

FAA HORIZONS

FEBRUARY 1964

OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY



FAA HORIZONS

FEDERAL AVIATION
AGENCY

FEBRUARY 1964

FAA HORIZONS, the official employee publication of the Federal Aviation Agency, is published monthly by the Employee Information Division in the Office of Information Services. Articles of interest to employees on an Agency-wide basis are welcome. They should be addressed to: Editor, FAA HORIZONS, 1D-40, Federal Aviation Agency, Washington, D.C. 20553 Tel. No.: WO 2-9574.

FAA HORIZONS



COVER: The Federal Aviation Agency building at 800 Independence Avenue, S.W., Washington, D.C., is a contemporary structure of glass and marble, 10 stories high, two blocks long, topped off by a roof-top heliport. Its completion, late in 1963, brought together for the first time, some 3000 Headquarters employees.

EDITORIAL: *The Public's View of FAA*



Arvin O. Basnight, Director
Southern Region

From where I work, there are no pat answers as to "how the public sees us." However, in the Southern Region, we are not satisfied with an attitude created by some—that "you are the group proceeding in a straight line from an unknown assumption to a foregone conclusion."

In writing about this subject, we are motivated only to stimulate thought—and from the indications available, I think the FAA has a good image. However, this is not necessarily an accurate indicator, and I submit there is continuing need to improve the Agency's public image—its view of FAA. We might, therefore, consider this article a *critical acclaim*, a stimulant to our desire for a superb agency.

How may we proceed? Perhaps, by applying the now famous philosophy—"Ask not what the Agency can do for you, but what you can do for the Agency."

Let's orient this question to ourselves—the individual worker—and the broad area of supervision that spans the Agency between the Administrator, the Executive Council, and the journeyman workers. I submit that we move forward at a rate proportionate to the momentum each of us creates. We have clean, clear goals. It is generally agreed that these goals are sound, desirable; and, if effectively implemented in all areas of the Agency, there will result a service second to no Government Agency.

I am convinced we have a dedicated, willing work force, ready and able to implement the objectives when they are clearly communicated, and there is a better understanding in the minds of all members of our team.

I suggest several challenges to our supervisors, managers, and implementers—that may improve the quality, the image, the performance, and the public appreciation of our services.

First, I suggest we correct our internal misunderstandings—for the biggest conflicts we face seem not to have been waged for *ideals*, but rather for one *opinion* against another. We have a formal organization that leads, communicates, and bears the burden of any poor performance, but our collective energies oftentimes are dissipated through misunderstandings between the policy level and the workers.

Do we have our supervisors well enough informed? Can you think of instances where our supervisory people have not been well informed and the efforts of the Agency were sapped?

On the other side of the coin—why is our image generally good? What do we have? Almost 46,000 well-qualified human beings—nearly all of whom want to do a good job . . . a mission of safety, a primary requisite of mankind . . . some very good equipment, and plans for more . . . a formal organization—the understanding of which is improving . . . a considerable ability to communicate and develop understanding through our formal type organization . . . and a concept that our Administrator's office is at least superhuman.

It is in our individual and collective self-interest that we respect and develop the public's view of us for we are involved in assuring the public's air safety, and nothing short of the best effort from each employee in *every environment* will produce a satisfactory product.

Where can we do better? Have we more pride in traditions, prejudices, old concepts, and do we have more just plain "rebels" than we really need? Have we loyal supporters who create positive public opinion through professional associations, news media, special columnists?

What is to be done about these things? One of the best approaches, in my opinion, is through having each of our employees fully realize that he creates a public image that actually is interpreted as being the Agency.

There are other important efforts being made which each of us can help make effective. They include: (1) developing an open-minded attitude; (2) appreciating the fact that all taxpayers are entitled to be listened to, and the users of our services have opinions that should be seriously considered; (3) recognizing that growth will come from more use of aviation—so self aviation in a broader arena than the aviation interest; (4) improving the surveillance of our services from both the "pilots' appraisal and developing the proficiency in using resources, and (5) concentrating on doing things the way they *should* be done rather than the way they *have been* done.

With these and other improvements, we will have a disciplined—high performance—superior Agency deserving and enjoying a most favorable public image.



800 INDEPENDENCE AVENUE

Light floods the building through a thousand windows that open on the spectacular panorama of Washington—the Capitol dome, the tree-lined Mall; the National Archives, The Museum of Natural History, the National Gallery of Art; older Government departments—Labor, Commerce, Agriculture; the flag-ringed Washington Monument. In the distance are the Jefferson and Lincoln Memorials, with the historic Potomac beyond.

In this setting, supported by 36 massive columns, Washington's new FAA building is an arresting picture of glass and marble, functional and beautiful. The front entrance faces Independence Avenue in the southwest section of the city; the back entrance, C St.; 9th Street is on the Western boundary and 7th the eastern. It is 433' long; 213' wide, and nearly 150' high, with 10 stories above ground and two below.

Immediate neighbors are the modern, streamlined National Aeronautics and Space Administration, the venerable Smithsonian, and a utilitarian red brick structure used by the Armed Forces Medical Museum, as diverse a group, architecturally, as it might be possible to assemble. There are also some vast parking lots, a few tempos and, across the railroad tracks to the rear, the huge, weather-beaten General Services Administration Regional Office building.

Approaching the building from Independence Avenue, the visitor gets an indication of its true size. A feature that adds to its imposing dignity is the recessed ground floor that

creates a broad arcade on all four sides. Wide steps, flanked by 100' flag poles, one flying Old Glory and the other the Agency ensign—the FAA seal on a bright red field—lead into the lobby through double glass doors. The lobby floor is of neutral tile, the walls are glass and marble, and marble columns extend to the ceiling of the second floor which is divided into two parts by an open walkway about 15' above the ground.

On either side of the reception desk stand FAA directories, one listing by name the Administrator, Deputy Administrator, Assistant and Associate Administrators, Office and Service heads and their deputies. Another carries an organization chart and photographs of Washington management, the Regional Directors, Managers of the Aeronautical Center and NAFEC. Backing both directories are detailed floor plans, color coded.

In the lobby there is a personnel office where prospective employees are screened; an exhibit area, the mail room, an FAA Procurement Information Office and a room equipped for the press. Escalators give easy access to the second floor, to a cafeteria that will seat 800 persons, a table and chair snack bar, and the executive dining room. There is another snack bar on the 5th floor, and on 3 through 10, vending machines for beverages and cigarettes.

A little more than three years from the date the invitations to bid were released (November 1960), the building had become a reality and the "big lift" from 1711 New York

Avenue, the Columbian Building, the Mather Building, and Temporaries 3-4-5 was accomplished. The going had been rough at times, the path thorny, but from beginning to end the road to 800 Independence Avenue was an exciting and challenging one for those that followed it—architects, engineers, designers, and the 20 or more members of the FAA Task Force that sweated out the whole thing.

Of the multitudinous problems that beset everybody in those 36 months, the biggest frustration was space. How was the FAA to house 3,900 bodies in a building designed for 3,200? Originally the Agency was to have had some space in the new NASA building but this was soon cancelled.

First plans called for traditional quartering of executives in private offices around the building's perimeter, and the traditional system of corridors leading to and from them. But when one of many studies showed less than one-fourth of the traffic flow within the building would be directed to the private offices, an idea was born.

After struggling with its possibilities, and after countless hours of alternate discouragement and hope, another plan was developed—something new and different for a government building. It was the "core concept"—at once economical and practical. It reduced to a minimum the space-consuming corridors; placed most of the private offices in the central section, the staff in the periphery. This one action saved thousands of feet of space and made it possible to bring the full headquarters complement together under a single roof.

By-product of the new "core concept" was a system of flexible office areas. Out went stationary plaster and wood partitioning; in came movable walls of metal and glass. Because they are movable they provide easy and economically sound ways to meet changing requirements without disarray and loss of time, not to mention money, that goes with tearing down and putting back fixed partitions.

Conference rooms, training rooms and miscellaneous areas follow the same design. Multi-purpose conference rooms seating 90 persons are centrally located in the core on the 5th, 6th, 7th, 8th, and 9th floors. These may be subdivided into three smaller rooms by the use of folding partitions. The Library, on the 9th floor, is bright and efficiently laid out. The Executive Staff Conference Room, located on the 10th floor, is unusual—drum shaped, with teakwood panels, and acoustically so right there is no need for microphones.

The auditorium will seat 211; it has special lighting, a

public address system, acoustical walls and projection room.

Following further the new space-thinking (taking into consideration the history of growth and change that has affected FAA down to its smallest sections), the principle of interchangeability and flexibility was applied to the new furniture purchased for the 10th floor down to one-half of the 6th; (refurbished used furniture is used everywhere else and will be replaced gradually over a five-year period). Described as "modular furniture" the new units are identical in size and utility value, permitting the Agency to expand, contract, or shift various elements with the least possible upset, so that from now on a move from one part of the building to another will be a move of people—not furniture.

Actually the building's architectural design, plus the determination to have all employees together did not permit use of the traditional oversize executive furniture. Most furniture was declared surplus and is now being used by government agencies having more spacious offices.

Before the FAA could proceed with these innovations, arithmetic had to prove them economical. The initial cost would run higher than conventional construction, BUT; alterations would be forever negligible, and the Agency was saved the tremendous cost of renting space elsewhere. For example, the 142,000 square feet the FAA was to have occupied in the NASA building would have cost an estimated \$6 per square foot or \$852,000 per year. This savings will be amortized in under four years, and does not take into account the savings on re-shuffling partitions and concomitant costs. A point to be made while on the subject of economy is that the original appropriation for NASA's building and the FAA's was \$38,326,500. Total spent for the two: \$30,012,335.

As blueprints came off the drawing boards it became evident that some very special consideration needed to be given the staff areas. Better than an acre of open space was left on most of the floors after the central core had been filled in. While this acre permitted a very high degree of flexibility, something had to be done to relieve the amorphous feeling of lost identity that could be brought on by the sight of desks extending straight ahead in rows for two whole blocks.

