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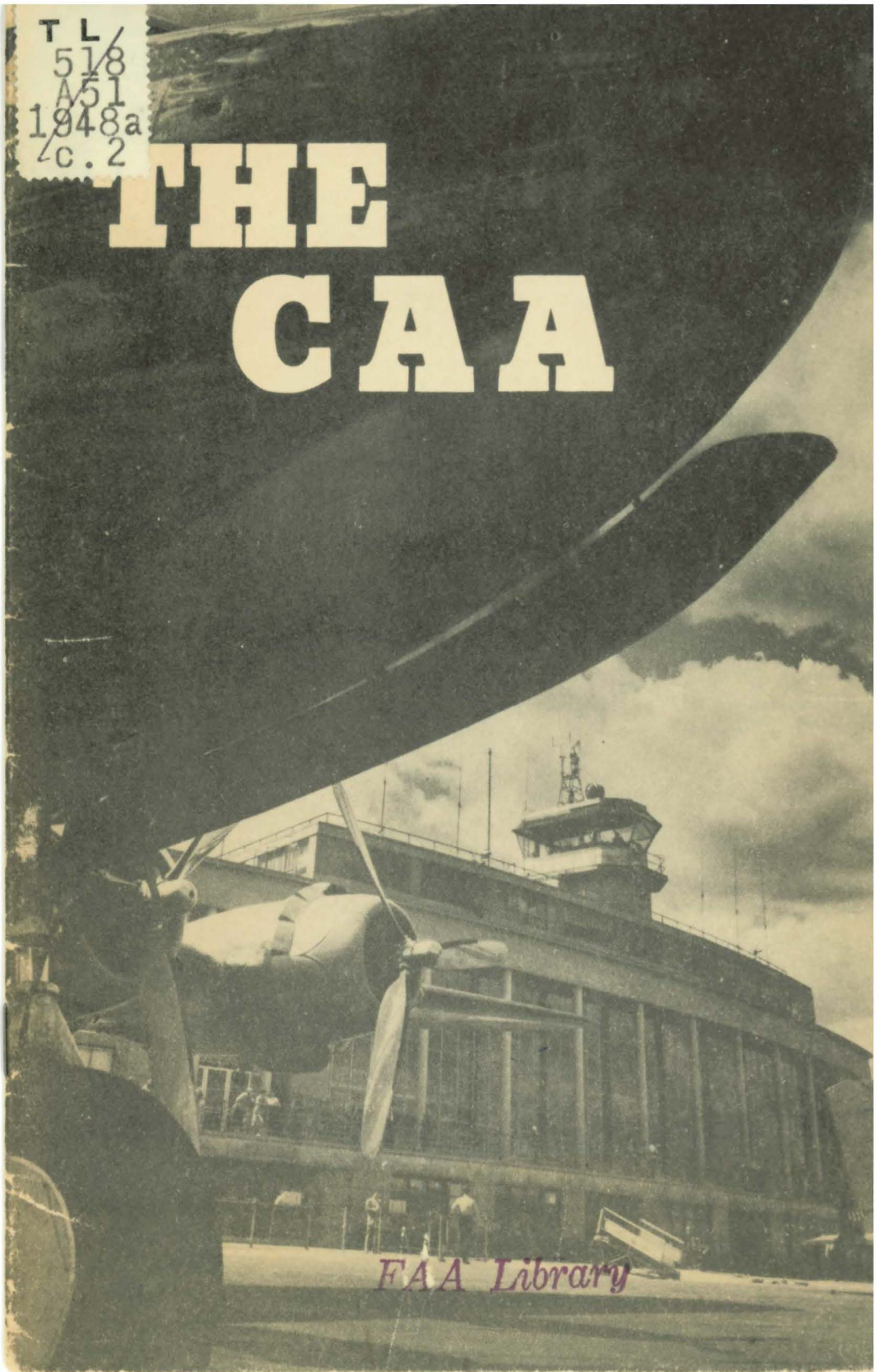
THE CAA



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U. S. DEPARTMENT OF COMMERCE
CHARLES SAWYER, Secretary

CIVIL AERONAUTICS ADMINISTRATION
D. W. RENTZEL, Administrator

The CAA

June 1948

Prepared By
CAA AVIATION INFORMATION

The Administrator is empowered and directed to encourage and foster the development of civil aeronautics and air commerce in the United States, and abroad, and to encourage the establishment of civil airways, landing areas, and other air navigation facilities. * * *

—Civil Aeronautics Act of 1938, as amended.

