FAA HORIZONS

MARCH 1965

OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY

EDITORIAL:

Arvin O. Basnight
Director, Southern Region

From his headquarters in Atlanta, Ga., the Director of the Southern Region directs FAA activities in the seven southeastern states of Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina and Tennessee; and in the Caribbean area (including Puerto Rico, the Virgin Islands, Swan Island, the Canal Zone and Panama), South America; that portion of the Gulf of Mexico in which domestic offshore control is exercised by ATC facilities of the Southern Region; and, for purposes of flight inspection the Ascension Island. More than 5,500 people work in the Southern Region.

You Are Respected.

You are respected as an individual, and for your work! It is because our leaders, and indirectly the people we serve, choose and support the kind and quality of people who enable our FAA to progress.

The public looks upon our Agency not as some sort of overlord, but as a creature of its own hands. Performance is entrusted to men and women capable of discharging duties with care, foresight and protection.

Internally—between individuals—there is and need be a spirit of competition. In a sense, then, the very fact that you continue as a vital part of FAA means: you are respected and appreciated by many who may never tell you—by some who may do work that is less challenging—by a few whose special interests you must assess against the best interests of many.

In accomplishing changes, we are bound to have different points of view. This can be good if we appreciate each other—both our abilities and limitations—and continue working for "One FAA." But when discouraged, a few of us tend to let down on things we are capable of doing better with the excuse "we are not appreciated." It is normal to want appreciation. Yet, it is unhealthy to react to the absence of expressed appreciation by adopting a negative role of hurt dignity—a posture defined by some wit as "the quality that enables a man who says nothing, does nothing, and knows nothing to command a great deal of respect."

In the use of our resources, we should benefit from what men should have known from the time of the democracy of Athens. Plutarch tells us that the Athenians first were thrifty but then became "lovers of expense." The President asked us "to be open-minded in being of service, and tight-fisted on spending." In our environment, complacency is an infirmity. We have, and may we sustain, that classic desire of the ages to weld together an ever-improving organization of men and women dedicated to meeting the needs of air safety.

To be of maximum effectiveness, any organization must have aims that are specific, concrete, definitive and understood. Great progress has been made in this area, and the Administrator, in the January FAA HORIZONS, has defined for us a "true course for 1965."

With our goals set, our success in reaching these goals rests with each of us. We have many talented, enthusiastic and interested people. To us is given the opportunity to weld the FAA into a classic organization. Each employee should recognize himself not only as a valued part of the organization, but also as a person who is appreciated, respected and capable of making substantial contributions. We, in FAA, consider our people very personally—as *individuals*, not merely *statistics*.

As individuals, many of us hunger for success; as mature people we are faced daily with problems to be balanced on our road to success. Those who make the breakthrough recognize there are two elements involved—what you attain and what you sacrifice.

Individuals aware of the challenge find a satisfaction performing work that earns respect—in doing for others things they cannot do for themselves—being a vital part of a service—an Agency that is moving forward!

Arvin O. Basnight

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MARCH 1965

F E D E R A L A V I A T I O N A G E N C Y

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Womanpower FAA
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is represented by 5,700 women working in scores of jobs wherever the Agency serves the public.

'Hasta Mañana'

Time Capsule Planted

The Southern Region buried a time capsule deep in the heart of the foundation of the new San Juan Air Traffic Control Center and International Flight Service Station so that citizens of the year 2000 may know of the life and times of 1965.

The January ceremony was held to salute construction of the half-completed, contemporary new facilities.

Lt. Gen. Harold W. Grant, deputy administrator, made the principal address and emphasized that the tremendous growth in jet age aviation in Puerto Rico, the Caribbean, and in South America prompted the Agency to build this new air traffic facility.

The general said, "Last year, 268,000 airplanes were handled by these two air safety facilities and we anticipate that this number will substantially increase.

"All told," continued General Grant, "the American taxpayer has invested more than $13.5 million in Puerto Rican aviation and we have some 223 FAA employees in the islands." The general closed by saying, "We know—as El Moro Castle in old San Juan protected the citizens from marauding pirates in the 15th century—that our FAA facilities will bring safety to jet age flight in the 20th century."

Into the airtight, waterproof time capsule went current television film clips, tapes of radio newscasts, current newspapers, magazines including a current copy of *FAA HORIZONS* and *AVIATION NEWS*, books, and predictions of the future. Forecasts included stories of atomic-powered aircraft carrying more than 800 passengers from the cold northern states to the sunny Caribbean which had become one of the world's leading resort areas. Predicted too, was a world at peace enjoying the benefits of aviation for the good of mankind.

The new FAA building, located two miles southeast of San Juan International Airport, will replace cramped and outmoded quarters now located in the airport terminal building.

Approximately one-half the size of domestic centers, the building is being constructed in three parts—a one-story administration building connected by a covered walkway to the two-story operations building and the one-story mechanical wing.

The glass-enclosed administration building includes an inner court that makes maximum use of natural light. A concrete overhang supported by flaring precast concrete columns around the building perimeter will provide protection from direct sunlight and combines architectural beauty with the structural strength of reinforced concrete. #

At San Juan's new ARTCC and IFSS which is now under construction, General Grant and Mrs. Jaime D. Serra, above placed a copy of HORIZONS into the time capsule. Below, Southern Region Director Basnight seals off the capsule with concrete as Area Manager Serra, his wife and General Grant prepare to help.

Womanpower FAA

"...I intend to see that there is an even greater expansion of opportunity for women in the days ahead ... I believe a woman's place is not only in the home but in the House, the Senate and throughout the Government service. We are very proud of you women doers."—President Lyndon B. Johnson ~~at~~ the Fourth Annual Federal Woman's Award presentations on March 3, 1964.

Fifty-seven hundred strong—that's FAA womanpower! This group of femininity is distributed throughout the Agency in almost every state of the Union and in some foreign countries.

Womanpower in the offices of the FAA has added to the successful operation of every segment of the Agency. The significance of womanpower is emphasized further by the gradual disappearance of jobs formerly tagged "for men only." Today, women are being considered for employment and advancement at FAA on the basis of merit alone.

Today, approximately 13 per cent of the FAA's total work force are women. The women hold many varied positions in the Agency ranging up the scale to GS-15 with some 1,000 holding professional grades at GS-7 and above.

FAA has women lawyers, mathematicians and engineers; nurses, medical technicians and budget analysts; women teach school on Wake Island, control traffic in towers and centers, brief pilots in flight service stations. Throughout the Agency women are in communications work; they are librarians, contract procurement officers, management analysts, computer systems analysts, personnel and training specialists; economists, technical writers and project analysts. In the more traditional occupations there are thousands of administrative assistants, secretaries, stenographers, clerks, receptionists and typists.

On the high rungs of the FAA ladder in Washington, D. C., Mary E. Healy is the deputy manager of the Office of Headquarters Operations; Katherine Stinson is technical assistant to the chief of the Engineering and Manufacturing Division, Flight Standards Service; Theresa Harwood is chief of the Pharmacology and Biochemistry Laboratory, Office of Aviation Medicine; Alice M. Kosobucki is chief of the Airways Programs Division in the Budget Office; Ethel Cohen is chief of the System Research Branch, Office of Personnel and Training; Blanche W. Noyes, a 1963 Federal Women's Award winner, is chief of the Air Marking Staff, Installation and Materiel Service; Diane E. Malatesta is an assistant to the chief of the Compliance Division, Office of Compliance and Security; Elizabeth Bowers, Maryann B. Lloyd and Cynthia Straker are attorneys in the Office of the General Counsel, and Margaret K. Boylan is special assistant to the assistant administrator for General Aviation Affairs.

Women also hold important and responsible jobs in every Region, the National Aviation Facilities Experimental Center (NAFEC) and the FAA Aeronautical Center. At the FAA Academy, Aeronautical Center, women instructors conduct predominantly male classes in air traffic management and supervisory and general management techniques. Women are also employed in the shops at the Aircraft Services Base, the Civil Aeromedical Research Institute (CARI) and, in fact, all the various activities that comprise the Aeronautical Center.

The Administrator supports the President's womanpower program wholeheartedly. Mr. Halaby has said many times that nothing is more important to the FAA than putting the right person in the right place; that the only basis for selection, when hiring or promoting, should be the candidate's qualifications.

When the Government does not make full use of its womanpower, the President and Mr. Halaby have stated, an important natural resource is being ignored. Womanpower . . .

"...a woman's place is...throughout government service."

Mee Har Y. Eng
Secretary
Washington, D. C.

Marjorie J. Rolle
Aviation Clerk
Billings, Mont.

Mary Jeffries
Air Traffic Controller
Nashua, N. H.

Enid Malcolm
Project Analyst
Fort Worth, Tex.

Beatrice K. Matsui
Mathematician
Atlantic City, N. J.

Dr. Theresa Harwood
Pharmacologist
Washington, D. C.

Helen Noelani Lum (left) and Marjorie Hoong Choy Rupsch
Communications Relay Equipment Operators
Honolulu, Hawaii

Alice M. Kosobucki
Budget Officer
Washington, D. C.

Eloise S. Wright
Procurement Assistant
Kansas City, Mo.

Mary Y. Baron
Secretary
Washington, D. C.

Betty K. Danielson
Illustrator
Fort Worth, Tex.

Ethel Slaughter (left) and Sarah Deakins
Sheet Metal Workers
Oklahoma City, Okla.

Aimi Kuun
Electronic Engineer
Washington, D. C.

Bertha W. Harrod
Laboratory Assistant
Washington, D. C.

Audrey L. Butler
Procurement Clerk
Washington, D. C.

Diane E. Malatesta
Compliance and Inspection Officer
Washington, D. C.

Clara Gumowitz
General Supply Officer
Kansas City, Mo.

Estelle L. Brannon
Pantograph Operator
Oklahoma City, Okla

Thelma L. Stacy
Systems Analyst
Oklahoma City, Okla

Joan Barriage
Aeronautical Engineer
Washington, D. C.

Lois Wallace
Secretary
Atlanta, Ga.

Ruth Kapeil
Engineering Draftsman
Seattle, Wash.

Doris P. Little
Librarian
Atlanta, Ga.

