Aviation News

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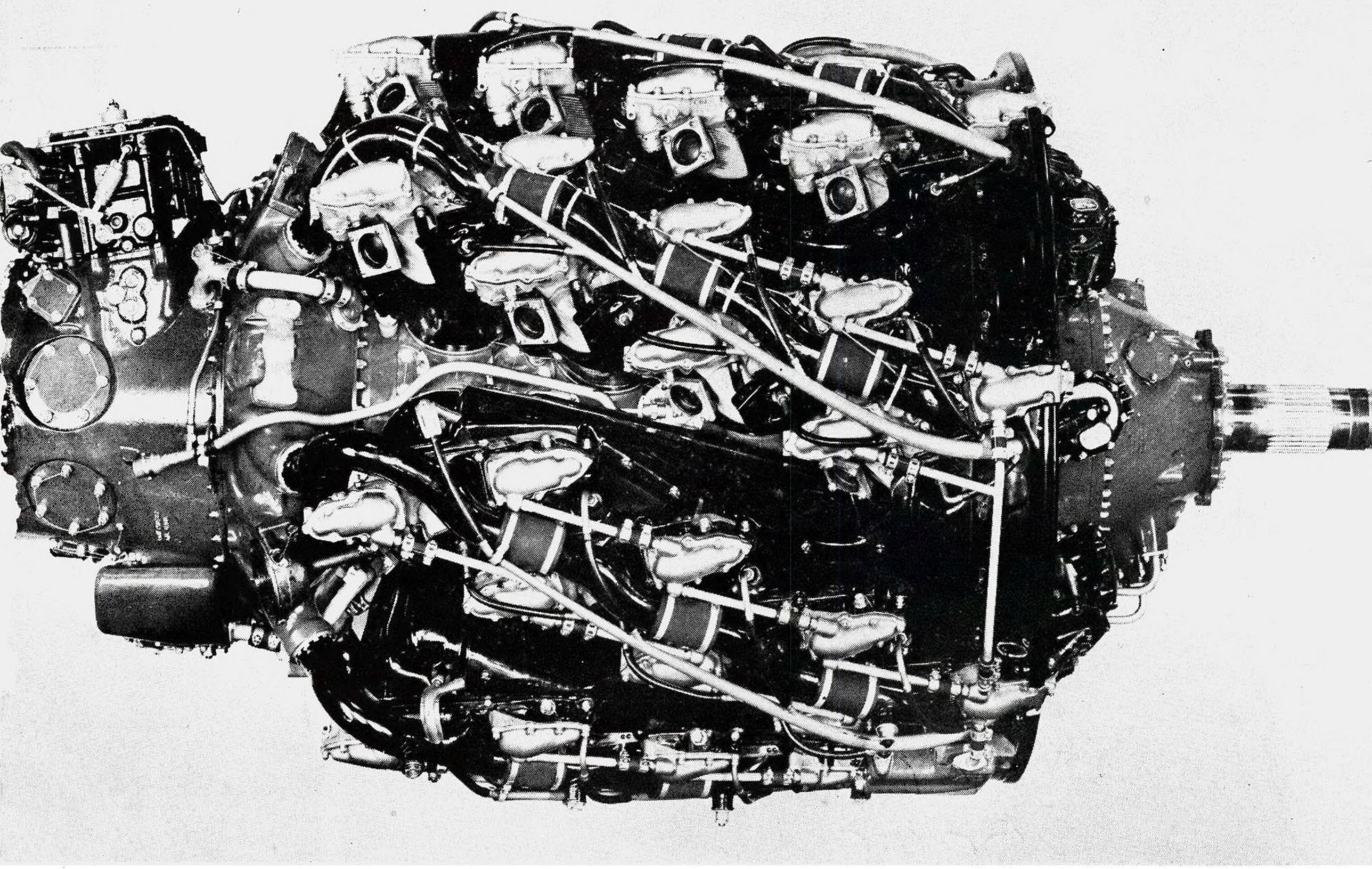


Powerhouse—*Selected to power five of tomorrow's giant air transports is this Pratt & Whitney* Wasp Major, *28-cylinder, four-row radial air-cooled motor which delivers more than 3,650 combat hp. In addition the engine is being used in two of the Navy's crack fighters, two of the Army's largest bombers and at least six other military aircraft not yet announced.*

THE AVIATION NEWS

Washington Observer

RECORD FLIGHTS—The record long-distance flight of the Boeing B-29 from Guam to Washington is reported to be only the beginning. The AAF is said to be out to break all existing records possible with American aircraft. The British jet mark, plus some subsequent and not too quiet comment about the Lockheed *Shooting Star* stung the AAF high command. The B-29 distance mark will not be the last, since the British are reported readying for London-Australia non-stop. But at least two American planes can top any British distance mark. And the jet speed record will be one of the records the AAF will smash.

* * *

NO SQUEEZE—Responsible opinion in Washington now is that the U. S. will not use requests from foreign nations for food, clothing and other necessities as levers to bargain for air rights. That policy, if it is a policy, however, will stop when the relief requested takes the form of pleas for financial assistance. When talking money, officials feel the U. S. is justified in asking for commercial rights.

*

FEW DISPUTES—Most important countries where rights still must be obtained are France, Russia and England, the latter being the site of airbases which might be principally involved. Department of Commerce reported last week that U. S.-built airbases during the war totaled 468, costing $1,097,000,000, with many of them in out-of-the-way spots which would serve no commercial end.

*

RUSSIA WILL PLAY—Officials anticipate no extreme difficulty in coming to a freedom of transit agreement with Russia, when it becomes necessary. Informed explanation of Russia's non-appearance at the international air conference in Chicago is that the Soviet's absence did not indicate lack of interest or willingness to participate, but merely that Russia realized the U. S. and Britain could not agree on basic principles and saw no point to becoming involved in a bi-lateral argument.

* * *

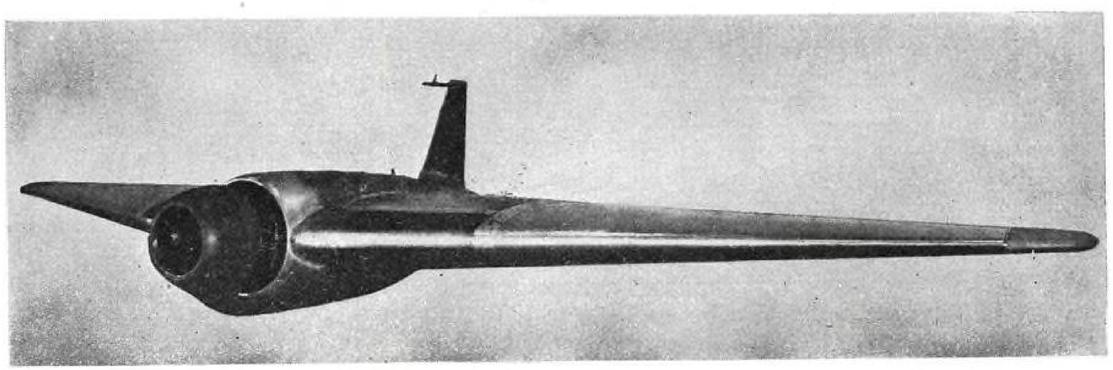
FOREIGN AIRPORTS — Few foreign airports, other than those built by the AAF, will meet American airline requirements, and domestic companies operating in the foreign field probably will have to make large investments in facilities to meet American operating standards. Many of the largest foreign fields do not even meet minimum Chicago Conference standards, and local governments are reported showing little disposition to meet them.

* * *

OCCUPATIONAL DEFERMENT—With the war over the Army and Navy are on record as having discontinued sponsorship of occupational deferments of workers in plants manufacturing equipment for the services. It probably will be denied, but despite this announced policy, both services continue from time to time to intervene in behalf of key workers.

* * *

MONTHLY PRODUCTION REPORTS — Although it still is in the planning stage, a subcommittee of the Air Coordinating Committee will be set up within a few weeks to make a monthly overall report on aircraft production. Since V-J Day there have been no overall figures available from the Government, except on military craft. It is probable that the Census Bureau will compile the report.



This Northrop Flying Wing jet bomb carries its explosives in the wing. *(See Page Ten)*

AVIATION NEWS

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Volume 4, Number 19

Advertisers Index

News at Deadline

Airport Legislation

Prospects for enactment of airport construction legislation before the end of the year appears dim with House and Senate conferees making little progress in ironing out the Senate-passed McCarran bill and the House-passed Lea measure. Little was done at the first meeting and the second meeting last week was disbanded because of lack of quorum.

Senator McCarran remained hopeful for early completion but there were differences over the methods of funneling federal allocations to states and municipalities.

Tipton Resignation

Friends of Stuart G. Tipton, counsel and acting president of Air Transport Association, say he may retire from the organization after the first of the year. He is understood to have been offered a position with United Air Lines and may take that or return to private practice.

Research Indorsed

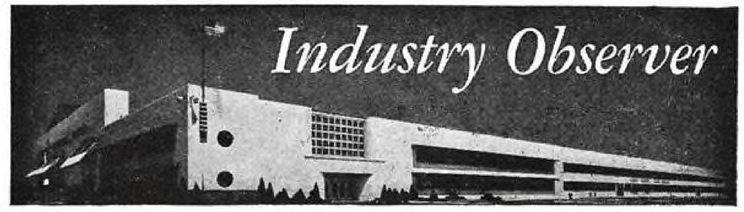
A resolution adopted by the International Association of Machinists (AFL) calls upon Congress to enact legislation to allow the air forces to proceed with a post-war program embodying full experimental and continuing technological improvements in the latest type aircraft.

The National Grange also recommends sound programs directed toward the advancement of aviation, including adequate research and development.

AA Contract Program

American Airlines is announcing today its entry into non-scheduled contract carrier operations, using C-54's, five of which are available now for the service, with more being added later. Initial contract is with Newsweek magazine, effective this Wednesday. AA will fly the magazine's West Coast editions from Dayton, Ohio, to afford distribution on the West Coast simultaneously with other sections of the country.

First load will be 65,000 copies of the magazine, constituting the maximum payload, 18,500 lbs., of the aircraft.



▸ Sigmund Janas, Colonial Airlines president, last week flatly denied an AVIATION NEWS story of Nov. 19 that purchase of Colonial by Eastern Air Lines was in the making.

▸ Whittling down its backlog of undecided route applications, CAB shortly will release decisions in two more international cases.

▸ Industry expects RFC to issue its over-all report on plant disposal this week, covering September, October and November. Monthly reports hereafter are anticipated.

▸ Election of Joe E. Crosson, veteran Alaskan flyer, as president of Northwest Air Service, Inc., is accompanied by the announcement that the Seattle firm now is wholly owned locally. Stock held by Charles H. Babb, Glendale plane broker, has been bought by four Seattle men—Dallas Donnan, lumber dealer; Thomas H. Olin, insurance broker; John Heily, dress manufacturer, and Chris Gilson, vice president of Seattle Chamber of Commerce. Balance of stock is held by Crosson and Noel Wein, pioneer Alaskan pilot who bought into the firm in 1944.

▸ Opening of Idlewild Airport, scheduled for Dec. 2, has been postponed indefinitely because of labor disputes.

▸ United Air Lines has contracted with Northrop for modification of 33 C-47s, work to extend through February.

▸ National Aeronautic Association is studying a plan for making awards to airports which meet certain standards in cleanliness and good service to customers, a project similar to the "Good Housekeeping Seal of Approval" or the American Automobile Association's approved service station list.

▸ Naval Air Transport Service now regards the service life of its regularly overhauled transports as five years, a contrast to wartime estimates, but similar to the domestic airlines' depreciation policy on old Douglases.

▸ Navy is attempting to complete its contract with Lockheed for the PV-2, fast twin-engined patrol bomber. This is one of the models which has required extensive modification at the Navy Lockheed service center at Burbank. PV's not modified by the end of the year are scheduled to be kept off the line. About 100 remain to be delivered from Lockheed on the contract.

▸ A revision in Navy's Martin *Mariner* schedule will reduce the number of monthly deliveries in 1946 to two, with the contract running through June, 1947. November schedule of five will be met.

▸ Douglas' new Navy dive bomber, the BT2D-1, is expected to be ready for tests shortly, the first plane being reported as completed, with a Pratt & Whitney R-3350 engine.

▸ Martin's experimental patrol plane for the Navy, the XP4M, is making satisfactory progress, with initial test flights now scheduled for early spring.

▸ Navy has about 3,500 torpedo bombers of the Grumman type made by General Motors' eastern aircraft division—TBM-3—which has gone out of production. Spare replacements will probably be made on this orphan by cannibalization.

▸ CAA finally is studying a proposal made by the airlines to permit carrying of mail and cargo in unconverted C-54 military transports.

▸ Effective Dec. 15 Colonial Airlines will permit passengers to carry an extra 10-lbs. of baggage free if it is sports equipment.

▸ TWA last week claimed a new commercial trans-Atlantic speed record for a *Constellation* which flew from Gander, Newfoundland, to Rineanna, Eire, in 6 hours, 55 minutes, averaging 297 mph.

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Aviation News

McGRAW-HILL PUBLISHING CO., INC.

December 3, 1945

NAA Conference Brings Demand For Better Private Flying Policies

"Honest thinking" in development urged by speakers in pointing out steps which must be followed if personal aviation's potential is to be realized.

By ALEXANDER McSURELY

Demands for "honest thinking" in personal aviation development and for more attention to the needs of the non-professional "panty-waist" flyers who may be expected to make up the large majority of future personal aircraft users echoed from the Statler Hotel in Washington last week where the first post-war Conference on Private Flying was held under sponsorship of the National Aeronautic Association.

If the aviation industry is to go beyond its present limited distribution of private planes it must make a greater effort to satisfy the potential consumer who has neither the time nor the money to spend in learning to fly today's conventionally controlled aircraft, Elizabeth Gordon, managing editor of *House Beautiful*, and a student pilot with approximately 50 hours of flight, told the conferees. Comparing her experience in first soloing an *Ercoupe* in less than five hours, with her later flight training in various conventional control planes, Miss Gordon warned that the average American woman will not take the time or the money to learn to fly the latter, when there were so many other competing interests which are less demanding.

Costs—"You can get a very nice fur coat for what it costs you to learn to fly, and what American girl isn't going to prefer to get a fur coat first?" she asked.

She believes the fewer number of hours required for simplified control spinproof plane flight instruction and the lower cost will be an important factor in consumer satisfaction. She called for more comfortable planes in which the woman pilot can wear skirts. She re-echoed the swelling private pilot demand for clean airports and adequate restroom facilities with definite attention to making airport users comfortable in pleasant surroundings.

Capitalization — The niceties which private flyers are demanding, must be provided by private capital, in the opinion of Robb C. Oertel, Standard Oil Co. (N.J.), aviation sales director, another speaker at the conference. Oertel does not expect public funds—even through the national airport program and corresponding state programs—to provide more than a small percentage of the needed facilities which he estimates should eventually total about 20,000 landing areas of various kinds for the private flyer. A solution to financing problems was suggested in the form of an FHA to finance airport hangar, shop and other facilities for the operator.

Asked about the investments which some oil companies are making in airport development, Oertel replied:

Banks Scored—"The banks simply won't play. Some petroleum companies have been willing to back good, sound Americans.

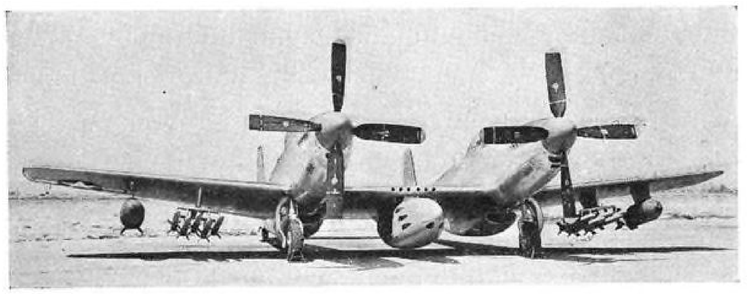
"Any operator unable to get funds has a perfect right to go to his suppliers and secure backing. However, the worst thing industry could do is back them too far, until you have the manufacturers owning all the service businesses. That would be tragic."

Design—William B. Stout, Dearborn inventor and engineer, urged the aviation industry to stop kidding itself and to stop doing business with itself. He called for more "honest thinking" in the line of seeking out the actual needs of potential plane users, and the tailoring of planes to fit these needs. Visibility, range and economy must be improved, he urged.

He discussed possibilities of an all-plastic plane, now reported under development and predicted that aircraft engine costs would be curtailed to a volume level only when engines were developed which could be used interchangeably in autos and airplanes.

CAA Criticism—The reactionary "Old Guard" in the Civil Aeronautics Administration came in for some harsh criticism during the conference. James W. Batchelor, legal counsel for the United Pilots & Mechanics Association, told the conference the CAA is made up of two divergent groups.

"If the viewpoint on top were



TWIN *MUSTANG'S* ARMAMENT:

Slung from a special shackle in the center wing section of North American's Twin Mustang, *an eight-gun nacelle gives this unusual aircraft a total of 14 forward-firing .50-cal. machine guns. On the outer wing sections the plane packs two 1,000-lb. bombs and ten rockets. A 450-gal. droppable gas tank may be substituted for the machine gun nacelle.*

reflected all the way down we would have no quarrel with CAA," he declared. He characterized a group within the CAA, below the highest policy-making level, as "hard-boiled, highhanded, inconsiderate and discourteous," and urged that the highest CAA officials take inventory of their personnel "to find out whether their views are being carried out."

▸ **Penalties**—Bachelor charged that the new regulations applying to private pilot flight examiners were being poorly administered and asserted that the practice of filing suit to collect a penalty for alleged violations of Civil Air Regulations was becoming "a mild form of legalized extortion." He urged need for legislation taking this arbitrary power from CAA.

Warning that private flying hazards must be reduced if the personal plane can achieve mass utility was given by Jerome Lederer, chief engineer, Aero Insurance Underwriters, Lederer predicted private flying deaths would reach a total of 300,000 annually in a few years, if the pre-war accident curve in aviation continued, as compared with 40,000 motor deaths a year pre-war. He charged private flyers with weakening national defense by not crusading for safety, and with being spendthrifts, since their own actions are responsible for the high accident rate that increases the cost of using a plane.

▸ **Faults**—In 1944, 70 per cent of the reckless flying accidents were due to low flying, buzzing houses, stunting over populated areas, etc., he said, urging private flyers to cooperate in an educational campaign to point out the errors of such flying practices to the offenders, and to complain about them to field managers. He also urged watchfulness about sloppy maintenance and ground handling of planes.

Lederer called for improvement of personal plane designs, safety-wise, to provide:

▸ Fuel strainers accessible without removing cowl, so as to insure clean fuel.

▸ Better visibility for flying and taxiing.

▸ Redesign of instrument panel and cabin interior so that wheel, or stick, and other interior fittings do not "become a weapon against the pilot in a crackup."

Promotion — A five-point program which the Indiana is using to promote aviation was outlined by Clarence F. Cornish, Indiana state aeronautics director. Encouragement of airports in the state has been so successful that the number has increased from 54 in 1944 to 110 now, with 60 other airfields now being developed, he reported. The state is expected to be completely airmarked by next summer. The department proposes to award a certificate of merit to the airports which meet certain minimum safety qualifications.

The state is setting up two advisory councils, one composed of private flyers, and one of commercial aviation representatives which will represent various sections of the state. Through local organizations responsible to each of these council members, the grass-roots sentiment of the aviation people of Indiana will be reflected to the state department in establishing policies and planning.

▸ **Subsidies** — "Civil aviation has sold its birthright for a federal subsidy," W. L. Jack Nelson, president of Servair Aviation Corp., Washington, and former secretary of the CAA Private Flying Advisory Committee, told the conference.

Nelson pointed out that the federal subsidy to fight training programs which resulted in a large number of additional students being trained had resulted also in increasing federal restrictions over private flying. He urged the aviation industry to look "to our neighbors in our own communities" rather than the federal government for future financing and development.

Failure of aviation to establish proper "grassroots" groups throughout the various states was blamed by Nelson for such actions as the recent Kentucky "good roads amendment" which he said "penalizes aviation in Kentucky for years to come" by limiting fuel tax expenditures to roads, regardless of their origin.

If sufficient interest in aviation in the local communities of Kentucky had been developed such a measure could never have succeeded, he declared.

▸ **Legislation**—Harry Meixell, Air Transport Association state relations manager, reviewed state aviation legislation, reporting that national interest was reflected in the fact that 2,000 aviation bills were presented in state legislatures in 1944-1945 sessions and more than 250 of these were enacted as laws. Many of these were enabling acts to authorize local government units to finance airports in their communities.

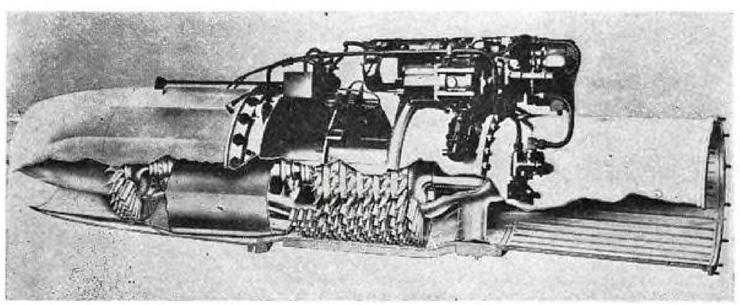
He urged the importance of an aviation commission as an integral part of each state government, warning of a trend in some states to combine aviation with ground transportation interests to the detriment of aviation.

