



MOVING DAYS - AERONAUTICAL CENTER - USA

Two stories high, Air Navigation Facilities Laboratory takes its place among Aeronautical Center's new buildings

CAA Employees' Association

**CAA AERONAUTICAL CENTER
OKLAHOMA CITY, OKLAHOMA**

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CENTER TO BE DEDICATED

IN A CELEBRATION of national interest the new CAA Aeronautical Center buildings were dedicated on June 22, 1958. Two days of open house for the public's view were climaxed by the dedication services on Sunday at 4:00 p.m. A barbecue and ISKA HELIH HOMA powwow (a ceremony by the Flying Red Men) followed.

Louis S. Rothschild, Undersecretary of Commerce for Transportation, who officiated at the ground breaking ceremonies on February 15, 1957, expressed the general sentiment when he said the buildings are here - people are moving into them - but it seems impossible. From ramshackle wooden barracks - some leaky, all drafty and hard to clean - to the most modern and beautiful edifices in less than two years! It is a noteworthy accomplishment of planning and construction.

Headed by Mr. Rothschild, the Washington dignitaries here for the dedication included CAA Administrator James T. Pyle and Senator Mike Monroney. High level officials from airlines and industry were present.

THE COMPLETED BUILDINGS are also a tribute to the patience and perservance of the builders and employees. The wettest spring in recent Oklahoma City history came at the beginning of the project. Trucks with supplies mired down in roadways; huge bulldozers were kept idle day upon day; streets ready for paving were washed and gutted so badly that all work had to be done again and again; steel work was slowed down because of torrential downpours. In the early months of construction the deadline of July 1, 1958, seemed an impossibility.

Plowed roads, chug holes, detours, no parking spaces were some of the inconveniences that tested employees' tempers. In the early days some CAA'ers hurrying to work were completely unnerved to have houses arguing the right-of-way on the highway. Some wondered what had been slipped into their morning coffee; others felt that hard work was finally taking its toll; QB members wondered if there had been a meeting the night before.

As the barracks were auctioned and then moved from

the premises, walking houses failed to rate a second thought except perhaps an occasional feeling that an old, though untrustworthy, friend was being transferred.

SOME OFFICES have had to move once, or even twice, until the new places were ready. Getting rid of surplus, obsolete and unusable material has been a hard and even heart-rending chore. It is rumored that the first draft of the Wright Brothers' plans and some spare airplane parts from the shop at Kitty Hawk were uncovered as Hope Biggers started packing for the move. Not to mention the original rough draft of the Act of '38 which was wedged in between the books, "Women are Here to Stay," and Galileo's dissertation on vitalized physics.

Training of CAA personnel went through on schedule but it wasn't always easy. Lecturers had to compete with pneumatic drills tearing away concrete; classrooms assigned ahead of time might be non-existent at the time the course was held. Students and instructors waded through ankle-deep mud to reach their buildings. Sometimes they just couldn't get there from here. A road that had "always" been at the Center disappeared overnight or was blocked by a structure that had been across the field. To step out of a building before looking both ways was foolhardy. Students and official visitors are rejoicing with Center personnel over the completion of the building project.

A FOURTEEN MILLION dollar building project would be expected to attract a large number of sidewalk superintendents. And it did. Each group patriotically kept to its own building except perhaps for the huge new hangar. As the forms were erected for molding the side columns, or the massive cranes swung the steel girders into place across the ceiling, the s.w. supers forgot their

Ed. Note: In the Vol. IX - issue No. 2 Aeronautics Bulletin, published by Parks College of Aeronautical Technology, East St. Louis, Illinois, the following article appeared as a salute to the Civil Aeronautics Administration on its 20th anniversary.

FEW INDUSTRIES IN America have grown with such rapidity and with such dramatic surges as the aviation industry. Lindbergh's flight across the Atlantic and two world wars gave an impetus to flying. Today it has international importance and has become an essential in our lives. This constant pattern of growth is continuing on and on ... building speed upon speed with an ever increasing pace.

Thirty years ago, small airlines were cramming single passengers into the front cockpit of open aircraft even in midwinter and filling empty corners of crannies in their planes with a few air mail bags. It is estimated that in 1927, 8,670 passengers were flown. From that beginning air passenger travel has continually grown. Each year the number of passengers carried has vaulted upward with the exception of the war years, when travel was restricted. In 1930 there were 384,000 passengers; in 1935 - 762,000 passengers; in 1940 - 3,000,000; and in 1956 - 41.7 million. By 1970, it is estimated that the number of passengers carried by domestic air carriers will be up to 120 million.

..... It is the job of the CAA to oversee the many facets of aviation today. As the CAA celebrates its 20th anniversary (continued on page 4)

DEDICATION - continued

individual areas of supervision and joined forces to 'help'.

'Tis said Mr. Lanter could give the number of pounds of concrete poured, the total units of bricks laid, the count of nails used each day. I.M.

AIR PROGRESS - cont'd from page 3

sary, the nation looks forward to the great promise of the jet age in civil air transport. It is the CAA's anticipation of these changes and the new problems they bring that will enable us to fly with safety, comfort and convenience. From the inspector checking the plane to the pilot testing the equipment at high altitudes; from the radio communicator in the small mountain side station to the radar operator on a darkened instrument flight; from the airport engineer to the controller perched in his high tower guiding air traffic; from the maintenance technicians to engineers, ... throughout the entire far-flung CAA, almost 24,000 people work together to perform this job in order that the jet-age may come as a boon to mankind rather than as a hazard.

DURING THE 20 years since the inception of CAA, technological developments and scientific progress have kept this agency hopping with increasing air traffic and higher and higher speeds. As larger and larger planes went into operation the CAA has been called upon to push beyond frontier after frontier. It has been their job to give us safe airplanes, safe airmen (including mechanics and any other ground personnel), safe airports, safe aids, to air navigation, and safe control of air traffic. CAA employees are scattered throughout the entire United States, Alaska, Hawaii, and most of the free world.

..... under the Air Commerce Act of 1926, the Department of Commerce established an Aeronautics Branch, and proceeded to certificate aircraft and airmen to insure safety, and to build airways across the country to make flying safe.

Airways were built first by engineers

of the Bureau of Lighthouses, and their first concern was to make possible safe flying at night. To these men, this meant lighthouse on the land, with emergency fields along each route for airplanes in trouble. But radio improved and engines improved, and gradually the visual airway gave way to the electronic airway, and then the cities and towns along the airways took over most of the emergency fields for public use. So short a history tells nothing about the struggles of CAA pioneers 20 years ago, working out a brand new kind of travel, but our tremendous system of more than 106,000 miles of airways today stems back to their untiring effort.

TRAFFIC CONTROL

TO MEET THE COMPLEX problems of handling ever-increasing air traffic, the functions of the former Federal Airways have been divided.

Essentially, air traffic control provides aircraft in flight with longitudinal, lateral or vertical separation from other aircraft. Air traffic in the U.S. moves under two sets of rules. Visual Flight Rules (VFR) which are used in good weather when the rules are "see and be seen", and Instrument Flight Rules (IFR) which are required when the weather is bad and visibility restricted.

The CAA has been controlling air traffic since 1936. Ten controllers were in the original group but 10,000 persons perform air traffic control duties at 530 locations today. To control the traffic over the 106,000 miles of airways and at busy airports, the CAA has divided the country into 26 segments and in each of these it has established a control facility known as the Air Route Traffic Control Center (ARTC). the Centers control en route traffic between terminal points and airport traffic control towers control traffic operating in a radius of approximately 20 miles around an airport.

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MEMO TO SECRETARIES
(Bosses may read too)

Thanks to Doris N. who reads the Wall Street Journal, we have the following interesting article.

THREE MEDICAL RESEARCHERS have announced in the Journal of the American Medical Association some predictions about technology and slim secretaries and we hasten to offer a rebuttal before their statistics upset business, the farms and all slim secretaries.

The scientist say that a girl who works with modern machines has got to watch her weight. A five-foot-three, 120-lb. secretary, for example, who switches to an electric typewriter can be expected to gain an extra pound every ten weeks unless she cuts down on her calories. Their reasoning is that the electric typewriter calls for less energy to operate than other typewriters and that the energy thus saved builds up into excess poundage.

NOW, IF THESE statements were just left at that, no telling what might happen over at IEM and the corner grocers'. Slim secretaries would either have to shun electric typewriters or eat less. Either way, the economy could be affected.