Mabel M. Brand
Engineering Draftsman
Salt Lake City, Utah

Daisy Kiakona
Placement Specialist
Honolulu, Hawaii

Left: From the control room of the University of Nebraska's Station KUON-TV at Lincoln, the producer uses the monitors to select the best views while a student engineer records the FAA program. Above: The studio is readied for the taping of the 30-minute film covering the activities of the Lincoln FSS. Right: Props and lights are adjusted to exact requirements before action begins. Below: John J. Faltermeier (left) a flight service specialist, Lincoln FSS, and Ansel H. McAllaster, principal operations inspector, Lincoln GADO, run through the script of simulated flight.

LINCOLN FAAers STAR ON LOCAL TELEVISION

"Five . . . four . . . three . . . two . . . one . . . this is the take," said the voice in the television station control room. It was the signal for the start of a TV filming session.

In the studio, beyond two thicknesses of plate glass, three TV cameras were focused on a man standing before an airways chart of the Central United States. The man looked and spoke like a professional television actor. He wasn't, however. He was Ansel H. McAllaster, principal operations inspector of the Federal Aviation Agency's General Aviation District Office (GADO) in Lincoln, Neb. Both he and John J. Faltermeier, a flight service specialist in the Lincoln Flight Service Station, were in the studio to make a 30-minute television film of a typical flight service station weather briefing.

The station, KUON-TV in Lincoln, Neb., owned and operated by the University of Nebraska, broadcasts educational programs to more than half of the state's population. It has programmed four educational films about the FAA. Three of the future film presentations will deal with navigation, FAA regulations and aircraft performance.

KUON-TV initiated the FAA film series last year after it produced a program called "Nebraska's Air Age," starring a large number of FAA personnel from the general aviation district office, the airports district office, the flight service station, the control tower and the systems maintenance sector in Lincoln.

Audience response was so good, KUON-TV decided to do a television film series about the FAA. Boyd Rooney, a producer for KUON-TV, and Tom Fox, a member of the Nebraska Aeronautics Commission, worked with FAAers McAllaster and Faltermeier on the script of the first film.

Later when McAllaster and Faltermeier appeared at the studio for the actual filming, Producer Rooney had everything in readiness in a corner of the huge studio on the Nebraska university campus. Along one wall was a table, its legs raised with empty Coke cases, to simulate a flight service station counter. On another wall was an aeronautical chart of Central United States. Additional props included weather maps and copies of teletype weather sequence, pilot and wind aloft reports.

When the props were readied, engineers and cameramen busied themselves adjusting the maze of lights which hung from the ceiling, illuminating the set for the FAA film production.

When everything was finally set up, Producer Rooney called for a rehearsal. Operations Inspector McAllaster's introductory remarks highlighted the importance of thorough weather briefing for pilots. He explained how carelessness could be fatal to a pilot who fails to heed hazardous weather situations. He stressed the importance of a complete weather briefing which is available at any FAA flight service station. Then he used a hypothetical flight from Lincoln to St. Louis to illustrate an actual briefing session. Flight Service Specialist Faltermeier, using some of his regular briefing aids, gave a typical weather briefing.

As McAllaster and Faltermeier enacted the typical weather briefing, Producer Rooney directed his camera crews around the television studio set, selecting the best camera angles from one of the TV monitors on the control panel.

As the producer shifted from one camera to another, red lights on each camera flashed on indicating that that particular camera was focused on the television performers.

After the first rehearsal, discussions were held by the producer, Mr. Fox, and Melvin O. Wood, supervising inspector of the Lincoln GADO, and Harrison W. Yount, chief of the Lincoln FSS, who served as technical consultants during the filming.

After several rehearsals, the actual filming was completed without a single hitch. The many hours of rehearsals under the hot TV kleig lights had produced two new veterans.

Now—off camera—the two new FAA television stars have returned to the workaday world of pilots, planes and teletypes to await their evening on video, when they can gather around their television sets with their families to see the results of their performance. #

JOINT USE OF RADAR SAVES MILLIONS

When pilots found their way simply by following railroad tracks, and federal air navigation aids were limited to light beacons or signs painted on roof tops, joint civil-military use of these navaids presented no special problem.

World War II changed all that.

Modern radars for navigation, air traffic control and for air defense are so complex and expensive that they have become a major item in the budget of two government agencies—the Federal Aviation Agency and the Department of Defense. Consequently, quarterly meetings are held between representatives of these two agencies to effect joint use of the nation's long range radar and save money. This joint Radar Planning Group (JRPG) held its first formal meeting in 1957, but its history goes back many years.

Mass Produced Air Traffic

The hundreds of thousands of airplanes produced during World War II had about the same impact on air traffic as they did on production lines, recalled J. Griff Edwards, of FAA's Air Traffic Service. The "wild blue yonder" was no more. It had to be charted and subdivided into air traffic control areas and airlanes in much the same way this country's land surface is laced with superhighways and automobile traffic control devices. Not only did aircraft increase in numbers during World War II, but they were flown more and more during all kinds of weather.

The pilot needed more than railroad tracks and light beacons when he navigated cross country in and above overcasts. He needed radio aids to penetrate the overcasts and traffic control to separate his aircraft from others flying the same route with the same radio aids.

World War II helped fill this gap, too. A highly secret electronic device—radar—developed for air defense in Britain, became the open sesame which made present day all-weather air traffic control possible.

Pressure of Problems

Traffic control procedures were developed quickly around equipment designed originally to detect the presence of aircraft and to differentiate between friend and enemy.

But there were other problems. Radar was expensive, and as more advanced equipment was developed, it became even more expensive.

These problems faced the FAA and Air Force representatives who made up the first Joint Radar Planning Group (JRPG). When the group first met, according to Vincent Constantino, FAA Installations and Materiel, who has served as both an FAA and a USAF representative, the group included the Administrator of the Civil Aeronautics Administration, James T. Pyle, Joseph H. Tippets, now director of FAA's Western Region, and James E. Dow, now director of the National Air Space Special Projects Office.

The USAF contingent was headed by Major General Hugh Parker, representing the Air Defense Command. Also closely associated with the early meetings was an Air Force Major General who had played a key role in running a combined air traffic control and air defense operation in Japan. This man, Harold W. Grant was then the director of Operations for the Air Defense Command, and is now FAA's Deputy Administrator.

Savings brought about through JRPG have already reached $291 million, Frank W. Marzec, FAA chairman, stated. Fifty-six radars are now used jointly by FAA and the Department of Defense and 25 more will be brought into joint use under current programs. Joint use plans are in effect in the Pacific Region, Alaskan Region, in the Caribbean area and in the continental United States.

During the initial acquisition of land and equipment and during installation, $60 million was saved. Another $177 million was saved by eliminating duplication in maintenance, power, logistics support and personnel. This savings will accrue with each year of joint use. Still another $114 million will be saved when additional programmed joint use arrangements are carried out.

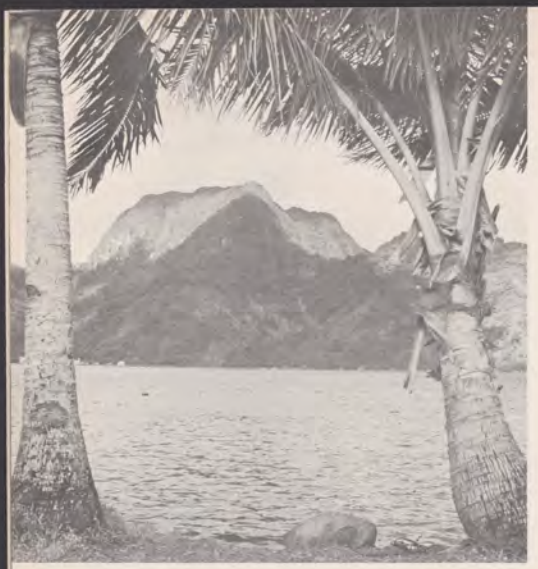
The significant JRPG accomplishments overshadow many obstacles the group had to overcome. Although failure was predicted when the program was started because of the divergent missions of the FAA and the Air Force, both have worked out successful compromises which have permitted joint use on a much broader scale than originally anticipated. The group also has provided an exchange of technical information which has allowed each agency to take advantage of the state of the art developments of the other.

Today, JRPG is headed by Frank W. Marzec Jr., representing FAA, and Lt. Col. A. W. Freeman of Air Defense Command for the U. S. Air Force. The group is made up of other veteran FAAers including J. Griff Edwards, Air Traffic Service; Leonard A. Crouch, Installations and Materiel Service; Arthur R. Ashley, Systems Maintenance Service, and Russell M. Nerheim, Systems Research and Development Service, and many others who have contributed specialized knowledge and experience.

The millions saved are just a prelude to future joint use radar programs. Agreements reached in June 1964, promise to bring the entire radar surveillance system which blankets the North American continent into joint FAA-USAF use and result in increased economy. #

FAAers Henry B. Mizell and Richard J. Warnock (on the right) work with USAF technicians. Below, from the left are: co-chairmen, Frank W. Marzec Jr., FAA and Lt. Col. Lyle W. West, ADC, meeting with JRPC members, Col. Worth Speed, Russell M. Nerheim, Lt. Col. Krout and Vincent Constantino.

Maintenance problems are reviewed at joint radar site, Roanoke, Va., by Air Force officers, Major Duane J. Krell and Lt. Francis X. Kelly, and Sector Chief Frank J. Randazzo and Robert E. Mathews, of FAA.



American Samoa Improves Facilities

Above: The FAA's Pago Pago International Flight Service Station is housed in one of the new, modern buildings. Below: One of the 17 three-bedroom housing units constructed on the island to accommodate FAA employees and dependents.

Down below the Equator, approximately 2,500 miles south of Hawaii, the FAA's southernmost installation—American Samoa—is undergoing a facelifting. Its new look includes new housing, new buildings and increased radio communications and navaid facilities.

More than a million dollars has been invested by the FAA to provide these new facilities on this South Pacific archipelago.

Under the direction of the Pacific Region, 240 acres of land were cleared to build the new FAA buildings and to house radio communications facilities and navaids.

The jet-age construction began in 1962 on the island of Tutuilla, the largest in American Samoa. Since that time the Pacific Region has installed a non-directional radio beacon, a low-powered high frequency marker beacon, a very high frequency omni-directional range and a visual approach slope indicator. A tactical air navigation system is planned for the future.