The answer here was color, a totally integrated color scheme, that would not cost the government any more than the use of a single standard color. Basically the building's interior walls are a rather muted gray, and the color is in

accents, and in addition to its eye-appeal it has a very practical value, a sort of visual system of traffic control. Receptionists give visitors a small paper swatch that helps them identify their floors and move about without getting lost. While the floor plans in the lobby are color keyed, and color permeates all the dining areas on the second floor, the color plan does not actually begin to work until the third floor is reached.

The third and fourth floors are done in yellow; the third in lighter and the fourth in darker shades and this pattern is repeated as the building rises; greens on the 5th and 6th floors; blues on the 7th and 8th, and tones of international orange and red on the 9th and 10th.

Using the darker blue as an example, when the elevator doors open to the eighth floor, the wall opposite is painted in deepest blue, and throughout the floor blue appears in various shades and intensities on upholstery, rugs, doors, and walls.

This creates a highly diversified environment which breaks down the atmosphere of mass housing found in most large government buildings. Personnel on one floor while physically living under the same conditions as on any other floor, retain a degree of individuality.

Need for the new FAA building is highlighted in a report to the President by his *Ad Hoc* Committee on Office Space which stated that "lack of adequate, modern permanent facilities for Government agencies has obliged the Government to lease expensive privately-owned space on a large scale. . . . Virtually all of the space in the temporary buildings is substandard, together with a substantial portion of the leased space. Overcrowding, poor lighting, and poor ventilation are not conducive to efficient work performance. . . ."

Policy guidelines on Federal architecture included in that report state that "major emphasis should be placed on the choice of designs that embody the finest contemporary American architectural thought. The development of an official style must be avoided. Design must flow from the architectural profession to the Government. The policy shall be to provide requisite and adequate facilities in an architectural style and form which is distinguished and which will reflect the dignity, enterprise, vigor and stability of the American National Government. . . ."

The new FAA building meets all the policy guidelines for Federal architecture laid down in that report.

G. H. Weitz, B. S. Selteneich, J. L. Hemingway of Flight Standards, discuss maintenance.

Cafeteria will seat 800. The atmosphere is colorful and cheerful. Good company, good food, music—who could ask for anything more?

Four fast moving lines take care of the hungry between hours of 11:30 and 1:30.

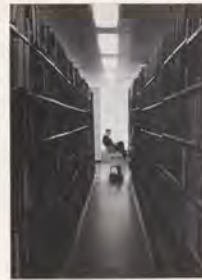


FAA Horizons

Elaine Mack checks references in library, a treasury of aviation information. More than 80,000 books, periodicals and reports are available here in this one-room "university."



Concentration is easier away from telephones. W. R. Andersen in law library.



Informal conference. D. D. Thomas and B. J. Vierling.



Bernadette Wojtowicz at reception desk, hands visitor a "flight plan."



Section of open area surrounding "core." Rear wall is entirely of glass.



From start to finish, Mary E. Healy, HQ-2, directed building's progress.

"TIGHTROPE" CLUB MEMBERS FORM UNIQUE GROUP



A dozen top-level Federal regulators have been quietly trying to do something about the old complaint that one hand of Government never knows what the other hand is doing.

In sharp contrast to days when the head of one agency wasn't even a nodding acquaintance of another, these key officials have formed a social club.

The club, which meets the first Tuesday of each month, has no officers, no rules, no dues and no headquarters. It makes no decisions. It does, however, have a name. Members call it the Tightrope Club.

And these 12 men on a tightrope do have one goal, "to be fair and graceful under pressure," as one member put it.

Project Tightrope was the name given to a 1961 study of the fairness of FAA regulations by a panel of outside experts. The tightrope-walking (represented by club's symbol shown above) involves the balancing of the sometimes-conflicting interests of the branches of Government with the right of the industry and individual under regulation.

Members are reluctant to talk about Tightrope. They fear the inevitable cry that someone is trying to create a "super agency" or wants to conduct the public business in secret. They insist that their purpose is to air broad philosophical questions which critics of the agencies often charge are never tackled.

Although Tightrope is virtually unknown in most of official Washington, the Club began meeting early in 1962. It began with the chairmen of the agencies that regulate transportation and communications.

Federal Aviation Administrator Najeeb E. Halaby and former Federal Communications Commission Chairman New-

ton N. Minow found they had common if not overlapping problems. Alan S. Boyd, Chairman of the Civil Aeronautics Board, joined the club's nucleus. His agency and the FAA have so many areas of overlapping jurisdictions that the public is often confused about which agency does what in aviation.

By word of mouth the notion spread. Dan H. Fenn, Jr., former White House recruitment chief and now a member of the Tariff Commission, liked the idea and was asked to sit in on the meetings.

These agency heads joined in: William Cary, Securities and Exchange Commission; Paul Rand Dixon, Federal Trade Commission; John W. Macy, Civil Service Commission; Glenn T. Seaborg, Atomic Energy Commission; Joseph G. Swidler, Federal Power Commission, and Laurence K. Walrath, Interstate Commerce Commission.

The other two members are Budget Director Kermit Gordon and Deputy Attorney General Nicholas Katzenbach. FCC Chairman E. William Henry has replaced Minow.

Tightrope has met in the Metropolitan Club, the Lawyers Club, the Executive Office Building and elsewhere. Members take turns as host and frequently invite prominent officials to sit in. Guests have included key congressional committee chairmen, a Federal judge who is an expert on administrative law and Attorney General Robert F. Kennedy.

All the regulators found they had questions for Macy, whose Commission has the duty of ensuring fair play for career Federal employees. Each regulator found also that Katzenbach's views on anti-trust law shed some light on the duty of each agency to protect industry from monopoly control.

The late President Kennedy was said to have approved the group idea and to have wanted to sit in once or twice. The latest invitee was President Johnson, who in turn asked the group to meet with him at the White House. The invitation was extended later to include half a dozen other agency heads some of whom were unaware of Tightrope.

The group heard impressive advice on how to walk a tightrope. President Johnson warned that regulators often are subjected to immense pressures, which should be honored when they are honorable but rejected when not.

"Let the venal and the self-seeking and the tawdry and the tainted fear to enter your building and fear even to knock on your door," the President said.

Mel Gough Saw Aviation History Created During 37-Year Period



Melvin N. Gough

When Melvin Gough started in aviation, the Ford Tri-Motor had just completed its maiden flights, the scheduled airlines were being formed to carry the mail, and President Coolidge signed into law an Act of Congress creating the first predecessor of the FAA.

That was in 1926, when Gough, fresh from Johns Hopkins University began work for the former National Advisory Committee for Aeronautics, now NASA.

At the end of December Gough retired as Director of the FAA's Aircraft Development Service, ending a 37-year Government career in aviation.

Gough began with NACA as an engineer, but took a leave of absence and learned to fly with the U.S. Navy at Pensacola, Fla. He then became a test pilot for NACA and from 1939 to 1943 was the Chief Test Pilot.

In 1943, Gough was made Chief of the Flight Research Division at NACA's Langley (Va.) Research Center. Then, when NACA became the National Aeronautics and Space Administration, Gough became Director of the Agency Operations Office for the Atlantic Missile Range.

Gough left NASA in January 1960 to become Director of the Bureau of Safety at the Civil Aeronautics Board. He held this position until May 1962 when he joined FAA as Director of the new Aircraft Development Service.

Gough leaves behind him a trail of honors and commendations—among them the Octave Chanute Award in 1941 for his flight test work, the Flight Safety Foundation Award in 1956 for distinguished service in achieving safer utilization of aircraft, and the Laura Taber Barbour Air Safety Award in 1960 for his work in improving air safety.

QUESTION BOX

Q. To whom should I submit a beneficial suggestion?

A. Employees should always submit their suggestions through their supervisors to the appropriate Recognition and Awards Coordinator within their respective divisions.

Q. If I make an oral suggestion, which results in improvements within the FAA, am I eligible for an award?

A. Yes. The fact that the employee used informal channels should not deprive him of an award. However, in such cases the supervisor should assist the employee in documenting his suggestion and should then forward it for award consideration to the appropriate Recognition and Awards Coordinator.

Q. What happens to a suggestion that cannot be evaluated or adopted within the Eastern Region?

A. If your suggestion cannot be evaluated or adopted locally, the appropriate Recognition and Awards Coordinator will forward your suggestion to the Coordinator of the appropriate service or office in Washington Headquarters, NAFEC, Aeronautical Center, or other Region for evaluation and appropriate action.

Following evaluation, the suggestion will be returned to the local coordinator who referred it. He shall then process the suggestion to its completion.

Q. I have on many occasions recommended to the Classification Branch titles for positions under my supervision which I believe are most descriptive of the work being performed. Why have they not been accepted?

A. The only position titles that may

be used for official personnel budget and fiscal purposes in the Federal Government are those authorized by the United States Civil Service Commission Position Classification Standards, by Agency Guides, or, in certain instances, by local determination in accordance with specific agency criteria and instructions.

Q. Who is entitled to Veterans Preference in filing for Civil Service examinations and what benefits do they get after they are employed by the Federal Government?

A. Under the Veterans Preference Act of 1944, there are two classes of veteran preference: 5-point and 10-point.

(1) Five-point preference is given to honorably separated veterans who served on active duty in the armed forces of the United States during any war, or during the period April 28, 1952, through July 1, 1955, or in any campaign or expedition for which a campaign badge or service medal has been authorized (The official dates for World War I service are April 6, 1917—July 2, 1921; and for World War II service are December 7, 1941—April 28, 1952.)

(2) Ten-point preference is given to an honorably separated veteran who served on active duty in the armed forces at any time, and who has a service connected disability or is receiving compensation, disability retirement benefits, or pension under laws administered by the Veterans Administration, Army, Navy, Air Force, Coast Guard, or Public Health Service. For instance a veteran who has been awarded the Purple Heart for wounds

received in action is considered to have a service connected disability.