Well, girls, we've got some news for you. The secretary in our office is five-foot-two-and-one-half inches tall, weighs 115 pounds, and has been using an electric typewriter for the past six months. Her appetite is normal.

AND SHE'S LOST THREE POUNDS, not counting her winter coat.

Which certainly indicates that researchers can't always tell about secretaries. Or their own statistics, either.

* * * * *

MIDDLE AGE IS that time in life when it takes you as long to get over a good time as it does to have it.

FISCAL BRANCH CHIEF
REPORTS TO CENTER

THE BUDGET AND FINANCE Division welcomes its new Chief of the Fiscal Branch, John K. Hall.

JOHN REPORTED FOR duty on April 7 from Ellington Field, Texas, where he had served as Chief Accountant for many years. He comes to us very highly rated for his work with the Air Force, having received just last February an award for his sustained superior performance.

KANSAS IS HIS HOME state - Manhattan, his home town. After his highschool days he went to Los Angeles where he worked with the Los Angeles Stock Exchange. In 1941 he enlisted in the Navy and ultimately spent 38 months in the Pacific with a dive bombing squadron. After his discharge in December, 1945, he spent some time with the RFC and WAA. Then, taking advantage of the G. I. Bill he enrolled at Kansas State where he obtained his degree in accounting. Upon the completion of his college work, he returned to Houston and immediately went to work for the Air Force. His wife, Claudia Jean, is a Houston girl whom he met in 1941 and married a year later. They now have two daughters.
(continued on page 10)

CHANGES AT FMD AID FIELD EFFICIENCY

THE ELECTRONIC FIELD technicians are probably beginning to think that the letters "CAA" have recently acquired a new meaning such as, "Changes are Abundant". There are so many different changes taking place it is not easy to keep up with them as CAA modifies its operations to meet present and future needs. One of these "new-looks" is the relationship between the field technicians, and the Facilities Materiel Division (FMD). In a nutshell, to the field maintenance specialists FMD is an engineering and shop organization as well as a supplier of establishment equipment and materials.

The Airways Facility Shop is now completely integrated into FMD, which is continuing the crystal making and repairing, the special electronic fabrication and assembly, the reconditioning programs for goniometers, DME Components, transformer repair, etc., that were until recently accomplished in the old Airways Facilities Shop.

FMD, previously known as PMD, has always had large fabrication and assembly capabilities in the area of structural equipment, relay racks, flight progress boards and facilities for all types of metal working, finishing, painting and wood-working activities. The complete disassembling, reconditioning and testing of all types of electronic and teletypewriter equipment is not new to FMD. For example, a year ago, before any consolidation started, FMD had a staff of electronic technicians engaged in the complete overhaul of electronic and teletypewriter equipment prior to its shipment for installation.

The significant change at FMD in rendering service to the field technicians is the requirement for more efficient

FMD CHANGES (Continued)

shop facilities and more manpower to handle the greater volume. FMD is now completely moved into its new air-conditioned shops which embody the most modern and efficient facilities conceivable. No effort has been spared to provide special buildings, structures, facilities and equipment to repair, overhaul, fabricate, calibrate and test almost any major items of equipment for a CAA facility. A common by-word at FMD is "if we don't have it and you can't buy it, let's make it."

SOME OF THE UNUSUAL items to be found in daily use at FMD are such as marble-top precision true tables, vacuum pumps, crystal lapping wheels and diamond abrasive cutting wheels, environmental test chambers, the plastic radio-frequency window along one side of the antenna laboratory, microphone analyzers, equipment for automatic plotting of r-f impedance/admittance charts and other gadgetry to provide more exacting and economical service.

A considerable quantity of new and elaborate laboratory and developmental equipment has been secured and more is on order. FMD personnel are scheduled for factory training at a number of manufacturers of complex equipment. A competent staff of design engineers, engineering technicians and draftsmen are on hand.

MANY PEOPLE AT FMD may be seen, these days, wearing their head-gear at a jaunty new angle, the "field maintenance angle". Some are even wearing new reversible caps for those days when they are doing "establishment" work instead of "field maintenance jobs". In many cases the equipment is identical and the only difference may be one of fiscal coding and priority. It may be interesting to note that simultaneously FMD will be handling "repair and return" directly with the field station, and also performing a national and international function for the receiving, warehousing (continued on page 7)



CAKE AND COFFEE were the order of the day when Aircraft Branch said "Goodbye" to W. H. Fricks who left for temporary detail to the Airways Modernization Board. Walt has been assigned to the Simulator Operations Division of the Directorate of Systems Analysis.

In the picture above, the honoree cuts the cake, with moral support from Warren Smith, Flight Operations

FMD CHANGES (continued from page 6)

shipping, overhaul, testing, designing and fabricating various items of CAA equipment for the establishment of facilities in the U.S. and many foreign lands. The essence of FMD's functions are, therefore, to deliver new or like-new equipment to any remote location, at the time required

& Airworthiness Chief and Division secretaries. Stantees include Washington and Regional personnel here for the first run of the EE-4, "Basic Jet Transport Electronics Specialist Alternating Current Systems and Controls Course" and other FLOP/Air people.

GEORGE WOLFE, instructor at Air Traffic Control, has also drawn an assignment to AMB and reported to Washington at the same time.

to speed the establishment of new facilities. When such facilities are commissioned, FMD will offer certain repair or fabrication services to the field technician, in accordance with Regional instructions, to aid in the field technician's goal of perfect and continuous performance of his facilities.

G. Younghein, AC-700

RADAR ANTENNA LABORATORY MEETS RIGID REQUIREMENTS

THE RADAR ANTENNA Laboratory, which is located just south of the CAA hangars and east of the main FMD shop, is the smallest of the new Aeronautical Center buildings. (See back cover of BEACON). In this building the CAA Precision Radar Antennas and other types of equipment are overhauled.

The building and all of the associated equipment was designed with the utmost care to meet the rigid requirements demanded by this exacting work. From the outside it looks similar to but smaller than some of our other beautiful buildings. Inside, the difference is quite apparent. The temperature does not vary over 4° F. through the year. This requirement is necessary to maintain the accuracy of adjustments needed, where even the expansion of metal due to temperature has to be considered.

It is built lying north-west to south-east. This was done to permit perfect alignment of antenna arrays being calibrated in relation to the Test Radar Transmitter which is located on the east side of Will Rogers Airport.

A VISITOR ON THE INSIDE OF THE BUILDING would wonder about many of the things that would meet his eye. The first of which probably would be the large Radar window that fills the south-east end. He would perhaps think the huge opening was left for a large view of the field that lay before him, or that the designer had an afterthought and filled in this space. This was not the case, as the material which fills this window is very transparent for Radio waves, even though the human eye cannot see through it. This window is ten feet high and thirty feet long so it must be protected against high winds. On the outside of the building is a massive roll type door that

RADAR ANTENNA LAB (continued)

covers this window when winds become too high for safe operation.

IN THIS BUILDING, directly in front of the Radar window is another odd looking device. This is the training mount and Radar reflector with which the antennas are calibrated after they have been overhauled and adjusted. Like everything else associated with these antenna arrays, this device also is extremely accurate and it is possible to read the Radar beam angles to one one-hundredth of a degree. This mount was specially built for this particular job. The base used in its construction was at one time with the U.S. Navy, where it served as a mount for an optical range finder on a battleship.

Looking around the largest room of this building, the visitor will see several very heavy tables secured to the floor. These are called "true tables". That is a good name for them as they have been made in such a way that they will not warp or distort, and have been machined very true. It is on these tables that the Radar antennas are assembled and adjusted. Every precaution is taken to see that the perfect alignment is obtained while working on these antennas, therefore, a true surfaced table must be used to avoid any chance of misalignment.

NEAR THE NORTHEAST wall is a rack of instruments and a dial, much like the dial on your telephone. This rack contains control equipment for the control of the Radar transmitter located on the east side of the airport. With this equipment, the technicians can turn on or off the transmitter, select the channel desired and actually tune the transmitter very accurately. While only one telephone line extends to the transmitter site, 18 operations can be performed by this equipment.

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SPERRY GROUP DEMONSTRATES TOM



PERSONNEL FROM Sperry Gyroscope Company, including Mr. S. C. Atkins, Assistant Director, Southern District Office, and Mr. R. Snodgrass, Director of Flight Research, presented the important functions of the Sperry

Take-Off Monitor to a group of CAA Washington, Regional and Center people on April 28. (See picture above). The salient features and utilization were explained. The session was in the FLOP/Air Lab.