In addition, the Pacific Region also helped the Government of American Samoa plan a new jet runway.

Personnel of the Pacific Region view the passing of the facilities built prior to the jet era with nostalgia. One of the early FAA arrivals on the islands, James W. Haines, chief, International Flight Service Station, Pago Pago, has happy thoughts of his early days on this United States possession. He established the all-time record for continuous residence at Samoa's world-famous Rainmaker Hotel. For nearly one year the Rainmaker was the unofficial Samoan headquarters of the FAA, the "front room" and Jim's pad.

With the coming of the jet-age's new facilities, the Rainmaker and its hospitable manager, Mary Pritchard, go into retirement. The FAA has constructed 17 three-bedroom housing units on the island to accommodate employees and their dependents. These new units were built in the architectural style of the old Samoan home, the *fale*.

Communicators who formerly worked for the Government of American Samoa are now a part of the FAA. A 15 by 20 foot wooden shack which was used as their base of operations has been replaced by two new, large, modern, air-conditioned, fireproof buildings.

American Samoa looks forward to further expansion and modernization as the jet-age gathers impetus. #

COCKPIT RESEARCH SEEKS OUT HIDDEN KILLERS

When the engine of his light plane quit abruptly at 1,000 feet, the pilot, with 3,000 hours behind him and a good aircraft under him, felt no qualms. Below, pasture land stretched for miles like a smooth carpet. Everything was on his side—altitude, weather, a choice of landing sites—and he brought the plane in for a textbook landing, kissing the turf lightly.

On the roll-out the little plane hit a chuck hole, flipped on its nose. The pilot's upper body snapped forward sharply and he was dead of a puncture wound when his forehead slammed into a toggle switch an inch and a half long. Unmarked but for the tiny wound, he was just as dead as if the plane crash had been a "total."

Experienced aircraft accident inspectors can almost read the make of an aircraft by viewing the impact "signature" left on the occupants in a specific seat. The Office of Aviation Medicine and the Aircraft Development Service has begun studies at the Civil Aeromedical Research Institute, Oklahoma City, to "delethalize" small plane cockpits by eliminating all sharp, elongated, brittle pointed objects—toggle switches, circuit breakers, trim-tab controls, radio knobs, etc., by recessing them.

As a result of their studies, the Office of Aviation Medicine is convinced that perhaps half of the pilots now lost annually in aircraft accidents would live if what is already known about impact damage were incorporated into aircraft design.

In a preliminary summary of findings CARI scientists have identified three principles for greater cockpit safety:

- removal of any protuberance that might cause a puncture wound.
- provide a true body restraint—shoulder harness as well as a seat belt.
- devise a means of cushioning or absorbing the impact of a crash before it can act on the occupants of the aircraft.

A cockpit mockup incorporating many of the improvements recommended in this study is under construction at CARI.

Various interior configurations of the cockpit, including instrument design, positioning and mounting, aircraft engine and flight controls and seating will be tested under different conditions. Results will be made available to the aircraft industry. #

Engineer John J. Swearingen examines seat damage caused by body impact in a crash.

An instrumented head, held by Swearingen, is used to study the crash impact forces.

ALASKA TAKES ON NEW LOOK

"It started as a slight back and forth movement underfoot," recalled James Ray, who was duty officer in the Alaskan Region's Communication Control Center. "I was standing at the time but I soon found myself being pitched crazily from wall to wall like a steel ball in a pinball machine as the oscillations increased in intensity."

That was a year ago when the devastating 1964 earthquake struck. Jim Ray along with hundreds of other FAAers reacted mechanically when the quake subsided. They checked on loved ones, assessed the damage to their homes and extended helping hands to neighbors.

At Anchorage and other stricken areas, only a few hours after the final shock wave, reconstruction began. New sounds were heard. Sounds of rebuilding . . . of digging out . . . of people helping people.

Jackhammers, coupled with the whine of cranes swinging steel beams into place, noisily proclaimed that the determined people of "the 49th" had started rebuilding.

Today in Anchorage, new hotels and office buildings have changed the skyline. Aircraft arrive and depart from the busy airports at greater volumes than ever before. Underwater discoveries of "black gold" (oil) in nearby Cook Inlet spur further explorations for natural gas and other resources. Anchorage is a city on the move—and the sky's the limit.

In the "flyingest state in the Union," where there is one aircraft for every 156 persons and one out of 55 has a pilot's license, the FAA was called upon to assist the state's recovery efforts.

Getting Agency facilities back in business was the first matter on the agenda. Ulysses M. Culver, chief of the Installation and Materiel Division in the Alaskan Region, estimates the cost will be close to $1.3 million when all repairs are completed.

This includes replacing the dock at Woody Island, near Kodiak, which was destroyed by a tidal wave; repairing broken underground cables at the Anchorage International Airport; reconstructing the flight service station building, water and sewer systems at Cordova; relocating the U. S. Weather Bureau offices and communications equipment at the international airport and restoring the navaids at Portage and Hinchinbrook.

The costliest project, approximately $900,000 was for the construction of a new control tower at Anchorage International Airport to replace one totally demolished during the quake.

The new FAA standard type "0" control tower—one of the first of its type to be built by the Agency—was placed in service last month. Robert L. Daymude, air traffic control specialist who survived the collapse of the original tower, served the first watch in the new one.

Immediately following the earthquake, the Airports Division, headed by Gerald O. Kempton and assisted by his engineers, made damage surveys of 64 airports at the request of the Alaska Division of Aviation. Twelve airports had runway and taxiway damages which included the destruction of underground cabling and lighting facilities.

FAA helped restore damaged airports by working with officials of the President's Office of Emergency Planning (OEP) and the U. S. Army Corps of Engineers. Three airports were repaired by the Agency, contracts were let by the Airports Division working on behalf of the OEP to repair the others. Afognak Airport had to be completely rebuilt in a new location on Kodiak Island. A tidal wave had destroyed the original village and airport. The relocated village and facility is now called Port Lions.

On this first anniversary of the earthquake, Alaskans doggedly push on with work that has to be done. On March 27, when the minute hand of the clock reaches 5:36 p.m., every Alaskan who survived the catastrophe will stop work for a moment, count his blessings, review what has been accomplished during the year, and take new strength from having pulled through the Big Breakup of 1964. #

A snow-filled trench is all that remains of the quake damage as Anchorage rebuilds.

Anchorage's International Control Tower was a heap of twisted steel (left) following the 1964 earthquake. Lower left, electronic maintenance men like William I. Conyers (right), chief, and a technician Roscoe M. Robey restored equipment following the big break up. Below Robert L. Daymude, a survivor of the collapsed tower, watched the construction of the replacement. A plaque honors his co-worker, William G. Taylor, who was killed in the tower during the earthquake.

Border Patrol and FAA Work Together:

EYES ON THE BORDER

Air and ground observations are made by patrols.

Western Region's James V. Nielsen (left) and James M. Yohe confer with Inspector Elmo M. Rainbolt and Patrolman Randolph.

Aided by FAA radar and communications, the Border Patrol flies low over the U.S.-Mexican border looking for signs of smuggling of unlawful entry of aliens into the States.

Yuma FSS Chief Crooks coordinates data with Border Patrolman Robert Randolph.

An American pilot picks up two illegal aliens at a remote Mexican airstrip and heads toward the border. His plane crosses into the United States over a desolate, uninhabited section. As he travels toward a small airstrip more than 100 miles to the north, the pilot feels certain his plane has not been detected by the Border Patrol.

He had no way of knowing that his illegal flight was, at that moment, being plotted precisely and efficiently on a large wall map at U. S. Border Patrol Sector Headquarters in Yuma, Ariz. Nor could he have known that in a darkened FAA control room, the plane's "blip" was being watched as it moved slowly across the radarscope. Had the pilot known these things, he would have been far less surprised at the Federal "welcoming committee" awaiting him when he finally touched down at a small Southwestern field.

Each year, many such wayward pilots come to grief, thanks to the close working relationship which exists between the FAA and the Border Patrol, an arm of the U. S. Immigration and Naturalization Service.

More than 6,000 aliens are apprehended annually on the basis of information provided by Border Patrol pilots, and in almost every instance there is some element of FAA assistance.

The patrol's basic mission is detection and prevention of smuggling and unlawful entry of aliens into the United States. The task is formidable: the U. S.-Mexico border meanders for more than 2,000 miles, much of it across a lonely desolation of sand, cactus and sage or along the Rio Grande's muddy reaches. Maintaining security along this vast border would be virtually impossible without airplanes. With them, the Border Patrol's task becomes both manageable and efficient.

To provide tight aerial vigilance over the border, the patrol set up 11 adjoining border sectors, each with its complement of light aircraft and pilots. Border Patrol pilots skim low over these boundary sectors daily, keeping a sharp lookout for telltale footprints that give away another hopeful (but usually hopeless) northward trek by an illegal alien. To spot their quarry, patrol pilots often must fly at altitudes of less than 200 feet and FAA has granted special waivers for this purpose.

In each sector, the Border Patrol maintains a close liaison with personnel at FAA facilities. At Yuma, for example, a close working relationship has been developed between Elmo M. Rainbolt, chief patrol inspector at Yuma Sector Headquarters, and William R. Crooks, chief of the Yuma Flight Service Station. Inspector Rainbolt and other officers of the Yuma Border Patrol Sector, confer frequently with FSS Chief Crooks.

This same cooperative relationship exists between patrol officials and the Compliance and Security Divisions at both Western and Southwest Region headquarters.

The benefits of such cooperation are reciprocal. The patrol regularly furnishes both regions with detailed summaries of air smuggling suspects. Time and again, this information has proven extremely useful to General Aviation District Office supervising inspectors, to Regional Counsels and to Compliance and Security, all of whom are vitally concerned in cases where United States pilots or aircraft become engaged in questionable activities.

Besides the regular radar and communications support which the FAA gives the patrol, the Agency also furnishes a great deal of information concerning the pilots themselves and the planes they fly. The patrol frequently requests records of aircraft and airmen from the Aviation Records Center at Oklahoma City. Details on aircraft ownership, and names and whereabouts of pilots have been very helpful to patrol investigators.