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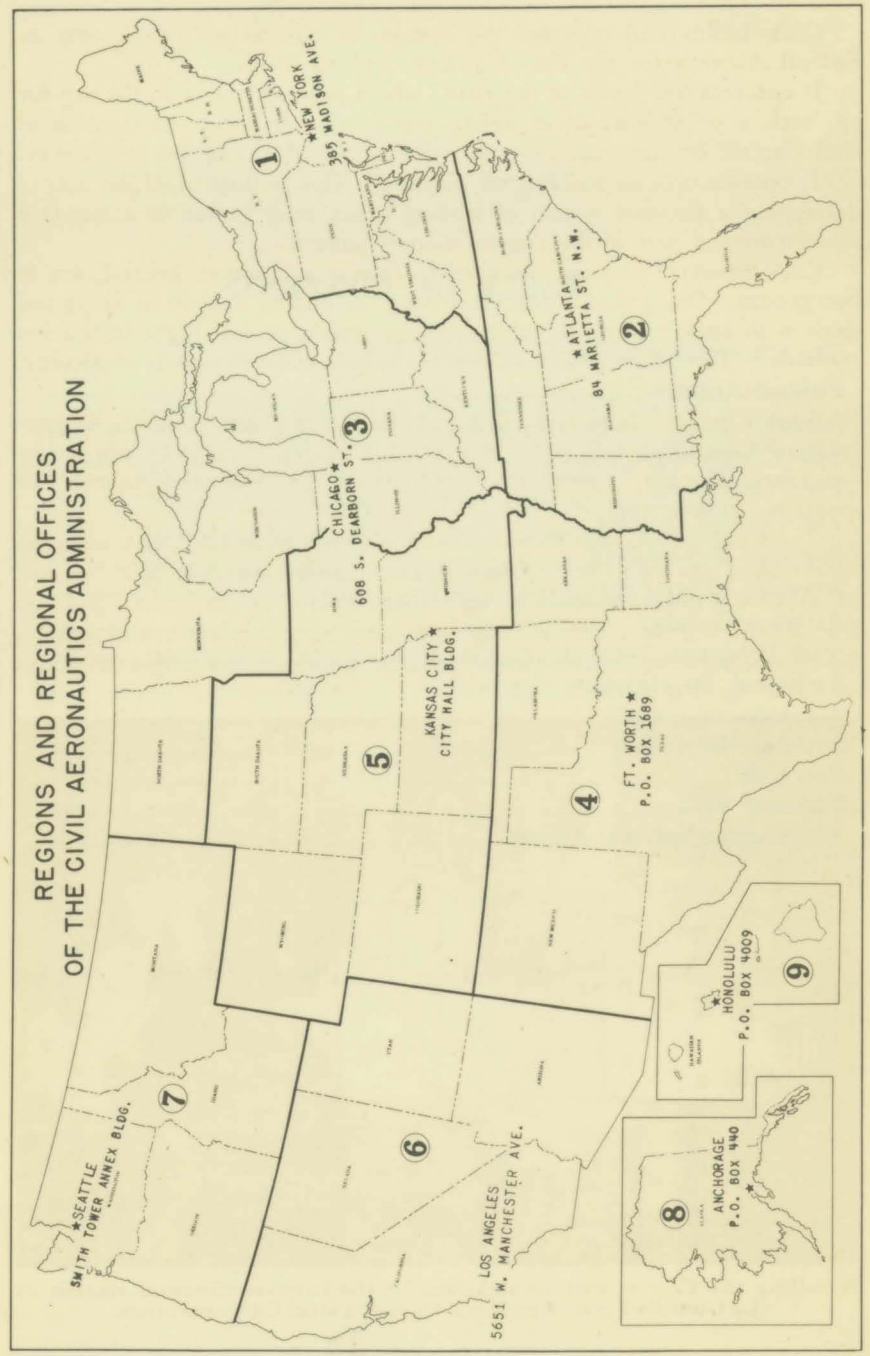


THE CAA: WHAT IT IS

CAA builds and operates the system of navigation aids known as Federal Airways for the use of airlines and all fliers.

