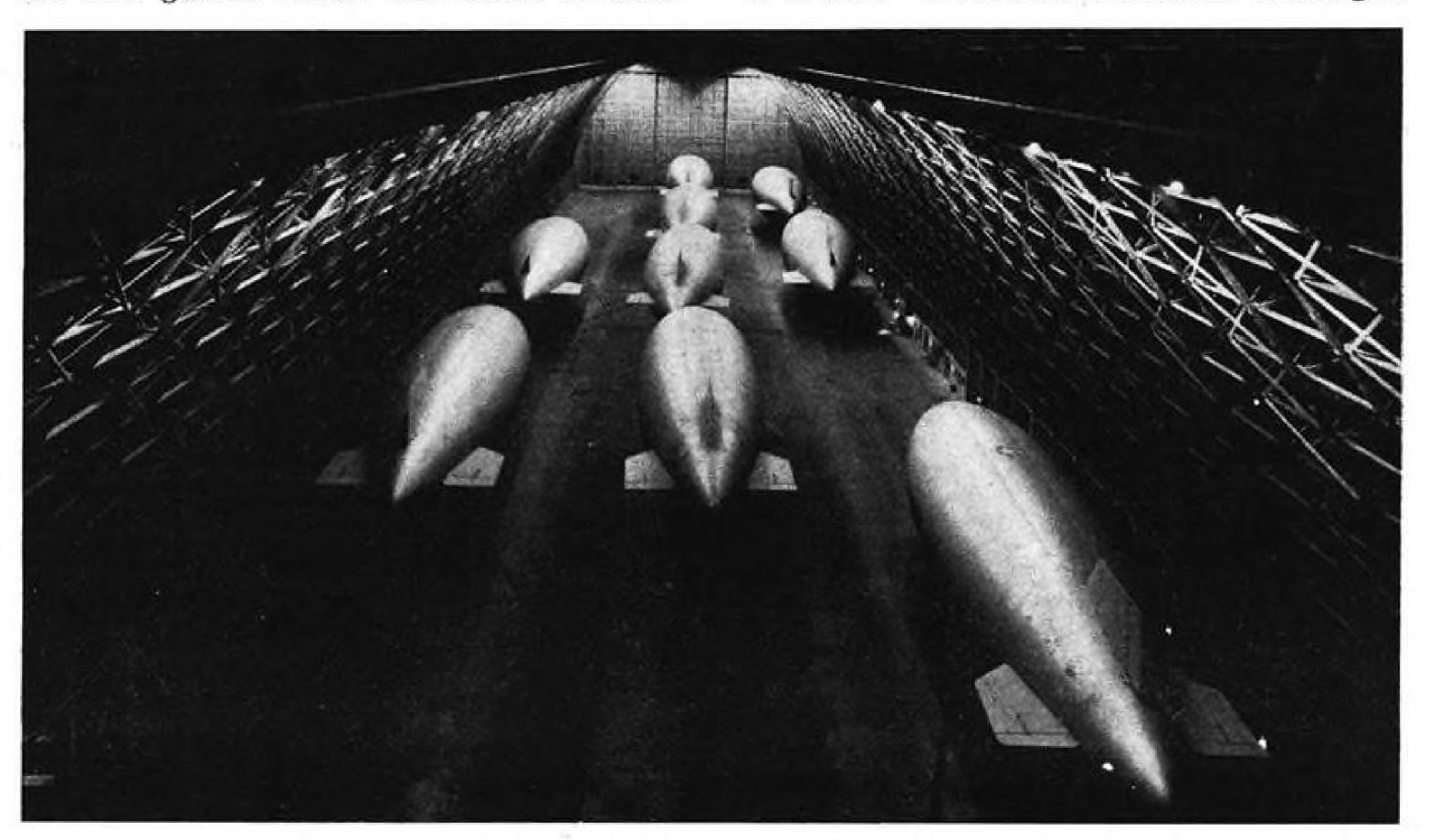
PACIFIC WAR-The war in the Pacific will still require tremendous production. Both military and production men recall the damage done to vital machines and equipment in war plants when the 1918 armistice was signed, and they are making plans to avoid a repetition of that when X-Day comes in Europe. Details are now being worked out.

POST-WAR PLANS-Two important aircraft manufacturers in different fields have dropped hints of their post-war plans within the week-Donald Douglas, of Douglas Aircraft, and John P. Gaty, of Beech. Aircraft manufacturers have been reluctant to discuss the future, except in the most general terms. The action of these

two executives in telling the world that they expect to be in business in a big way when peace comes again is being commended in Washing-

CUTBACK PROCEDURE—The furor caused by unexpected cutbacks in Army airplane production recently resulted in close attention to future procedure in such cases in official Washington circles against the day when cutbacks come again as they inevitably will. Officials once more say some sort of cushion must be fashioned before any further announcements. The Navy, for example, is said to have decided to announce cutbacks locally rather than round them up for Washington announcement with the resultant emphasis which a Washington dateline gives to a news story.

CUTBACK SAVINGS-Washington government officials say privately that taxpayers in cities having war plants should throw their hats in the air instead of complaining about cutbacks. Each cutback means the saving of hundreds of millions of dollars which would come out of their pockets. This is easier said than done when a community's economy is largely built on war production but in the long-range view of things, it is best. Production officials in Washington



U. S. Navy training blimps home to roost in their Moffett Field hangar.



AVIATION NEWS

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> Editorial Headquarters, 1357-63 National Press Building, Washington 4, D. C.

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

Mid-West Office, 955 Reibold Bldg., Dayton, O. Pacific Coast Office, 621 So. Hope St., Los Angeles Copyright 1944, Vol. 2. No. 6. Published week-ly by McGraw-Hill Publishing Co., Inc., price 50c a copy. Allow ten days for change of ad-dress. Subscription rates—United States, Mexico and Central and South American countries, \$5 a year, \$8 for two years, \$10 for three years. Canada, \$6 a year, \$10 for two years, \$12 for three years. All other countries \$9 a year, \$14 for two years, \$18 for three years. Entered as second-class matter July 31, 1943, at the Post Office at New York, New York, under the Act of March 3, 1879. Printed in U.S.A. Cable Address "McGrawhill, New York."

James H. McGraw, Founder and Honorary Chairman; James H. McGraw, Jr., President; Howard Ehrlich, Executive Vice-President for

Business Operations; John Abbink, Executive Vice-President for Editorial Operations; Curtis W. McGraw, Vice-President and Treasurer; Joseph McGraw, Vice-President and Treasurer; Joseph A. Gerardi, Secretary; J. E. Blackburn, Jr., Director of Circulation, 330 West 42nd Street, New York 18, N. Y. Branch offices: Chicago, 520 North Michigan Ave.; San Francisco, 68 Post Street; Los Angeles, 601 W. Fifth Street; Aldwych House, Aldwych, London, W. C. 2; Washington; Philadelphia; Cleveland; Detroit; St. Louis; Boston; Atlanta. Return Postage Guaranteed.

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Washington Observer

still maintain they will ease the cutback shock as much as possible, but the fact remains the shock is coming and war plant communities should be prepared to meet it.

SOME SOLUTION—Plans are now under way for an aircraft representative to sit with the Production Executive Committee through which all production cutbacks amounting to more than \$1,000,000 are to be coordinated. This committee is working on plans to pave the way for cutbacks through consultations with manufacturers, and wherever possible-government officials say it is not always possible—manufacturers will be given enough advance notice to plan production, personnel and public relations accordingly. This will not eliminate the shock, but should ease it.

CAMEL'S BACK—The aircraft cutback statement, which was released through OWI, was one of the straws that broke the camel's back so far as WPB Chairman Nelson's relations with the Byrnes-Army group was concerned. The statement flatly announced release of thousands of workers, told when they would be released and in what areas. Knowing that, Nelson felt that the Byrnes directive was unnecessary and was issued at Army insistence to further embarrass Nelson in his efforts to launch the celebrated four-point reconversion program.

DEMOBILIZATION HEAD—When Congress finally completes action on the Industrial Demobilization bill, the top post of director of the Office of Demobilization may fall to J. S. Krug, now acting WPB chairman. A sizable bloc of well-informed persons in Washington says the President placed Krug in the WPB spot to test his ability to handle a major agency and that if the young acting chairman is able to patch up all the dissension, he is at the top of the list for the bigger job. Friends of Donald Nelson said he definitely is not interested in the Byrnes job as reported by Senator Ferguson last week. Nelson is intensely interested in foreign trade and is said to feel this work will be far more important than any that the Byrnes post could offer him.

KINDLY EYE-Now that the rush is beginning, Federal officials are looking with a more kindly eye on state aviation commissions and at least one high official has expressed the hope that the CAA will be able to function much as the federal public roads program is administered, with the CAA an overall agency alloting fund to states, which would then carry out the landing facility programs. State officials are helping by cooperating with federal groups in an attempt to make it a 50-50 proposition.

PRODUCTION LAG-It has finally come to light, but nothing has been published on the subject, that, following General Somervell's recent blast at production lags, Donald Nelson received an urgent appeal from the OWI London bureau for a letter of denial. Newspaper accounts of the reported lags caused some demoralization among troops stationed in England and OWI wanted ammunition to fight the reports. Nelson was never able to give OWI the letter it wanted, so the total effect of General Somervell's campaign was that, while home front morale may have been strengthened, it was accomplished at the cost of sagging battle-front

BRITISH FIRE BOMB—Allied bombers are carrying a new deadly and devastating incendiary bomb which weighs about 30 pounds, is 21 inches long and has a diameter of 5.5 inches.

morale.



Another weapon the Nazis don't like.

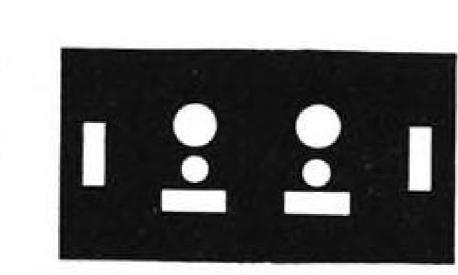
Its main filling is a solution of methune in gasoline under pressure. Descent of the bomb is controlled by a parachute which reduces its terminal velocity. When the bomb lands, it emits from its tail a flame about 15 feet long and two feet wide. The Axis has been complaining about it.



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1/4" to 1/2"	-002	+003	-0015	+0015	-004		-005	+005
½" to 1"	-002	+005	-002	+002	-005	+005	-007	+007
1" to 2"	-010	+010	-0025	+0025	-006	+006	-008	+008

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WPB Shakeup Expected to Result In Abolishing APB, Shuffling ARCO

End of Aircraft Production Board recommended by its members on ground that production job is nearing finish; Tracy to become acting director of diminishing ARCO with departure of T. P. Wright.

By SCOTT HERSHEY

WPB's Aircraft Production Board will be abolished, with prospects of a general reshuffling of the functions of the Board and the Airstemming partly from a shift of top government personnel dealing directly with the aircraft manufacturing program.

duction Board have recommended WPB organization. that the Board be abolished. They feel that the job the Board was set up to do has largely been accomplished, an indication that the aircraft industry has met the requirements of the armed services.

J. A. Krug, acting chairman of the War Production Board, late last week had not definitely decided to abandon it, but the Board's recommendation for its own abolition was expected to carry considerable weight.

Tracy to Take Over-Meanwhile, Myron A. Tracy, who has been with the government since WPA days, will take over as acting director of the Aircraft Resources Control office with the departure of T. P. Wright, director of the office and member and recorder of the Aircraft Production Board, who has been nominated as administrator of Civil Aeronautics.

Tracy joined the National Defense Advisory Commission in 1940 about the time Wright was called to Washington from his post as vice-president and director of engineering for Curtiss-Wright. Later Tracy transferred to the OPM and when the aircraft production division was set up within WPB, he was chief of the airframe

There are strong indications that of the program coordination division where he has served under Wright.

Wilson Resigns-Almost coincidental with Wright's nomination to craft Resources Control Office, the CAA, Charles E. Wilson, WPB executive vice-chairman and chairman of the Aircraft Production Board, submitted his resignation from the government together with Members of the Aircraft Pro- a blast at workings within the

Third member of the Aircraft Production Board concerned in the personnel shift is Lieut. Gen. William S. Knudsen, named to head the new Air Technical Service Command, made up of the old Materiel Command and the Air Service Command.

Aircraft Production Board, here-

tofore an important agency with which the aircraft industry has dealt since the aircraft construction program was started, loses three key men.

With the recommended folding of the Aircraft Production Board, the plan being considered makes the Joint Aircraft Committee the directing agency for the aircraft production program with the Aircraft Resources Control Office as its executive agency. ARCO has acted as executive agency for the Aircraft Production Board.

Krug Faces Tough Job-Before the Aircraft Production Board can be abolished, Krug must issue directives and orders changing duties and responsibilties. Krug, a former WPB vice-chairman, is 36 years old and recently has been serving in the Navy as a lieutenant commander.

Interesting speculation has arisen as to Krug's relation to the aircraft industry. While he was chief of priorities for WPB, he delegated to ARCO and the Aircraft Scheduling Unit, the authority to issue materials priorities without applying to the Board. Under the proposed new set-up these authorities Three Key Men Lost—Thus, the will have to be re-delegated and the aircraft industry is watching



AIRCRAFT GRAVEYARD:

Junked fuselages and wings, stripped of the bulk of their useful parts, lie in a salvage yard awaiting shipment to the United States as scrap. At one large salvage yard at a 15th Air Forces Service command adbranch. When that branch was vanced depot more than 600 tons of damaged aircraft are handled every dissolved and ARCO was set up in month. Over 200 damaged aircraft a month are sent back to combat December, 1942, he became chief made whole again with salvaged and new parts.

with more than casual interest for the results.

Wilson Resignation Loss to Industry-Wilson's work as chief of aircraft production was generally highly satisfactory to the aircraft industry and his departure from WPB resulted in immediate expressions of regret within the industry. Wilson twice previously tried to resign and, on at least one occasion, aircraft industry executives exerted sufficient pressure to keep him on the job.

Members of the Joint Aircraft Committee, which will be the directing agency for aircraft production are: Army-Gen. H. H. Arnold, Maj. Gen. O. P. Echols with Lieut, Gen. B. M. Giles and Brig. Gen. E. M. Powers as alternates; Navy—Rear Admiral Lawrence B. Richardson, Comdr. H. D. Riley, Cmdr. T. W. Jones and Rear Admiral E. M. Pace, Jr., alternate; British-Sir Richard Fairey, Air Marshal Sir William L. Welsh and alternates Air Vice Marshal R. B. Mansell, Air Commodore H. E. Nowell, Capt. E. M. C. Abel-Smith and S. W. Musson. T. P. Wright and Dr. A. E. Lombard represented the Aircraft Production Board with M. S. Tracy, as alternate.

Lovett Cites Need Of Scrapping Planes

Tells broadcasters surpluses must be accepted as part of war costs; points to need of maintaining up-to-date air force with modern equipment.

One of the first public moves in seeking support for an educational program to acquaint the public with the necessity for scrapping of much aircraft surplus was taken last week by the Assistant Secretary of War for Air, Robert A. Lovett:

Outlining planning for the future, Mr. Lovett told a radio broadcasters convention that preservation of the aircraft industry in a strong position is a prerequisite of continued air supremacy, that large scale scrapping of surplus aircraft is necessary to accomplish this. These surpluses must be accepted realistically for what they are—one of the great costs of modern war.

Retaining leadership means maintenance, with full public support, of a strong permanent air force with skilled personnel and up-to-date equipment. He pointed chairman of the Council and diout that replacement of obsolete rector of archives, Institute of aircraft must be a constant process. Aeronautical Sciences.

World Aviation

Work is going ahead on the long-awaited report on international aviation of the aviation subcommittee of the Senate Commerce Committee. Chairman Clark of Missouri returned to Washington last week and the present plan is that he, with Senators Bailey of North Carolina, chairman of the full committee, and Brewster of Maine will complete the report during the congressional recess, expected to run from mid-September through Nov. 7.

If other subcommittee members can come to Washington during the recess, the report likely will be turned over to them for consideration. If not, it will go to the subcommittee when Congress reassembles, then to be passed on by the full committee and, if approved, presented to the Senate as the Commerce committee's report.

and said that the Materiel Command now is charting a comprehensive post-war experimental program.

NAA Collier Award Committee Meets

The new committee appointed by the National Aeronautic Association to make the annual Robert J. Collier Trophy Award, met last week in Washington for the first time to draft rules and regulations for the award.

Grover Loening, aircraft consultant, office of the chairman of War Production Board, is chairman, and members are: William R. Enyart, president of Simmonds Aerocessories and of NAA; Gill Robb Wilson, aviation editor of New York Herald Tribune; Roger Wolfe Kahn, Grumman Aircraft Corp., and NAA director; Lawrence P. Sharples, chairman of the board of Aircraft Owners and Pilots Association; William P. Mac-Cracken, NAA general counsel; Dr. George W. Lewis, director of Aeronautical Research, National Advisory Committee for Aeronautics; William P. Redding, executive commissioner of Denver Chamber of Commerce, treasurer of NAA, and secretary of the Committee; and Lester D. Gardner,

U. S. Experts Ready For World Air Talks

With discussions with individual countries virtually completed, Assistant Secretary of State Adolf Berle, Jr., and officials of the Aviation Division are prepared to begin the long-planned international conference on civil aviation as soon as other nations signify their willingness. State Department officials now are considering what may be the best means to arrange the full-dress conference before the end of the year.

There remains one important country with which post-war commercial air arrangements have not been discussed—France—and the State Department was expecting last week that this will be undertaken soon.

▶ Site Undecided—Decision has not been made as to where the international conference will be held. This country's representatives believe America is naturally the best location, but they recognize that several international conferences already have been held here during the war. For this reason they expect some other country may want to be host to the air parley.

Bilateral aviation talks have been held with virtually all countries interested in post-war participation in international air transport except France.

Greyhound Buses May Use Plane Engines

What is believed to be the first attempt to adapt air-cooled aviation engines to highway transportation is involved in an order for new type buses placed with Consolidated Vultee by Greyhound Corp.

While Consolidated Vultee officials refer all inquiries to Greyhound, it is understood that the first prototype will soon be road tested. It will be powered by aircooled engines and incorporate a number of details of airplane construction heretofore foreign to busbuilding.

▶ G. M. Gets Bus Order—Coincident with the Greyhound announcement that an order had been placed with Consolidated was one that an order for new type buses also had been placed with General Motors. Deliveries in both instances are dependent on release of materials from war production.

Competition between Consoli-

dated and General Motors in such direct fashion will receive close attention of both automotive and aircraft executives.

WEST COAST REPORT

Intrastate Air Policy Studied in California

Program planned by Gov. Warren expected to be western leader in post-war aviation.

By SCHOLER BANGS

Western factory heads and airline operators may anticipate momentarily action by Gov. Earl Warren, California, toward the end of shaping an intrastate air policy for the state that will be the western leader in post-war aviation. When he does act, he doubtless will do so with a better-thanaverage appreciation of problems of factory taxation and the reasonable extent of state rights in controlling air commerce. He has been advised by experts, and recently conferred at length with no less an authority than Oswald Ryan, Civil Aeronautics Board member, who was a West Coast visitor.

▶ PLANE BUILDERS HOPEFUL— Major factory executives, who not long ago stressed the small number of transport aircraft required to "saturate" the airline market, do so no longer. Their sales of four-engine passenger and cargo transports may not be staggering at the start. And they may be able to record the year and month when they will have built all the new planes that the market can absorb, with little hope for any heavy orders to replace equipment that isn't going to wear out. But, they'll have by that time a hole card that promises to keep them in thriving business-an adaption of the automobile industry's "new model" de-

Unit Renamed

Army Air Forces Materiel Command at Wright Field and Air Service Command at Patterson ield have been redesignated the Air Technical Service Command since the reorganization placing Lieut. Gen. William S. Knudsen as director of both. Brig. Gen. Ken-B. Wolfe commands Wright Field and Maj. Gen. Clements MacMullen is commander at Patterson.



CAA TRAINEES RECEIVE SCHOLARSHIP AWARDS:

Four graduates of the Civil Aeronautics Administration's Inter-American mechanics school are shown above as Bruce Uthus, CAA's director of manpower and training, presents scholarships for further study in U. S. aircraft manufacturing plants. Left to right are Vincente Guevara, Colombia, who will study operation and maintenance of aircraft instruments at Sperry Gyroscope Co.; Rene Raeder, Brazil, operation and maintenance of aircraft engines at Pratt & Whitney; Uthus; Jesse D. Green, CAA coordinator of inter-American training; Jayr Veiga, Brazil, Pratt & Whitney; and Juan Torres, Cuba, who will study aircraft manufacturing techniques at Piper Aircraft Corp.

new transports begin to fall off posed to see. It has been at the they will have under construction airport for several months, and new planes showing such startling viewed on the ground and in flight improvement in earning power and performance that competing airlines will be forced to shelve their still-new planes for the new-

West Coast builders have on hand today inventions that will not appear in the first post-war planes they are talking about. They are being held in reserve for installation on later transports not yet announced. This will induce a rapid rate of obsolescence a factor that more than any other one thing may delay "giant plane" ventures. Manufacturers fear that any "Queen Mary" airliners they might attempt to build will be rendered obsolete before they are flown. They are going to prefer to stick with the building of moderately large aircraft, periodically replaced by new models embodying new operating economies and travel luxury.

SUPER SECRECY — Alaskatouring Congressmen were treated in Los Angeles to a common example of military "secrecy." The War Department said "No" to the suggestion of members of the congressional group that they be

vice. By the time their sales of seeing the plane they weren't supby thousands of garden variety citizens.

> ▶ POST MORTEM—Western factory executives who recently thought "unrealistic" Consolidated Vultee's admonition to workers— "What you do today is determining where you will be tomorrow."might have been hasty. In analysis of the statement, it is difficult to believe that Convair is not as fully aware as other plants of the power of union contract seniority clauses. It would seem, rather, that Convair's "What you do today . . ." carried not so much a warning to workers to watch their step as an assurance that the company will recommend to other jobs the "good workers" who are forced to bow to seniority and accept layoff during the post-war conversion period.

CONSAIRWAY—Convair's failure to announce, to date, the postwar plans for its California-Australia ATC airline, Consairway, may be good business. Consairway's Pacific terminus has just been switched from Australia to New Guinea. Apparently the airline will be extended toward the Orient as the Pacific War advances. shown a new, spectacular, and Every extension will add to the highly restricted warplane. Land- operations know-how of Consairing at a major airport following way's personnel; will add to the an after-luncheon skycruise over value of Consairway's only tan-Los Angeles they couldn't avoid gible asset-since the airline owns

no planes (they're Army) and possesses no route certificate.

▶ JET PROPULSION — Commercial jet propulsion still may be far distant, but its approach is indicated by the latest widespread West Coast rumor—which can be neither confirmed nor denied because those who would know are under military secrecy agreements. It is that a jet fighter recently flew from Los Angeles to Chicago in—3 hours and 22 minutes!

Congressmen Back From U. S. Air Tour

Members of House group report 11,500-mile survey of civil aviation was "very educational."

Realization of the significance of civil aviation development was gained by members of the Aviation Subcommittee of the House Interstate and Foreign Commerce Committee, who returned last week from an 11,500-mile air tour of the United States and Alaska.

The enthusiastic Congressmen will write a report on their field study of aviation, with particular regard for post-war indications, hoping to submit it to the Speaker of the House within a month. There may be delay if Congress recesses in mid-September until after the elections.

▶ Hearings Conducted—Eight subcommittee members made the tour, accompanied by Edward P. Warner, Civil Aeronautics Board vicechairman; Elton J. Layton, committee clerk, and John Groves of the Air Transport Association.

Extensive hearings were held in Los Angeles, San Francisco, Seattle, Chicago and Canadian points the group visited on the route to Alaska. They talked with private pilots, fixed base operators, state officials, manufacturers, airline representatives and others.

The group followed their itinerary closely, deviating from it only when they flew to Phoenix, Ariz., instead of Salt Lake City, on their way back from the West Coast. At Phoenix, as at Chicago, Seattle, San Francisco and Los Angeles, special flights were made to give the Congressmen views of airports and airport sites.

The subcommittee was making the first tour of the sort ever participated in by a Congressional group, and members are certain that the things they learned will proposed.

Origin of Naval Aviation

For the record, the formal beginnings of Naval aviation date back to Aug. 30, 1913, when Admiral George Dewey, of Manila fame, signed the report of the General Board recommending establishment of an air department "suited to the needs of the Navy in war."

Four years earlier, however, a group of pioneers laid the foundation. Leader was Capt. Washington Irving Chambers, USN, who, although not a flyer, came to be known as the father of Naval aviation. It was he who interested Glenn Curtiss, the plane designer and builder, and Eugene Ely, well-known pilot of the era, in flying a plane off the deck of a ship.

Ely performed this historic feat in 1910, flying from a platform in the bow of the USS Birmingham, at Hampton Roads. Early the next

year, Ely landed a plane aboard a ship, this time on a platform built in the stern of the USS Pennsylvania, in San Francisco harbor.

Then Curtiss and Lieut. T. G. "Spuds" Ellyson, a Naval officer whom Ely taught to fly and who became the first Naval aviator, designed a plane with a hydroplane attachment. Curtiss demonstrated the device by landing in the water alongside the Pennsylvania, being hoisted aboard, put down in the water again and tak-

In the spring of 1911, Lieuts. John Rodgers and John H. Towers and Ensign V. D. Herbster were assigned to aviation duty. Three planes were purchased and Naval aviation started on the long road, through 31 years of peace and war, to the eminence it has achieved today.

Navy Air Celebrates 31st Anniversary

The 31st anniversary of naval aviation observed last week found 47,276 Navy and Marine Corps pilots on duty, more than seven times the total Dec. 7, 1941.

Naval aviators enjoy a better than four-to-one advantage over Jap airmen, having destroyed more than 2,300 planes as against 560 Navy planes lost in combat during the first six months of this year. A high percentage of our pilots were rescued.

▶ 34,071 Planes—Development and production of Navy aircraft kept abreast of pilot training, with 34,-071 planes on hand June 30, compared to 5,000 at the time of Pearl Harbor. Deliveries of Navy planes approached 3,000 a month, more than 75 percent of them combat types, contrasted with 300 planes a month before Pearl Harbor.

Further emphasis on heavier models of improved quality have given the fleet the world's most powerful carrier-based fightersthe Vought F4U Corsair and the Grumman F6F Hellcat. Production of the Douglas SBD Dauntless came to a halt as this work-horse was replaced to a large extent by the faster, more destructive Curtiss SB2C Helldiver.

▶ 231 Shore Facilities—Naval aviation is maintaining 231 shore fagive them a new insight and judg- cilities, exclusive of those in adment on whatever legislation is vanced theaters, for the training and support of the fleet and sea

frontier forces. Four years ago there were only 38 such establishments.

At the outbreak of the war the Navy had seven carriers, six of them in the Pacific. Four of these were lost. Today there are approximately 100 carriers built and in or nearing action. Among them are 14 fast combat carriers of the Essex type and nine of the Independence class, converted from cruisers.

Vice Admiral Aubrey W. Fitch, Deputy Chief of Naval Operations (Air), indicated the strength of naval aviation on its 31st anniversary when he said that Task Force 58 which scourged the Jap so effectively in the last eight months was just a sweet, summer zephyr compared with the array and arrangement of ships, planes and other weapons—old and new which are ready to lash out now.

AVIATION CALENDAR

Sept. 4-6-Aero Medical Association, Annual Meeting, Jefferson Hotel, St. Louis, Mo. Oct. 3-Air Line Dispatchers' Association,

Oct. 5-7-SAE National Aircraft Engineering and Production Meeting, Los Angeles. Oct. 20-Institute of Aeronautical Sciences, National Air Transport Meeting, Statler

Hotel, Washington. Oct. 25-26-27-Southwestern Aviation Conference, Amarillo, Tex. Nov. 13-14-National Association of State

Nov. 15-18-National Clinic of Domestic Aviation Planning, Oklahoma City. Dec. 4-6-SAE National Air Cargo Meeting.

Aviation Officials, Annual Meeting, Okla-

Dec. 5-7-Second Annual Meeting, Aviation Distributors and Manufacturers Association, Jefferson Hotel, St. Louis, Mo.

Dec. 6-7-National Aviation Trades Association, Annual Convention, Jefferson Hotel, St. Louis, Mo.

CAA Station Tests Full Range Of Surplus Military Plane Types

Base staff to check all kinds of used ships from liaison twoseaters to airliners to determine probable sales value.

By ALEXANDER McSURELY

major Army modifications, down to two-passenger lightplanes used by the Army for liaison work, a wide variety of military airplane types which have been declared surplus and eligible for sale is C-47 Commando, the Douglas being flight tested by Civil Aeronautics Administration test pilots at a recently-opened CAA test base at Dayton Municipal Airport, Vandalia, Ohio.

J. D. McCutcheon, manager of the CAA operation, which occupies one hangar and office space at the Dayton Army Air Field, sub-base of Wright Field, says the CAA base is the only one of its kind in the country, and emphasizes that it has no part in the sale of surplus planes. Such sales will be handled by government disposal agencies. a type has been declared surplus a plane of that type is earmarked for the CAA test base to be test flown by McCutcheon and the four other CAA flight engineers at the

Approximately 25 hours of flight tests are given to each type, to determine length of takeoff, rate of climb, stability, and other characteristics, which determine whether the plane is airworthy under CAA standards. When the type test is completed findings are reported to the chiefs of the CAA flight engineering and aircraft engineering sections in Washington, with recommendations that the plane be licensed "as is", that licensing be approved with certain modifications, or that the license be disapproved.