▸ **Airports** — Community effort to develop airparks and airports based on local need and the financial ability of the community to pay, was urged by Eugene V. Fryhoff, head of the aviation division, Missouri State Department of Resources and Development. He appealed for elimination of friction between the various factions of aviation, and improved cooperation for the mutual interest of the industry. He described the Missouri program (See *Private Flying*).

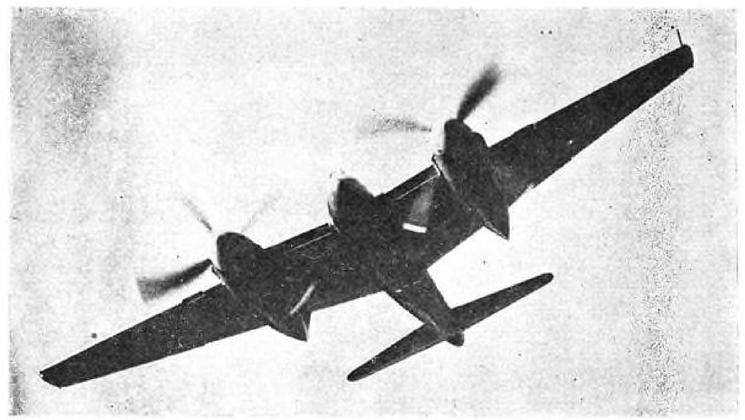
Certification Step

A plan which eventually is expected to permit 15,000 A & E mechanics to give annual inspections of aircraft and issue airworthiness certificates, is being developed by the CAA general inspection division, Paul Young, assistant chief of the division, told the NAA Private Flying Conference in Washington, last week.

Young said the plan should be ready for trial in about 90 days and that it was hoped as many as possible of the mechanics would qualify, thus cutting down delays now encountered in getting inspectors' certification of aircraft. Later Young told AVIATION NEWS the mechanics who would give the inspections would be designated aircraft maintenance inspectors, and would be appointed by inspectors on their record and aircraft knowledge, without examination. Appointments are subject to approval by the regional administrator and the Washington office.



NAVY'S *YANKEE* JET:
Cutaway view of the Westinghouse Yankee *jet engine built for the Navy. This unit, which has a diameter of only 19 inches, and its companion 9-inch diameter "baby jet," are the first such power plants of entirely American design.*



DE HAVILLAND *HORNET:*
This new long-range fighter is powered by two Rolls-Royce Merlin *engines each of 2,070 hp. at take-off, driving de Havilland hydromatic four-blade propellers. Top speed exceeds 470 mph. Rate of climb is over 4,500 fpm. at sea level and the plane has an operating ceiling of around 35,000 ft. With long-range tanks it has a range exceeding 2,500 miles.*

Aviation Activity In House Stalled

Aviation activities of House Interstate and Foreign Commerce Committee are likely to be at a standstill until the new Congress meets in January, it was indicated last week by the committee's chairman, Rep. Clarence F. Lea (D., Calif.).

There are two matters Lea is anxious to act on before year's end, however.

▸ **Investigation** — First, he would like to get Rules Committee clearance and House approval of his resolution authorizing Interstate to make a thorough investigation into transportation, with a view to re-framing over-all national transportation policy and law. Lea said he would like to have authorization for the investigation by the first of next year. He has requested a hearing by Rules on his resolution, but unless this is granted shortly, Lea's absence from Washington will prevent action.

All segments of the transportation industry, Lea stated, have submitted voluminous reports in response to his request for views and recommendations for use in the proposed investigation. Although a deadline date of Nov. 15 was set for submission of the reports, the Congressman said they are still welcome. Lea plans to have an investigating staff carefully review these documents, and probably have them published, prior to launching investigative hearings.

▸ **CAA Independence** — The other matter which Lea would like to clear before Congress adjourns is legislation establishing the Civil Aeronautics Authority as an independent commission. He predicted, however, that action on the measure might have to go over until next year, and added that it would then have top priority on the committee's agenda. The bill has been drafted, but has not yet been introduced.

NATS Halts Cargo Flights

Naval Air Transport Service has discontinued cargo-only flights as unnecessary due to a decrease in the number of schedules since the war ended. NATS pilots in training during the war flew such flights for experience before they carried passengers. All NATS flights now are carrying passengers as well as cargo.

Noted Flyers Head Airport Firm

Two of World War II's most famous Marine Corps flyers head a newly organized California corporation, Community Airports, Inc., which will begin aggressive development of airports for owners of personal aircraft.

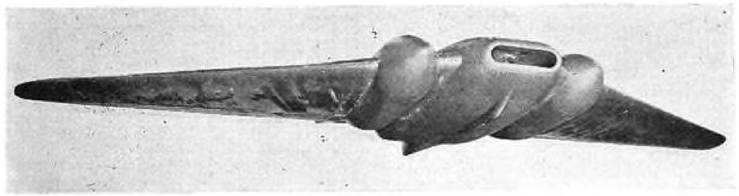
They are Col. William J. Fox, who was commandant of Henderson Field during the critical defense of Guadalcanal, and Maj. Joseph J. Foss, at one time America's leading ace with 26 Japs bagged in combat. Fox is president and chairman of the board of the corporation, and Foss is vice-president. Other officers are Raymond D. Dishman, Vernon, Calif., real estate broker, director; Floyd Walker, Los Angeles attorney, secretary-treasurer, and Jack Eagles, Los Angeles attorney, director.

▸ **Project**—Fox said that with a corporate capitalization of $2,500,000 Community Airports will seek to develop airport lands for maximum utility and service to all types of aviation enterprises, and especially will seek to develop residential areas on property adjoining airports for the convenience of personal aircraft owners.

The corporation already has filed with the War Department and RFC notice of its interest in acquiring military airports and flight strips as rapidly as they are declared surplus.

▸ **Background** — Fox is widely known throughout Southern California, and when called to active duty from the Marine Corps Reserve was chief engineer of the Los Angeles County Regional Planning Commission. He resumes that post after the first of the year.

Prior to the war Fox directed preparation of Los Angeles County's first master plan of airports, and at that time pleaded with little success against the conversion of airports to industrial and subdivision properties.



Flying Wing Buzz Bomb: *This twin-jet missile was the first Northrop Aircraft venture into buzz bomb production for Army testing. It carried its explosive charges in the bulges in the wing. This model later was shelved in favor of the single-jet JB-1A which carried the explosive inside the wing itself.*

Mobile Buzz Bombs Built By Northrop

Flying wing type can be launched in 50 ft. by use of rocket-powered sleds.

Wartime development of buzz bombs by Northrop Aircraft, Inc., has turned that type of guided missile into an implement of mobile warfare, company officials have revealed, and further demonstrated the efficiency of the firm's Flying Wing design.

The first model turned out by Northrop was a twin-jet model with both units drawing air from a central intake duct. It carried its explosive charge in bomb-like bulges in each wing.

▸**Later Model**—Following experiments with this model Northrop switched to a single-jet model which also had the power unit designed as an integral part of the wing (See Page Three). Its 3,700 lb. of explosives were carried in cast magnesium sections inside the wings adjacent to the power section. The castings, Northrop says, are among the largest ever produced.

The new model, designated the JB-1A, weighs about 7,000 lbs. and has a 30-ft. wingspread. It has an effective range of more than 100 miles at a speed of 350-400 mph. depending on fuel and explosive load. The craft is fabricated of aluminum and magnesium, using a special Northrop-designed "Heliarc" welding process on the inflammable magnesium. It used a German-type athodyd jet built by the Ford Motor Co.

▸**Launching**—The German method of launching was followed in first experiments with the buzz bomb, using 300 ft. of standard railroad track. Dissatisfied with the results, Northrop engineers redesigned the launching sleds and came up with a model which was capable of getting the bombs into the air from three-rail tracks only 50 ft. long.

This made possible the use of portable launching platforms which could be knocked down and transported in large military truck-trailers or used on landing craft in amphibious assaults.

▸**Design**—Backbone of each of the redesigned landing sleds is a 14-ft. aluminum tube which is 12 inches in diameter and mounted on runners.

With the bomb in its cradle four rockets in the sled are fired electrically, giving the craft a speed of 220 mph. when it clears the end of the tracks. Each sled weighs 470 lbs. and can be assembled in a few minutes.

Experimental work on the buzz bombs began in the summer of 1944 and the full production quota now has been completed. In all, more than 1,000 sleds and a number of the buzz bombs were delivered to the armed forces.

Georgia Supreme Court Hears Gas Tax Case

The Georgia Supreme Court recently heard arguments in the State's effort to collect $575,000 in gasoline taxes from Eastern Air Lines. Besides seven years' back taxes, the state claims interest and penalties. The theory is that it is entitled to taxes on all gasoline purchased and delivered in Georgia.

Eastern contends that since the gasoline bought in Georgia was used in interstate commerce, the company was exempted from taxes on it under an attorney general's ruling of a decade ago. Counsel arguing the case for Eastern Air Lines included three attorneys from three Atlanta law firms—Marion Smith, Smythe Gambrell and B. D. Murphy.

RFC Sells Plant For $13,750,000

International Harvester Co. purchases Illinois engine parts plant previously operated by GM.

In the largest transaction of its kind to date, Reconstruction Finance Corp. has sold the engine parts plant at Melrose Park, Ill., operated during the war by General Motors Corp., to International Harvester Co. for $13,750,000.

The sale has attracted considerable industry attention, not just because of the size of the property involved, but because of the terms and other conditions which apparently influenced the disposal agency's decision.

▸**Machinery**—While the plant itself was built at a cost of $17,286,000, it contains machinery valued at an additional $84,350,000. International Harvester is not buying any of the machinery, which will be removed from the plant at Government expense.

Another factor which is believed to have had some bearing on the sale is the fact that the company plans to employ some 5,500 people in the production of diesel engines, power units, tractors, etc., and most of these workers will be recruited locally.

The surplus plant disposal regulation provides that locally-owned companies or companies giving employment to local workers shall be given special consideration.

▸**Equipment**—Among the equipment which will be removed and offered for sale by RFC are 85 aircraft motor test blocks which cost approximately $4,000,000, and 3,200 machine tools.

In trying to dispose of an estimated $10,000,000,000 worth of surplus aircraft and parts plants, RFC has recently issued announcements on several large facilities. Up for sale are two plants operated in wartime by Curtiss-Wright—the propeller plants at Indianapolis, which covers about 10 acres and cost $1,000,000, and at Beaver Falls, Penna., which includes nearly 32 acres.

Another on the block is the Wright Aeronautical plant at Wood Ridge, N. J., which contains 1,980,000 square feet and covers 158 acres. Also on the list are two plants formerly operated by United Aircraft at Bridgeport and Stratford, Conn.

Pratt & Whitney *Wasp Major* To Power Five Giant Transports

Engineers believe huge motor, expected to be used also in at least six still-secret warplanes, has possibilities beyond its present rating of 3,650 combat hp.

Details of Pratt & Whitney's *Wasp Major*, which delivers in excess of 3,650 combat hp. have just been disclosed, along with the announcement that this most powerful aircraft engine yet developed and in production, has been selected to power five commercial air giants.

This powerplant is being used in the 108-passenger, four-engined Douglas C-74 *Globemaster;* the 114-passenger, four-engined Boeing Model 377 *Stratocruiser*, commercial version of the B-29 *Superfortress;* the 105-passenger commercial version of the Martin *Mars* seaplane; the ultra high-speed 40-passenger four-engined Martin *Rainbow* airliner, and the eight-engined Hughes *Hercules* seaplane, the world's largest aircraft, now being assembled on the West Coast.

▸**Military Use**—At least six military planes, not yet publicly announced, are reportedly being developed around one or more of these engines in addition to other military craft already announced.

Since the *Wasp Major* is particularly useful in big, long-range airplanes, it is to power two of the Army's heaviest bombers, the six-engined Consolidated Vultee B-36 and the four-engined Boeing B-50. Two of the Navy's crack single-engined fighters, the Goodyear F2G *Corsair* and the Boeing F8B, also use this engine.

▸**More Power**—Engineers at Pratt & Whitney believe the presently announced power output of the *Major*, which has a piston displacement of 4,360 cubic inches, does not represent the ultimate possibilities of the engine.

They point out that the smaller, 18-cylinder, 2,800 cubic inch *Double Wasp* has delivered in combat operations well in excess of 2,800 hp. The *Major's* 28 cylinders are arranged in four rows of seven cylinders, each giving the engine a frontal area no greater than that of the 18-cylinder *Double Wasp*, a two-row radial engine with a basic rating of 2,100 hp.

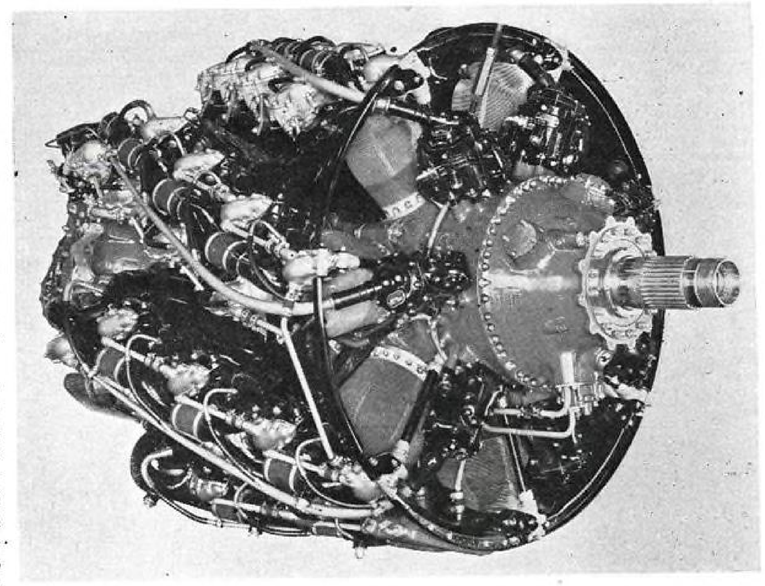
▸**Small Diameter**—The new engine is only one inch larger in diameter than the original *Wasp*, which delivered 410 hp. back in 1925. A helical arrangement of the new cylinders about the crankcase projects each individual cylinder into the air stream and gives the big engine better cooling characteristics than most two-row engines.

While production of the *Wasp Major*, which slackened temporarily with the general termination of war contracts, now is being stepped up to meet current demands, there has been no such interruption of the engine's development program.

▸**History**—Development of the engine was accelerated and encouraged by experimental and production contracts from both Army and Navy. Less than five years have elapsed since the project was authorized late in 1940. The first engine was run in April, 1941. The *Major* first powered an airplane in flight in May, 1942 and completed its 150-hour qualification test in December, 1944.

Pratt & Whitney reported that while the basic elements closely follow those used in service-proved models, the engine incorporates a number of innovations and improvements. These include:

Deep-finned forged aluminum cylinder heads and duralumin cylinder muffs of special design for use interchangeably with tractor or pusher installations; scientifically correct cylinder cooling baffles; elimination of conventional ignition harness through the use of seven interchangeable magnetos, one for each bank of four cylinders; a vibration-free crankshaft and improved vibration dampers; an improved automatically controlled, hydraulically driven, variable-speed supercharger.



Leads the World: *Most powerful aircraft engine in production is this Pratt & Whitney* Wasp Major *which is rated at 3,650 combat hp. It is only one inch larger in diameter that the original* Wasp *which put out 410 hp. back in 1925.*

Reseeding from Air

Reseeding from airplanes of large areas of fire-blackened rangeland within national forest boundaries in the Northwest is underway by the U. S. Forest Service. One seed-dusting plane recently began a project covering 16,000 acres in Southwestern Idaho.

Other uses to which aviation facilities have been put by the Forest Service during the fire season included fire-spotting from planes and transportation by air of fire-fighters to relatively inaccessible fire scenes.

Navy Proving Base Trying Out All Fog Dispersing Systems

FIDO system's cost cut to $200 per landing; sonic, water jet and hot air methods are scheduled for test at Arcata, Calif., field; airline interested.

By SCHOLER BANGS

Conclusive tests of every known fog dispersing system may be expected if the Navy continues the operation of its proving ground at Arcata, Calif., one of the foggiest sites in the nation.

Present indications are that an improved FIDO system, outlining runways with high-pressure fuel burners, holds greatest promise for fog dispersal at strategically located military air bases where imposition of radio silence might preclude use of conventional landing aids.

▸ **Costs Cut**—Navy tests at Arcata have resulted in the lowering of FIDO operating costs to as little as $200 per landing, and the system is reported under investigation by one major airline.

A spokesman for this airline asserted that information given him during a visit to the proving ground indicated still greater savings in FIDO costs are possible with improved burners, and with use of instrument approach methods to reduce the degree to which the fog cover must be dispersed.

He pointed out that although the expense per landing might appear high it becomes less of an obstacle when one considers that "zero-zero" conditions at one key station can disrupt an airline's entire schedule. When the same weather affects several lines a fairly expensive fog-dispersal can be employed with a net economy, considering all other revenue factors, he said.

Under the supervision of Lt. Comdr. R. L. Champion, USNR, director of the Navy's Landing Aids Experiment Station at Arcata, plans have been made to extend the testing of other fog dispersing methods, including:

▸ Sonic coalition of fog droplets by focusing beams of sound, generated by sirens or other devices, above the up-wind end of a runway;

▸ Pumping jets of water to a height of 100 ft. or more in the form of a water screen in the path of drifting fog;

▸ Creating a curtain of hot air in the path of drifting fog by blowing pre-heated air vertically from ducts laid the length of a runway;

▸ Projecting into the air desiccants such as powdered resins, which will combine or precipitate fog droplets.

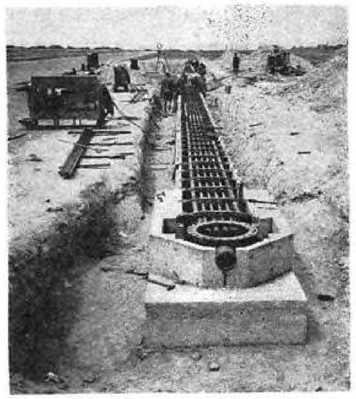
Although fog dispersal experiments have been reported over the past 20 years, no successful results were recorded until the British developed the FIDO system and saved, by its use, large numbers of planes which otherwise would have crashed when fog blanketed military airfields.

▸ **U. S. Use**—Navy study of Britain's FIDO results began Sept. 20, 1943, and indications that Japan might launch an all-out northern invasion led to the installation of a FIDO system at Amchitka, where it was operated for the first time Aug. 4, 1944. Subsequently the Landing Aids Section of the Navy Bureau of Aeronautics was organized and experiments begun at Amchitka were moved to Arcata.

During an initial test at Arcata this fall a PB4Y-1 was able to use the field five minutes after FIDO burners had been ignited.

▸ **Heavy Fog**—At the start of the burn fog covering the airport had a depth of 3,000 ft. and on the runway visibility and ceiling were "zero-zero."

Five minutes after the burn was started the ceiling had lifted to 1,000 ft. near the center of the runway and visibility was good the length of the FIDO installation. In addition a hole was burned in the fog over the runway.

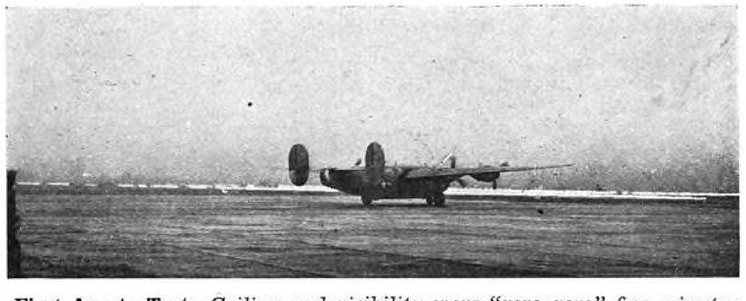


FIDO Burners: *Indication of high installation costs and maintenance problems are given by this view of a segment of the Navy's FIDO burners at Arcata, Calif. In military use, where costs are of secondary consideration, FIDO has saved many planes which otherwise would have crashed.*

Commercial FIDO Use

First commercial installation of a FIDO fog dispersal unit, now under way at Heath Row Airport, the new port of entry for London, is being watched with interest by American experts.

Britain, which recently ordered nationalization of overseas airlines, presumably is meeting the cost of the project under that program, encouraged by the fact that during the war 2,524 military planes were brought safely to ground when chronic British fogs shrouded their bases.



First Arcata Test: *Ceiling and visibility were "zero-zero" five minutes before this bomber landed. In those few minutes FIDO burners raised the runway ceiling to 1,000 ft., and burned holes in a fog blanket 3,000 ft. thick.*

Military Aviation Procurement In Britain Is Twice That of U. S.

No extensive demobilization set up; 900,000 workers in industry which has orders on hand for more than 10,000 service aircraft as compared with 5,000 here.

By SCOTT HERSHEY

The British aircraft industry, unlike our own, has undergone no extensive demobilization and has a military procurement program double that of the United States.

The Society of British Aircraft Constructors reports there are 900,000 workers employed in the British aircraft industry "with manufacture of military planes still going on apace, orders for these totaling more than 10,000 aircraft."

▸ **Far Above U. S.**—The significance of these figures is pointed up by the relative position of the British and American industries. Latest surveys show about 146,000 workers employed in the basic aircraft industry in the United States. Against the 10,000 orders for military aircraft in Britain, the United States has about 5,000 aircraft on order for the Army and Navy combined through June of 1948.