It enforces the "rules of the road" which promote safety in the sky for all, with a prime part of its safety regulation job being examination of civil aircraft for airworthiness and examination of airmen for proficiency.

It coordinates the building of airports. This is done with the aim of developing a national system of landing areas, each geared to a standard and forming a part of the general airport pattern.

CAA research projects, designed to benefit aviation in general, are in two groups. One group is concerned with the human element in flying and deals with such matters as pilot selection standards and flight instruction methods. The other group relates to technical development of aircraft, instruments, airport devices, charts, etc.

CAA conducts these and other functions as an agency of the Department of Commerce and under the mandate placed upon it by law to develop and encourage aviation. It serves as the "executive branch" of aviation's government.

The Civil Aeronautics Board, usually referred to as CAB, is a separate, independent agency which operates as the "legislative and judicial branch" of aviation's government. Its "legislative" job is to issue the Civil Air Regulations and its "judicial" task is to pass upon applications of airlines for routes and rates. It also investigates air accidents and judges violations of Civil Air Regulations.

Handling the flow of communications in the inter-continental station at La Guardia Field, New York City, is a vital CAA operation.

FEDERAL AIRWAYS

The Office of Federal Airways builds, operates, and maintains the vast network of "air highways" and flying aids, totalling 37,000 miles in the United States and 8,000 miles in Alaska. It also carries on a continuous research and experimentation program to increase safety and efficiency in flying.

The far-flung system of airways, each 10 miles wide, links every city served by a scheduled airline, with more than 300 intermediate fields situated to provide emergency landing areas every 100 miles or less.

Along the airways, fliers find many aids which help them determine their location, keep on course, obtain information on weather and other flying conditions, and make safe landings.

The nerve center of a large airport is the control tower in which the CAA traffic controller is stationed to give directions and assistance to pilots by radio.

To help pilots make the most effective use of the Federal Airways system, flight charts are published periodically. They show the location of flying aids and their current characteristics.

When new airways are to be established, Federal Airways experts make the necessary ground and air surveys and draw up detailed plans and specifications for the facilities to be installed. Thereafter, they build, operate, and maintain these facilities.

The various aids provided by the Office of Federal Airways include: radio range stations which transmit "radio-beam-signals" to guide the pilot; radio markers to give him his location at frequent intervals; visual air markers further to guide him by day, and rotating light beacons to guide him at night; radio communication stations to provide him with weather information and other data; instrument landing systems to help him make safe landings and take-offs; and lighted emergency landing fields along the airways. All of these aids are kept in perfect operation by frequent and systematic inspections.

From the moment an airplane makes ready to take off from an airport on the civil airways system, to the time that it lands at its destination, its movements are carefully controlled by Airport Traffic Control towers and Airway Traffic Control centers.

AIRPORTS

The Federal-aid airport development program is directed and supervised by the Office of Airports. This program proposes development, during the 7 years starting July 1, 1946, of a national system of airport facilities adequate to serve the needs of aviation in this important postwar period of expansion. Under this program the local units of government, including States, counties, cities, and other political subdivisions, sponsor airport development projects and meet approximately 50 percent of the cost. The other 50 percent is furnished on a grant basis by the Federal Government.

