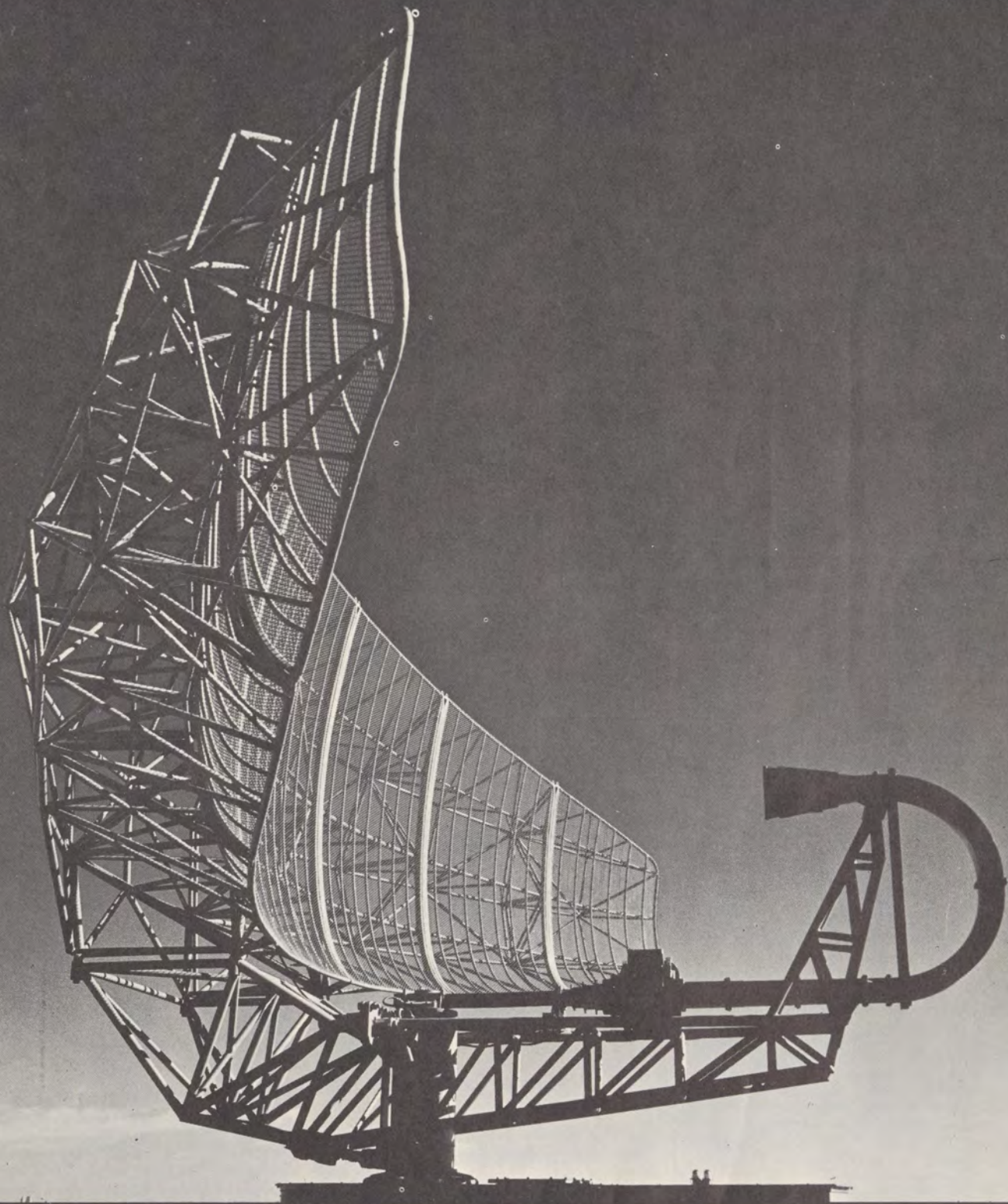




OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY



JUNE 1961

FAA School at AC Renamed by Agency As Training Center

In a move to more accurately reflect its functions and responsibilities, the Agency has changed the name of its School at Oklahoma City. Hereafter, it shall be known as the FAA Training Center.

Although the Center is being assigned national program functions, it will continue to carry out its former mission. It is anticipated that the change will not affect its present staffing.

Under the readjustment, the title of the Center's head has been changed from Superintendent to that of Director. The following organizational elements fall under the Office of the Director: a Management Staff; Flight Proficiency Standardization Staff; Training Developing Division; and Technical Services Division. Also a Facilities and Materiel Training Department, a Flight Standards Training Department, a Publications and Non-Resident Instruction Department and a General Training Department.

Among the functions of the Center will be that of providing training for Agency employees and other authorized personnel, furnishing technical and staff assistance to the chief of the Training Division, and the evaluation of training processes.

The Center will provide its own administrative, management, budgetary, statistical, personnel, and related functions, except those supporting services which have been assigned to the manager of the Aeronautical Center.

Agency Revises Key Positions

The FAA has published a revised list of key positions for its Ready Reserve Screening Program. The new list of key positions is as follows:

1. Heads of Washington Offices and Bureaus
2. Regional Managers
3. Manager, Aeronautical Center
4. Director, FAA Training Center
5. Manager, Facilities and Materiel Depot
6. Bureau Division Chiefs, Washington and Regions (Exception: Bureau of Aviation Medicine)
7. Directors, Washington National & Dulles International Airports
8. Facilities Flight Check Pilots (all grades)
9. Air Traffic Control Specialists (all grades)
10. Electronic Data Processing Positions, Aeronautical Center (GS-7 and above), assigned to Flight Standards Program
11. Electronic Technicians (all options, all grades)
12. Electro-Mechanical Technicians (all options, all grades)
13. Construction Superintendents & Mechanics (all options, all grades)
14. Emergency Readiness Positions (employees who have been or will be given specific assignments to task forces necessary to continuity of executive direction at FAA national and regional levels, as defined in appropriate emergency operational plans)
15. The following options of Engineers, all grades: General, Mechanical, Architectural, Electrical, Civil, Electronic, Construction, Airways and Structural

It is anticipated that an Agency Practice will be issued shortly incorporating the revised positions.

Time Change

Washington headquarters, now operating on Daylight Saving Time, will go back to Eastern Standard Time the last Sunday in October.



Charles C. Van Cott

Official of OIC Transfers to State Department Post

Charles C. Van Cott, formerly chief of the Civil Aviation Assistance Group in New Delhi, India, and a 21-year veteran of CAA and FAA service has transferred from the Agency to the Department of State for new duty.

Mr. Van Cott has assumed the post of Assistant Civil Air Attache at the American Embassy, London, England.

Entering CAA in 1940, Van Cott was assigned to the former 6th Region, now 4th, where he was a radio engineer in the air navigation aid field. During World War II he was assigned to the CAA Foreign Unit installing navigation aids in the North Atlantic area. He also has had experience in Germany from 1947 to 1952, assisting in re-establishment of aeronautical communications and facilities.

In 1952, Van Cott joined the former International Region of the CAA in London where he was in charge of avionics. In 1956 he was assigned to New Delhi, India, as chief of the Civil Aviation Assistance Group under the Office of International Coordination, a post which he held until returning to Washington last November.