▶ Modifications—If the plane can be modified to be eligible for license, the CAA will then make an effort to interest the manufacturer of the type to make necessary modification parts. It would then be the responsibility of the plane's buyer to have these modifications made at his own expense before the plane could be licensed.

In the event a plane had been type tested commercially before the war, like the Douglas DC-3, now widely used as a transport by both Army and Navy, the mili-

From commercial airliners with major modifications, can be licensed without an additional type test, after they have been declared

Transports—Type tests on new big transports, such as the Curtiss C-54 Skymaster, and the Lockheed C-69 Constellation, which were not commercially licensed before the war, may be run on new commercial versions at the manufacturer's plants, and such tests would hold good for licensing surplus military planes of the same

Thus far, none of these transports has been declared surplus and present indications are that they may be among the last military types to be placed in this category, so that the commercial Get 25 Hours' Tests-As soon as type tests would not delay sale of

surplus military planes of the same type. However, if the picture changes and it appears that the military versions are ready for disposal as surplus, before the commercial type tests are run, it is probable that the CAA test base will go ahead on military version type tests.

Four Planes Type-Tested-Since opening operations at Vandalia in June, the CAA flight engineers have completed type tests on these four surplus planes:

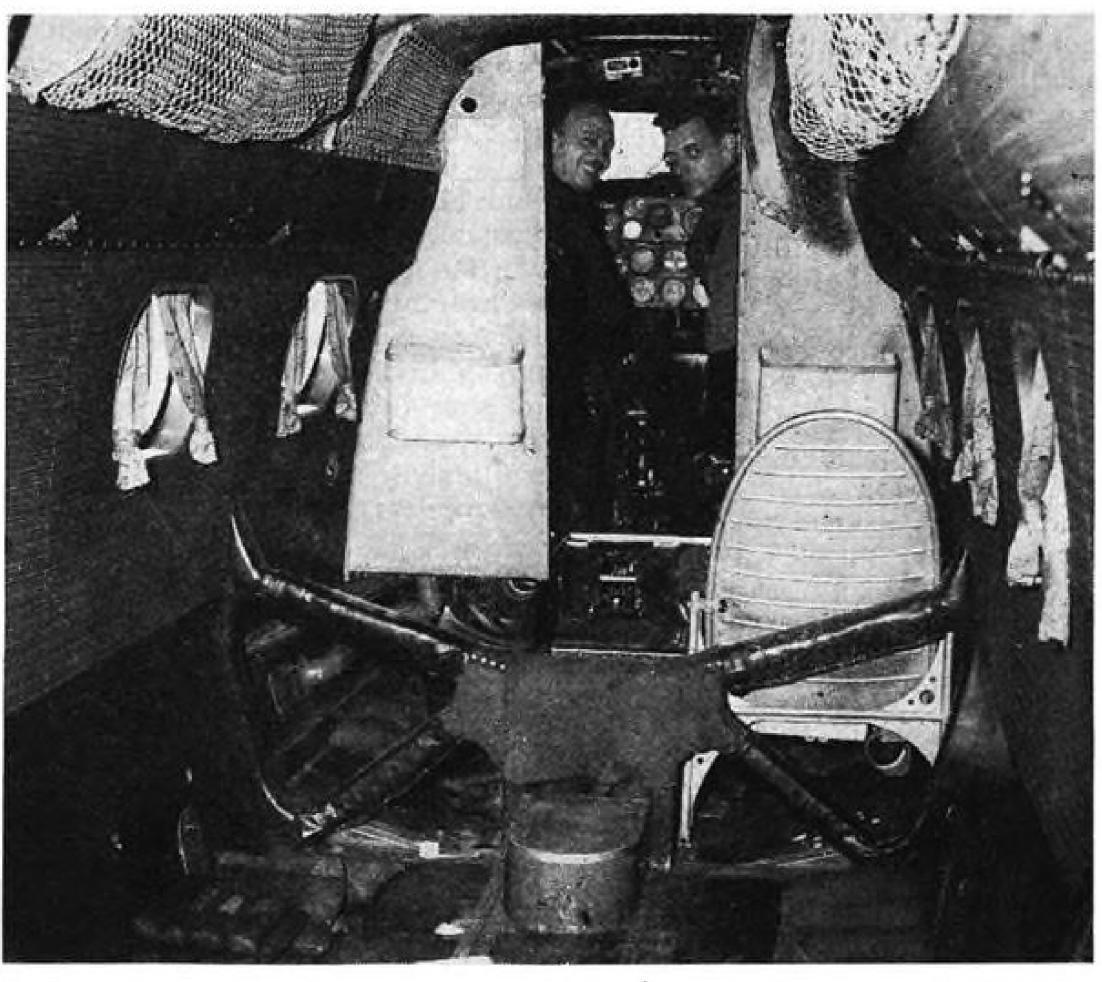
North American 0-47-B, threeplace observation plane, mid-wing monoplane, 1,050 hp. engine, with some possibilities as a commercial camera plane, cargo plane or airmail pickup plane.

Aeronca PT-23, two-place primary trainer, low-wing monoplane, Fairchild design, 220 hp. Navy Trainer N-3-N, built by Naval Aircraft Factory, two-place biplane primary trainer, 235 hp. engine.

▶ Taylorcraft L-2-M, two-place liaison, high-wing monoplane, 65 hp. engine, also used by War Training Service in flight training.

Bad weather has slowed flight testing, McCutcheon said.

Other surplus planes currently



Testing Boeing 247 Transport: Loaded with shot pads equivalent to the weight of 10 passengers and seats, this Boeing 247 transport is ready for a flight test at the CAA test base, Dayton Army Air Field, Vandalia, Ohio. Airline curtains and wall panels still remain in the plane, bought by the Army and now declared surplus and subject to resale for commercial use. A new type test is necessary on this craft because of Army modifications changing engines and propellers. In cockpit, CAA Flight tary versions, unless they have Engineer Dave Baker, left, and CAA Maintenance Supervisor, Ed Cole.



Surplus Aircraft Await CAA OK: At CAA test base for surplus planes at Dayton Army Air Field, Vandalia, Ohio, four army planes declared surplus are seen on the hangar apron, awaiting tests for commer-

cial licensing by CAA. Left to right, Avro Anson (Canadian built) AT-20; North American O-47B observation plane; Aeronca-built PT-23 trainer (Fairchild design) and Douglas O-46 observation.

at the base undergoing type tests are: a Boeing Model 247 (Army designation C-73) twin-engine transport, which will carry 10 passengers and crew of three, now subject to test because of major Army modifications installing different engines and propellers from those used in the version already commercially licensed; a Martin B-26 Marauder twin-engine bomber; an Avro Anson twin-engine advanced trainer AT-20 Canadian-built, and a Douglas 0-46 high-wing observation monoplane.

Fighter Planes—McCutcheon indicates CAA may disapprove general licensing for commercial use of fighter and bomber types, although there is possibility that special licenses for specified uses by experienced pilots might be authorized. He pointed out that CAA standards emphasize safety beyond performance and are occasionally at variance from military standards which are primarily seeking high performance.

If CAA disapproves a plane type for commercial license, its disposal value drops to a negligible quantity since it may not be flown in this country for other than military use. In such case, surplus planes of a disapproved type probably would be salvaged or scrapped, unless they were sold to some friendly foreign government for its military use.

Can. Vickers Sold

Control of Canadian Vickers is authoritatively reported to have been purchased by Roy M. Wolvin, of Montreal, and associates. Control of 30 percent of the stock was held by the Belgian Solvay trust through Losanac, Ltd., and Wolvin has bought out Losanac for an undisclosed amount.

Wolvin is interested primarily in shipbuilding and the steel industry and owns a number of shipbuilding plants throughout Ontario.

FEDERAL DIGEST:

WPB Eases Ruling On Wooden Props

Replacements of blades now permitted without agency OK; summary of week's activities in U. S. and war agencies.

By MARY PAULINE PERRY

Latest amendment to General Limitation Order L-48, exempts wooden aircraft propellers from present restrictions on transfer of aircraft or aircraft products, War Production Board reports.

Officials explain that wooden propellers are used by the large majority of aircraft operators and that replacements are now permitted without WPB approval, thus eliminating procedural delay. Restrictions on manufacture of wooden propellers remain.

Former manufacturers of chromium plated tubular furniture are making tubular parts for planes, tanks and other types of military equipment, and will be unable to resume large-scale manufacture of

Plane Output Off

Best estimates on August aircraft production put the figure about 400 units below the scheduled 8,200 airplanes.

The announcement of cutbacks in production and shifts in production schedules were given as the principal reasons together with the fact that some plants are undergoing change-overs in order to do their own modification work. In some plants warplanes are being modified right up to fighting requirements.

Production of Boeing B-29
Superfortresses was reported close to schedule.

their normal products soon, the industry advisory committee informs WPB.

Allocation controls from civilian production of styrene and butadiene, used in production of synthetic rubber, were removed, as they are now in sufficient supply as the result of improved production techniques. Styrene also is used in plastics, magnesium castings and aircraft laminates.

Operating Committee on Aircraft Materials Conservation has ordered that use of all chromium chemicals, chromic acid and chromium salts utilized in finishing metals be dispensed with where practical, and alternative materials used. These chemicals are critical and requirements probably will increase.

Staff of WPB, after six weeks of reviewing the placing of production cutbacks, said that such cutbacks are not now a significant problem. Between June 15 and Aug. 1, a total of 216 cutbacks was reviewed. Of these the staff said no employees were to be released in 130 cases and in an additional 35 cases the number of workers to be laid off, if any, was unknown.

National Labor Relations Board has ordered elections at General Motors Corp. (Allison Div.) for timekeepers for or against Indianapolis Loc. 5, United Aircraft Engine Workers, Inc., CUA. Production and maintenance employees and mechanical employees in plants 1 to 7 inclusive, are to vote for UAW-CIO, United Aircraft Engine Workers, Inc., CUA, or for neither.

Trial examiner recommended Kinner Motors, Inc., cease and desist from discouraging membership in IAM-AFL; from discharging or otherwise discriminating against any employee because he has given testimony under the act; or from in any other manner interfering with, restraining, or coercing em-

A POSTWAR PLAN

for G. I. Joe

A MESSAGE TO MOTHERS AND FATHERS OF SERVICEMEN

Returning servicemen and women have a readymade postwar plan in the "G. I. Bill of Rights" which recently passed Congress. Among its many provisions are such awards to veterans of World War II as tuition for vocational training plus a government guarantee on loans to enter or purchase a business. It is a guarantee of opportunity.

Knowing that after the war aviation will provide opportunities which will even surpass those offered by the automotive and radio industries after the last war, your sons and daughters in the service will be exceedingly interested in studying the career opportunities in aviation. California Flyers' School of Aeronautics has a limited number of pre-Pearl Harbor catalogs which factually describe various divisions of aviation, the opportunities, the training, and educational background necessary. Although it is obsolete in minor respect, the book is one that every young person considering a career will want. It's free. There is no obligation.

California Flyers, which is one of the nation's leading aviation schools, will accept no enrollments or deposits at this time. This famous school has completed an intensive training program for the U. S. Army Air Corps and today is entirely engaged in an important aviation project. Till the war is won, California Flyers must say, "Sorry, no enrollments accepted." But in the meanwhile, brand new postwar aviation courses which will meet postwar aviation problems are being created, and they will be well worth waiting for!



SCHOOL OF AERONAUTICS
LOS ANGELES AIRPORT - LOS ANGELES 43, CALIFORNIA

FREE CATALOG DESCRIBES AVIATION COURSES If your son is interested in an aviation career, send today for California Flyers' informative 68-page free catalog which describes aviation's opportunities and training requisites. Get one for your son in the service. (Postal regulations require that they be mailed to your address if he is overseas) California Flyers, Inc., Dept. AN9 School of Aeronautics Los Angeles Airport, Los Angeles 43, California. Gentlemen: Please send your free catalog. Name.....Age......Age.....

City......Zone.....State.....

ployees in their self-organizational rights; offer three employees immediate reinstatement with back pay; and post compliance notice for 60 days.

leased a report on production and manpower in major categories of military equipment in which shortages have been classified as critical. In the report, OWI says aircraft production, which accounts for a large share of the entire munitions program, is not now facing an apparent critical man-

power shortage.

National headquarters of the War Manpower Commission has dispatched specially trained men to lead 20 special recruiting teams into the field to help regional, state and local WMC directors meet urgent inter-regional quotas. Contract Settlement Director Robert H. Hinckley, has prescribed uniform procedures for Federal Reserve bank guarantee of termination loans (Tloans) made by commercial banks to contractors whose war contracts are canceled. T-Loans enable any war contractor to convert into cash at his local bank approximately 90 percent of the sound value of his war assets frozen by contract termination. The lending bank is protected on its loan by Federal Reserve bank guarantee.

National War Labor Board directed a standard voluntary maintenance of membership clause and checkoff of union dues in a dispute case between the Consolidated Vultee Aircraft Corp., Fort Worth, and IAM-AFL.

Both the union and the company requested adoption of the Southern California Aircraft Industry wage plan for most of the job classifications, but were in disagreement over rates that should be paid other classifications. The Board unanimously directed the adoption of the S.C.A.I. plan, with the provision that no employee now receiving rates above those set in the plan is to have his pay reduced as a result of the Board's action. Establishment of a grievance machinery, with final and binding arbitration, was ordered.

NWLB unanimously referred back for further collective bargaining a joint proposal to increase minimum and maximum wage rates submitted by the McDonnel Aircraft Corp., of St. Louis, and IAM-AFL. An agreement to increase the second-shift bonus from seven cents to ten cents an hour was approved.

The case involving 3,833 employees, was originally certified to the Board as a dispute. However, after a hearing before the Airframe Panel of the Board, an agreement was reached on all issues except vacations for inspectors.

Defense Plant Corp., has authorized an increase in its contract with Aerojet Engineering Corp., Pasadena, to provide additional plant facilities in Azusa, Calif., at a cost of approximately \$240,000, resulting in an over-all commitment of about \$570,000.

American Bosch Corp.'s contract has been increased by about \$250,000 to provide additional equipment at a plant in Chicopee, Mass. The over-all commitment is now approximately \$2,-000.000.

Army-Navy "E" Award has been won by the Solar Aircraft Co., Des Moines plant.

War Department has authorized additional construction at Hamilton Field, Calif., in the amount of \$1,000,000 for construction of hangar, service apron, additional buildings wash rack, loading mat and minimum essential utilities.

A contract has been awarded for stabilizing shoulders for runways and taxiways, relocating hangar avenue

Wright Delay?

Reports from Washington's Capitol Hill are that Secretary of Commerce Jesse Jones, Under Secretary Wayne Chatfield Taylor, and Assistant Secretary William A. M. Burden want Senate confirmation of T. P. Wright as new Civil Aeronautics Administrator before mid-September, when Congress is thinking about taking a recess until after the elections.

Senator McCarran of Nevada, however, has wired Chairman Bailey of the Senate Commerce Committee, to whom the nomination was submitted, asking that Committee action be deferred until McCarran returns to Washington. The request probably will be granted, as a matter of Senatorial courtesy.

Wire Sent McCarran—Jones,
Taylor and Burden are said to
have wired McCarran in his
home state, where he is fighting a reelection battle, asking
him to withdraw the request.
McCarran fathered the Civil
Aeronautics Act of 1938, has
introduced his own bill to
amend it, and is known to be
opposed to anything savoring
of unusual Commerce Department control over the Civil
Aeronautics Administration.

and seeding spoil areas and clear zones at Fairfield-Suisun Airfield, near Fairfield, Calif. Amount of contract is \$1,300,000.

Improvements at Mather Field, near Sacramento, Calif., have been authorized in the amount of \$2,000,000. Improvements are to consist of reinforcing and extending runways; reinforcing existing taxiways and construction of new taxiways; reinforcing existing aprons; revising fueling systems, etc.

In addition, the War Department has let contract for improvements at Army air bases and installations within the country in the approximate amount of \$1,163,000.

WPB Rules on Plane Lighting Equipment

War Production Board has added types of aircraft lighting equipment in an amendment to the Table of Acceptable Assemblies in a further effort to achieve joint Army-Navy certification of all military items.

The table, which supplements ferenthe order as a guide to manufacturers and purchasers, lists the types, specifications and manufacturers of aircraft lighting equipart Amement that has been certified as action.

ceptable by the Aeronautical Board, Army Air Forces, Navy Bureau of Aeronautics, or the Civil Aeronautics Administration.

▶ Items Certified — Among items now certified as acceptable by both the Army and Navy are certain types of cockpit lighting equipment and indicator light assemblies.

New Plan Devised to Identify Materials

The National Standards Committee of the Aeronautical Chamber of Commerce has developed a new uniform identification system for materials used in aircraft manufacturing to replace the outmoded color code plan.

The new system, based on suggestions contributed by the Army, Navy, aircraft and steel industries, the latter participating through the American Iron and Steel Institute, consists of a printed legend stating the specification number and condition, the nominal thickness, steel manufacturer's name or trade mark and the commercial designation (optional) to be used for identification marking of steel sheet, bar, rod or wire.

tem is expected at the special Army-Navy-industry conference which will be held Sept. 19 at the Hotel Lexington in New York City. Army and Navy officials already have endorsed it as a procedure which will simplify their problems of stocking materials in the field. Industry sources believe that because of time-saving and economy features, some mutually satisfactory version of the system may be put into effect soon.

L.I. Group Organized

Representatives of more than a dozen manufacturing plants, airlines, educational institutions and airport engineers are forming the Long Island Aeronautical Engineering Conference with the goal of a program of joint research on major problems and possibly an exchange of facilities and personnel.

Chairman is Dr. R. Paul Harrington, of the Brooklyn Polytechnic Institute. Members of the conference executive committee are Preston R. Bassett, Sperry Gyroscope; A. A. Kartveli, Republic Aviation; William Littlewood, American Airlines, and Harrington.



End of War With Germany to Close Third of Army Plane Contracts

Close co-operation of industry with Army will bring prompt termination action, says Lovett, Knudsen, Meyers at AAF Materiel and Services mass contractors' conference in New York.

One-third of all Army aviation contracts will be terminated when the war with Germany ends, thus creating an avalanche of readjustment problems which will require close co-operation of industry with the government agencies if long delays are to be avoided. This was emphasized forcefully last week when more than 2,500 prime and sub-contractors gathered in New York City to hear Assistant Secretary of War for Air Robert A. Lovett, Lt. Gen. William S. Knudsen, director of the Army Air Forces Materiel and Services, and a number of other Army and civilian readjustment officials discuss the problems that are facing tion, Materiel Command, Army industry in the near future.

process for readjustment of procurement contracts, Maj. Gen. Bennett E. Meyers, deputy director, AAF Materiel and Services, pointed out, and will afford the greatest possible speed, but it is essential, he added, that industry be prepared to do its share. This includes, said the Army representatives, the prompt preparation of claims, proper compilation of inventory figures, adjustment of contracts and commitments with sub-contractors, and particularly a careful study of readjustment procedure by especially assigned personnel.

Contracting Officers' Powers Broad-The Army has schooled 4,225 contracting officers in termination work and the existing law has made it possible for these officers to assume broad powers. Claims not exceeding \$25,000 need only the signature of the contracting officer and claims as high as \$500,000 require additionally only a review by an Army board. Of particular interest was the fact stressed by some of the speakers: the decision of the Army in the readjustments is final. There is no higher authority that can countermand the Army's final decision, it was said.

Careful preparation by industry officials for the initial conference held with Army officers on the company's readjustment claim will do much to speed up the entire

process of termination. This preparation, said speakers at last week's conference, requires complete data on surplus stocks and all considerations that go into the evaluation of these stocks. It requires study of reconversion methods and problems and for this purpose the Army urges that qualified personnel be given this task as a full-time responsibility and that they be given broad latitude and power in the dealings with the contracting officer.

Don't Look for Shorter Way-Col. E. S. Pillsbury, assistant permits. chief of the readjustment division and chief of the termination sec-Air Forces, Wright Field, stressed The Army has streamlined its one bit of advice: the termination rules which have been adopted were selected because they will do the job the quickest and best way and industry representatives are urged to "get along on the rules . . . don't look for panaceas shorter, quicker methods."

Speakers at the New York session, in addition to Secretary Lovett, General Knudsen, and Col. Pillsbury, included: Col. Don L. Hutchins, supervisor, Eastern Pro-

curement District, who opened the meeting and introduced the chairman, Brig. Gen. Frederick M. Hopkins, Jr., chief of the Resources Division, AAFMS; Col. E. W. Rawlings, chief, readjustment division; C. H. Hummel, Bendix Aviation Corp.; John Hancock, co-author of the Baruch-Hancock Report; and Charlton MacVeagh, deputy director, readjustment division, AAF Headquarters.

Bendix to Make Home Radio Sets

Announces plans for production of new line as soon as military situation permits.

Bendix Aviation Corp., making its first entry into the consumer manufacturing field, announces it will manufacture home radio sets as soon as the military situation

Ernest R. Breech, president, said the decision to enter the home radio field was in line with the company's policy to manufacture certain consumer products which will represent real contributions to the public in point of engineering advancement and at prices made possible by low-cost production methods.

Large Radio Producer-Bendix Aviation is one of the largest producers of precision radio, radar and other communications equipment for aircraft and military use.

The home radios will be manufactured at the Baltimore plants.

To Speed Contract Terminations

Here are a few of the specific > Set up an independent organi-steps that industry can take to zation within the company to ference held by the Army last problems. week in New York:

physical inventory.

contracted items.

how much is usable for other purposes and how much must be called scrap.

Move as much surplus material as possible into production now -somewhere.

Prime contractors must recognize their responsibility to subcontractors and train them, where armed with facts and figuresnecessary, in the elements of the termination procedure.

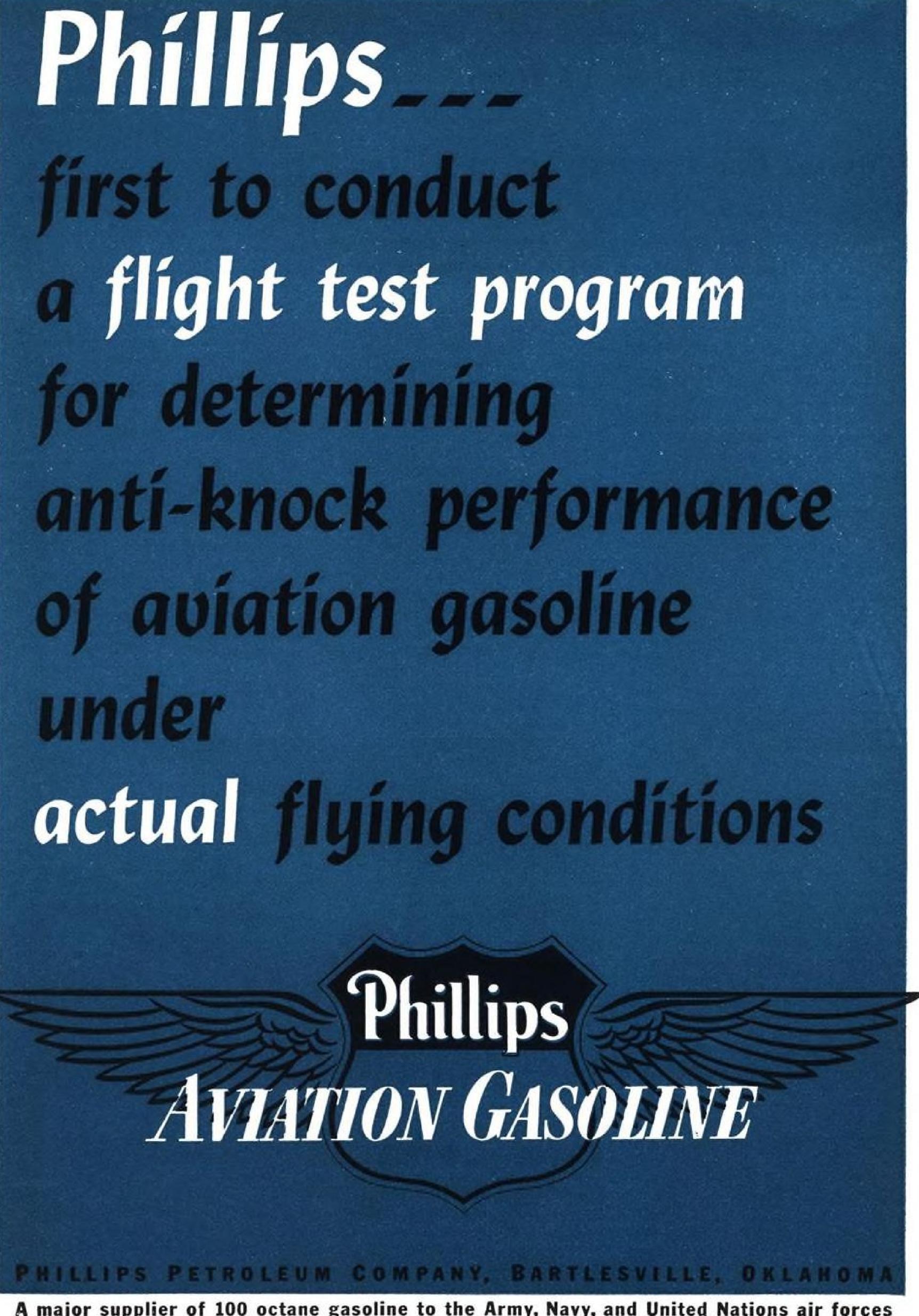
aid the Army in stepping up the handle terminations. This pertempo of supply contract termi- sonnel should study rules and nations, as suggested by various methods carefully and become speakers at the contractors' con- well acquainted with termination

Give termination division per-Get records into agreement with sonnel as much power as possible to avoid further delays caused Adjust commitments for sub- by restudy and approval by oth-

Inventory material on hand and In large corporations, allow sepgoods in process and determine arate plants and divisions to handle their own terminations independently.

Pre-determine as many of the termination pitfalls and problems as possible and have answers

Go into your initial conference with the contracting officer well and with the authority to settle negotiations.



A major supplier of 100 octane gasoline to the Army, Navy, and United Nations air forces

PRIVATE FLYING

Anyone Can Learn to Fly in 5 Hours Parks' Tests With Ercoupe Show

Average student can pilot plane alone in less time, record of 109 beginners reveals; expense of operating craft put at less than that of light automobile.

Most oft-asked questions regarding post-war private flying concern the length of time it takes to learn to fly, whether it is difficult to learn and the cost.

Parks Air College and its affiliated school set out to find an answer to these and similar questions and the results of their experiments provide a sound, businesslike approach to the basic factors of future private flying.

Best Methods Sought-Primarily, Parks was trying to determine the best methods of instruction and the time required to solo a two-control airplane-specifically, the Ercoupe, made by Engineering and Research Corp. They found the answer and other significant data during the experiment which covered nine months. It was conducted at five points and the results are of importance to future private flyers and instructors as well.

Results of the experiment, according to Parks, prove that anybody can fly this new type private airplane with an average of five hours' instruction. One hundred nine persons between the ages of 20 and 60 took part. The students were not selected, but taken in accordance with their seniority in various job classifications in Parks' five schools and included kitchen help, guards, stenographers, field personnel, mechanics, etc., both men and women.

Solo Time Recorded-A tabulation made according to age groups showed that it required an average of four hours and 54 minutes to solo women students and an average of four hours and 30 minutes to solo men students.

The following is the amount of time required before solo for the various age groups:

20 to 25 years—4 hrs. and 18 mins. 35 to 40 years—4 hrs. and 19 mins. 40 to 50 years—5 hrs. and 3 mins.

Costs were kept on direct operating expenses of the Ercoupe during the experimental program, including student instruction, demonstration and cross country flying.

Total hours flown were 1,133. Gasoline used amounted to 4,916 gallons at 21 cents a gallon and 214 quarts of oil at 30 cents a quart. Material used for maintenance amounted to \$243.41 and labor required amounted to \$1,117 or 558:30 hours at \$2 an hour.

Expenses—The cost per hour totaled \$2.156 on a basis of 91 cents per mile set at \$.02.

Cruising speed of the airplane for the switch. is 105 mph and Parks, taking three popular-priced cars as a basis, WPB officials of the War Produccame to the conclusion that the di-

rect cost is less than that on the Ford, Chevrolet or Plymouth.

The experiment was conducted at Missouri Institute of Aeronautics, Sikeston, Mo.; Mississippi Institute of Aeronautics, Jackson, Miss.; Alabama Institute of Aeronautics, Tuscaloosa, Ala.; Cape Institute of Aeronautics at Cape Girardeau, Mo., and Parks Air College, East St. Louis, Ill.

Since the experiments covered men and women in all age groups and in different sections of the country and the students could be considered average private flying prospects, the Parks study assumes significance beyond the original purpose of the program.

Expect CAA Control Of 73, 80 Octane Gas

Powers of distribution to private aircraft probably will be taken over from OPA on Nov. 1.