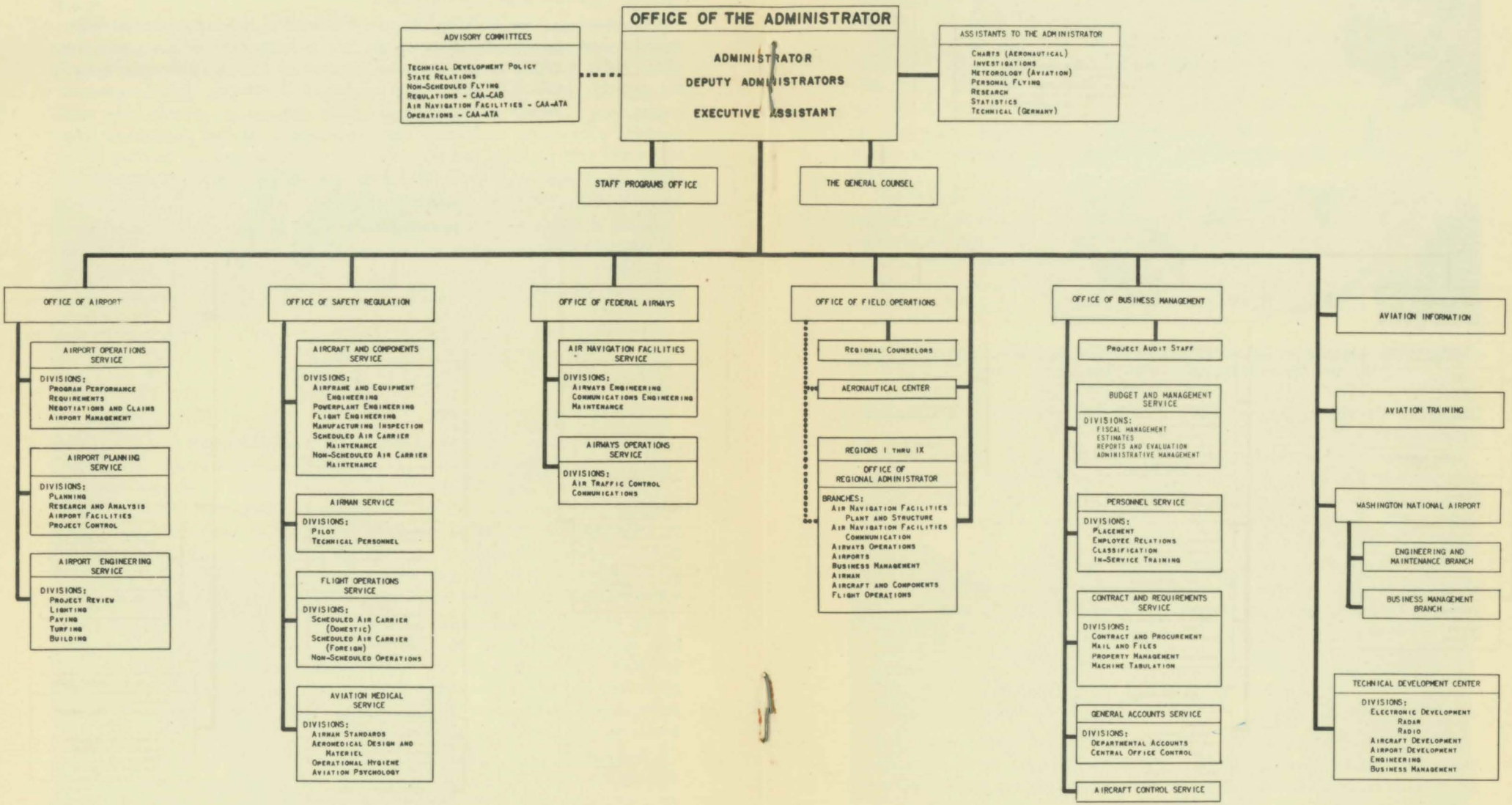
In addition to this major activity, the Office of Airports advises civic and private officials in the planning, design, and operation of airport facilities. This office develops and promulgates standards relating to planning, engineering, zoning approach protection, and operation and management of airports. It originates booklets, standard plans and specifications, and model legislation dealing with airports.

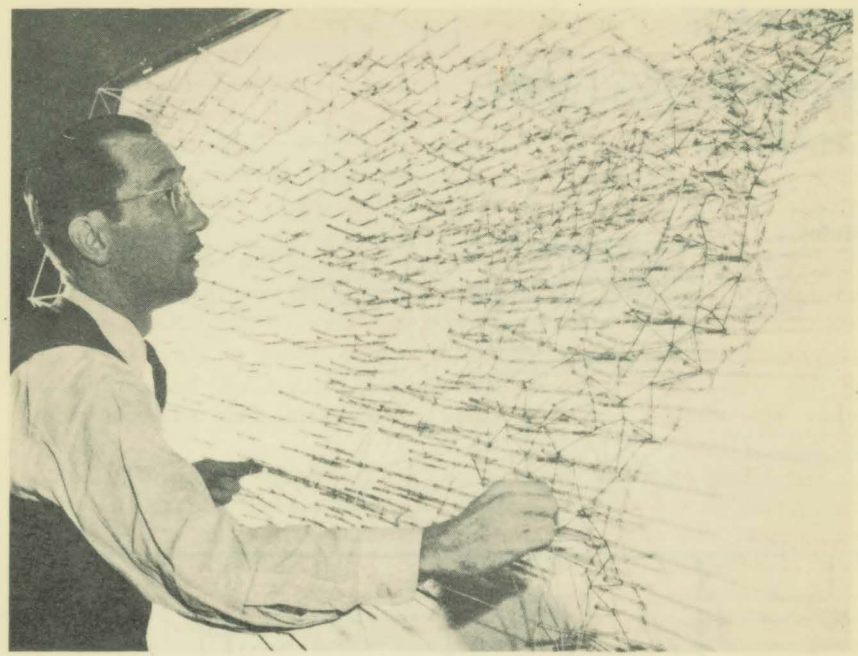
Services of airport engineers on the staff of the Office of Airports have been made available to many individuals, cities and governmental agencies in connection with the following activities: planning selection of airport sites; reviewing the design of airport layouts including runways, lighting systems, and buildings; the general preparation of projects for airport