Van Cott, accompanied by his wife and son, departed the U.S. for his new post in early May.

FRONT COVER—Long range radar antenna (see AC story on pg. 8) used for training purposes at FAA's Aeronautical Center.



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SECOND TIME AROUND

Specialist Retires

Carmelo Aruta, exhibit specialist with the Agency since 1945, has retired for the second, and what he says will be his last time.

The dapper Aruta, who will observe his 76th birthday this August, retired May 27. He was originally slated for retirement at the age of 72 in 1957, but because of his skill in designing and constructing 3-D exhibits and models, he was retained.

His models, which are exact minia-

tures of the aviation scenes or equipment they represent, have delighted countless viewers over the years and have earned him the respect of other model makers.

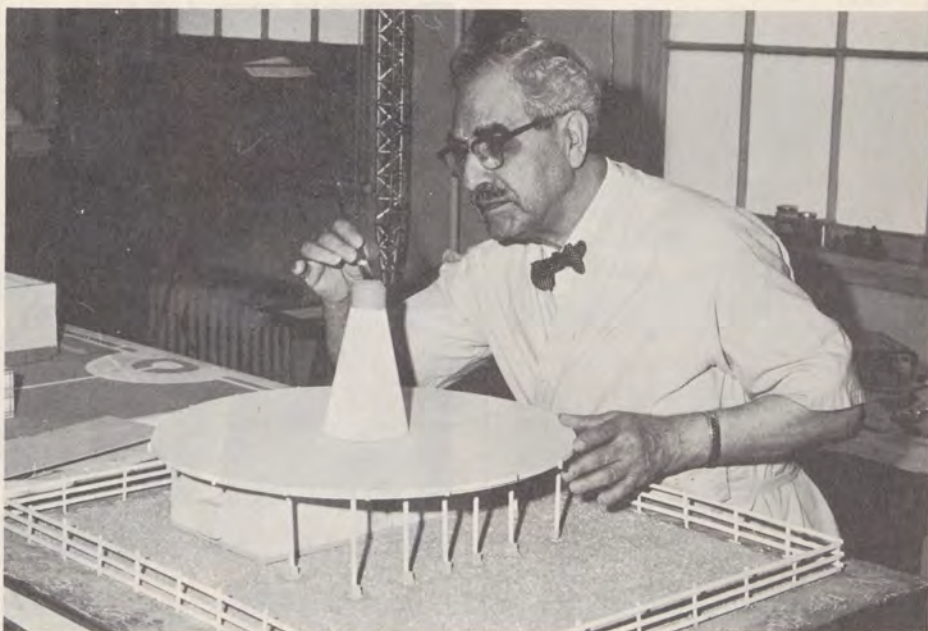
Aruta was born in Italy in August 1885 and came to the U.S. in 1911. That same year, he and Mrs. Aruta were married in New York City. They celebrated their 50th wedding anniversary in April.

He was employed first as a super-

visor of art projects for the WPA in Washington, D. C., in 1938. In 1942 he transferred to the Office of Strategic Services and in 1945 joined the CAA.

When asked what his future plans were, Aruta said that he had none, other than to relax. His idea of relaxing is to spend more time with his hobbies of painting and sculpturing.

Photographs reading clockwise: Aruta at his workbench touches up lighting platform for airport approach model; Mr. and Mrs. Aruta pose for their Golden Wedding photo; final paint job is given realistic model of VORTAC; and miniature framework of airport surveillance radar platform gets touch of solder.



It's All Yours

If you had to borrow this copy of FLY-BY then something's wrong. Beginning with this issue there are enough copies for each employee. If you did have to borrow one, let us know. We'll see that your place of business gets more. By the same token, if your place of business receives more copies than you have employees, let us know that, too. Your help in this is needed.

Perhaps this is your first issue of FLY-BY. Just what is FLY-BY? First of all, it is the official Agency-wide house organ. It's published by the Office of Personnel and Training. It is distributed to all FAAers around the world.

FLY-BY seeks only to inform. Its columns are open to anyone with a legitimate story, article, or any item that might be of *Agency-wide* interest. Any and all correspondence is invited whether it be a story idea, a finished article, a photograph, a kindly nod, or even your strongest criticism.

We are not in the business of publicizing just one bureau, office or region. If it looks that way, then you can feel pretty sure that that bureau, office or region is submitting copy (or at least more copy) than the others.

Our deadline for material is the first day of each month. In other words, material for the August issue should be in our hands on July 1. Photographs and negatives should be identified. And let us know if you want them returned. These should be submitted with a piece of cardboard slightly larger than the photograph with the photograph facing the cardboard. Negatives should be in an envelope or paper between two pieces of cardboard. If people are in the photograph, please identify them, left to right, with first name, middle initial and last name.

All material should be sent to Editor, FLY-BY, PT-20.

Officials Presented Classified Briefing

FAA Deputy Administrator James T. Pyle headed a group of approximately 30 headquarters officials who attended a classified briefing on chemical and biological warfare on April 20 in the Experimental War Room in the basement of the headquarters building. Included in the group were Brig. Gen. Paul T. Preuss, Assistant Administrator for Plans, Mr. Joseph Tippets, F&M Bureau Director, and representatives of 10 Offices and Bureaus.

Sponsored by the Emergency Readiness Division of the Office of Plans, the briefing was given by a 10-man team from the U. S. Army Chemical Corps Board. It included actual demonstrations of the effectiveness of newer chemical agents, filmed data on field tests, and background information regarding enemy capability in these matters.

It is no secret that the Soviet Union has the capability to wage chemical and biological warfare, and that its leaders have said they would use these agents without hesitation if deemed appropriate. The Agency was urged to include defensive measures against them in the FAA emergency readiness planning.

Security arrangements were made by the Security Division of the Office of Personnel and Training.

FAA Controller Awarded Jaycee Aviation Trophy

Carl R. Leavitt, Jr., chief controller for the tower at Jacksonville, Fla., was recently presented the annual Laurie Yonge Trophy. This award is given by the Jacksonville Junior Chamber of Commerce to the man who has contributed the most to civil aviation in that area.

The occasion held special meaning for Leavitt since Laurie Yonge, the man for whom the trophy is named, was on hand for the presentation. Leavitt began his aviation career by learning to fly under Yonge, soloing in 1939 and obtaining his private license in 1940.

Leavitt went to work in the Jacksonville tower, then operated by the city of Jacksonville, in 1941. The CAA assumed operation of the tower in 1942. Except for special details as instructor of Air Traffic Control and Instrument Flight Rule procedures at various military schools during the war years, Leavitt has continued to serve in the Jacksonville tower since 1941.

Henry Cook, president of the Jacksonville, Fla., Junior Chamber of Commerce made the trophy presentation to Mr. Leavitt during a Jaycee luncheon which was held at the Seminole Hotel in Jacksonville on April 4, 1961.



CHIEF Controller Carl Leavitt, Jr. (center), accepts Laurie Yonge trophy from Jaycee president Henry Cook (left) and trophy's namesake, Laurie Yonge.



Operation Snowshoe

Warm weather got you down? Humidity giving you fits? If so, take a close look at the pictures on this page, sit back, and mentally visualize yourself there. But before you do, we want to remind you that the temperature was below zero at the time. B-r-r-r!