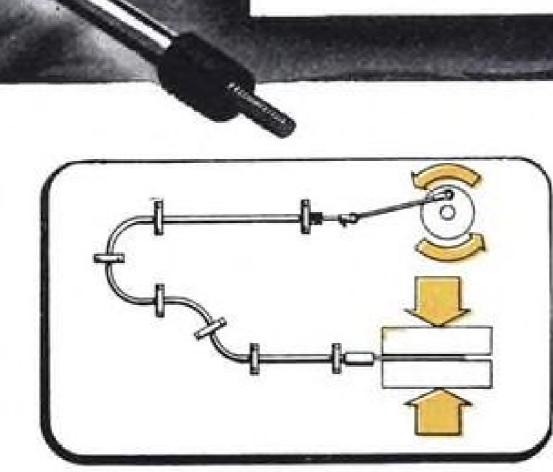
Control of the distribution of 73 and 80 octane gasoline for private aircraft is expected to be transferred shortly from the Office of for gasoline, oil \$.056; material Price Administration to the Civil \$.21 and labor \$.98, with the cost Aeronautics Administration with Nov. 1 tentatively set as the date

> Extended discussions between tion Board and aviation industry



CAA ENGINEERS CHECK SURPLUS PLANES:

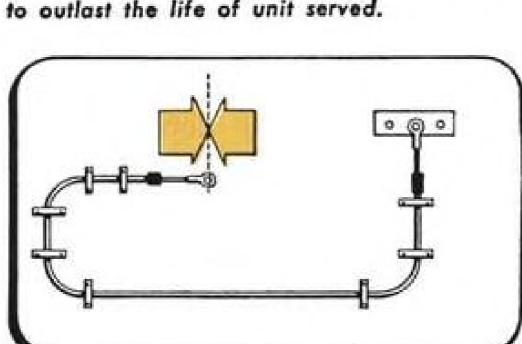
Among the Army surplus airplanes now being type-tested by CAA flight engineers at CAA test base, Dayton Army Air Field, Vandalia, Ohio, is 25 to 30 years-4 hrs. and 44 mins. this Taylorcraft L-2-M, two-place liaison craft, of special interest to 30 to 35 years-4 hrs. and 58 mins. prospective private plane buyers. Radio equipment seen behind CAA Flight Engineer John P. Jones, was used for communication between plane and ground artillery batteries to direct fire. Some of these planes 50 to 60 years-6 hrs. and 30 mins. also were used by War Training Service.



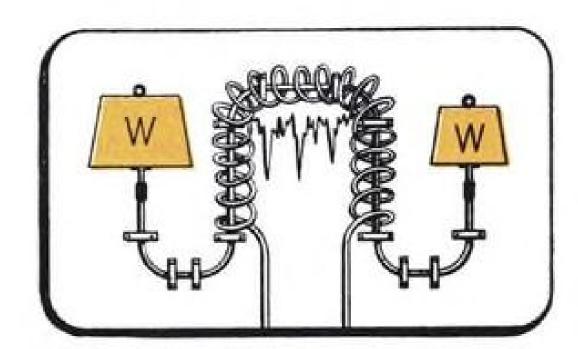
Dependable all around duty assured

with Simmonds Push-Pull Controls

ENDURANCE: Cycled 30,000 times under stress, as illustrated, Simmonds controls are not affected in any way, and can be expected to outlast the life of unit served.



DEFORMATION: AAF specifications call for loads ranging from 10 to 50 lbs. Allowable average deformation is .140". Simmonds controls average only .083".



FIRST TO CARRY THE YELLOW DOT

of Army Air Force Winterization acceptance for opera-

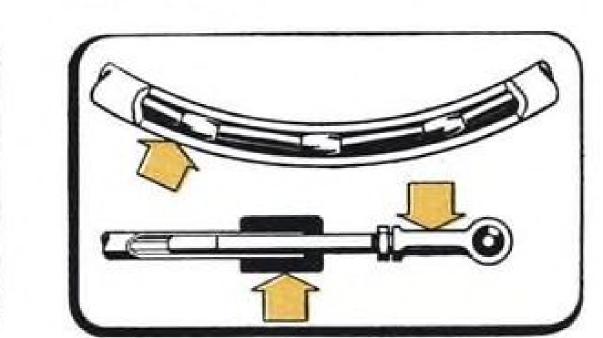
tion in extreme temperatures is the Simmonds-Corsey

Push-Pull Control. Comprehensive tests with temperatures

as low as minus 72°F. and as high as 160°F. prove

efficient operation under wide variety of conditions.

EFFICIENCY: Input-output ratio of control is measured at various temperatures in insulated chamber. Result: average efficiencies are twice the AAF requirements.



CORROSION: Simmonds controls meet AAF specifications for corrosion resistance with standard cadmium plated or anodized surfaces. Tube ends are rubber sealed.

INQUIRIES concerning War Contracts or Post-War problems involving push-pull control equipment are invited. Our service engineers will furnish you gladly with analyses and recommendations. Telephone or write to your nearest Simmonds office.

SIMMONDS EQUIPMENT FLIES WITH EVERY TYPE OF ALLIED AIRCRAFT

Automatic Engine Controls — Push-Pull Controls — Spark Plugs Hydraulic Accumulators — Hydraulic Fuses — Chronometric Radiosondes Self-Aligning Rod-End Bearings — Fasteners and Clips of Specialized Design 30 Rockefeller Plaza, New York 20, New York

Branch Offices: Dayton . Washington . Hollywood . Montreal

AVIATION NEWS . September 4, 1944

STATIC STRENGTH: In this test Simmonds

push-pull control successfully withstands tensile

and compressive forces of 400 lbs. Credit sim-

PRECISION CONTROL: Motion between ten-

sion and compression is negligible. Before

endurance test: average—.046"; after—.082".

Simmonds are precision-built controls.

plification of design, improved linkage.

Manufacturing Plants: New York . Vermont . California

representatives is reported to have led WPB to agree that the best interests of both civil aviation and gasoline conservation would be served by asking CAA to take over the job. It was indicated that CAA would follow in general the plan successfully employed by the Petroleum Administration for War on higher octane aviation gasoline. Procedure — Under plans now under consideration, allotments will be made to airports and distributed by the operators in accordance with standards established by CAA, but pilots will share in the responsibility of conserving aviation fuel. The CAA wants to issue conservative quantities sufficient to permit civilian airports to remain in operation for use as necessary by military aircraft; civilian flyers to maintain their skill; additional pilots to receive flight training and essential aerial transportation to continue.

Supervision would be by inspectors of the CAA Safety Regulation Service, whose normal duties require them to visit all airports regularly.

William A. M. Burden, assistant Secretary of Commerce, said the more careful distribution of gasoline for private airplanes and will attempt to get the maximum use of civil aviation facilities with the pay. minimum consumption of aviation gasoline.

▶ Program — Detailed operating procedures will be announced shortly by the CAA as worked out in cooperation with the Petroleum Administration for War.

ration aviation gasoline, it was understood, is that considerable aviation gasoline is reaching automobile owners and consequently is not being used to further aviation. Fosters Air Commerce—Burden commented that since the CAA is heavily engaged in work for the armed forces and in helping to maintain domestic and international air carrier operations, it is not anxious to assume additional responsibilities, but feels it has an obligation under the Civil Aeronautics Act of 1938 to foster the development of air commerce.

One of the immediate problems in connection with the WPB directive transferring this authority from the Office of Price Administration is what will be done between now and Nov. 1, particularly in regard to those persons already holding aviation gasoline coupons sufficient for fuel to carry them past Nov. 1.

Beech Expects Post-War Products To Keep All Workers on Payroll

New line of peace-time manufactured goods to be introduced with tapering off of military needs, says Vice-President Gaty; cites substantial backlog for twin-engine cargo planes.

Beech Aircraft's conversion plans contemplate the development of a line of peace-time products "so superior to those offered by its competitors" that there will be jobs for at least as many persons as are now employed by the company.

In a frank statement on the company's post-war prospects, John P. Gaty, vice-president and general manager, foresees an extensive program for Beech, although he did not disclose the articles Beech intends to produce, he did say the company has a large back-log of orders, especially for twin-engine UC-45F cargo airplanes.

Markets-He said that in order to develop markets to the utmost during peace, the efficiency of wartime production, which he lauded, CAA is aware of the necessity for must be improved still further so that Beech can pay good wages and salaries and yet sell its products at prices people can afford to

Two immediate situations which the company may have to face were outlined by Gaty in an open letter to employees but which has additional significance in that it indicates the trend of planning in aircraft plants in the Beech class. Chief reason that CAA wants to | Conversion - One | prospect he cited is the gradual tapering off of production of war materials with simultaneous conversion to peace-time manufacturing such as will develop with a continuation of the war against the Japanese after the defeat of Germany. Virtually all Beech production is now concerned with the A-26, a plane whose primary field of operations is the Pacific.

The second possibility for which to be prepared is an unexpected end to hostilities and immediate termination of war contracts. In that event many Beech workers would have to find other jobs until conversion had been completed.

• Overtime for Some—Even so, as Beech sees it, it would be necessary for a number of departments to go immediately on an overtime basis to handle the obligations of the company under termination Corp., with headquarters at the proceedings. Gaty listed such Convair Stinson Division in projects as inventories of raw ma- Wayne, Mich.

terials and parts in process, additional work in the accounting department, full-scale operations in the engineering department, particularly to complete designs now in process for post-war Beechcrafts of new types and subsequent expansion of the experimental department.

The tooling department would participate in the new activity and the outside production department would be called on to secure the aid of subcontractors for component parts and new tooling. Scheduling and planning departments would continue and plant engineering and maintenance would have its hands full during the conversion period.

▶ Backlog—The pattern drawn at Beech will find a counterpart at many other plants, subject to local and company conditions, of course, but Beech is trying to make it clear to its workers the details of the job that lies ahead.

Gaty said that, by pre-war standards, Beech's present backlog of post-war deliveries is immense and new orders should continue to come in when customers know that the company reaches a position to make delivery. He added that it was surprising that the company had any backlog for post-war deliveries at all under present circumstances.

▶ Post-War Orders—Deposits have been made with Beech on purchase of post-war aircraft which are to be delivered at some indefinite date and at some indefinite price.

Gaty disclosed that an extensive dealer organization is now being constructed to merchandise the company's post-war products, and he noted that none of the company's present orders were from dealers.

Convair Names Mara

William A. Mara, partner of the late Eddie Stinson in the formation of Stinson Aircraft Co., and sales director since 1926, has been appointed private sales director of Consolidated Vultee Aircraft



THE AIR WAR

COMMENTARY

Airborne Army Ready to Pave Way For Allied Smash into Germany

New consolidated forces well prepared if Germans attempt to make a stand behind much publicized but probably overrated Siegfried Line.

The German Armies in the west have been on the run since the middle of August, and Allied strategy is to keep them on the run and not permit a battle of position. However, the Germans have some natural defense lines and the much publicized but probably overrated Siegfried Line and Westwall which may not be easily outflanked. If (and it appears to be a big "if") the enemy is able to dig in solidly behind any of these lines, the Allies have a new weapon, highly er, which can deal effectively with such a situation.

Airborne Army—This is Lieut. Gen. Lewis H. Brereton's flying army, formed by merging all airborne forces now in the U.K. into one unit, approximating an army in size and importance. The leader of the new Allied Airborne Army is on a command level with the commanders of the air forces and ground forces, being directly responsible to General Eisenhower and his deputy, Air Chief Marshal Tedder, and thus participates in theater planning in the highest echelon.

This new army with wings takes its orders from Brereton, not from the ground commanders Bradley or Montgomery, nor the tactical air chief, Leigh-Mallory. It is also complete with all necessary components-transport planes, gliders, supply and service forces, engineer units, airborne infantry, paratroopers, communication equipment and personnel, guns and light tanks. It can strike behind the strongest and most vital defenses, and hang on to what it hits.

Treop Carrier Developments — The concept of this highly complex organization did not spring forth

in the present war. Under the term Troop Carrier Aviation, air transport has become a vital arm of combat operations. The AAF First Troop Carrier Command was established in April, 1942, about eleven months after the Germans conquered the island of Crete by airborne invasion and two years after the Luftwaffe outflanked the British Navy in the battle of Nor-

Motto of the First TCC is Vincit qui prinum gerit ("He conquers tion was announced in July, 1942, by a special statement of General Arnold, who said that tactical training was under way for combat teams using transport planes and large gliders, and that in size, equipment and fire-power the airborne army will exceed anything of the kind the world has ever seen. And now, two years later, we have it. A brief review of the outstanding examples of the-use of troop carrier aviation will indicate the steps in the growth of this lusty infant of World War II. Note the development of its three main functions as (1) a tactical agency; (2) a logistical agency; and (3) an evacuation agency.

New Guinea — In September, 1942, when the Japs were within 14 miles of Port Moresby's outer airfields, General Kenney had 3,600 troops flown in from Australia and saved the day. Shortly afterward, a full division was flown across the high Owen Stanley Range, and landed fresh and in full force at Wanigela and other airstrips close to the battle lines in the Buna-Gona area. However, it's not the first cost but the upkeep which matters! These troops were not only transported

moved by the same route. Sick and wounded were evacuated on the return trips. The entire operation proved to be of far-reaching tactical significance.

A few months later, in the offensive on Lae, airborne engineers were flown in to the area and built three fighter strips. These provided fighter cover for the great paratroop landing at Nadzab in the Markham Valley behind the Jap lines at Lae. About 1,700 troops dropped in 70 seconds. Ten days later, this great enemy stronghold was captured. From here the clean-up of the Wewak air base and the leap-frog operations to Aitape, Hollandia and Sansapor were made. Thus was tested and perfected a new form of campaign which, according to General Mac-Arthur, points the way to the ultimate defeat of the enemy in the Pacific.

▶ Mediterranean — In November, 1942, in connection with our landings at Oran, the Troop Carrier Command flew a parachute battalion in 40 Douglas C-47's over 1,400 miles non-stop from England. This was operation TORCH, and its purpose was to capture two mobile and of great striking pow- who gets there first"). Its forma- airfields outside Oran and hold them until relieved by seaborne forces. A few days later more paratroops were dropped on the airfield at Bone, and a week later a parachute battalion was dropped on airfields along the western border of Tunisia. All these fields were held throughout the North African campaign, and by this means the range of our fighters and bombers was extended many miles into enemy territory.

When the rainy season developed, it became impossible to supply the units on these fields with food, gasoline and ammunition by motor convoy. Troop Carrier came to the rescue and for three weeks flew in all the necessary supplies to continue operations.

Gliders Used—Airborne forces available for the invasion of Sicily in July, 1943, consisted of one American and one British airborne division, totaling well over 20,000. This was the first Allied operation in which gliders were extensively used. One group of air landing troops supported Patton's 7th Army in the west and the other group Montgomery's 8th Army on the east coast. As soon as advance airfields were established in Sicily, Troop Carrier moved in AAF full-blown to meet the present but were supplied by air at a rate ground personnel to support the situation. Far from it. It is a re- of more than two million pounds advance air echelons. Altogether sult of the combined Allied, and per month. Construction equip- some 18,000 men were flown in by to some extent enemy, experience ment, steel mats and asphalt transport plane and glider in eight



Night-letter" cargo for bonus payloads

Variations in rail traffic are met simply by adding or removing cars. But the fixed capacity of an airplane demands full loads for maximum economy.

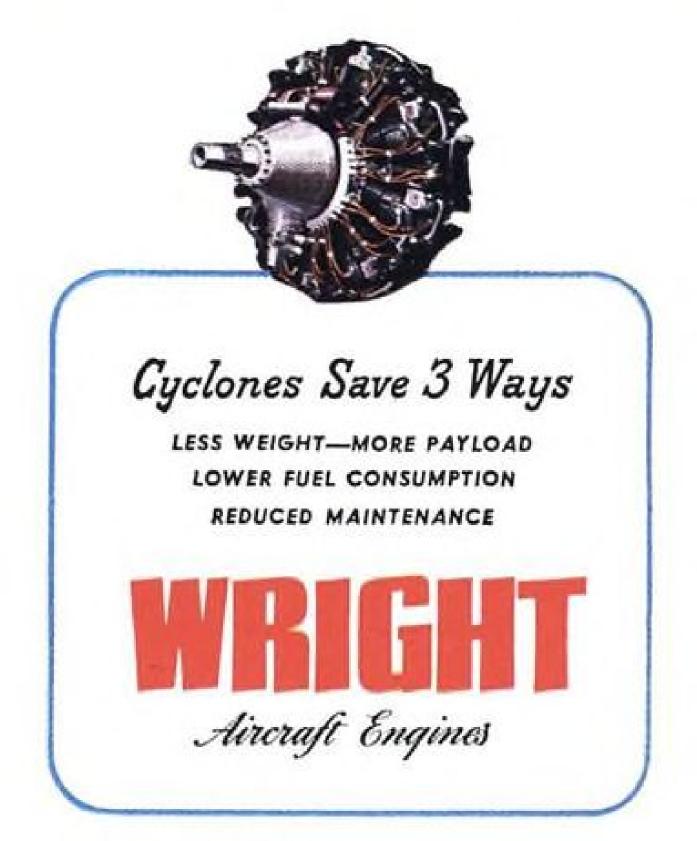
A constant backlog of air express for deferred departure at "Night Letter" rates offers one possible means of achieving capacity loads. Shipments could be bulked for common destinations to fill in on non-capacity flights leaving within a few hours. Such a service could assure second morning delivery virtually anywhere in America.

The reduction of air cargo rates will necessarily be a gradual, cutand-try process. The "Night Letter"

plan would be in essence a "commodity" rate on space available on off-hour flights and would not entail wholesale rate revision.

Wright believes that the full load is the key to the gradual reduction of all air traffic rates. To that end, Wright Cyclones offer a payload bonus of one or more passengers in the weight of each engine. With lower fuel consumption and maintenance costs, world-wide operation demonstrates the fact that Wright Cyclones pay their way.

Wright Aeronautical Corporation A Division of Curtiss-Wright Corporation Paterson, New Jersey, U.S.A.



"Every Pound Saved on a Delta Airliner Has a High Monetary Value"

SAYS GEORGE R. CUSHING OPERATIONS MANAGER DELTA AIR LINES

"The value of a pound of pay load during the life of an airliner has been variously estimated. The exact value will, of course, vary with the degree of utilization of the equipment.

"Certainly, during this period of capacity loads, every pound which can be saved has a high monetary value, and will at times be priceless.

"A few pounds saved may mean that another soldier gets home for his last leave, that another war-valuable shipment of express gets through on time, or that another sack of mail can go aboard. In Delta we prefer not to express such things in dollars and cents."

Send for Free Boots Weight-Saving Booklet Today

Actual weights of over 250 different self-locking nuts used in aircraft, comprehensively reviewed for the convenience of aircraft designers, engineers, operating and maintenance personnel. Copy will be sent you, free, on request.

Motion Picture — "All Work And No Play" — 16 mm. sound — 30 minutes Write for information

SELF-LOCKING NUTS

BOOTS NUTS SAVE UP TO 60 LBS. PER PLANE

- Being all metal, they are TOUGHER and SAFER as well as LIGHTER.
- Can be used over and over again.
- · "Outlast the plane."
- Now used on every type of military aircraft.
- Will be standard on commercial planes after Victory.
- Approved by all government aviation agencies.



BOOTS WING-STYLE HEX NUT (W.65, 8-32)

The comparable fibercollar nut is 96.4% heavier than this allmetal self-locking

Boots Aircraft Nut Corporation, General Offices, New Canaan, Conn., Dept. L Representatives in New York . Chicago . Detroit . Buffalo . Indianapolis . Los Angeles . Kansas City . Dallas . Toronto . Montreal . Vancouver days, the total weight exceeding 7,000,000 pounds. During the six weeks' campaign, some 14,000 wounded were evacuated by air.

At a very critical point in the battle of Salerno, on Sept. 13-14, over 3,200 completely equipped paratroopers were flown into the area from Sicily, an operation which turned the tide and eventually saved the day. By this time, airborne aviation had become generally recognized as an important element of air power.

▶ Operations in Burma — Since early 1944, when Brig. Gen. Old's Troop Carrier Command began operations on the Burma front, a new principle of warfare has been established. Millions of pounds of supplies have been dropped to combat troops with such precision they have been called "Biscuit Bombers," the dropping points being often within rifle shot of the enemy. Infantry and artillery units have been carried many miles behind the Japanese lines. Hundreds of sick and wounded, who would have had no other way to be taken out, have been evacuated from behind those lines. As a member of General Old's staff put "Troop Carrier Command's operations over Burma have proved conclusively that with air superiority there is no such thing as encirclement."

During the winter of 1942-43 in the case of certain units completely cut off and encircled by the Russians the Germans offered a partial proof of the same principle, but in losing air superiority they eventually lost everything. In Burma, British and Indian troops were repeatedly cut off by the Japs but Troop Carrier kept turning apparent defeats into victories.

The next phase was the airborne invasion of Burma by the Air Commandos, led by Col. Phil Cochran and Col. Johnny Alison. The story is too well known to be repeated at length. These successful operations last March were an important factor in General Stilwell's campaign in Burma.

TCC and the Invasion—June 5. 1944, brought the biggest test of all. On this night at 10 o'clock when the first C-47 was airborne the tactical beginning of the liberation of Europe was on. There were six drop zones and there were six Pathfinder planes with specially trained crews to blaze the trail. The crews of these planes estabthe drop zones and also showed cific theater.



DEPEW IN FARMAN HE SOLOED IN 33 YEARS AGO:

Richard H. Depew, Jr., special projects manager for Fairchild Aircraft Division, soloed in this Farman pusher-type biplane 33 years ago. He observed his anniversary with a flight in a Fairchild F-24 this month. He has flown 156 types of planes since.

of 924 transports, including 103 which towed gliders, flew in two American airborne infantry divisions with but two and a half percent in aircraft loss.

The British carried out a similar operation involving one airborne division. Both operations were under the direction of the Allied Expeditionary Air Force Headquarters. These are the units making up the nucleus of General Brereton's flying army. Where will they land next? NAVIGATOR

Super Gas Developed For Super Bombers

Although facilities cannot now be diverted to its production, the United States is getting ready to produce a "souped up" gasoline obtained by refinement of the 100octane product, it was disclosed last week.

When the demand for the present aviation gasoline in the European theater lessens, production facilities can be diverted to the new fuel. It is expected to give the superbombers greater range and generally better performance for lished Radar navigational aids on the long raids required in the Pa-

pilots of the main column. A total War Industry Council said about source of supply.

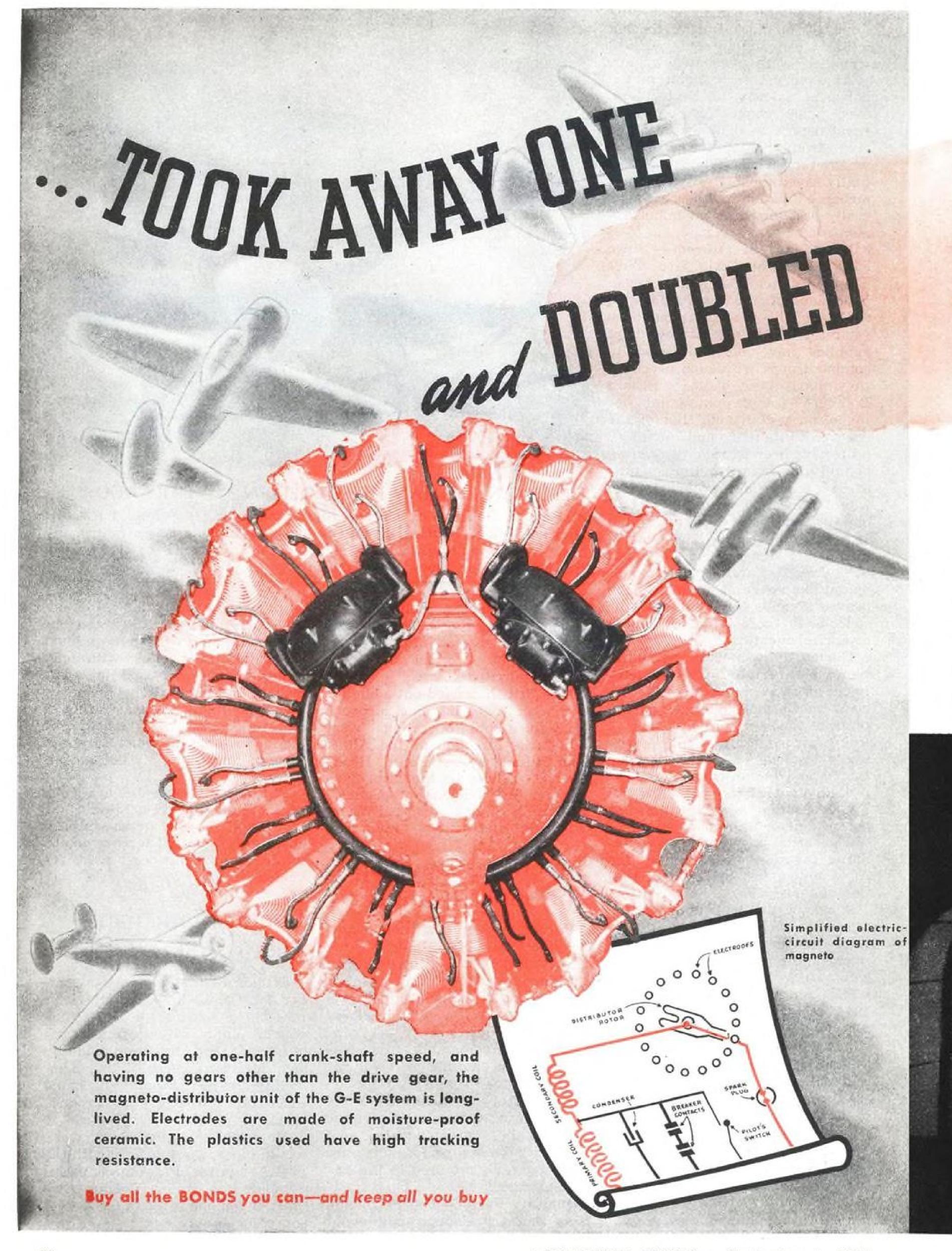
80 percent of the nation's high octane gasoline capacity can be switched over to the new product when the time comes with only minor changes in facilities. The change, however, cannot be made until the higher octane rating is more important than quantity, the big factor today with the European theater demanding 500,000 barrels

William R. Boyd, Jr., chairman of the industry council, said the new fuel is "100-octane rebuilt chemically," but no further details of the chemical process were re-

Boeing Canadian Plants Make B-29's

Disclosure that a major assembly for the B-29 Superfortress is now being made at the four Vancouver plants of Boeing Aircraft of Canada, Ltd., has been made by Jay Morrison, general manager, adding further to emphasis being placed on Superfortress produc-

Morrison said the B-29 work would in no way interfere with the present contract for Catalina patrol bombers, of which Boeing Airmarker lights for the guidance of Quantity Factor-The Petroleum craft of Canada is the current chief



the MARGIN of SAFETY

New G-E high-tension ignition system reduces number of units from three to two-gives the added protection of two magnetos—and doesn't require supercharging

Skilled pilots who've nursed battered planes back across the Channel warmly praise the combat "staying power" of American aircraft. One thing now contributing to this stamina is the G-E high-tension ignition system, in which the functions of magneto and distributor have been combined into a single, integral unit.

Two of these units replace the three—one magneto and two distributors—found in most coventional systems. Since each magneto is capable of keeping all cylinders firing, both must be put out of action before the engine quits.

SIMPLIFIED MAINTENANCE

From the ground crew's standpoint, this reduction in the number of units to be serviced is also important. So is the fact that either of the two self-condetached without removing other parts of the system.

FLIES HIGH WITHOUT SUPERCHARGING

Ample clearances in the magneto and solid, though flexible, impregnation of the harness eliminate the need for supercharging at high altitudes. And—the simplified design of the entire system facilitates effective radio-noise shielding.

This high-tension ignition system is one of several G-E systems which give aircraft manufacturers substantial savings in engineering man-hours and assembly time. We'll gladly consult with you on the possibilities of adapting one of these pre-engineered systems—or of designing something entirely new—to fit the projects you are planning. Just call the G-E office near you. General Electric Co., Schenectady 5, N. Y.



Check inspections of the magnetodistributor can readily be made on the engine. The entire system is designed for ease of installation, timing, maintenance, and repair. It is shown here installed on the Pratt and Whitney Aircraft engine of Republic's Thunderbolt (P-47).



PRECISION PRODUCTS
AND
ENGINEERED SYSTEMS
FOR AIRCRAFT

GENERAL & ELECTRIC

PERSONNEL

John B. Thurston has joined the executive staff of Transcontinental &



Western Air, Inc., as head of the new industrial engineering division. Previously he was comptroler of Fram Corp., Providence, R. I. An attorney and public accoun-

tant, Thurston has written for technical publications and frequently has spoken before internal auditing, accounting and other groups. He was instrumental in founding the Institute of Internal Auditors and was its first president.

A. L. Wykes, head of Taylorcraft Aeroplanes (England) Ltd., was killed last month while doing military acrobatics in an Auster observation plane manufactured for the RAF by his company. Wykes, 45, was an RAF pilot in the last war and well known in aviation circles both in Great Britain and in this country.

Robert M. Averill, assistant to vicepresident Robert J. Wilson of Pennsylvania-Central Airlines, has been appointed chairman of the State Relations Committee of Air Transport Association. Averill is a lawyer and has been with PCA for four years.

David Lewis Miller has been appointed assistant to Harry Stringer, vice-president of traffic for All American Aviation. He joined the company two years ago as an instructor in the Airlines War Training School operated by All American and later became a meteorologist and senior traffic analyst.

William F. McGrath has been named traffic manager of the transportation



Transcontinental & Western Air, Inc., in a new organization plan involving the creation of the transportation department which embraces all operating and service

department of

functions of the airline. He has been the airline system's traffic superintendent. McGrath will act as assistant to John Collings, named as vicepresident in charge of transportation.