Under certain conditions wives of disabled veterans, widows of veterans, and mothers of veterans may also be entitled to ten-point preference.

Persons who establish veteran preference and make passing grades on civil-service examination have 5 or 10 points added to the scores they make in open, competitive examinations for appointment to jobs in the Federal Civil Service.

Preference Veterans employed by the Federal Government are entitled to additional benefits such as:

(1) Active military service time is creditable in computing years in service towards retirement.

(2) Active military service time is also used in determining the amount of annual leave hours you accrue.

(3) Employees who are veterans are entitled to certain job retention privileges in the event of a reduction in force program. **NOTE:** Persons who entered on active military duty on or after July 2, 1955 are not entitled to veterans preference unless they have served in a campaign or expedition for which a campaign badge or service medal has been authorized. Those not entitled to veterans preference, however, are granted the benefits shown above for preference eligibles under paragraphs (1) and (2), if employed by the Federal Government. Although they are not entitled to all the benefits shown in paragraph (3), time spent on active military duty is credited in counting total number of years service for retention purposes in the event of a reduction in force.

AWARDS GIVEN FOR SUGGESTIONS AND FOR GOOD EMPLOYEE RELATIONS



L. I. Pearce, Supervisor of the Washington Air Traffic Area Office presents a check to John Lindstrom, Richmond Tower, for suggesting a detailed, yet simplified, training guide for local control position.



Alien E. Taylor, Military Coordinator for the Washington Air Traffic Area Office, presents a check to Joe Bennet, ATREP, Oceana NAS, for suggesting simplified posters and slogans for air traffic control.



L. I. Pearce, Supervisor of the Washington Air Traffic Area Office, presents plaque to Chester Watson, Chief, Washington Center, for outstanding achievement involving personnel at the Washington Center.

ALBANY GADO VISITS SUGARBUSH GLIDER MEET

"As a fellow soaring enthusiast, we would like to invite you to participate in the first annual Green Mountain Wave Soaring Encampment to be held this year during the last two weeks of October here at Sugarbush Valley, Warren, Vermont.

"The encampment is being sponsored by our Sugarbush Soaring Club and will be the first group meeting to take advantage of the previously unexploited conditions considered by experts to be the finest wave conditions in the eastern U.S.A."

With invitation in hand, red-blooded Al J. Nogard, Supervising Inspector, Albany GADO, and also one of FAA's glider enthusiasts, decided to make ski-famous Sugarbush Valley a stopping place in his itinerary. His invitation to visit Sugarbush lived up to expectations.

During the two-week meet, more than 50 flights reached an altitude in excess of 10,000 feet. More than 256 tows were made with 35 U.S. pilots and about 25 Canadian pilots participating. The meet also attracted gliders from Poland, Canada, Germany, Sweden and France, lending a true international flavor. One Canadian pilot averaged seven hours a flight, while another averaged four hours a day for 10 days. A Vermont record of 13,500 set by Stewart Schweitzer last August was broken at the beginning of the meet with an altitude of 15,300, followed by another record-breaking flight of 19,300 feet by Ben Green of North Carolina.

Vermont Governor Phillip N. Hoff and Vermont Aeronautics Board Commissioner Ed Knapp attended the meet, with Governor Hoff being one of the first to soar.

Nogard summed up his visit to Sugarbush as a "most interesting development" in soaring and gliding and looks forward to the next meet.

Inspectors Nogard and Egge, Albany General Aviation District Office, inspect a release hitch.

Vermont's Governor Hon. Phillip N. Hoff, a glider buff, readies for a flight with George Arents



An English Skylark Glider at the Sugarbush Valley Meeting.



Foka Glider from faraway Poland is preparing for takeoff.



When glider is positioned controller will signal for takeoff.



Talking things over. Above: Bernard Charis, winner of Gold Altitude Award. Below: Charis, J. Murphy, President of Sugarbush Assn. (center) and J. McCone, Manager of Meet.



FAA Horizons



Family affair. Director and Deputy Director exchange Christmas greeting with I&M personnel.



Interior lobby, J. F. K. International Airport.

'Twas the Season to Be Jolly . . .



Flight Standards group entertains Regional Director, above. The Director wishes Weather Bureau Assistant Chief S. Smith and staff a Merry Christmas.



Eastern Region's offices and facilities underwent a bit of a face-lifting during the last few weeks of December. Ordered by Santa, the face-lifting saw Christmas trees, large and small, suddenly sprout up, while tinsel and ornaments brightened up spirits and offices. EA's towers and centers sent out special NOTAMS giving Santa permission to light the skies during the night of the 24th, and early morning hours of the 25th.

Santa received loads of help from FAAers with some facilities donating to special community drives, while others sent donations to the needy instead of sending Christmas cards. Some of Santa's extra suits were donned by FAAers and New York Center sponsored an orphanage, with a present to each orphan and a large screen TV set for all. While the order of the day was "business as usual," amenity hour gave employees an opportunity to visit friends and wish all a "Merry Christmas."

Christmas Eve in New York saw regional personnel tuned to the ceremony renaming New York International Airport the "John F. Kennedy International Airport." At the same time, preparations were underway to rename New York International Tower "Kennedy Tower."

Staff photographer Tony Figurella made his usual rounds at the airport, catching some of the prevailing Christmas spirit. His photos help tell the story of the 1963 Holiday Season!



Meet Carol Laubach, Lucy Schipani.



Pretty peeper is Janet Hoelldobler.



AT's Barbara Rossol and D. Gluckman.



Kennedy Tower glitters in Xmas glow.

ADP PROGRAM KEEPS PERSONNEL WELL INFORMED

In the spring of this year Eastern Region conducted its first after-hours course in the "Fundamentals of Automatic Data Processing." The success of the undertaking and the great interest shown by Regional personnel prompted ATD to initiate a second ADP seminar.

On November 13, 1963 the second seminar was started, attended by 24 volunteer specialists from the Air Traffic, Installation and Materiel, Accounting, Administrative Services and Flight Standards Divisions. The course was conducted at the Regional Office after work hours, two nights a week from 5:00 to 8:00 p.m. Eugene Klausman, Remington Rand Univac Systems Analyst served as instructor with respect to the technical aspects of the curriculum. I. Goode, ATD Special Projects Officer for Automation, developed facets of the program dealing with adaptation of data process-

ing techniques to the Air Traffic Control System.

To enable practical demonstrations of automatic data processing, a Univac 422 computer was provided in the classroom by Remington Rand. The computer made it possible for the class to see practical results based on classroom theory.

The curriculum was divided into three basic topics:

1. Input/output equipment
2. The central data processor, and
3. Basic programming concepts

The class wrote and coded elementary computer programs which were subsequently run on the Univac 422 computer.

With the daily implementation of automatic data processing techniques into Agency programs, seminars such as these serve to keep FAA personnel "in the know" in the technical field.

DIA Club Gets Charter No. 3642 From Toastmasters International

The Dulles International Airport Club #3642 of Toastmasters International was presented its official Charter on October 22, 1963. This newly formed club is composed of personnel from Dulles Tower, airlines serving Dulles, U. S. Weather Bureau, and residents of the local area.

Toastmasters International is a worldwide organization dedicated to helping untrained speakers in all walks of life. Toastmasters is an excellent form of management training and a means for educational improvement at all levels of supervision.

Club Officers for the next six months are: President, John Curran (Chief, SMS 316); Educational Vice-President, Walter Britton (Chief Controller, DIA ATCT); Administrative Vice-President, Calvin S. Fischer (Radar Section Chief, SMS 316); Secretary, Rex McClelland, (Delta Airlines); Sergeant-at-Arms, Edward Stoddart, (Supervisory Controller, DIA ATCT).

MILLION DOLLAR INVESTMENT



R. M. Brown, Chief, Installation & Materiel Division, holder of book No. 1 in the Credit Union, made the deposit which put the Eastern Region Federal Credit Union in the million dollar asset class. Credit Union membership is available to employees in all states except Maryland, Virginia, West Virginia and Kentucky. Plans are under way for employees in these four states to become eligible members. Left to right: Oscar Bakke, Regional Director; Tony Areidacomo, General Manager of the Credit Union; Barbara Holly, Secretary, Credit Union; N. P. McGroarty, President, Credit Union; and R. M. Brown.

Inspector's Idea Works Two Ways To Bring Him \$175 in Award Money

Ernest Grasso, Supervisory General Aviation Inspector, Aircraft Management Branch, Hangar 11, was the recipient of a \$100 award on November 15, 1963, for adoption of a suggestion on the use of a 7-power optic tube used in inspection of aircraft parts. The suggestion was also adopted by Washington Flight Standards Service for use on an FAA-wide scale. As a result, Grasso received an additional award in the amount of \$75.

"PERT" Training at Bolling AFB For Three from Materiel Branch

During the months of November and December, three Materiel Branch employees participated in a 40-hour PERT training course at Bolling AFB.

Messrs. Solomon Kornblau, Procurement Analyst, Harry Rosenthal, Supervisory Contract Specialist, and Seymour Waksman, Supervisory Procurement Agent, agreed that the course provided principles and fundamentals of sound project planning and scheduling as well as methods of application of techniques to actual case problems as related to contracting functions. It is planned that PERT principles will be applied to future construction contracts.



(Left), Unveiling the massive "JKP" initials signifying the change in the designation of Idlewild Airport are: Mayor Robert Wagner; New Jersey Governor Richard Hughes; Senator Edward Kennedy; Sloan Colt, Port of N. Y. Authority. At right are: M. White, Regional Counsel; W. Hendershot; and Regional Director Oscar Bakke.



The New

JOHN F. KENNEDY INTERNATIONAL AIRPORT

On Christmas Eve 1963 more than a thousand people and 250 city, state, and federal officials gathered at New York International Airport to witness its rededication and renaming as John F. Kennedy International Airport. Known as "New York International" or "Idlewild" since 1947, the airport comprises 4900 acres, equivalent to Manhattan Island from 42nd Street to the Battery. It is nine times the size of LaGuardia Airport.