More than 25 employees of Region Five took part in a rugged winter survival program conducted by their Alaskan headquarters during February and March of this year.

Known as "Operation Snowshoe," the course was designed to teach those who fly extensively in Alaska, how to

survive if forced down or stranded in remote areas.

Training included three hours of classroom instruction by the Air Force in camping and the use of cold weather equipment. Next was a self-study period, followed by a three hour review. Final examination consisted of three days of actual do-it yourself survival.

Classes were divided into six groups of four to seven trainees each. Four of the groups received their outdoor training near the FAA airstrip at Skwentna, one group near Farewell FAA station, and one near Eielson AFB. Trainees encountered temperatures down to minus

31 degrees at Skwentna and minus 40 degrees at Farewell and Eielson AFB.

They were required to build their own shelters and beds of boughs, start fires with flint and steel, and supplement meager rations by hunting and fishing during their encampment.

The survival course was directed by Alfred K. Young of the Anchorage Flight Standards Division, assisted by E. W. Heter, Farewell communicator.

Clockwise from upper left: E. Dyer, H. L. Burns, D. Carr and J. Bushnell are shown in front of their lean-to; trainees K. J. Smith and A. O. Davis prepare ice fishing gear; aerial view of Skwentna campsite (note letters "L L" tramped in snow to signify "All Well"); campers Smith, K. T. Roney and Davis warm themselves after hunting foray.



VETERANS' CORNER

Some of the questions received by the Veterans Administration concerning veterans' benefits, and the answers supplied, are presented as assistance to FAAers who are veterans.

What deadlines have been established for the expiration of GI Loan rights for veterans?

Applications by World War II veterans for GI loans must be received by the VA from lenders before July 26, 1962. Veterans with service during the Korean Conflict period have until January 31, 1965, to obtain GI loans.

My sister, a widow of a veteran, is planning to remarry. Will she forfeit her pension payment?

The law requires that pension payments be stopped when the recipient widow remarries.

By authorization of Public Laws 382 and/or 724, the Federal Government adds \$6 a month to my civil service retirement check. In a year's time this \$72 takes me over the \$2,700 limit to be eligible for a VA pension. Do I have to count that particular \$6 a month as income?

No. The VA does not count as income that part of a pensioner's civil service retirement check which is a

federal contribution for health and medical insurance.

What are the official dates of the Korean War and of World War II for purposes of VA hospitalization?

June 27, 1950, through January 31, 1955, for the Korean War and December 7, 1941, through December 31, 1946, for World War II.

Has the War Orphans Education program now been extended to include children of some deceased peacetime veterans?

Yes. Children who have lost a veteran-parent through death that resulted from a service-connected injury or illness may benefit from the Orphans Education Program, even though the parent concerned served only in peace time.

I am the widow of a World War II veteran who had six months of overseas service. Will I get a pension under the new pension law that went into effect last July 1?

It appears that you may be eligible for a pension, but you will not receive one unless you apply for it at your nearest VA office.

Can I apply to the VA for a headstone for my husband's grave? He was a World War II veteran.

Yes. Headstones are available for eligible deceased veterans of World War II. Although applications must go to the Quartermaster General of the Army, any VA office will provide information and assistance in filing the application.

Experiment Launched To Provide Improved Weather Information

There's an old saying that everyone talks about the weather, but nobody does anything about it.

This no longer holds true. Today, a lot of people are concerned with doing something about it. Among them are members of the U.S. Weather Bureau and FAA.

In the interest of improved air safety, these two agencies will launch a pilot-to-forecaster test on July 1, 1961. The idea behind the year-long experiment is to provide airborne pilots with more complete and up-to-date weather data than has been available to them in the past.

Washington, D. C., and Kansas City, Mo., have been picked for the initial experiment. Pilots flying in those areas will be able to request an up-to-the-minute weather briefing around the clock.

Weather communications coverage in the area covered by the Washington ARTCC will extend south to Raleigh, N. C., and west to Elkins, W. Va., with communications emanating from the ARTCC.

In the Kansas City test, the coverage will be over the area covered by the Kansas City ARTCC, and communications will be from the downtown Weather Bureau Forecast Center.

Radio frequency 122.6 has been specifically assigned for the project.



SYSTEMS equipment division and regional establishment branch chief's conference held at Headquarters April 11-14. Shown, region following, were: front, Messrs. Driver 2, Glass 3, Grosh 4, Alexander 2, Caporale FM-300, Chiarito 1, Godfrey AC, Reed 4; middle, Young 5, Burko FM-301, Wendorf FM-360, Brown FM-330, Fisher 1, Dutton FM-370, Emanuel 3, Head FM-305; back Karabelnikoff 5, Cutler 5, Rea AC, Edwards 6, Olsen 6, Nickelsberg FM-310, Blair FM-340, King FM-350.



SPEAKERS at D. C. Society of Professional Engineers were, front row: Oscar Bakke, FS Bureau Director, J. T. Pyle, Deputy Administrator, L. T. Crook, president of DCSPE, J. A. Weber, Bureau R&D; **standing,** R. F. Date, Bureau NCA, J. D. Blatt, Acting Director Bureau R&D, and D. E. Marlow, first vice president of DCSPE.

DIRECTIVES IN BRIEF

This listing is intended only to serve for general information and as an index of current agency Orders, Bulletins, Practices and Practice Bulletins. You can see them at your personnel office.

Agency Orders

No. 59 (Revised 17 April 61)—Sets forth the basis for FAA staff action pursuant to the provisions of the document creating the Interagency

The first checks of a \$230,000,000 special G.I. insurance dividend announced recently by President Kennedy, will go into the mails on July 1, and processing of the payments should be completed by Labor Day, the Veterans Administration reports.

Special dividend checks will go to some 4,800,000 World War II veterans holding National Service Life Insurance (NSLI) policies, and to approximately 260,000 World War I veterans holding U.S. Government Life Insurance (USGLI) policies. Of the \$230,000,000 total, approximately \$193,000,000 will be paid on NSLI policies, and about \$37,000,000 on USGLI policies.

The special dividend will be the second paid by the VA this year.

Group on International Aviation (IGIA).

No. 65 (13 April 61)—Informs Agency personnel of National and Agency policy concerning assistance to labor surplus areas.

No. 66 (28 April 61) — Establishes FAA policy, and assigns responsibility for implementation of the President's Equal Employment Opportunity Program.

Agency Bulletins

No. 61-7 (21 April 61)—Changes the title of the head of the Office of Congressional Liaison, from "Congressional Liaison Officer" to "Chief, Office of Congressional Liaison."

Agency Practices

No. 2-600 (12 April 61)—Brings up to date the policy and procedures on travel advances previously contained in Sections 2200-2299 of the CAA Standards Practice.

No. 4-2, Sec. 8a-f (12 April 61)—One sheet insertion on simplification of procedures for obtaining travel advances from imprest funds.

No. 0-1 (20 April 61)—Supplements the provisions of Agency Order 59 (Revised) and outlines in more detail the flow and processing of ICIA cases.