FISCAL BR. CHIEF (Cont'd. from page 5)

JOHN COMES INTO a situation here which will provide him, we hope with no more than his share of overtime. It becomes his immediate responsibility to devise and initiate a modified system of accounting for FMD and Operation of Aircraft as a part of the CAA's program for the improvement of financial management. Since he is starting from scratch, it might be said that he has his work cut out for him. He is looking forward to the challenge, though, and we are sure he will meet it.

L. Rickman



"Another beauty contest?"

QUESTIONS & ANSWERS - SALARY INCREASE

THE FOLLOWING questions and answers, about the effects of ;the Federal Employees Salary Increase Act of 1958, have been prepared by ;the Civil Service Commission and cover the points on which questions are most frequently received.

Q. Which employees are affected by the salary increase provisions of the Act?

A. Approximately 978,632 employees under the Classification Act; 4,119 officers and employees in the judicial branch; 6,200 officers and employees in the legislative branch; 19,485 doctors, dentists, and nureses in the Department of Medicine and Surgery, Veterans Administration; and 12,636 officers and employees in the Foreign Service of the State Department.

Q. Which of the above affected employees get a straight 10% raise?

A. Generally speaking, all of them do, except those in GS-18 who get slightly more than 9%.

Q. To what date is the pay raise retroactive?

A. To the first day of the first pay period beginning on or after Jan. 1, 1958. In most cases, that will be January 12, 1958.

Q. Who is entitled to the retroactive pay raise?

A. There are four groups of employees (or former employees) who are entitled to retroactive pay. They are:

(1) Employees on the rolls on the date of enactment.

(2) Employees who left the civilian

service during the period of retroactivity to enter military service and were in military service on the date of enactment.

(3) Employees who retired during the period of retroactivity.

(4) Employees who died during the period of retroactivity, in which event their beneficiaries will receive the pay adjustment.

Q. How much retractive pay will I get?

A. You will get the difference between your old pay rate and the new pay rate computed for 12 pay periods, minus deductions for income tax and retirement (or social security). Generally speaking, deductions will take out about $\frac{1}{4}$ of the amount due.

Q. What are the deductions for persons who retired during the period?

A. Income tax only.

Q. I have heard that the periodic within-grade pay increases are now larger than before. Is this true? If so, what are the new amounts?

A. Yes, it is true. The periodic step increases, both old and new, are as follows::

Grade	Old step increase	New step increase
GS-1 thru GS-4	\$ 85	\$ 95
GS-5 thru GS-10	135	150
GS-11 thru GS-14	215	240
GS-15	270	300
GS-16 thru GS-17	215	240

10% (minus deductions) of what ;you actually earned during the period of

AIR NAVIGATION FACILITIES ARE



Typical Office



Student Lounge

SETTLED IN NEW LABORATORY



Upstairs Corridor



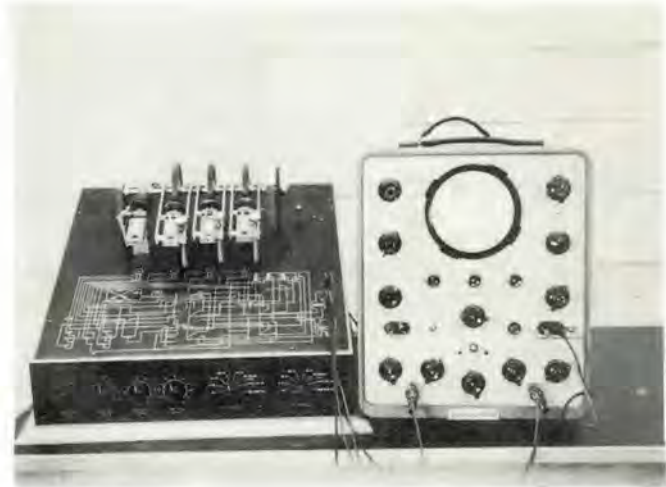
Laboratory - Classroom

LATEST TYPE EQUIPMENT IN LABORATORY

The problem of effective use of the laboratory oscilloscope by the instructor in showing waveforms to a group of students may be solved by the use of slave scopes. A new DuMont Slave Scope, pictured at right, is in use in a radar laboratory. Additional units are expected for other laboratories in the Resident Schools.

The Slave Scope is tied to the vertical and horizontal deflection plates of a normal oscilloscope through a cathode follower. All variations made on the normal oscilloscope are then repeated, including vertical and horizontal positioning. As shown in the photograph, it can also be used with a Dual-Trace Oscilloscope; in this case it is the Hewlett-Packard 150A.

The use of the Slave-Scope will become increasingly important as class sizes increase next fiscal year, making it necessary to have more students in the laboratory at one time.



/ SPACE MODULATION DEMONSTRATION

Radiations from loop antennas are combined in the laboratory to produce the space modulation effect. The student obtains visible proof of combined signal effects upon detection. One loop radiates modulated carrier, the other radiates sidebands only from a sideband generator. A third loop, not shown, picks up signals combining them upon detection to produce the "space modulation" effect.





Branch Chief Mueller and W. M. Hill proudly survey new facility.



New classrooms are immediately put into use.

* * * * *

RADAR ANTENNA LAB (continued from page 9)

In this rack also is a device for telling the direction and velocity of the wind and serves as a warning device should the wind velocity get high enough to endanger the large Radar window.

THE NORTHWEST PORTION of the building is a workroom for the machinists to perform the necessary overhaul on the antennas. Here the antenna arrays are completely disassembled and thoroughly cleaned and every part inspected. Each part is measured to one-ten-thousandth of an inch. Special tools and jigs make it possible to maintain a very close tolerance and

the personnel of this shop are trained for this specific type of work. They take great pride in being accurate in everything that they do in this shop. Here, like most of the shops of the CAA the men look for answers to problems, and not excuses for them. If they find a case where wear is taking place, they strive to find why, so that it will not occur another time. This attitude has increased the inservice time of these antennas by nearly 1000 scanhours between overhaul periods.

The movable portion of some of these antenna arrays are 14 feet in length and are moved at the rate of 60 sweeps a minute, still they are held to an accuracy of a maximum of plus or minus one-thousandth (continued on page 16)

RADAR ANTENNA LAB (continued from page 15)

of an inch variation anywhere along the entire length.

WITH THIS CARE in our shops here at FMD, we know that when these antennas are sent to New York, Boston, or any other station where they have precision Radar for landing aircraft, they will perform satisfactorily. The controllers and the technicians at the stations know from past experience that they can depend on our workmanship and the calibrations which we furnish.

R. Wenzel

* * * * *

AIR PROGRESS (continued from page 4)

There is a third type of facility in the control system, the Air Traffic Communications Station (ATCS), which forms the communications link between controllers and pilots in flight along the airways, providing pre-flight and in-flight briefing and flight advisory service.

THESE THREE TYPES OF FACILITIES - the centers, the towers and the communications stations-linked by 130,933 miles of teletype and 135,764 miles of interphone lines, work closely with each other to bring about a safe and orderly flow of traffic.

NAVIGATION FACILITIES

IMPORTANT ALSO in traffic control are the navigational aids which enable a pilot to follow the airway route assigned to him. The signals from these aids, such as the Very High Frequency Omnidirectional Ranges (VOR), form the structure of the Federal Airways.

CAA's air traffic control facilities are manned by Airways Operations Special-

AIR PROGRESS (continued)

ists, each performing his special function. The man in the Center assigns a pilot on an IFR flight plan a specific altitude at which to fly between his point of departure and his destination, giving the pilot a reserved slot of airspace which in effect moves along with the flight. Before an aircraft leaves one center the information about it is passed on by telephone to the next center so that it can take over the control. Nearing its destination, the flight is "laddered" down by the center to an appropriate altitude, from which it is turned over to an airport traffic control tower for approach and landing instructions. Here the pilot is in direct communication with the controllers in the tower, who give him a heading to fly, information about other traffic, weather, etc., and final landing instructions in sequence with other arriving aircraft. At the same time, aircraft on the ground are being controlled outbound by the tower after having been given a clearance and an altitude and route to their destination by the center.

A CONTROLLER IN A CAA-operated tower must be a jack-of-all-trades, that is, he must be able to move freely from one control position to another. For example, the Washington tower has a local controller, a military controller, a ground controller, a flight data man and a radar departure controller. On the floor below is an IFR room where there are two radar approach controllers and one precision approach controller, and a controller whose job it is to act as liaison between the tower and the center.