Walter R. Hayfield Jr., assistant regional chief of the Border Patrol who heads air operations in the Southwest, recently paid a visit to Oklahoma City to confer with Aviation Records Center officials and to observe the operation of the FAA records system. Chief Hayfield and other patrol officials have paid high tribute to this system, pointing out that such records, furnished promptly and in required detail, have helped the patrol apprehend lawbreakers and balk attempts to penetrate the United States border with illegal aliens, contraband and narcotics.

As an additional service along these lines, the FAA provides the patrol with current information on all crashes of United States registered aircraft in Mexico, Central and South America. In many instances, planes covered by these reports are those which patrol officials have lost track of and were suspected of having been involved in illegal re-entry into the United States. Official notice that the plane in question has been either destroyed or damaged south of the border enables the patrol to conclude its surveillance.

Harlon B. Carter, Southwest Regional commissioner for the U. S. Immigration and Naturalization Service, considers the rapport existing between the FAA and the Border Patrol an excellent example of intra-Governmental cooperation.

"Both th FAA and the Border Patrol are proud, hard-working Governmental organizations noted for their high *esprit de corps* and efficiency," he said. "Motivated by the highest standards of dedication to their respective missions, each has worked closely with the other, thus allowing both to render a higher degree of service to every American." #

NEWMAN NAMED REGION DIRECTOR; LEAGUE TO HEAD AIR TRAFFIC SERVICE

Henry L. Newman

Two top level executive assignments were announced in late January by Administrator N. E. Halaby.

Henry L. Newman, deputy director of the Central Region since November 1961, has been named director of the Southwest Region, succeeding Archie W. League who moves to Washington Headquarters as the director of Air Traffic Service. The two changes will be effective May 1.

In his new post Newman will direct FAA activities in five southwest states —Arkansas, Louisiana, New Mexico, Oklahoma and Texas.

Newman, who has held a succession of key management jobs with the FAA/CAA since joining the Agency in 1946, first entered Government service with the Department of Interior in 1936.

During his career with the FAA, Newman spent 10 years in the Alaskan Region where he served first as executive officer and later as deputy regional administrator. In 1956 he was named assistant regional administrator of the Eastern Region in New York City. He remained there two years, then transferred to the Central Region in Kansas City, Mo., as assistant regional administrator. In 1961 he was appointed deputy director of the Central Region.

As director of the Air Traffic Service, League will head the Washington staff responsible for the safe and efficient operation of the nation's air traffic control system. This system requires 18,000 people and includes 26 air route traffic control centers, 278 airport control towers and 334 flight service stations.

League's association with aviation dates from the late '20s when he operated his own flying circus, barnstorming through Missouri and southern Illinois.

His Government career dates from 1937 when he became an airport traffic controller for the City of St. Louis. He had been director of the Southwest Region since May 1960.

Archie W. League

After progressing through the ranks as an air traffic controller, League was named assistant regional administrator of the Central Region in 1956. After two years in that post he moved to the Washington Headquarters as chief of the Planning Division in the Planning and Development Office.

From October 1959 to May 1960 he was assistant to the director of the FAA's Bureau of National Capital Airports.

AIR DEFENSE DISCUSSIONS

Attending the Conference of Commanders from the Detroit Air Defense Sector held at Selfridge Air Force Base in January were, from left: Kenneth Hollinger, chief, Minneapolis ARTCC; Col. George V. Williams, USAF; George Campbell, chief, Cleveland ARTCC and Group Capt. Wesley B. Hodgson, RCAF.

Eastern Region Engineers Study Present, Future Airport Designs

Present day airport design philosophy as well as ideas for future airport construction were presented in a three-day course to Eastern Region airport engineers in mid-January.

Edward N. Hooton of Airborne Instruments Laboratories (AIL) conducted the course. The text was a 270 page report titled "Aircraft Capacity" developed by AIL under FAA contract.

The report points the way toward more efficient placement and use of runways and taxiways in future airport construction.

Assistant Airports Chief Frank A. Carboine presented certificates of completion to Milton B. Cram, Charles J. Waterman, Daniel F. Cassidy Jr., Thomas J. O'Brien, Henry S. Fairchild, Robert B. Muter, Edward V. Heiskell Jr., N. Wayne Atkinson, Martin A. Warskow, Donald A. George, Robert J. Wood, Harold Smetana, James P. Muldoon and Louis T. DeRose.

AGENCY TAKES OVER FALLON RADAR MAINTENANCE

Next month is moving-in time for Western Region personnel at the Fallon, Nev., radar site as they replace military airmen who, up until that time, have been maintaining the facility.

The FAA has assigned 27 electronics maintenance technicians to the Air Force radar site at Fallon, Nev. as a continuation of the program for joint civil-military use of radar facilities. *(See pages 10 and 11.)*

The joint-use program cuts costs for both the Air Defense Command and FAA by avoiding duplicate facilities and personnel. Since 1956, more than 56 radars have been incorporated into the joint-use program, with an estimated saving of more than $291 million.

The FAA contingent began moving to Fallon last September and since then has been working closely with Air Force personnel at the radar site in an intensive familiarization and training program.

Responsibility for maintenance of the Fallon Air Force radar will be turned over to the Agency in April.

Radar data will be fed into the Oakland Air Route Traffic Control Center, Fremont, Calif., via telephone company facilities, supplementing radar coverage now provided by Battle Mountain and other radars.

Ambitious So'westers Are Flocking Back to School

More than 100 Southwest Region FAAers in the Dallas-Ft. Worth area are going to college on their own time.

Night courses in accounting, English, personnel management,' Spanish, data processing and applied psychology offered by North Texas State University proved so popular that of the 407 Federal employees attending the courses, 117 are from FAA.

Graduate courses as well as undergraduate are now being offered under a program set up between the University, the Federal Executive Board and the Federal Training Council of Dallas and Fort Worth.

Starting last semester, courses were offered at two off-campus study centers. Most of the initial courses were continued for the spring semester and more courses were added. Each class is held for three hours one night a week.

The graduate program started last month on the North Texas State University campus in nearby Denton.

Master's degrees are offered in both government and business administration curriculums.

Controller's Corrective Actions Direct Airline Pilot to Safety

There are times when things "just don't look right" and a controller adopts a questioning attitude. Such inquisitiveness has probably averted many aircraft tragedies.

Recently, in the Western Region, Charles G. Starr, a RAPCON controller at Fairchild AFB, Wash., encountered such a situation.

An airliner was forced to divert to the Coeur d'Alene, Idaho, airport from Spokane because of weather. As it was approaching Coeur d'Alene, Controller Starr noted that the pilot did not seem to be making a normal approach.

After checking bearings with the pilot, the controller advised the pilot that he was apparently using the wrong approach procedure.

The pilot had been using an obsolete approach chart for the homing facility which had been relocated.

In a letter to Starr, commending him for his astuteness, John H. Hilton, chief of the Air Traffic Division, Western Region, stated: "We will never know whether your actions prevented a tragedy in this case or in some future instance if corrective action had not been taken by the airline to update pilot approach charts. We do know that your actions on this occasion were timely and an outstanding example of controller initiative and basic inquisitiveness."

AVIATION MECHANICS WIN NATIONAL FAA SAFETY AWARDS

Harry A. Palmer (center) of Midland, Tex., was the national winner in the general aviation mechanic category. Administrator N. E. Halaby (right) and American Aviation Magazine Editor Wayne W. Parrish honored him.

J. R. "Bob" Schneider (left), an American Airlines mechanic in Tulsa, Okla., who was a polio victim was the national finalist in the air carrier class. Mr. Halaby commended both 1964 winners for their safety contributions.

SYRIANS LEARN NEW TECHNIQUES AT LAGUARDIA

Syrian controllers Omar Kayal and Yassin Bayazud, with binoculars and chart in the LaGuardia tower, get some expert information on traffic patterns in New York area from Arthur Graham, facility operations officer (wearing headset).

Omar Kayal and Yassin Bayazid, air traffic controllers from Syria, completed an intensive 30-week familiarization with air traffic control procedures which included the high-density terminal area of New York's LaGuardia Airport and the FAA Academy.

Kayal and Bayazid, with seven years of controller experience in the Damascus center and tower, were sent to the United States by the Syrian Government for training by the FAA in the latest techniques of air traffic control.

Following a daily schedule of typical tower control activity planned by the LaGuardia staff and supervised by Operations Officer Arthur Graham, the Damascans spent the final eight weeks of their program in this Eastern Region facility. Seventeen weeks of intensive training in the basic air traffic control course for international enrollees at the FAA Academy preceded the Middle Easterners' exposure to metropolitan operations in the busy New York terminal area.

The two Syrians were part of the large contingent of foreign nationals who come to the United States each year for special civil aviation courses which are planned, supervised and coordinated by FAA as part of our Government's extensive program of technical assistance for other countries. In fiscal year 1964, the Eastern Region was host to 83 participants from 23 countries. The Region's air traffic division trained 26 of them in its various facilities.

Controller Learns Weather Lesson on the Water

Leroy Cox, air traffic control specialist, learned the hard way that aircraft pilots are not the only people who must be weather conscious.

The New Orleans controller learned this fact during a sudden storm on Lake Pontchartrain.

Cox and several friends aboard the controller's houseboat, *Happy Hours*, tried to outrun a storm as he saw it approaching but his seven-knot-an-hour craft was immediately overtaken. Dropping anchor to ride out the storm, he first made sure that his guests were all wearing life preservers and then turned his attention to the boat.

Cox was alarmed to notice the boat was dragging anchor and drifting toward the 24-mile-long causeway bridge which only recently was rammed by a barge, resulting in a six fatality bus accident. Desperately, he fired a signal rocket and started out in a nine-foot lifeboat to alert Coast Guardsmen.

A speedboat skipper was attracted by the rocket and Cox borrowed a longer rope for his anchor which slowed the drift. Coast Guardsmen arrived in a rescue cutter, took the houseboat in tow, and battered through the high waves to a sheltered area where Cox and his guests sat out the storm.

In his regular work Cox had made many assists for pilots and he knew that the Coast Guard's rescue, as in his own work, was only routine. But routine or not, Skipper Cox made a vow: Never again would he cause even a routine rescue because he plans to be the most weather-wise skipper in port.