In this connection it is interesting to note that Britain produced only approximately one-third of the number of airplanes produced in the United States during the war. The ratio is about the same as the population ratio—three to one—but Britain apparently takes a different viewpoint of the importance of air power preparedness in setting up a peacetime program which calls for twice the number outlined in the current plans of the United States.

▸ **ACC Report**—The recent report of the Air Coordinating Committee used a range of estimates in reaching its conclusions on procurement by the services. The report said that in determining the upper level—5,780 planes annually—of possible military requirements for aircraft "we have assumed the need for a substantial striking force ready at all times to cooperate in the maintenance of world peace."

The committee conceived of the lower level—3,000 planes annually—"as a minimum which could be reached only after maintenance of world peace is well assured and a substantial degree of disarmament has taken place."

The report adds significantly that "this lower level also approximates the absolute minimum we believe, from which it would be possible to plan for mobilization in a future emergency."

The committee expressed deep concern because prospective production over the next 12 months will be appreciably below this safety margin.

Scheduled military production for the calendar year 1946 is less than 2,200 airplanes, not even 4 percent of the July 1945 production rate. This reduced level of procurement, the report added, "is eroding the base for any future expansion to a point from which it will be impossible to achieve the required volume of production."

▸ **Policy Lacking**—Leaders of the aircraft industry repeatedly have called for a clear cut national air policy as necessary to assure the place of the United States as the world's leading air power.

Carl B. Squier, vice-president of Lockheed Aircraft, told the National Aviation Clinic in Oklahoma City, that he wanted to add his voice "to those who are advocating the immediate appointment by the President or Congress, of a committee of outstanding, competent, unprejudiced, public-spirited citizens, who would immediately undertake a comprehensive study of all phases of these problems and make recommendations for establishment of a definitive national air-power policy.

▸ **Possibility** — Eugene E. Wilson, vice-chairman of United Aircraft Corp., and president of the Aircraft Industries Association, suggested to the Clinic that "a long-term Air Power Policy could attract private financing and relieve the government of some direct support. This would free industry from government domination and provide strong incen-

Instrument Backed

An angle-of-attack indicator to warn the private pilot of stalls and of excess landing speed is an essential addition to the private plane's instrument panel, Victor E. Carbonara, Kollsman Instrument Co. general manager, told the NAA Private Flyers Conference in Washington, last week.

Carbonara urged that every private plane should be equipped with at least a primary group of instruments, to enable the pilot, as a measure of insurance, to make a 180-degree turn and go back where he came from.

CARGO-GLIDER PICKUP:
An All American Aviation, Inc., towplane swoops down over the beach at Allerton, Mass., to "snatch off" a glider loaded with live lobsters consigned to New York markets. The test flight, made recently, was termed a complete success. The front cockpit of the two-place sport-type glider was packed with cases of lobsters and the craft was towed to Bendix Field, Teterboro, N. J., where a New York dealer declared the cargo was in perfect condition. Retouching shows pickup rope.

tives to competitive development in the revolutionary arts now opened up."

"This is one of the many reasons," he added, "why the aircraft industry is on record as favoring a new Presidential Advisory Committee on Air Policy."

▸**British Policy** — While United States aircraft manufacturers are asking for a definite policy, the British have set up a military procurement program and also a new civil aviation policy. The British aircraft industry, according to the Society of British Aircraft Manufacturers "is assured of an active future."

Already nearly 200 aircraft of various civil types are being produced on orders placed by the Ministry of Aircraft Production alone. In addition, many producers have scheduled programs for the manufacture, without Government orders of civil aircraft for both the domestic and export markets.

▸Details or even information on the Russian aviation program are not available, a situation which has prevailed for some time.

U. S. Research Unit Urged By Eaker

It should be clear, says Lt. Gen. Ira C. Eaker, AAF Deputy Commander, that "scientific research to insure the maintenance of our national security is vital."

Gen. Eaker, speaking at the annual dinner of the American Society of Mechanical Engineers in New York last week, pointed to the spectacular innovations in technological warfare which appeared with ever increasing momentum during the war and culminated with the atomic bomb and added:

"I believe it is in the national interest to establish a national research foundation composed of the most highly qualified scientists in the United States and charged with the responsibility of furthering basic research and development in all fields of science and the scientific training of adequate numbers of highly qualified men."

▸**Atomic Bomb**—The atomic bomb, he said, has made air power all important, because air power provides not only the best present means of striking an enemy with atomic bombs, but also the only available protection against the misuse of atomic explosives.

CAB Report Differs On Crash Analysis

Safety Bureau study, based on limited figures, indicates returning military pilots have been wrongly charged.

Although based on admittedly skimpy evidence, the CAB Safety Bureau in effect has taken issue with other sources that contend returning military pilots are subject to a high accident rate in personal aircraft because of unfamiliarity with slower and lower-powered planes.

A Bureau report finds that of 400 "serious and fatal" accidents during the first nine months of 1945, only 17 involved military pilots and none could be charged directly to the pilot's "loss of familiarity with the airplane's characteristics."

▸**Contract**—"Data presently available refutes the popular belief that military pilots are experiencing difficulty in reorientating themselves to the light types of aircraft after having flown for some time heavy high-performance military aircraft," the Bureau states.

Both the Bureau's conclusions and figures contrast sharply with statistics of the AAF Office of Flying Safety on liaison plane accidents (AVIATION NEWS, Oct. 15) which indicated that better than 80 percent of the pilots involved during a one-year period had less than five hours' experience in the model of aircraft concerned.

▸**Distinction**—The Safety Bureau separates accident statistics of military pilots from those of "other military personnel," which it defines as those in the service who know how to fly but do not do so as part of military duties. It expresses the belief that the opinion that service pilots need reorientation is largely founded on the lack of such differentiation in the public mind. In July, August and September of this year, other military personnel were involved in 12 serious and fatal accidents, while strictly military pilots had only seven.

The Bureau also examined the minor and no-injury accidents in the first six months of 1945. here were a total of 1,611 mishaps in this category, 33 involving military pilots. Only two of those could be attributed to a "loss of familiarity with the airplane's characteristics." In four other cases, the pilots' original experience in lightplanes was scanty, ranging from 10 minutes to five hours.

▸**Weakness** — Qualified observers state that the weakness in the Bureau's survey is the fact that in the period it covers there were few military pilots returning to civilian life. The Bureau admits this, asserting that a later study, made after more pilots have returned to civilian life, "may reveal 'loss of familiarity' as a dominant cause of accidents." Meanwhile, it is recommended that the "corrective emphasis" be placed on discouraging wilful reckless flying, which applies, adds the Safety Bureau, "equally to all pilots flying civil aircraft."

Roof Landings

A Portland, Ore., office building now under construction will have what is believed to be the first helicopter-autogiro roof landing facility on the Pacific Coast. The two-story building occupies an area 80 by 460 ft., and the roof landing feature was ordered by the building's owner, Chris Maletis, an autogiro enthusiast.

Provision for fueling the rotary-winged aircraft is included in the roof plan, although no hangar structure on the roof is contemplated. The building is in an area of relatively low structures, south of the main business district, and no difficulty from shifting wind currents is anticipated.

Move Seen to Support Mail Sorting at Airports

Hope that the air transport industry will support a Post Office Department move to obtain space for mail sorting at air terminals was expressed by department spokesmen at last week's annual meeting of Air Transport Association membership.

Lack of such facilities now means that airmail, after it is unloaded from a plane, must be taken to the post office for sorting then returned to the airport. On a country-wide basis, such a procedure means large total delay. Mail going by rail, on the other hand, is sorted en route.

The department, expecting that plane increases will mean the return to the airways of much business mail previously sent by rail, will ask a more than $7,000,000 increase in its budget in January for airmail purposes.

Larger Dealer Role in Disposal Of Surplus PT's Appears Justified

RFC figures for first month following change in procedure indicates new set-up has shown results which earlier critics had asserted would be possible.

Justification of the repeated assertions by aircraft dealers that they deserved a larger role in the disposal of surplus training planes is seen in the sales figures for the first month following the change in disposal methods which permitted dealers a discount and lowered the floor prices.

The reduced prices and the discounts were put into effect by the Reconstruction Finance Corp., aircraft disposal agency, Oct. 4. In the four weeks ending Nov. 1, total sales reached 1,132, a figure exceeded only once—last April when RFC began to push sales of PT's. That four-week figure includes transports and all other planes types. Planes sold at discounts to dealers totaled 1,031 during the period, a figure also exceeded only by the April results.

▸**Increases**—Planes sold at discounts and at reduced floor prices (AVIATION NEWS, Oct. 22) are primary trainers, basic trainers and Cessnas.

In the four weeks ending Nov. 1, 924 PT's were sold, 68 Cessnas, and 39 BT's. Most interesting figure is that for BT's. It is more than one-third of the total number (96) of BT's previously sold from the beginning of the program up to Oct. 1.

Under the revised RFC sales procedure, announced several months ago, a buyer establishes a dealer status with the purchase of three or more aircraft at one time, on which he gets a 20 percent discount. Any planes he later buys carry the same discount.

▸**Results**—A study of RFC figures shows PT sales sank to the third lowest point of the year in the week preceding the putting into effect of the discounts. They soared in the next two weeks to reach the year's second highest point (340) in the week ending Oct. 18. The slight decrease since then is not blamed on a slackening of interest.

In the first place, the Oct. 18 peak was partly due to the releasing of a pent-up demand; sales slackened after the original announcement that prices would be lowered and discounts given. Secondly, the rush to take advantage of the new terms exhausted stocks at many sales centers. This is indicated by increasing sales at storage depots.

Disposal at depots exceeded that at sales centers in the week ending Oct. 18, and have been upward since.

U. S. Surplus Aircraft Abroad Sell Slowly

Indifference of foreign nations to surplus U. S. aircraft abroad is reflected in the latest report of the Foreign Liquidation Commission, showing that of more than $500,000,000 worth of aircraft and parts overseas, only $2,706,498 worth has been sold.

Bulk of the overseas stocks, of course, consisted of combat aircraft and parts which could not be used for civilian purposes.

The fact that the aircraft and parts other nations want are in this country is indicated in sales by FLC and its predecessor agencies from Reconstruction Finance Corp. stocks of $4,968,984, up to Oct. 31.

▸**Salvaged**—By far the greatest part of the overseas surplus—the unsaleable combat types—has been salvaged, aircraft with an original cost value of $351,371,743 having been disposed of in that manner, and parts with an original value of $158,499,036.

Remaining to be sold abroad on Oct. 31 were aircraft valued at $6,406,397, and parts costing $20,335,885.

For the $2,706,498 worth of aircraft and parts overseas sold, FLC has received $777,623. Combining this figure with the far larger sales from RFC stocks in this country, FLC has received from overseas customers a total of $5,746,617.

▸Although FLC has whittled its overseas aircraft surplus down to a manageable amount consisting primarily of cargo types, trainers and gliders, chances of disposal of even these would seem to be limited as the majority is in poor or fair condition.

Surplus Total

Declarations of surplus aircraft will reach $10,700,000,000 by next July, Surplus Property Administrator, W. Stuart Symington, told the House Appropriations Committee last week.

SPA plans to sell $9,900,000,000 of the total as scrap, he said, and estimates that not more than $122,000,000 in surplus aircraft, parts, and components will be saleable in their original form.

▸**Schedule** — Symington set surplus airport declaration by next July at a total of $2,000,000,000, and reported that $484,000,000 of this surplus would be turned over to municipalities and other governmental subdivisions, with no cash payment.

This is the schedule of surplus aircraft declarations presented by Symington: $2,150,000,000 from July through September, 1945; $2,950,000,000 from October to December; $2,800,000,000 from January through March, 1946; $2,800,000,000 from April through June. On the total anticipated surplus of $10,700,000,000, SPA expects to get a return through sales of $30,000,000 by next July, Symington said.

AVIATION CALENDAR

Dec. 3-5—SAE National Air Transport Engineering Meeting, Edgewater Beach Hotel, Chicago.
Dec. 5—Penna. Aviation Trades Association, Hotel Penn-Harris, Harrisburg.
Dec. 6—Aircraft Industries Association, annual membership meeting, Ambassador Hotel, Los Angeles.
Dec. 8—Sportsman Pilots Association, Carolina Hotel, Pinehurst, N. C.
Dec. 10-11—Aviation Distributors and Manufacturers Association, Hotel Statler, Cleveland, Ohio.
Dec. 11-12—Western Aviation Conference, Sacramento, Calif.
Dec. 13-14—Airline Finance and Accountant Conference, Dallas.
Dec. 16-17—International Aviation Day, El Paso.
Dec. 17—National Aeronautic Assn. and Aero Club of Washington banquet honoring recipient of Robert J. Collier Trophy and presenting Brewer Trophy and Haire Awards, Statler Hotel, Washington, D. C.
Dec. 17—Institute of Aeronautical Sciences, Wright Brothers Lecture, Washington.

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Jan. 4-5-6—All-American Air Maneuvers, Florida Air Races.
Jan. 7-11—SAE Annual Meeting, Book-Cadillac Hotel, Detroit, Mich.
Jan. 11-20—Cleveland (Ohio) Aircraft Show.
Jan. 21-22—Northwest Aviation Planning Council, Boise Hotel, Idaho.
Jan. 28—Institute of Aeronautical Sciences Honors Night Dinner, Waldorf-Astoria Hotel, New York.
Jan. 29-31—Institute of Aeronautical Sciences, Annual Meeting, tentatively scheduled for Pupin Laboratory, Columbia University, New York.
Feb. 12—IATA European Rate Conference, Paris.
Feb. 21—IATA Middle East Rate Conference, Cairo.
March 1-5—Pan American Aircraft Exposition, Dallas, Texas, reviving pre-war annual exhibit.
April 3-5—SAE National Aeronautic Spring Meeting, Hotel New Yorker, New York.

Subcontractor To Manufacture Fairchild F-24's at Texas Plant

Robert McCulloch, former manager there for North American, heads new company which has orders for 200-300 planes; parent concern will handle sales.

An initial contract for manufacture of 200 to 300 Fairchild F-24 high-wing four-place monoplanes has been let to the Texas Engineering & Manufacturing Co., Ltd., Dallas, Tex., by the newly created Personal Plane Division of the Fairchild Engine & Airplane Corp.

It was reported that the parent company which will handle sale of the planes, already has booked over 200 orders for the F-24 and that the initial contract probably will be followed by a larger order.

▸ **Tools Moved**—Jigs, tooling and fixtures for the F-24 which was manufactured pre-war at Fairchild's Hagerstown, Md., plant are being transferred to the former North American Aviation, Inc., plant at Grand Prairie, Tex., near Dallas, which will be used by the Texas Engineering & Manufacturing Co., under a leasing arrangement with Reconstruction Finance Corp. Heading the Texas organization is Robert McCulloch, former Texas manager for North American.

J. Carlton Ward, Jr., Fairchild president, announced the new division of the company would handle design, manufacture, sales and service of private-owner aircraft, and its research and development program would be guided by Sherman M. Fairchild, chairman of the board.

▸ **F-24 Price**—Price of $8,500 has been set for the 165 hp. radial air-cooled Warner engine-powered F-24, while an alternate version, powered with a Ranger Six 175-hp. in-line aircooled engine, will be sold for $8,875. These prices include full standard equipment and instrumentation but not two-way radio.

Ward said Fairchild had disassociated its personal plane activities from the aircraft division at Hagerstown, Md., to permit that division to concentrate on military, naval and commercial planes. The division is currently producing a substantial order of C-82 *Packet* cargo planes for the AAF and is undertaking new military development work.

▸ **Other War Work** — During the war the company manufactured nearly 1,000 F-24s in a military cargo and personnel transport version known as the *Forwarder*, or UC-61.

At Dallas, McCulloch said his company had a small force already at work moving equipment into the one-third of the North American Plant A, which will be used for the personal plane production. His company also plans to do several reconversion jobs on Army C-47 transport planes, to convert them for commercial airline use and is negotiating for additional subcontracts with Fairchild for building sub-assemblies for the C-82 *Packet*. McCulloch and his partner, H. L. Howard, organized the new company about a month ago.

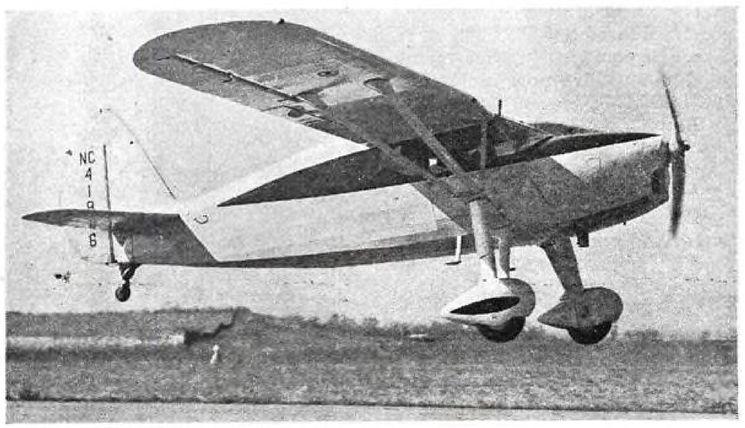
▸ **Pre-war Use**—In pre-war days the F-24 was used widely by sportsmen pilots, charter service operators, small airlines, for light cargo, and by government services and corporations as an executive plane. The post-war version will be improved over the pre-war plane, reflecting some of the company's experience in producing the military version, Ward said.

It is understood the Texas organization is not financially connected with the Fairchild organization. The arrangement under which the F-24s will be built leaves the Fairchild company free to develop other personal aircraft, while at the same time keeping its name before the public through the Dallas-built F-24s. The company announced more than a year ago its plans for building a post-war four-place low-wing monoplane, which have been temporarily shelved due to pressure of C-82 orders. It is presumed that this design will be developed further by the new Personal Plane Division.

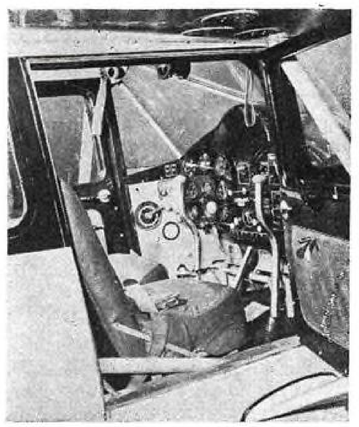
▸ **F-24 Data**—Performance of the F-24, equipped with the Ranger 175-hp. engine is quoted as: top speed, 133 mph.; cruising speed (at 75 percent power) 118 mph., landing speed with flaps, 53 mph.; takeoff to clear 50 ft. obstacle, 1,100 ft.; landing over 50 ft.; obstacle, 1,000 ft.; maximum range 620 miles; service ceiling, 14,000 feet.

Standard equipment will include bank-and-turn indicator, rate-of-climb indicator and sensitive altimeter in addition to all primary flight instruments. The plane will be completely wired and prepared for installation of two-way radio with engine shielded, airplane bonded and antennae mounted. It will be wired also for installation of landing lights.

▸ While specifications and construction details of the Dallas-built F-24 are not given, it is presumed the plane is essentially the same as the F-24-W-4 pre-war plane, which had a 36-ft. 4-in. wingspan, 23-ft. 9-in. length, 8-ft. height, 14.65-lb. wing loading; 1,482-lb. weight empty; 2,550-lb. gross weight. Construction was fabric covered welded tubing, with spruce wingspars and ribs. The high wing was braced with two struts. Landing gear was semi-cantilever split-axle type with full swiveling tailwheel.



Due for Production in Texas: *The Fairchild F-24, four-place personal and business plane, will be produced at Dallas, Tex., under a subcontract arrangement between Fairchild Engine & Airplane Corp., Personal Plane Division, and Texas Engineering & Development Co. Above, an F-24 powered by a 175-hp. Ranger motor takes off.*



Interior of F-24: *Fairchild's F-24 personal plane, to be built in Texas by a subcontractor, is fully equipped for instrument flying and wired for two-way radio equipment. The front right seat folds forwards to allow access to the rear seat.*

Northwest Air Council To Meet Next Month

The Pacific Northwest's aviation problems are scheduled for discussion Jan. 21-22 at Boise, Idaho, when the Northwest Aviation Planning Council holds its first post-war meeting. Representatives from Washington, Oregon, Idaho, Montana, Alaska and the Canadian provinces of British Columbia and Alberta will attend.

Tentatively listed for attention are: education of aviation personnel, federal participation in airport development, military and national guard aviation, state departments of aeronautics, airport engineering, outlook for women in aviation, aviation legislation and taxation. Harry L. Yost, national councillor of the organization, will be general chairman.

ASME Hears Burden Ask Better Planes

The most important single step toward the solution of private flying problems in the U. S. is to get busy and "turn out better and easier to fly personal aircraft," William A. Burden, assistant secretary of Commerce, told the annual meeting of the American Society of Mechanical Engineers last week in New York.

"The industry will be doing itself and the country a disservice," he said, "if it disillusions thousands of new flying devotees by offering them, in the name of post-war aviation, planes which give far less utility and comfort than the present state of the aircraft-designing art permits."

▸ **Proposal**—He urged the industry manufacturers "to produce a minimum number of old-type planes to satisfy essential demand and keep your organization intact, while moving full speed ahead to develop an improved airplane."

Burden urged full utilization of such technical advances as tricycle landing gear, spinproof characteristics, improvement in landing and takeoff performance through lower power loadings, two-control systems and reduction of external noise, either through redesign of propellers or use of some other type of power plants.

▸ **Other Needs**—If designers get busy on these problems, he said, we can have 400,000 personal planes in the U. S. in ten years. If they fail, he warned, we won't realize more than a quarter of that.