Practice Bulletin

No. 2-7 (1 May 61) — Provides the most recent "Attachment A" issued by the Bureau of the Budget by Transmittal Memo No. 18, dated 11 April 61. This supersedes Practice Bulletin 2-6 of 1 April 61.

Private Pilot Lauds Agency

The following was written by Mr. George B. Foster, president of Raydata Corporation: Dear Mr. Halaby: I am writing you this letter to inform you of a recent encounter I had with staff members of the Federal Aviation Agency. During a wait for a commercial flight out of Washington National Airport, I requested permission to visit the control tower facility. When I identified myself as a private pilot, this permission was granted.

I was very much impressed with the operation of Approach Control. I later went to Tower Operations where Mr. Dick Neal showed me the procedures used.

I wish to commend your organization for a most energetic, effective and safe mode of operation in this facility. However, I particularly was impressed by the obviously high morale and spirit of teamwork which characterizes this operation. I do not know whether all of the tower crews have this same quality. Mr. Neal's, however, certainly has it. Best wishes in carrying out your heavy responsibilities.



PERSONAL record kit being distributed to those who are enrolled in Blue Cross and Blue Shield's health plan.

It's All Business at AC

The pilot riding the night winds into Athens, Greece air terminal checked his instruments reflecting their indirect lighting; picked up his mike and called the Athens Control Tower.

The voice that answered had an unmistakable Greek accent, but spoke in English. That's now the language of the International Airways and it's all part of a standardization program for air safety around the world—anywhere this side of the Iron and Bamboo Curtains.

The man in the control tower was only one of many foreign nationals who have been trained on a sort of lend-

lease agreement between this country and his own nation. That training, basically, came from the part of the worldwide Federal Aviation Agency known as the FAA Training Center at the Aeronautical Center.

What is the Aeronautical Center? Basically, it's a group of buildings—already burgeoning past the 20 million dollar mark in construction—set up to handle the many-faceted side of the FAA that is logistical, training, and medical research. Sometime within the next 18 months a new 8 million dollar medical research building will rise three

stories high at the Center. It's part of medical research, that arm of the FAA's Bureau of Aviation Medicine called Civil Aeromedical Research Institute. Also planned for immediate construction are new school buildings to take care of space requirements for the increased load of students who someday will be in the field checking air navigational aids, ground communications or in control centers and towers controlling the constant flow of air traffic. Planned for the calendar year 1961—and it could be more—a flow of more than 10 thousand students through the FAA School.

The Aeronautical Center—as a geographical location—is the hub for this story of the aviation age—a story that reaches out into every spot on this earth where free men can take off or land a plane; up as far as men can probe the skies in flight; and deep into some of the biggest challenges mankind faces today.

You can get an idea of the size of the task the Federal Aviation Agency and the Aeronautical Center faces from some cold statistics. Right now, in the United States alone, there are more than 70 thousand civilian craft of all types and sizes; plus two thousand commercial aircraft; and over the next few years the FAA may take over the responsibility for all U.S. military aircraft in the sky.

It's the task of the Agency to provide all this—and much more. To do this, most of the men are trained and methods tested at the Aeronautical Center in Oklahoma City.

The FAA's School

The Agency's school is now one of the largest training programs in government. Oklahoma City has served as the location for centralized training under the old CAA and under the FAA since 1946. In that year a number of small activities involving both training and supply—scattered to the four corners of the U. S., were brought to Oklahoma City and the Aeronautical Center.

Training at the School falls into four broad areas: Air Traffic Control, the maintenance of Air Navigation Facilities, Flight Standards, and Management and General Training.



FACADE OF FAA Aeronautical Center Administration Building at Oklahoma City.



Enar B. Olson
Director, FAA Training Center

While some training in air traffic control was accomplished prior to 1946, it was just nine years ago that centralized training became a must for this mushrooming air age. Between 1951 and the present, more than 10 thousand people have successfully completed training in air traffic control. Most of these are graduates of the basic qualifications course provided for the tower and air route center controllers. Included in this overall figure are 254 air traffic controllers from other nations — representing 45 different countries in the Free World. It's a rugged course, brimful of study and running eight weeks for air traffic control personnel. Most of these students have had some basic experience prior to this schooling—either in military or in contact work with control areas as pilots. Today some 80 students are in average daily attendance in air traffic control at the FAA School.

As was mentioned, it's a rugged study course, full of high-pressure points. The student either learns quickly to think "Three Dimensionally" as he would have to do to keep aircraft separated in actual flight operations; masters the computations required to maintain the different-speed aircraft at their proper levels—or he's through with the schooling process. The "washout" rate is in the upper teens percentage-wise. The student gets a complete course in terminology and procedure before he goes into the control tower mockups or control center simulators.

For the foreign student this course runs 17 weeks for both center and tower air traffic.

Engineers and Technicians

The largest training program at the FAA School is in the training of engineers and technicians to maintain the many complex electronic aids to navigation that now define our airways system.

Engineers, communications specialists, inspectors learn how to use, check and maintain thousands of intricate pieces of equipment that range from simple airborne radio to radar and a host of other electronic marvels, with names like ILS, VOR, ASR, VORTAC, DME . . . all facets from instrument landing systems to distance measuring equipment. There are more than 62 hundred navigational facilities in use now in the 50 states that make up this country and more in other countries. So . . . these men must know their work. They are responsible for the proper tuning, adjusting and trouble shooting of the aids. Included are courses in all kinds of radar, distance measuring equipment, instrument landing systems, and very high frequency omni direction radio ranges.

Prior to 1946 maintenance and communications systems training was conducted at Fort Worth, Seattle and other locations. Since installation at Oklahoma City this training in air navigation facilities maintenance has been given to some 11 thousand persons, including 500 international students from 40 other countries.

AISLE SHOT through length of Depot Warehouse which contains some of the materiel that is used stateside and overseas.



Lewis N. Bayne
Manager, Aeronautical Center

tries. And today, in this course, something over 900 technicians and engineers are in average daily attendance in this program.

It is not a "one-time" course. With the constant advancement of jet aviation the skyrocketing need for better control instruments is being met. So these students must return again and again for refresher training. This is a prime requisite for the FAA Flight Standards Inspectors who are responsible for the inspection of aircraft operations and maintenance, engineering and manufacturing of aircraft, and for the enforcement of civil air regulations. The first training provided by CAA in Flight Standards was at the instrument training school, Wayne County Airport near Detroit, Michigan.

That move was made in 1937. In 1941 this course was moved to the Houston, Texas Standardization Center, and in 1946 moved to the Oklahoma City area and the Aeronautical Center. Since 1946 some six thousand student courses have been provided involving training in pilot proficiency and in aircraft maintenance techniques.

There are refresher courses in reciprocating and jet engines, helicopter maintenance and so on down a long list. In the jet engine category—a recent addition to the FAA School is an analog computer that acts, in every way, as a jet engine on a DC-8 or a 707 would act. This takes the flight engineer and the pilot through all kinds of problems, ranging from takeoff temperatures on

up to fuel consumption at altitudes up to 35 thousand feet at Mach One or better in speed.