Tex Rankin, well known acrobatic pilot and head of Rankin Aeronautical Academy, Tulare, Calif., has received word that his son, Lieut. Dale Rankin has been killed in action over France. Lieut. Rankin had previously been reported missing from a P-38 dive bombing raid on a target along the Marne River, but hope was held that he might have been a prisoner of war. His decorations included the Air Medal and Oak Leaf Cluster.

W. W. Finlay recently joined Guiberson Corp., as vice-president and general manager. He has a background of many years with Wright Aeronautical Corp.

Roger C. Fleming has succeeded Frank Walton as director of public relations for the Allison Division of General Motors Corp., located at Indianapolis. Walton's resignation was announced in AVIATION NEWS recently.

C. C. Thompson (photo) was awarded a pin in commemoration of his



fifteen years with United Air Lines by the company president, W. A. Patterson. Thompson is vice-president of United in charge of public relations and has served the airline in a

number of capacities. He has been a vice-president since 1940. He previously was associated with United Airports of California and Boeing Air Transport.

New administrative appointments at the Canadian Car and Foundry Co., Ltd., Montreal, are: William Harty as executive vice-president in charge of domestic and export sales, including aircraft; Lyle McCoy, vicepresident and general manager; Gordon G. Elster, general sales representative for domestic sales contracts; and John F. Forman, supervisor of Amherst Works, Aircraft Division.

Leonard S. Hobbs has been elected vice-president for engineering of United Aircraft Corp., and was also appointed a member of the operating and policy committee. He joined the engineering staff in 1928. ment.

H. Ainsley Highman, New England executive of United Air Lines, has

been named administrative supervisor on the Atlantic seaboard, including England, New York and Philadelphia. When he joined United in 1939, Highman had had 25 years



of executive experience in various international shipping and transportation organizations. Highman is a director of Boston Chamber of Commerce, executive secretary of the Boston Aeronautic Association, and chairman of the foreign export commission of the state of Connecticut.

Comdr. Frank W. Wead, well known aviation writer, has been awarded the Legion of Merit for his work as a member of the staff of Commander, Air Force, Pacific Fleet, when he assisted in supervising much of the planning for the Navy's accelerated air war in the Pacific. Commander Wead returned to active duty on the outbreak of war and has served aboard an Essex class carrier with the Pacific Fleet.

Frederick W. R. Pride, counsel for the Navy Price Adjustment Board, has been appointed general counsel for the War Contracts Price Adjustment Board to succeed W. James MacIntosh, who has resigned to return to his law practice. MacIntosh was also counsel for the War Department Price Adjustment Board and has been replaced by the assistant general counsel, Lt. Col. William Wadsworth Watts.

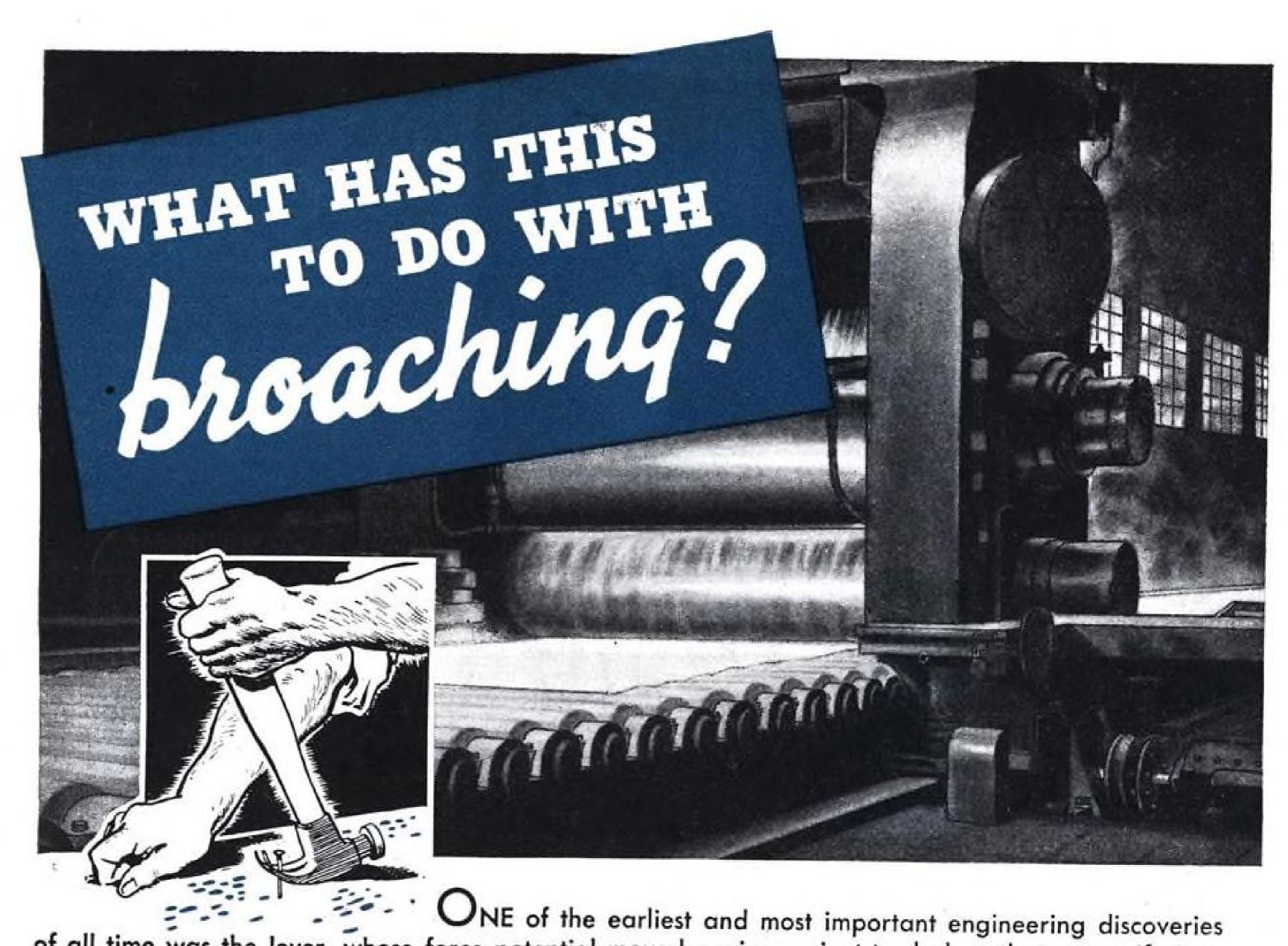
Henry G. Tarter has been appointed chief engineer of the aircraft carbu-

retor engineering department of Bendix Products division of Bendix Aviation Corp. He has been a test engineer at the Philadelphia Aeronautical Engine Laboratory, Naval Aircraft Factory.



He was actively associated in engineering and development of the Bendix-Stromberg "Injection Carburetor" used in many allied tactical aircraft.

H. M. McKay has been named acting general manager of Fairchild Aircraft division, Fairchild Engine and Airplane Co. McKay went to the Burlington plant in January joined United in 1927 and became from the Hagerstown, Md., plant a director in 1942. At the same time where he was special assistant to Wright A. Parkins was appointed vice-president R. S. Boutelle. At engineering manager of United's Burlington he has been in charge Pratt & Whitney division. Parkins of the production end of manage-



of all time was the lever, whose force potential moved a wise ancient to declare that . . . if given a lever large enough, and a star to serve as its fulcrum . . . he could move the world! Although, in its pure form, an earth-moving lever is impractical, the lever today performs, almost unrecognized, a multitude of useful functions. Its truly earth-moving potentialities are to be found in the lever's formula of power application . . . energy + ingenuity = efficiency!

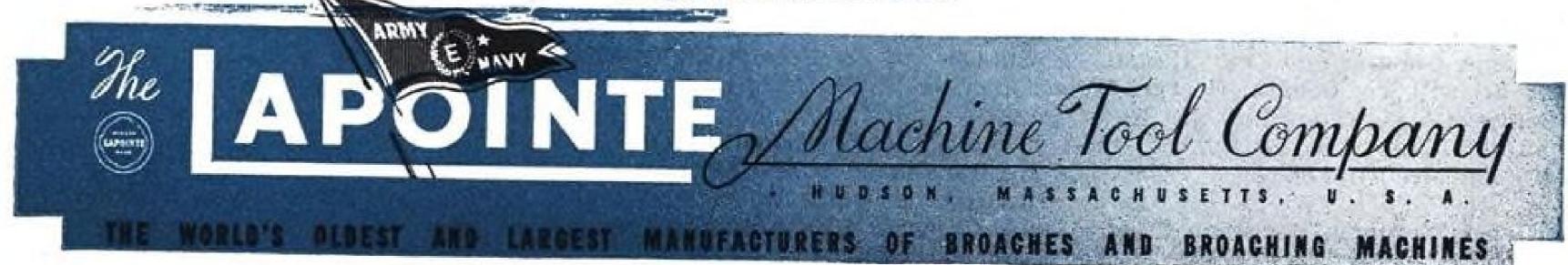
It seems a far cry from the claw hammer to a huge rolling mill, where huge red-hot ingots are transformed as if by magic, into wafer-thin sheets . . . yet the principle remains constant. You couldn't beat out miles of thin steel plate with a carpenter's hammer . . . nor could you pull out a hard driven spike with your fingers. Both are examples of the lever's theory that a minimum of energy correctly applied can not only move the world . . . but can make the world a better place to move in.

BROACHING is a further development of this principle. Eliminating needless operations and speeding up production, it requires less energy to produce more . . . resulting in fewer man and machine hours to produce each part. Parts mass-produced in a fantastic variety of complex shapes and sizes to uniformly close tolerances. It will pay you to investigate the possibilities of broaching in your plant.

Just as Lapointe pioneered in the designing of broaches and broaching machines for the mass production of precision parts . . . so too, will Lapointe continue in its quest to make better things for a better world quicker and cheaper!



Earliest use of broaching principle on this continent was by soldiers of the Revolution, who drove steel balls through heated rifle barrels to give the correct bore.



Alice Rogers Hager, Washington editor of Skyways magazine, has



left for the China - Burma -India war theater as the first woman to cover that theater exclusively for aviation. One of her main studies will be the future of air transport in

China and India. She formerly wrote for the New York Times, did free lance work in Washington, has been governor of the Washington district for the Aviation Writer's Association, and is a former chief of information for CAB.

Three members of the Baltimore staff of Pennsylvania-Central Airlines have completed courses in air transportation at the University of Baltimore. Graduates are: Marshall V. Butler, traffic representative; Frederic G. Hull, chief agent; and Charlotte H. Leach, ticketing agent.

R. G. Wingerter, industrial engineer for Timken Roller Bearing Co. for the past six years, has been appointed assistant chief engineer for the industrial division.

O. L. Earl has been appointed vicepresident and a member of the board



of directors of Acme Alumi-Foundry num Co., Chicago, to direct sales and sales developof new ment products for the company, producers of aluminum, bronze

and magnesium castings. In 1942 and 1943 he was lent in an advisory capacity to Brig. Gen. A. R. Clancy, chief of tank automotive center, Detroit.

Noel J. Humphries, formerly liaison officer of the Canadian government's trans-Atlantic air service, operated by Trans-Canada Air Lines, has been appointed supervisor of flight control for TCA, with headquarters in Winnipeg. He will be responsible for the development and maintenance of flight control procedure for the entire TCA system.

Comdr. W. Gordon Beecher, Jr., deputy director of the Navy Department's public relations division, has been detached from duty to assume a command at sea. His successor will be Comdr. George W. Campbell, now on duty at Navy public relations as assistant to the director, security officer.

of public relations and editor of the Aircraft Corp.



HEADS FIELD SERVICE:

D. K. Tasker, assistant director of military contacts of Republic Aviation, is making a trip which will take him to every overseas base where Republic P-47 Thunderbolts are operating, which means around the world. Tasker organized Republic's Field Service that has technical representatives at all Thunderbolt bases.

Volunteer, house organ, since October, 1942, has been named resident director of public relations of Vultee Field Division, Downey, Calif. Charles Cowden, associate editor and photographer of the Volunteer, has been named acting editor.

Halford G. Davis has resigned from the Aeronautical Chamber of Commerce after serving as acting manager of the legislative department.

Robert I. Robinson, assistant to the general traffic manager of Trans-



continental and Western Air, Inc., has been promoted to sales promotion manager. He will work with TWA's sales manager Clyde Fullerton, and will be in charge of sales promo-

tion throughout the airline's coastto-coast system. His headquarters will be in Kansas City. He has been eastern regional manager of TWA's public information department.

Rudy Koch has been named works manager of Consolidated Vultee's Louisville division. He was promoted from factory superintendent to replace K. F. Leaman, who is being transferred to the New Orleans titled "History's Lesson to Air division as works manager. Koch Power," a reprint of a talk he gave Allen F. Simmons, assistant director was formerly with Vought Sikorsky recently to sales executives of

TELLING THE WORLD

 Eastern Air Lines and Pan American Airways have launched a joint advertising campaign to publicize their newly arranged joint service between New York and Mexico City. Initial ads have been run in New York and Washington, D. C., morning newspapers and were prepared by Campbell-Ewald Co., Inc., Eastern's agency. Similar ads are scheduled to appear in evening newspapers in the same city under the direction of J. Walter Thompson, Inc., Pan American's agency. All ads measure 600 lines.

• Aeronca Aircraft Corp., lightplane manufacturer of Middletown, Ohio, has retained Alden E. Calkins, New York, as publicity and public relations counsel. Calkins' organization has specialized in industrial public relations. A special Aeronca New York office at 350 Fifth Avenue is being opened Sept. 1.

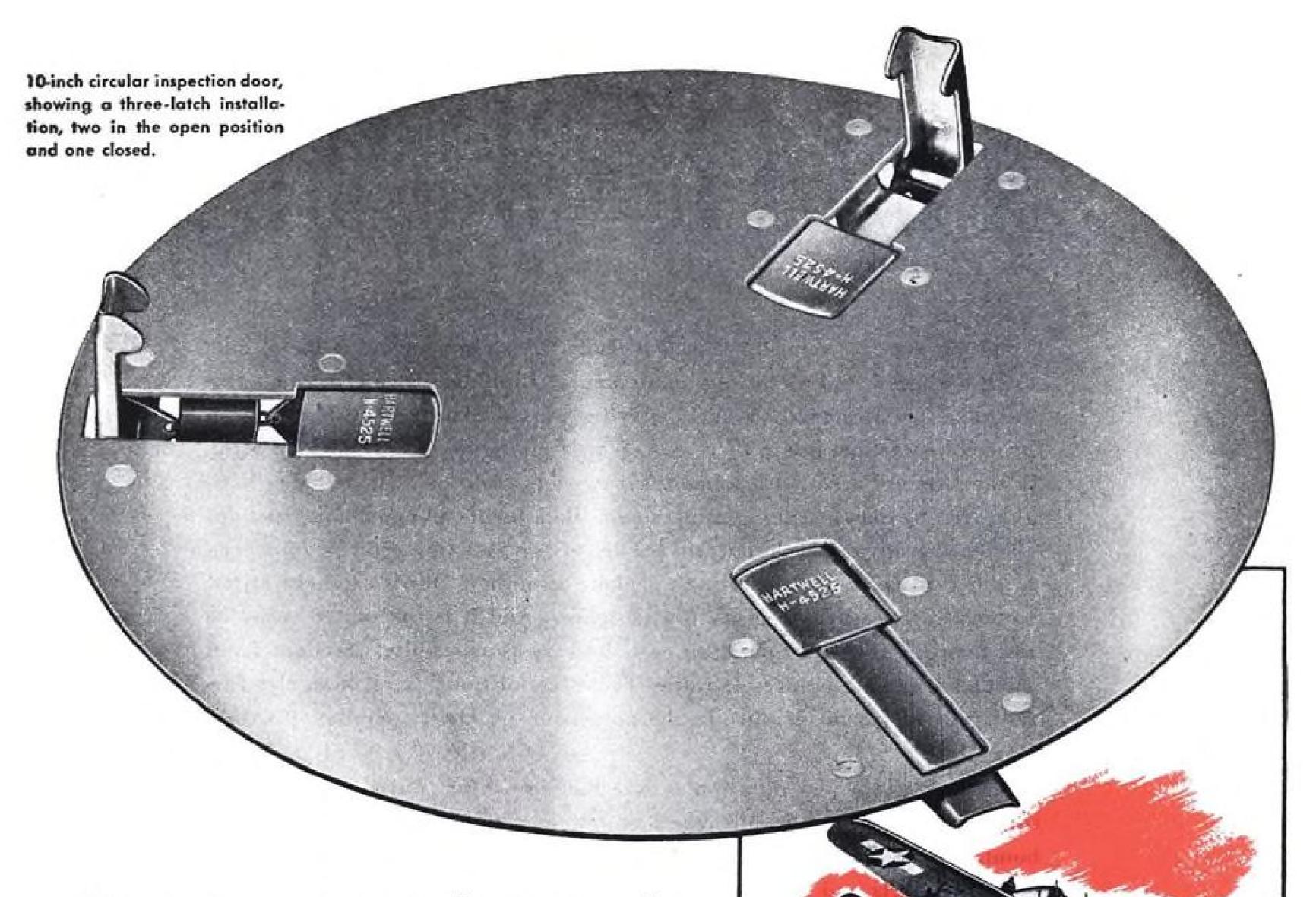
• Ford Motor Co. has appointed Walter Thompson Argentina S. R. L., the Argentine branch of J. Walter Thompson Co., Inc., to direct its advertising in Argentina, effective Oct. l. Ford already is advertising in Mexico through Thompson.

• Taylorcraft Aviation Corp., Alliance, Ohio, has renewed its advertising through Griswold-Eshleman Co., Cleveland.

· "Congratulations, Navy Pilots," is the slogan being used by Grumman Aircraft Engineering Corp., in ads showing sections of newspaper stories concerning recently reported accomplishments of Navy Hellcats. Measuring 560 lines, the ads are scheduled to appear two to three times a month in dailies in key cities. A campaign in popular and technical aviation publications will be opened in October. Charles W. Hoyt is the agency.

• Gilbert Schade, with Pratt & Whitney Division, United Aircraft, and for five years sales promotion manager, Silex Coffee Co., has joined the advertising and sales promotion department, Servel, Inc., New York. War Department, in cooperation with the National Safety Council, Inc., has released a pamphlet titled "Private Droop Has Missed the War," which illustrates 12 simple, on-duty safety rules. A survey showed that a 61 percent reduction in furlough accidents was effected during the period the pamphlet was tested at certain specified camps.

 Thompson Products, Inc., has issued a brochure, "A Decade of Achievement," reviewing the growth of the company in the last 10 years. · P. W. Litchfield, chairman of the board of Goodyear Aircraft Corp., Akron, has issued a bulletin en-Goodyear Tire and Rubber Co.



New Door Latch Speeds Plane Inspection

As much as 30 minutes can be saved in the inspection of a single plane, when you use the new Hartwell latch on inspection doors. It fits flush with the outer surface; weighs less than 1/3 oz. The Hartwell latch has been approved for use on aircraft by the Army Air Forces, and can be installed in a standard Army Air Forces' cutout, print 43G2853. Write or wire our Los Angeles office for complete engineering details.

> Single source for 779 different aircraft production parts and tools

HARTWELL

AVIATION SUPPLY COMPANY

3417 Crenshaw Boulevard, Los Angeles 16, California Dallas, Texas . Detroit, Mich. . Kansas City, Kansas Designed and engineered by Hartwell, the new inspection door latch eliminates the slow removal and replacement of inspection doors. Press the trigger and the latch is released. Press the bolt and it is locked in place.



H-4525-Pat. applied for.

The Hartwell inspection door latch consists of four parts: Trigger and bolt, made of formed sheet steel, aluminum bracket, and twin springs.



Because of its design and construction, the Hartwell latch can be used with metals, plastic or plywood of varying thicknesses, and on inspection doors of any size or shape. On multiple latch installations no hinge is required.

METAL MODERN · Magnificent!

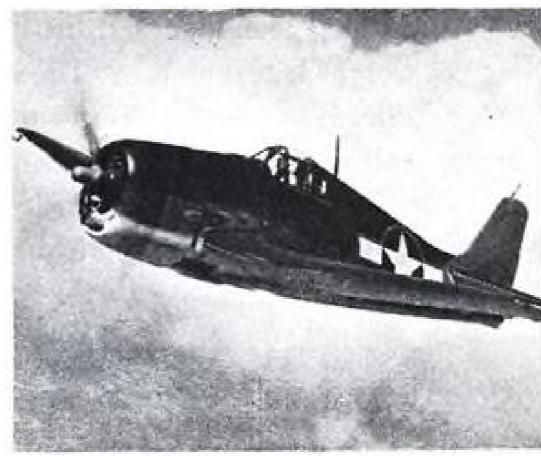
You'll always eye your SILVAIRE pridefully. Gleaming, enduring metal, like today's rugged and victorious battleplanes. Built to fly comfortably, frequently, far. Designed to elicit envying regard. The SILVAIRE has been proved by wartime use in the C.A.A.-War Training Service, Civil Air Patrol, in the Armed Forces. It has had hard use the world over. It has long been approved by discriminating owners and pilots for its all-metal construction, efficient aerodynamic design, its beauty. Your SILVAIRE will be improved by our experience in fabricating warplane assemblies. It will again be styled to magnificence by America's top designers. And it is wisdom to enjoy its low depreciation and operating cost, its easy repairability, freedom from maintenance and high resale value. These less obvious excellences also further your long run pleasure in the possession of The Luscombe SILVAIRE.

WAR WORK for the duration is our business. Our job continues to be the production of such vital parts as tail assemblies, ammunition boxes, bomb bay doors, engine enclosures, gunners' seats, carburetor assemblies, machined parts and dozens of other elements for such famous war planes as are pictured here. However, the War Production Board has released an ample supply of parts for the maintenance of the four-year pre-war production of SILVAIRES now in daily use.









CRIMMAN FEEFHellen!"

EASTERN TBM "Avenger" CURTISS C-46 "Commondo"

These are a few of the planes for which Luscombe is fabricating metal assemblies.

* * * * * * * * * * * * * * *

The Luscombe SILVAIRE

YOURS WHEN THE WAR IS WON, the new and distinguished Luscombe SILVAIRE is the finished product derivative of a long line of all-metal planes . . . proved, improved, smartly styled.

You are invited to write for full information NOW.

Please direct your inquiry to Department G

LUSCOMBE AIRPIANE CORPORATION

Trenton 7, New Jersey

AIRCRAFT PRODUCTION

Parliament Group Urges Canadian Industry to Seek Transport Orders

Any further airplane contracts from U. S. and Britain "should be with respect to Army transports rather than fighter craft and bombers," committee recommends; production program of Dominion is more than two-thirds complete.

gram more than two-thirds completed, the Parliamentary Committee on War Expenditures recommends that further orders for planes from the United States and Great Britain "should be with rather than fighter craft or bomb- for aircraft overhaul. ers," and urges immediate planning for post-war.

ies were 12,908 planes. Backlog now is only 5,393 more, mostly Mosquito bombers and night fighters, of 227 Mosquitos. Lancaster bombers and Curtiss Helldivers. Some of these orders may not be completed due to cutbacks.

With the Canadian aircraft pro- 17 Types Produced—Production has involved 17 types, the seven planes now in production accounting for 10,000 either delivered or on order. The Canadian government has extended aircraft capital assistance of \$68,563,500, of which respect to army transport planes \$15,589,000 represented facilities

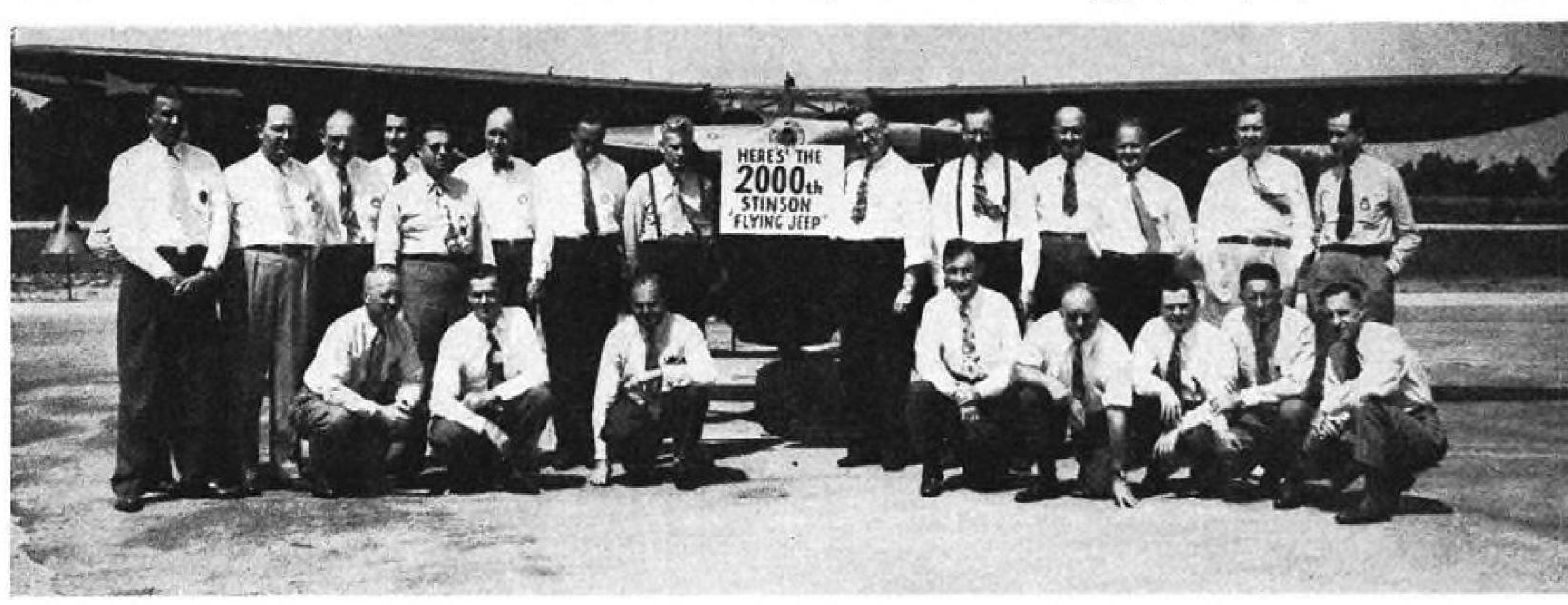
Of 1,500 Mosquito aircraft ordered from de Havilland Aircraft The committee says through of Canada at Toronto, 670 repre-June 30, 1944, Canada war deliver- sent bombers, 773 fighter-bombers, 57 as trainers. On June 30, the government had accepted delivery

> The government-owned Victory Aircraft Ltd., of Toronto, has delivered 81 of a total order of 900 Lancaster bombers, while about

one-fifth of total orders for Curtiss Helldivers has been filled by Canadian Car and Foundry Ltd., of Fort William, Ont., and Fairchild Aircraft of Canada, at Montreal. Canadian Car orders totaled 1,030, with deliveries of 220. Fairchild had orders for 705 and had delivered 175.

▶ Boeing of Canada—Boeing Aircraft of Canada, at Vancouver, has delivered 233 out of 380 PBY Catalinas, and Canadian Vickers Ltd., of Montreal, 212 of 369 ordered.

Noorduyn Aviation Ltd., Montreal, has received a total order for 1,146 Norseman transports. largely from the United States Army, of which 539 have been accepted. Among trainer planes still in production 1,300 Anson V twinengined aircraft, produced by Federal Aircraft Ltd., Toronto, government-owned, and sub-contractors, have been ordered, of which 742 have been delivered. The Harvard single-engined trainer, made by Noorduyn Aviation, Montreal, was ordered for a total of 3,120 aircraft, of which 2,278 have been delivered. Other types now no longer produced account for total production of 8,276 aircraft. Financing—Capital assistance for the Anson production amounted to \$2,524,000; for the Cornell elementary trainer (Fleet Aircraft mainly), \$1,455,000; for the Mosquito,

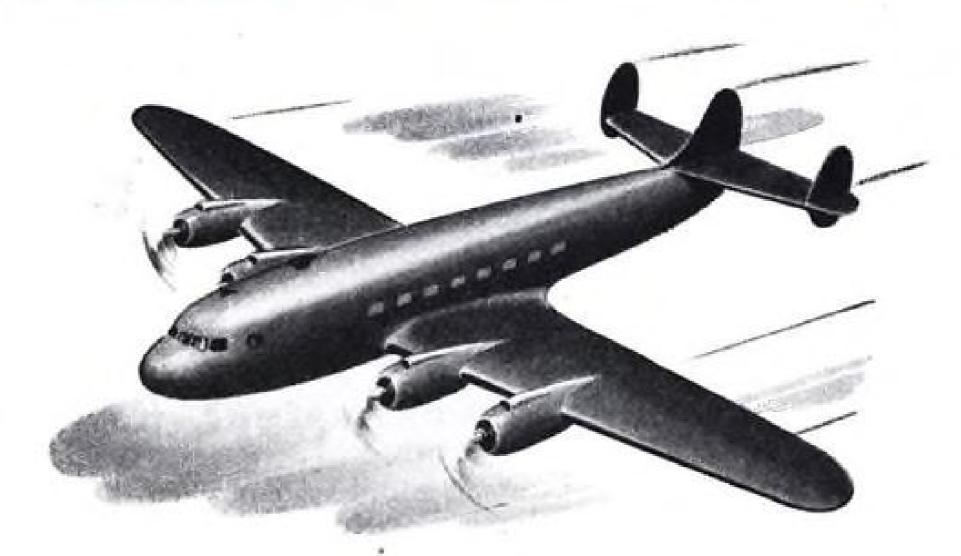


STINSON TURNS OUT 2,000TH "FLYING JEEP":

front for spotting, communications and hospital work, is the 2,000th to come off the line at the Stinson Mich. Coincident with production of this Flying Jeep was a meeting of directors and division managers. Left to right, top row, are A. M. Hall, new the president; R. B. Parkhurst, director of industrial Field; C. T. Leigh, vice-president; L. H. Cooper, new division manager, Miami; T. Y. Smith, acting division

This Stinson L-5 liaison plane, used on every war- manager, Stinson division, Wayne; Harry Woodhead, president; A. E. Shelton, new division manager, Allentown; M. A. Hannan, director plant protection; Division of Consolidated Vultee Corp., at Wayne, R. S. Fleet, director plant facilities; R. F. Jones, assistant to director, plant engineering; Earl A. Hoose, director of public relations. Left to right, kneeling, are H. A. Sutton, director of engineering; L. K. division manager, Elizabeth City; Joe Hennen, divi- Grant, assistant controller; I. M. Laddon, executive sion manager, Nashville; A. H. Shaad, assistant to vice-president; J. L. Kelly, division manager, San Diego; W. L. Jones, division manager, Louisville; V. engineering; C. W. Coslow, division manager, Vultee C. Schorlemmer, controller, San Diego; B. W. Sheahan, engineering manager, San Diego; R. G. Mayer, division manager, Fort Worth.