Other steps urged by Burden were: thousands of new small airports, better air marking, improvement of airport facilities.

NEW PUBLICITY ANGLE:

H. O. (Rocky) Nelson, Phoenix, Ariz., Ercoupe *distributor, won widespread newspaper publicity for personal planes recently at the first Arizona Aviation Conference, Tucson, when he landed on an outlying street, with his* Ercoupe *and taxied it up Broadway, parking it in front of a "No Parking" sign. A motorcycle cop promptly arrested him, and Nelson paid a $1 fine for several hundred dollars worth of publicity.*

Baltimore Ruling

Baltimore Aviation Commission has approved application of three flight schools for use of facilities at Baltimore Municipal Airport, opening the municipal field to civilian training for the first time since it was constructed.

Flight instructors and students must clear with the control tower before takeoffs and landings and must conform to traffic pattern, but training planes will not be required to have two-way radio until traffic becomes denser. Schools using the facilities are Stevens Flying school, headed by Howard L. Stevens; Oriole Flying Service, headed by Joseph Dolan and Dr. M. Charles Elko, and French Flying Service, headed by Howard French.

Private Schools Allowed To Buy Surplus Planes

Revision of Surplus Property Administration regulations to make it possible for private aviation technical schools to obtain surplus aircraft and parts for instruction purposes was revealed today by Wayne Weishaar, secretary of the Aeronautical Training Society.

While tax-supported institutions have been eligible to buy aviation surpluses for non-flight use at extremely low prices, private schools heretofore could not. Costs to the private schools were not announced, but is understood that the prices would be slightly below the scrap values of the equipment concerned. By contrast, prices to tax-supported institutions are lower, ranging from about $100 for a fighter to $350 for a heavy bomber.

Student Pilots Lead In CAR Violations

Ten of 16 violators of Civil Air Regulations were student pilots, according to recent Civil Aeronautics Board investigations. Carrying passengers and low flying were the chief offenses.

Summary of the violation and Board action follow:

REVOCATIONS

Student Pilot Robert Joe Noland for flying in the vicinity of El Dorado, Kans., and carrying a passenger seated at the operative dual controls when neither he nor his passenger were certificated for such operation, operating the aircraft acrobatically at less than 1,500 ft. when neither he nor his passenger were equipped with a parachuto, July 4, 1945. Actions violated CAR 60.71(a), 60.701(b), 43.50, 60.71, and 60.72. Certificate revoked.

Student Pilot Barnie Hart Graeber for piloting an aircraft over a congested area of Des Moines, Iowa, at less than 1,000 ft., and performing acrobatic maneuvers consisting of zooms and dives at tree and house top levels, Aug. 7, 1945. Actions violated CAR sections 60.101, 60.104 (b), and 60.105(a). Certificate revoked.

The following student pilots carried passengers when not certificated for such operations:

Frank Hall, near Butler Airport, West Plains, Mo., June 9, 1945.

Richard Emil Bross, near Swatara Valley Airport, Pine Grove, Penna., July, 1945.

Leo Gerber Morse, from Simpson to Chinook, Mont., May 20, 1945.

George Hanson, Near Ong Airport, Kansas City, Mo., July 18, 1945.

Paul Raymond Spaur, near Vail Field, Los Angeles, Calif., June 2, 1945.

Action violated CAR sections 20.720 and 43.50. Certificates revoked.

Student Pilot Robert Cletus Ruxlow for piloting an aircraft in the vicinity of Marshalltown, Iowa, at less than 500 ft. altitude, and in a reckless and dangerous manner in that he dived and zoomed at workmen engaged in baling hay and threshing wheat, coming within 10 ft. of the men, Aug. 26, and flying dangerously, Aug. 28, 1945, by diving at a number of automobiles on a highway, flying to within two ft. of the top of the cars, later landing in a nearby field. In attempting to take off from the field Ruxlow completely demolished the plane. Actions violated CAR sections 60.101, and 60.105 (b). Certificate revoked.

Commercial Pilot Robert W. Bosse for flying at less than 500 ft. above the ground and less than 1,000 ft. over a congested area of Bilbert, Ariz., and performing acrobatics both over the congested area and at less than 1,500 ft. while carrying a passenger seated at operative dual controls, who was not the holder of at least a private pilot certificate. Actions violated CAR sections 60.3500, 60.3503, 60.700-(a), 60.701(b), and 60.71(b). Certificate revoked.

Student Pilot Lovell Gordon LaVanway for attempting a take off from a place other than a designated landing area in the vicinity of Moxee City, Wash., when there was risk of collision with another aircraft, without obtaining prior approval of the administrator's authorized representative, and carrying an uncertificated passenger when the aircraft was equipped with functioning dual controls, May 14, 1944. LaVanway executed loops and spins in the vicinity of Reno Sky Ranch, Reno, Nev., when he was not equipped with a parachute, July 6, 1944, and in an aircraft for which there was not outstanding a valid airworthiness certificate. Actions violated CAR sections 60.3300, 60.951(a), 20.720, 20.724, 60.72 and 60.31. Certificate revoked.

Commercial Pilot Francis Eugene Ackerman for flying at an altitude of less than 500 ft. near Alturas, Calif., Nov. 27, 1944, and near Dorris Reservoir, Alturas, Dec. 12. On the first flight Ackerman flew toward, and so close to, a station wagon on the highway that the driver was forced to leave the highway in order to avoid a collision. He also dived to within 20 ft., before pulling up, of a highway bus loaded with passengers. Actions violated CAR section 60.3503. Certificate revoked.

SUSPENSIONS:

Student Pilot Robert Eugene Rothermel for piloting an aircraft in the vicinity of Berwick, Penna., and practicing a simulated forced landing, although he was not under the supervision of a flight instructor, at an altitude so low that he was unable to effect a safe recovery before the plane struck a small hill. Action violated CAR sections 60.350 and 60.3503. Certificate suspended for six months.

Commercial Pilot Clarence David Correll, for flying at an altitude of less than 500 ft. above the ground, and at 1,000 feet when the ceiling was insufficient to permit flight at minimum altitude and when the visibility was less than one mile. Upon encountering instrument weather, he failed to make a landing at the nearest airport, although he was not the holder of a valid instrument rating, and the aircraft was not equipped for instrument flying. Actions violated CAR section 60.3503, 60.35, 44.10, 60.470, 60.5, and 60.51. Certificate suspended for six months.

Commercial Pilot Robert Chester Johns for piloting a plane, after completing a takeoff from Sullivant Avenue Airport, Columbus, Ohio, at an altitude of less than 500 ft. over the airport and toward, but not over, the hangars and people who were standing there, May 21, 1945. Action violated CAR section 60.3503. Certificate suspended for 20 days.

Commercial Pilot Santiago Gonzales for flying about one mile west of the Lantana Airport, Lantana, Fla., at an altitude of less than 500 ft. above the ground, May 3, 1945. Action violated CAR section 60.3503. Certificate suspended for 90 days.

Private Pilot Gregory Harold Osborn for piloting an aircraft at less than 1,000 ft. over a congested area of Sublette, Kans., July 17, 1945. Action violated CAR section 60.3500. Certificate suspended for 90 days.

Briefing *For Private Flying*

Another indication of the rapid swing toward simplified control private planes is the opinion of an Aeronca dealer voiced at the Oklahoma City National Aviation Clinic. He estimates that 80 percent of his total Aeronca sales will be sales of the *Chum*, two-place two-control plane which the Middletown, Ohio, manufacturer is making under Fred Weick's *Ercoupe* patents by license. And the plane is not even in production yet! All of which indicates that the personal plane manufacturer who doesn't have some kind of an easy-to-fly plane, at least on the drawing boards, had better have a serious talk with his chief engineer.

MORE SEAPLANE BASES—Natural advantages of St. Louis with its long waterfront, are being recognized in three applications filed with city officials within the last two weeks for permission to establish seaplane bases on the riverfront. James B. Irwin has applied for 300-ft. frontage on the river to establish St. Louis Sky Harbor. Petty Marine Flying Service, which has been operating a water flying dock 12 miles from St. Louis, has applied for 250-ft. frontage, midway between MacArthur and Ennis bridges, with plans for a ramp, offices, restaurant, hangar and shop, and Albert W. Courtial, Jr., and Walter Westfield have applied for 100-ft. river frontage with plans for a 50-ft. ramp and a dock 25 by 15 ft., for their base.

HICKSVILLE AIRPARK OPENS—At Hicksville, L. I., private flyers have organized an airpark flying club which may serve as a pattern for other similar flying clubs in other parts of the country. The club opened its field recently with a flag-raising dedication ceremony. Four concrete block hangars are under construction, and a five-room clubhouse is on the field. Two grass runways, one 1,000 ft. long and one 1,600 ft. long, are in use. The club owns two planes for its members' use. Dues are $2 a month, after a $10 initiation fee. Planes are rented to members for $5 to $7 an hour solo, and $3 more for dual instruction. Starting modestly with some 30 members, the club plans to buy additional training planes, build a playground for members' children, a swimming pool and other recreational facilities, and eventually a larger clubhouse. The project is a community, non-commercial affair, open to every resident 16 or over.

INTERNATIONAL FLIGHT PERMITS EASED—CAA inspectors at U. S. borders now are authorized to issue permits to foreign civil aircraft not carrying passengers for hire, cargo, or mail to make flights within the U. S. under a new order of Administrator T. P. Wright. Previously permits could be obtained only from Washington, which meant that if a Mexican, for example, wished to fly within the U. S. he had to write, telephone or telegraph Washington at considerable delay and expense. The order also enables CAA factory inspectors to issue permits to foreign purchasers of new planes to fly them through and out of the U. S. Wright has announced as the ultimate goal, to permit private or commercial non-scheduled planes from foreign countries to enter the U. S. without prior authorization from anyone if they come from countries which grant reciprocal privileges to U. S. planes. Discussions on this subject now are in progress, but pending some definite decision, charter or other non-scheduled commercial flights into the U. S. still must be authorized through the Chief of Aircraft Recordation, CAA, Washington.

—Alexander McSurely

Aero Insurance Underwriters Cuts Premiums As Much As 50%

Group, one of nation's largest aviation policy handlers, makes reduction in expectation of great flying expansion and consequent increase in volume of premiums.

Reductions of as much as 50 percent in insurance premiums for personal aircraft owners and aircraft service operators have been put into effect by Aero Insurance Underwriters, one of the nation's largest aviation insurance groups.

While over-all opinion in the insurance field is that loss experience does not justify any substantial premium reductions at the present time, Aero is making its decreases on the strength of expected flying expansion, G. L. Lloyd, general manager, states.

▸ **Volume Increase**—"In our judgment the number of aircraft in non-scheduled operations next year should be at least double the number this year," he says. "This justifies the assumption that the future will bring a substantial increase in volume of premiums. If so, a very important factor in keeping up the cost of liability insurance will be removed and rates can be radically modified."

As examples of the new rates, a $5,000-$10,000 public liability insurance policy now costs $10 for the private owner and $15 for an aircraft service operator, as against the old rates of $20 and $35. Property damage policy in the amount of $5,000 now require a premium of $12.50 for the private owner and $17.50 for the operator, compared with $25 and $40. The operators' premiums on a $5,000 passenger liability policy covering passengers carried for hire are cut from $100 to $75.

▸ **New Coverage**—Along with the reduction, Aero has instituted a new form of coverage, "single limit liability," which can be bought in place of the usual multi-limit policy on public liability and property damage. A personal aircraft owner will pay $17.50 for coverage in the amount of $5,000 on both public liability and property damage. A limit of $10,000 on both forms requires a premium of $23.80. A $25,000 limit has a premium of $29.40. The single limit coverage is also available to include passenger liability.

In a letter to Aero's agents and brokers, Lloyd frankly admits the new rates and coverage are experimental. But while flying will increase, he emphasizs, "we expect that losses will not be any greater proportionately than in the past."

▸ **Safety Manual**—In an endeavor to contribute to the safety record, Aero has published an "Airplane Operations and Maintenance Manual" to guide business executives in use of company-owned aircraft. Prepared by the underwriter's engineering department, the manual stresses, among other points, the danger of an executive's ordering a flight when in the opinion of the pilot, the flight cannot be made with maximum safety.

Atlanta Department Store To Handle *Ercoupes*

First sale of personal aircraft in a Southern department store is being undertaken by Davison-Paxon Co. in Atlanta, Ga. The store is displaying *Ercoupes* under an arrangement with Southeastern Air Service, Inc., *Ercoupe* distributor for Georgia, North and South Carolina.

Southeastern is furnishing pilot-salesmen who explain the airplane to prospective customers, and make arrangements for flight demonstrations.

Cox, Berry Named Aides For Personal Flying

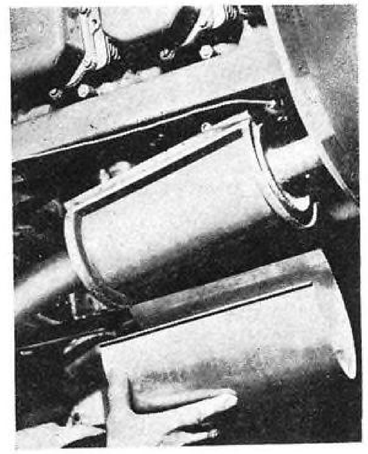
Col. Charles E. Cox, Jr., and William M. Berry, veteran CAA employees, have been appointed as assistants to regional administrators for personal flying development.

Cox, former manager of the Indianapolis Municipal Airport, is assigned to Region 3, including Illinois, Ohio, Indiana, Kentucky, Minnesota, and North Dakota, with headquarters in Chicago. Berry, who formerly operated his own flying service, was superintendent of safety regulation in the Fourth Region, with headquarters at Ft. Worth, where he will continue to serve in his new post. The region includes Texas, New Mexico, Arkansas, Oklahoma and Louisiana.

▸ **Veteran Flyer**—Cox, a combat pilot in World War I, returned to CAA recently after AAF service in the second World War. He was assigned as a private flying specialist before he re-entered military service. His other aviation experience includes airplane sales and flight instructor work.

Oklahoma Sales System For *Voyagers* Set Up

Plans to develop a statewide Oklahoma lightplane distributor-dealer organization for the Stinson *Voyager* 150 were announced at Oklahoma City last week by Frank



CAUSE AND EFFECT:

Use of insulating material and dual engine mufflers (above) has made it possible to reduce the noise level in the new Stinson Voyager 150 *to a point where the plane uses a cabin dome loudspeaker (below) in place of the headphones which have long been standard personal plane radio equipment. For diehards who still want headphones, a jack is provided on the panel.*

Clark, automobile dealer, who will operate the state distributor headquarters in combination with his automobile business in a new $200,000 downtown sales and service building.

The airplane business will be directed by his son Jack, who served three years as a troop carrier command pilot before his recent honorable discharge, and his daughter Betty, now studying aviation law at Northwestern University.

The state dealer organization, it is being planned, will be set up as rapidly as production of the airplane justifies.

Airpark Programs Boom in Missouri

15 communities follow Eldon's lead and 25 others are planning similar projects.

The example set by the Eldon, Mo., small community airpark project started about a year ago, has led to similar projects in 15 other Missouri communities of like size, while 25 others are making plans for campaigns to have their own airparks, Eugene Fryhoff, aviation director of the state resources and development advised AVIATION NEWS last week.

The aggressive attitude taken by the Missouri towns toward airpark development may be cited as a specimen of the grass-roots airpark and landing facility potential which Arthur C. Boreman, chairman of the CAA non-scheduled flying committee, expects will lead with proper cultivation by local governments and individuals to as many as 16 to 20,000 landing facilities throughout the nation in the future.

▸ **Dedication**—Fryhoff and Mayor Bob Reed of Eldon, disclosed that the model airpark already is being used by private flyers to a limited degree, although facilities there still are under construction. Plans are being laid for a flying dedication of the airport with wide representation from private flying interests, next June 1 and 2, under sponsorship of the Personal Aircraft Council of the Aeronautical Chamber of Commerce.

Edgar Smith, head of Airports Associates, Inc., Kansas City, will manage the Eldon Field. It is expected that this field in time will become a national model and display location for many types of hangars and other equipment which will be designed for airparks.

A model contract is being drawn up for management of the airpark which, it is expected, will be used generally by other Missouri towns interested in financing similar projects.

▸ **Financing**—Bond issue campaign carried on by Eldon successfully last spring to authorize a $25,000 bond issue for financing the field, which is located within the city limits, has served as a model for a number of other communities Fryhoff said. Posters, huge newspaper display advertisements, campaign meetings, and house-to-house visits to get out the vote for the airpark bond issue were the main methods used.

Among examples of other Missouri towns cited by Fryhoff as following Eldon's lead are:

▸ Albany, population 2,300, which has voted a $25,000 bond issue for a 120-acre airpark.

▸ Bolivar, population 2,600, which also has voted a $25,000 bond issue for an airpark.

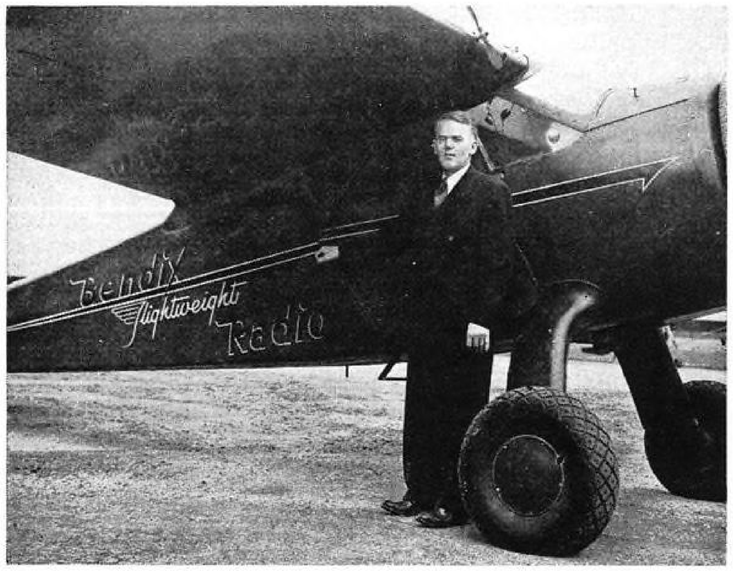
▸ Boonville, where 82 business men put up $100 apiece to purchase a 100-acre airpark site.

▸ Slater, population 2,500, which lost its airpark bond issue election by 50 votes. But citizens petitioned the city council to buy the airpark site anyway, with funds which were available, and the council responded to make the expenditure. so Slater has an airpark anyway.

▸ Warrensburg, the only other town where an airpark bond issue has failed to carry, also has an airpark in spite of the defeat. Kenneth Marr, Warrensburg druggist, and chairman of the airpark bond issue campaign, bought the proposed airpark site as a private venture and is developing it for community use.

The airpark sites at Bolivar, Slater and Albany all are either partially or completely within the corporate limits, within easy walking distance of any part of town, and it is planned to include the portion of the airparks which are not now within the limits, by amending municipal ordinances.

A privately developed air strip at a fishing resort at the Lake of the Ozarks, also is available as a result of the Missouri development program. The one-way strip is within a short walk of the cabins of Mel Atkins, who is operating the landing facilities as an added attraction for his patrons.



FLIGHT DEMONSTRATOR:

A flying laboratory to demonstrate the new Flightweight *line of personal plane radio equipment has been announced by Bendix Aviation Corp., radio division, Baltimore. Gordon R. Mathews, experienced transport pilot, and formerly active in CAA and in civilian training schools for AAF cadets, will have charge of the plane, operating out of Chicago over the eastern half of the United States. Bendix engineers expect Mathews' experience with the flight laboratory will contribute much practical knowledge toward tests and further development of personal plane equipment.*

Use of Nazi Helicopter Designs Believed Under Study in U. S.

Anton Flettner, noted German engineer, offers to build samples of latest models and make his knowledge available; one craft called most advanced in field.

Possibility and desirability of utilizing German helicopter designs and techniques are believed to be under study by U. S. industry and government, following an offer by Anton Flettner, Germany's foremost rotary wing engineer, to build samples of his latest creation for U. S. authorities and make his knowledge available.

Flettner, while confined to a detention camp by occupation forces, revealed many details of his work to the Combined Intelligence Objectives Subcommittee, the report of which has just been released.

▸ **New Design**—Although the Flettner FL-282 (AVIATION NEWS, Oct. 15) is regarded as being a most advanced type of helicopter, its inventor terms it outmoded by a new design, the FL-339, which incorporates his entire 18 years' experience with rotating wing craft.

Regarded as one of the world's leading aeronautical designers and noted for many airfoil and control developments which are used on most aircraft, Flettner has been working on helicopters since 1927 and in some respects may have achieved better results than helicopter engineers in this country. The FL-282 was the fourth design of his company and 26 different models of it were built. By the end of the war, the German armed forces had placed an order for 1,000 of them.

▸ **Performance**—Some Allied specialists who have seen a 282 fly have confirmed that it holds the peak of present development in its field. It was used by the Germans for convoy patrol in the Aegean Sea and in tests it flew in 50 mph. winds. It can achieve an altitude of about 16,000 ft., and can carry two or three persons at a top speed of close to 100 mph.

▸ The two rotors of the craft were two-bladed, mounted on separate but adjacent hubs, and inclined away from each other while rotating in opposite direction. As they are practically one airscrew, Flettner says, it is unnecessary to have rotors on each side of the craft, or a counter-torque propeller in the tail.

▸ The gearing is simple, the rotor shafts being connected to the motor by a worm gear drive.