Free Nation Students

There you have a quickly written, but fairly comprehensive picture of the FAA School at the Aeronautical Center. But . . . within the school area there is one element that means far more than just training. This key school for the world of aviation may well prove to be a key school for more than air safety. Students from all the Free Nations, pouring through the Center for training, go home with more than just training. In many cases they bring their wives and families. They live in Oklahoma City from four weeks to a year. To say they are welcomed, wined, dined and shown the sights with all the care given visiting royalty would be a gross understatement.

More than 200 Oklahoma City families have made "Operation Host" their full-time avocation. And more Oklahomans contend for these special adoption privileges than there are foreign students.

With World Communism continuing its relentless drive to possess every unpledged mind and bit of territory on this earth, it is rather thrilling to take a close look at a small statue now on display in the Air Traffic Management Building at the Aeronautical Center.

It's a replica of our own Statue of Liberty, sculpted by a Turkish student last year and presented to the Center by

DATA PROCESSING, showing IBM 704 Computer and tapes used in conjunction with Semi-Automatic Flight Inspection.



INTERIOR of C-135—Nan-98—high altitude jet which is used in nav aids inspection. Consoles indicate signal response and accuracy from ground installations.

fourteen of 1500 students who have carried home to their countries their certain knowledge of what America really is.

A small card in Miss Liberty's hand reads:

"Class TF-24. June 30 to October 24. Akholer—Turkey. Atay—Turkey. Gabriel—Spain. Galan—Chile. Gonzales—Spain. Iglesias—Spain. Isquiera—Spain. Kajiya—Japan. MacAuliffe—Chile. Masbava—Japan. Oreniz—Spain. Ohtake—Japan. Ozetoman—Turkey. Satomi—Japan.

Friendship between individuals. Peace Between Countries. We appreciate the kind of assistance of FAA and instructors.

WE WILL NOT FORGET!"

And—they don't. Recently the Honorable J. Howard Edmondson, Governor of Oklahoma, started the presentation to all graduating foreign nationals, an Honorary Colonelcy on the Governor's Staff. Purely a gesture—yet these students take these certificates home with great pride. The students become a real bulwark against communism.

Other Facets

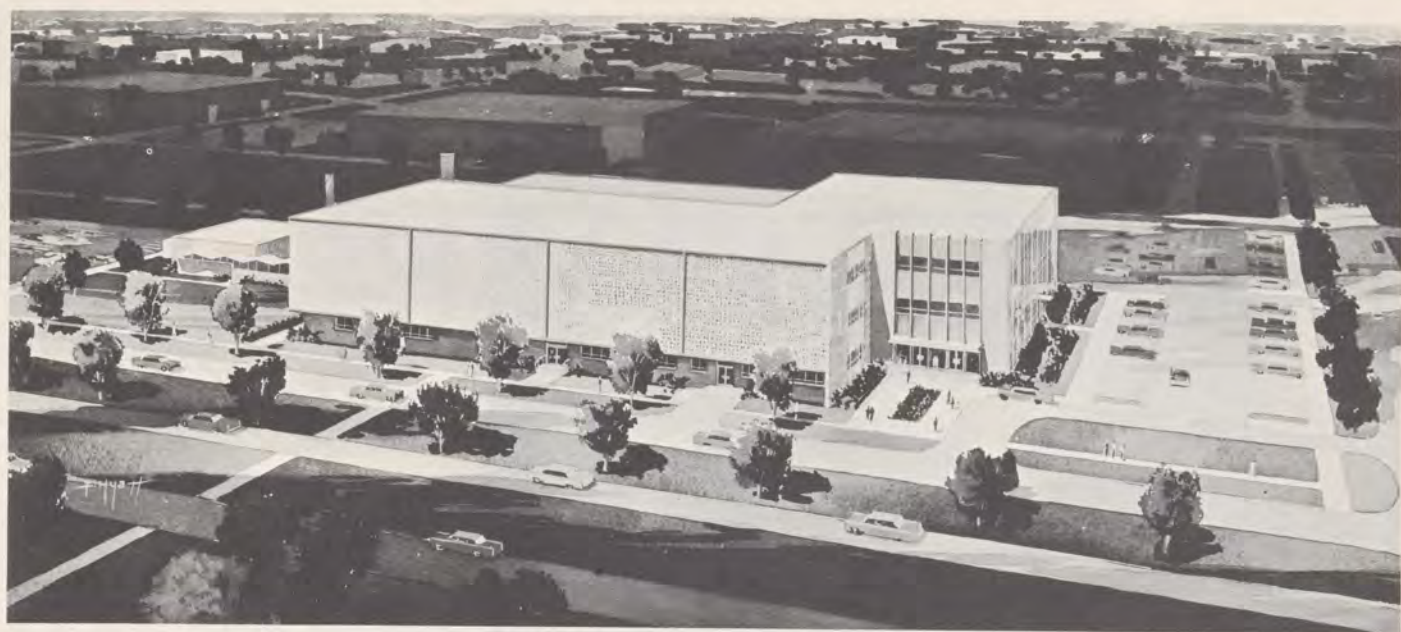
Within the framework of the Aeronautical Center are other facets of today's aviation. The dry name of "Facili-

ties and Materiel Depot" masks the tremendous logistical job of getting electronic gear and other supplies out to more than six thousand facilities, and the work of maintaining the FAA aircraft that fly our air routes.

The supplies are housed, for the most part, in a tremendous warehouse, comprising 15 acres under one roof. Everything from tiny transistors to huge props and wings are housed in this area. This area supplies support to FAA ground and aircraft facilities and a centralized assembly and shipping point for the structural and electronic equipment purchases from many commercial sources for use in communication and air navigational aid facilities.

The Aircraft Division occupies the major portion of the three hangars at the Center. Some one thousand people work in this area. There are two separate operations involved: the first is tied in with minor and major maintenance and overhaul functions covering air frames and engines, and the second with fabrication and repair of airborne electronic systems.

The shop facilities for the aircraft operations are quite complete and permit the doing of almost any type of repair work on airframes and engines. The Avionics facilities are of a highly specialized nature and permit both



ARTIST'S CONCEPTION of new 3-story, 8 million dollar Civil Aeromedical Research Institute building to be erected at AC.

fabrication and overhaul of the wide variety of radio, electronic and automatic pilot equipment in FAA aircraft used for flight inspection of air navigational aids and communications facilities.

There are also the electronic ships which provide major repair facilities for all FAA electronic equipment—on the ground—not airborne and the structural shop area which provides major repair facilities for equipment such as engine generators, beacon lights, motors, prefabricated building parts, heavy air conditioning equipment and other plant facility items.

Flight Inspection

Within the field of flight inspection comes that of checking navigational aids across the 50 states of this nation, and overseas. Recently added to this area are two C-135 jets. One has been modified as a "flying lab" called Nan-98 and is doing high altitude inspection of air navigational aids.

This huge 600-mile-an-hour laboratory was modified at the FAA Center at a cost of \$250,000 excluding the cost of equipment. The C-135, originally built as a tanker or cargo plane, has been equipped with special electronic gear to enable an inflight check of ground navigational stations.

Previous to the conversion of the mammoth jet, the high altitude checks have been accomplished by smaller jets such as the TV-2 and a modified British Canberra.