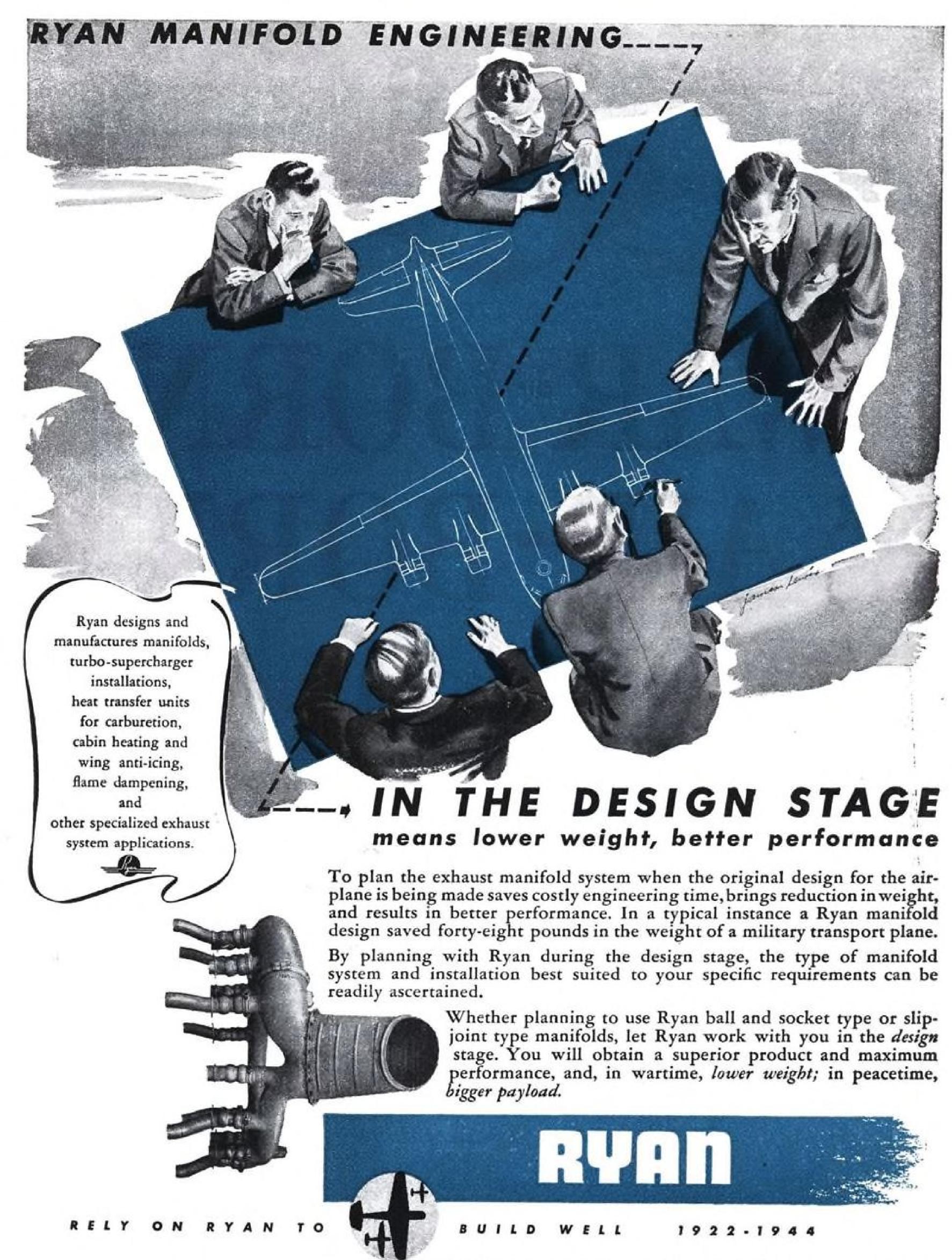
A LEADER IN FINE AVIATION OILS

Made to meet the rigid specifications of the aviation engineers of the U. S. Army and Navy in one of the world's largest oil refineries . . . D-X Aviation Oil is now available for civilian use—subject to military priority. Your inquiries are invited.

MID-CONTINENT PETROLEUM CORPORATION

TULSA, OKLAHOMA

34



Ryan Aeronautical Company, San Diego - Member, Aircraft War Production Council, Inc. Eastern Office - 420 Lexington Avenue - New York 17, New York

DESIGNERS AND BUILDERS OF COMBATANT TYPE AIRPLANES AND EXHAUST MANIFOLD SYSTEMS

36

\$10,436,000; for the Harvard, \$3,-587,000; for the Hurricane (produced by Canadian Car & Foundry), \$79,000; for the Lancaster, \$7,313,000; for the Norseman, \$1,-676,300; for the PBY Catalina, \$11,091,000; and for the Curtiss Helldiver, \$6,223,800. In addition there is a general assistance item in the report of \$8,589,400.

The Committee recommended that all aircraft plants study the profit-sharing plan in operation by Canadian Vickers Ltd., Montreal, and that it should be used throughout the industry as far as possible.

69 Firms Turn Out Parts for New Mars

Martin Company in production on 20 craft for NATS.

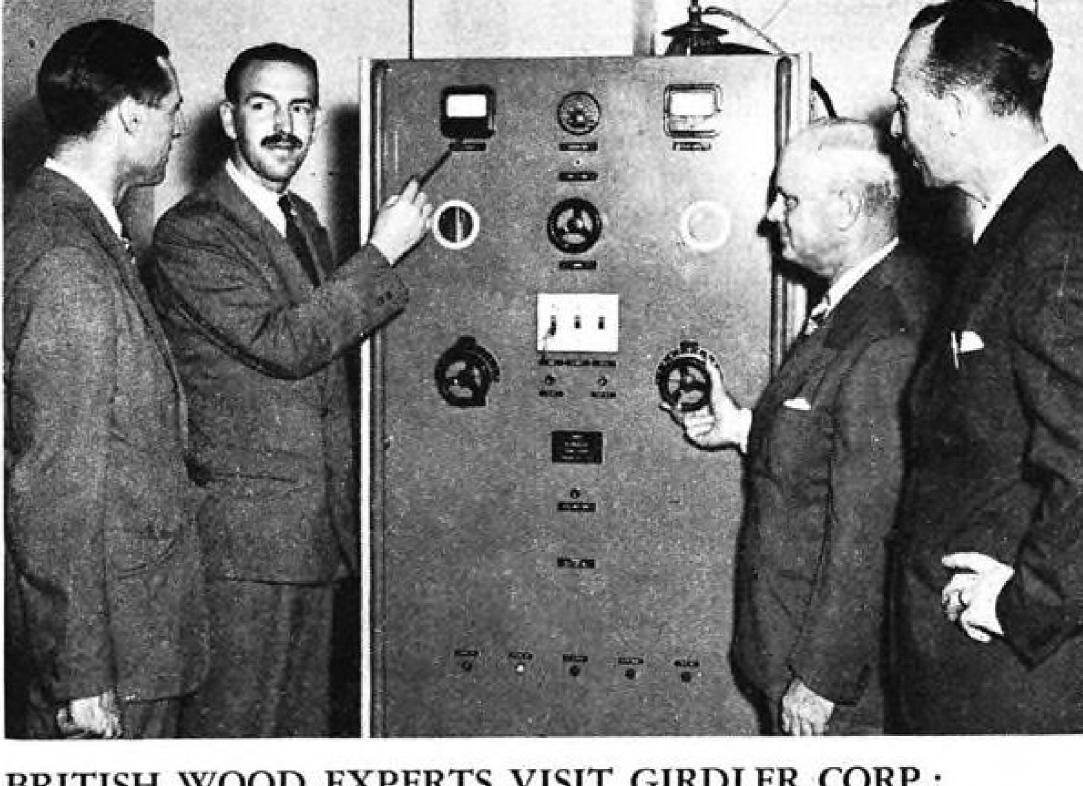
The manufacturing program on the JRM Mars-world's largest production airplane—is now in operation with 69 manufacturers in 37 cities in 12 states turning out sub-assemblies and components for Glenn L. Martin Co., which is building 20 of the 721/2-ton craft for the Naval Air Transport Ser-

Sub-contracted items for the flying boats, sister-ships of the original Mars now in operation in the Pacific for NATS, include wing tips, flaps, control surfaces, floats, beaching gear, exhaust stacks and interior equipment, stairs, bolts, hinges, fittings and a wide assortment of small machine parts and assemblies.

> Spartan Aircraft—Largest of the sub-contracts is held by Spartan Aircraft Co., of Tulsa, only subcontractor on this job located west of the Mississippi. Spartan is building wing-tips, ailerons, stabilizers, elevators, fins, rudders, flaps and tabs for the transport.

Bellanca Aircraft Corp. is turning out wing floats and float struts and Ferracute Machine Co., Bridgeton, N. J., is making the massive beaching gear.

Exhaust stacks for the engines are from National Radiator Co., Johnstown, Pa. Warren MacArthur Corp., of New York, is supplying seats for the pilots and crews while tables for the navigator and radio operator are in the works Works, Essington, Pa., and Castaloy Corp. of Detroit.



BRITISH WOOD EXPERTS VISIT GIRDLER CORP.:

Three members of the British Wood Aircraft Mission inspected the Thermex Division of the Girdler Corp., at Louisville in their study of Thermex high frequency units used to speed up production of plywood and laminated wood used in plane construction. Left to right are: J. Latham, Dr. F. T. Barwell, Lyman L. Dawson, vice-president of the division, and A. E. Lain.

timore. Air Utilities, Murfreesboro, Tenn., is making crew lock-

Machine shops predominate among the sub-contractor but there are companies on the list whose peacetime output is far removed from aircraft production. For example the All Purpose Gold Corp., of Brooklyn is making bell crank housings; Diecraft Engraving Co., of Baltimore is making spar splice and rib assembly fittings. Others include General Oilburner Co., Baltimore; Marco Chemicals, Inc., Sewaren, N. J.; National Advertising Co., Westminster, Md.; Post-O-Graf Co., Trucksville, Pa., and Allen Stoker Co., Allentown.

Aircraft Plywood Studied by British

Use of plywood for aircraft parts is-being studied by British Forest Products Laboratory's wood experts who are now making a return visit to the U.S. Forest Products Laboratory at Madison, Wis. respectively at Essington Metal Last year an American mission studied British uses of wood, plywood, phenolics, and plastics.

columns and quadrants are being Aircraft Establishment and Minis- bines and all related devices will

and Charles T. Brandt, Inc., Bal- West Coast area, some sections of the South and plan to visit Massachusetts and Canada before returning to England.

Canada Organizes JP Research Firm

Government-owned company to take over plant and equipment used in Dominion's original experiments started in 1942.

Turbo Research, Ltd., to carry out design and development work on jet propulsion for aircraft and gas turbines as a prime mover has been formed by the Canadian government to take over the plant and equipment set up in Canada in 1942, when the government first became interested in jet propulsion.

The head office and main research works will be at Leaside, Ont., outside Toronto, adjoining the government-owned Research Enterprises, Ltd., manufacturers of optical glass, optical instruments used as range finders, and secret radio equipment.

Permanent Research Group—The permanent organization for research and development in connec-Dother Parts Furnishers-Control Representatives from the Royal tion with jet propulsion, gas turassembled at Ritter Co., Inc., Roch- try of Aircraft Production are work closely with a similar comester, N. Y.; ladders and stairways among the men visiting this coun- pany established in Britain. A at Kellett Aircraft, Philadelphia, try. They have traveled over the staff representative will be established at London to keep in close liaison with the British company.

President is H. J. Carmichael, co-ordinator of production, Department of Munitions and Supply and, before the war, general manager of General Motors in Canada. Vice-president and general manager is Brig. F. C. Wallace, of Research Enterprises, Ltd.

Army Tests New Twin Rotor 'Copter

Flight experiments at Wright Field reveal AAF's four years' work on Platt-LePage model.

An Army helicopter development going on secretly for four years, is revealed in the announcement by the AAF Materiel Command that the Platt-LePage dualrotor helicopter is now undergoing tests at Wright Field.

Labeled the XR-1, and following a design similar in many respects to the twin-rotor German Foche-Achgelis helicopter, the American-built "whirligig's" history dates back to mid-1940, with its military contract preceding the Sikorsky models which have now gone into mass production.

Contra-Rotating Blades — Twin rotors, each 30½ feet in diameter, turn in opposite directions at the ends of two streamlined pylons projecting from the fuselage sides. Power is supplied by a 450 hp. Pratt & Whitney engine, enclosed and located approximately in the middle of the fuselage. Widely-spaced main landing gear is fixed on the pylons.

The fuselage resembles that of a conventional airplane, more nearly than the single-rotor helicopter designs, and it has an empennage fairly conventional, except for the fact that the horizontal stabilizer is set quite high on



NEW B-17 TAIL TURRET:

An improved tail turret, greatly increasing the defensive firepower of the Boeing B-17 Flying Fortress, is shown in this new photograph. The range of the guns has been increased, the tail gunner's compartment has been extended to the tip of the tail cone, and the gunner has been given added protection of more bullet-proof glass and armor plate.

the vertical fin, apparently for better control. The craft weighs approximately 4,800 peunds.

Transparent Plastic Cockpit— The two-place tandem cockpit is largely covered with transparent plastic, even to the floor, giving excellent visibility.

Col. H. F. Gregory, Materiel Command rotary-wing aircraft expert, says the Army is thoroughly exploring advantages offered by the dual rotor helicopter, as opposed to those of the Sikorsky type.

Asked about the possibility of a wing or rotor failing on the Platt-

LePage craft, Gregory replied: "The same thing would happen to the XR-1 that would happen to an airplane if the wing came off, but there is no more reason for a pylon or complete rotor to give way on the XR-1 than for a normal airplane wing to fail."

▶ Experimental Model—The model currently under test is designated the XR-1A, a revision of the original Platt-LePage XR-1 design, which places the observer in the nose, in front of the pilot's seat. In AAF designation, X stands for experimental, R for rotary-winged, and 1, for the first design of its class.

While the Army has kept the Platt-LePage helicopter under wraps, W. Laurence LePage, president of Platt-LePage Aircraft, Eddystone, Pa., last October testified before the CAB concerning a 12-14 passenger helicopter transport design apparently a larger scale development of the XR-1, with dual rotors, and released a drawing of the proposed large craft, (AVIATION NEWS Oct. 11, 1943, Cover and page 7).

New Wilder Wildcat

Disclosure that a new and faster version of the old Grumman F4F Wildcat is operating in the Pacific off the decks of a baby flat-top of the Casablanca class was made last week by the Navy.

The Wildcat, designed by Grumman, is now built exclusively by Eastern Aircraft Division of General Motors. Though replaced on fast carriers by the Grumman F6F Hellcat, the new Wildcats are reported still ranking among the world's best light planes for carrier operations and the Navy reports they have shown themselves well able to cope with Jap fighters in recent combat.



New Platt-LePage Twin-Rotor Helicopter Tested by Army: Shown is the XR-1A in hovering flight over Wright Field, AAF Materiel Command headquarters, at Dayton, Ohio. The craft follows a design basically

similar to that of the twin-rotor German Focke-Achelis helicopter. While the American-built craft may reach military production, and while tests have been successful, it still is an experimental model.



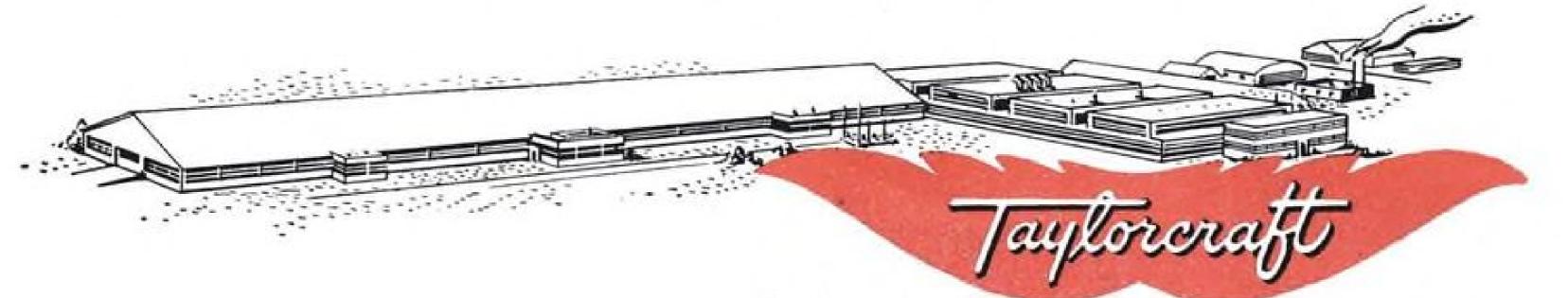
THE SHIP WITH THE Built-in Tail Wind

TAKE a 65 h.p. engine—put it in several different planes. What happens? One plane will outfly and outclimb the others, and use less fuel. It's no secret—any experienced light plane pilot will tell you, "Sure, Taylorcraft outperforms any ship in its class."

Just as Taylorcrafts flew in front before the war, and have repeatedly proved their ability for numerous wartime activities, so the new Taylorcraft will again lead the field when America eagerly picks up peacetime flying.

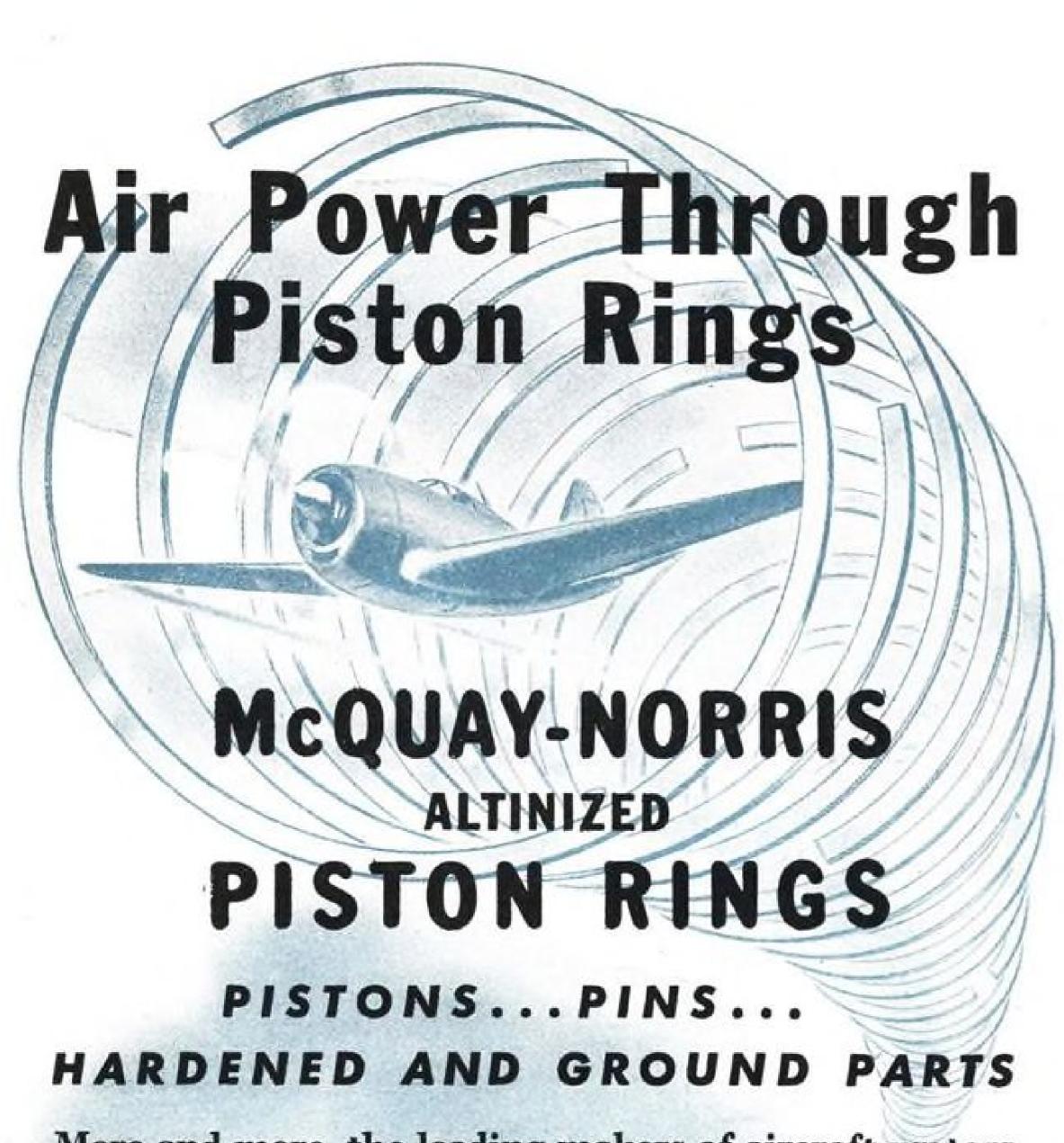
As soon as current restrictions ease and Taylorcraft's war production responsibilities have been completely met, we want you to know what you can expect from Taylorcraft to make your flying safer and more satisfying than ever before.

Send us your name and address so you may be among the first to learn the news and details of Taylorcraft's newest developments.



World's Largest Builders of Side-by-Side Airplanes

TAYLORCRAFT AVIATION CORPORATION · ALLIANCE, OHIO



More and more, the leading makers of aircraft motors are using McQuay-Norris precision parts. Our 34 years' experience in precision manufacture, our long and intensive work in metallurgy, heat treating, clinical research and laboratory experiment, enable us to turn out the sturdy, dependable parts demanded by modern aviation. Your inquiries are invited.

PARTS FOR AIRCRAFT ENGINES

Piston Rings Oil Sealing Rings Supercharger Rings **Carburetor Parts** Machined Aluminum Pistons Piston Pins Counterweight Cheek Pins **Machined Magnesium Parts** Cylinder Hold Down Nuts **Hardened and Ground Parts**

PARTS FOR PROPELLER ASSEMBLY

Machined Magnesium Parts Piston Rings

EQUIPMENT FOR MAINTENANCE OF AIRCRAFT

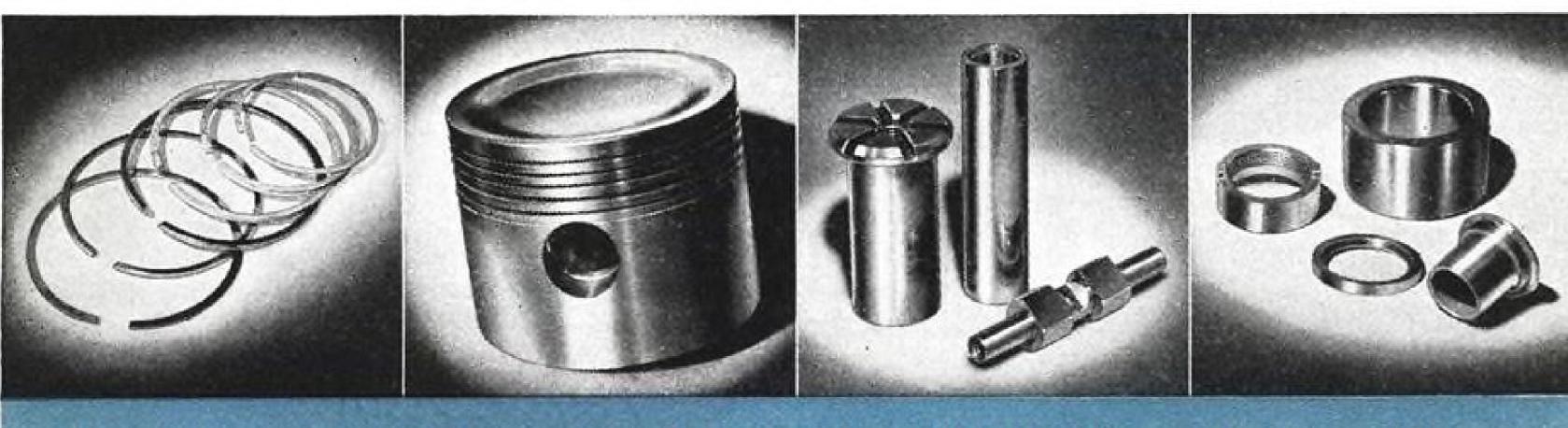
Pistons for Oxygen Compressor Piston Rings for Oxygen Compressor Pins for Oxygen Compressor Pistons for Air Compressor Pins for Air Compressor Piston Rings for Air Compressor

LANDING GEAR PARTS

Machined Aluminum Pistons Piston Rings Hardened and Ground Parts

AVIATION NEWS . September 4, 1944

PRECISION WORKERS IN IRON, STEEL, ALUMINUM, BRONZE, MAGNESIUM



McQUAY-NORRIS MFG. CO. (AIRCRAFT DIVISION), ST. LOUIS, U.S.A. CANADIAN PLANT, TORONTO, ONTARIO

Aviation Materials Indexed by SAE

164-page compilation presents comparable tables of specifications and numbers for original, interchangeable and substitute material.

A comprehensive cross-index of original, interchangeable, and substitute aeronautical materials used in aircraft, engines and accessories has been completed by the Society of Automotive Engineers for use of the United Nations' air forces.

The 164-page index presents comparable tables of the SAE, Army-Navy, Federal, Army Air Forces, Navy Aeronautical, British, Canadian and Australian specifications and numbers for original, interchangeable and substitute materials. Among these are ferrous steel, aluminum, magnesium, copper, nickel, tin, zinc, bismuth, and lead alloys, with chemical compositions and mechanical properties, used by United Nations Air Forces.

Eases Shortage Problem — The organization believes that service mechanics will be able to solve any shortage problems by use of substitute or interchangeable metals when no supply of the original is available.

The work was initiated a year ago by SAE Aeronautical Division Committee after discussions with representatives of the Society of British Aircraft Constructors, British Ministry of Aircraft Production, British Air Commission, U. S. Army and Navy air arms and of the Canadian and Australian governments.

Hurricane, Swordfish Production Complete

Production has been completed on two veteran British warplanes -the RAF's Hawker Hurricane, of Battle of Britain fame, and the Fleet Air Arm's Fairey Swordfish, the last of the fully operational biplanes

The Hurricane started life as a single-seater fighter with eight .303 machine guns about 10 years ago. Since then more than 10,000 of them have been built. The Hurricane has been developed into a 12-gun fighter, a four cannon convoy escort and a long-range clone 18's for the Boeing B-29 Su- on behalf of the industry.



CURTISS WRIGHT'S POST-WAR PLANNERS:

Members of Curtiss-Wright Corp. Post-War Committee, which is developing plans for peacetime production, are shown here at a recent meeting in Buffalo. Left to right, are C. M. Leeds, Wright Aeronautical; James C. Willson, Curtiss-Wright vice-president and chairman of the group; Dr. D. H. Davenport (standing), Airplane Division, director of business research; Peter F. Rossmann, general manager, development division; Prof. Edmund D. McGarry, business research consultant. Oscar Nelson, propeller division, is also on the committee.

fighter with auxiliary fuel tanks. Fitted With Rockets-The Hurricane also was the first fighter to be fitted with rocket projectiles. Although the Hurricane gradually will die out as existing planes are used up, it has successors, the rocket-carrying Typhoon and the Tempest.

The second veteran on the retired list, the Swordfish, is even older than the Hurricane. Designed as a Naval torpedo-reconnaissance-bomber in the early 1930's, it has taken part in leaflet raids on North African towns, landed British agents behind enemy lines and served as a transport maid-of-all-work to Fleet Air Arm units in the Western desert. Successor to the Swordfish is the Barracuda, also built by Fairey's.

Engine Schedule Cut At Wright Plant

A sharp decrease in engine schedules at the Wright Aeronautical plants at Paterson, N. J., is reported by P. B. Taylor, vicepresident and acting general manager, who said that by the end of this year monthly shipments of engines from the four Paterson area plants will have shrunk to less than half of last year's total production.