The John F. Kennedy International Airport cost in excess of 400 million dollars, and provides employment for 32,368 people with an annual payroll of 241 million dollars. By 1965, it is expected that the airport will provide jobs for 40,000 people with an annual payroll of 325 million dollars.

Federal and state officials attending the rededication ceremonies included Senator Edward Kennedy, New York City Mayor Robert Wagner, New Jersey Governor Richard Hughes, Port of New York Authority Sloan Colt and FAA Regional Director Oscar Bakke, Deputy Director Wayne Hendershot, and Regional Counsel Martin White.

In his remarks at the ceremony, Mayor Wagner stated "This civilian airport is a symbol of intercommunication, understanding and peace. Hence, it is truly appropriate to name this airport after President Kennedy because he was, among many other things, a brilliant practitioner of intercommunication, a young sage of understanding, and a tireless searcher for peace."

Senator Edward Kennedy, brother of the late President, speaks at the rededication ceremony. Invited guests rise in anticipation of dedication invocation prayer.





Capt. Holmquist (left) briefs Mr. Bakke on ODT controls. (Center) Bakke and Holmquist in cockpit. (Right) L. Cardinal views ODT computer racks.

FAA Visits Monument to Ingenuity

On the North Shore at Sands Point, Long Island, hidden away on 150 acres of rolling woodlands and golf greens, stands a monument dedicated to man's ingenuity and creativity. The U.S. Naval Training Device Center, a part of the Office of Naval Research, is located there in two old Scottish-type castles overlooking Long Island Sound.

The Center's mission? To create simulators, training devices, synthetic trainers, and a wide assortment of teaching aids designed to train people effectively, realistically and economically to use the military hardware that will assure operational readiness of the Armed Forces in the event of an emergency.

Commanded by Navy Captain Carl D. Holmquist and Colonel J. S. Greene, Jr., Associate Army Director, the US NTDC employs about 700 civilian personnel and operates on a yearly budget approximating 100 million dollars. The Center's Operation Flight Trainers—(OFT's) are mammoth truck-borne simulators of latest configuration Navy aircraft—and are designed to simulate almost every operational function of the actual aircraft—while remaining on the ground. Center personnel like to tell the story of a Fleet pilot who became airsick, and emerged from an OFT "perspiring freely" after a "flight" in which the NTDC instructor had inserted no less than 24 "emergency" conditions!

The Center is known also for its ingenious submarine simulators—used today for training crews of Fleet Ballistic Submarines. Housed in multi-structured buildings, the sub simulators roll, pitch, yaw, and provide crews with complete operational training, CIC indoctrination, and training in the firing of a nuclear missile.

Through its counterpart in operations, the Army-Center engineers and Army project officers (a specialized group of career men from the combat forces) the Center has designed rocket simulators and trainers, tank simulators, a simulated A-bomb explosive device, mortar training devices, machine gun simulators that duplicate the sound, noise and flash and cyclic rate of an operational machine gun (at a fraction of the cost) animated transparencies that demonstrate the operating mechanisms of howitzers, tanks, trucks, machine guns, etc.

While the Center's prime concern is keeping the Fleet in a state of operational readiness through the provision of devices, it is concerned also with normal training and peacetime missions. For example, the Center built the first Human Centrifuge—an ingenious device designed to train and test astronauts—without scrambling their brains in the process.

Shortly afterward, the Center designed a human disorientation device, a mechanism that twirled man and animal around laterally and longitudinally at the same time. Center "human engineers" are constantly searching for methods of adapting man to environment, whether it's below, above, or on the surface. Studies performed by Center human engineering personnel have met with world acclaim, and Center expertise is considered a valuable asset in the fabrication of operational equipment as well as simulators.

Often called a "thought factory" by visitors, the Center can be proud of its intensive concentration of dedicated civilian and Armed Forces personnel who specialize in putting "thoughts" to words, and words to hardware. And that hardware saves the U.S. taxpayer millions while contributing greatly to the combat effectiveness of the Armed Forces.

F. L. Richson, TDC USN explains instructor's console to Flight Standards' Air Carrier Specialist R. Jones.



MTDC's H. Zauderer (L) explains submarine simulator with Region's R. Farrell and Lt. Col. Patterson.



FAA visitors listen to Capt. Holmquist talk about the fleet ballistic missile trainer at the Center.



Agency, Industry Friends Fete Estill at Retirement Dinner



Mr. and Mrs. Frank Estill at his retirement dinner.

A retirement dinner was held recently for Frank Estill, FSD, who saw more than 33 years of service with the FAA and its predecessor agencies. About 90 friends from the FAA and private industry attended the dinner.

Frank started his career with the Agency in June 1934 when he reported to the CAA Headquarters in Detroit. For many years Frank served as the only CAA Inspector covering the States of Indiana and Kentucky. He held many varied positions with the Agency from 1934 to the early 40's, at which time he went on active military duty for approximately four years. Upon release, Frank returned to the Agency, serving in various positions in the Eastern Region. His most recent job was that of Accident Prevention Specialist in the Operations Branch, Flight Standards Division. Frank holds the rank of Colonel (Retired) in the Air Force Reserve.

Ford Tri-Motor Shuffling Along Traffic Pattern Stirs Memories



American Airline's rejuvenated Ford Tri-Motor N9683 chugged into the traffic pattern around Dayton Tower and started old time controllers on a trip down memory lane that left the younger generation hanging on to every word.

The "Tin Goose" is credited with being the plane that made regular, comfortable air travel possible.

Several Dayton controllers joined the general public in flights in the old plane.

Materiel Branch Chief Receives Award



Thomas F. Lynch, Acting Chief, Materiel Branch, I&M Division, was recently awarded a certificate and quality within-grade pay increase in recognition of his continuing high level of performance. Participating in the presentation, made by Mr. R. M. Brown, Chief, I&M Division, were members of Mr. Lynch's staff: L to R: K. L. Dyse, J. V. Peterson, M. Unterberg, T. F. Lynch, E. Wine, R. M. Brown, D. Oshiver, J. E. O'Brien.

Receives Performance Award



Timothy L. Hartnett, Assistant Chief, Establishment Branch (left) receives Quality Within-Grade Increase Award from I&M Division Chief Robert M. Brown during ceremony conducted at Regional Headquarters.

Gets the Bird



Regional Director, Osear Bakke, learns that sometimes getting the bird can be a pleasant experience. He was one of 15 lucky winners of turkeys distributed in the Eastern Region Club's free membership raffle. LTR: Monte Davison, Treasurer ERC, Ivo Kriendel, Chairman ERC, Frank Fietz, Membership Committee Chairman ERC, Osear Bakke and Vince Bonaventura, Vice President ERC.

NEW TOWER AND FSS DEDICATED AT CINCINNATI



FAA personnel and City of Cincinnati officials pose following dedication of new Lunken Airport Tower and Flight Service Station. The dedication was a landmark in the eight million dollar improvement program to Lunken Airport, Cincinnati, Ohio, designed to provide better service for the growing aviation needs of the community. Approximately 100

civic and aviation leaders attended the dedication. In the FSS, LTR: C. W. McKay, Area Coordinator; W. A. Schafer, Chief, Lunken Tower; R. M. Brown, Chief, I&M Division; O. Bakke, Director, Eastern Region; G. Howie, Director of Public Utilities, City of Cincinnati; H. Doyle, Chief, Lunken FSS; C. Newpol, Assistant Chief, AT Division.

SMD Employee Receives SSP Award As He Departs FAA



Lawrence E. Medway (center) receives Sustained Superior Performance Award from Louis J. Cardinali (right), Assistant Chief, SMD, as Joseph J. Haas, Chief, Administrative Management Branch looks on.

Medway, Manpower and Training Section, Administrative Management Branch, was accepted as Production Planner by Lederle Laboratories, American Cyanamid Company at its Pearl River Plant in New York.

Larry is a Korean Veteran. He received his BA degree in 1953, an MBA in 1956, and is currently well on his way to receiving a PHD in Management from New York University. He is a Phi Beta

Kappa member and while with the FAA was nominated for an FAA Career Education Award.

Prior to entering the Government service, Medway was employed from 1956-1958 as an executive assistant, performing industrial engineering duties for one of the major laundries in New York City.

His civilian government service began in October 1958 as an EA Placement Officer.

What does the future have in store for Larry? Success and happiness, we hope, and a blessed event in May when Joan and Larry Medway will welcome their first child.

Innovations in ATC Discussed by Washington Advisory Committee



The Washington ATC Advisory Committee met at the Washington Air Traffic Area Office (ATAO) quarters at McLean, Va., to discuss recent AT innovations. Left to right are: Paul Moore, Chief, Washington Tower, Chester Watson, Chief, Washington Center, Louis Leon, Washington ATAO, Frank Wedderburn, Operations Officer, Washington Center, James Furr, ALPA, Capt. E. D. Haas, Flight Manager UAL, Paul Peterson, Asst. Chief, Andrews Tower, Harold Doebler, Asst. Chief, Dulles Tower, Capt. W. F. Bettwy, Superintendent-Flying, DCA AAL, John Woods, NBAA.

Also present but not shown were: George Freitag, Supervisor, Washington ATAO, Allen Taylor, Washington ATAO, Gene Smith, Chief, Washington FSS, Frank Lyden, ATA, Major H. T. Headley, Air Force Representative, Eastern Region, Major R. D. Hyman, Army Regional Airspace Office.

EA's Pay System Advantageous to The European Region's Personnel



A recent agreement between European and Eastern Region provided for EA payment of about 45 EU personnel stationed at John F. Kennedy International Airport. Above, marking the first payment made under the new system are, left to right: Roscoe Anderson, Imprest Fund Cashier, Everett Sellers, IFO, and John A. Steele, IFO. Lester Lord, Chief Accounting Division and Meyer Rothman, Chief, Voucher Examination Branch, watch approvingly.