Nan-98 will check VOR facilities and TACAN facilities to see if all stations are sending out directional headings within prescribed tolerances. The TACAN and VOR stations give directional aid to military and airline pilots as well as the smaller craft of Mister Private Pilot.

Nan-98 and her sister ship, to be completed this spring, will check instruments from an altitude called the "bottom of the jet routes." This is above 20,000 feet.

Inside this giant plane are installed three large electronic consoles. Two large control panels will receive distance information sent out by eight VOR and four TACAN stations, received simultaneously. A large center console will receive distance information from four distance measuring equipment stations and four TACAN facilities.

The photograph which appears on page 8 of this issue of FLY-BY is the same one which adorns the new telephone directory for Oklahoma City. This directory is put out to more than 300,000 subscribers. The photograph, taken by the Aeronautical Center's Robert Newkirk, also won first prize at the 1961 Convention of the Professional Photographers Association of Oklahoma's print exhibit.

The all-jet laboratory also will include a galley in the rear compartment as well as bunks for extra long flights. Each flight will involve at least eight hours in the air so the giant plane can criss-cross the United States in grid fashion.

Also well into the operational stage at the Aeronautical Center is the business of automated checking of navigational aids. It's called Project SAFI—Semi-Automatic Flight Inspection—using at the moment a Convair literally stuffed with electronic equipment.

The second phase of SAFI is a ground-based computer. This is the IBM 704, and is used to produce flight tapes which control the Convair in its flight. No attempt has been made to control take-offs and landings. The flight control is over a grid pattern of the United States. After the day's grid has been selected, pertinent data are gathered and entered into the computer. The computer has been programmed to take these data and master files of the facility data, and arrange them in pertinent order. From this is produced a magnetic tape which will actually fly the Convair over the correct air navigational aid route. The tape tunes the radio sets, calibrates them, has information stored on it permitting an evaluation of the signal received from the ground facility. Results of these questions put to the air navaid stations are recorded on another magnetic tape in the plane. This second tape, after the



RECORDS SECTION of Examination and Records Division. Hundreds of thousands of airmen certificates and aircraft registrations are kept up-to-date and on file.

flight, is sent to the ground computer in Oklahoma City where an analysis is completed. This provides a quick and certain method for checking NavAids Facilities. And—it means that where it once took literally weeks of manual analysis to effectively compute a facility's performance, that now can be done in hours. Accuracy has been dramatically increased.

Through this combination of computer, electronic gear, and aircraft the FAA is taking a big step toward maintaining the safety of the Federal Airways.

Research Institute

The newest of the organizations housed at the Aeronautical Center is the Civil Aeromedical Research Institute. CARI, as it is called, operates under the Bureau of Aviation Medicine in Washington.

CARI operates in four areas—research requirements, medical standards, medical certification and environmental health. The responsibilities include developing standards and regulations concerning the mental and physical health of airmen.

CARI is also charged with development of plans for research required in any aspect of medicine affecting civil aviation.

CARI will soon be housed in an \$8,000,000 building at the Aeronautical Center. Currently operating out of the Oklahoma University North Base, a deactivated naval base at Norman, Oklahoma, CARI researchers are carrying on activities in the fields of stress and fatigue factors in controllers and tower operators, pilots and other airmen. One area of development in this field orbits around the use of electronic medicine, to use that term. In this area, for one instance, the controller or control tower operator is "wired for sound." He wears a transistorized electronic belt. Some miles away a telemetering van picks up the electronic signals which spell out the blood pressure, respiration, brain waves, etc., to measure the stress and strain under which this man operates.

Many questions can be answered. Should this man work a straight eight-hour shift without relief? Is there a point of physical tiredness—or mental tiredness—at which the controller or tower operator is not efficient? Where is the point of no return?

These physical exams from miles away will tell these CARI researchers much about the man who takes care of the flyer and of the pilot himself. Heretofore a man being tested had to be taken from his normal place of work and placed under simulated stress, such

as long walks on a treadmill. Wearing a special belt, information from five tests can be transmitted at one time to an instrumented van designed and installed by CARI technicians.

Incidentally, a shakedown cruise of this equipment started this spring, to actually check operators in Centers and Towers across the nation.

In other areas of research at CARI: Studies are underway for survival after crashes, how to cut down on the high rate of accidents in aerial application (crop dusting), best seating methods for passengers in liners, etc.

The aging factor is being carefully studied, particularly since the FAA's regulation last year set a mandatory retirement age of 60 for airline pilots. To be determined is the question of physiological, not chronological age, as the factor in examining pilots for either general or commercial aviation.

This is only part of the whole picture, the kaleidoscope that is medical research in this age of the jet-space flight. Within the next few years these research factors will be world-wide in scope; will attract medical experts in every field of aviation medicine. Already experts in survival, aging factors, etc., have come to Oklahoma City from such places as Peru, and other countries.

The final linkage in this geographical complex that is the FAA Aeronautical Center is the Examination and Records Division. Now Oklahoma City has this virtual picture of civil aviation in its midst. In a downtown office building (soon to be moved to space at the Center) are row after row of filing cabinets which contain row after row of pilot's certificates and aircraft registrations.

The care and handling of records is one side of this tremendous business of keeping tab on the pilots and planes. The other side is called Examinations. This job, handled by skilled men—and all are pilots or experts in their own field—revolves around the type of examination given to pilots and other airmen. These range from private pilot, through mechanic to controller and even to free balloon pilot.

So the Aeronautical Center houses a replica of today's and tomorrow's aviation needs and opportunities. And it is little wonder that the Aeronautical Center at Oklahoma City is affectionately called the FAA's "University of the Air."

FLY BY

OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY

SPECIAL EDITION (NO. 1)

JUNE 1961

Modernization Plan Announced

The first steps in a plan to broaden the authority of Regional executives and improve the general management of the Agency have been announced by Administrator Najeeb E. Halaby.

These steps, part of a modernization of the Agency's structure, are based on good, sound management principles, that are presently used in business and government.

The Administrator is simply trying to instill some of these principles to make the Agency more effective management wise in order to provide the best service possible to the public.

Changes are to be made in a gradual, evolutionary, and progressive way so as to disrupt the general business of the Agency as little as possible. For the time being, all Regions—with the exception of Region One—will continue to operate just as they are now doing.

Here is what is taking place. First, Region 1, with headquarters in New York, has been selected to pilot the program. The Region will be called the Eastern Region. Oscar Bakke, head of the Bureau of Flight Standards, has been selected to develop the program and submit to the Agency a transition plan which can be used as a model for other Regions. Effective July 1, his title will be Assistant Administrator for the Eastern Region.

He will be responsible for the direction of all FAA programs in the Eastern Region and the planning therefor. Subject to

applicable laws and Agencywide programs, plans, policies, and standards, Mr. Bakke, as Assistant Administrator, will be authorized to take any action necessary to the discharge of FAA responsibilities in the Region; provided that, in the exercise of authority relation to organization and the appointment of key personnel, he will be subject to such limitations as the Administrator may prescribe. He will report to the Administrator through the Deputy Administrator.

Second, in their respective fields of responsibility, Washington Offices and the components formerly designated as Bureaus—now to be called Services—will provide direction and guidance to the Assistant Administrator in the form of national program definitions and plans, national standards, national policies, interpretations, and advice.