Automobile Replaces Airplanes In Old Los Angeles Tower Switch

The old steel control tower at Los Angeles International Airport—a landmark at the field since 1951—has a new and unusual home.

The 80-foot tower was moved to Riverside, Calif., where it will serve as a control structure for auto races.

The tower became obsolete when the modernistic new 170-foot control tower was placed in operation at the jet-age terminal in October 1961. Airport commissioners who needed additional cargo space put the tower up for sale.

The only bid received was from the Riverside Raceway, which offered to buy it for one dollar. The Los Angeles Department of Airports estimated that dismantling costs would be $3,000 so the one dollar bid was accepted.

Construction men used two 60-ton cranes, each equipped with 110-foot booms, to lower the 20-ton double cab to a flat-bed truck.

In 1951, when the tower was placed in service, controllers handled 500 to 600 daily operations. Today, the remaining tower performs over 1,000 aircraft operations daily.

While the 80-foot tower switches from the world of air transportation to the world of sports, still another old tower remains at International Airport. This is the original, which was part of the airport's first administration building, opened in 1930, when the area was surrounded by bean fields.

Owners of the Riverside track plan to recondition and paint the old tower, and add another deck before it is placed into service. The top cab will be used to control traffic on the race course; the second level will be for the press and the third will be a hospitality deck. The entire job of refurbishing the one dollar tower will cost the race track $50,000.

ALASKAN REGION DOUBLES ITS AERO CLUB FLEET

Wallace L. Stripling (left) and Raymond T. Uhl of Alaska's Airports Division check engine pre-heater on aircraft. Heater is of the catalytic type (flameless) and is used to preheat engines at Anchorage's below zero temperatures.

The fledgling Civil Air Flying Club in the Alaskan Region increased its fleet of aircraft by 100 per cent recently with the purchase of a single-engine, four place Piper *Cherokee* 160B. This followed by a year the purchase of the club's first airplane — a single-engine Piper *Colt*.

Club President Wallace L. Stripling, an engineering technician in the Airports Division, reports that the two aircraft are getting lots of use by the members. Club membership has risen from 18 to 23 and flying time logged totals 472 hours.

The membership fee is $200, which may be paid in installments. Of this, $150 is refundable. Monthly dues are $10.

Ten members are rated pilots. Two trainees have received private licenses and five have had their shirttails snipped—meaning they have soloed. Three more are approaching the flight check stage and five others will begin flying soon.

The new *Cherokee* provides the club members with a choice of aircraft, thereby broadening their flying experience. The hourly rate for the smaller *Colt* is $9 for the first three hours and $7 for any additional hours. Rental for the *Cherokee* is a straight $12 per hour.

Club President Stripling, looking forward to a large increase in membership this year, says, "FAAers should take to flying like ducks to water. Aside from the pleasure it affords, pilot training and flying increases an employee's knowledge about aviation with resulting improvement in job effectiveness," he says.

The Agency encourages establishment of flying clubs and has granted certain benefits under Agency Order OA 3710.4.

Dowling Helps Boost Bay Area Campaigns Over the Top

Thomas F. Dowling, chief of the San Francisco International Flight Service Station, recently was commended for the part he played in putting the United Bay Area Crusade over the top.

Dowling, who is also the San Francisco area coordinator, was co-chairman in the Federal Agencies portion of the fund drive.

Asa T. Briley, chairman of the Federal Agencies campaign and director of the Civil Service Commission in San Francisco, lauded Dowling for his leadership in the drive.

"The valuable role played by you and others is shown by the increase of nearly $20,000 in the contributions of employees this year," Briley stated.

Dowling was awarded the Crusade's Certificate of Appreciation for distinguished public service in support of community health and welfare services.

Aviation Activity Hits New High According to 1964 FAA Handbook

Aviation activity measured by numbers of airplanes, pilots, air traffic and aeronautical exports soared to all-time highs in 1963, according to the 1964 edition of the *FAA Statistical Handbook of Civil Aviation* released recently.

As of Jan. 1, 1964, a total of 87,267 active civil aircraft was registered with the FAA. This number includes 85,088 general aviation (non-airline) civil aircraft and 2,179 airline aircraft. In 1962 the total was 86,287 active aircraft—84,121 general aviation and 2,166 airline.

California led all other states in active aircraft in 1963 with 13 per cent of the total, followed by Texas with eight per cent. Five states had more than 100 active aircraft per 1,000 square miles. These were New Jersey with 219; Delaware, 136; Massachusetts, 134; Connecticut, 126 and Rhode Island, 110. States with 12 or more aircraft for each 10,000 persons were Alaska with 64; Nevada, 17; Montana, 16; Wyoming, 16 and Idaho, 13. At the close of 1963, 378,700 active pilots were on record with the FAA, a big increase over the 365,971 in 1962.

FAA air route traffic control centers handled 10,602,032 aircraft in 1963, a five per cent increase over the previous year. Airport traffic control towers handled 31 million takeoffs and landings in 1963, an increase of ten per cent over 1962. Major gains resulted from general aviation flying activity which increased by 15 per cent over the previous year and accounted for nearly two of every three flights reported by FAA airport traffic control towers.

General aviation aircraft flew an estimated 2.05 billion miles in 1963, compared to the previous year's 1.96 billion. Revenue miles flow by U. S. scheduled airlines in 1963 totaled 1.10 billion compared to one billion in 1962. Revenue passenger-miles flown by the scheduled airlines in 1963 totaled 50.36 billion.

In 1963, 6.9 million passengers traveled by air between the U. S. and foreign countries. A total of 1.7 million traveled by sea. In 1962, there were 6.0 million air travelers compared to 1.6 million sea travelers.

Civil aircraft shipments increased in 1963. The 8,121 units shipped represented approximately a 12 per cent boost over the previous year and the highest number since 1960. Rotorcraft output rose 35 per cent to 413 units in 1963, including 59 turbine-powered, transport-type helicopters.

THREE OF FAA's NEW STANDARD DESIGN VFR TOWERS BEGIN OPERATION

Three of the Agency's 18 air traffic control towers under construction to provide controllers a standardized working environment began operating last month at Lawton Municipal Airport, Lawton, Okla., Anchorage International Airport, Anchorage, Alaska, and Riverside Airport, Tulsa, Okla. They are the first control towers of standard design to be built entirely with FAA funds.

The current FAA construction program includes 15 towers at airports which qualify, for the first time, for airport traffic control service. To qualify, an airport must have an annual operations traffic count of 24,000 itinerant takeoffs and landings. The remaining three towers under construction are replacements at busier airports.

All towers now under construction have a distinctive functional design tailored to air traffic control requirements at visual flight rules (VFR) or non-radar airports. All operating space will be in the supporting structures. Average construction costs, including instrumentation, are estimated at $350,000.

The new FAA towers located at VFR airports will be free-standing, painted white, with a control cab placed atop a pentagon-shaped, steel-frame, supporting structure covered with metal paneling. The structure houses five floors of operating space from the base of the tower up to the tower cab floor. Stairs provide access to the tower cab. Floor-to-ceiling windows are located at each corner of the five-sided tower.

The FAA also will construct a standard concrete-shaft design tower at larger airports which provide both VFR and radar or instrument flight rules (IFR) air traffic control service. These will be built generally at locations which require towers higher than 60 feet and where future expansion of air traffic control facilities is anticipated.

Major advantage in the larger tower is the provision for future lateral expansion at ground level. The base structure of a radar facility will contain the terminal radar control (TRACON) facilities, training room, ready room, administrative offices for the tower chief and maintenance chief and staffs, workshops, and a standby generator to be used in case of power failure.

Both type towers will be topped by a standardized control cab with floor space ranging from 300 to 400 square feet. The larger cabs will be used on towers 120 feet and higher.

The standardized control cab is designed for fabrication in sub-assemblies which can be economically shipped and erected. The cab may be assembled at ground level and hoisted to the top as a unit, or assembled and erected on top of the tower.

Locations where towers are under construction follow: **New Locations—** *California:* Brackett Field, Los Angeles County; Modesto, Napa, Riverside, San Diego (Montgomery); *Illinois:* Decatur, Alton, *Michigan:* Saginaw; *New Mexico:* Farmington; *Oklahoma:* Lawton, Tulsa (Riverside); *Pennsylvania:* Lancaster; *South Dakota:* Rapid City; *Texas:* McAllen; *Wisconsin:* Janesville. **Replacement Locations—** *Kentucky:* Louisville (Bowman); *Pennsylvania:* Reading; *Alaska:* Anchorage (International).

FAA's new standard design VFR tower at Lawton, Okla. stands high over the head of its new chief, James E. Welsh. It is one of a trio put into operation recently.

AFGHAN AT TETERBORO FSS

Abdul Nejrabi, communications supervisor at the Kandahar Communications Center, Kabul, Afghanistan, receives instruction and procedure tips on Transcribed Weather Console from Training Officer William H. Nantz (standing).

Kansas City Center Controllers Turn Ideas into Cash and Awards

Certificates of award and cash awards totaling $1,725 were presented by George D. Smith, chief of the Kansas City Air Route Traffic Control Center (ARTCC), Olathe, Kan., recently in a special awards ceremony.

Paul Hilger received an award for a beneficial suggestion involving modification of equipment. Forest W. Nothnagel and Walter E. Stoecker Jr. received Special Service Awards for services associated with the consolidation of the St. Louis and Kansas City centers.

Newton L. Myers, Alfred A. Hostmeyer, James O. Keyton, James L. Smith, Merlin W. Keplinger, Lynn R. Pruitt, received Sustained Superior Service Awards for their superior job performance.

All award recipients are employees of the Kansas City ARTCC and were commended for their valuable contributions to the FAA.

More on Point Barrow:

VITAL RADIO LINK

FAA's Point Barrow air/ground project (Horizons, February 1965) constitutes an historic first in the civil air/ground communications world. It marks the establishment of the *first* U. S. civil air/ground station employing high powered, ultra-modern single sideband equipment for routine use on an established international air route. It is the first of a number of forthcoming similar modernization steps, all employing single sideband capabilities, planned for accomplishment by FAA in the next few years. Cold Bay is the next station slated for activation on this schedule. It too, will be remotely controlled from Anchorage. Thus the local operation from Point Barrow is only a temporary expedient until completion of remote control circuits to Anchorage, expected in the near future. Upon completion of this new installation, Anchorage communicators will talk directly with aircraft across the vast stretches of water as far as Tokyo.