EMPLOYEE UNIONS IN FAA RECOGNIZE INTERESTS OF AGENCY PERSONNEL

Throughout the Agency, employees are asking: What is this employee-management "recognition" bit all about? Almost every week, the FAA announces it has given exclusive, formal, or informal recognition to another group. To whom and for what? Should you or shouldn't you join one of these groups? What good do they do?

To make it easier to understand, compare yourself to your friends in private industry. Generally, they fall into one of two categories: labor or management. Many of those in labor improve their status through their right to organize into groups (sometimes called unions) and bargain collectively with management.

What Unions Can Do for You

So much for how your friends in industry gain higher wages, shorter hours of work, decent working conditions, and job security. How about you? If the Federal Government enacts legislation to govern labor-management relationships in business, what does it do for its own employees?

Because Government salaries, basic hours of work, and most fringe benefits are established by law, management officials cannot negotiate with employees on these matters. However, there are other important bargainable areas: working conditions, promotion policies, grievance procedures, safety, transfers, and meal periods. Many employees feel that their interests would be better served if organized groups represented their views and presented them to management.

On January 19, 1962, the President issued Executive Order 10988 which provided for a formalized program of employee management cooperation in the executive branch of the Government. Since the order went into effect, nearly a dozen employee organizations have asked the FAA to recognize them as representing groups of FAA employees. The Agency has granted this recognition on the local, regional, and national level, and the recognition has been informal, formal, or exclusive.

Different Types of Recognition

"Informal" recognition means that the organization has the right to be heard on matters of interest to its members. "Formal" recognition gives the organization the right to be heard and consulted on matters of interest to its members, and "Exclusive" recognition gives the organization the right to be heard and consulted and to negotiate on matters of interest.

The Executive Order provides:

That employees of the Federal Government shall have the right to form, join and assist any employee union or organization, without any restraint from management, or the right to refrain from such activity.

That the right to join a lawful union extends to all employees, whether or not they are engaged in managerial, personnel or similar duties except that management officials may not serve as officers or representatives of rank and file employee organizations where there is a conflict of interest with their official duties.

That when certain conditions are met agencies are directed to accord informal, formal or exclusive recognition upon any lawful association, labor organization, etc., having as a primary purpose the improvement of working conditions among employees, and to any craft, trade, or industrial union whose membership includes both Federal employees and employees of private organizations.

Any organization which does not qualify for formal or exclusive recognition may be accorded informal recognition. An employee organization with this type of recognition has the right to be heard but Agency management is not obligated to seek the views of the organization.

FAA Has Own Directives

Groups with membership of 10 per cent or more of the employees in a unit may be granted formal recognition, obligating management to obtain the views of the organization and to consider these views in formulating personnel policy.

An organization chosen by a majority (50 per cent plus one) of the employees in a unit or activity may qualify for exclusive recognition, becoming the exclusive representative for employees in the unit in negotiations with management.

The FAA has issued its own directives on how the order should be carried out. In addition, the Agency has expressed its affirmative willingness to deal with each recognized employee organization. Groups are formed on the basis of a "community of interest," and what constitutes this community is determined by management. Points of consideration might include like skills of employees, common supervision, and geographical location. If it is agreed that a community of interest does exist, an organization may then seek recognition within that community.

Last May, President Kennedy issued

his *Standards of Conduct for Employee Organizations, and Code of Fair Practices*. Both of these define democratic processes in employee organizations, exclude persons from office who are affiliated with the Communist movement, prohibit organization officers from business interests which might be in conflict with their duty to the organization, promote the maintenance of fiscal integrity in the conduct of the affairs of the organization, establish a procedure for denial, suspension or withdrawal of recognition, prohibit management from encouraging or discouraging membership or interfering with the rights of membership to employees who are organized, prohibit employee organizations from attempting to induce management to coerce an employee in the enjoyment of his rights, and prohibit an employee organization from engaging in any strike, work stoppage or slowdown against the U. S.

Two Practical Points

Two of the more practical points to emerge from this area are:

- There can be no union or closed shop.
- While an organization, by having exclusive recognition, represents all the employees of the unit this does not prevent individuals from bringing personal matters to the attention of management.

Employees will be affected directly in this matter:

- They may join an organization or remain unorganized as they see fit. They may not become officers of an organization, however, if their duties as an officer would conflict with their duties as an FAA employee. If they are professional employees, they may belong to but not be represented by an organization containing non-professionals which has exclusive recognition unless a majority of such professional employees vote for inclusion in the unit.
- An organization having exclusive recognition has the right to be represented at a hearing on any grievance presented by employees in the unit which the organization represented.
- They may not be solicited for membership during their working hours.
- They may, if they choose, vote when an election is held to determine the number of employees who desire to be represented by an organization seeking exclusive recognition.
- Any decision or change brought about by an agreement reached through negotiations will be binding on them.



Thai government forbade commissioning of VOR until Buddhist priests had consecrated it.



Kandhar International Airport in Afghanistan is a dazzling example of Asia's changing face.

A Changing Era's Brilliant Contrast

Saffron-robed Buddhist monks, begging bowls in hand, file beneath the serpentine eaves of a Bangkok temple. A few miles away, jets sweep in and out of southeast Asia's busiest airport.

The crescendo of jet engines plays a fugue with the soft tinkling of silver bells swinging from the Buddhist temples. A paradoxical contrast? Not at all. In Southeast Asia modern life pulsates against a backdrop of ancient ritual.

Synthesizing Eastern customs with Western ways, Asians are beginning to acquire, through Western aid, the industrial machinery and technical assistance that allows a modern state to take roots and grow.

The FAA, working with the U. S. State Department's Agency for International Development (AID), has played a major role in catapulting Southeast Asian countries into the twentieth century.

The FAA has Civil Aviation Assistance Groups in the Southeast Asian countries of Afghanistan, Cambodia, Indonesia, Korea, Laos, Pakistan, The Philippines, Taiwan, Thailand, and Viet Nam. The Americans who belong to these CAAG units deal with underdeveloped societies at the very center of their expectations and hopes. FAAers abroad help narrow the gap between expectations and reality by demonstrating what people can do for themselves once they set their minds to the task—and then FAA helps them to do it.

Multi-million dollar airport showpieces have sprung out of dust-brown valleys and bone-bare wastelands because FAA airways engineers, engine-generator specialists, air traffic controllers, instructors, and electronic technicians have taught Asians how to recognize their aviation needs, how to articulate them, and how to answer them. Asian pilots fly reassured because newly-installed navigational aids guide them from point-to-point. Asian businessmen feel the surge of a bolstered economy because airplanes bring the world to their romantic

doorsteps and take their products to the rest of the world.

The job has not been easy—neither for the Southeastern Asians nor the Americans. Diagnosing an ill is easier than curing it. The task has required that American technicians and Asian provincials learn to speak each other's language—both literally and figuratively. It has required a reconciliation of mythical ritual and pragmatic economics.

Politically and physically, the undertaking has been enormous. Adhering to its ceremonial belief, the Thai government once forbade the commissioning of a new VOR until it was astrologically propitious for a group of Buddhist monks to bless it. An electronic technician in Saigon, surveying a site for an ILS outer marker, had to be flanked by a squad of fifty Vietnamese soldiers for protection against communist guerrillas. A 210-foot non-directional beacon antenna mysteriously disappeared from a warehouse in Laos, then was "reincarnated" as a broadcasting antenna for the local television station.

The FAAer, in rendering technical assistance, copes with the frustrations of unfamiliar problems—whether they be obstinate camels blocking the only road for miles or typhoons washing away progress.

When independence came to Southeast Asia, few of the new nations were ready to meet its challenges. Most were burdened with high levels of illiteracy, low levels of political experience, and economies that resisted change. Independence has not brought the people the new age of ease and affluence they had dreamed of.

It would be naive to think that sleek new airports, integrated air navigational systems, air route traffic control centers and transmitter facilities will solve all the problems of Southeast Asia. But it is a beginning. Jet engines and silver bells play in counterpoint—not in cacophony but in a melodic harmony. It is a promising overture.

FAA Horizons



The complex human fabric of Southeast Asia is a source of enigmatic charm, constant excitement, and romantic images. Yet even its most primitive elements are now touched by the modern world. Asians are responding to the challenges of the 20th Century in many ways. One is by a patient, diligent effort to establish an advanced system of civil aviation. FAA's Technical Assistance Program in Southeast Asia, headed by Robert Green and Lynn I. Jones in conjunction with the U.S. Agency for International Development, gives native engineers, technicians, pilots, and supervisors encouragement and assistance.



February, 1964

QUESTIONS AND ANSWERS OF INTEREST TO AVIATION MEDICAL EXAMINERS

Q. What is meant by phoria, and tropia? How do we distinguish them?

A. A phoria is a tendency for the eyes to deviate from the normal visual lines. Ordinarily, when a patient looks straight ahead, his eyes are parallel. If there is a tendency for them to deviate from this parallelism, this indicates a condition termed a "phoria." If a person is manifestly cross-eyed, or his eye turns out, up, or down, he has a condition known as a "tropia." A phoria is a tendency; a tropia is a manifest deviation which can be seen with the naked eye. A tropia may be referred to as a strabismus, manifest deviation, diversion, or squint.

Item 55, FAA Form 1004, requires that the AME record the diopters of heterophoria and specify the distance used in making these measurements. The procedures used in performing these tests are discussed fully in the Guide for AMEs, Chapter II, page 25.

Q. Explain the difference between exophoria and esophoria.

A. Exophoria refers to that condition in which the eye will deviate outward when it is covered and fusion is broken. Esophoria is the inward deviation of the eye when fusion is broken.