Effective July 1, all authority previously delegated to the Regional Manager or to the chiefs of the Field Divisions of Region 1



OSCAR BAKKE, the present head of the Bureau of Flight Standards, will become Assistant Administrator, Eastern Region in New York on July 1.

will be placed in the hands of the Assistant Administrator, Eastern Region.

Third, a Board of General Advisors has been established. Mr. Lawrence C. Elliott, who has been manager of Region 1, has received the first appointment to this Board. The Board will bring to the FAA the advice and counsel of the Agency's most experienced individuals. Other appointments to the Board will be made during the summer months.

The Board will consist of members appointed by the Administrator from the ranks of senior career officials experienced in aviation and the affairs of the Agency, to serve at his pleasure. The Chairman will be designated by the Administrator.

The Board of General Advisors, or members of the Board, will:

- Advise the Administrator on the performance of the Agency as a whole and the efficacy of its efforts.

- Counsel the Administrator in the formulation and evaluation of Agency policy and practice which because of its breadth, significance, or controversial character requires critical attention at the highest level of the organization.

- Hear appeals, in cases assigned by the Administrator, and advise as to findings and decisions.

- On assignment by the Administrator, execute special projects and studies requiring the attention of senior personnel having the perspective of the Administrator.

Fourth, on July 1, three Deputies in Washington will be responsible to Mr. Halaby for planning and directing the operations of the Agency. Regional offices will be headed by Assistant Administrators, who will be responsible for the direction and execution of all FAA programs in the field subject to direction and guidance from Washington in the form of na-

tional program definitions and plans, national standards, national policies, interpretations and advice.

The Deputy Administrator, who will serve as Acting Administrator in the absence of Mr. Halaby, will also serve as the general manager for Agency operations. He will direct, coordinate and insure the adequacy of program planning and performance by the following elements of the Agency:

- Air Traffic Service (formerly Bureau of Air Traffic Management), Aviation Facilities Service (formerly Bureau of Facilities and Materiel), Flight Standards Service (formerly Bureau of Flight Standards) and, with the exception of medical research, Aviation Medical Service (formerly Bureau of Aviation Medicine.)

- Regional Offices.
- Bureau of National Capital Airports.

Mr. Oscar Bakke, who on July 1, will become Assistant Administrator for the Eastern Region, is a native of Bergen, Norway.

He came to the U.S. as a child and later attended Wagner College, Staten Island, N.Y.

During World War II, he served in the U.S. Army Air Force as a Command Pilot.

Following the War, Mr. Bakke joined the Civil Aeronautics Board and served with the Board in various positions dealing with accident investigations and safety regulations.

In 1956, when the CAB's Bureau of Safety Regulation and Bureau of Accident Investigation were consolidated into the present CAB Bureau of Safety, Mr. Bakke was selected as its director. He held that position until joining the FAA in 1960.

He currently holds an Air Line Transport Pilot's rating and is on flying status with the U.S. Air Force Reserve.

- International Aviation Service (formerly Office of International Coordination.)

The Deputy Administrator for Plans and Development will direct and coordinate long-range planning, research and development programs of the Agency and will be responsible for supervision of the following functions:

- The Office of Plans.
- The Aviation Research and Development Service (formerly Bureau of Research and Development.)

The Deputy Administrator for Administration whose duties will be to plan, direct, coordinate and insure the adequacy of the administrative management programs of the Agency. These will include the immediate direction of:

- The Office of Management Services, headed by a Director of Management Services.

- The Office of Budget, headed by a Director of Budget.

- The Office of Personnel and Training, headed by a Director of Personnel and Training.

The present position of Assistant Administrator for Management Services and that of Assistant Administrator for Personnel and Training will be abolished. Effective July 1, the functions vested in these positions will be transferred to the Deputy Administrator for Administration. On the same date, the Budget Division of the Office of Management Services will be removed from that office and reconstituted in the Office of Budget.

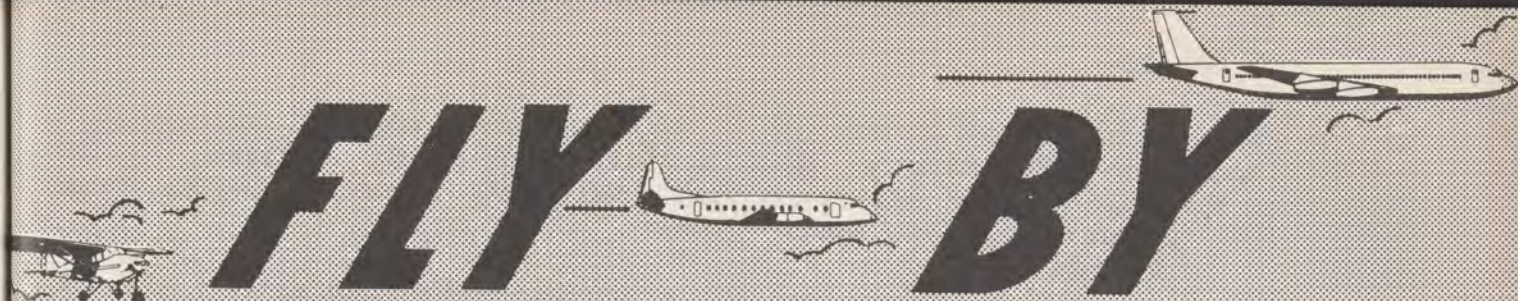
The Administrator will continue to be assisted by the following staff offices in Washington:

- The Office of the General Counsel.

- The Office of Congressional Liaison.

- The Office of Public Affairs.

As you can see, the Agency is going to make some changes . . . is going to modernize. You will be notified of these changes and modernizations as rapidly as possible.



OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY

SPECIAL EDITION (NO. 2)

JUNE 1961

Plans Announced for Establishment Of One Additional Regional Office

Plans for the establishment of an additional regional office for the Southeastern states with headquarters in Atlanta, Ga., were announced by Administrator Halaby, June 8. Establishment of the new region will strengthen the management of the field activities of the Agency.

The new regional office will have responsibility for FAA activities in Georgia, Florida, North Carolina, South Carolina, Tennessee, Alabama, Mississippi, Puerto Rico, the Virgin Islands and Swan Island.

At the same time, the Administrator announced that supervision of FAA activities in the state of New Mexico would be shifted from the regional office at Los Angeles, Calif., to the regional office at Fort Worth, Texas.

Planning for the establishment of the Atlanta office will begin at once. It is expected to become fully operational shortly after January 1, 1962.

The new regional headquarters will be a controlled installation with minimum staffing. It will be used as a model for all other regions as part of a move to reduce regional headquarters' cost through prudent management.

As a target, it is planned to staff the Atlanta office with about 400 positions; 300 of these will be transferred

from the Fort Worth office. The Administrator proposes that jobs at the level of Branch Chief and above--and some selected Section Chief positions--will be filled through the National and Executive Promotion Plans. Jobs below these levels will be made available to Fort Worth employees who are interested in transferring to Atlanta. If the quota is not met then these vacancies will be advertised throughout the Agency.