Watch for another article on Point Barrow and Cold Bay single sideband installations in a future *Horizons* issue.

SOUTHERN REGION TESTS NEW PILOT 'AID' SERVICE

Pilots using the Auburn-Opelika Airport may now file flight plans at this newly installed Airport Information Desk. Checking modern equipment are (from left) Russell Crosby, Walter J. Robinson Jr. and O. L. Patterson.

Three "do-it-yourself" Airport Information Desks (AID) are now in operation in the Southern Region—Auburn, Ala., Lakeland, Fla., and Aiken, S. C.

These contemporary, functional desks, designed for use in the flight service facility testing program, were built at NAFEC from an idea originating in the Southern Region. All told, there are 16 AIDs being tested throughout the Agency.

Each of these unmanned desks is equipped with a direct telephone line to the nearest flight service station, an altimeter, wind direction and velocity instruments, flight planning chart, and flight information materials. The AID installed at Auburn-Opelika Airport also includes a receive-only teleprinter for receiving latest weather information.

After only nine days of testing, the AID at Auburn was averaging 15 operations a day. The present evaluation indicates this new service is being received enthusiastically by airport managers and pilots alike.

Through this system, pilots may receive briefings and file their flight plans. The AIDs are designed to provide more pilot service at small facilities.

Maloy Presents Certificate

Raymond B. Maloy, assistant administrator, Europe, Africa, Middle East (left), presents a special Certificate of Appreciation to William O. Coleman, director of Oklahoma City Airports, for his aid and assistance to the FAA's foreign national training program.

FAA/Air Force Cooperation Saves Teenager's Life

The life of a 16-year-old Tulsa, Okla., boy dangled for more than four hours from a net of invisible electronic threads recently while the FAA and the Air Force joined forces in a fast-paced maneuver to speed a special serum to his bedside.

Doctors at Tulsa's Hillcrest Hospital had abandoned hope of getting the serum from St. Louis, 361 air miles away—and much farther over ice-slicked roads—when a nurse made a desperate 2:24 a.m. phone call to the Tulsa Tower.

"No, there are no scheduled flights from St. Louis," replied air traffic controller John Calvert, who took the call. But maybe there was another way. Calvert and watch supervisor Kenneth Buchanan immediately called the Fort Worth Air Route Traffic Control Center, asking if any planes flying in the Oklahoma-Missouri area could help.

The center, working an Air Force T-33 over Oklahoma City, sent the message flashing through the night to the pilot, Capt. John E. Montei. Could he help?

Montei, a member of the 498th Fighter Group, McCord AFB, snapped back a fast answer—yes, he could, and explained that he was on an emergency flight from Hill AFB, Ogden, to Little Rock, Ark., with a passenger. He'd refuel at Little Rock, he said, and continue on to St. Louis to pickup the serum.

Arrangements were made by the center to have the serum ready, coordinating with Little Rock and St. Louis towers, and the Memphis and Kansas City centers.

The captain landed on schedule at Tulsa where tower controllers had made arrangements for police to rush the serum to the hospital.

The phone call that started the race with death was made at 2:24 a.m.—four hours and 26 minutes later—at 6:50 a.m. the boy received the life-saving injection.

51,548 NEW PRIVATE PILOTS EXAMINED IN 1964

Public interest in private flying took a sharp upswing in 1964, a year in which the Federal Aviation Agency gave a record number of written examinations for private pilot's licenses.

A total of 51,548 applicants took the examination in 1964. It represented an 18 per cent increase over the 1963 total of 44,032. This increase reflects a significant public response to private flying opportunities, since previous yearly increases in the number of applicants for private pilot's licenses were much lower.

The accelerated public interest in flying was attributed by Administrator N. E. Halaby to "cooperative efforts on the part of Government and industry in making private flying safer, easier and cheaper."

Mr. Halaby cited the Federal-aid Airports Program as an example of the Federal Government's effort to improve the aviation facilities available to private flying throughout the nation. "Modernization of airports and the increase in the number of airport facilities for general aviation has done much to increase the utility of private flying," Mr. Halaby said.

"Moreover," he said, "industry has done its part by producing small planes which are less expensive than earlier models, and by equipping them with navigational aids which a significant portion of the general public can afford to buy and learn to operate."

The net result, Mr. Halaby said, has been a gratifying increase in the number of private pilots who are instrument-rated or capable of using modern navigational instruments to insure their safety in the air. As the general public becomes increasingly aware of the extensive national system of air route surveillance by radar and radio navigational guidance, as well as air traffic control services provided by FAA to all pilots, the popularity of flying will show even greater increases in the years to come, the FAA Administrator predicted.

Huskey Assists Flight Standards Move in Alaska

A recent moving day for Flight Standards personnel in the Alaskan Region brought 33 members of the Flight Inspection District Office and 13 air carrier inspection personnel of the Flight Standards District Office under one roof at the Anchorage International Airport.

This is the second move in a year for these two offices. The new offices are a great improvement over the old ones, reports FIDO Chief Harry J. Huskey. "We're right at the airport where all of our work is done and we have plenty of space."

INDIANS VISIT FAA ACADEMY

Training specialists from Bombay, India, recently visited the FAA Academy to study training requirements and curriculum development. From left: J. B. Mitchell, acting director of the Academy; E. G. Menon, technical officer, Central Training Institute; C. W. Mueller, FAA Academy; V. M. Raghavan, school vice president; Neil A. Fox, FAA and N. M. Guha, teacher trainer, Bombay.

Does Iron Bird Fly?

George W. Hiatt, Honolulu FIDO pilot, does some hangar-flying with Tabuia Maungaunga, Gilbertese member of British constabulary on Canton Island.

Third Level Airlines Are Tops In Passenger Hauling Business

Third level airlines are performing in first-class style at the ticket wicket, according to a summary of business in fiscal year 1964 compiled by the National Association of Third Level Airlines.

The 14 third level airlines—scheduled air carriers operating with aircraft weighing 12,500 pounds or less—carried 171,528 passengers in FY '64. How much increase this represents over FY '63 cannot be accurately determined because of incomplete reporting. However, the eight airlines which reported passenger traffic for FY '63 and FY '64 showed a 60 per cent growth.

Tag Airlines, operating between Detroit and Cleveland, was by far the largest carrier, with 60,000 passengers. Next was Reading Airlines with 17,400 passengers carried over three routes—Reading, Pa. to Newark, N. J.; Reading to Philadelphia and Allentown, Pa. and Allentown to Newark.

The third level airlines aircraft fleet consists on 10 single-engine and 39 twin-engine planes. The DeHaviland *Dove* and Beech 18 make up approximately half of the fleet. Other planes used are the *Aero Commander*, Cessna 310, Lockheed 10A and 12A and various single engine Cessna and Piper aircraft.

According to the report there are 276 persons employed in third level airline operations, including 86 pilots, 92 mechanics and 98 administrative and miscellaneous personnel.

'ATTITUDE' SHOULD MOVE ALONG WITH AVIATION

People in the flying business are constantly concerned with "attitude", but normally it isn't considered a problem unless vertigo is also present.

At least one FAA employee thinks that a type of vertigo is affecting personnel of some field facilities in their "attitude" of resistance to change.

Merrill W. Bones, air traffic control specialist at Hutchinson, Kan., feels so strongly about it that he decided to do something about it. Stressing that his comments were not directed to any one facility or group of facilities he has visited, Bones wrote a letter on the subject of "Attitude Improvement" through his boss, Carl H. McCrary, facility chief at Hutchinson, which found its way to *Horizons*.

"This resistance is natural and expected," he observed in a cover letter, "but since our Agency has launched a rather extensive modernization program, this resistance has changed to resentment and fear toward the individual's job and security."

In an open letter to fellow employees, Bones counseled that everyone is caught up in an apparent conflict between his primary responsibility of providing for his family and himself and keeping up with the tremendous changes that are constantly taking place around him.

"If you consider the growth of the aviation field alone it has been of such enormity that the task of our Agency in just keeping even with the growth would have been difficult.

"Everyone involved," Bones observed, "can indeed be proud of having been part of the task of not just keeping even, but of moving out front in order to prove to the aviation industry and all others that we are a dedicated team of men and women intent on doing our job and doing it well."

He sees the task of providing for one's self, and keeping-up, as one and the same. Commenting on the high caliber of people FAA has as a result of its unique requirements and its thorough screening system, he added, "We cannot afford to keep poorly trained or substandard personnel to drag down our forward movement. The aircraft of today, in fact the entire aviation industry, is moving with much greater speed than just a few short years ago and we must have forward-thinking, able men and women to meet these demands. . . We would be naive indeed to think our Agency could begin to accomplish the necessary changes ahead without inconvenience on the part of some of us.

"Before most of us even approach retirement age, the FAA as we know it, will be very different in practically all fields," Merrill Bones' letter to fellow employees continues. "There will naturally be a few positions that will remain almost unchanged, but if you are counting on riding out your time in complete disregard for the changes ahead, I feel you will be in for a big surprise and disappointment. What lies ahead for us as individuals will now be largely dependent upon how we set out to fight, or face, this problem of modernization.

"If we stick to a philosophy of fighting any change that involves a temporary inconvenience or a move for ourselves and our families, or involves making a radical departure from the old concept of how we have been doing things since we started with the Agency, we are only courting disaster."

Soviet Airliner Makes Emergency Landing at JFK

Strong cross winds and turbulence aloft resulted in an impromptu visit of a Soviet *Cleat*, TU-114, to John F. Kennedy International Airport recently.

En route to Havana from Moscow, the pilot of the turboprop passenger transport reported to the New York Air Route Traffic Control Center that the aircraft did not have adequate fuel reserves to continue to Havana, so he requested diversion to JFK.

Escorted by two USAF *Century* series fighter aircraft from the Air Defense Command, the TU-114 with 51 passengers and a crew of 15 aboard, landed at JFK. James Kengetor, air traffic control specialist, worked the aircraft from New York Center by issuing a series of radar vectors to the airport.

Special assistance to the Russians was provided by bi-lingual center controllers John Malushizky and John Badzo, who maintained close contact in Russian with the pilot.