Q. Explain the different types of glaucoma.

A. In general, there are two kinds of glaucoma. There is primary glaucoma and there is secondary glaucoma, and perhaps we might include congenital glaucoma as a third type. Primary glaucoma is the one we are essentially concerned with, because this is the one that causes most of the trouble. Secondary glaucoma is easily recognized because there is a manifest cause for it. It is a uveitis, or hemorrhage in the eye, or tumor in the eye, or something of this sort that increases the pressure of the eye. We still do not know much about primary glaucoma, as far as cause is concerned. We know a lot about how it behaves, and we know a lot about what we can do to maintain pressure, but we still don't know what causes the disease.

Primary glaucoma is divided into two main types—the closed angle and the open angle. Closed angle glaucoma is characterized by the narrow angle of the anterior chamber. The angle of the anterior chamber is obliterated or very narrow, and when the pressure increases, the iris blocks off the angle, with the resulting elevated pressure. This is the classic type of glaucoma which produces the halos around lights, the steamy cornea, the redness, the severe pain, the head-

ache, etc. This is the narrow-angle type of glaucoma. It in itself is not particularly difficult to recognize. If a patient has an acute attack of narrow-angle glaucoma, there is usually no doubt about it. He can't see, he's having a lot of pain, and diagnosis is fairly easy.

Open-angle glaucoma is more difficult to diagnose because there are no symptoms with this form of the disease in the early stages. Since open-angle glaucoma begins usually in the 40 to 50 age group, it is important to check the ocular tension of everyone in this age group.

Congenital glaucoma is something which we probably will never be concerned as far as prospective pilots are concerned. It is characterized by the extremely large eye. It is called buphthalmos which means cow eye, and is almost impossible to miss because the eyes are so big in comparison to the normal eye. Infants may be born with a form of glaucoma, or develop it in the first few years of life. The cornea is generally hazy and the infants are photophobic.

Q. What is the cause of open-angle glaucoma?

A. As far as the mechanical cause of glaucoma is concerned, there is a blockage somewhere in the normal flow of the aqueous material of the eye, which sends the pressure up. It is unusual to find a pressure in open-angle glaucoma which is more than about 30 to 35 millimeters of mercury. The pressure remains about that, and it is a constant pressure on the optic nerve for many years. As this pressure on the optic nerve continues, and perhaps increases, very gradually the patient begins to lose visual field, his blind spot increases in size, and eventually, if nothing is done, he will go blind. This is why it is important to take tensions with a tonometer.

Without a tonometer, it is very difficult to get an accurate tension. It has been said there aren't any symptoms in open-angle glaucoma. However, through a simple ophthalmoscopic examination, you may suspect it. There are two things the examiner may look for in determining by the ophthalmoscope whether open-angle glaucoma is present. This is the type of glaucoma in which we get the typical cupping of the optic disc. There is a type of normal optic disc which shows a rather wide physiological cup, and sometimes to determine the difference between this and a glaucomatous cup is difficult. However, if the cupping extends out to the periphery of the optic nerve, a good distance around the disc,

you can be fairly suspicious that this is a glaucomatous type cupping. If the optic disc appears somewhat saucer-like rather than flat, a glaucomatous cupping may be suspected. And if the tension is 20 millimeters of mercury or higher, and this situation exists in the optic nerve, it is advisable to refer the patient to an ophthalmologist.

Q. What is the prognosis in glaucoma?

A. Open-angle glaucoma, if discovered early enough, can usually be very well controlled. We always use medical treatment—the miotic drugs—as long as possible. Pilocarpine is still the drug of choice, although other miotics are frequently used. This will, in many instances, control glaucoma very well, and the prognosis is fairly good as long as the patient is conscientious in carrying out the medication. If this medication doesn't work, then carbonic anhydrase inhibitors can be used to reduce the flow of aqueous, which will maintain the pressure at a good level in many instances.

The indication for control is two-fold: the maintaining of normal pressure and the maintaining of the visual field.

If the patient does not respond to medication, then surgery is necessary even in the open-angle type of glaucoma. These are the cases in which the so-called "filtration operations" are being done, to re-establish the exit of aqueous from the eye.

If the glaucoma has progressed to the later stages without treatment, the prognosis is not good, because even surgical intervention may not control this disease. This is one of the things that is unknown about glaucoma. When it progresses into these very late stages, without treatment, in spite of reducing tension to normal levels, the disease goes on, and the patient continues to lose vision.

If a person has an attack of closed-angle type of glaucoma, there is only one treatment, and that is an iridectomy. There are means of reducing the extremely high pressure, which may go as high as 90 or 100, and in an acute attack the eye is as hard as a rock. We can lower these pressures by massive doses of the carbonic anhydrase inhibitors, and by the intravenous use of hypertonic solutions. With the pressure down, an iridectomy will produce a satisfactory reduction in pressure and presumably, in most instances, cure the patient so he will never have another attack. If this is so in one eye, then he should have the iridectomy in the other eye to prevent the narrow-angle closure

FAA FINDS A WAY TO THANK RAYMOND MATTHEWS



A day's pay for a day's work and more for Matthews.

Slightly puzzled, Raymond Matthews, Jr., walked into his boss's office, wondering why George Moore, Director of Flight Standards wanted to see him.

Just about the last thing he had suspected was the \$1000 check Moore proffered him. It was FAA's way of thanking the hard-working and enterprising engineer for his long-time superior work and personal initiative.

Ray Matthews is a quiet, understated man. His soft-spoken modesty belies his mastery of a wide range of skills. A former school teacher and Army Air Corps pilot, Matthews has been with this agency for 20 years. A jack-of-all-trades, it seems, he has been a private pilot, A&P mechanic, flight engineer, ground instructor, international field officer, public speaker, accident investigator, propulsion technician, and personnel officer.

He has combined this gamut of talent with intuitive resourcefulness to win the respect of both his superiors and sub-

ordinates alike.

Presently, Matthews is in Washington Headquarters as Chief of the Propulsion Section in Flight Standards' Air Carrier Maintenance Branch. He is responsible for developing and controlling national standards, limitations and procedures governing the maintenance, inspection, repair and overhaul of aircraft propulsion systems and helicopters. One ticket to his success in managing this complex area has been his deftness in maintaining a close relationship with various engine and helicopter manufacturers.

Credited to him has been the development of reliability concepts in airframes and component parts—a major part of the FAA/Industry Propulsion System Reliability Program, a giant step forward for engine reliability and safety.

Taking a busman's holiday when official duties allow a breather, Matthews enjoys his hobby of building model airplanes. In fact, in successive years of 1949 and 1950, Matthews' flying model airplanes were National Champions in competition sponsored by Pan-American Airways. He is past vice-president of the Academy of Model Aeronautics and is a member of the Amateur Bicycle League of America.

It isn't every day the boss calls an employee in to present \$1000 worth of recognition and gratitude. Nevertheless, it can happen to any and all employees who are able to demonstrate the same qualities of consistent diligence, imagination, competence, and energy reflected in the twenty-years' effort of Raymond Matthews, Jr.

Agency Issues Five Categories of Certification

The FAA issues five different classes of licenses, permits, or certificates. Do you know what they are and who must have them? If not, here they are:

Airmen. Pilots, mechanics, repairmen, instructors, dispatchers, air traffic control tower operators, parachute technicians, flight radio operators, flight navigators, and flight engineers.

Aircraft. Federal registration, type, production and airworthiness certificates (are needed) for any contrivance now known or hereinafter invented, used or designed for the navigation of or flight in the air, either original or after alteration or repair.

Aircraft Engines. Any engine used, or intended to be used, for propulsion of aircraft, including all parts, appurte-

nances, and accessories thereof, other than propellers which are given separate type certificates.

Air Carriers. Scheduled, irregular, commercial operators and air taxi operators.

Air Agencies. (1) Civilian schools giving instruction in flying and related ground school subjects, or in the repair, alteration, maintenance, and overhaul of aircraft, aircraft engines, propellers and appliances. (2) Repair stations or shops for the repair, alteration, maintenance and overhaul of aircraft, aircraft engines, propellers or appliances; and (3) parachute lofts for general maintenance and minor repair, canopy overhaul, harness overhaul, metal parts and container overhaul, and drop testing of parachutes.

National Capital Airports Are Guarded by Experienced Police



Jim Davis shows off his family to WNA Police Chief Dillon. Mother Eberle, next to Chief, is FFA'er, too. Private Davis's mother-in-law, Fannie Fagin, is in middle and lovely wife beams with pride next to him.

The Agency's compact but highly efficient 90-man National Capital Airports police force is polishing its already sparkling image.

A long-range training program, which will feed selected officers into the District of Columbia's famed Metropolitan Police Academy, has already produced two graduates. Two others, Privates Donald O. Frye, Jr., of Washington National Airport, and Harvey T. Eberly, of Dulles International Airport, are now undergoing the rugged 13-week course. Not for sissies, the school starts its daily program with a full hour's workout in judo.

Most recent graduate, and the second man to take the course, is WNA Private James E. Davis, Jr., who placed in the upper third of his class. Young Davis, 24, affable but all business on the job, seemed destined for police work when he enlisted in the Air Force in 1957. He was tapped for the USAF Police School, Lackland AFB, Texas, and after earning his badge was assigned to Hickam AFB, Hawaii. He later moved up to become a member of the Hawaiian Armed Services Police, a joint force with representatives of all the Armed Forces.

Preceding Davis in the D. C. Police Academy was Private T. A. Johnson.

All members of the National Capital Airports Police force are experienced police officers before they are accepted for the Agency's guard force, WNA Chief James P. Dillon explained. He has a 42-man force; his counterpart at DIA is Chief Michael D. Benarick who has 48 men.

The Metropolitan Police Academy curricula includes the legal framework on which police procedures are built—the laws of arrest, evidence, District of Columbia Criminal Code, and the Alcoholic Beverage Code; handling of crowds and prisoners; and advanced first aid and field work—all crammed into 13 weeks.

HEALTH FOR ALL

OFFICE OF AVIATION MEDICINE

OCCUPATIONAL SAFETY BULLETIN

R. M. Marrazzo

It is the policy of the FAA to minimize occupational hazards by conducting vigorous occupational health and safety programs.