▸ **Application** — Flettner declares that the 282 design is especially applicable to the construction of helicopter cars and buses, and it is this enterprise that he would most like to cooperate in with U. S. manufacturers. When freed, he hopes to be able to develop his ideas along that line.

No details on Flettner's newest design, the 339, have been revealed. He proposed to occupation authorities that he be permitted to reopen his factory at Frankfurt-on-Main, under the surveillance of Allied officials, and construct four model 339's, two each for the British and the Americans. Only in this way, he asserted, could he transmit all the information on helicopter design that he has at his disposal.

Argentine Exports

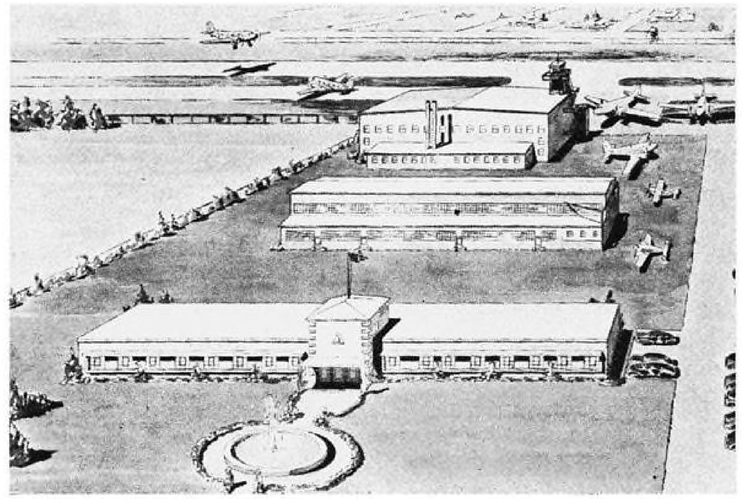
Resumption of the granting of export licenses for aviation equipment to Argentina is announced by the State Department. Licenses will be subject to the requirement that the equipment be used only for development of private and commercial aviation.

"This action results exclusively from the progressive termination of wartime restrictions," the Department declares, "and is totally unrelated to any political considerations."

AAF Orders for P-82 Believed on Way

Indications that North American Aviation soon will receive production orders for its *Twin Mustang* fighter-bomber, the P-82, were strong last week as the Air Technical Service Command completed trials of the plane.

The P-82 tops 475 mph., has a



NORTHROP SCHOOL:

Creation of Northrop Aeronautical Institute, which will begin operations early next year, has been announced by Northrop Aircraft, Inc. at Hawthorne, Calif. Sketch shows buildings which will be occupied by the Institute at Northrop Field. The school will specialize in aeronautical engineering and airline maintenance mechanics courses, starting home-study courses in January and resident school classes in March.

combat range of more than 2,500 miles and will operate up to 45,000 ft., ATSC disclosed.

▸ **Heavily Armed**—It has a gross weight of 20,000 lbs. and empty weight of 14,350 lbs., mounts six free-firing .50 caliber machine guns in the center wing section, four racks for 1,000-lb. bombs, and five rocket-launching racks carrying a total of 25 rockets. An eight-gun nacelle can be installed below the wing at the centerline.

Dual controls make the fighter a two-pilot plane, although the chief pilot is assigned to the left-hand fuselage. A total of 4,400 hp. is supplied by the plane's two Packard-built 12-cylinder V-1650 Rolls Royce engines. Tactically, the plane offers the advantages of two-engine performance, while minimizing the fatigue that would ordinarily be suffered by a single pilot on long missions.

▸ If NAA receives a production order for the P-82, it will be produced in the company's Inglewood plant on lines previously producing the P-51H.

Constellation Wing Given "Shake" Test

Lockheed expected to announce results soon on 4,000-hr. check on integral fuel tank leakage.

Lockheed Aircraft Corp. is expected to announce soon the results of a 4,000-hour shake test conducted with a *Constellation* wing section in seeking to solve problems of integral fuel tank leakage.

Indication has been given that the company has succeeded in developing a satisfactory tank sealing compound, and that no major leaking should develop in production models of the Lockheed transport.

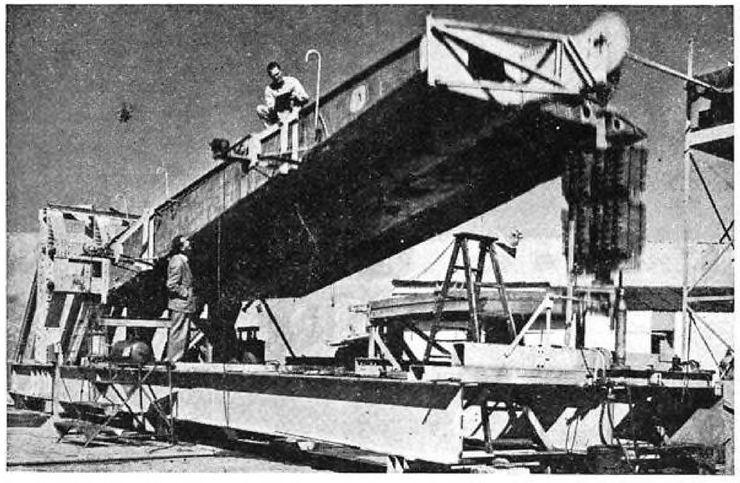
▸ **Major Problem** — Integral fuel tank leakage proved a major problem in the design of four-engine military bombers and transports, and during the closing year of the war all manufacturers of multi-engine planes were engaged in seeking solutions through the development of sealants and new tank structure designs.

To test the success of *Constellation* integral tank improvements Lockheed developed a simple but highly successful shaking mechanism shown in the accompanying photograph.

▸ **Vibrators**—At the outer end of the securely mounted wing was fastened a framework transmitting to the wing the vibration impulses of a weight-loaded eccentric flywheel, electrically driven. Smaller eccentric vibrators were mounted on the main spar at engine mount points, to provide a simulation of engine vibration.

So successful was the device in running the fuel tank tests that Lockheed engineers are continuing its use in an extended study of the wing structure under simulated flight stresses. Test loads of up to 50 tons have been applied, and for the first time engineers have been able to study the "working" of both the interior wing structure and outer covering during the simulation of flight stresses resulting in displacements of up to 18 inches at the outer portion of the wing.

▸ "It is the first time that aircraft designers and engineers have been able to observe first-hand the effects of flight upon a plane's internal structures," says Hall L. Hibbard, Lockheed vice-president and chief engineer.



"Constellation" Wing "Shake" Test: *Clamped securely on a massive steel testing jig, this wing of the Lockheed* Constellation *is "flying" at a speed in excess of 300 miles an hour. This wing has flown for 4,000 hours to test structural strength and the efficiency of integral tank sealing methods.*

C-W Acquisition

The Marquette Products Co., of Cleveland, manufacturers of precision parts and assemblies for the automotive and aviation industries since 1920, has been acquired by Curtiss-Wright Corp.

G. W. Vaughan, president of Curtiss-Wright, will assume the newly-created position of chairman of the board of Marquette. Herbert Gleitz will continue as president and general manager of Marquette which currently employs 1,000 people at its Cleveland plants where operations will be continued. No change in personnel is contemplated under the new set-up.

▸ **Marks Trend**—Marquette is the second firm Curtiss-Wright has acquired during the past year, marking a definite trend for the corporation in taking over comparatively small manufacturing units where engineering and financial assistance can be used to advantage. Late in 1944, Curtiss-Wright purchased the L.G.S. Spring Clutch Corp., of Indianapolis, manufacturers of spring clutch assemblies for all types of mechanical equipment.

DeHavilland of Canada Taking Back Factories

De Havilland Aircraft of Canada, Ltd., is gradually resuming operation of the factories at Toronto for peacetime production. The Canadian government took over the facilities to speed production of the *Mosquito* combat craft, and is now turning them back to the company.

Some of the buildings already are being used, while the three war-time built assembly bays for the *Mosquito* are still operated by the government, currently for storage.

▸ **Plans Prepared**—While no new

type aircraft are yet announced by the company, it was learned plans for new aircraft are being drawn. Meanwhile, de Havilland has several hundred employees on the job manufacturing the pre-war designed Fox *Moth*, a four-place cabin type biplane, powered with a single Gypsy *Major* engine. Test flights of the first peace-time model are expected soon.

Airspeed *Ambassador* Being Pressed

Now under development at the Airspeed factories in Britain is the Airspeed *Ambassador* Transcontinetal liner of 45,000 lbs. loaded weight, high-wing arrangement, tricycle undercarriage, nose wheel steering, low loading position and level attitude when at rest.

The craft embodies a thin laminar-flow wing. It is powered by two Bristol *Centaurus* 2500 hp. sleeve-valve engines. The company reports it will take off and clear a 50-ft. obstruction in 750 yds. and climb continuously thereafter at 1,580 fpm. when loaded to gross weight and carrying a payload of 9,400 lbs. It is designed to cruise at 240 mph. at 20,000 ft. Range is around 1,000 miles.

▸ **Pressurized**—The cabin is pressurized and air conditioned. The plane is expected to fly next year.

New Rubber Booklet

A booklet outlining applications for rubber and synthetic products in industry has been published by B. F. Goodrich Co., and is being supplied on request. Opening pages are devoted to explaining Koroseal, a flexible synthetic material.

Minneapolis-Honeywell Expands

Minneapolis-Honeywell Regulator Co., manufacturers of automatic controls, including recently announced electronic automatic pilots and other aeronautical devices, has begun an expansion program which will cost $3,500,000 and enlarge plants and equipment in three U. S. cities, and in Toronto, Canada.

The company's main plant in Minneapolis was expanded during the war, but will be enlarged still further with the construction of a new wing to add 120,000 square feet. Facilities in Chicago and Philadelphia will also be increased.

▸ **Employment** — Harold W. Sweatt, company president, declares that reconversion is practically completed and that employment is approximately 30 percent above previous peacetime levels.

The number of employees is expected to go even higher when the factory expansion is accomplished according to present plans made by the company.

Canada Studing Tailless Aircraft

A general investigation of tailless aircraft is being conducted by the National Research Council at Ottawa, J. H. Parkin, director of the mechanical engineering division told AVIATION NEWS. This investigation includes wind tunnel studies, work in the spinning tunnel and flight trials of a flying model, to study the stability and control of this type of aircraft.

A glider model has been chosen for the flying model in order to avoid interference with various instruments and to avoid the additional complications of an experimental engine installation combined with a shaft drive. The wing span of the glider is 47 feet and the maximum weight in test will be approximately 4,000 pounds. A pilot and observer will be carried and dual controls are provided. The wing section is of the low drag, or laminar flow, type. The primary structure of the glider is entirely wood, embodying a relatively thick moulded plywood skin over conventional ribs and a single laminated spar.

▸ **Instruments** — Fairly extensive automatic recording instruments is being fitted for the flight trials.

Use of Rocket Sleds For Takeoffs Discussed

Possibility of utilizing a rocket-propelled sled for the launching of jet aircraft is being discussed in aeronautical design circles. The device would replace conventional landing gear. Jet nacelles would be so designed to make feasible "belly" landings without damage.

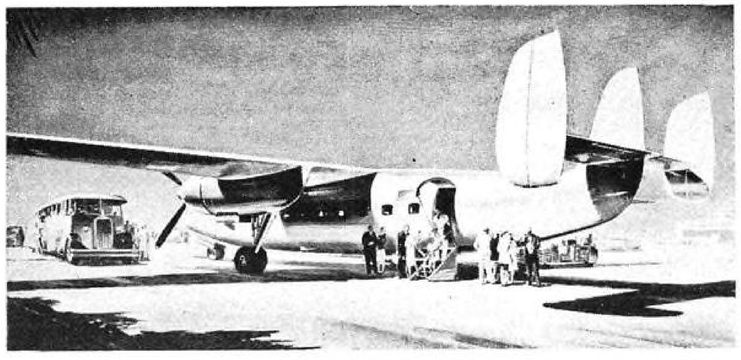
The plane would have small, lightweight retractable gear to facilitate ground handling.

▸ **Savings** — In takeoffs, the jet plane would be hurtled into the air, leaving the sled on the ground. Claimed advantages of the proposal is a great weight-saving in eliminating conventional landing gear, shortened takeoff distance, and, through the use of the smaller taxiing gear, more space for payload.

Board Completed

Formation of the board of directors of War Assets Corp., a Reconstruction Finance Corp. subsidiary which will take over RFC's surplus disposal functions (AVIATION NEWS, Oct. 29), nas been completed, and Arthur J. Fushman has been named WAC president.

Other members of the board, in addition to Fushman and Sam H. Husbands, chairman, are: George F. Buskie, vice chairman, Harvey J. Gunderson, Merritt C. Penticoff and David H. O'Brien.



New British Transport: *Artists drawing of the Airspeed* Ambassador *which is expected to fly next year. It has a gross weight of 45,000 lbs. and a cruising range of 1,000 miles.*

PERSONNEL

★ ★

Col. Rose Named Aide To TACA Board Chairman

Col. Leonard M. Rose (photo) has been appointed assistant to Benjamin F. Pepper, chairman of the board of TACA Airways. Until his recent release from the Army, Col. Rose was chief of transportation, base section, in India and Ceylon. Before the war he had 18 year's experience in various fields of transportation in Latin America and spent 10 of those years in Mexico.

C. E. Lawton has been promoted to the post of assistant treasurer of TACA Airways Agency, Inc. Lawton joined the agency in 1944 as assistant manager. The agency represents TACA airlines of Central and South America.

Albert H. Charlton (photo) has been named sales manager of the aluminum division of the Reynolds Metals Co., with headquarters in Louisville. Charlton joined Reynolds in 1936 and was assigned to the company's sheet mills, later he became an assistant plant manager. He helped set up the plants for prefabrication of aluminum parts for aircraft.

Carl J. Snider, formerly an aircraft maintenance supervisor for the AAF, Air Technical Service Command, has been named assistant to the chief engineer in charge of development of aircraft hydraulic testing machines and maintenance equipment by Greer Hydraulics, Inc., Brooklyn.

Cliff Johnson, former member of the public relations staff of North American Aviation, Inc., has been appointed to the publicity department of Douglas Aircraft Co., Inc., Santa Monica, succeeding **Irving Kramer,** who has been employed as director of publicity for the Los Angeles Chamber of Commerce.

Stanley Schlenther has been named director of advertising for the international division of Transcontinental & Western Air, Inc., and **Walter Brown, Jr.,** has been named director of passenger sales. Schlenther was with the Air Transport Command and prior to joining the service, was account executive on TWA advertising. Brown has spent 20 years in the railroad and steamship business.

Ringer Is Elected ACT Vice President

Capt. John Ringer (photo), Chief Pilot for Air Cargo Transport Corp., has been elected vice-president of flight, it has been announced by H. Roy Penzell, president. Capt. Ringer also will continue as chief pilot of the line, now operating non-scheduled service out of Newark Airport with a fleet of seven DC-3's. Capt. Ringer joined ACT in August, coming from Colonial Airlines.

Constance Peterson has resigned as chapter service director of National Aeronautic Association, to rejoin her husband who has been in the service. She is being replaced by **Mrs. Lucile Thompson,** formerly with the U. S. Public Health Service.

C. E. Reid has been appointed manager of the Los Angeles branch of Air Associates, Inc., after having been temporarily assigned to the Los Angeles office for six months. Reid formerly was with Sikorsky Aircraft, Nicholas Beaszley, Inc., and Air Associates' main plant at Teterboro.

Col. Frederick G. Betts (photo), former chief of staff of the 8th Fighter Command, has been released by the Army to become executive assistant to the senior vice-president of Transcontinental & Western Air, Inc. Col. Betts has been with TWA and its predecessor companies since 1928. Prior to joining the Army he assisted in the inauguration of the airline's intercontinental division under contract to the Air Transport Command.

Bonnalie Heads United's Mexican Subsidiary

Allan F. Bonnalie (photo) has been named president and general manager of Lineas Aereas Mexicanas, S. A., Mexican subsidiary of United Air Lines. He succeeds William A. Taylor, resigned. Bonnalie has just returned to United after service as a commander in the Navy's Bureau of Aeronautics at Washington. Before going into service he was assistant to United's vice-president-operations. He began his flying career in 1911.

W. G. Wood, eastern traffic manager of Trans-Canada Airlines prior to his enlistment in the Canadian Army in 1942, has been appointed assistant traffic manager for TCA, and will specialize in development work as it affects the traffic department.

Harold F. Blackburn has been appointed director of the Atlantic region for the international division of Transcontinental & Western Air, Inc., while **W. G. Golein** was appointed superintendent of flying operations. Blackburn is a million-mile pilot and has been directing the intercontinental division of TWA since last year. Golein, who has been with TWA for 15 years, also is a veteran pilot. He has been assistant manager (flight) assigned to the intercontinental division.

Ellen Gibson (photo) has been named publicity assistant in Braniff Airways, Inc.'s publicity department. Her appointment is part of a long range plan for enlargement of Braniff's public information department. Formerly with the southern region public information department of American Airlines in Dallas, Miss Gibson will handle general news and feature stories.

W. L. Wilkinson has been made new sales manager for Solar Aircraft Co. **Dan Young** and **William H. Quade, Jr.,** have been named his assistants. Wilkinson had been purchasing agent for Fokker Aircraft Co., and after a period of private business joined Solar as assistant purchasing agent in 1942. Young was affiliated with the Wright Brothers in 1910

and since then has been with Curtiss-Wright, Seversky, Republic and Brewster. Quade was a contract administrator for Lockheed before joining Solar.

William Wiseman has been named assistant chief engineer in the aircraft division of Continental Motors Corp. Wiseman has been connected with the Warner Aircraft Co. for the past 12 years and was chief engineer.

William Moscrip Miller (photo) has been named director of advertising and publicity of Air Cargo Transport Corp. Miller goes to his new position from the War Advertising Council with which he was associated since his return as a war correspondent. Prior to the war Miller was in charge of magazine and feature publicity for the National Broadcasting Co. Miller will develop an advertising and publicity plan in keeping with the company's national service to shippers by cargo carrying planes.

A. D. Palmer, Jr., has resigned the position of director of public and internal relations for Curtiss-Wright Corp.'s airplane division which he has held for 10 years, to join the Burke Dowling Adams Advertising Agency of Montclair, N. J., as an account executive.

John Snure, Jr., has been appointed director of public relations for Bell Aircraft Corp., succeeding **Stephen E. Fitzgerald,** who has resigned to accept another public relations position in New York. Snure is a Washington newspaperman who was director of information for the Selective Service System until he joined Bell in 1944. He has been assistant director of public relations for Bell.

J. P. Shaw (photo), former chief of flight at Consolidated Vultee Aircraft Corp.'s Tucson, Ariz., division, has been appointed contracts supervisor for Convair's Stinson division sales department at Wayne, Mich. Shaw was an attorney and will serve as a liaison between sales and production departments and will service reports from distributors and dealers of the Stinson *Voyager* personal airplane.

George E. Wardman (photo) has been appointed assistant to **Robert L. Cummings,** manager of Pan American Airways' Atlantic division. Wardman was previously assistant to **John C. Cooper,** who recently returned as Pan Am vice-president and assistant to **Juan T. Trippe.** Wardman joined Pan Am in 1936 serving in several capacities.

Frank W. Jones, former lieutenant commander in the Navy with Air Group 20, heads the recently-formed light metal products division of Northrop Aircraft, Inc.

Carl Norcross, managing editor of *Aviation* magazine before the war, has recently joined *Fortune* magazine as a staff writer on aviation subjects. Norcross was one of the first members of a small staff who went to England early in the war to set up the organization that subsequently became the 8th Air Force. He later became assistant chief of staff-intelligence to Maj. Gen. Curtis LeMay at the newly formed Third Air Division.

Col. William C. Ray, former American Airlines maintenance field superintendent at LaGuardia Field, has been discharged from the Army and has returned to the company as director of maintenance and overhaul of American Overseas Airlines. **Richard A. Holman,** for the past year Baltimore traffic manager for American Airlines, has been appointed to the position of personnel administration manager-traffic.

F. J. Baum, original project engineer on the Northrop *Black Widow,* has been appointed Dayton representative for Northrop Aircraft, Inc., and will be responsible for liaison between Northrop Field and the ATSC at Wright Field.

The associated firms of Horner and Shifrin and Smith, Hinchman and Grylls, Inc., announce the establishment of an airport division under the direction of **J. B. Bayard, Jr.,** formerly director, airport plans and survey service, Civil Aeronautics Administration. The two firms are engineering ones.

TELLING THE WORLD

• The Burton-Bigelow trophy presented each year by the Southwestern Association of Industrial Editors, has been awarded to George E. Bounds, public relations director of Chicago and Southern Air Lines. The roving award is presented each year to the editor doing the best job of interpreting management to the reader. Bounds, in addition, was also named director of the Southwestern Association of industrial editors for the State of Tennessee.

• TACA Airways Agency, Inc., representing seven affiliated and associated airlines in Central and South America, announces appointment of Royal & de Guzman as advertising counsel. Newspapers, magazines, trade papers and other media will be used. Paul de Guzman is account executive.

• R. B. Stevenson, former representative of Pan American-Grace Airways in Miami, has been transferred to the New York office to assist general traffic manager Christopher de Groot in handling Panagra's N. Y. advertising publicity.

• Jack Prescott, city editor of the Reading, Pa., *Eagle* and with the *Associated Press* in Newark and Philadelphia, has been appointed editor of Lockheed Aircraft Corp.'s plant newspaper, *Lockheed Star.*

• William C. Speidel, Jr., newspaperman and columnist, has been appointed to the publicity department of Northwest Airlines to serve as western region representative with headquarters in Seattle. He has been on the staff of the Seattle *Star* and last year won the annual award of the Washington State Press club.