▶ Wood-Ridge Plant Unaffected—

perfortress is on a full-scale basis. The cutback is another indication of the increasing emphasis on heavy bombers and less upon medium bombers and fighters, result-

ing from changes in the military situation.

ACCA to Check on Technical Programs

Activation of a policy of industry endorsement of technical programs or engineering projects through the Aeronautical Chamber of Commerce was announced last week by James P. Murray, Chamber president and vice-president of Boeing.

Endorsement of matters to be submitted to government agencies by engineering departments, associations or other organizations can be obtained promptly by channeling the data through the technical department of the Chamber, Mr. Murray said.

Management Needs Stressed—He explained that, because of the entry of new organizations and the broadened interest of others in the field of aircraft development, the Chamber has felt it necessary to re-emphasize the desirability of providing industry engineering management with the opportunity to review and endorse any recommendations relating to formal refighter, a tank buster with 40 mm. The schedule changes will have no quirements for design, performcannon, a fighter-bomber, a Fleet effect at the Wood-Ridge plant, ance, standards and engineering Arm fighter, a catapult-fighter for where production of Wright Cy- policies made to the government

FINANCIAL

Rate Reductions Present Problem On East and West Coast Service

Eastern considers adjustment to meet new schedule announced by National on New York-Miami flights; California-Honolulu rate competition developing.

Lowering of passenger fares on its New York City-Miami flights by Eastern Air Lines, Inc., to meet the new rates announced by National Airlines, Inc., has been discussed by officials of the former company and an early adjustment is expected.

As indicated in the table below. the fares proposed by National run around five cents a mile, while Eastern's rate is roughly figured at five and a half cents a mile. This results in a differential of less than two dollars on the New York-Miami fare. On the New York-New Orleans trip, however, the fares are the same.

Fares Compared—Comparison of fares between New York City and key points on the New York-Miami flight follows:

New York to National	Eastern
Norfolk\$18.05	\$20.90
Charleston 35.85	36.70
Savannah 40.25	41.55
Jacksonville 45.95	47.80
Daytona Beach 51.05	52.90
Orlando 53.65	55.50
Tampa 56.95	58.80
W. Palm Beach 61.10	62.95
Miami 64.50	66.35
New Orleans 67.00	67.00

Meanwhile, on the West Coast, there has developed rate competition in proposed flights from California to Honolulu.

On Aug. 20, United Air Lines Transport Corp. announced that it would fly from Los Angeles and San Francisco to Honolulu for \$125 on a 1034 hours schedule. Nine days later Pan American World Airways announced proposed flights between mainland and island terminals in a "little more than 8 hours" at a one-way fare of \$96, or \$86.40 each way on a round-trip ticket purchase. During the interim, Matson Navigation Co. proposed fares of \$175 for day service and \$200 for sleepers, while Ryan School of Aeronautics plans to organize Pacific Air Lines and fly from the mainland to Hawaii for \$128.25.

lowest proposed rates, its service costs has been upward and this surplus of \$3,343,200.

is probably several years in the future because it must await delivery of new 128-passenger clip-Construction orders for these aircraft depend, of course, on military priorities.

Costs Stabilized—In a study of the need and pattern for the development of air transportation in the United States, the Department of Economic Planning of American Airlines, Inc., pointed out that the ability profitably to lower fares depended on the ability to lower either direct flying costs of the airplane or the overhead costs of airline operation or both.

"The period from 1938 to 1941 witnessed the relative stabilization of the industry and some profit of operation," the report said. "During this period revenue generally exceeded expenses. This was not due to a reduction in costs. Total cost of operation per plane mile remained practically the same. The profit of operation resulted from a more intensive development of the industry and an increase in the load factor, i.e., an increase of revenue traffic proportionately greater than the increase of plane miles flown-more miles were flown per mile of route, more revenue tonnage was flown per mile and per mile of route.

Departions Intensified - "Profit resulted from more intensive operation. The whole aviation industry experienced the same development.

"During the war period costs, direct and indirect, have risen and will continue to rise.

"Should the industry expand in such a way that a great many more miles of routes would be operated with low frequency of flights and low load factor, ability of the industry to reduce fares would be severely limited, and even with present fares, the industry could easily face disaster.

higher level of costs can be expected to continue after the war. Estimates on equipment which will be available shortly after the war show that some slight reductions are being made in direct flying expenses.

"Unless we develop in such a way that overhead costs either remain relatively the same or diminish, we shall find that the reduction in direct flight costs is annulled and fares to the public would of necessity remain the same, or go up. Subsidies would be the only alternative. An unsound, disorderly expansion might well jeopardize the solvent position of the industry for the next several decades, should costs of operation be materially increased."

Grumman Salaries, Income Reported

Grumman Aircraft Engineering Corp. paid its president, L. R. Grumman, \$65,250 for the fiscal year ended Dec. 31, 1943, according to the company's annual report to the Securities and Exchange Commission.

L. A. Swirbul, executive vicepresident, received \$60,200 for the same period, while \$31,800 was paid to W. T. Schwendler, another vice-president. The company paid \$57,164 to Hurdman and Cranstoun, its accountants.

John W. Gillies, Jr., received \$21,724, of which \$15,000 represented his salary and \$6,724 his commissions as sole proprietor of Gillies Aviation Corp., selling

Sales-Gross sales of the company during 1943 totaled \$278,-688,275. Manufacturing costs and other expenses amounted to \$242,-668,663, leaving a balance of \$36,-019,612.

Net income before provision for income and excess profits taxes amounted to \$24,901,524. Deductions of \$20,258,323 for estimated normal income, surtax and declared value excess profits tax, and estimated excess profits tax, brought the net income before credit for post-war tax refund to \$4,643,200. The latter item of \$1,-955,000 brought net income to \$6,-598,200.

After making provision for postwar re-adjustment of \$1,300,000. and the \$1,955,000 of post-war tax refund, \$3,255,000 was transferred to reserves, leaving a balance of While Pan American offers the Costs Increasing-"The trend of net income transferred to earned

200,000 Manifold on its way to Victory!



JULY 21, 1944 Solar completed its 200,000th stainless steel airplane exhaust manifold—a record the company, its employes, suppliers and customers share with satisfaction.

This is a long step from Solar's total production in 1930 of just two manifolds built for the U. S. Navy. Revolutionary in principle, they substituted a scientifically designed and constructed exhaust system for the crude and dangerous method of venting gases through extended pieces of short tubing.

For fourteen years Solar has led in this important branch of the airplane industry. Engineering technique has kept pace with greater demands imposed by increased engine horsepower in the disposal of hot gases, and resistance to heat and corrosion... specialized skill

has been acquired in fabricating hard to handle stainless steel and similar alloys. Companies confronted with such problems are invited to consult Solar. Address "Management."



SOLAR AIRCRAFT COMPANY SAN DIEGO 12, CALIF. DES MOINES 5, IA.

TRANSPORT

Transport Industry Urged to Speed Study of Proposed CAR Changes

ACC Airworthiness Requirements Subcommittee and ATA Aircraft Requirements Committee listed among major groups seeking to prepare program for consideration before year end.

By MERLIN MICKEL

Information from Civil Aeronautics sources indicates it will behoove aviation industry agencies to expedite their studies of changes they deem necessary in the transport category of Civil Air Regulations. Government engineers, devoting increasingly more time to consideration of this problem, express hope that a proposed revision may be ready by the end of the year.

Few if any doubt that changes will be necessary, but the speed with which they may be effected can easily depend on the attention given the problem by the industry, and the latter's preparedness to deal authoritatively with alterations in the regulations when they are proposed.

Major Groups Involved—Among the major industry groups dealing with the question are an air carrier airplane performance subcommittee of the Aeronautical Chamber's Airworthiness Require-

ments Committee, for the manufacturers, and a subcommittee of Air Transport Association's Aircraft Requirements Committee, for the airlines.

In addition, the situation is drawing much attention in West Coast factories, as pointed out in AVIATION NEWS, Aug. 21.

Because of the war, only one model has been certified as a type, since the regulations went into effect July 1, 1942. That is the Vought Sikorsky VS-44 being used by American Export. The regulations didn't apply to any planes in service on that date, though they were written to apply to all aircraft after Dec. 31, 1947. The expectation here was that the nearly six years intervening would be enough to retire the old types.

Picture Changed—The war has changed the picture, however, and now it is generally agreed that the date on which they will have universal application will have to be

put further in the future.

In the meantime, CAA engineers who have been cooperating with CAB staff members have had access to Air Transport Command experience on the larger craft, such as Douglas DC-4's and Curtiss Commandos, that undoubtedly would have been new types subject to the Civil Air Regulations had they not been pressed into military service.

Points of structural design, engines and propellors and equipment, and flight and performance aspects are among those on which the Army has passed along engineering data.

and CAB have been studying for more than a year what one official describes as the "further advancement of the regulation picture," and expect to devote additional time to it between now and the end of the year, in the anticipation that some revision may then be ready.

When that time comes, CAA will contribute its working knowledge to CAB, who will combine this with its own material and possible changes, then draft a release for submission to the industry and others interested for their reaction.

The ACCA and ATA subcommittees are studying specifically part 04.75T of the regulations. The 04 section of the regulations contains those for airworthiness, and the part in consideration deals with planes in the transport category. ATA's interest stems naturally





B. A. Rawson, Supt. of Flight Operations for T.C.A., starts Flight Lt. Howey, D.F.C., on his air line instrument flying course in the Link Trainer.

Returned Was Polits JOIN TRANS-CANADA AIR LINES

The job of training returned airmen for peace-time commercial transport flying has begun in Canada. Already engaged for the flight crews of Trans-Canada Air Lines are a number of Royal Canadian Air Force pilots who have distinguished themselves on operational duties overseas.

The first group of veterans to join T.C.A. is shown above in Link Training quarters in Winnipeg. Left to right, they are:

Flying Officer R. S. WHITE-40 operational flights, including 14 raids over Germany; service in Egypt, Libya and Malta

Flying Officer H. H. BOLTON-Coastal Command, Great Britain, operational flights as far as Iceland

Flight Lieutenant E. L. HOWEY, D.F.C. As member of Demon Squadron, took part in several 1,000-bomber raids on Germany

Flying Officer J. C. MORDEN-34 operations in Wellington bombers; service in Egypt and Libya

Flying Officer C. R. FOGAL-service in Scotland, Gibraltar, North Africa

Their tours of duty over and physically fit, these men are now learning air line procedure. Link instruction in instrument flying is an integral part of this training.

WHEN WRITING YOUR SERVICE MAN, USE V-MAIL-IT GOES BY AIR

CONGRESSIONAL GROUP ON WEST COAST:

Western Air Lines was host to the House Interstate and Foreign Commerce aviation subcommittee when the group visited Los Angeles late this month on its field study of aviation's post-war possibilities. The subcommittee toured aircraft plants and conferred with plant officials at Los Angeles, WAL headquarters. In the group here are, left to right, Thomas

Wolfe, Western's traffic vice president; Edward P. Warner, Civil Aeronautics Board vice-chairman; Reps. Joseph P. O'Hara of Minnesota, Carl Hinshaw of California, Subcommittee chairman Alfred L. Bulwinkle of North Carolina, and Richard F. Harless of Arizona; Leo H. Dwerlkotte, WAL executive vice president, and Elton J. Layton, committee clerk.

AVIATION NEWS . September 4, 1944

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SIGNING TWIN-CITIES COMMISSION CONTRACT:

Chairman Lewis G. Castle, the Minneapolis-St. Paul Metropolitan Airports Commission, signs the contract which gives his group control over all airport activities within a 25-mile radius of the Twin Cities. The Commission was created by the Minnesota legislature, which also provided a \$1,000,000 appropriation for airport development. At left is Robert G. Aldrich, Commission director; center (standing) Mayor John J. McDonough of St. Paul; right, Mayor Marvin Kline of Minneapolis.

from operational questions, while the manufacturers' basic interest is in the planes themselves.

Neither group has had a meeting, although members of both are studying the problems. Before any policy is formed, there will be an interchange of ideas, and it is interesting to note that at that stage —when some preliminary decision is reached—the Air Line Pilots Association will be called upon for its views.

Dopposed Weight Increases-This is the group that so vociferously and effectively opposed landing and takeoff increases at a Civil Aeronautics Board hearing not long ago. Manufacturers and the airlines and Civil Aeronautics Administration engineers argued that the increases were practical but the CAB declined to permit them and the pilots won out.

Since landing and stalling speed requirements are high on the list of subjects for discussion, it is obvious that the pilots here again will have a lot to say about any proposed changes.

fore those interested in CAR modification are intent on seeing that

speeds imply no decrease in safety standards. This inevitably involves improved landing facilities, as higher approach and landing speeds obviously would require more space. A spokesman for the Chamber group says the ARC is interested in two primary considerations: increased safety and increased service to the public.

Questions put to the ARC subcommittee by Chairman G. S. Schairer of Boeing in anticipation of the meetings it is to hold soon, probably in the Los Angeles area, deal with desirability of the present regulation permitting takeoff continuation subsequent to engine failure occurring prior to unstick speed; possible simplification of present rules from an interpretation or testing standpoint; the present 80 mph stalling speed requirement; the "fundamental problem" of definition of approach speed and approach stalling speed; stability regulations and whether they result in a good flying airplane or "use of crutches which are deleterious to good flight characincreases in landing and approach landing gear; need for two engine

flight requirements on four-engine airplanes with respect to allowable gross weight, particularly for overwater operation; proposals that passenger air carrier aircraft be licensed automatically at a higher gross weight by percentage for cargo, and stalling speed modification therefor; and cooling requirements.

Schairer urged the committeemen to consider these questions not only as manufacturers but "more particularly from a standpoint of the airline passenger since the rules have been set up by definition to protect the airline passenger."

Army Plane Returns May Hit 298 Ceiling

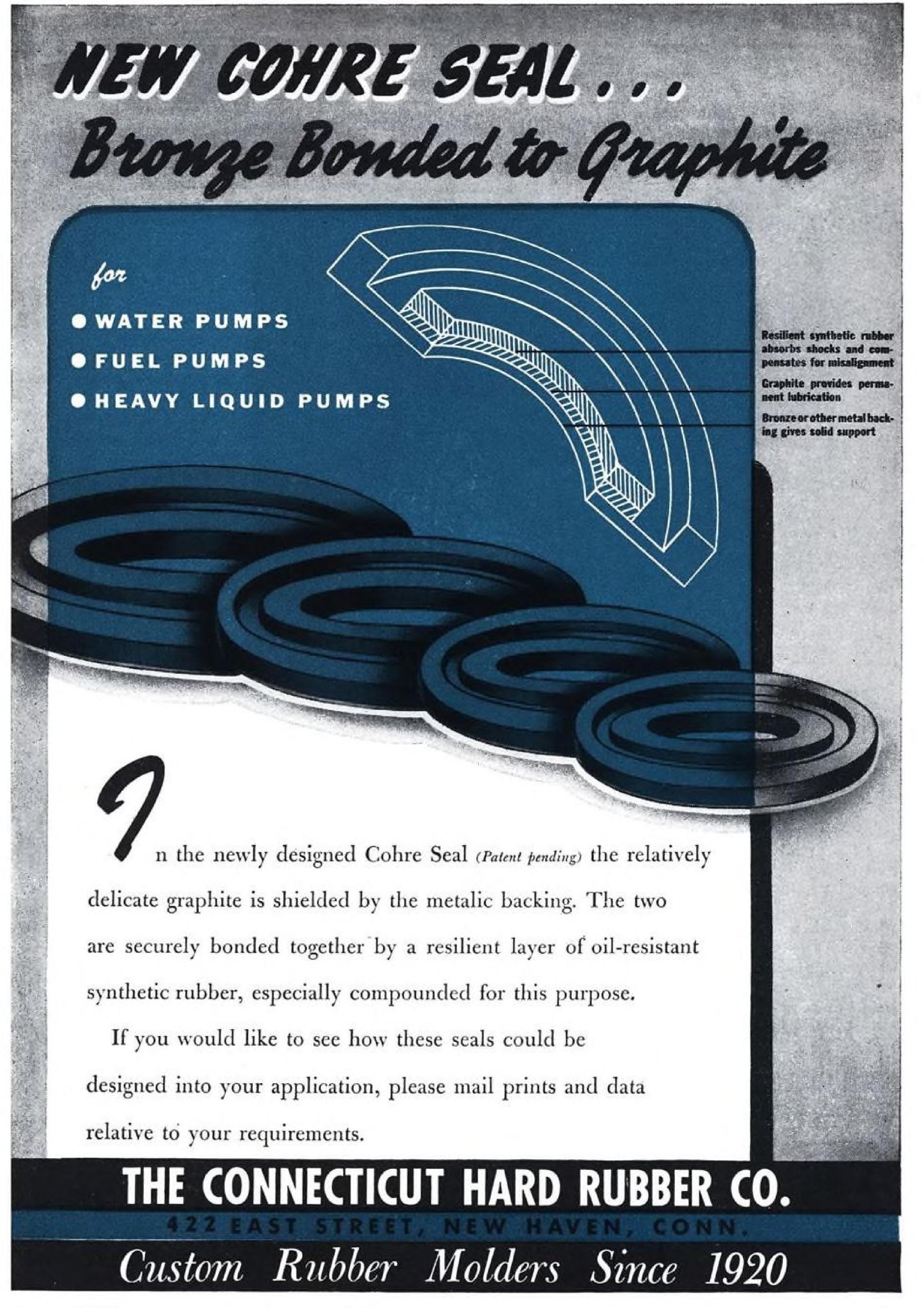
Informed airline circles doubt that the number of planes returned by the Army will reach the 300 limit set for the airlines by executive order. The equipment total is expected to stop at 298.

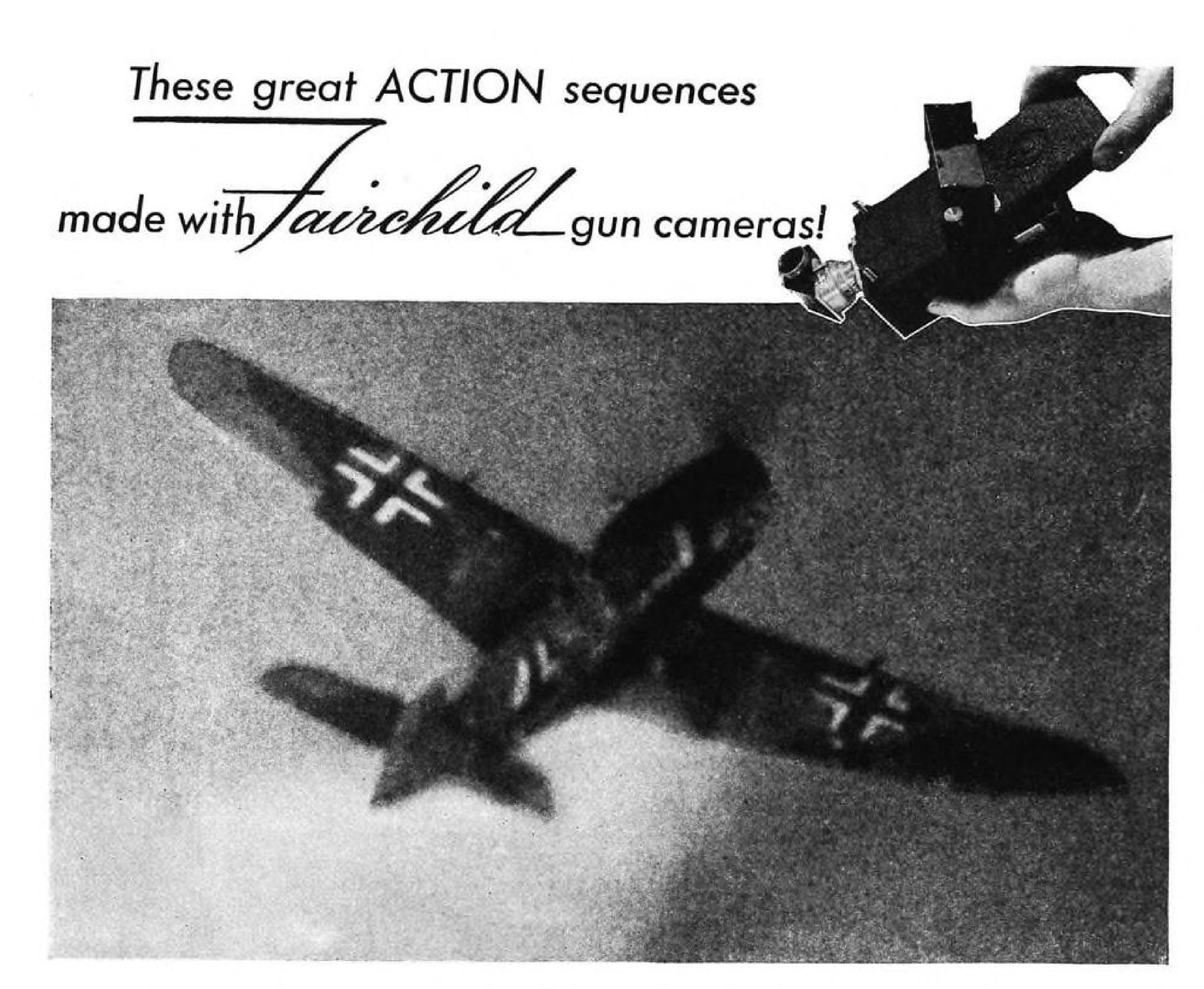
Reason is that the Army, these sources say, arrived at 300 arbitrarily as the number calculated to bring seating capacity to what it was when the big takeover occurred in May, 1942.

▶ Larger Craft Returned — Since some Douglas DC-3's have gone to Mid-Continent and Continental, in place of the smaller Lodestars they gave up, total pre-takeover seating capacity is expected to be attained before the unit ceiling is reached.

Civil Aeronautics Board people conversant with the situation feel however that the unit ceiling will be reached, and see no reason why more planes should not be turned over to the airlines if the Army can spare them. The 300 ceiling, which increased the former limit by 100 planes, was the Army's idea in the first place, the CAB recommending that the previous ceiling be removed entirely.

Various Types Released—Airline equipment now stands at 274 units. compared with 324 before the 1942 reduction, which cut the airlines to a low point of 166. The first 57 returned after the 200 ceiling was raised were DC-3's. Since then various types have been allocated. They include three DC-3's to Mid-Continent, two to Continental and one to Inland, five Boeing Stratoliners to TWA, two DC-2's Guard Safety Standards—There- teristics"; hot day takeoff prob- to All American Aviation, two lems; rate and angle of climb; Lockheed Electras to Essair, and icing; reversible pitch propellers; two Lodestars to National, bringing the total to 274.





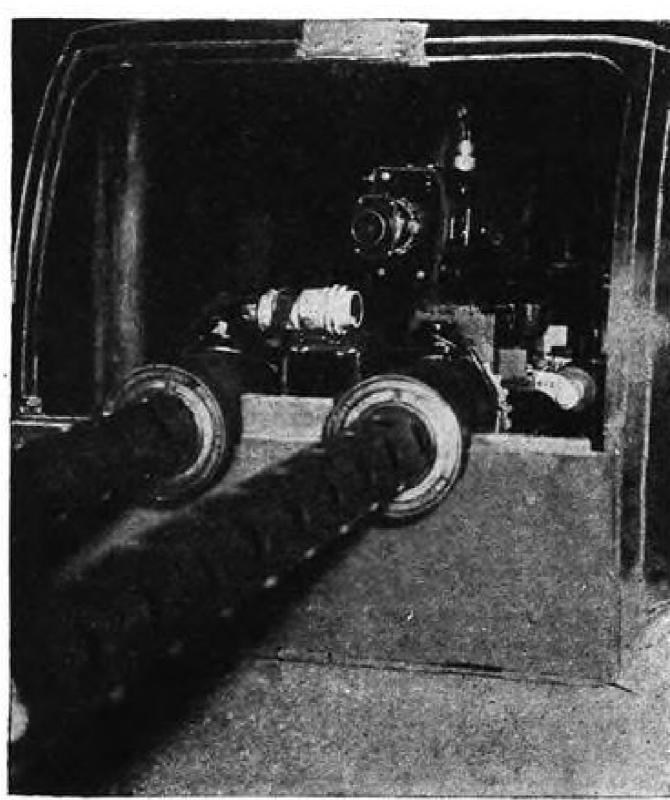
In newsreels recently, you've probably seen plenty of movie sequences showing Messerschmitts, or Zeros, being literally 'blasted' from the skies. These pictures were taken originally not to furnish you with entertainment; rather, to furnish our armed forces with indisputable proof of enemy planes destroyed!

These pictures are taken with a very unusual type of 16 mm movie camera . . . known as the Fairchild GSAP. Mounted close to the plane's guns, and to follow the bullets' course, these cameras automatically 'grind' while guns are firing, and stop only after the last bullet has reached the target or the target area.

You might well ask . . . "how can such a light, compact 16 mm camera operate so dependably in face of the incessant pounding and vibration from engines and guns?" The answer, of course, lies in its unique design and in its precision manufacture. Designed in cooperation with U. S. Army and Navy experts, it is built to the same precise standards which have kept Fairchild constantly in the aerial camera lead.

It's the kind of camera every movie owner some day hopes to own.





The Fairchild Gun Sight Aiming Point Camera is mounted close to the guns, to record all action.

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THE STORY OF AERIAL PHOTOGRAPHY IS THE STORY OF FAIRCHILD CAMERAS

New TACA Subsidiaries Revive Rivalry with PAA in So. America

Acquisition of Venezuela and Colombia routes shifts ancient battle for Latin trade from Mexico and Central America to lower half of Hemisphere.

Renewal of an old airline rivalry in a new setting—South America —is evident in announcements by TACA of new subsidiaries in Venezuela and Colombia. Farther south on the continent, TACA has a line operating in Brazil, and plans an Argentine company when U. S. relations with that country improve.