DEPARTMENT OF COMMERCE

CIVIL AERONAUTICS ADMINISTRATION

ORGANIZATION CHART





Study of this graphic indication of airport locations, and the airways which connect them, is an aid in planning for the future.

improvement; airport management problems; airport building design; and urban planning.

Enactment of State and local airport legislation in the interest of civil aeronautics is encouraged. Particular attention is devoted to State legislation necessary to permit municipalities and counties to establish airports and to prevent, by the zoning method, establishment of hazards within the aerial approaches of airports.

The Office of Airports, in short, has the task of directing and guiding the tremendously important work of developing an airport system on a nation-wide scale, with each airport in the system closely geared to the area it serves.

SAFETY REGULATION

The main objective of the Office of Safety Regulation, as the name implies, is safety in aviation. To hold that objective, constant vigilance is maintained over airmen, aircraft, aviation equipment, and flying procedures.

In performing its functions, this office endeavors to assure that aircraft shall be airworthy and that they shall be flown by competent pilots.

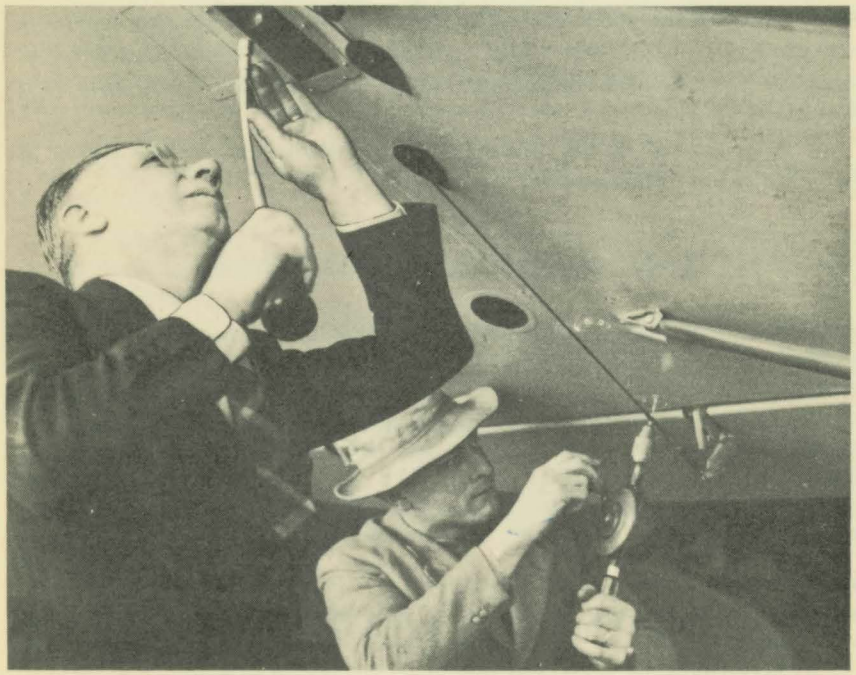
It analyzes aircraft designs, conducts ground and flight tests on new

or modified aircraft and equipment, and inspects the facilities of manufacturers to determine ability to produce safe products in quantity. It analyzes and reports on flight problems; develops and recommends physical standards for airmen; conducts or supervises periodic inspections of aircraft; and examines pilots, mechanics, control tower personnel, parachute riggers, flight instructors, and other specialized aviation personnel for certificates or licenses. It also reports violations of the Civil Air Regulations.