• The semi-annual roster of the Aviation Writers Association, containing 110 changes in the data on members, is ready for distribution to approximately 1,000 industrial concerns, newspapers, periodicals, and aviation associates. It contains the names of 235 regular, military and associate members. This is the fourteenth edition. Copies may be obtained from the executive secretary, P. O. Box 835, Grand Central Annex, New York.

• The Institute of the Aeronautical Sciences has announced release for distribution of the *Aeronautical Engineering Catalog,* 1945 edition. It is published as a reference guide for aeronautical designers and engineers and contains specifications and engineering data on a wide variety of aircraft products available for post-war airplanes.

CONTROLLED ATOMS or CONTROLLED LIVES

SINCE August 6th when the first atomic bomb was released over Hiroshima, the American people have been subjected to a continuous barrage of pronouncements on the use and control of atomic energy. Some of this comment has been strident, and much of it conflicting. A considerable portion of it has been of sincere and constructive excellence.

It has not been easy to separate the wise counsel from the merely noisy, and it is small wonder that the minds of many are troubled and confused.

However, the sheer mass of discussion poured into press and microphone has awakened us all to the gravity of the issue. In terms of any problem on which Americans ever have been called to exercise a judgment—This is It!

Even the dullest now recognizes that atomic weapons hang over modern civilization like the Sword of Damocles, and understands in some measure how fragile and taut is the hair of political balance that holds it suspended.

From this point on, we need the coolest and most carefully considered judgment that can be brought to bear. Discussion highly charged with emotionalism will but increase the tensions both at home and abroad, and render wholly insoluble a delicately intricate problem.

What Is The Problem?

The major outlines of that problem now are coming into focus in understandable terms:

1. The scientists have opened up a new and virtually unlimited storehouse of energy, and the engineers have discovered how to turn it into a military explosive incomparably more powerful than any we have known. We know that this energy may also be used to produce heat for useful power, and we suspect that the radioactive substances produced by the process in hitherto unimagined quantity may also have medical, industrial, and other constructive applications.

2. Terrifying as have been the demonstrations of the atomic bomb thus far, we know that they are as nothing in comparison with its potential destructiveness. The explosive force of individual bombs can be increased tremendously, and means for their effective delivery to predetermined targets in wholesale quantity already are at hand. The experts tell us that no practicable means of interception can be devised, and that reprisal in kind probably will be the only answer to an enemy attack with atomic weapons.

3. So far as we can see now, even successful retaliation would be at best an answer of hollow effect. Any two nations each having wholesale stock-piles of bombs could accomplish the practical destruction of each other. Since a first treacherous blow might well constitute an enormous advantage, a nation actuated by a ruthless urge to conquest or revenge might have the best chance of survival. But since the widest possible dispersal of bombs and launching units would be dictated by the strategy of atomic weapons, it is doubtful that one nation could destroy another without itself suffering destruction. On both sides the major centers of population could be wiped out, and the nation of least concentrated industrialization and commerce would suffer least. However, no one can be sure that the concentrated explosion of as many as 20 thousand atomic bombs would not poison the atmosphere of the world to an extent that would be fatal to great masses of population, not only within the country bombarded, but perhaps in the country which launched them.

4. The problem is further complicated because, so far as we know now, any large-scale commercial use of atomic energy as a power source is more or less inextricably linked to a potential military use. It is true that, if atomic power becomes economically feasible (which is by no means certain for a long time to come), it would require only low-grade concentrates of fissionable material, which would need further elaborate and costly processing before reaching explosive potential. But the process of producing such low-grade concentrates constitutes perhaps two-thirds of the industrial effort required to make effective bombs. It follows, then, that if nations were to equip themselves to produce large quantities of low-grade concentrates for power generation, the effort required to develop large-scale bomb production would be materially reduced. Moreover, the maintenance of an effective inspection to police agreements not to produce bombs might be forbiddingly difficult if atomic power generation were allowed.

5. In addition to the major problem posed by the use of atomic bombs in international war, any nation which produces or possesses such bombs, or the fissionable materials with which they are loaded, faces still another in the danger of their falling under the control of paranoid elements in its own population.

What Are We Going To Do About It?

We face the hard fact that we have produced a weapon capable of destroying whole nations—perhaps even the whole world. Although we were importantly aided in its development by the nationals of other countries, we, together with Great Britain and Canada, now must take the initiative in deciding what shall be done with it. We have only two choices. We can try to keep this weapon as a monopoly of our own, or we can try to place it under broad international control.

Can We Keep It To Ourselves?

If we know one certain fact about the atomic bomb, it is that it cannot long be held as a monopoly of those nations which produced it.

If Nazi Germany had succeeded in developing the weapon first, it probably would have attempted to achieve world dominion, with utter destruction as an alternative. Such a course is not within our range of choice. It violates every principle for which we stand.

Much reckless nonsense has been uttered concerning the inability of other nations to master the scientific, engineering, and industrial problems involved. It is the virtually unanimous opinion of those who worked on the project that several nations today are fully equipped in science, engineering, and industrial organization to produce atomic bombs and to provide the means for launching them. At least one of these nations, Russia, has also access to an ample supply of the necessary raw materials. The only debate is over whether it would take three, or five, or ten years for her to marshal her resources to produce bombs in multiple thousands. Once such an atomic race were on, we have no reason to believe that Russia might not divert more resources to the task than we ourselves should be willing to put into it.

Additional nonsense is talked as to how we might attempt to cope with the problem of living in a world in which mutually suspicious or hostile nations faced each other, with stores of atomic weapons on both sides. We hear talk of dispersing our cities and even of moving underground. No one has seriously reckoned the difficulty or the cost of following such counsel of despair. Still less has anyone appraised the neurotic effect upon men's minds of living by any such preposterous formula, under continuously mounting tension day after day, and year after year.

Certainly, if we could find no way to prevent the competitive production of atomic weapons, we should be driven at least to the selective dispersion of our bomb-launching facilities, of certain key industrial establishments, and of our centers of government and governing personnel. We should be forced, also, to change our traditional requirement that only Congress can commit us to active war. We should be forced to organize ourselves as a police or military state, with our scientists regimented and muzzled, with all of us under constant surveillance against the smuggling and planting of time-bombs, and constantly alerted against attack through the air.

Before we commit ourselves to any such intolerable procedure, we should be mad not to explore all possible means for making it unnecessary.

The Only Feasible Alternative Is Effective International Control

This cardinal principle has been recognized in the statement of November 15th, issued jointly by President Truman, and Prime Ministers Attlee and King. Their statement frankly concedes that against atomic weapons there can be no adequate military defense, that no nation can command a monopoly of such weapons, that responsibility for eliminating atomic energy as an instrument of war and for devising safeguards over its use for the advancement of science and other peaceful and humanitarian ends rests upon the civilized nations of the world.

They propose that a commission be set up at once under the United Nations Organization to make recommendations: (a) for extending between all nations the exchange of basic scientific information for peaceful ends, (b) for control of atomic energy to the extent necessary to ensure its use only for peaceful purposes, (c) for the elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction, and (d) for effective safeguards by way of inspection and other means to protect complying states against the hazards of violations and evasions.

Already criticism is leveled at the wording of the statement, at alleged omissions, at the wisdom of choosing the United Nations Organization as the medium through which to seek agreement in view of the weaknesses of the UNO Charter.

None of these issues should be crucially important. What matters is that an invitation has been issued in good faith for the nations of the world to meet and decide upon means for assuring the elimination of weapons, the existence of which no one can afford to tolerate.

The decision cannot be other than international; it will require the best thought of the best brains the world can muster. The smaller nations have an equal stake with the large, and from them may well come the most fruitful suggestions. But Russia now holds the key to the success or failure of our proposal. If she accepts our invitation, no other nation will refuse.

Alternatively, there will be an international armament race paced by atomic weapons. It will mean an end of free science, a severe policing and regimentation of international travel and trade, and innumerable restrictions upon those individual freedoms which we have just fought so desperately to preserve. This is the dismal prospect if we fail to arrive at a genuinely international accord on the control of atomic energy. But even this interval would promise to last only for an uneasy period, until someone started pressing the push-buttons on the panel-boards of extinction.

The only permanent solution lies in finding means to eliminate war itself. That we cannot hope to achieve overnight, but we can, and do hope that the nations will now agree to eliminate atomic weapons and their radioactive by-products as instruments of war.

If they do that, we can move forward more surely to the constructive development of the incalculably valuable resources that science has newly opened to our use. And, we can hope also for a progressive improvement in international understanding.

Unless the nations can reach agreement on this paramount issue of atomic energy, it is difficult to conceive of any vital issue on which they might agree.

President, McGraw-Hill Publishing Co., Inc.

THIS IS THE 42ND OF A SERIES

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Investment Services Continue Hopeful on Airline Share Values

Current Moody survey projects future earnings conservatively but concludes carriers' stocks are suitable for purchase on long-range basis; earning factors are outlined.

Investment advisory services continue to assume a very hopeful outlook for airline share values. A current issue of Moody's Stock Survey analyzes the air transport group and advances a number of conclusions, including a projection of future earnings. Based on its findings, Moody's concludes that airline stocks are suitable for holding and some for purchase on a long-range basis (2-3 years).

Along with the intangible element of management, the survey lists a number of factors which are expected to determine the per share earnings of the airlines in the post-war period. They are:

An increase of 100 percent in revenue passenger miles and pound miles;

A net increase of 50 percent in all other revenue;

A 20 percent reduction in passenger rates and a 33 percent cut in mail pay;

A net increase of 100 percent in the aggregate of aircraft operation expenses;

A 50 percent increase in the aggregate of ground and indirect operating expenses.

On these assumptions and applying 1946 tax rates, a projection of airline earnings is made for this period in question and it is far more conservative than estimates advanced by other investment sources.

▸**Rating**—In the placement of new funds, preference is given to Eastern, Delta and, in the case of more speculative funds, to National.

American, Braniff, Chicago & Southern, Northwest and United, in the opinion of Moody's, should perform satisfactorily marketwise, but they lack elements to justify the expectation of better than average price appreciation.

Colonial, Continental, Mid-Continent and Northeast are distinct speculations, according to the service, with any substantial further price enhancement largely contingent upon the allocation of major routes or mergers. (Since the release of this report, Colonial has shown the sharpest appreciation, rising to 35¾, or a gain of more than 40 percent. This reflected reports of merger discussions with Eastern, since denied.)

▸**Divergence**—Chiefly because of the sharp rise in price during recent weeks, the stocks of PCA, TWA and Western, in Moody's opinion, now seem to discount the future pretty far ahead and are considered overvalued in relation to the stocks in the first two groups.

As a matter of contrast, Merrill Lynch, Pierce, Fenner & Beane, in its recent airline recommendations (AVIATION NEWS, Nov. 26) also favored Eastern and Delta. It further included American, Northwest and TWA to round out the issues it considered relatively most attractive.

UAL Conversion May Be Speeded

Extensive conversion of United Air Lines' preferred stock is in process. At current market prices, this trend may be accelerated—in fact the stock may be called, thus forcing conversion of the entire issue soon.

A total of 105,032 shares of this 4½ percent preferred were issued in January, 1944, at $100 per share. At last reports there were about 95,000 shares outstanding with around 1,000 shares being converted weekly. The preferred is convertible into common at the rate of $30 per share or 3 1/3 shares of common for each share of preferred. With the common now selling in the fifties, the company could easily force conversion by calling the entire issue. This preferred is callable, on 45 days' notice, at $107.50 per share up to Jan. 1, 1946, and thereafter at $105 up to Jan. 1, 1954.

▸**Savings**—It would be to the company's advantage to retire the preferred as soon as possible. A senior equity requiring an annual payment of $4.50 per share would be eliminated, to say nothing of avoiding heavy sinking fund payments in subsequent years. Assuming this conversion, considerable dilution of the common will occur. Instead of 1,500,451 shares of common outstanding before the preferred conversions started, there will be 1,850,525 shares.

Application of Assumptions to Domestic Air Transportation Stocks

	Year Ended June 30, 45	Per Share Earnings Based On Assumptions	Recent Market Price
Large Carriers:			
American	$3.56	$ 5.50	88¾
Eastern	2.46	10.50	96½
TWA	#3.97	4.50	68
United	#4.86	3.50	54
Medium Carriers:			
Braniff	0.60	0.75	28
Chic. & Southern	0.63	0.90	30½ (ask)
Delta	1.35	5.50	50½ (ask)
National	0.34	1.75	29
Northwest	1.18	3.00	48⅞
PCA	1.59	1.50	45
Western	0.92	1.25	35
Smaller Carriers:			
Colonial	d	d	25
Continental	*1.29	d	21 (ask)
Mid-Continent	0.17	d	20¾
Northeast	d	d	23

Key: #Before adjusting for retroactive pay cut ordered by CAB.
* Includes extraordinary income.
d Deficit
SOURCE:—Moody's Stock Survey.

CAB Restriction Order Indicated As Non-Scheduled Hearing Closes

Board expected to follow examiners' recommendations on limitations; operators present their case in unprecedented strength and harmony.

The nation's aircraft service operators in unprecedented strength and harmony have presented their case to the Civil Aeronautics Board for continuation of the present exemption of non-scheduled air services from economic provisions of the Civil Aeronautics Act but there is a strong indication that the board will follow most major recommendations of the examiners to draw up a more restrictive exemption order which will set up new definitions, set a statutory limit on certain trip frequencies, and require operators to register, and meet safety requirements, file periodic reports and to maintain minimum standards of insurance.

The board seeks a skeleton outline of economic regulations which can be filled out as the non-scheduled industry itself takes form. Any provisions considered basic but found to be restricting the business of an operator unduly could be made the basis of an exemption for that operator of indefinite duration if he was deemed not in competition with scheduled carriers.

ATA Approval—It is significant that the Air Transport Association, whose members most fear future competition of charter or non-scheduled operators, approved virtually all of the examiners' suggestions.

There appears a strong possibility that the examiners recommendations for classifying operators by frequency of service will be followed. Fixed base carriers would be limited to trips to or from their bases, except for occasional flights between other points, and would not be permitted unlimited trips between any two points served by scheduled air carriers.

No Answers—CAB Chairman Pogue and members Branch and Lee reiterated in their questioning of non-scheduled spokesmen that the act makes the board responsible to Congress for a sound air transportation system with jurisdiction over all air carriers. They clearly indicated their belief that some economic control is essential and that a few guides "to help define the rules of the game" will be in the public interest and of benefit to legitimate operators in protecting them from responsible competition and in giving them an official status before the public which they do not now possess.

Regardless of overwhelming testimony of non-scheduled aviation spokesmen against any change in the present exemption order, it was obvious the board did not receive from the oral argument any answers to its fundamental question of definition of non-scheduled operators, which were more suitable to it than the examiners' and the ATA's recommendations.

Board Attitude—Mr. Branch at one time revealed the board's thinking when he asked an industry spokesman what objection there could be to changing the present exemption order to permit regulation in small degree with few restrictions, building up a regulatory system from time to time as an industry pattern de-

Counsel's Comment

Following are public counsel's recommendations to CAB on the question of regulation of non-scheduled air services:

1. That the present exemption order be repealed.

2. That a new method of exemption of non-scheduled air services be adopted: (a) Establishment of a classification such as "non-certificated air carrier" in which classification a carrier would qualify by filing a simple notice, certain periodic informational reports and furnishing adequate liability insurance satisfactory to the Board. Carriers of passengers and property should be treated the same with the possible exception of exempting the owner-operator of one or two planes in the all-cargo field; (b) The only operating restriction for non-certificated air carriers would be that the carrier could not operate over 10 round trips per month up to 500 miles and five round trips per month over 500 miles.

UNUSUAL FREIGHT FLIGHT:

Increasing volume of business is reported by Air Cargo Transport, Inc., which operates out of recently reopened Newark, N. J. Airport. Rush shipment of 20 special clocks to Moissant International Airport, New Orleans, was among unusual jobs handled by the pioneer non-scheduled cargo line. Above, Adrian Flattner, Benrus Watch Co. official, hands ACT Capt. Tom Davis, former NATS pilot, a special watch for New Orleans Mayor Robert S. Maestri. It was delivered at the end of the flight which was said to have been the first commercial cargo delivery into the new field which is to be opened next month.

velops. Under such a plan the board would schedule hearings and call in interested parties whenever it felt amendments of regulations were in order.

▸ **Competition** — Charter operators cannot possibly compete with the airlines in the foreseeable future. Joseph Garside, of E. W. Wiggins, Boston, told the Board. Representing the Aeronautical Training Society, he urged that any new definitions be considered from a standpoint of encouraging rather than restricting non-scheduled operations. Arnold Knauth discussed the legal aspects for ATS.

William Anderson, of Pennsylvania Aeronautics Commission, opposed any changes in the present exemption order.

▸ **Burden Testifies**—William A. M. Burden, Assistant Secretary of Commerce for Air, in urging the Board to take no action for two to five years, said any regulation would tend to throttle the industry at the time it needs freedom to serve thousands of new customers and absorb returning air force veterans some of whom will go broke. He expressed strong opposition to restricting operators to their bases and in number of flights.

▸ Roscoe Turner, President of National Aviation Trades Assn., said restrictions are unnecessary at this early stage of the industry, when the returning veteran should be given encouragement to obtain jobs. In no other country is there as fine a non-scheduled aviation industry, yet despite its aid in building the world's greatest air force it grew without subsidy to any of its component companies.

▸ Richard Bircher, representing Pennsylvania Aviation Trades Association, said as a plane distributor and operator he has received about 600 letters from veterans who hope to enter the field. He urged postponement of regulation, assuring the Board that while haphazard economic conditions may prevail temporarily there now is no pattern to indicate the type of regulation needed.

▸ William McCracken, general counsel for National Aeronautic Association, urged that regulations be confined to fair safety provisions to give free play to the economic laws of supply and demand.

▸ Arthur Boreman, chairman of the Non-scheduled Flying Advisory Committee of CAA, said his position was identical with that of Mr. Burden—for no restrictions or definitions at this time.

▸ **Act's Purpose** — Gerald P. O'Grady, representing the New England Aviation Trades Association, said the Civil Aeronautics Act was enacted for the benefit of the public, not to favor any single class of aviation. He sees no competition with the airlines.

He did not object to registration or simple periodic reports, but forecast that limiting operations to bases will raise costs, deprive the public of maximum service and lead to artifices such as mobile bases or establishment of temporary bases for short periods to take advantage of business opportunities.

▸ **UPMA Stand** — James W. Batchelor, counsel for United Pilots & Mechanics Association, represented 95 firms, operators and individuals who had expressed their views. UPMA reports about 600 operators in its membership.

Batchelor opposed regulation at this time. He also warned the Board that since its jurisdiction was mainly over interstate operations, any decision it made to limit freuqency of charter flights will penalize an operator near a state line or based in a small state.

Suggestions of that non-scheduled flying be certificated and regulated "come with poor grace from a group whose losses have been underwritten by the federal treasury and who have had a major portion of their profits exempted from excess profits tax while all other forms of business, including those which they propose to regulate, have been taxed regardless of the source of income and have received no subsidies whatever," he asserted.

▸ **Attacks Argument** — Batchelor said a frequent argument for regulation is to prevent high mortality among operators.

"Statistics show that the mortality rate for grocery stores is the highest of any type of business," he said, "yet no one would propose that we limit the number of grocery stores, or the trade area they should serve simply because the mortality rate is high.

"While it is true that no operator would deliberately wish to go broke, if he is willing to offer service to the public for less than he can afford to provide it, the public will benefit through cheaper service. There will always be another operator waiting to take his place until the industry is frozen by regulation, as in the case of the motor transport industry."

▸ **Exemption Asked** — Albert F. Beitel, appearing for Harry Playford's U. S. Airlines, which is starting non-scheduled air cargo service between Florida and New York, urged the Board to set up a category of air cargo carriers by general exemption order so that the companies may operate as common carriers.

Coates Lear of Globe Freight Airline, Inc., urged the Board to grant certificates more rapidly to operators without experience.

Others who appeared were Earl Shinn for American War Dads, Caesar Cone for Greensboro-High Point Airport Authority, Hobart Cock and Herman Riddell of Trans-Marine Airlines, and Vernon Kohlhaas of Air Cargo Transport Corp.

Text of Non-Scheduled Exemption Order

Following is the text of Section 292.1 of the Economic Regulations of the Civil Aeronautics Board, adopted Oct. 18, 1938, and amended into its present form Dec. 7, 1938. The exemption order is currently in effect for all aviation activities meeting its definition of "non-scheduled."

"(a) Until the Authority shall adopt further rules, regulations or orders with respect to such matter, every air carrier which engages solely in non-scheduled operations shall be exempt from the provisions of section 401 and all other provisions of Title IV of the Civil Aeronautics Act of 1938 (except as provided in paragraph (b) of this regulation). Within the meaning of this regulation any operation shall be deemed to be non-scheduled if the air carrier does not hold out to the public by advertisement or otherwise that it will operate one or more airplanes between any designated points regularly or with a reasonable degree of regularity on which airplanes it will accept for transportation, for compensation or hire, such members of the public as may apply therefor or such express or other property as the public may offer."