This expansion is viewed as TACA's bid for some of Pan American Airways' business in South America and will transfer the contest long existing between the two lines in Central America. With permits granted by the Mexican Government for TACA to begin service into that country from El

Salvador, and by Guatemala for TACA to resume routes there which were discontinued several years ago, TACA has scored two signal victories over Pan Amer-

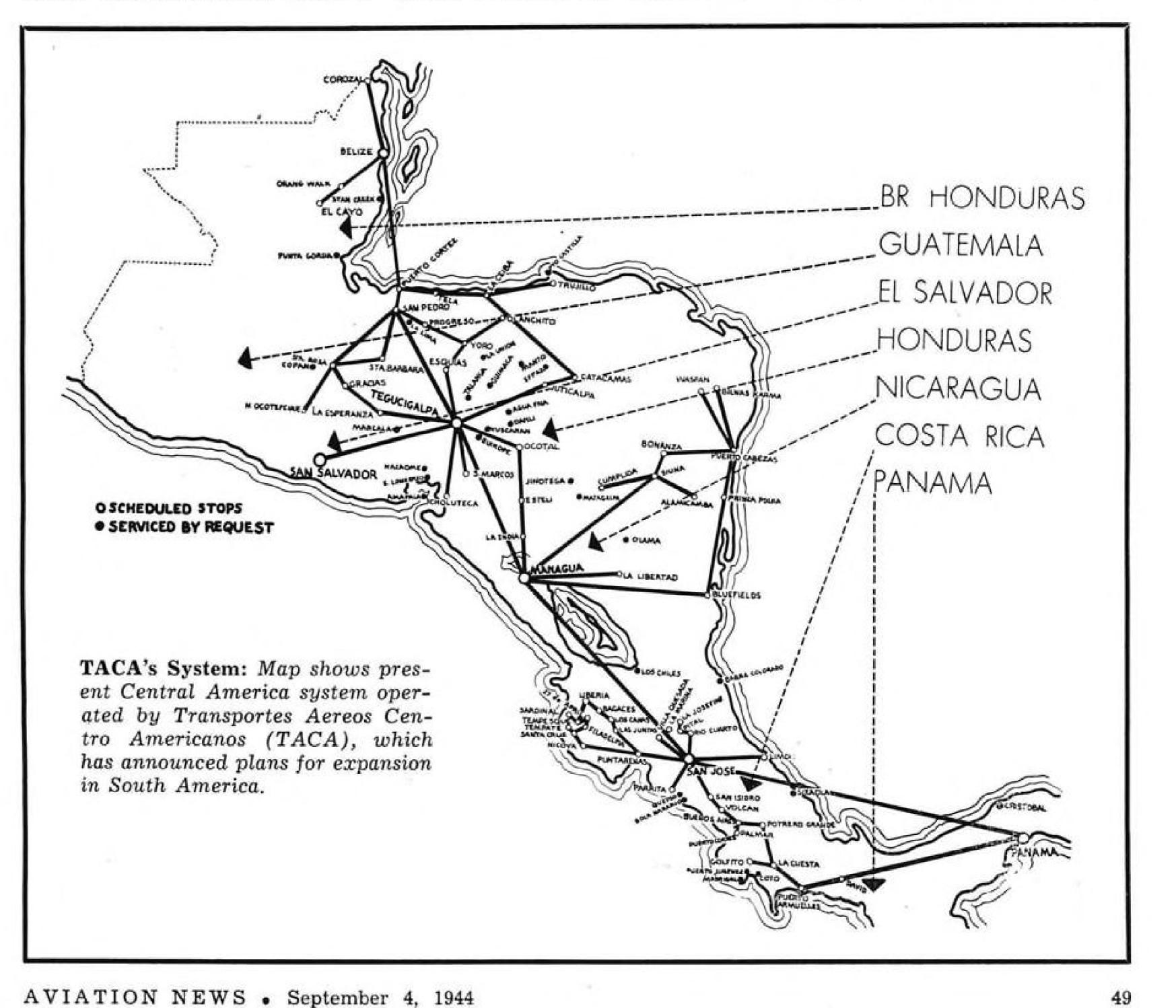
Mexican Front — Re-entry of TACA into Guatemala is a direct outgrowth of the recent political upheaval in that country. According to TACA sources, the line pioneered air service in Guatemala, furnishing fast transportation for chicle and increasing tremendously both the amount marketed and the country's revenue. The then president, Jorge Ubico, was prevailed upon to accept discarded planes of another airline, technical

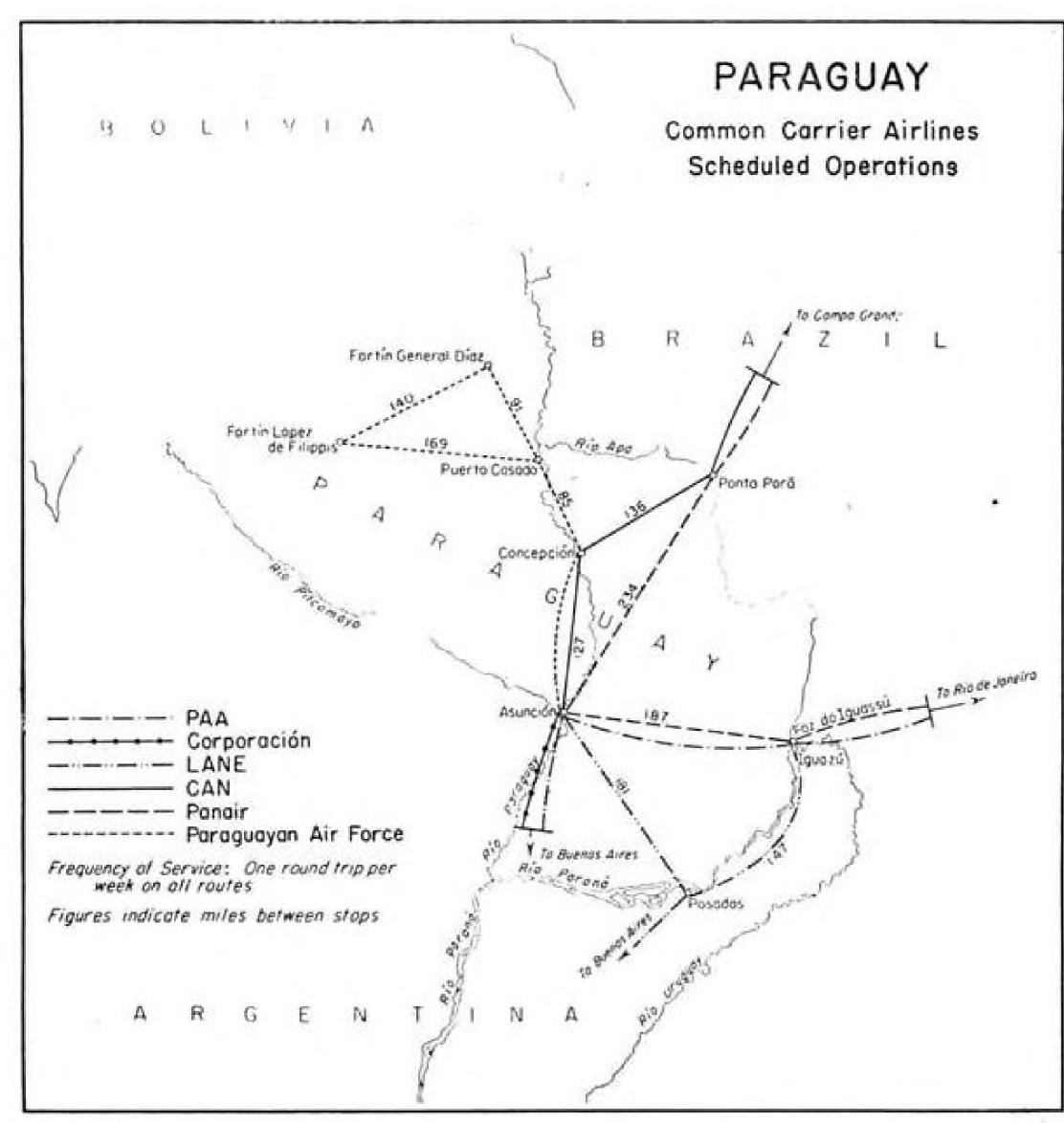
and maintenance assistance and launch a Guatemalan national air service. Without preliminary notice, TACA fields were taken over and the line ordered to cease Guatemalan operations.

After Ubico was deposed last Spring, the new president sent for TACA's president, Lowell Yerex, and offered a new franchise. Yerex has agreed to take over the chicle trade again, but resumption of service must await equipment.

May Get Army Equipment— TACA officials have been active in Washington recently and the promise of used Army aircraft is now definitely bright. It is believed that this circumstance, combined with others, is the reason Yerex recently turned down an offer by British interests to buy control of the Central American system. A TACA spokesman declares Yerex refused the British bid "for the express reason he expected certain things from this (the U. S.) government."

It is pointed out that TACA is





Paraguayan Air Services: Twice the size of Great Britain, Paraguay offers excellent opportunities for development by air; it has only 300 miles of public railways, 445 miles of private industrial railroad, and 3,760 miles of roads. Six airlines are operating there, including LATN, Paraguayan Air Arm line. Others include Pan American; Corporacion Sudamerica de Servicias Aereas, S. A. (Argentina); Linea Aerea Nord Este (LANE, Argentina); Correio Aereo Nacional (CAN, Brazil); and Panair do Brasil, affiliate of Pan American Airways System.

percent of the stock, and it should cargo. be handled by the U.S. government in the same manner as any other U.S. line engaged in foreign operations. The line seeks an even stronger U.S. tie-up in its application for permanent Miami service. If this is granted, plans are to construct a major base inasmuch as all TACA's planes are manufactured in this country and the company has felt handicapped in not having a domestic delivery point for its aircraft.

▶ Has 50 Planes—TACA's present fleet of some 50 airplanes range from DC3's to old Ford tri-motors, and include the only two "flying tankers" in existence. These each carry 4,200 pounds of diesel oil to supply gold mines at Neptune and La Luz, Nicaragua.

The oil trade is only one feature lines operating in Paraguay. service with a five-passenger Stin- government, which will donate Bulwinkle Bill.

now a U. S.-owned line, with son 12 years ago in Honduras. Last TWA, Inc., holding roughly 29 year, TACA flew 12,000 tons of

Paraguay Organizing National Airline

LATN to be operated by country's Air Arm Command carrying passengers, cargo and mail.

The Paraguayan government has authorized establishment of a national domestic airline known as Linea Aerea de Transporte Nacional (LATN), operated by the Paraguayan Air Arm Command, to carry passengers, property and

In addition to being an instrument for internal development, the that the question of other states' new line may offer considerable rights was not before it. Individcompetition to the five other air- ual justices voiced the belief that

of the cargo operation developed > Heavily Underwritten-The line by Yerex since he began an air is heavily underwritten by the a result of this expression was the

five planes valued at 550,000 guaranis (\$177,750) to begin operations. A three-man directorate, headed by the Commander of the Air Force, will manage the line.

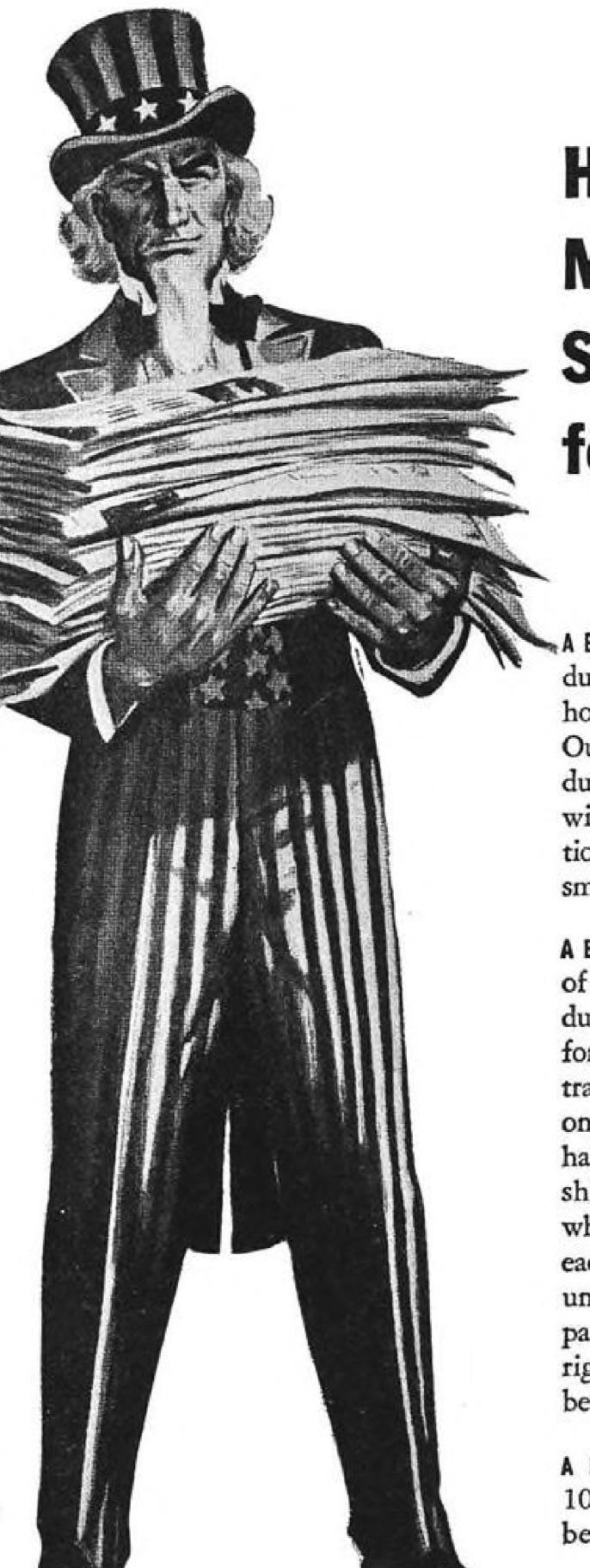
LATN already has several special privileges including exemption from all present or future government or municipal taxes. It may use Air Arm Command bases under conditions to be established in each case, and may establish offices in each Paraguayan post office. It also is enpowered to enter into agreements with other airlines looking toward improvements of service.

Ryan to Name Airline Tax Study Group

National Advisory Committee to aid CAB in investigation of multiple levies.

Oswald Ryan of the Civil Aeronautics Board expects to name this week a national advisory committee to assist CAB in its study of multiple taxation of domestic air The board's recommendations for a solution of the multiple tax problem must be delivered to Congress within six months from the passage of the Bulwinkle Bill ordering the investigation and instructing CAB to consult with state and local governments during the investigation. The President signed the measure in July. Headed by Mitchell—At Los Angeles, Ryan said the committee appointed by him as chairman of the investigation will not be unduly large but will be adequate to give full representation of the taxing views of states as well as air lines. The Board has appointed George W. Mitchell, tax economist of the Federal Reserve Bank of Chicago, to direct the study.

The investigation will be important to air carriers because of the significance of the May 15 Supreme Court decision supporting Minnesota's taxation of Northwest Airlines to the full value of its fleet, although half a dozen other states also taxed the same equipment. Although sharply divided, the Supreme Court majority held that Minnesota was justified in its taxation as Northwest's domiciliary state. The high court held also the problem of multiple taxation was one for Congress to settle, and



How Four Leading Manufacturers are Helping Save Precious Paper for Uncle Sam

A BIG OIL COMPANY—"In 1943 we reduced the number of issues of our house publication from 12 to 6. Our employe house organ was reduced in size as were our dealer window displays, and all promotional material was kept to the smallest possible size."

A BIG DRUG COMPANY - "The weight of our corrugated board was reduced to the minimum necessary for protection to our goods in transit. The weight of board used on some items was cut almost in half. We increased the pack per shipping case on many items where doubling of the quantity in each case would not result in an unwieldy or hard-to-lift unit. Nests, partitions and liners were dropped right and left. Package insets have been dropped except on one item."

A BIG CHEMICAL COMPANY - "Where 100-pound basic-weight paper had been specified as desirable, the

lightest practical weight is now used. All pieces and forms are carefully checked for reduction to next standard smaller size, excessive margins, and number of pages or parts. The Company has adopted single typewriter spacing where practical, typing on both sides of the sheets, pruning lists, and all such miscellaneous practices. Wastepaper at our plants and offices is not burned but baled to reach paper mills for conversion."

ANOTHER BIG DRUG COMPANY—"In 1943 we stopped issuing an almanac. We had been sending out around twenty million. We also discontinued our small booklets, the edition of which was some thirty to thirty-five millions. For 1944 we kept the ban on booklets and also cut out the printing of twenty million calendars."

These quotations are from reports to the A. N A. Paper Committee





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Airport Management Leaders Hold 1st Southeast Conference

Existence nearby of wartime Army fields, lack of state financing programs, "big airport" thinking and dearth of trained personnel among topics discussed at Alabama Polytechnic Institute talks.

By WILLIAM G. KEY

Although airport planning in the southeast is not so far advanced as in some other sections of the country, more than 100 city, state and county officials last week attended the first Southeastern Regional Airport Management Conference at Alabama Polytechnic Institute in Auburn, Ala.

States with aviation commissions have been more active than others in preparing programs. But even in those states there has been some lethargy in communities.

Several factors involved drew major interest in the discussions: The existence of many army fields relatively near these towns throughout the southeast.

Lack, in many instances, of state financing programs both for construction and maintenance.

something this conference was designed to counteract.

A dearth of trained personnel that forces, in some states of the

section, almost total reliance on an understaffed Civil Aeronautics Administration to advise cities and towns as fast as might appear profitable from planning standpoint.

In addition to the community officials, CAA, airline airport experts, fixed base operators, personal aircraft manufacturers and state and city aviation officials attended the sessions, sponsored by the college, the CAA, and the Alabama Aviation Commission.

S. C. Program—Considerable interest was expressed in the South Carolina airport program, under which it is proposed—and it can be done by the law creating its aviation commission—that the state the biggest task lies in assistance take over and operate all airports. The state now maintains these airports, except where they are un-"Big airport" thinking, which is der lease to the services, financing its program by a six-cents-a-gallon gasoline tax that goes direct to the commission.

The commission has been in op-



NATIONAL STARTS WEST PALM BEACH SERVICE:

National Airlines' recent opening of service to West Palm Beach, Fla., on AM 31 brought O. B. Carr (left), chairman of the welcoming committee, to greet Capt. E. J. Kershaw, National's vice president in charge of operations, who piloted the first plane into Morrison Field. Left to right, besides Carr and Kershaw, are MacDonald Bryan, NAL publicity director; Margaret Watson, assistant chief stewardess; Capt. Dave Gannon, division operations manager; and Fletcher C. Reams, assistant station manager at the Palm Beaches.

eration six years, now has a staff of 75 persons and maintains machinery and crews for the airport maintenance program as well as engineering and research divisions. ▶ War Effects Evident—Some concept of the impact and the benefits of the war in southern states can be gained from the airport statistics of South Carolina. Before the war, the state had four paved airports. Today there are 26. The Army controls all 26 today, probably will turn virtually all back.

Alabama, with 20 designated airports now, will have 30 additional ready for construction when the war is over. Mostly Class One and Class Two ports. In all, the state will have 115 under the CAA master plan. The program of 30 being prepared as the first unit in the building up of the overall plan.

South Carolina, Alabama and Tennessee have active state commissions, with Tennessee's being primarily aimed at an educational program. Other states have advisory committees, but the planning responsibility is chiefly that of cities and counties, and the attendance at Auburn indicated that to communities interested in aviation yet not having the technical experience in the community to take advantage of that interest.

Ship Firms See Loss In Trade to Airlines

United Fruit official stresses need of steamship owners to offset competition by air services.

Additional evidence that steamship operators are becoming increasingly concerned with the competitive effect air transport will have on their passenger traffic was supplied last week by William K. Jackson, vice president and general counsel of United Fruit Co., who said "it is generally conceded that within five years steamships will have lost to the airplane from 50 to 80 percent of their present passenger travel."

Steamship companies seeking to offset this competition by operating air services themselves, stress the point that they expect to be able to operate such services without government subsidy. They point to the fact that previous United States air service to Central America has been heavily subsidized, although many steamship lines have operated without subsidies.

Exhibits Filed — United Fruit

Co.'s views were outlined in exhibits filed with the Civil Aeronautics Board as the company's presentation of its case in the Latin-American proceeding, scheduled for hearing Sept. 18.

In describing the United Fruit exhibits, Jackson also touched other points generally indicative of the steamship operators' position. They included the following:

Heavy war losses sustained by steamship operators make coordinated air-steamship service "absolutely necessary" if they are to maintain their former position in passenger trade: Steamships require considerable time to replace, but air service would bridge the interim.

▶ Subsidies—Government subsidization of future shipbuilding would be highly uneconomical unless measures to insure the ships' fullest use are taken. Combination ship-air services would develop both forms of travel.

Steamship companies have maintained experienced staffs in Latin America for many years. These would be available for serving passengers under coordination.

If permission to operate air services is not granted steamship lines, competition from air lines may curtail their profits so seriously as to require government subsidy to maintain a merchant marine.

Suburban Service

Parks Air College is thinking about extending the shuttle idea contemplated in its feeder line proposals to fast suburban services at the St. Louis, Chicago and Detroit metropolitan areas.

Some of the planners in Parks Air Transport, Inc., the prospective feederline operator, visualize as many as a dozen round trips a day on four or five routes out of each of these centers.

Closest to the type of plane these officials believe would be necessary for the operation is Consolidated's Model 39. They say they may ask manufacturers to bid on a 60- to 80-passenger plane with 150 mph. cruising speed and 65 to 70 mph. landing speed, figuring about 30 would be needed in each place where this type of service was provided.

Both local and express service will be offered if their plans are realized.



Specifications for the construction called for the utmost precision in the finishing of the small gears into the assembly of the B-24's Cowl Flap Screwjacks. As can be imagined, burring and other finishing operations had to be carried out with considerable delicacy to stay within the extremely close tolerances.

How to burr and finish these gears? That was the problem. The manufacturer, Lear Avia Inc., Piqua, Ohio, as so many others, turned to LEA for the answer. A LEA technician visited the plant, studied the operating requirements and recommended the methods and compositions. Changing to the LEA Method resulted in considerably increased production and reduced assembly rejects.

To those who may be doubtful as to the cost, speed, or effectiveness of their burring, polishing or buffing operations, LEA technicians will be glad to give the benefit of their many years of experience along these lines.



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AIR NAVIGATION MADE EASY

By James Naidich, Chairman, Department of Mathematics, Manhattan High School of Aviation Trades; C.A.A. Instructor in Air Navigation.

This practical manual presents an unusually simple and direct explanation of the air navigation actually needed by civilian pilots. It deals with the two basic types of navigation, air piloting and dead reckoning, showing you how to read maps, fly by landmarks, measure direction, use the com-pass, correct for wind, plan a trip, and locate position in flight. Here is all the information you need to pass the air navigation questions in the examination for private pilot's rating, clearly explained and illustrated. 124 pages, $7\frac{3}{5} \times 10$, 98 illustrations, \$1.75

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Parks Makes Mail Pickup Optional

Air College revises application to offer feeder system with or without postal service.

Parks Air College, E. St. Louis. Ill., is preparing changes in its application for a feeder airline system in order to present to the Civil Aeronautics Board a system with or without mail pickup.

The system without mail pickup would materially speed schedules by eliminating several points now designated for pickup. The alternative plan is contemplated in line with current official thought in Washington, which questions the feasibility of using passenger planes for pickup service.

Non-Pickup System—Details of the non-pickup system are incomplete. The combination passenger, cargo and mail routes now proposed would provide service to 481 mid-Western communities with 35 routes emanating from five strategic bases.

The routes are arranged to shuttle planes periodically into the main base at E. St. Louis for major overhaul. Maintenance and repair will be handled at bases in Chicago, Kansas City, Indianapolis and Tulsa. The routes interlock to give system-wide avail-

Mileage 14,769 — Parks Air Transport, Inc., is the operating name of the feeder airline. Total mileage planned for the combination service of 14,769 would directly serve a population of 12,106,249, not counting the base cities.

Oliver L. Parks, president of Parks Air College, is planning to carry passengers at 4 cents a mile. He figures total cost of operation at 35 cents per plane-mile, with 1,083 personnel and a monthly payroll of \$216,725.

▶ 50 Beechcraft Planes Ordered— On order are 50 twin-engine Beechcraft 18S planes, delivery contingent upon favorable action of the CAB.

Distribution of passenger and cargo space is still under consideration, proposals for the passenger load being between four and eight. Each plane is to have a co- Kan. pilot acting also as mail clerk.

The planes are to cruise at 170 mph at less than 1,000 feet altitude and are figured to average 120 mph over-all on the routes. Six minutes is allowed for each in- Moines, St. Paul. termediate stop and ten minutes

Service Changes

Airline service changes reported to Civil Aeronautics Board, effective Sept. 1 unless otherwise noted:

American—Resumption of service at Elkins, W. Va., on AM 25; additional round trip daily except Monday, cargo only, New York-Chicago on AM 7; additional round trip daily, New York-Dallas, AM 23; on Sept. 15, additional round trip daily New York-Detroit on AM 7; also on Sept. 15, additional round trip daily New York-Chicago, cargo only east bound except Sunday when passengers will be carried, west bound passengers daily.

Braniff-All Sept. 5: additional round trip daily Chicago-Dallas on AM 9, Houston-San Antonio on AM 50; Dallas-San Antonio on AM 15, San Antonio-Corpus Christi on AM 15 and Dallas-Houston on AM 15; also opening service at Austin, Tex., on AM 50.

Chicago and Southern-Opening service to Greenwood, Miss., on AM 8.

National—Resuming service at Sarasota-Bradenton, Fla., on AM

PCA-Additional round trip daily, Washington-Pittsburgh on AM 14, Norfolk-Detroit on AM 14, Pittsburgh-Buffalo on AM 46, Norfolk-Washington on AM 14, and Washington - Baltimore on

United-Additional round trip daily except Sundays, Mondays and days after holidays, cargo only, New York-San Francisco

Western-Opening service at Ogden, Utah, on AM 19; additional round trip daily Salt Lake-Los Angeles on AM 13, Los Angeles-San Diego on AM 13, and Butte-Salt Lake City on AM 19.

Two Daily Round Trips - Two round trips a day, seven days a week, are scheduled.

The system is planned to supplement major airline service in a territory of some 6,000 square miles, running northeast to southwest about 800 miles wide between Minneapolis and a point 300 miles north of Detroit on the north and to Dallas and Amarillo on the south and west.

Base points and the terminals of routes emanating from them:

E. St. Louis-Memphis, Tulsa, Kansas City, Detroit, Indianapolis, Chicago and Davenport, Iowa.

Kansas City-Sioux City, Des Moines, St. Louis, Little Rock, Tulsa, Grand Island, Neb., and Hays,

Indianapolis — Toledo, Columbus, Nashville, Cairo, St. Louis, Chicago, Davenport.

Chicago—Pontiac, Midland, Sheboygan, Escama, St. Louis, Des

Tulsa-Kansas City, St. Louis, for connecting and terminal stops. Fort Worth, Amarillo, Dodge City.

Cargo Plane Rules

Increasing use of domestic airline planes for all-cargo flights has brought up the general question of Civil Aeronautics Board safety regulations governing cargo flights. The Board will undertake a review of cargo regulations as soon as passenger regulations have been overhauled.

Among questions CAB will consider is the advisability of relaxing the general regulations to permit less stringent performance characteristics for cargo planes than those required for passenger ships.

The fact that cargo planes will operate in the same traffic with passenger ships has caused some question as to the advisability of any substantial lowering of requirements.

CAA to Open Navy's Bermuda Control

The Civil Aeronautics Administration will open and operate an approach control center for the Navy at Bermuda as soon as necessary equipment can be installed. The center will be responsible for the safety and expedition of all aircraft within a 150-mile radius and will be similar to a normal airport approach control system extended over a considerable water area.

Headed by CAA Expert-The center will be headed by a CAA veteran traffic expert, Arney C. Leathers, formerly chief of the CAA airway traffic control branch at Kansas City.

Staff of the center will include eight controllers, four teletype operators, a radio supervisor, four radio operators, and 2 clerks.

The CAA undertook the project at the Navy's request, with the latter assuming expenses. The center is expected to be in operation within two months.

Essair Reconverts

Essair, Inc., is reconverting two Lockheed Electras for use on the Texas route for which it has been certificated, but officials doubt actual operation will begin for at least another month. Efforts are being made to obtain a third plane. Reconversion, being done at Dallas, is being pushed on one ship in the hope that it may be completed and equipped in a month for pilot training and familiarization flights.



AVIATION NEWS . September 4, 1944

SHORTLINES

Chicago and Southern's president Carleton Putnam has announced that operation of the Memphis-Detroit segment granted his line in a recent Civil Aeronautics Board decision will require three DC-3's to begin day and night service. Only additional navigating facility required will be a medium power radio range at Paducah, Ky.

Salary provisions in a working agreement between Mid-Continent Airlines and the Air Line Dispatchers Association have been approved by the National Railway Labor Panel. The Association also discloses revision and renewal of the working agreement between United Airlines and the flight dispatchers it employs. Pan American - Grace Airways, calling attention to completion of the second year of its all-cargo service, reports that volume of air shipments increased steadily in the two-year period. Cargo on the service increased from 1,330,000 pounds in 1942 to 2,000,000 in 1943, while air mail went up from 242,000 pounds to 280,000 pounds. Panagra plans to use four engine, high speed transports on its South American routes after the war.

Pennsylvania-Central Airlines announces that the 43,856 passengers it carried in July constituted the



3 DC-3's for WAL

Sharp increases in seating capacity of four Western Air Lines divisions will be effective this month when the company receives three additional DC-3's.

Tom Wolfe, Western's vice president of traffic, reports the equipment will permit more schedules and result in a 50 percent increase in seating capacity on the Los Angeles-Long Beach-San Diego division, 25 percent on the Los Angeles-Salt Lake City division, 100 percent on the Los Angeles-San Francisco division, and 100 percent on the Salt Lake-Lethbridge, Canada, division.

Western's Los Angeles-San Francisco schedules will be doubled Sept. 15, when six daily round trips will be flown.

largest number for any month in its history. The figure was 72.7 percent higher than July, 1943, when the line had four fewer planes in service. Between 11 and 12 units were in service during July this year.

▶ Braniff Airways carried 23,744 revenue passengers during July compared with 18,557 in June and 15,-908 in July, last year. Braniff, which received the first of a series of returned planes July 6, boosted its July plane miles to 488,233, against 402,744 in June and 360,167 in July last year.

Addition of another DC-3 to Northwest Airlines' fleet will enable it to increase service between the Twin Cities and Chicago to 11 round trips daily, effective Sept. 20, the line announces.

▶ The Transportation and Public Utilities branch of the Canadian Bureau of Statistics announced that Canada's Air Lines carried 30,166 revenue passengers during April, compared with 22,580 in April last year and 29,513 in March. Revenue freight carried declined from 835,-779 pounds in 1943 to 762,878 pounds, and mail also declined from 615,941 to 561,389 pounds. Freight ton-miles and mail ton-miles, however, showed increases of 10 and 8 percent.

New UAL Record

United Air Lines estimates that all-cargo flights will give it a 1944 mail record of approximately 30 billion pound - miles - nearly as much as the 31,727,000,000 poundmiles carried by all domestic air lines in 1941. John J. Hart, United's manager of postal service, cites conservative estimates that the Post Office will receive a 50 to state. Provision for state regula-70 million dollar profit on air mail tion of such carriers is contained for the fiscal year just closed.

· Civil Aeronautics Board has begun action on a portion of National Airlines' application for additional points on its Jacksonville-New York route. The application asks to include New Bern, N. C., Washington, D. C., and Newark, N. J., on AM 31. CAB will consider only New Bern at present inasmuch as it is an unconsidered remainder of the proceed-ing in which National was awarded the Florida-New York route.

CAB ACTION

· Plans for holding CAB's West Coast hearing in Los Angeles have been changed because hearing rooms are unavailable there in mid-October. The proceedings will now be held in San Francisco's Civic Auditorium beginning Nov. 1. The San Francisco Chamber of Commerce has assured the Board that sufficient hotel accommodations will be avail-

 The Board authorized non-stop service over Braniff Airways AM 15 between Dallas and San Antonio, Texas, beginning Sept. 1.

· Missouri-Kansas-Texas Railroad Co. and Missouri-Kansas-Texas Railroad Co. of Texas have filed petitions to intervene in several applications included in the Texas-Oklahoma feeder case.

• Pan American Airways has filed notice with CAB that it intends to operate nonstop between San Juan, Puerto Rico, and Fort de France, Martinique.

· Lawrence van Ryn has asked the Board to dismiss his application for a Detroit-London route which was included in the North Atlantic proceeding.

 Department of the Interior has petitioned to intervene in the Hawaiian case (Docket 851 et al.).