The Atlanta office will be headed by an Assistant Administrator who will be responsible for the direction and execution of all FAA programs in the seven Southeastern states. Selection of the new Assistant Administrator will be announced soon. When this is done, the key jobs will be advertised and the new Assistant Administrator will select his Division Chiefs and other key assistants so that they in turn may begin at once the process of selecting their staffs.

Mr. Halaby said that the establishment of the new regional office was the result of a concentrated three-month evaluation of the programs, organization and personnel of the Agency.

"The supervision of field facilities in the Southeast and the Southwest," Mr. Halaby said, "is seriously inadequate because of the size of the area which is now the responsibility of the Fort Worth of-

ficie. We can correct this deficiency and also develop a better understanding of and rapport with the people and communities of the Southeastern states through the establishment of the Atlanta office."

The addition of the new Atlanta office to cover seven states now under the supervision of the Fort Worth office will bring the number of FAA regions to seven; five to serve the contiguous 48 states and one each for Alaska and Hawaii.

The Administrator also announced the redesignation of the FAA regions on a geographical basis in place of the present numerical name. Following is a listing of the FAA regions, the headquarters cities, and the states which they will serve when the Atlanta office has been established:

o EASTERN REGION (formerly Region 1), New York, N.Y.: Connecticut, Delaware, Kentucky, Maine, Massachusetts, Maryland, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia.

o SOUTHEASTERN REGION (new), Atlanta, Ga.: Georgia, Florida, North Carolina, South Carolina, Tennessee, Alabama, Mississippi, Puerto Rico, Virgin Islands, Swan Island.

o SOUTHWESTERN REGION (formerly Region 2), Fort Worth, Texas: Arkansas, Louisiana, Oklahoma, Texas, New Mexico, Canal Zone.

o CENTRAL REGION (formerly Region 3), Kansas City, Mo.: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin.

o WESTERN REGION (formerly Region 4), Los Angeles, Calif.: Arizona, California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming.

o ALASKAN REGION (formerly Region 5), Anchorage, Alaska: Alaska, including the Aleutian Islands.

o HAWAIIAN REGION (Formerly Region 6), Honolulu, Hawaii: Hawaii, Wake, Canton and Guam.

The Administrator realizes that initially any changes will involve some operational and personal adjustments. Also, that this brief article can not possibly cover all questions which may arise. But he will endeavor to keep you informed of any important developments which will be of interest to you.

FLY BY

OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY

SPECIAL EDITION NO. 3

JUNE 1961

The Federal Aviation Agency has received authority to raise the grades of certain air traffic control jobs in Centers and Approach Control Towers. The action authorized is dependent upon the performance of duties described in a letter and report dated June 16, addressed to Administrator Halaby by the Chairman of the Civil Service Commission.

The raises authorized are interim adjustments subject to completion of a full classification standards study. The Agency intends to act as quickly as possible to reclassify the jobs of personnel performing the duties cited in the CSC report, and to follow through a broad-gauge study designed to revise the 1958 classification standards. Because the Commission's grade findings are tied to the performance of duties in varying combinations rather than to specific positions the Agency faces a substantial workload of classification and placement

actions in effecting grade changes. It is expected that at least one or two months will elapse before the first promotions can be made. Promotions will of necessity be determined on an individual basis. It is impossible, therefore, to predict when any particular individual may find the results of these changes reflected in his pay check.

The Commission acted speedily in response to the Administrator's request for grade increases for all Station, Tower, and Center personnel. Although the increases authorized fall short of the across-the-board raises asked, they constitute a most important step for the Agency. The CSC action is the first success in an intensive FAA classification standards drive for higher rates of pay.

The following functions and levels were cited specifically in the CSC report. Other duties and jobs cited in the 1958 classification standard are not affected:

CENTERS

Center Chief.	Levels III and IV.	GS-15
Center Chief.	Levels I and II.	GS-14
Shift Supervisor.	Levels III and IV.	GS-14
Shift Supervisor.	Levels I and II.	GS-13
Flow Control and Inter-sector Coordination.		GS-13
Intra-Sector Coordination.		GS-12
Radar Handoff.		GS-12
Radar Surveillance of Holding Pattern.		GS-12

TOWERS

Tower Chief.	Level IV.	GS-15
Tower Chief.	Level III.	GS-14
Shift Supervisor.	Level IV.	GS-14
Tower Chief.	Level II - Approach Control.	GS-13
Shift Supervisor.	Level III.	GS-13

COORDINATION OF RADAR CONTROL

Level II Tower (when combined with Shift Supervision).	GS-12
Level III Tower.	GS-12
Level IV Tower.	GS-13

COORDINATION OF ARRIVAL
OR DEPARTURE CONTROL

Level IV Tower. GS-12

RADAR HANDOFF

Level II Tower. GS-11

Level III Tower. GS-11

Level IV Tower. GS-12

ARRIVAL OR DEPARTURE CONTROL-RADAR

Level II Tower. GS-10

Level III Tower. GS-11

Level IV Tower. GS-11

LOCAL AND GROUND CONTROL

Level III Tower. GS-10

Still pending CSC decision is an important proposal for reclassification of Flight Service Station jobs. This request was submitted simultaneously with the request for the Center and Tower actions. A CSC representative is studying the analysis of Station jobs developed by the Office of Personnel and Training. He will make personal visits to a number of stations during the week of June 19, accompanied by Mr. Pyle, Mr. Thomas, Mr. Luikart, Mr. Meisel and other officials. Although the nature and timing of a decision on this proposal cannot be predicted, officials hope for early and favorable action.

Other studies underway include the development of new standards for Electronic Maintenance Technicians, and a revisions of the Agency Guide for classification of Manufacturing Inspector jobs. In addition, the Office of Personnel and Training and the Bureau of Flight Standards are reviewing the need for changes in the guides controlling the classification of Operations, Maintenance and Flight Check jobs.

Future editions of the FLY-BY will keep you posted on developments in all of these projects.

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ALAN L. DEAN NAMED DEPUTY
FOR ADMINISTRATION

Alan L. Dean, who has been Assistant Administrator for Management Services since January 1959, has been named Deputy Administrator for Administration. The appointment becomes effective July 1.

In line with the recently announced reorganization plan, he will plan, direct and coordinate the administrative management programs of the Agency. He will be responsible for supervision of the Office of Management Services, the Office of Budget, which was formerly a part of the Management Services office, and the Office of Personnel and Training.

BASNIGHT AND BOATMAN TO HEAD
SOUTHERN REGION IN ATLANTA

Administrator Halaby announced on June 20, the appointment of Arvin O. Basnight as the Assistant Administrator and Paul H. Boatman as Deputy Assistant Administrator for the Southern Region, with headquarters in Atlanta, Ga.

Mr. Halaby said that planning for the creation of the new office would begin at once; that the new appointees would be responsible to select key personnel, arrange for office space and establish operational relationships between the Washington headquarters and other Regional Offices.

FAA plans to start operations from Atlanta about January 1, 1962 but may not be completely staffed until July 1, 1962.

For the past two years Basnight has been Deputy Assistant Administrator for Management Services.

Mr. Boatman started his career in CAA in 1934 in Ashfork, Ariz., and has been in various positions in the field and the Fort Worth Regional Office. His past two years have been as Chief of the Air Traffic Management Division Region Two.