"(b) The exemptions provided in this regulation shall not be applicable to the provisions of subsection (L) of section 401 of the Act or to the reporting requirements of section 407 of the Act; *Provided*, That no provision of any rule, regulation or order that may be adopted by the Authority requiring reports pursuant to section 407 of the Act shall be deemed applicable to any non-scheduled operator unless such rule, regulation or order expressly provides that such provision is to be applicable to air carriers who are exclusively engaged in non-scheduled operations."

ATA Approves Recommendations To Curb Non-Scheduled Service

Urges carriers be tied down to home-base flights except for occasional trips elsewhere but concedes CAB can make exemptions in hardship cases.

Air Transport Association approves examiners recommendations that the designation of non-scheduled air carriers, who should remain partially exempt from the Civil Aeronautics Act, be replaced by a classification of fixed base carriers.

The domestic certificated airlines also approve of the controversial suggestions of the examiners and public counsel that such operators would limit commercial trips to those originating or terminating at the headquarters base, with the exception of "casual, occasional and infrequent" flights between other points.

▸ **Leeway**—With respect to any two points served by "reasonably direct" certificated, scheduled air service, ATA also agrees with the examiners that individual operators must not operate oftener than 10 round trips a month.

Anticipating strenuous criticism from non-scheduled operators because of these limiting factors, ATA's spokesman at the oral argument on the non-scheduled investigation pointed out, significantly, that even though the Civil Aeronautics Board adopted the new fixed base designation, the Act still would permit it under Section 416(b) to "exempt from the requirements . . . of any . . . regulation . . . any air carrier . . . if it finds that . . . such regulation . . . would be an undue burden on such air carrier."

▸ ATA contends that nowhere in the record of the investigation has any operator reported as many as 10 trips a month between airline points, although it also concedes that data on non-scheduled services are incomplete.

J. D. Durand, speaking for ATA, asserted that the major differentiation between the certificated and uncertificated carriers on a basis of scheduled or unscheduled is illogical and to be found nowhere else in transportation.

▸ **Distinction** — "The basic distinguishing characteristics (from the certificated carriers) of the so-called non-scheduled air carriers is that they render service which is not over a predetermined pattern, and which is not rendered periodically and frequently between any designated points. These characteristics are of sufficient substance to justify separate classes of air carriers," Durand said.

Another shortcoming of the terminology of Part 292.1 of the Economic Regulations is its attempt to define the exempt carriers in a regulative manner.

▸ The board previously has used the term non-scheduled to denote absence of printed timetables or schedules, or failure to hold out to the public by advertisement or otherwise that it will operate between any designated points regularly or with a reasonable degree of regularity any aircraft which will accept for transportation or hire such members of the public as may request passage for themselves or for property.

▸ **Loophole**—"It could be argued," Durand said, "that the carrier must hold out, by advertising or otherwise, four factors: (1) that he will operate an airplane, (2) between designated points, (3) regularly, and (4) that he will carry persons for hire. Because of the grammatical construction then it could well be argued by operators of aircraft that they could hold out three of these but would be exempt because they did not hold out the fourth."

Durand left a loophole in his argument, indicating ATA expected some unusual cases, when he conceded that a regulation based on frequency of trips may not serve to classify easily all air carriers. According to the ICC Bureau of Motor Carriers there still are 28 motor carriers which that bureau cannot classify, though the Motor Carrier Act was passed in 1935.

▸ **Answer**—ATA sought to answer objections that veterans will find it more difficult under this system to start new air services by claiming that anyone—whether veteran or not—could still operate from his base, provided he limited round trips between airline points.

ATA approves the examiners' suggestion that carriers must file a notice of intent to operate, containing name and address of the carrier, his citizenship, principal place of business, and description of services, plus such periodic reports as may be prescribed. Successful applicants would receive air carrier operating certificates pursuant to Part 42 (safety) of the CAR.

▸ **Other Points**—In addition, ATA recommends:

▸ (1) To permit the Board to examine in detail a proposed or existing operation which appears not to meet the requirements for partial exemption, the regulation should specify that the operation in question may commence or continue, unless within 30 days of the date of filing of the notice of intent to operate the Board takes action which would result in interrupting or postponing the operation. Such treatment would be similar to that afforded certificated air carriers seeking to perform non-stop services.

▸ (2) The notice of intent should contain the additional data: (a) certified copy of applicant's air carrier operating certificate; (b) statement of type and number of planes to be operated; (c) a statement of the points between which operations will be carried on, including an indication of the points between which the greatest volume of traffic is anticipated; (d) financial statement, "in a form consistent with proper accounting practices," indicating applicant's assets and liabilities. ("The public has a vital interest in information of this type which is indicative of the applicant's financial capacity to meet claims against him growing out of breach of contract to render service. Likewise, the Board has a vital interest in this information as indicative of whether the applicant has the necessary financial resources to undertake, with a reasonable degree of success, the desired operation.) (e) Statement of the insurance which the applicant has to cover its public liability, passenger liability and property damage liability. (f) Tariffs, even if only on a mileage basis. ("It would be difficult for the Board effectively to prevent discriminatory charges by the applicant unless some statement of charges is on file with the Board.")

▸ ATA contends that requiring such information would work no hardship on the applicant.

▸ ATA suggests that the periodic reports proposed by the examiners should include a standard, simplified system of accounts providing for filing of financial and operating information on a periodic basis, perhaps quarterly; a periodic statement of insurance, perhaps yearly, and any changes in tariffs.

Indiana Air Trade Unit Schedules Elections

The reactivated Indiana Aircraft Trades Association, made up of aircraft service operators in the state, will elect officers January 23.

Dormant since 1941, the organization now is headed by Lt. Col. Walker W. Winslow, head of the state CAP wing and superintendent of Weir Cook Municipal Airport.

Land Likely To Be ATA Head; Ramspeck Made Vice-President

Maritime Commission chairman's resignation reliably reported already at White House; Georgia Representative will be organization's executive director after leaving Congress Dec. 31.

By MERLIN MICKEL

Selection of Rep. Robert Ramspeck as executive vice-president of Air Transport Association at the annual directors' meeting last week roused speculation as to the organization's presidency, now vacant, with Chairman Emory S. Land of the Maritime Commission the most likely choice.

The retired vice admiral said he had not resigned his current post, and had signed no contract. But reliable reports were that his withdrawal from public life to take the ATA post already had been submited to the White House, and there was further good reason to believe that announcement of his election to head the Association will come towards the end of this month.

▸ **Changes Due**—Definitely in prospect was some kind of ATA reorganization, probably shortly after the first of the year. It seemed likely that Land would emerge as president, with two vice-presidents working with him. One of these, of course, would be Ramspeck. C. Bedell Monro, Pennsylvania - Central president, now is ATA vice-president.

Ramspeck, who in any event will be the organization's chief administrative officer, is a Georgia Democrat. He will take the new job Jan. 1, resigning his seat in Congress Dec. 31, although his resignation will go to Georgia's chief executive earlier in order that an election may be called to provide a successor. The Congressman attended both meetings of ATA's Board of Directors last week.

▸ **Surface Carriers** — Since Ramspeck is a member of the Merchant Marine and Fisheries Committee of the House, which is on record in favor of steamship company participation in air commerce, and Admiral Land has been a strong advocate of such a step, the selection of both for key posts in ATA would be of more than usual interest to an industry that has resisted strongly any encroachment by surface carriers.

It should be pointed out, however, that Ramspeck's duties as chairman of the House Civil Service Committee have kept him so busy that he has rarely been in attendance at Merchant Marine. Nor does he recall being on record on the steamship issue. The report in which the committee recommended participation came from the committee as a group, and Ramspeck does not recall attending the meeting which resulted in the report (AVIATION NEWS, Dec. 4, 1944).

▸ **Compromise** — Some observers feel, on the other hand, that a compromise between the airlines and the steamship companies may be in the offing. They point to the fact that Land, highly regarded in the shipping industry and for his administrative ability, is strongly backed for ATA's top spot by C. R. Smith, chairman of the board of American Airlines and a strong advocate of unified effort.

With air transport expanding rapidly internationally, the air-carriers in that field will need ticketing agencies throughout the world. Such agencies have been established by the steamship companies. Furthermore, the latter are said to be preparing for a drive soon after the first of the year for amending legislation that will allow them the air operation they hitherto have been denied by Civil Aeronautics Board interpretation of the Civil Aeronautics Act.

Board Changes

Two changes in the Board of Directors of the Air Transport Association were made last week. W. A. Patterson, president of United Air Lines, was reelected after several month's absence from the directorate. C. E. Woolman, Delta Air Lines vice-president, was elected to the board.

Members who continue into the new year are C. R. Smith of American, Capt. Eddie Rickenbacker of Eastern, T. B. Wilson of TWA, C. Bedell Monro of PCA, and Croil Hunter of Northwest. Patterson succeeds Paul Collins of Northeast, and Woolman replaces T. E. Braniff of Braniff Airways.

WHERE THE ARMY OVERHAULS C-54'S:

These overhaul docks at Morrison Field, near West Palm Beach, Fla., are the 600-hr. destination for the Army's C-54's. Each dock has its own power supply and is equipped for night work. Capacity is 26 planes. The planes fly in with veterans destined for discharge, and out with Air Transport Command equipment.

▸ **Question** — Here the question immediately arises as to what distinction can be drawn then to keep the railroads from similar participation, also opposed by the airlines.

Ramspeck's knowledge of legislative processes in Congress will be of value in his new job. In addition, he is more familiar than any other man in Congress, some of his friends say, with personnel in government departments. Particularly is this true of the Post Office Department. He was secretary of the Chamber of Commerce in his home town of Decatur, Ga., at the edge of Atlanta.

▸ **"Blow to Congress"**—A Washingington newspaper described his resignation as a "blow to Congress as he was widely recognized as its leading authority on Federal personnel and related matters."

He was elected to Congress in 1929 and has been returned at each succeeding election. Among important measures he has sponsored into law is the Ramspeck-O'Mahoney act of 1938, which brought first, second and third class postmasterships into the Civil Service system. He is a former prosecuting attorney in Georgia and state legislator, and in Washington worked in the House postoffice and as secretary to a member of Congress before he returned to his home to run for Congress in Georgia's Fifth district.

Washington National Funds Approved

A $3,998,000 appropriation for the Washington National Airport, approved by the House Appropriations Committee last week, will implement the first phase of a $16,000,000 post-war expansion program planned by Hervey Law, airport administrator.

The appropriation approved last week in the first deficiency appropriation bill will provide for: extension to the south end of the terminal building, at an estimated cost of $865,000; four additional hangars, $2,833,000; land for, and planning of, a $750,000 access road to the airport, $100,000; boiler house extension, $200,000.

▸ **More Space**—The terminal building extension is being built to give two domestic operators—United Airlines and TWA—more adequate space, and provide accommodations for three new airline operations—by Colonial, and by TWA and Pan American international routes.

Commitments for rental of the four new hangars to be constructed have already been obtained, Law reported, from United, Colonial, TWA, and American.

▸ **Funds Cut**—Law disclosed that the Budget Bureau clipped $700,000 for a fifth hangar from appropriation requests. Although he pointed out to the House committee that the fifth hangar would pay for itself over a period of years, the item was not reinstated in the appropriation bill.

The $16,000,000 post-war development plan portrayed by Law to the House Appropriations Committee would convert the airport into a self-sufficient town.

▸ **Program** — Included in Law's plans for future construction are:

▸ A combination hotel-apartment to house permanent employees at the airport, and supply overnight accommodations for air travellers;

▸ A garage with complete repair facilities;

▸ Warehouses for use of the airlines;

▸ A shopping center, to accommodate, primarily, employees at the airport unable to get to downtown Washington during shopping hours;

▸ An exhibition building, illustrating developments in aircraft accessories, with showrooms "which could be rented at fairly high prices." Some small planes could also be exhibited.

Law pointed out that all of the expansions planned for the airport will bring in substantial incomes.

Mail Underestimated

An underestimate by the Post Office Department of the volume of domestic airmail during the 1945 fiscal year—which ended last July—necessitates a deficiency appropriation of $595,000, Robert Burgess, superintendent of the division of airmail service, testified before House Appropriations Committee last week, in connection with the first deficiency appropriation bill.

In drawing up its 1946 fiscal year budget early this year, the Post Office calculated a 1945 deficiency sum based on an unanticipated volume of domestic airmail which was 15 percent over the 1944 fiscal year volume. It has now developed, Burgess said, that the 1945 fiscal year volume of domestic airmail was approximately 45 percent over the previous year.

DC-4 MOCKUP AT TCA:

Trans-Canada Airlines pilots are working with this DC-4 mockup at TCA headquarters at Winnipeg in preparation for use of this type of ship sometime before the end of next year. The aircraft are to be built in Montreal at government-owned Canadair, Ltd., along with an RCAF transport version of the C-47.

CAA Would Hold Advances In Electronics For Future Use

Policy calls for present instrument landing system to be pushed to full completion first, keeping new methods in reserve; ATA, Arinc and most airlines agree.

By BLAINE STUBBLEFIELD

Basic advances in electronic navigation facilities will be held in reserve for the future, if CAA's go-ahead policy can be carried out, while the present instrument landing system is pushed to completion.

In pre-war years, so many improved instrument approach systems were advocated by different groups that actual adoption and development of one system could not be started until the President finally called for a decision.

▸ **New Dispute**—Now, the temptation to switch to new developments is at hand again, with government and private research progressing rapidly in radar and other applications of radio to air navigation, but an apparent majority of persons concerned are determined to resist it.

CAA, ATA, Arinc, and most airlines feel that it will be better to go ahead with the partly completed system which is judged to be good, than to change and spend more years waiting for something better. Meanwhile, of course, all their research facilities are working on fundamental improvements which some day will replace present instruments and techniques.

▸ **Progress** — Aeronautical Radio estimates that the entire domestic air fleet will be fully equipped with VHF airborne approach instrumentation by next September. CAA officials believe that by 1950 the present 300 air mail and passenger stops will have doubled to 600 and that about 180 of these will have instrument landing ground facilities in service.

How many of these stations will require more than one instrument-equipped runway will depend upon interim progress with swivel landing gear, reverse-pitch braking propellers, and other factors. During minimum visibility, the wind is below 5 mph. more than half the time, and most higher winds during the other half are uniform in direction. There is presently no plan to use portable ground stations, which would make all runways available, because they get out of adjustment easily.

▸ **Other Equipment** — The airlines are fully equipped with 75-megacycle fan marker receivers. All except recently-acquired airplanes are equipped with RC-103 localizer receivers, procured during the war. This receiver has been certificated by CAA. Only ten Army-Navy ARN-5A glide path receivers are in hand as yet. One of these is at United Air Lines laboratory, where testing is completed and certification is expected at once. Procurement from military surplus will not be substantial until New Year.

Both glide and localizer receivers require modification for civilian use. Neither was exactly what the operators wanted, and new production will be somewhat changed. Some surplus planes being delivered to the airlines are equipped with both receivers, but no advantage is gained because they have to be taken out and modified. The entire airborne approach instrumentation—localizer, glide, marker, and directional receivers—is designated SCS-51.

▸ **Modifications**—The airlines also have 500 communications circuit receivers now going through a modification center in Washington. These are the ARC-1 Army-Navy 25-volt type, already certificated, and the 12-24-volt combination, which will soon be approved. These 500 units were obtained by Arinc direct from the Navy.

Total of 92 CAA HF ground stations (AVIATION NEWS, July 24, 1944) are now programmed. Twelve CAA stations are working; 10 are being installed; 40 are in CAA's 1946 plan; and funds for 30 in 1947 have been budgeted. In addition 27 have been completed for the Army, plus five in process; Navy is getting two, one is complete. How many of the instrument-equipped Army fields will become available to commercial flying can not be determined as yet.

▸ **Approach Aid**—Projected installation of 20 direction-finding stations at 12 major airports by CAA is intended merely as an aid to instrument approach in this winter's weather. Most airline planes have direction receivers. The transmitters to be used are Army surplus.

It is possible that direction finding instrumentation will justify permanent and expanding installation. Many pilots find it an invaluable supplement to local range facilities.

It consists in most cases of two ground transmitters on which the pilot uses his direction compass to line up with the runway, or to check his localizer lineup. Runway lights, with the direction finder, are regarded by many airmen as excellent approach facility in themselves for most landings.

CAA's VHF Program

Here are the major items on the Civil Aeronautics Administration's VHF program at its Indianapolis laboratory:

▸ Continuing development of the localizer transmitter.
▸ Working on omnidirectional range.
▸ Writing specifications to be followed by crews locating VHF range transmitter sites.
▸ Continuing work on two course directional range.
▸ General radar research program, with emphasis on a control tower scanning screen.

FLYING CARPETS:

Three rolls of broadloom carpet from a New York mill are shown being checked for flight by Air Transport Command C-54 from La Guardia Field to Harman Field, Newfoundland, where they were assigned to the Non-Commissioned Officers club. The load was described as the first large shipment of carpet by air to a foreign country.

Improved Controls Outlined By Gilbert

Developments in store for air traffic control in the immediate and more distant future have been outlined by Glen A. Gilbert, chief of Civil Aeronautics Administration's Air Traffic Control Division.

Among more immediate improvements contemplated:

▸ Omnidirectional VHF ranges with visual indication of desired track as basic means for navigating over land areas, such as continental U. S., where traffic is highly congested.

▸ Long range navigation over water or thinly-populated land areas accomplished chiefly by direction finders, using high-powered nondirectional radio beacons on ground or vessels.

▸ Use, as basic navigation aid at airports, of instrument landing system with runway localizer and glide path.

▸ Communication by voice where language permits, with radiotelegraph in suitable codes used in many cases.

▸ Application of radar screens in control towers.

▸ **Objectives**—Among ultimate objectives are:

▸ Elimination of the voice as a medium of communication.

▸ Removal of human element through use of automatic devices.

▸ Establishment of facilities and development of procedures to permit traffic flow during instrument flight in same volume and frequency possible during contact flight.

▸ **Methods**—Various methods of accomplishing these objectives, internationally as well as domestically, are under consideration.

They involve use of a collision warning device known as a "vertical separation indicator"; automatic communication equipment on the ground for exchange of flight data between centers and between centers and towers; and automatic transmission of traffic control instructions directly into the cockpit, possibly by means of an indicator utilizing a system of lights or by several revolving drums electrically activated to form desired codes.

C-54-B Allocations

Thirty-one Douglas C-54-B's were divided among domestic and foreign airlines in the 21st allocation of surplus transport aircraft by Surplus Property Administration, announced a few days ago.

Twenty-seven went to U. S. lines, as follows: five each to Pan American and Eastern; four each to United, American and TWA; two to Western, and one each to Braniff, Delta and Chicago & Southern. Two of the four allocated to foreign lines went to Panair do Brazil, and one each to Aerovias Nacionales de Colombia and Compania Mexicana de Aviacion.

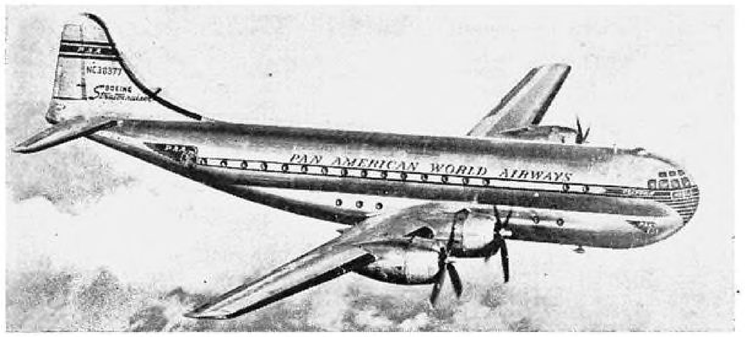
Canadian Data Issued

The Canadian Air Transport Board has issued a directive for the filing of schedules of air carriers licensed to operate commercial scheduled flights.

The directive contains full data on how to file schedules, provision for operation of extra flights or additions of sections to regular flights when heavy traffic requires, the printing of timetables, and the furnishing of information to connecting airlines and the post office department.

DISCUSS AIR FREIGHT POSSIBILITIES:

Among "guest experts" at a recent Pacific Coast air freight forum sponsored by the Oakland, Calif., Chamber of Commerce Aviation Committee were: left to right, seated, Dall De Weese, San Francisco district traffic manager, American Airlines; Ernest C. Miehle, western region cargo traffic manager, American; James Greenwood, cargo division, United Air Lines; Charles Greene, cargo division, TWA; and Ed Smith, traffic division of United at Oakland. Standing—Mitchell Coxwell, cargo division, TWA; J. F. Hassler, Committee chairman, and Curt Haxthausen, cargo division, Pan American. West Coast growers, shippers, manufacturers and county and state agricultural authorities also attended.



Ordered by Pan American: *Picture shows how the Boeing* Stratocruiser *will appear with Pan American Airways insignia. Contract whereby PAA will purchase 20 of the big ships at a cost over $25,000,000 was announced last week. The C-97, Army cargo version of the plane, flew from Seattle to Washington last January in 6 hrs., 3 min. and 50 seconds at a record average speed of 383 mph.*

Non-Stop N. Y.-London Service Seen As PAA Orders 20 C-97's

Delivery of 80-passenger *Stratocruisers* to begin next November; Boeing also negotiating for similar orders from other U. S. and foreign airlines.

Prelude to possible New York-London non-stop service is a $25,000,000 contract placed last week by Pan American Airways for a fleet of 20 Boeing *Stratocruisers*, 80-passenger commercial version of the Army C-97. Delivery is to begin in November next year.

The contract was signed by President William M. Allen of Boeing and Vice President Franklin Gledhill of Pan American. Boeing officials said at a press conference after the announcement that they are negotiating for further *Stratocruiser* sales with TWA, American, Northwest, and some foreign airlines.