One of the specialized mediums used for the dissemination of health and safety information relating to occupational environments is the Occupational Health and Safety Bulletin. This Bulletin was established by Agency Order OA 1710.1 (9/19/62) by authority of the Administrator.

To date, nine Bulletins have been published and distributed. The subjects include: "Acetone"; "Black Light"; "Pyranol"; "Teflon"; "Selenium Rectifiers"; "Ammonia"; "Carbon Monoxide"; "Emergency Oxygen" and "Methyl Ethyl Ketone." Distribution is on a selected basis and addressed primarily to working personnel who are affected by nature of their job. Limited copies of the above Bulletins are available through the Medical Library in Washington (HQ-640).

Bulletins usually are developed in response to suspected or demonstrated occupational hazards occurring, for the most part, in field operations.

The Bulletin provides the concerned party with specific information on the subject matter such as degree of hazard, harmful effects, exposure limits, protective measures and medical procedures.

FAA employees are encouraged to consult with regional medical and safety representatives on all suspected occupational and environmental hazards. Corrective action may very well require equipment and/or system modifications. In some instances, the nature of the problem may lead to the issuance of a Bulletin which provides the same guidance to other affected parties throughout the Agency.

Efficient and productive use of manpower and material is the assigned responsibility of the Agency Environmental Health and Occupational Safety Programs. Safe and healthy occupational environments help accomplish this mission through reduced on-the-job injuries and illnesses. The Bulletin is just one measure employed in this endeavor.

SMALL BUSINESS BIG WITH FAA

Small business is big business in the Federal Aviation Agency. In the fiscal years 1960-1963, contracts running close to \$300,000,000 were awarded to small business firms for research and development, components of the air navigation and traffic control systems, spare parts for the maintenance and repairs of aircraft, NAVAIDS, and other equipment.

The Agency's long-standing interest in giving a fair share of its business to the small manufacturer was emphasized a few months ago by the appointment of



F. S. Redmond

Frank S. Redmond as Small Business Assistance Officer within the Office of Procurement, and more recently by placing him in charge of the new Procurement Information Office on the ground floor of the new building where he is easily accessible to anyone interested in what FAA is buying currently.

An important part of Mr. Redmond's job is to help responsible small manufacturers, particularly in the so-called "labor-surplus" areas in their efforts to secure contracts, and by so doing to strengthen and broaden FAA's industrial base. For example, prime contractors are encouraged to sub-contract part of their work to smaller firms.

All suppliers, large and small, have an equal chance to compete for FAA business—generally through competitive bids—sometimes by negotiation. Single purchases run from a few hundreds dollars to the multi-millions; from small radio tubes or coaxial cable to complicated electronic computers.

Notes from the Deputy Director, Southern Region

As I am sure you have seen in this issue, Director Basnight wrote the national editorial which appears on Page 2 of this magazine, so he asked that I talk with you through this column in his place.

As I travel about the Region . . . into large cities . . . and small . . . I sense some differences in the level of overall FAA support by teamwork that I would like to discuss with you.

It is true that the broad expanse of FAA activities require intensive, specialized training, and the specialists who have this training are assigned to divisional organizations, which are especially geared to the accomplishment of specific responsibilities. This is only right and good, of course; but if allowed to be carried too far, it has pitfalls and dangers, also.

It is vital to the achievement of the Agency's mission at the local level that the FAA employees, in a particular community, get together and feel that they are an "FAA team," and that they completely support each other, geared to the

accomplishment of the Agency's overall air safety mission in their community.

Each of you does have an organizational responsibility to his division, but you also have a responsibility to work together with other specialists as an effective team so that misunderstandings . . . the "going of separate ways" . . . disjointed actions . . . and other conflicts . . . are kept to an absolute minimum.

I would like to urge that if you have not already done so, each of you in your community take positive steps with the beginning of the new year to get together more often . . . get to know each other . . . resolve any conflicts . . . support each other . . . and mold yourselves into a true team, pointed toward the same goal . . . the safety of the airways."

Once you have done this, I am confident you will be greatly rewarded with the fact that you will see . . . as if magically . . . that many former differences will evaporate, and you will achieve a sense of "oneness" that you have not enjoyed before.



A philosopher once said, "As you think, so are you." You will find that you will become whatever you want to become . . . you will achieve what you want to achieve . . . when you think positively and develop an overall appreciation and understanding of the total FAA Program.

Paul H. Boatman
Deputy Director, Southern Region

AGENCY TAKES HAND IN TRAINING FLEDGLING ARMY HELICOPTER PILOTS



Jacksonville Center Area Manager Jim Pound points out an important feature of air traffic control procedures to a group of U.S. Army student helicopter pilots touring the Center. Tours are regular part of training.



One of Ft. Rucker's Army Aviation Center transport 'copters, arriving with a group of student pilots to tour the ARTC facilities, sits down easily on the spacious grounds in front of Jacksonville Center.

About once a month, the Center Area Manager Headquarters and the Jacksonville Air Route Traffic Control Center at Hilliard, Florida, play host to a class of Army student helicopter pilots and their instructors from Fort Rucker's Army Aviation Center.

Advance appointments are coordinated with the Center. These visitors usually arrive in 10 to 12 of the Army's large transport helicopters, and the fact that there are no airport facilities at Hilliard

presents no problem to these "whirlybird" pilots. The center building is situated on a 30-acre tract and provides excellent landing space for the Army "choppers."

Upon arrival on the center grounds, a typical class, usually numbering from 60 to 100, is divided into groups of 8 to 10 men. These small groups are given individual familiarization tours through the facility's various activities. During and after each tour, the center's primary functions and air traffic control procedures, in

general, are explained to the students.

In this manner, through the excellent cooperation between the Jacksonville Center and the Army Aviation Center, many fledgling Army pilots are taught the "right way" about Instrument Flight Rules procedures (IFR), and the importance of ATC procedures early.

This is a fine example of one of the many ways in which the Agency's policy of fostering air safety through preventive measures is accomplished.



Giant, bulging dome of Moscow, Mississippi's "eye in the sky" dominates terrain... dubbed the "Big Eye." It scans 251,000 square miles of airspace.

THE BIG EYE

A MILLION-WATT ELECTRONIC MARVEL IN MOSCOW, MISSISSIPPI

The "Big Eye" . . . one would be hard-pressed to find a more descriptive term to describe the Federal Aviation Agency's radar installation near Meridian, Mississippi. This monster, a 16-ton plastic alloy bulbous radome, sparks the imagination to compare it to a Paul Bunyan-size eye.

The "Big Eye" radar site is a very important part of the joint Federal Aviation Agency—U. S. Navy Radar Air Traffic Control Center, located in North Lauderdale County's old Moscow community. This installation actually functions as an all-seeing electronic "eye," monitoring all air traffic passing across the state of Mississippi above 25,000 feet.

The maximum output of this electronic marvel is rather overwhelming—a million watts. The maximum wattage of any commercial radio station in the United States is a mere 50,000 watts! This radar scans approximately 251,000 square miles of airspace, transmitting 360 electric impulses per second. It is difficult for the human mind to comprehend the tremendous speed at which a transmission of an energized radar beam from this "eye" scurries into space until it strikes an airborne object—possibly as far away as 200 miles—until it returns, less than a quarter of a second later (2460 microseconds to be exact).

"There can be no margin for error," says Andrew Petrisin, engineer in charge of FAA's System Maintenance Sector Office at McCain Field.

An interesting feature of this radar installation is "electronic dualization" throughout this radar facility. If one system fails,



Electronics Technicians Petrisin (left) and Jesse Ponds watch a radar scope which monitors microwave pictures for Station personnel. Right, Electronics Technician Don Tingle uses an old-fashioned vise and rat-tail file to make minor adjustment on electronic equipment—a little of "old" needed to maintain the new."



a standby system automatically takes over to provide uninterrupted service.

While Meridian is historically a railroad junction town, it is also a major sky highway intersection. However, a large percentage of the air traffic handled by the Meridian RATCC is transcontinental commercial and military traffic, flying so high that there is little audible or visible evidence of the great number of aircraft passing over. For this reason, the residents are not usually aware of the dense volume of air traffic over this area.

The Systems Maintenance personnel at McCain Field are responsible for servicing and manning, 24 hours a day, this electronic system which provides surveillance capability over this heavy air traffic flow.

Systems Maintenance technicians, working quietly and usually with little fanfare, are vital team members in FAA's overall air safety mission. In their own words, they provide the "system"—Air Traffic Control provides the "service."

While the "Big Eye's" talented guardians may not qualify as television and movie material, this huge "eye in the sky" looks like something straight out of science fiction.

This radar site may also be remotely controlled from the Meridian RATCC at McCain Field, where the movement of aircraft is channeled as swiftly as the giant rotating radar's "sail reflectors" under the ball-shaped radome receives it.

This data is fed simultaneously along a parallel microwave link to the FAA's Memphis Air Route Traffic Control Center

by eight relay stations. Memphis, in turn, further disseminates this data over an even greater airspace area.

In addition to the Radar Air Traffic Control Center and the Systems Maintenance Office at the Naval Station, there are several other FAA offices at Meridian—a new Flight Inspection District Office which maintains aerial surveillance of electronic navigational and landing aids over approximately the same territory scanned by Moscow's "Big Eye,"—a separate Systems Maintenance Section Office—and a Flight Service Station at Key Field.

Because of the highly technical and complex nature of the work performed at this radar site, the average television or radio repairman need not apply for a job here. Before an Electronics Technician is even permitted to stand a radar watch for FAA, he is required to have a minimum of three and a half years of basic electronics training, plus six months' intensive FAA advance radar engineering study at our Aeronautical Center at Oklahoma City.

The job is certainly no snap—even some of FAA's veteran technicians who baby this maze of equipment are still somewhat awed by the complexities and capabilities of it.