One of the biggest jobs in the CAA is keeping the aids to air navigation, the communications network, and the air traffic control system, which together make up the Federal Airways, operating without interruption 24 hours a day. There are some 4,000 maintenance specialists, of which 3,105 are electronic specialists, whose respons-

(continued on page 17)

ibility it is to keep it operating at peak efficiency. These specialists try through regular preventive maintenance, to avoid breakdowns in the system. When a breakdown does occur, they may be called on at any time of the day or night to go to some remote spot to repair it.

FLIGHT OPERATIONS AND AIRWORTHINESS

The Flight Operations and Airworthiness personnel of the CAA specialize. One group consists of aeronautical engineers who work side by side with the engineers of the industry when a new plane is being born. All the experience of the years in producing a structure of proper strength and durability is thus brought to bear on all new products. When the plane is produced as a prototype and flight tested, again with a CAA expert on hand, it is approved by the CAA, and the manufacturer then may turn it out in numbers.

The mechanic who works on this plane to keep it in condition, the pilot who flies it, the navigator and engineer aboard and the dispatcher who sends the plane on its journey, if it is a commercial carrier, all must qualify under CAA rules for their competency and earn certificates.

CAA's General Aviation Inspectors, working out of the General Safety District Offices, take care of general aviation matters such as fast-growing and important business flying, air taxi and other various operations. Visiting the major airports in their districts on regularly scheduled itineraries, they give examinations to applicants for mechanic, pilot and airmen certificates; approve flight and mechanic schools which meet CAA standards; authorize changes in small aircraft.

HAVING HELPED TO produce safe aircraft and competent airmen, the CAA continues its supervision for safety. It requires periodic inspection of aircraft to insure their airworthiness and it forwards to owners the latest information on proper maintenance and special care of their aircraft.

Pilots who fly for pleasure only, pass a physical examination every two years: commercial pilots once each year. Airlines require still more frequent physical examinations of their pilots. The CAA, through its medical division, designates doctors to give the examinations for commercial and transport pilots.

THE OFFICE OF FLIGHT OPERATIONS and Airworthiness also keeps records on aircraft ownership and airmen certificates. Other Inspectors are assigned especially to airline operations noting maintenance, operation, and communications.

AIRPORTS

The CAA, through its Office of Airports, helps build airports. For many years the federal government has shared the expense of airports with local sponsors, and today the Federal Aid to Airports Program is under way with the largest appropriation ever made by Congress for the purpose. Congress charges the CAA to produce an adequate national system of airports, and authorized Federal money to match local funds, usually on a 50-50 basis. In 1955, Congress passed a bill authorizing \$63,000,000 a year for this federal share for the next four years. This makes possible long-range planning by localities and the CAA. It promises that this adequate system of airports will come nearer to reality.

THIS IS A BIG COUNTRY, and airplanes know no geographical boundaries. Thus it is important that this industry, which deals primarily in speed, have no blocks and
(continued on page 18)

checks placed in its way by government. The CAA designates qualified individuals in the industry to act for it, so as to get still closer to the grass roots needs of the flying public. Thus a qualified flight instructor can examine an applicant and give him his pilot's certificate; or a qualified specialist in an aircraft factory can inspect and approve workmanship just as an official CAA Engineering Flight Test Inspector would do. This accomplishes some other important goals. It avoids having the CAA grow to a huge bureau full of federal policemen and it passes on to an industry, now grown to adult stature, the responsibility it should bear as an American business.

INTERNATIONAL COOPERATION

In the International field, the CAA is concerned with many of the same problems it has in this country. Flight Operations and Airworthiness Inspectors and airways specialists are stationed in the 11 International Field Offices at London, Paris, Beirut, Bangkok, Manila, Tokyo, Lima, Buenos Aires, Rio de Janeiro, Frankfurt and San Juan, where they carry on their usual services for U.S. airlines serving their areas, and for the foreign airlines which fly from there to the United States. These CAA men, usually veterans of long service in the United States, experts in their specialties, are very often regarded and used by foreign governments as aviation advisors and consultants.

IN ADDITION TO THESE established offices, the CAA sends missions to various countries on specific aviation problems and over 20 missions are in the field at one time, assisting in such matters as airways aids for India; a multi-million dollar

system of airports for Columbia, training air traffic controllers for Japan or a new and modern communications center for Latin American nations.

THE INTERNATIONAL COOPERATION Administration usually provides funds for this work by the CAA as a part of U.S. technical assistance to friendly nations. The overall purpose of the CAA is to produce standard airways throughout the world, with aids and procedures uniform everywhere as a major contribution to air travel safety. Our nation's experience in building and operating airways, and in promoting safety in aviation has resulted in leadership in these matters, and it is willingly shared with other nations. Hundreds of foreign nationals have been brought here for specialized training, and scores of high officials from other countries have come here to observe and study U.S. methods, facilities and procedures.

PLANNING AND DEVELOPMENT

The Airways Modernization Board recently established by the President, and the CAA's Planning and Development Office are constantly projecting aviation requirements into the future in order to accurately forecast what civil and military air activity will be in the years ahead.

THE REPORT BECOMES the basis for planning for airways and other CAA services, development, modernization and expansion. Special teams have been studying what the advent of jet powered aircraft will mean to our airports, airways, and air traffic control facilities, and other teams have studied the problem of certificating foreign-made jet transports for use here.

At Indianapolis, the CAA maintains a Technical Development Center, where ideas and inventions valuable in aviation are evaluated and developed for practical use. Such studies as fires in aircraft in flight, fuel tanks that will not rupture in crashes, windshields strong enough to withstand collision with birds, the

strength of airport pavements and other projects are carried on in many cases with the cooperation of the aviation industry and the military services.

CAA's own men must maintain their efficiency and therefore the CAA operates at Oklahoma City the Aeronautical Training Center. Here CAA officials take refresher courses, large classes of new employees are trained in air traffic control and foreign trainees take courses in many aspects of airways operations.

An important part of the CAA job is to put essential information in the hands of the industry and the public. The Public Information Staff is the communications channel for this purpose, using booklets, films, releases to the press and other media.

THE CAA WORKS CLOSELY with the Civil Aeronautics Board but the two are separate agencies. The Administration is a part of the Department of Commerce, while the CAB is a five-man board appointed by the President. The CAB function is to establish rates and routes for the air carriers; to write the Civil Air Regulations which the CAA enforces; to judge those who violate these regulations; and to investigate accidents to large planes.

So, wherever you may fly, the CAA has an interest in your safety. If your pilot is "on instruments" and you cannot see the tip of the wing of the plane, you can know that he is following an electronic highway in the sky. If the plane encounters rough air, you can reflect that it is built many times as strong as the maximum turbulence it may be expected to encounter and that a CAA man stood by in the factory to be sure it was

designed and built to that strength.

IF YOU SEE NOTHING below you but trackless ocean for hours on end, you can rest assured that the Navigator could tell you instantly just where the plane is on its unmarked path. The pilot has proven his ability. The dispatcher who loaded the flight knew how to figure the weights and balances required for safe disposition of the mail, passenger and baggage load.

And waiting for you at the destination airport are landing aids which will make possible a safe landing even though the ceiling is down to 200 feet and the pilot cannot see to the end of the runway.

WATCHING OVER THAT FLIGHT, and the flights of private planes, business planes or great transports, is a dedicated group of air traffic controllers and communicators, bringing to every pilot every flight aid from the ground which has been developed and perfected in the 20-year history of this increasingly important federal aviation agency.