• The Board refused to permit Beech Aircraft Corp. to intervene in the North Central States, West Coast, Rocky Mountain, and Great Lakes-Florida cases. In all of these proceedings considerable discussion of performance statistics of the Beechcraft 18-S as a feeder plane led the manufacturer to seek entry into the case. The Board feels that Beech's interests can adequately be protected without actual intervention. • Northwest Airlines received CAB permission

to operate non-stop between Great Falls, Mont., and Spokane, Wash., on AM 3. • The Board rescinded its temporary suspension of service order for Elko, Nevada, on

 Department of Justice received permission to intervene in the Florida case (Docket 489

 The Board modified certain restrictions in Pan American Airways certificates to allow the carrier to operate a service between Miami and Leopoldville, Belgian Congo, via San Juan, Puerto Rico, Port of Spain, Trinidid, Belem and Natal, Brazil, and Monrovia, Liberia. Pan American also was authorized to suspend service temporarily to Lagos, Nigeria, a point named in its certificate be-

tween Monrovia and Leopoldville. • The Maritime Commission received CAB permission to intervene in the Hawaiian proceeding (Docket 851 et al.). The Commission's interest in the case admittedly concerns the application of the Matson Navigation Co., a steamship operator seeking an air route,

• At TWA's request the Board dismissed the carrier's application to add Grand Canyon, Ariz., on AM 38 and Kingman, Ariz., on

• The Board granted a petition of the Greater Miami Port Authority to intervene in the Latin-American case (Docket 525 et al.). A similar petition of the City of Kansas City, Mo., was refused.

State Airline Bill

Draft of a proposed uniform state air carrier bill, prepared by the legislative committee of the National Association of Railroad and Utilities Commissioners, is being circulated by the association with the hope that it will be considered by nearly all state legislatures within the next year.

The bill is designed to provide a uniform method of meeting the problems raised by commercial air operations which are solely intrain the draft.

17 Lines Take Issue With Bailey, Clark

Charge two Senators gave wrong impression as to air transport industry's support of "community company" proposal in McCarran

The Airlines Committee for U. S. Air Policy, stressing the need for public hearing before Congress, took issue last week with some of the points made by Senators Bailey and Clark of the Senate Commerce Committee in their letter to the President. The Senators had asked that the administration postpone action on international routes until Congress has made further study of the situation.

The Airlines Committee, in a letter to Bailey and Clark, pointed out that all hearings held thus far in connection with the Senate Aviation Subcommittee's study of international air problems have been in executive session. Public welcome, and the airlines are looking forward to them.

Wrong Impression"-The communication accused Bailey and Clark of giving a "wrong impression" as to air transport industry's support for the "community company" proposal embodied in the McCarran Bill when the Senators wrote that "a number of important American companies" favored such a proposal. Only Pan American and United among the airlines believe in the community company idea, and 17 airlines oppose it.

The 17 understand that Congress may change policy on international air transport "but until such changes do occur, we propose to proceed under the Civil Aeronautics Act of 1938 and assert the competitive rights assured by Section 2 of that act. We trust that no erroneous impressions of uncertainty, or suggestions of hasty Congressional action, will impede the realization by the United States of the high place in international air transport to which it the bill." is entitled."

Written by Royce—The Airlines' letter was written by Alexander B. Royce and was made public at a press conference where the ap- in any quarter of the year matepointment of Royce as chairman rial and equipment equal to one of the Airlines' Committee, a post and one-third the amount authorformerly held by Sam Solomon of ized for the second quarter of 1944, Northeast Airlines, also was an- War Production Board ordered in nounced. Royce joined the com- a revision of P-47.

mittee seven weeks ago as special counsel. His letter to the Senators described their missive to the President as "disturbing" to the Committee. But he told the conference the airlines were not alarmed, that they feel there will be opportunity for hearing on overseas route applications by the Civil Aeronautics Board.

It is the Airlines Committee's attitude, Royce said, that while Congress is reviewing the law, which the 17 airlines believe should stand, nothing should be said to give the impression that changes are necessary, before anything can be done along the line of international development. Royce said he is satisfied that every government department favors regulated competition in U.S. international air transportation. Both the State and Justice Departments have informed Senator Bailey's committee that they are opposed to the chosen instrument

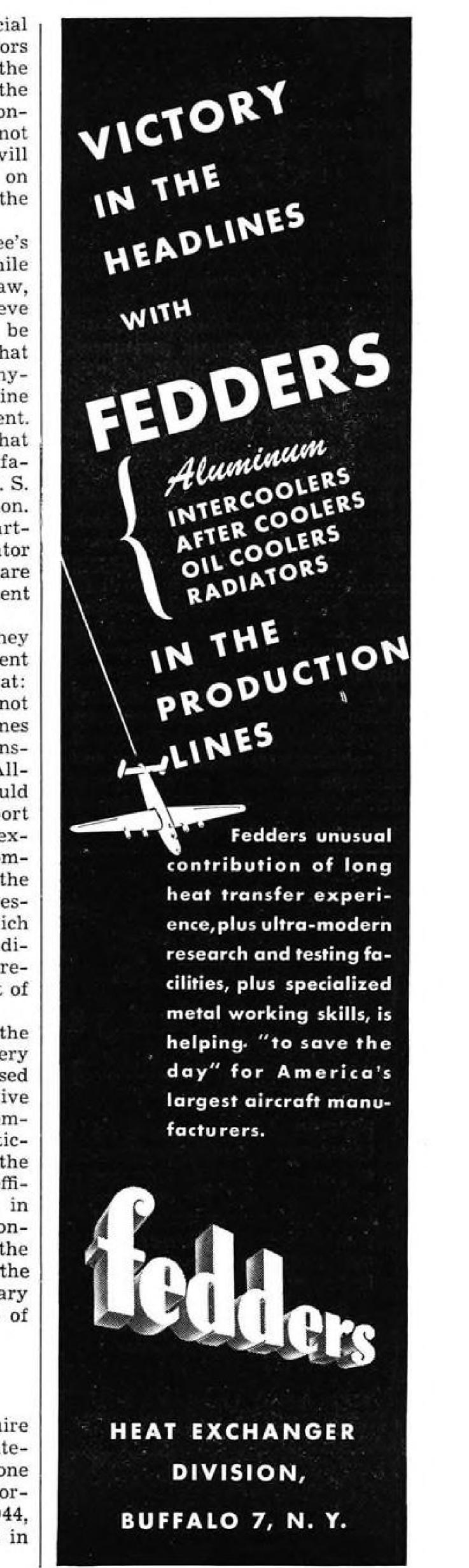
▶ Biddle's Comment — Attorney General Biddle, in his comment hearings, the letter said, would be on McCarran's bill, asserted that:

"While the legislation would not exclude other American air lines from engaging in foreign air transportation, nevertheless the "All-American Flag Line, Inc." would receive financial and other support from the government to an extent that is likely to exclude competition. These provisions of the bill involve a fundamental question of legislative policy in which the Department of Justice is directly interested because of its responsibility for the enforcement of the Sherman Act.

"I venture to suggest that the committee should consider very carefully whether the proposed plan will promote the progressive development of international commercial aviation and, more particularly, whether it will promote the development of vigorous and efficient American air commerce in the international field. In this connection, I also suggest that the committee may wish to weigh the suggestions made by the Secretary of State regarding this aspect of

Parts Curb Eased

Commercial airlines may acquire



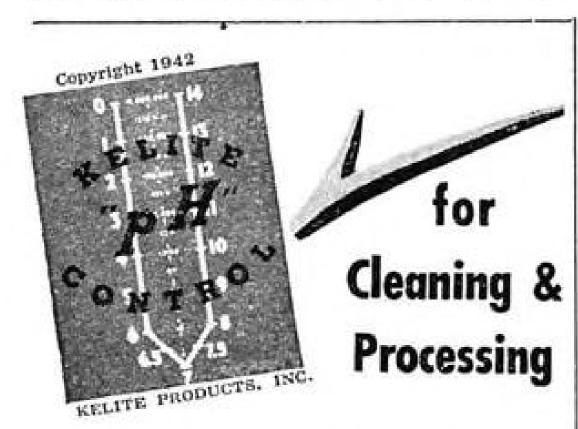
Reorganization Plan Of TWA in Effect

New transportation department, headed by John A. Collings, takes over all operating and service functions of airline.

Transcontinental & Western Air's reorganization plan went into effect last week as the new Transportation Department, headed by John A. Collings, took over all operating and service functions of the airline. TWA officials announced that the new department would avoid topheaviness by appointment of regional general managers for New York, Kansas City, Chicago and Los Angeles, within the next few months.

Personnel Expansion—The whole plan, according to President Jack Frye, looks toward a vast personnel expansion, possibly to 45,000 within a few years after the war. It is designed to expedite placement of TWA personnel now in armed service, as well as the airline's expansion plans.

As transportation vice president Collings, formerly vice president of operations, will have charge of all regional and district offices and activities as well as operations. Under him will be H. H. Gallup as operations manager, and W. F.



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58

McGrath as the traffic manager,

Among the functions the new department will handle are schedules, tariffs, public relations, passenger and cargo sales, flight and food service, reservations and ground service.

9th Regional Office Formed by CAA

Formation of a ninth regional office, covering the Hawaiian Islands and the Pacific Ocean area, with the exception of those sections included in the eighth (Alaska) region, is announced by the Civil Aeronautics Administration. The new region will extend CAA jurisdiction from the West Coast to Hawaii and beyond, in preparation for rapid expansion of commercial flying after the Pacific

▶ Headquarters Honolulu—Regional headquarters will be Honolulu, where the CAA revealed it has been operating an overseas airway traffic control center since late 1943. This center handles traffic control for aircraft operating between the West Coast and the South Pacific areas and Hawaii.

It has been very successful in providing navigational assistance to planes which have become lost on long overwater hops.

The Administration also disclosed that additional overseas airway traffic control centers are now being established on other transoceanic air routes.

Oral Argument Heard On N. Y. Extensions

Civil Aeronautics Board last week assembled the first quorum it has been able to muster in a month and heard attorneys for Northwest Airlines argue in favor of CAB examiner's recommendations that Northwest be granted a New York extension to form a fourth transcontinental carrier.

The Board was strongly urged to overrule the restriction advocated by its examiners on the recommended route, which would prevent Northwest from operating local flights east of Minneapolis-St. Paul.

▶ PCA-TWA Arguments — Attorneys for PCA likewise endorsed Chattanooga, Tenn.; and Battle the recommended extension of that Creek, Mich., are now without opcarrier's system from Pittsburgh erating airport traffic control towto New York. This was countered ers. At each of these, the tower by objections from TWA, which was formerly operated by CAA pointed out that PCA competition with Army funds.



HEADS NEW TWA POST:

Chosen to head the new Transportation Department set up by TWA's reorganization plan is John A. Collings, formerly vice-president of operations.

would likely divert nearly half of TWA's traffic over AM 2.

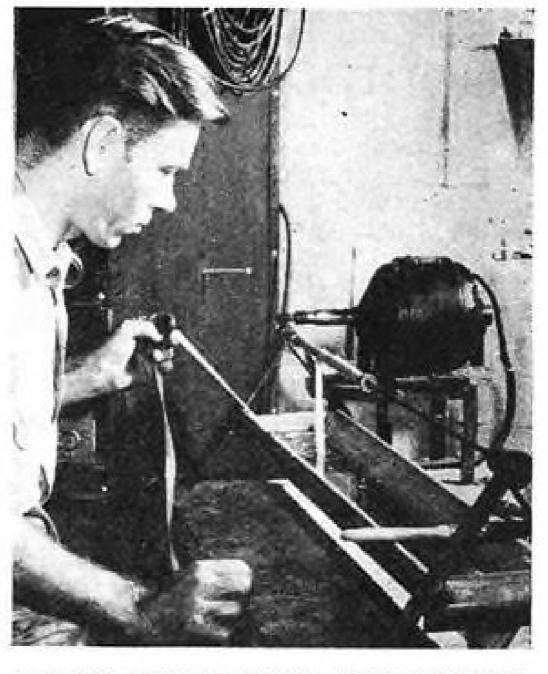
All members of the Board except Oswald Ryan were present.

Control Tower Cut Blow to Airlines

Closing of several airport traffic control towers, formerly operated by the Civil Aeronautics Administration with Army funds, is reported to have created a serious problem for airlines operating into the fields affected. The Army funds were withdrawn when the CAA was notified that the towers no longer were required for military purposes. No appropriation for CAA tower operation exists.

Opinion among the airlines seems to point to the desirability of continued federal operation of such facilities, and efforts to obtain legislation to finance control tower operation will probably be made. Airlines generally are unwilling to assume financial responsibility for such facilities, inasmuch as their use of them constitutes a small percentage of the total.

Airports at Philadelphia, Pa.; New Orleans, La.; Tampa, Fla. (municipal); Indianapolis, Ind.; Omaha, Neb.; Daggett, Calif.; Ogden, Utah; Coeur d'Alene, Idaho; Helena, Mont.; Pocatello, Idaho;



NEW CONDUIT WRAPPER:

Winding the conduit from spark plugs to ignition harness manifold with moisture-proof tape was done by hand until PCA maintenance man Charles Donovan, devised a mechanical (above) wrapper which does the job in half the time. The conduit is placed over a long motor-driven mandrel. Tape runs through a trough of dope, under a steel bar to provide tension, and then up to conduit, which is revolving and winding.

CAB SCHEDULE

Sept. 5. Hearing date for Rocky Mountain Sept. 5. Tentative hearing date for Braniff Airways proposed acquisition of control of

Aerovias Braniff. Sept. 6. Hearing on West Coast to Hawaii ap-plications (Docket 851 et al.) Sept. 10. Briefs due in the Kansas City-Tulsa-New Orleans case (Docket 651 et

Sept. 11. Prehearing conference on National Airlines' application to include New Bern, N. C., on AM 31. Sept. 12. Cincinnati-New York hearings be-

fore Examiner Frank A Law, Jr., and Barron Fredericks. Sept. 15. Prehearing conference, international route applications via the North and

Central Pacific. Sept. 18. Latin-American route hearing be-fore Assistant Chief Examiner Francis W.

Brown. (Docket 525 et al.) Oct. 1. Deadline for exhibits in the Oklahoma-Texas feeder case. Oct. 2. Exchange of exhibits in the Florida

cases (Docket 489 et al.) Oct. 2. Prehearing conference international route applications, Australia. Oct. 2. Date for exchange of exhibits in North Atlantic case. (Docket 855 et al.)

South Atlantic case. Oct. 16. Exhibits due in the New England Feeder case (Docket 399 et al.). Oct. 16. Deadline for exhibits in the South Atlantic case. (Docket 1171 et al.)

Oct. 15. Date for exchange of exhibits in

Oct. 16. Hearing date, North Atlantic routes. Oct. 20. Date for exchange of rebuttal exhibits in the Oklahoma-Texas case. Nov. 1. Rebuttal exhibits in the Florida cases due. (Docket 489 et al.)

Nov. 1. Hearing date, South Atlantic routes. Nov. 1. Hearing in the West Coast Case (Docket 250 et al.) before Assistant Chief Examiner Francis W. Brown and Examiner F. Merritt Ruhlen in the Civic Auditorium, San Francisco, Calif. Postponed from Oct. 16.

Nov. 13. Deadline for rebuttal exhibits in the New England feeder proceeding (Docket 399 et al.). Nov. 27. Hearing date for the Florida cases

before Examiner William F. Cusick (Dock-

Dec. 4. Tentative hearing date for applicants for feeder routes in the New England states. (Docket 399 et al.). Dec. 13. Tentative hearing date, North Pacific Jan. 10, 1945. Tentative hearing date, Central

Feb. 1, 1945. Tentative hearing date, Aus-

ATA Seeks Data On New Transport

Airlines to seek agreement on requirements for advanced longrange ship.

As the first step in preparation of general specifications for an advanced type of non-stop transcontinental and overseas plane, all members of the Aircraft Requirements Committee of the Air Transport Association, representing major airlines, are being asked to submit preliminary data for consideration at the next committee meeting.

Their views are being requested on 43 questions, relating to a ship which would be step beyond airliners now flying, dealing with the general purpose, passenger, baggage and crew provisions, performance, and crew facilities. This means a variety of queries under these headings, ranging from technical points on performance to such considerations as where the passenger shall put his hat. Fourteen queries deal with passenger provisions, two with crew facilities. It is expected that all the answers will be in for compilation before the next meeting, which probably will be held around the end of October.

Here are some of the matters on which the members will comment: General Purpose-Number of passengers, number of engines and horsepower, range, gross weight, and accommodations.

Passenger Provisions—Desirability of adjustable ratio of passenger and cargo space, seating capacity, doors and their location and size, whether a sleeper version should be considered, coat and hat stowage, ceiling height, food service, lavatories, pressurization.

▶ Baggage — Suggested handling, stowage location, weight, space.

▶ Cargo—Weight, density, definition of "usable" cargo space, design loading of floor and supporting structure, parcel maximum, maximum length and cross section, possibility of hinged shelves for cargo stowage on two levels.

▶ Performance — Cruising speed and standard gross at 60 percent meto power and 10,000 feet, mini-

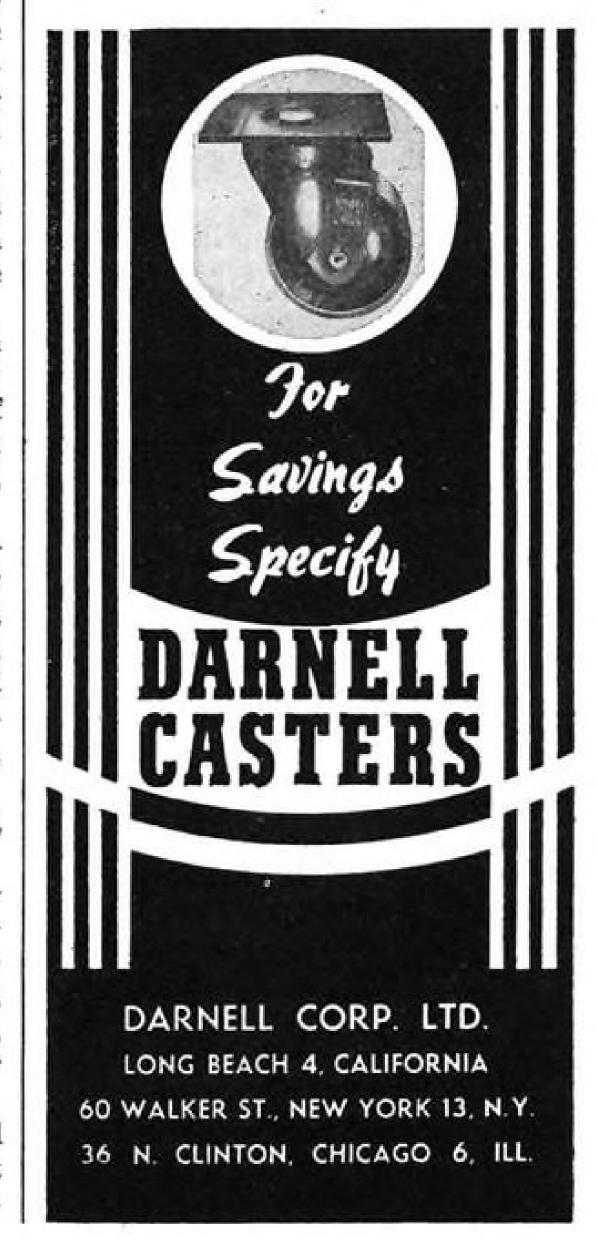
mum operational ceiling with one engine out and standard gross weight, minimum runway length at sea level, minimum range at 10,-000 feet with 60 percent meto power, 10 mph. headwind and no fuel reserve, optional installation of additional fuel tanks to give more range, minimum payload.

Crew Facilities-Number of crew members and crew food and lavatory facilities.

Priority for Cabinet

Under recent authorization of the Air Transport Command, the privilege of establishing personal air travel priorities on domestic routes over which ATC has priority control has been extended to Cabinet members. Senators and representatives have had the privlege for some time.

Domestic air carriers will establish Class 3 priorities for members of Congress or the Cabinet on satisfactory identification. A "Passenger's Evidence of Air Priority" form certifying that the trip is necessary for the war effort and of sufficient urgency to require air transportation on the specific flight concerned must be signed.



AVIATION NEWS . September 4, 1944

et 489 et al.)

EDITORIAL *****************

Mr. Cordell Hull on the Issue of Competition

portant extracts from a report by Secretary of State Cordell Hull to the Senate Commerce Committee, commenting on the issue of monopoly, or chosen instrument, versus competition for U. S. airlines in the international field. This report, not previously published nationally, is the State Department's first official indication that it prefers competition. The report followed filing of a bill by Sen. McGarran providing for an "All American Flag Line, Inc.," which would be a chosen instrument jointly owned by the U. S. airlines. The News last week published an exclusive story, picked up by national press services, reporting the preference of State and Justice Departments for competition for U. S. international airlines.

It is often assumed that most of the leading nations have adopted in full measure the single-company principle, and that this was done because of unsatisfactory experience with other alternatives. As a matter of fact, the experience of other countries is so varied that very few definite conclusions can be drawn.

Some countries adopted the monopoly policy not only for their international air service but for their domestic air services as well. With respect to international operations, Great Britain (after the formation of British Overseas Airways Corp. in 1940) also could have been included among the countries adhering to the single company policy, except for the continued existence of certain unsubsidized British-flag lines to the Continent and to Eire.

The countries which, prior to the war, concentrated on one or two companies may be grouped into three categories: (1) those having a basic political philosophy favoring state monopoly; (2) those with small geographic homeland areas, and distant or widely scattered colonial possessions; and (3) those whose financial resources did not permit them to support more than one enterprise.

The United States does not fit into any of these groups. On the contrary, our predominant position in world aviation has been achieved through the competitive system; our country is so large that it offers an ideal laboratory for technical improvements, and our foreign operations are not intended primarily to connect our outlying possessions; and we are not prevented by limited finances from obtaining the benefits of regulated competition among several companies.

This country is, therefore, free to make a decision either for regulated competition or for monopoly, depending on its estimate of the effect of such decision on future development of its aviation industry and its air commerce.

It was possible for foreign airlines to compete in the material aspects against a single American company in South America; thus by using night flying prior to the war, the French line (Air France), and the German Condor Lufthansa, were at one time carrying air mail between Buenos Aires and Europe in three and one-half days as contrasted with the six days required for the service between Buenos Aires and Miami, which was operated by an American company—the distance being approximately the same.

The experience of most other countries which have adopted the monopoly or so-called "chosen instrument" policy has been that such a policy, either intentionally or by sheer force of gravity, led to a government-owned system, or else to a system so completely government-controlled as to have all the qualities of government ownership. In the case of Great Britain, France, Italy, the Netherlands, Germany, Sweden and Japan, the airlines started out as private ventures but were subsequently taken over by the state.

The regularity of this tendency suggests that determination to accept or reject the "chosen-instrument" theory might well turn upon whether it were desired to accept or reject the probability of government ownership, or of government control tantamount to it.

In respect to the relation of a single instrument to the national defense, it is to be noted that Great Britain has made extremely effective use of the single government-controlled British line; equally, the United States has found it possible to use a number of lines; and that all the American lines in question have reached a high level of operating efficiency over far-flung world routes. . . .

Section 902 (b) provides that "the Secretary of State may negotiate agreements with foreign governments in

the name of the United States for the benefit of All American Flag Line, Inc." Section 902 (c) implies that the company itself may negotiate with foreign interests and provides that the department, when requested, shall make available its services and facilities in furtherance of such negotiations. Section 902 (d) provides that the Secretary of State shall not negotiate agreements with any foreign government or foreign national for the benefit of any air carrier engaged in foreign air transportation "except as herein provided." Certain considerations as set forth below indicate that these provisions may be undesirable.

At present the department and the Civil Aeronautics Board share the opinion that negotiations with foreign governments concerning aviation rights should be undertaken by the government rather than by individual air carriers, although it is recognized that there may be instances wherein exceptions to this principle should be permitted. The statement is sometimes made that landing rights can be obtained by an individual company without committing its government, but this argument is to a large extent outdated and was valid only so long as the foreign government concerned had no interest in having its carriers fly to United States territory. In general, reciprocity is inherent in the acquisition of any foreign landing rights, even if they happen to be requested by an individual company. This is evidenced by the present tendency among leading nations to recognize that the interest of their national air carriers abroad can best be protected through intergovernmental negotiations. Incidentally, this prevents a foreign government from "playing off" one company against another.

Another point to be considered is the disparity which sometimes exists between national policy and the activities of individual companies. Pan American Airways System, when it was the single American company in the field of international air transport, usually followed the practice of negotiating with foreign governments as an individual company. With the advent of the war, however, some of the arrangements which the company had made proved to be a deterrent to our war effort and were therefore not in the best interests of this country. While it is assumed that arrangements which would be negotiated by the proposed All American Flag Line, Inc., would conform more closely to our national interests, the freedom delegated by the bill to such a company to undertake its own foreign negotiations might still result in a situation which would be not wholly compatible with government policy or the public inter-

The department foresees no difficulty in negotiating with foreign governments on behalf of a single company should this principle be adopted, but it anticipates no difficulty in assisting individual air carriers to operate abroad provided they are duly certificated by our aeronautical authorities.

For the above reasons, it is believed that the Secretary of State should be free to negotiate agreements with foreign governments for the benefit of United States air carriers in general and should not be bound to negotiate for one carrier only; and that there should be no legislative mandate which would place the department's facilities at the sole command of a single company without allowing any discretion to the Secretary of State.

Section 902 (e) provides that foreign agreements described therein are not to be entered into except by treaty. Section 902 (e) as now drafted would not only make it difficult for this government to participate in certain informal arrangements permissible under the law, and desirable for the development and smooth functioning of international air navigation, but also would deprive the executive branch of the government of the exercise of reasonable discretion in the conduct of foreign affairs. The department does not desire to take out of the treaty-making procedure matters which are properly subject thereto. However, it is necessary that this government should be able in all appropriate cases to participate in international arrangements for the regulation of technical and operational aspects of international aviation without the conclusion of a treaty.

CORDELL HULL.

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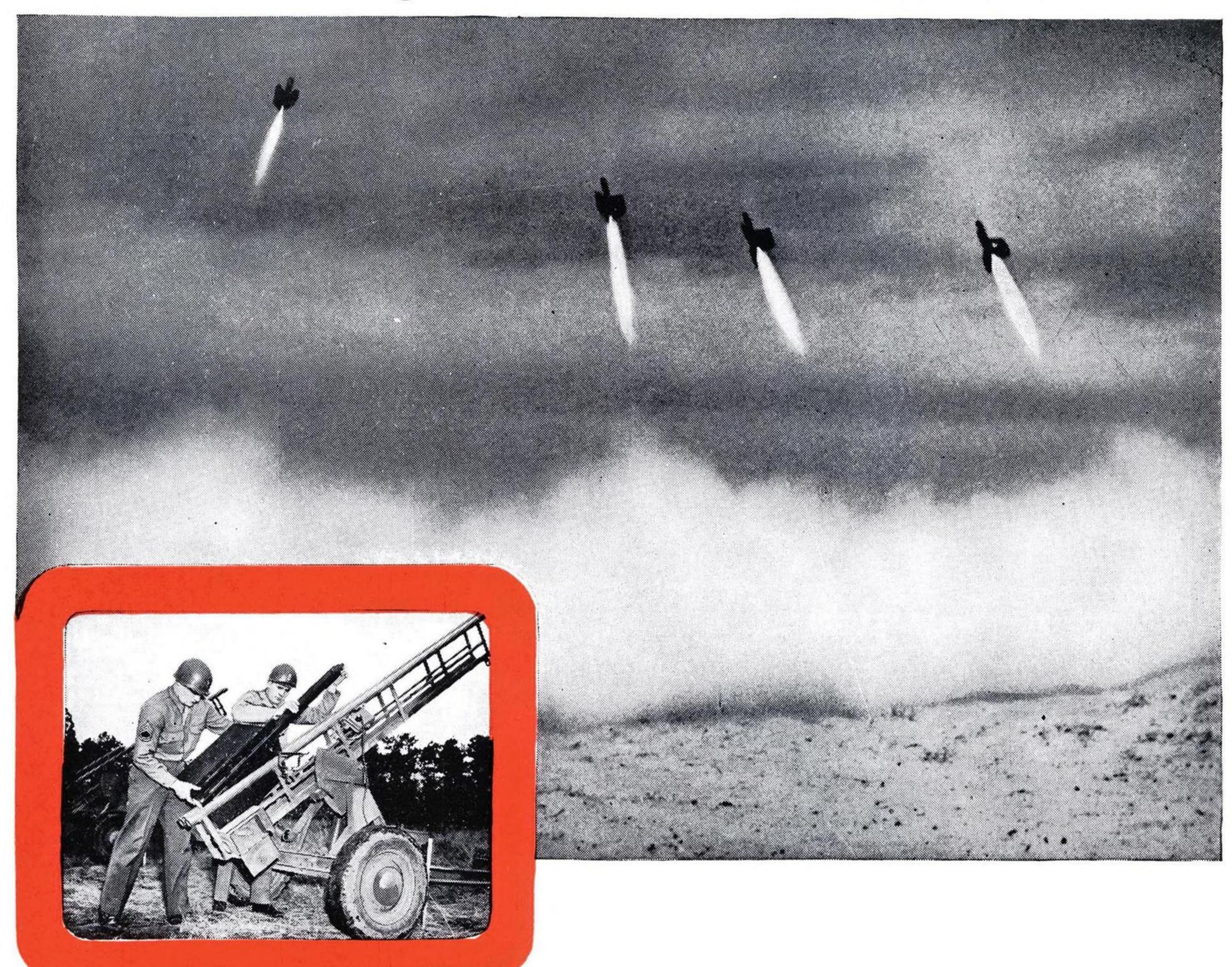
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