Malushizky and Badzo advised the pilot, among other things, that United States interceptor aircraft would escort him to JFK.

Afer an eight hour stay at the airport, the *Cleat* was fully refueled and departed for Havana with an additional crew of three U. S. Air Force personnel aboard.

Jack Frost Almost Nips VORTAC Crew on Site in the Zuni Range

George M. Lawshe and a crew of Installation and Materiel engineers from the Southwest Region found winter no wonderland when it hit them without warning a few months ago in the mountains of western New Mexico.

They had picked a possible VORTAC site on the Torrivio Mesa in the Zuni Range west of Gallup. Then they moved portable VOR equipment onto the mesa over an old wagon trail and readied an aircraft for a flight-check.

When they turned in that particular night everything was set to go in the morning, but the season's first storm smothered their plans with a snowy blanket. The temperature plummeted and at daybreak Lawshe found the flight-check aircraft frozen to the apron.

For a time there was a question whether the site would be checked at all, and if the equipment could be driven out before the wagon trail closed in, because storms follow one another rapidly in those regions once they start. However, the weather gods gave FAA a break and it cleared and warmed up enough to thaw the aircraft loose from the ground. The flight-check was made, the plane went on its way, and the engineers rushed the equipment down the mountain to a less chancy altitude.

Come spring, they'll go back and construct the permanent VORTAC.

UNION OKAYED

NAFEC Manager William F. Harrison signs formal agreement with representatives of the American Federation of Government Employees Lodge #2335. At ceremony are (from left) Audrey J. Gale, secretary-treasurer; William Perrella, second vice-president; Norman L. Ivins, president; and Clarence Abbott, first vice-president.

ON THE SCOPE

BLANK SHEETS: Mrs. Katherine G. Hughs of CE in Kansas City was awarded $300 for her suggestion that blank sheets be left out of Agency handbooks.

NAFEC: Thomas S. Chopin (right) receives achievement award for outstanding service from Robert J. Shank, associate administrator for Development.

NOW TAPE THIS: Robert L. Haskett, Denver Center controller, was surprised when his wife presented him with a $100 check for his idea to use a portable tape recorder in proficiency training. The surprise was held at the weekly crew briefing.

MASS CASH: Employees of the Aircraft Services Base at the Aeronautical Center received suggestion awards and cash for their ideas at a ceremony in Oklahoma City. From left: William S. Robbins; Louis L. McKenzie; Aaron J. Flowers; Boyce R. Dale; Lawrence E. Duncan; Robert L. Sicard (made presentations); Roy E. Meinecke; Herbert Hardy; John E Burleson; Marvin E. Brown and James H. Robinson.

McBRIDE PC's PRIDE: James A. McBride, chief, Program Planning Branch, ATD, was named "Federal Employe of the Year" for the State of Hawaii.

FORM LETTERS: Mrs. E. K. Smith receives a cash award for her form letter suggestion from Dr. Charles W. McMillin, Central Region flight surgeon.

YOUNG RETIREMENT: EA's ATCS James Young retired from the FAA after more than 42 years of service to aviation. Young began his career in 1932 and was assigned to the Airways Division of the Lighthouse Service. The occasion was a retirement dinner given in his honor in Danville, Va. From left: Mrs. Young, Young and Area Supervisor William C. Welde who presented the FAA Retirement Certificate.

AFTER HOURS

TIME'S NICK: Evan L. Melton (above), Central Region FAA test pilot, beat Old Man Winter by less than 24 hours when he successfully tested these aircraft floats designed by P. T. Kellner, Pee-Kay Aircraft Co. The next day the lake froze over solid for the winter. Five years in design and development, the floats are of compartmented aluminum construction suitable for four and six-place aircraft.

FASHION PLATE: Central Region's Joseph V. Geiger, in Minuteman outfit, is right up-to-date—1776.

SWITCH. Richard C. Young succeeds Col. L. J. Clarke, USAF, as president, Alaskan Chapter, Armed Forces Communication and Electronics Association.

ROOST. From left, eight planes owned by Jacksonville ARTC Center personnel: **Tripacer,** owned by W. H. Sutton; **Cougar,** Robert L. Rorabaugh; **Aeronca Champ,** R. E. Campbell; **Swift,** Roy R. Barlow; **Taylorcraft,** B. B. Foster; **Pacer,** R. W. Gilbert; **Twister,** R. N. Gilbert-D. E. Parker; **Pacer,** A L. Camp.

SCHOLAR: Reginald L. Kimball, electronic maintenance technician, Millinocket, Me., who has completed several Academy and 15 directed study courses, is a commercial pilot and home builder.

SOAR HEAD. Designer and developer Irving O. Prue, Pearblossom, Calif., with his one-place, all-metal, high-performance sailplane, first in a decade to be type certificated under part 5 of the Federal Air Regulations. Western Region issued the certificate for the feather-light aircraft which incorporates a unique dive brake which stabilizes the plane at 120 mph in a terminal dive. Wild blue beckons.

TECH TALK

KEEPING THE TIGER IN THE TANK: Aircraft fires could be drastically reduced through the design and development of crash-resistant fuel tanks, a recent FAA-sponsored study has revealed.

Such improvements could be included in aircraft by adding as little as one per cent in wing weight and production costs.

In California tests run by Convair Division of General Dynamics, San Diego, Calif., under an FAA contract, experimental fuel tanks were deliberately crashed into wooden poles that simulated trees up to 18 inches in diameter. The tanks survived crashes up to 57 Gs without rupturing or fuel spillage.

The study recommended that fuel containment principles be considered during the preliminary design of aircraft, that crash load criteria be established for such aircraft and that the greatest improvement might be gained by selecting areas of low damage probability when the designer has a choice of several locations for placement of fuel cells.

In the area of airframe structures, it was recommended that parts of an aircraft which may be broken during a crash landing, such as engine pods or landing gear, should be designed so that they would not rip open the fuel tanks. It was also recommended that wing tips should be designed to collapse progressively under ground impact rather than breaking off in large sections.

The FAA fuel containment study is one part of its extensive crash-fire test program to reduce the hazards and increase the chances of passenger survival in take-off and landing crashes and post-crash fires.

HANDLE WITH CARE. The next time your home TV throws a tantrum and you are obliged to wiggle out the tubes for a trip to the do-it-yourself tube tester in the corner drug store, consider FAA's Systems Maintenance Service technicians. They have a similar problem. Only bigger.

Among the tubes they wrestle with is the high-power microwave Amplitron, a squat 17 inches tall, 22 inches across and weighing 120 pounds installed, which provides the main output power for the FAA's air route surveillance radar (ARSR) system.

At $3,995 the Amplitron is a bargain since the original price, in 1959, was $5,200. The Amplitron is difficult to make, which accounts for its relatively high price. One out of every four fails manufacturing tests which include output surges of electricity in excess of 4.0 megawatts.

There are 49 ARSR radars in the air route traffic control system and one each at NAFEC and the Aeronautical Center, each equipped with two Amplitron tubes. The tubes have an average life of 4,000 hours, which works out to a cost of about one dollar an hour.

INTERIOR DECORATING. Systems Research and Development Service (SRDS) is taking a fresh, penetrating look at the somewhat cluttered interior of the terminal radar control (TRACON) room, formerly known as the instrument flight rules (IFR) room.

In most cases, the layout of TRACON rooms in the past evolved in a more or less add-on fashion, prompted by the periodic development of new equipment and the revision of techniques and procedures. Three SRDS divisions, Air Traffic control Development, Experimentation, and Environmental Development, have put their heads together to redesign equipment and layout for improved operations.

A laboratory model TRACON room is being assembled at NAFEC under the management of J. Roy Bradley. Actual terminal operating conditions will be simulated and equipment modified in the experimental facility. Four major areas of improvement are included in the program.

- Lighting. Engineers are studying all aspects of room, position and equipment lighting. Through anti-reflection coating on radar displays, better location and shielding of spot lamps with individual intensity controls, and additional lighting for equipment previously unlighted, the TRACON area should be substantially improved.
- Equipment arrangement. Two different layouts have been developed—one for present-day or off-the-shelf equipment and the other for prototype or proposed equipment. Each arrangement will be mounted in both the existing standard FAA console and a new modified console being developed at NAFEC.
- Position arrangement. For facilities operating with three radar positions or less, it appears that the in-line position configuration is suitable. For facilities with four or more radar positions, a back-to-back, U-shaped or elliptical configuration appears to have advantages. The arrangement is similar to those used successfully at Kennedy International Airport and at various FAA/military installations.
- Display devices. This is the area most in need of improvement. Among other items for display and test are backlighted charts, gravity feed tube from tower cab to TRACON to transport strips, use of sheet neoprene to eliminate strip holders, TV weather displays and a new highly improved Telautograph unit.

As part of the development program, actual air traffic problems will be simulated using vertical display consoles beginning in late March, and horizontal "shrimp boat" display consoles early in June.

Then, improvements developed during the TRACON studies will be made available to field installations through the Installation and Materiel Service. Comments on problems with present equipment in individual TRACONs are solicited by SRDS, Air Traffic Control Division, RD-100.

Left, Richard H. Rood works at the type of console now in general use. Right, Project Engineer Robert Mitchell at NAFEC-designed console. Center, Ernest L. Snyder installs cathode ray tube in a simulator console.

YOUR HE...AND SAFETY

EMPHYSEMA CAN BE A KILLER. Chances are that if you have enough breath to say "pulmonary emphysema," you haven't got it. "It," for those who don't have a medical dictionary handy, is considered to be a chronic-noncancerous lung ailment that balloons the lungs and makes them so inelastic that they can't do their work.

A few decades ago, emphysema *(em-feh-see-ma)* was a relatively rare disease. Today, it is one of the leading causes of death and disability in older men. In fact, some fairly extensive investigations showed that about one man in ten develops the ailment.

The report of the U. S. Surgeon General's Advisory Committee on *Smoking and Health* states that a relationship exists between pulmonary emphysema and cigarette smoking. Smoking cigarettes is associated with an increased risk of developing this lung disease.

Edward A. Gaensler, M.D., director of thoracic services at Boston University Medical Center, is more outspoken. "Emphysema would be largely eliminated if people did not smoke. . . ." he said.