FLIGHT INSPECTION TRAINING

INDOCTRINATION (CAA Class #1-58-D) 1/27 - 4/4/58

BOEGEL, William T.	Reg. 1
BRADY, Wade J.	3
FELL, Donald M.	5
GELLESTLY, Edwin E.	1
HEIDGER, Norman C.	4
McSAHEY, Thomas W.	AC
MITCHELL, Jack D.	2
NEUSCHWANDER, Emery A.	2
PAXSON, W. M.	4
TURNER, William H.	3
WOLF, Kenneth E.	1

INDOCTRINATION (USAF Class #27018) 1/27 - 4/4/58

COBB, Capt. Alvin B.	Mitchell AFB
FERRARI, Major Libero	ITA
GREEN, A/IC James M.	Tinker AFB
STANWINI, Major Ulderico	ITA
GULLAGE, T/Sgt. Albert J.	Chanute AFB
JESSE, T/Sgt. George P.	Hamilton AFB
MASSEY, Major Holman C.	Randolph AFB
PUGH, T/Sgt. Arthur R.	Robins AFB
SANDERS, Capt. Robert L.	Hamilton AFB
SEATON, Capt. Glenn E.	Craig AFB
SHEA, Capt. Richard H.	Stewart AFB
WRIGHT, Capt. Joseph	Hamilton AFB

REFRESHER (USAF Class #06018) 1/6 - 1/17/58

FORD, Capt. Charles R.	Robins AFB
GUNNARSON, Capt. Kenneth I.	Randolph AFB
HEUSTON, T/Sgt. Tharon F.	Randolph AFB
HATFIELD, Capt. Robert N.	Tinker AFB
LEACH, Capt. Laurence	Chanute AFB
LEONARD, M/Sgt. James H.	Mitchell AFB
MOORE, Major Grover P.	Scott AFB
ROSS, T/Sgt. Fred Jr.	Tinker AFB
SMITH, S/Sgt. Robert E.	Randolph AFB
STOKES, S/Sgt. Robert L.	Robins AFB
SYFERT, Capt. Gene E.	Mitchell AFB
WARD, T/Sgt. M. B.	Tinker AFB

FLIGHT INSPECTION TRAINING

REFRESHER (CAA Class #R-58-E-1) 5/12 - 5/23/58

EVANS, Donald	Reg. 3
McCORMICK, John F.	4

REFRESHER (CAA Class #R-58-F) 5/26 - 6/6/58

CRAYMER, L. G.	Reg. 2
DUNCAN, Joe B.	OIC
RYAN, Maurice J. Jr.	3
BELL, James F. Jr.	2

AIRCRAFT OPERATION STANDARDIZATION 1/6 - 1/17/58

BETTON, W. A.	W
HANSON, W. A.	Reg. 5
HUNT, R. H.	2
LOWRANCE, E. H. Jr.	3
OLSEN, Frank	1
WILDER, Fred O.	4
WOOD, Mach R.	W

AIRCRAFT BRANCH

Course EE-1
Light Aircraft Electrical Systems
3/3 - 3/14/58

GERACI, Natale J.	Teterboro, N. J.
METZGER, Paul L.	Allentown, Pa.
SALEES, Norman H.	Tulsa, Oklahoma
VANHORN, John E.	Harrisburg, Pa.
VOLKER, Bert	Wichita, Kans.
WILLIAMS, Roy P.	Grand Rapids, Mich.
YOUNG, Laurence M.	Denver, Colorado

Course EE-2
Transport Aircraft Electrical Systems
3/17 - 3/28/58

DILBECK, L. R.	Los Angeles, Calif.
FITZMAURICE, G. W.	Chicago, Ill.
KRIESEL, Ralph S.	Washington, D. C.
MAURER, H. H.	Washington, D. C.
NESS, Andrew K.	Washington, D. C.
PACHAM, Thos. G.	Miami, Fla.
PALMER, Carl A.	San Francisco, Calif.

FLIGHT INSPECTION TRAINING

REFRESHER (CAA Class #R-58-A) 1/27 - 3/7/58

ARCHER, George F.	Reg. 1
FARRIS, James W.	4
HANSON, W. A.	5
MILLER, Charles R.	2
McDONNELL, J. P.	3

REFRESHER (CAA Class #R-58-B) 2/10 - 2/21/58

COMPTON, Stanley G.	Reg. 4
KINZLY, Louis F.	1
LUEBBE, Robert L.	3
STONE, Robert S.	2

REFRESHER (CAA Class #R-58-C) 3/3 - 3/14/58

BAILEY, David D.	Reg. 2
BROWN, Thomas J.	1
GELBEL, Homer C.	3
KELLY, Robert E.	4
SHREVE, W. G.	6

REFRESHER (CAA Class #R-58-D) 3/24 - 4/4/58

BRAND, Claude R.	Reg. 4
CARLSON, Richard G.	1
McCullough, H. R.	2
SMITH, Tom W.	3

REFRESHER (CAA Class #R-58-D-1) 4/7 - 4/18/58

McDARIS, Charles C.	Reg. 1
ROWE, Elwyn L.	4
FRUETT, C. M.	2

REFRESHER (CAA Class #R-58-E) 4/28 - 5/9/58

BUTTERFIELD, L. L.	Reg. 6
GRAHAM, Charles E.	4
ILLICH, Harold F.	2
WALLS, John R.	3

AVIONICS TRAINING SECTION

ACES Class #2, 3/10/58 - 4/19/58

BENNETT, Glen D.	AC-680
CARRI, Emilio A.	Reg. 2
DELL, Glenn R. Jr.	AC-680.7
FISCHER, Paul V.	Reg. 4
GERALD, Dock B.	Reg. 1
GRAHAM, Walter S.	AC-680.6
JAMES, Kedrick B.	AC-680.7
LINDER, George R.	AC-680.7
MAHELOWA, Aaron W.	Reg. 6
REICH, Jack E.	Reg. 5
SINGLETON, Ellis C.	AC-680.8
PRATER, Ernest L.	AC-680.6
SMITHART, Shirl S.	Reg. 3
SULLIVAN, Roy L.	AC-680.6
WITTEN, James O.	AC-680.8

AIRCRAFT BRANCH

Course PP-3
Gas Turbine Engine Development
3/17 - 3/28/58

BIRELY, Wm. P.	Washington, D. C.
BLACKWELL, Carl T.	Oklahoma City, Okla.
BOSTELMAN, Arthur H.	New York City, N.Y.
BROWN, Raymond H.	Washington, D. C.
HALEY, S. D.	Denver, Colorado
HOPKINS, Albert M.	Minneapolis, Minn.
KENWORTHY, John A.	Los Angeles, Calif.
KING, R. H.	New York City, N.Y.
RAY, Robert W.	Dallas, Texas
SEED, J. Fred	Washington, D. C.
WHITE, Harry C.	Oklahoma City, Okla.

AIRCRAFT BRANCH

Course GM-4
Aircraft Instruments - Principles & Repair
Station Certification
3/24 - 4/4/58

BOLLINGER, Ted A.	Palo Alto, Calif.
DEYELL, R. D.	Rockester, N. Y.
EUBANK, Eugene O. Jr.	Kansas City, Kans.
HAMMOND, Elliott O.	Minneapolis, Minn.
LANE, Harold G.	Medford, Ore.
PILKER, W. B.	Charlotte, N. C.
REED, Arnold W.	Fargo, N. D.
RYSAVY, Wm. A.	Sacramento, Calif.
TUTTLE, Wayne	Dallas, Texas

OBSERVER

CALLEJA, Aurelio Costa Rico

AIRCRAFT BRANCH

Course GM-6
General Aircraft Radio Installation & Maintenance
4/7 - 4/18/58

ALLEN, Edward	Anchorage, Alaska
AVERETT, Bert A.	Seattle, Wash.
BEYER, Alwin F.	Spokane, Wash.
CARVER, Chester N.	Springfield, Mo.
RIEGER, Fritz	Rapid City, S. D.

OBSERVER

CALLEJA, Aurelio Costa Rico

Course PP-3
Gas Turbine Engine Development
4/14 - 4/25/58

BRENK, Richard A.	Kansas City, Mo.
COMMANDER, C. A.	Washington, D. C.
Glenn, Wm. A.	Washington, D. C.
HAND, Frank E. Jr.	Ft. Worth, Texas
HARE, Ralph L.	Vandalia, Ohio
KULEWICZ, H. R.	Los Angeles, Calif.
LUNSFORD, John O.	Denver, Colorado
MURPHY, E. W.	Kansas City, Kans.
NELAND, Kenneth E.	Washington, D. C.
TARBELL, Lyle E.	New York City, N.Y.
WEAVER, Ralph W.	Atlanta, Ga.

Course GM-3
Helicopters - Principles, Construction and
Maintenance
4/21 - 5/2/58

ALESKO, John M.	Troutdale, Ore.
BECHETTI, Fred A.	Des Moines, Iowa
BEHRMAN, Frank	Indianapolis, Ind.
CAPEHART, J. R.	Los Angeles, Calif.
DRIVER, C. H.	Louisville, Ky.
EISHER, George A.	New York City, N.Y.
JACOBSEN, Iver P.	Teterboro, N. J.
LIGHTHIZER, R. E.	Wichita, Kansas
MATHIAS, J. V.	Washington, D. C.
POOLE, R. G.	New York City, N.Y.
WELLS, W. F.	Ft. Worth, Texas

AIRCRAFT BRANCH

Course EE-4
Basic Jet Transport Electronics Specialist
A. C. Systems & Controls
4/21 - 5/9/58

BRANNON, Kirby L.	Washington, D. C.
CROSBY, Wm. E.	New York City, N.Y.
GRIFFITH, M. H.	Los Angeles, Calif.
MacDONELL, K. P.	Washington, D. C.
ODNEAL, H. D.	Ft. Worth, Texas
OGILVIE, Edward F.	Miami, Fla.
PIERCE, M. C.	San Francisco, Calif.
WATT, Everett M.	Kansas City, Kans.
WEIS, William J. Jr.	Kansas City, Mo.
ZIZZI, Joseph J.	Tulsa, Oklahoma

Course MF-1
Manufacturing Inspection Aircraft Operation
3/12 - 5/23/58

CURRY, R. J.	Washington, D. C.
O'TOOLE, Walter J.	Kansas City, Mo.
SAFFORD, Leland E.	Long Beach, Calif.
WHITEHEAD, Sam	New York City, N.Y.