Colonial Purchase — In another plane purchase deal announced last week, Colonial Airlines contracted for 20 Martin 202's, to cost about $4,000,000. Deliveries will begin in June, 1947, and end early in 1948. The contract was signed by Sigmund Janas, president of Colonial, and Peyton Magruder, representing the Glenn L. Martin Co.

The *Stratocruiser* order is the first commercial contract announced for this plane. Colonial is the third line to disclose purchase of the 202, and brings total commitments for this 270-mph., twin-engine transport to 105. PCA and Eastern have ordered 35 and 50, respectively.

Fare Cut—The Boeing plane, powered by four Pratt & Whitney 3,500-hp. engines, has a 340-mph. cruising speed, 4,200-mile operating range and will carry a maximum payload of 20 tons. It weighs 135,000 lbs. loaded and has two decks. Its ability to accommodate 80 sit-up passengers, Gledhill said, may result in a lower fare from New York to London than PAA's present $275.

Last January a C-97, Army cargo version of the *Stratocruiser*, set a transcontinental speed record of 383 mph.

Pan American says the ship could provide New York-London service in 11½ hrs. and coast-to-coast service in 8 hrs. 33 min. The line is seeking, among others, a transcontinental route in its application for several domestic routes on file with Civil Aeronautics Board.

Colonial expects the Martin 202 to make traveling time between Washington and Ottawa less than two hours, compared with the present 4½ by air and 20 by surface travel. Janas also announced that 10 converted DC-3's will be placed in service by his company starting next month, to provide a "substantial operating fleet" until the 202's are delivered.

Airlines Start Carrying GI's Across Country

Will handle 665 men each day, less than had been anticipated when service was ordered.

Five airlines originating flights on the West Coast, and four others with which they connect, today began the task of carrying out an ODT order requisitioning for military use 70 percent of the airline seating space available between four West Coast cities and half a dozen on the East Coast.

Number of troops carried will be 665 a day instead of the 800 the Office of Defense Transportation estimated or the 1,000 the Army Transportation Corps hoped for. It also is below the 25,000 a month Air Transport Association predicted. The troops will leave the West Coast on 53 flights a day.

Organization—Participating airlines are American, Northeast, TWA, United and Western, as the originating carriers, and Delta, Eastern, Northeast and PCA as the connecting lines. National was in on the conference mapping details of the plan, but did not appear on the allotment charts.

These show that of the originating airlines, American will start 17 of the flights, United 15, TWA 12, Northwest seven and Western two. The number of seats accorded the military each day by the originating carriers: American, 221; United, 180; TWA, 156; Northwest, 84, and Western, 24. American and TWA are allocating 13 a flight, the others 12.

Routings — Routings are as follows:

From San Francisco (United the originating carrier)—To Boston: two schedules daily on United, via Chicago. To New York: five schedules daily, four direct and one relaying to American at Chicago. To Washington: four trips daily, two via Chicago, and two connecting with PCA at Chicago. Total trips, 11; passengers per day, 132.

From San Diego (American and Western the originating carriers)—To Boston: one flight on American, via New York. To New York: American, two flights direct, and one connecting with Delta at Fort Worth, to connect with PCA at Birmingham: Western, one flight connecting with United at Salt Lake, relaying to PCA at Chicago. To Baltimore: two schedules on American, direct. To Norfolk: one flight on American, connecting with PCA at Washington. Total trips, eight; passengers, 103.

From Seattle (United and Northwest the originating carriers)—To Boston: two schedules daily, one on United to New York, Northeast to Boston; one on Northwest to New York, Northeast to Boston. To New York, four schedules daily, one United direct, one United to Chicago and PCA to New York, two Northwest directly to New York. To Washington, one schedule daily on United, via Chicago. To Baltimore, one schedule daily on Northwest, connecting with PCA at Chicago. To Jacksonville, Fla., two on Northwest, one connecting with Eastern at Chicago, the other with Delta at Chicago. To Norfolk, one on Northwest, connecting with PCA at Chicago. Total trips, 11; passengers, 132.

From Los Angeles (TWA, American and Western the originating carriers)—To Boston, five flights daily, two on TWA, one direct, one connecting with American at New York; three on American, one connecting with Northeast at New York, two via New York. To Washington, five flights daily, three on American, two direct and one via Cincinnati; on TWA, one flight daily, via Kansas City; on Western, one flight daily, connecting with United at Salt Lake, relaying to PCA at Chicago. To New York: on TWA, seven flights daily direct; on American, two flights daily direct, one via Cincinnati, and another connecting with Delta at Fort Worth, which in turn relays to PCA at Birmingham. To Norfolk: two flights daily on TWA, one direct and the other via Chicago, the latter connecting with PCA at Washington. Total trips, 23; passengers, 298.

$15,000,000 Expansion Announced By WAL

Western Air Lines has announced its intention to spend more than $15,000,000 in airplane and facility improvements. The company already has received delivery on three of 13 Army C-54 transports. An additional five planes of this type will be produced for Western on Douglas Aircraft assembly lines. Ten DC-6 transports also have been ordered from Douglas. The fleet of 28 four-engine planes will supplement a present fleet of 14 twin-engine transports.

The line expects to be flying well over 1,000,000 miles a month by next June, part of it over the Denver-Los Angeles route awarded it in November, 1943. Western officials say the company will be ready to operate the route as soon as Civil Aeronautics Administration has airway facilities in operation, probably by Jan. 15, and has approved the airway for instrument flight.

TWA Sued for $400,000

TWA faces four suits for a total of $400,000 damages as aftermath of the crash of a transport near Lockheed Air Terminal Dec. 1, 1944. For the death of Howard M. Muller, Mrs. Margaret S. Muller, his widow, asks $125,000. Gerald F. Smith, an injured passenger, is suing for the same amount, while two others injured, Lucian Terrebrood and John W. Roney, are suing for $75,000 each.

PICAO Subcommittee Outlines World-Wide Meteorology Plan

Final report covers steps for development of closely-integrated observation system applied to global air transportation needs; Chicago standards followed.

The meteorological subcommittee of the Provisional International Civil Aviation Organization (PICAO) in Montreal last week produced its final report of the first session, outlining a general plan for development of a closely-integrated, world-wide system of weather observation and its direction to the needs of international air transport.

Included in results of the committee's 18 meetings are a comprehensive set of "international standards and recommended practices" and a series of 28 recommendations for continuing study and improvement of meteorological services. The standards are fundamentally the same as those drawn up at last year's Chicago conference on international aviation.

Jurisdiction — PICAO's Interim Council also expanded the jurisdiction of its customs subcommittee to include consideration of "all impediments to international air transport" — specifically: customs procedures and manifests, sanitary, public health or quarantine regulations, financial and monetary regulations, taxes, police and immigration requirements and military restrictions.

Object is to seek elimination of delays imposed by international travel regulations designed for far slower means of transportation than the airplane, delays which considerably depreciate air travel's main advantage of speed. The new committee will begin its work early next year.

Navigation — Also presented to the Council were recommendations by the Air Navigation Committee for "regional route service organizations" to ensure the adequacy of air navigational facilities in various areas of the world. Procedure would be to ask one of the states concerned in a given area to convene a meeting of such a regional organization, with the general agenda to be prepared by PICAO.

The committee urged immediate action in four areas: the North Atlantic, European-Mediterranean, Middle East (including Western India) and the Caribbean. For later action it suggested: South Asia-Australasia, South Atlantic and South Pacific areas.

Next Meeting—The council continued to back and fill on the question of a site for next spring's meeting of the Assembly, but present indications are that it will be held in or near Montreal.

Difficulties of transporting a sufficient part of the secretariat and the necessary files and documents outweigh the advantages of travelling to Cairo or Rio de Janeiro, though both Egypt and Brazil have extended formal invitations.

Recommendations—In its recommendations on meteorological services the meteorological subcommittee suggested:

Detailed study of the adequacy of existing facilities, personnel qualifications, means for exchanging information, new requirements, charges made by "non-benefitting" states for data, division of costs, unification of graphs, charts and other documents and standardization of units.

FIRST *CONSTELLATION:*

The bulging side of Transcontinental & Western Air's first Lockheed Constellation *recently provided surface for the signing of a commemorative acceptance scroll when Lockheed made delivery of the airplane at Las Vegas, Nev. Signing, at Las Vegas' McCarran Field, are Sen. Patrick McCarran, Leonard K. Schwartz, Lockheed sales manager; and E. Lee Talman, TWA vice-president.*

New Ratifications

PICAO announced last week in Montreal that Denmark and Honduras had ratified the interim agreement on civil aviation and that Sweden had accepted both the international air services transit agreement and international air transport agreement, the two freedoms and five freedoms documents.

▸ That member states submit lists of subjects which their meteorological services consider require special statistical compilation and specifications for standards of adequacy.

▸ That member-states now maintaining weather patrol ships, shore stations, or meteorological reconnaissance flights continue these observations until arrangements can be made for civil agencies to take over the work.

▸ That PICAO study the cost and basis for financing the necessary weather ships and reconnaissance flights and stations in sparsely settled areas, including the arctic regions.

▸ That regional organizations be established when found advantageous.

▸ That PICAO consider the provision of aid in re-establishing facilities destroyed or disrupted by the war.

Other recommendations dealt with various aspects of PICAO's relationship to meteorological needs of air transport.

▸ **Statement**—The subcommittee's report was drawn up in consideration of already existing standards of the international meteorological organization and their application to aeronautics. Proposals also were formulated for close coordination between the two organizations.

Said the report: "There can now be placed at the disposal of member states a compendium of recommended practices which does not conflict fundamentally with any similar existing regulations but will enable states to provide meteorological service according to a uniform system."

Mississippi Valley Hearings Ended

Two and a half weeks of hearings in the Mississippi Valley route case ended last week before two Civil Aeronautics Board examiners in New Orleans after 10 operating carriers, 21 prospective feeder or local carriers and 16 city intervenors had presented testimony.

Hearings were conducted by Examiners Ferdinand D. Moran and James S. Keith.

▸ **Applicants**—Among the applicants at the closing sessions was the firm of Key, Gaillard, Ethridge & Broach, which seeks a fixed-base local feeder operation out of Meridian, Miss. Members of the firm are Col. Algene E. Key and Major Fred M. Key of Meridian, brothers who set the world flight endurance record in 1935 by staying aloft 28 days; Lt. Col. Milton Evans, Gulfport, Miss.; Lt. Col. Green R. Gailliard, Meridian; Lt. Comdr. George M. Ethridge, Jr., Meridian, and a civilian, Walker Broach, Jr., Meridian attorney.

They would operate a service to New Orleans, Hattiesburg, Miss., Jackson, Miss., Memphis, Nashville, Birmingham, Montgomery, Ala., Pensacola and Mobile, Ala., with two daily trips over each route.

Los Angeles Facing Airport Crisis

Los Angeles, center of the West Coast aircraft industry, and potentially, because of population and climate, one of the important private flying areas, faces an airport crisis.

Property owners who are not convinced that the growth of aviation will be accompanied by safety regulations are bombarding Los Angeles city and county governments with protests against extension of the area's 26 existing airports.

▸ **Action Delayed**—The Los Angeles County Board of Supervisors has delayed until Jan 6—after listening for an hour to protests against a single proposed airport near Pasadena—action on a new master airport plan proposing the development of 62 airports, major terminals, secondary airports and airparks.

Property owners, many of them organized in aggressive anti-airport groups, declare their objections to be based on the noise of airport operations, accident hazards and the possible loss of property values.

▸ **Damage Suit**—Several property owners who recently initiated an action to close Lockheed Air Terminal, have abandoned the abatement action, but are continuing a suit for $100,000 in civil damages.

So far only moderate support has come from meetings the CAA, National Aeronautic Association and other aviation groups have held with property owners to demonstrate the need for immediate development of airports.

CAB SCHEDULE

Dec. 3. Oral argument in National-Caribbean Atlantic control case. (Docket 1907 et al.)
Dec. 3. Briefs due in Great Lakes Area case. (Docket 535 et al.)
Dec. 3. Exchange of exhibits in Aerovias Nacionales de Colombia foreign air carrier permit case. (Docket 1983.)
Dec. 3. Hearing on Compania Cubana de Aviacion, S. A., application for foreign air carrier permit. (Docket 1887.)
Dec. 3. Exchange of exhibits in Aerovias Nacionales de Colombia, S. A., foreign air carrier permit case. (Docket 1983.)
Dec. 3. Exhibits due in route consolidation case. (Docket 932 et al.)
Dec. 5. Exhibits due in Royal Dutch Air Lines (KLM) and Royal Netherlands Indies' Airways (KNIEM) foreign air carrier permit case. (Docket 1277.)
Dec. 6. Hearing on Danish Air Lines (DDL) application for foreign air carrier permit. (Docket 2077.)
Dec. 10. Hearing on Aerovias Nacionales de Colombia, S. A., application for foreign air carrier permit. (Docket 1983.)
Dec. 10. Exchange of exhibits in Pan American Airways' trans-Atlantic route amendments case. (Docket 2076.)
Dec. 11. Hearing in Royal Dutch Air Lines (KLM) and Royal Netherlands Indies' Airways (KNILM) foreign air carrier permit case. (Docket 1277.)
Dec. 12. Oral argument in South Atlantic case. Postponed from Nov. 12. (Docket 1171 et al.)
Dec. 14. Exchange of exhibits in Middle Atlantic case. Postponed from Nov. 1 and 30. (Docket 674 et al.)
Dec. 17. Hearing in route consolidation case. (Docket 932 et al.)
Dec. 17. Exchange of exhibits in Mid-Continent-American merger case. (Docket 2068.)
Dec. 28. Exchange of rebuttal exhibits in Middle Atlantic case. (Docket 674 et al.)
Jan. 2. Hearing in Pan American Airways' trans-Atlantic route amendments case. (Docket 2076.)
Jan. 4. Exchange of exhibits in Kansas City-Memphis-Florida case. Postponed from Nov. 1 and Dec. 7. (Docket 1051 et al.)
Jan. 14. Hearing in Middle Atlantic case. (Docket 764 et al.)
Jan 14. Exchange of rebuttal exhibits in Mid-Continent-American merger case. (Docket 2068.)
Jan. 21. Rebuttal exhibits due in Kansas City-Memphis-Florida case. Postponed from Nov. 20 and Dec. 24. (Docket 1051 et al.)
Jan. 21. Hearing in Mid-Continent-American merger case. (Docket 2068.)
Jan. 28. Exchange of exhibits in Universal Air Travel Plan case. Postponed from Dec. 3. (Docket 1939.)
Jan. 31. Comments due on proposed new Part 42, Civil Air Regulations, non-scheduled air carrier certification and operation rules. Extended from Oct. 1.
Feb. 5. Hearing in Kansas City-Memphis-Florida case. (Docket 1051 et al.)
Feb. 18. Exchange of exhibits in Pan American Airways application for domestic routes. (Docket 1803.)
Feb. 18. Hearing in Universal Air Travel Plan case. Postponed from Dec. 17. (Docket 1939.)
Mar. 18. Rebuttal exhibits due in Pan American Airways application for domestic routes. (Docket 1803.)
Apr. 1. Hearing on Pan American application for domestic routes. (Docket 1803.)

CAB ACTION

● Permitted inauguration of non-stop service by Eastern Air Lines between Akron, Ohio, and Winston-Salem, N. C., and between Charlotte, N. C., and Jacksonville, Fla., on AM 6; National Airlines between Norfolk, Va., and New York on AM 31; PCA between Buffalo, N. Y., and Washington, D. C., on AM 34.

● Permitted American Export Airlines to serve North Atlantic co-terminals, Washington, Philadelphia, and Chicago, through Washington National Airport, Philadelphia Municipal Airport (Southwest Airport), and Chicago Municipal Airport, respectively; Delta Air Lines to serve Chicago through Municipal Airport; Eastern to serve Cleveland through Cleveland Municipal Airport; National to serve Philadelphia through Southwest Airport; Pan American Airways to serve Honolulu through Honolulu International Airport (Honolulu Naval Air Station); Yukon Southern Air Transport Ltd. to serve Fairbanks, Alaska, through Weeks Field (Fairbanks Municipal Airport).

● Granted cities of Alpena, Mich., and Sioux City, Iowa, permission to intervene in Great Lakes Area case (Docket 535 et al.)

● Granted cities of Laconia and Concord, N. H., permission to intervene in New England case (Docket 399 et al.), but denied latter city's motion to incorporate additional evidence into the record.

● Consolidated into its route consolidation case, involving American, TWA, and United, application of PCA for consolidation of AM 14 and AM 32.

● Granted city of Jefferson, Mo., and city and county of Denver, Colo., permission to intervene in Mississippi Valley case (Docket 548 et al.)

● Denied Munz Air Service permission to intervene in Pacific case (Docket 547 et al.), the record having been closed.

● Denied motion of Puerto Rico Transportation Authority that its application (Docket 2123) be heard immediately and considered simultaneously with "Latin American case (Docket 525 et al.)

● Denied Essair temporary exemption order that would have permitted origination and termination of schedules at Austin, Tex., an intermediate point on AM 64.

● Dismissed, at applicant's request, application of R. W. Putnam and I. V. Bartlemay (Docket 1788).

● Instituted a proceeding to fix mail pay rate to Pan American, from and after Nov. 16, 1945, on routes between San Francisco and Hong Kong and Singapore, and between San Francisco and Auckland, New Zealand.

● Granted American Export Airlines permission to intervene in Danish Air Lines (DDL) foreign air carrier permit case (Docket 2077).

● Denied requests of United Air Lines and Braniff Airways to consolidate their applications for routes in area served by Mid-Continent into American-MCA merger case (Docket 2068) and granted permission to intervene to BNF, Chicago and Southern, Delta, TWA, UAL, Air Line Pilots Association, and United Automobile - Aircraft - Agricultural Implement Workers of America.

● Severed for hearing that part of Royal Dutch Air Lines (KLM) and Royal Netherlands Indies' Airways (KNILM) application (Docket 1277) for foreign air carrier permit to operate between Amsterdam, Holland, and New York, and assigned the trans-Pacific service portion to Docket 2140.

The Budget Bureau and Aviation—II

LAST week's discussion on this page of the Budget Bureau and its importance to aviation stressed the tremendous power of the Bureau over all facets of aviation, the impractical, unrealistic and arbitrary nature of many of its decisions on aviation budget items and aviation legislation, and the plea for an end to the unhealthful and unnecessary awe in which the public, aviation industries and Congress have held Budget Bureau action.

With the end of the war and return of full control of many budget items from the military services to the Bureau, aviation must expect renewed attempts by the Budget Bureau to extend its control even further.

These comments are not made in derision of a hard working staff in the Budget Bureau, but they are made in an attempt to convince us that we must scrutinize the Bureau as critically, as we do our friends at CAA, CAB, State, Commerce, Army, Navy, NACA, and Congress.

We must remember that the Budget Bureau makes many decisions and interpretations, necessarily without consulting the President, and that, therefore, all Budget action should not be interpreted as infallible or as having come direct from the President. A political scientist would reject this thesis as a basis for action, but a resident of Washington will accept it as realistic advice.

One agency, which must remain unnamed, had a vital project which the Budget Bureau disapproved. An appeal to the top Budget Bureau authorities also failed, and the agency was thus unable to send its request to Congress. One of the agency heads finally went to the President, explained the project and the history of the case, and promptly received a memorandum to the Budget Bureau ordering approval of any budget the agency deemed necessary.

We must remember that the Budget Bureau is a small agency. It cannot possibly know everything about all things. Certainly, it cannot be an authority in aviation. It has no aviation section or unit or, as far as can be learned, even a single full-time specialist in aviation. It does maintain a continuing study in transportation, in which aviation still is considered as a luxury means of transport, and subsidiary to older modes. Its staff is quoted as favoring the placement of aviation regulation in some single transportation agency such as the ICC or a new consolidated body. It is obvious that such action would result in control of not only the air transport industry but perhaps even the non-scheduled operators and private flying by men who are essentially railroad minded. The threat of a single transportation agency is very real.

With the end of the war, the day is over when the Budget Bureau approves automatically all military requests. Yet we seem convinced, as a nation, that we must never again be unprepared for war. Furthermore, as the emphasis returns to commercial aviation we must expect to see more and more restrictions attempted by the Budget Bureau. By consistent lack of vision and a negative policy of cost-cutting, it can become the No. 1 enemy of an expanded post-war commercial and military aviation demanded by the people. It is lagging far behind public opinion, stressing theories which cannot, in themselves, be criticized, but which are depressing aviation because they are not bound up with realistic appraisal of today's rapidly moving developments and what they will mean tomorrow.

These editorials are not arguments for padded payrolls or pork barrel legislation. But it does seem that too often the Budget is being used, as far as aviation is concerned, more to save money than to spend wisely. Character of public expenditure changes greatly during a country's development. The public demands from its federal government maximum benefit from every new service which attains utility and makes possible a better life. Even the Budget Bureau's personnel will concede that economy and efficiency are not synonymous. Mere retrenchment or niggardly increases in budget, without consideration for the value of the return, never assure better public service, or security.

We have still another reason to demand that Congress, our elected representatives, act independently of the Budget Bureau in aviation matters, whenever necessary. But by the law of the land aviation is not merely another activity to be regulated. For our Civil Aeronautics act is the only law in transportation which orders the Civil Aeronautics Administration and the Civil Aeronautics Board not only to regulate, but to foster, encourage, and develop.

This unique dictum we should never forget, nor allow Congress itself or others to forget.

ROBERT H. WOOD

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