The first warning is a chronic cough. Next comes shortness of breath, even after slowly climbing a flight of stairs, walking fast or doing slight physical work. The breathing difficulty may be followed by a bout with pneumonia or some other lung condition. Typically, it becomes progressively more severe, until the patient is short of breath even while sitting or lying.

Unfortunately, little is known with medical certainty about the causes or the cure of pulmonary emphysema. The best that doctors can do at present is to arrest the symptoms—sometimes for as long as 15 or more years. Diagnosis of emphysema, particularly of mild or moderately severe cases, is not simple.

Why not stop smoking and reduce your risk of getting emphysema?

RECOGNIZE CHILD EYE TROUBLE SIGNS. About one out of every four school-age children has some kind of eye trouble. Early detection can prevent or at least lessen many of these visual defects.

FAA families can be on the safe side and put their minds at ease by having their children's eyes tested before the child's third birthday. In many cases some eye conditions, if allowed to go untreated, can destroy or impair vision. Naturally, the judgment of a pre-school youngster cannot be used to tell whether or not he's seeing well—he really doesn't know. Only by professional eye examinations can you be sure of doing the right thing to protect your youngster's eyesight.

Some signs to look for in the pre-school child are:

- He may stumble or fall.
- Show little interest to objects near and far.
- The child may squint, scowl or blink excessively.
- He may say his eyes itch, burn or feel scratchy.
- He may over-reach or under-reach for an object.

In the case of the older child, look for:

- dizzy spells or headaches.
- writing that tends to run off guide lines.
- use of unusual colors in art work.

A booklet on the subject, *Your Preschool Child's Eyes*, is available at 15 cents from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

AFTER AN AUTO ACCIDENT WHAT? Even the most careful FAAer can become involved in an automobile accident. But what should you do after the accident?

To help you remember the following four basic things to do, clip this out and paste it in your glove compartment and hope that you'll never have occasion to use it.

- *Clear the road—warn other drivers.* If you can still drive the car, pull it as far off the road as possible. Turn off the ignition. Stop smoking—gasoline may have spilled. Warn traffic going in both directions by appropriate gestures. At night, light flares which you should have available in your luggage compartment. Ask someone to call the police.
- *Help the injured.* Check the extent of injuries and damage to know what help you'll need. Call for a doctor or ambulance immediately in case of serious injury. If a phone isn't handy, ask a motorist to go for help. Give only as much first aid as you are qualified to give.
- *Get the facts of the accident.* Keep cool. Don't try to place the blame. The police have seen a lot of accidents and heard plenty of arguments. Losing your temper may turn witnesses against you. Be courteous. Give your name, address and driver's license number to the other driver. But sign no statements. Never attempt to settle the accident yourself. Get the names and addresses of all witnesses. If there are police officers present, write down their names, badge numbers and stations.
- *Report the accidents.* Notify your insurance company as soon as possible. If there are personal injuries or serious property damage, telephone or wire them collect immediately. The faster an experienced insurance investigator reaches the scene, the better his chance of getting the facts needed to represent you. Report every accident to your insurance company, no matter how slight, and regardless of whether the other fellow admits it was his fault and says he will pay for the damage. He may change his mind later and sue you. Notify your insurance company even if you are driving a borrowed car and don't think any claim will be made against you. Make out a formal accident report for the police.

These instructions are limited to bare essentials—things you can and should do even under stress. The only way to be sure of doing the right thing is to think about it now—while thinking is easy—and be ready to act in proper fashion.

BEWARE OF GIFTS

Employees are prohibited by law from accepting compensation for Government work from outside sources. Favors, gratuities or entertainment that might affect, or might reasonably be interpreted as affecting, the impartiality of an employee's judgment may not be accepted. This extends to the immediate-families of Government employees. If an employe thinks that a favor or gratuity is being offered as a bribe, he should report it immediately to Compliance and Security. A good name is better than riches and a Government job is worth more than a night's lodging, a dinner, a cigarette lighter, or, in fact, any gift. And while on this subject, employees serving in supervisory positions are also prohibited by law from accepting gifts or presents from subordinates or other employees receiving less salary. This, of course, does not apply to voluntary contributions from subordinates in cases of death or illness, or upon special occasions such as marriage, retirement, etc. It is all spelled out in the FAA Conduct and Discipline Handbook, PT P 3750.1A.

APPEALS AND GRIEVANCES

FAA's appeal and grievance systems offer employees two methods for the discussion of their personnel problems. In the phraseology of the handbook (OA P 3770.2), an appeal is a written request by an employee for reconsideration of an adverse action—a removal, suspension or demotion. A grievance on the other hand, is a written request for consideration of a matter that is not an adverse action and which cannot be solved by the immediate supervisor. Both provide the employee the right to request a hearing, conducted before a hearing officer who reports directly to the Administrator. In no other Agency does the hearing officer report directly to its chief executive. The appeals system assures a fair and impartial review of any decision with which the employee takes issue; it gives the official who initiates the action and the employee against whom it was taken equal opportunity to present his side of the question—the one to say why his action should be supported, the other to say why it should be modified or rescinded. Although it is possible for a grievance to reach the hearing stage, it is usually settled informally through frank discussions at various supervisory levels. The grievance system gives employees a chance to speak their minds when they feel they have reason to do so and management the opportunity to uncover and remove sources of dissatisfaction. Final decision on either a grievance or an appeal is normally made by the employee's regional director, center manager, or head of office or service. However, if any of these preceding officials personally *took the adverse action,* his *supervisor decides the appeal.*

NEW CAREER SERVICE EMBLEMS ADOPTED

The Agency has adopted four new career service emblems which are distinctly FAA-oriented and will replace the 18 (nine for men, nine for women) standard government-issued pins now in use. The emblems will be awarded in four increments—completion of the one-year trial period, acquiring career status after three years, and at the 15 and 25 year levels. The one-year emblem is all bronze; the career-status emblem has a bronze seal with white and FAA-red enamel trim; the 15-year emblem is sterling silver with white and FAA-red enamel trim and the 25-year one is a gold-filled seal with white and FAA-red enamel trim. The new emblems do not have specified years of service on them—one of the reasons why the old pins were discontinued—but the material used indicates the stage of career progress. Until the new emblems are available, however, the numbered pins will be presented to FAA personnel at appropriate service levels.

EMPLOYEE APPRAISALS FORM TESTED

Taking a fresh approach to the important matter of appraising employees, the Office of Personnel and Training (OPT) has devised a system that wraps all six FAA evaluations into one package. The plan, which uses a single form and staggers reporting dates, is now on a six-month trial run in the Southwest and Pacific Regions and at selected units at the Aeronautical Center. If it is successful —and OPT has high hopes—the system will be adopted Agency-wide.

Meanwhile, an abbreviated version went into effect on Feb. 1 throughout the rest of the Agency.

Before that date, supervisors had to complete four formal appraisals annually on four different forms—*Performance Rating* (outstanding, satisfactory or unsatisfactory); the *Personnel Data Summary* (for promotion plan purposes); the *Acceptable Level of Competence* and the *Training Requirements Evaluation.* The new method combines the first three into a single form and uses as an appraisal date the anniversary of the employee's most recent pay action—appointment, promotion or step increase. This has the effect of staggering the process over a 12-month period.

Of the three remaining evaluations, the *Training Requirements Evaluation* is given annually to determine proper training needs. The others, *Career Planning Evaluation* for long-range potential, *Evaluation and for Quality Within-grade Increases* or *Sustained Superior Performance Awards,* and are currently suggested appraisals but will become mandatory in the one-for-six arrangement.

The new appraisal machinery got off to a good start after supervisors and employees jointly established written job standards under the guidance of field personnel and training officers. Job standards will be continuously updated as the program progresses.

The modernized appraisal procedures are expected to bring about better employee-supervisor relationship and understanding, more effective and efficient management and a personnel program geared to results.

Not only has FAA's new anniversary rating date concept been approved by the Civil Service Commission, but the entire package also got the green light from the two national employee groups who were formally recognized at that time.

CHECKING OUT IN A JET

When executive aircraft moved into the jet age, FAA specialists kept one step ahead of industry in being ready to certificate pilots in the new planes. George N. Masterson, operations specialist at the Oklahoma City General Aviation District Office, is one of the early birds qualified to check-out pilots in the sleek jets. So far, he's the only FAAer authorized to give flight checks in the new **Jet Commander.** This sequence shows him working with Chief Pilot George Dippel of Timken Roller Bearing Co., whose company took delivery of the first **Jet Commander** to be used by industry. Clockwise, from right: Dippel answers Masterson's (back to camera) questions about the jet engine. ● Masterson (left) puts Dippel through thorough quiz on the **Jet Commander's** system. ● Cockpit check follows. In the oral, written and practical tests Dippel demonstrates what he learned in two weeks at the factory school. As part of the school program he logged 15 hours with factory instructors. ● Veteran pilot Dippel had no trouble flying the frisky jet that handles like a fighter. Following successful results of the final check ride, Masterson hands Dippel his type rating. ● It's all his—Chief Pilot Dippel gets airborne in the executive twin-jet.

FAAers ON THE JOB

Betty P. Gatliff

Here's a young lady who gets right down to the bare bones of the matter. As a medical illustrator at the Civil Aeromedical Research Institute, Oklahoma City, she and a colleague, William V. (Bill) Flores, prepare meticulous color slides and drawings for CARI scientists and doctors. Hand rendered art is preferable to photographs in many cases because extraordinary detail can be worked into the illustration and attention focused on a specific area. Extraneous material can be stripped away, cutaway views provided and a sequence of procedures diagramed. Miss Gatliff, an art major graduate of the Oklahoma College for Women, finds carving walnut wood a relaxing hobby.

Kenneth D. Rock

Capitalizing on typing and shorthand which he learned in high school, Kenneth D. Rock decided early in the game that he wanted to be a stenographer and that is exactly what he is today. He is clerical assistant and secretary to the Chief of the Operations Branch of the Southwest Region's Airports Division. It's Rock's suspicion that he is one of the very few male stenographers in the Agency. In World War II his ability with shorthand pad and typewriter was put to good use by the U. S. Army when he was assigned to a prisoner of war interrogation team in Africa and Europe. Before joining the FAA in 1950 he was employed by the War Assets Administration.