AIRCRAFT BRANCH

Course PP-3
Gas Turbine Engine Development
5/19 - 5/29/58

BRAUNSTEIN, Carl	San Francisco, Calif.
CHAMMAN, Charles E.	Los Angeles, Calif.
CORE, Howard E.	Hurst, Texas
FOUNTAIN, Ernest H.	Washington, D. C.
HUTTON, Robert C.	Miami, Fla.
McCARTHY, J. E.	Miami, Fla.
OUTCEN, Roy	Ontario, Calif.
SMITH, James H.	Minneapolis, Minn.
STEWART, Jack L.	Miami, Fla.

Indoctrination Course (Air Carrier Maint.)
5/25 - 6/27/58

CHAVENS, D. R.	Atlanta, Ga.
EICHORN, Frederic V.	Pittsburgh, Pa.
KUEHN, Robert A.	Chicago, Ill.
LAMAR, John W.	Kansas City, Kans.

Indoctrination Course (Powerplant)
5/26 - 6/6/58

HIRSCH, Daniel Lee	Kansas City, Mo.
MASON, E. W.	Los Angeles, Calif.
YOTTER, Richard F.	Kansas City, Mo.

Indoctrination Course (Manufacturing)
5/26 - 6/6/58

BERNARD, George A.	Seattle, Wash.
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Course EE-1
Light Aircraft Electrical Systems
5/12 - 5/23/58

BISTRAN, Stephen J.	Westfield, Mass.
KELLY, W. G.	Alexandria, Va.
MABRY, R. N.	Oakland, Calif.
STEVENSON, J. H.	Phoenix, Ariz.
VAN ARTEDALEN, B. S.	Haddonfield, N.J.
WEBB, Frank W.	St. Louis, Mo.

OBSERVER

MIRANDA, Marcos Panama City, R. P.

Indoctrination Course (Airframe & Equipment)
5/26 - 6/6/58

BALDWIN, Mark E.	Kansas City, Mo.
BROWN, Henry O.	Washington, D. C.
DAVIS, E. B.	Los Angeles, Calif.
GRAY, Larry	New York City, N.Y.
KEMP, Donald E.	Ft. Worth, Texas
KRUEGER, James A.	Los Angeles, Calif.
OLIVIER, H. J.	Los Angeles, Calif.
RIESS, Michael	Washington, D. C.
SIROTMILK, Lou	Los Angeles, Calif.
SWERDLIN, Cyril	New York City, N.Y.
VAUGHN, James N.	Kansas City, Mo.
WELSH, Glen W.	Los Angeles, Calif.

Course AE-1
Airframe & Equipment General Operations
5/26 - 6/6/58

ALBERT, George J.	New York City, N.Y.
ARCHER, C. J.	Ft. Worth, Texas
BUSSEY, John K.	Los Angeles, Calif.
VOLLMERKE, A. A.	Washington, D. C.

Course EE-3
Basic Jet Transport AC Electrical Course
6/2 - 6/20/58

BORN, John E.	Kansas City, Kans.
DENFIP, S. H.	Kansas City, Mo.
ESTEY, Harry D.	Washington, D. C.
JACKSON, Robert H.	Dallas, Texas
MARSHALL, Granville	Los Angeles, Calif.
MATTHEWS, Raymond C. Jr.	New York City, N.Y.
PACINAM, Tom	Miami, Fla.
SCHILLING, Robert A.	New York City, N.Y.
WALLSTEN, A. W.	Miami, Fla.

AIRCRAFT BRANCH

Course PE-1
Powerplant Engineer Aircraft Operation
6/9 - 6/20/58

BAIRD, John W.	Washington, D. C.
BOLSENGA, Ray	Ft. Worth, Texas
HADDAD, Joseph	Washington, D. C.
WELLS, George W.	Kansas City, Mo.

OBSERVERS

AY, Asri	Ankara, Turkey
BAZ, Nicolas G.	Beirut, Lebanon

AIR TRAFFIC CONTROL

CLASS TA-49

ALBRIGHT, James H. Jr.	Brookville, Pa.
AVANT, William T.	Memphis, Tenn.
AVERY, Charles P.	Memphis, Tenn.
BALL, Jack G.	Miami, Fla.
BARABAS, Edward J.	Cleveland, Ohio
BARLOW, Roy A.	Jacksonville, Fla.
BRADFORD, Maurice N.	Indianapolis, Ind.
BROWN, Peter W.	Albuquerque, N.Mex.
BROWN, Stanley H.	Phoenix, Ariz.
CALLAHAN, Donald P.	Boston, Mass.
CARPENTIER, James M.	Seattle, Wash.
CLARK, Dan C.	Phoenix, Ariz.
CRAWFORD, Harold B.	Washington Center
CROCKETT, Edward F. Jr.	Muscle Shoals ATCS
DAIGLE, Bernadin J.	Memphis, Tenn.
DAN, James R.	Washington Center
EASTMAN, Paul B.	Montgomery, Ala.
EISTER, Charles E.	Salisbury, Md.
EWELL, Stuart L.	Miami, Fla.
FAHEY, Omar D.	Indianapolis, Ind.
FALKNER, David J.	Muscle Shoals ATCS
FOSTER, Lemuel C.	Phoenix, Ariz.
FREY, Eugene G.	Galveston, Texas
GALKA, Ronald L.	Detroit, Mich.

AIR TRAFFIC CONTROL

CLASS TA-50

GIRANI, Robert	Poughkeepsie, N. Y.
GOETZ, Loren D.	Phoenix, Ariz.
GUY, Richard H.	Phoenix, Ariz.
HANEY, Thomas	Cincinnati, Ohio
HARTZOG, James F.	New Orleans, La.
HERRING, Billie F.	Atlanta, Ga.
HERTIG, Norman K.	Miami, Fla.
HOS, Eugene A.	Seattle, Wash.
HOUGHAM, Howard D.	Kansas City, Mo.
HUNTING, Duane A.	Indianapolis, Ind.
JACKSON, James	Dayton, Ohio

AIR TRAFFIC CONTROL

CLASS TA-50 (continued)

KAISER, Richard L.	Phoenix, Ariz.
KELLER, Louis M.	Ft. Worth, Texas
KERSTING, George B.	Phoenix, Ariz.
KEY, Richard D.	Albuquerque, N.Mex.
KING, Robert B.	Phoenix, Ariz.
KRAGERUD, James D.	Indianapolis, Ind.
LESLIE, Melvin J.	Ft. Worth, Texas
MAGNERS, Vernon S.	Savannah, Ga.
MANN, Charles	Cincinnati, Ohio
MARSHALL, Donald K.	Phoenix, Ariz.
McBRIDE, Hugh W.	Chicago, Ill.
MEADOWCROFT, Richard	Richmond, Va.

TA-51

MOSS, Jack H.	Atlanta, Ga.
MURPHY, James H.	Memphis, Tenn.
OLIVA, Charles R.	Miami, Fla.
PARRISH, William D.	Albuquerque, N.Mex.
ROSS, William L.	Kansas City, Mo.
RUNQUIST, Lynn E.	Albuquerque, N.Mex.
SCOTT, Harry O.	Savannah, Ga.
SIPE, William C.	Phoenix, Ariz.
SMITH, Bertrand C.	Miami, Fla.
SPROUL, Donald A.	Detroit, Mich.
SULLIVAN, Edward J.	Memphis, Tenn.
TEITGE, Jack B.	Seattle, Wash.
THIEBOLT, David L.	Indianapolis, Ind.
TURNER, Keith G.	Seattle, Wash.
UPTON, Berlie R.	Ft. Worth, Texas
WEBER, Eugene C.	Indianapolis, Ind.
WHITESSELL, Douglas	Washington, D. C.
WILEY, Bobby L.	St. Louis, Mo.
WILEY, John E.	Jacksonville, Fla.
WILLIAMS, Andrew J.	Washington, D. C.
WILKINSON, Charles M.	Atlanta, Ga.
WOOD, Thomas P.	Atlanta, Ga.
WYLIE, Oscar W.	Jacksonville, Fla.
ZENAS, Peter A.	Seattle, Wash.