A CAA inspector may appear at any time on the "jump seat" of a scheduled airline flight; and, when airline pilots are "proving" a new route, CAA inspectors always are flying with them. Other CAA inspectors, specializing in maintenance, have the airlines' shops on their beats. In all this work, the airlines cooperate closely with CAA, being proud of safety achievements and determined to maintain their excellent safety records.

The Office of Safety Regulations also investigates accidents from the engineering viewpoint; conducts tests to assist in development of improved regulations; and prepares manuals and special instructions covering aeronautical items with which it is concerned.

Much of the work of this office is connected with private and non-scheduled commercial flying and enforcement of the safety regulations



Skilled CAA inspectors examine airplane structures to promote safety for the flying public, in cooperation with the airlines.

which govern such operations. Inspectors constantly are traveling through their assigned districts, for example, in the process of inspecting such establishments as flying schools and ground schools and giving examinations to applicants for certificates which cover a wide range.

The Office of Safety Regulation administers the foreign field offices of CAA. In the field of international civil aviation operations, it develops and presents the CAA position through coordination with the Department of State, the Civil Aeronautics Board and other United States and foreign governmental agencies, organizations and individuals.

FIELD OPERATIONS

This office directs and coordinates continuous survey and appraisal of all domestic field operations of the CAA, determining their efficiency and making recommendations to the Administrator for possible improvement.

It assists in achieving coordinated and uniform application of established policies, standards and procedures by field offices and functions to discern and advance solution of operational or administrative problems linked with field activities.

The Office of Field Operations also provides consulting assistance to the various Washington offices of CAA in their development of policies, standards and procedures which affect field operations. In this connection, it represents the views of field officials and advises as to possible effects upon field operations.

It is designated as the channel through which field officials report to the Office of the Administrator.

THE GENERAL COUNSEL

This is a staff office responsible for advising as to interpretations of Federal and State laws, the Civil Air Regulations, and other regulatory matters affecting CAA activities.

This office also analyzes alleged violations of Civil Air Regulations and makes appropriate recommendations for either handling the case administratively or for forwarding to the CAB for punitive action. It drafts legislation as required, handles legal aspects of CAA contracts, and generally counsels the Administration on legal matters.

BUSINESS MANAGEMENT

Responsibility for keeping the CAA's administrative operations in smooth and efficient working order rests with the Office of Business Management. It makes current analyses and evaluations of the organization and functional performance of the Administration.

To this office fall the duties and responsibilities pertaining to management analysis, accounting, budgeting, contracts, procurement, personnel, position classification, and payrolls. It provides various office services involving property, supplies, central filing, mail, and messengers. It also has the responsibility for the establishment and coordination of administrative procedures, and for assisting other parts of the Administration in problems of procedure and organization.

AVIATION INFORMATION

The Office of Aviation Information serves both as producer of material used by airmen, the industry, and general public, and as publisher of material developed by other CAA offices. It is staffed by four major divisions—Flight Information, Aviation Statistics, Publications, Current Information—plus a Library and a special Visual Services Section.

This office presents all types of aeronautical information through publications, press releases, statistical data, exhibits, illustrated slides, charts, and other visual aids.

Airmen depend on flight information for current news on route conditions. This division issues the biweekly Airman's Guide (containing air navigation radio aid data, directory of airport data, and notices to airmen) and the Flight Information Manual, issued semiannually, which supplements the Airman's Guide.

The CAA and other Government departments, as well as businessmen, get authoritative aviation data, reports, and analyses through the Aviation Statistics Division.

The Civil Aeronautics Journal keeps the general aviation public informed on CAA and CAB activities, regulations, requirements, and aviation statistics.

Serving as publisher for CAA books, manuals, and pamphlets, the Publications Division reviews all material to be published and advises other offices on textual, layout, and printing problems. The Inquiry Section answers general correspondence, maintains all mailing lists and stocks, and distributes all publications.

The writing staff of Current Information supplies newspapers, magazines, wire services, and newsreels with informational material concerning the CAA, through press releases and contact.

The Visual Services Section provides illustrative material for CAA and outside publications. The Library makes aeronautical books and publications available to all employees for loan or reference.

AVIATION TRAINING

Aviation Training is the office concerned with the development of aviation education. flight and other aeronautical training, and both standardization and in-service training for CAA employees.

This office provides guidance and assistance to schools and colleges in the introduction of aviation subject matter into the educational pattern for all age levels from the elementary through the college age group. The purpose is to promote a widespread understanding of and participation in aviation activities.