TA-52

ALEXANDER, J. Philip	New Orleans, La.
BALLARD, Warren L.	Atlanta, Ga.
BARNETT, Clifford	Elmira, N. Y.
BEAUDET, Charles E.	St. Louis, Mo.
BENTON, Epharian T.	Memphis, Tenn.
BOYLE, Gordon D.	Memphis, Tenn.
BRANIGER, Myron D.	Cleveland, Ohio
BREEDING, David L.	Waco, Texas
BUSH, Floyd W.	Ft. Worth, Texas

AIR TRAFFIC CONTROL

TA-53 (continued)

CARSON, Jay F.	Cleveland, Ohio
CLARK, Thurman D.	Ft. Worth, Texas
COLEMAN, Ronald	Cleveland, Ohio
COLTRAIN, Joe E.	Oakland, Calif.
COOMES, Norman J.	Indianapolis, Ind.
CORMIER, Alfred	Cleveland, Ohio
CORPORON, Richard E.	San Antonio, Tex.
COUNTY, Walter	Cleveland, Ohio
DENSLEY, Orrin R.	Los Angeles, Calif.

TA-53

DIEZMAN, Richard E.	Los Angeles, Calif.
GALLIMORE, John R.	El Paso, Texas
GILBERT, Paul M.	Washington, D. C.
GUNTER, George H.	Ft. Worth, Texas
GUTIERRES, Frederick M.	Detroit, Mich.
HARIK, Robert F.	Oakland, Calif.
HARRIS, C. Wayne	San Antonio, Tex.
HARRISON, William H.	Indianapolis, Ind.
HARTLEY, Hugh A.	Ft. Worth, Texas
HARVEY, William J.	Oakland, Calif.
HUCK, Lawrence W.	Atlanta, Ga.
HUTTS, Wayne E.	Ft. Worth, Texas
JOHNSON, Alton L.	Ft. Worth, Texas
KLAASSTAD, Arthur L.	Salinas, Calif.
KNIGHT, James A.	Atlanta, Ga.
KUEHL, James J.	Chicago, Ill.
LEACH, Herman E.	San Antonio, Tex.
LEVINE, Frederick L.	Oakland, Calif.
LITZINGER, Thomas E.	San Antonio, Tex.

TA-54

McALLISTER, Dewey M.	Ft. Worth, Texas
MILLIGAN, Hugh D.	Pittsburg, Pa.
MORGAN, Robert T.	Nantucket, Mass.
MUELLER, Arnold H.	Indianapolis, Ind.
ORTON, James R.	Oakland, Calif.
PARRISH, Carl L.	El Paso, Texas
PAULK, Alton T.	El Paso, Texas
PEARL, Charles J.	Chicago, Ill.
PENNY, Eugene W.	Los Angeles, Calif.
SAUM, Jack H.	Brunswick, Ga.
SHINAULT, Charles L.	New Orleans, La.
SIMPSON, Robert M.	Washington, D. C.
SPARKS, James R.	Indianapolis, Ind.
STRUBE, O. Van	Utah, Calif.

AIR TRAFFIC CONTROL

TA-54 (continued)

TAPPER, Lawrence F.	Ogden, Utah
TAVOLARO, Ralph S.	New York City, N.Y.
TOLL, Arthur W.	Tucson, Ariz.
WHEELLESS, James E.	Ft. Worth, Texas
WOOLEVER, Leo O.	New Orleans, La.
ZOOK, Ronald T.	Daggett, Calif.

TA-55

ARCHER, Philip	Houlton, Maine
CARTER, T. L.	El Paso, Texas
CHUDZIKIEWICZ, Edmund	Washington, D. C.
COLBURN, Fay W.	Providence, R. I.
CORR, John H.	Buffalo, New York
FEATHERINGILL, Thomas N.	Indianapolis, Ind.
FERGUSON, Harry L.	Elizabeth City, N.Car.
FERN, Walter	Indianapolis, Ind.
FLOYD, Glen D.	San Antonio, Tex.
GEORGE, Billie L.	Indianapolis, Ind.
STORMAND, Olaf A.	Washington, D. C.
HARRINGTON, Richard F.	New York City, N. Y.
HOFFMAN, Robert E.	Pittsburgh, Pa.
MAGANA, Hipolito M.	St. Louis, Mo.

TA-56

McINTYRE, Harry I.	Chicago, Ill.
MILES, George T.	Buffalo, N. Y.
MORGAN, Daniel R.	El Paso, Texas
MORRIS, Robert E.	Atlanta, Ga.
MOSCATELLO, Louis	Washington, D. C.
O'RISKY, James D.	Indianapolis, Ind.
OWENS, Martin A. Sr.	Atlanta, Ga.
ROBERTS, Norman E.	Miami, Fla.
ROBINSON, John W.	Washington, D. C.
ROUTH, Robert O.	Indianapolis, Ind.
SHAWER, Kenneth A.	Washington, D. C.
SHAW, Elmer E.	Indianapolis, Ind.
SILVEN, Earle H.	El Paso, Texas
SMITH, Frederick H.	Nantucket, Mass.
SMITH, Robert L.	Atlanta, Ga.
SMITH, William D.	San Antonio, Tex.
WILKENS, Delbert D.	Chicago, Ill.
WREN, Kenneth L.	Indianapolis, Ind.
YORK, Robert B.	Ft. Worth, Texas

TA-27

AIR TRAFFIC CONTROL

ALLEN, Carl L.	Nashville, Tenn.
AMES, Lewis, Jr.	Hobbs, N. Mexico
AMSTUTZ, Dwayne F.	Cleveland, Ohio
ARCHUNG, David M.	Boston, Mass.
BARKSDALE, Theodore W.	Martinsburg, Pa.
BARTELL, Raymond	New Orleans, La.
BEACHAM, Burvell G.	Worcester, Mass.
BEADLES, Everett F.	Charleston, S. Car.
BERNKNOFF, Benjamin	Poughkeepsie, N. Y.
BISHOP, Jack	Atlanta, Ga.
BONNER, Oscar B.	Miami, Fla.
BRADLEY, Joe E.	New Orleans, La.
BRADY, Thomas M.	Syracuse, N. Y.
BRISSE, Clarence G.	Denver, Colorado
CHEEDLE, Wilfred E.	Farmington, N. M.
CLAPMAN, Kenneth	San Antonio, Tex.
CLEARY, Joseph W.	Indianapolis, Ind.
CONSLA, Allen B.	Cleveland, Ohio
COX, James E.	Atlanta, Ga.
GRAVEN, BERTRAM A. Jr.	Morgantown, W. Va.
CURTIS, Robert A.	Cleveland, Ohio

TA-58

DAWSON, James E.	Rochester, N. Y.
DICKINSON, Charles E.	Spokane, Wash.
DONAGHUE, Thomas O.	Detroit, Mich.
EASTON, Charles A.	Paso Robles, Calif.
GARTMAN, Richard B.	Detroit, Mich.
GILKEY, Grant G.	Indianapolis, Ind.
GILMAN, Carleton S.	Buffalo, N. Y.
GOODWIN, Sharon M.	Salt Lake City, Utah
HAHN, William H.	El Paso, Texas
HAILEY, James W.	Tyler, Texas
HASELTON, Robert E.	Indianapolis, Ind.
IGNACIO, Benham E.	Denver, Colorado
ERWIN, David J. Jr.	El Paso, Texas
JEFFERSON, Clyde B.	Windsor Locks, Conn.
JOHNSON, Richard C.	Detroit, Mich.
KAHOUN, Edward J.	Seattle, Wash.
KOSLOFF, Alexander	Seattle, Wash.
LACEY, Frederick J.	Cheyenne, Wyo.
LIVINGSTON, Raymond P.	Needles, Calif.
McCLUEY, LeRoy J.	Seattle, Wash.
McKINNEY, Donal L.	Ft. Worth, Texas

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AIR TRAFFIC CONTROL

MEDFORD, John E.	Spokane, Wash.
MITCHEM, Roger L.	Denver, Colorado
MOLER, Charles	Cincinnati, Ohio
PAWIS, George T.	Chicago, Ill.
PECZKA, Emil L.	Cleveland, Ohio
PLAYANS, Donald J.	Seattle, Wash.
POPE, Troy T.	Indianapolis, Ind.
POWELL, Robert G.	Denver, Colorado
RUSH, Donald E.	Spokane, Wash.
SALVATORELLO, Armond M.	Detroit, Mich.
SHETTERLY, Grover L.	Paso Robles, Calif.
SHOWALTER, Robert L.	Indianapolis, Ind.
SMITH, Robert J.	Seattle, Wash.
STEIN, Lester W.	Seattle, Wash.
STEWART, Robert J.	Kansas City, Mo.
STREET, Reece D.	Florence, S. Car.
SVOBODA, Ferdinand R.	Denver, Colorado
SWENAM, Frank	New York City, N.Y.
WELCH, Jesse E.	Memphis, Tenn.

TS-79 3/17 - 3/28

ARNESON, Monroe G.	Washington, D. C.
Boucher, w. b.	Kansas City, Mo.
BOWERS, Chester G.	Washington, D. C.
BUTCHER, W. V.	Kansas City, Mo.
HARTER, Sam O.	Kansas City, Mo.
JACOBS, Francis I.	Idlewild, N. Y.
KNOEPFLE, William C.	St. Paul, Minn.
ONISZKO, Edward S.	Scott AFB, Ill.
SHEPHERD, William F.	Scott AFB, Ill.
SIMS, Joseph D.	Minneapolis, Minn.
SWINNEY, Robert W.	Washington, D. C.
TAYLOR, John H.	Ithaca, N. Y.
TUN, U. Kyaw	Rangoon, Burma
WEAVER, Clifford L.	Jamaica, N. Y.

TS-80 3/21 - 4/11

BORSARI, George R.	Washington, D. C.
BROWN, Loren L.	Oklahoma City, Okla.
FLYNN, William J.	Pleasant Ville, N. Y.
GLASER, Oscar P.	Los Angeles, Calif.
McCLUNG, Frank E.	Washington, D. C.
McGIBENY, Richard H.	Oklahoma City, Okla.
PAPPAS, Michael T.	Pleasant Ville, N. Y.
SUTAPRAWIRA, Achmad	Djakarta, Indonesia
THOMAS, Donald W.	Anchorage, Alaska
WHITE, Clifford C.	Washington, D. C.
WIRJANA, Raden Petrus Canisius	Djakarta, Indonesia
YESENSKI, Joseph A.	Anchorage, Alaska

AIR TRAFFIC CONTROL

TS-81 4/14 - 4/25

BEALS, Robert M.	Oklahoma City, Okla.
BORGESON, Melvin B.	Washington, D. C.
BROWN, Thomas J.	Kansas City, Mo.
CROSBY, Gerald L.	Washington, D. C.
EDEY, Aubrey A.	Washington, D. C.
FOX, Neil A.	Oklahoma City, Oklahoma
FALLAGI, Arthur	Honolulu, T. H.
PRICE, Theodore E.	Honolulu, T. H.
RUDASILL, Nichols H.	Anchorage, Alaska
SINGLETON, Julius K.	Washington, D. C.
WILD, Fred J.	Los Angeles, Calif.

TS-82 5/6 - 5/16

DROTTS, Billy H.	Ft. Worth, Texas
ELLISON, Thorleif	Washington, D. C.
GREICH, Walter	Kansas City, Mo.
KOVARIK, Joseph A.	Ft. Worth, Texas
LALIBERTE, William	Washington, D. C.
McCLELLAN, Alan B.	Ft. Worth, Texas
McCOMB, James R.	Washington, D. C.
McLAUGHLIN, Joseph K.	Kansas City, Mo.
MEISSNER, Vernon S.	Washington, D. C.
RICHEL, Silas M.	Washington, D. C.
SMOOT, Francis L.	Washington, D. C.
WEITZ, George H.	Washington, D. C.
WILLESS, Homer L.	Guam

AIR TRAFFIC CONTROL

TS-1

ALLEN, Calvin L.	Atlanta, Ga.
ANGELASTRI, Albert	Washington, D. C.
AREBUCKLE, Fred R.	New Orleans, La.
CHANCE, Harold	Pittsburgh, Pa.
CRIST, Dwight E.	Albuquerque, N.Mex.
DODGE, Girard H.	New Orleans, La.
DUCOTE, Alfred J.	Oakland, Calif.
FINCH, Daryl E.	Oakland, Calif.
FISHER, Charles E.	Oakland, Calif.
FRETWELL, Kenyon B.	Oakland, Calif.
GREENE, Vincent	Washington, D. C.
HAMMOND, Clifford C.	Albuquerque, N.Mex.
HOLMAN, Edward	Norfolk, Va.
KOELLER, Roy G.	Memphis, Tenn.
LAGSANGE, Lloyd	Washington, D. C.
LEHMAN, Richard	New York City, N.Y.
McCULLEY, John W.	Albuquerque, N.Mex.

TS-2

McKINNON, Robert C.	Jacksonville, Fla.
McMILLAN, Hugh L. Jr.	Atlanta, Ga.
MARK, Leonard G.	Oakland, Calif.
MOLSTER, Clark	Washington, D. C.
MORSE, Russell A.	Kansas City, Mo.
OGLE, Mark A.	Atlanta, Ga.
OLER, Darrell L.	Ft. Worth, Texas
RHODES, Troy C.	Oakland, Calif.
RICKETTS, Charles E.	Albuquerque, N.Mex.
ROSKIE, James	New York City, N.Y.
SNYDER, Donald S.	Memphis, Tenn.
TORRY, Roberts D.	Oakland, Calif.
TURNER, Jesse C.	Ft. Worth, Texas
WALKER, Robert L.	San Antonio, Tex.
WEINER, Anthony J.	Chicago, Ill.
WEITKAMP, Sylvester	St. Louis, Mo.
WELLS, Kenneth F.	Detroit, Mich.
WHITACRE, Gerald F.	St. Louis, Mo.
WRIGHT, David T.	Oakland, Calif.

retroactivity, regardless of grade or salary changes. For example, if you were in GS-3, step 3, for 9 pay periods and in GS-4, step 2, for 3 pay periods since Jan. 1, your back pay (minus deductions) will be: (1) the difference in the old and the new rates for GS-3, step 3, computed for 9 pay periods, PLUS (2) the difference in the old and the new rates for GS-3, step 2, computed for 3 pay periods.

Q. I transferred without a break in service to a different agency in March 1958. Will my present employer pay me for all back pay due me since Jan.?

A. No. Your present agency will pay you for work performed for it, and will certify you to your former agency, which will pay you for the period you worked there. You will not have to get in touch with your former agency.

Q. I am a shortage-category employee and was recently placed in the top of my grade. Do I get the full 16% raise?

A. Yes, you get the full raise plus retroactive pay based on actual earnings during the period of retroactivity.

Q. I am a professional engineer in the top step of grade GS-5, and I expect to be promoted to a GS-7 position next month. How will the new pay law affect me?

A. Your starting pay in grade GS-7 would be \$5,430 a year, the new grade rate for the 4th step of the grade. Under the old pay schedule, you would have been entitled to the top step of the grade (\$5,335), but now that classification act pay rates have been increased you will get the pay of a lower step. This is because CSC regulations provide that the new above-minimum hiring rate will automatically become the nearest step of the new scale that will not result in a decrease. In this case it is the 4th step of GS-7.

Q. I was discharged for cause in February 1958 and appealed to the Civil Service Commission under section 14 of the Veterans' Preference Act. In April the Commission ordered my agency to reinstate me with full back pay. Will I get retroactive pay dating straight back to January?

A. The Commission's ruling that you be reinstated with back pay means that technically you were never off the rolls. Therefore, you will get retroactive pay dating back to January.

Q. One week before the new pay act became law, I resigned and took a lump sum payment for annual leave. Is there any way in which I can qualify for the retroactive salary increase?

A. No. You were off the rolls on the date of enactment and the law excludes you from entitlement to back pay.

Q. I was on leave without pay on the day the President signed the pay act. Am I entitled to the retroactive pay?

A. Yes, since you were officially on the rolls on the date of enactment.

Q. Have the time requirements been changed for the periodic step increases?

A. No, they are still the same. In grades GS-1 thru GS-10, one must spend 52 calendar weeks in each step before advancing to the next; in grades GS-11 thru GS-17, one must spend 78 calendar weeks in each step before advancing to the next.



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