Civilian flight training is encouraged by providing technical and professional assistance to flight training operation in schools, colleges, aviation schools, and organizations concerned with or interested in flight training in the United States.

Training programs for nationals of other American republics are conducted by this office. Under these programs, inaugurated in 1941 and jointly sponsored by the Department of State, a considerable number of Latin American youths have been trained as pilots, mechanics, airway technicians, and aviation interns.

This office also plans, develops, and directs appropriate in-service and standardization training programs for CAA employees, including the general direction of the CAA Standardization Center.

STAFF PROGRAMS OFFICE

This office is responsible for developing long-range plans for CAA and for coordinating the Agency's activities relating to the International Civil Aviation Organization (ICAO) and the interdepartmental Air Coordinating Committee (ACC).

It is responsible for operation of civil aviation technical assistance missions, receives official foreign civil aviation visitors, and handles technical relations with individual foreign countries. A program designed to effect maximum standardization of aeronautical facilities, equipment, and procedures is also under the direction of this office.

TECHNICAL DEVELOPMENT CENTER

The Technical Development Center formulates, administers, and executes CAA programs for technical development in aeronautics and related arts and sciences. Its work is directed toward elimination of hazards in, and increased efficiency of, the operation and flight of aircraft. Activities involve applied research, experimentation and laboratory, flight and service testing.

The Center conducts applied research by contacts with industrial organizations, educational institutions and other governmental agencies, and by direct participation. The broad goals are: new and improved radio and radar aids to air navigation and communication; improved methods of airport surfacing, drainage and marking; and improved aircraft structure and powerplant components and instruments.

AERONAUTICAL CHARTS

Activities relating to aeronautical charts, under an assistant to the Administrator, include prominently the formulation and clearance of CAA recommendations to the Coast and Geodetic Survey concerning provision of aeronautical charting services necessary to the safe and efficient movement of aircraft in national and international air commerce.

Close watch is maintained over development work in aids to navigation, methods of navigation, cartography and other related fields of activity with a view toward improving aeronautical charts by the application of advanced developments and techniques. Necessary liaison is maintained with interested public and private groups.

Also, there is continual surveillance of the requirements imposed by expanding areas and new types of flight operations of U. S. aircraft. The object is to meet such requirements by the development of new charts or new charting techniques.

AVIATION METEOROLOGY

Activities and developments in the field of meteorology which concern aviation are closely observed by CAA from the standpoint of safety and efficiency of aircraft movements in domestic and international air commerce.

Recommendations relative to provision of aviation meteorological services necessary to that safety and efficiency are formulated and cleared as a responsibility of an assistant to the Administrator.

Liaison is maintained with the Weather Bureau, other governmental agencies, the aviation industry and the many separate activities within CAA which are concerned with aviation meteorology.

Continual emphasis is given to advanced techniques in aviation meteorology in relation to development of aids to navigation, methods of navigation and associated fields with improvement of the service as the objective.

RESEARCH

Specializing in the study of pilot selection and training methods, the CAA Research Division has achieved results of outstanding importance to both civil and military aviation. Much of this research has been assigned to

colleges and universities, contracting through the National Research Council.

Developed and used in the program are such unique devices as an airborne model magnetic wire recorder and a motion picture camera set up for filming student pilot performance. The recorder has been used to gather data on instructors' vocabulary and approach; on the basis of these data a book of standard "patter" and a manual covering fundamental training maneuvers have been prepared.

PERSONAL FLYING

Acting under his mandate to foster the development of civil aeronautics, the Administrator has appointed a special assistant, with a counterpart in each region, to devote full time to promoting personal flying, potentially the biggest phase of aviation.

In addition, he has named from the industry a Non-Scheduled Flying Advisory Committee, to help guide CAA in this field.

WASHINGTON NATIONAL AIRPORT

The Washington National Airport is the only airport wholly operated and controlled by the CAA, and serves as a model for other communities. It was created by filling in the Gravelly Point area on the Virginia side of the Potomac River, and was officially opened in 1941, becoming a show place of the Nation's Capital.

From this airport, planes of the Army Transport Command and those of the Naval Air Transport Service fly regularly to all parts of the world. Planes of the domestic passenger lines and those of private fliers form an almost constant procession across the field, with those of the transoceanic passenger routes increasing rapidly.

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