The "Big Eye," while located in a field on the side of a barren clay hill, would look equally at home on the moon. The first sight of it immediately gives one the impression that it could very well be something from outer space. Regardless of its weird appearance, the "Big Eye" is one of the most vital links in the nation's Airspace Utilization System.

The national spotlight was turned on the 50th Anniversary of commercial air travel when the late President John F. Kennedy spoke at Tampa's Al Lopez Field on November 18th.



Above: The world's first commercial airliner, with Pilot Tony Jannus and one passenger, soars over Tampa Bay in 1914. Right: In this 1914 photograph, Pilot Tony Jannus, seated in tiny Benoist airboat, appears to be happy with a fresh customer—in this case George S. (Dad) Gandy, builder of the Gandy Bridge.



Burrell Tibbs, veteran pilot and retired employee of Boeing Aircraft, inspects the hull of the replica of the Benoist Airboat. Tibbs helped to build the first airboat 50 years ago. Working on the aircraft is Louis Hoss, owner of the H&H Cabinet Shop.



GOLDEN ANNIVERSARY OF SCHEDULED AIR CARRIERS

Tampa Bay Infant Grows to Aviation Giant in 50 Years

New Year's Day 1964 marked the 50th birthday of one of the world's largest, most beneficial, and profitable industries—scheduled commercial airline operations.

A brand-new industry, born in Tampa Bay on January 1, 1914, with one paying passenger, has today grown into a vital, mushrooming international industry, safely transporting millions of paying passengers and untold tons of cargo, employing hundreds of thousands of people, and producing multi-millions of dollars in business profits annually.

On that historic date, January 1, 1914, pilot Tony Jannus, with his first passenger, A. C. Phiel, strapped themselves into the tiny Benoist bi-plane . . . pulled down their goggles . . . cranked up the midget-size engine . . . splashed across the waters of Tampa Bay . . . took to the air . . . flew a total of 23 minutes . . . and landed safely near a power plant at the mouth of the Hillsborough River in Tampa.

The first commercial air passenger operation had been successful, and the world's first scheduled commercial airline was inaugurated—The St. Petersburg-Tampa Airboat Line.

This airline was the tangible result of the dreams and efforts of a far-sighted, hard-working man, Paul E. Fansler. One bright morning in December 1913, this enterprising man stepped off a train in St. Petersburg . . . went immediately to the local newspaper editors and leading local businessmen and presented his ideas. He talked—he worked—he organized—and, before nightfall, the St. Petersburg-Tampa Airboat Line

was organized.

On that first day, Fansler signed a contract with the local city officials. In doing so, another first was recorded. This contract guaranteed a cash subsidy of up to \$50 per flight from the city, similar to cash subsidies paid commercial airlines today by the Federal Government. This subsidy was for a 3-month period, January through March.

Probably one of the most famous names associated with this little airline was its Chief Pilot, Tony Jannus. Jannus is credited with establishing the rule of "pilot's choice," still in effect today in both military and civil aviation. It is still recognized procedure that the pilot has the "go/no go" decision in questionable weather.

Jannus also played an important role in obtaining Federal regulation of the precedent-setting airline. Tony and his brother Roger, also a pilot, were granted the first Federal aviation licenses.

Fansler, the General Manager, followed his pioneering spirit far beyond the founding of this airline and selling it to the public. He launched a far-reaching public relations program. In fact, he auctioned the first three passenger tickets, netting \$675, which he donated to the city to purchase their first harbor lights . . . still standing today as a monument to this company.

A gloomy day appeared on the horizons of this infant venture though on March 17, 1914. This date marked the

end of the initial contract period.

During this time, the little airline had truly enjoyed an astonishing record. It had a record of punctuality to be envied by today's jet-age air carriers, and its unblemished safety record glistened. It had transported over 1200 passengers in this short time without accident or injury. A second airliner was also placed into service, and flights were extended to Bradenton, Sarasota, and Tarpon Springs.

A desperate appeal was made at the end of the contract period by Thomas Benoist to the city to extend the contract—but in vain. World conditions at that time seemed to be in a conspiracy against the young company . . . a new railroad had come into St. Petersburg . . . the wars in Mexico and Europe . . . money panics . . . and, finally, this country's preparations and ultimate entry into World War I . . . all resulted in the deathknell for the airboat line.

Regardless of the untimely cessation of this company's operations, its seemingly insignificant life span had accomplished many valuable objectives in the advancement of commercial aviation. For one thing—it had proved that transporting passengers in aircraft between two cities could be safe as well as financially successful. It also firmly established the first step forward in the cause of commercial airline operations.

An exact replica of the first Benoist airboat was flown on January 11, 1964, from St. Petersburg to Tampa (the original

flight path). The pilot of the flimsy aircraft was Burrell Tibbs, a very colorful personality himself.

Tibbs, now 64 and a retired employee of the Boeing Aircraft Corporation, was so enthused about flying that at the ripe old age of 16, he quit school and wangled a job with the Benoist Aircraft Company. Tibbs, a veteran pilot also with over 37,000 hours logged, fondly recalls that the Benoist Aircraft Company looked more like a second-rate chicken house at that time.

Tibbs helped to build the first 1913 Benoist airboat in St. Louis expressly for the St. Petersburg-Tampa Airboat Line. The original plans were used to reproduce the replica.

The wooden body of this flying crate is 26 feet long, with a 36-foot wing span. The original Benoist was powered by a 75-horsepower chain-driven marine engine. The replica enjoys a much more efficient engine than the original model—a converted 6-cylinder, 140-horsepower, belt-driven Chevrolet "Impala" automobile engine. It can fly 65 to 70 miles per hour and can reach an altitude of 6,000-8,000 feet.

The observance of this Golden Anniversary received nationwide attention when the late President John Kennedy saluted the occasion in a public address at Tampa's Al Lopez Field on November 18th. Following the St. Petersburg-Tampa Flight, a 50th Anniversary Commemorative Dinner was held in the Palm Room of the Tampa Terrace Hotel to honor airline presidents and other aviation dignitaries.



A pilot receives a preflight briefing by Specialist Frank T. Collier. If the proposed flight will take the pilot outside the continental United States, the Specialist, utilizing his comprehensive knowledge of international aviation regulations, will fully acquaint the pilot with pertinent data concerning the area over which he will fly.



The administrative staff of the Federal Aviation Agency's busiest International Flight Service Station located at Miami, Florida stand in front of the FAA Administration Building. Posing in the back row, (l to r) are Theron Wheelock, Henry Dale, and Morris White. In the front row, (l to r) are Arthur Eno (Miami Area Coordinator), Sue Innes, and Henry Ibbetson, Chief of the Facility.

THE MIAMI IFSS Communications Gateway to Latin America

The Miami International Flight Service Station (IFSS) has the distinction of being the busiest of the eleven such Air Traffic facilities operated by FAA.

Miami IFSS had its beginning as a domestic FSS at Opa-locka in 1932 with a staff of five. International communications for the Navy Transport Service began in 1942. This was followed by the commissioning of civil communications circuits with Honduras and Costa Rica to assist air carriers operating between these nations and the U.S.

However, it was not until 1944 that CAA, predecessor of FAA, consummated an agreement which officially designated to Miami IFSS the responsibility for the operation of international civil aeronautical communications.

Miami IFSS personnel must be prepared to coordinate with both U.S. and international interests in the resolution of problem areas. Therefore, each specialist must also be prepared to brief foreign pilots and visitors who speak little or no English.

To ensure that employees are adequately prepared to cope

with various facets of operation, a highly effective training center is maintained. Continuous evaluations must be conducted to assure that high standards are being met by all personnel, that new procedures and regulatory developments are understood and utilized, that new employees receive classroom instruction and are administered qualifying examinations.

Courses and instructions are also furnished foreign nationals sent to this country by the U.S. State Department for special technological training.

Known as FAA's communications gateway into Mexico and Latin America, Miami IFSS is responsible for accomplishing the effective exchange of meteorological information on a selective basis. Of particular importance to pilots throughout the world is the information on weather disseminated through this network.

With quiet competence, approximately 120 employees of the Miami International Flight Service Station operate this vital link in the chain of FAA facilities.



Actual voice communication with pilots in flight is conducted by Specialists Harley Dewey, Luke Testa, Stanley Selkowsky and Leo Reifman. Foreign pilots, speaking little or no English, pose a serious problem to IFSS personnel. The knack of "deciphering" these communications is a vital factor in air safety. Employees assigned to these positions often serve as coordinators between international and domestic aviation interests in search and rescue operations.



Training is a vital part of IFSS activities. Pictured above are trainees who are learning the intricacies of Air Traffic's Flight Service Station operations. Facility Training Instructor explains the use of VOR. Those employees who are later assigned to IFSS facilities must undergo additional training on regulations peculiar to various foreign countries. Should any U.S. pilot violate these regulations, severe penalties may be levied by the Nation involved.



Unique to International Flight Service Stations is the Meteorological Relay System which Merle L. Anderson, Awilda Baez, Anthony F. Manning, and Robert Furey operate above. Weather communiques are received from Mexico, Central and South America and Caribbean area. Along with domestic weather information, they are evaluated and relayed to designated points for dissemination to pilots or pre-flight briefing. Operators check teletypes for latest reports.

FAA Horizons

"FLYING AMBASSADORS"

Basnight and Commander Play Role of Diplomats

In accepting the most recent, and one of the greatest, challenges thus far offered the Southern Region . . . responsibility for U. S. civil aviation operations and interest in Latin America . . . Director Basnight took a penetrating look at aviation activities on a recent familiarization tour of the Central and South American countries where FAA has International Field Offices.

Director Basnight was accompanied on this extensive journey by Flight Standards Air Carrier Branch Chief C. A. Commander. Their travels embraced eighteen days and took them to the far reaches of the South American Continent.

On this long journey, Basnight and Commander stopped off first at Balboa, Canal Zone, where they joined FAA Deputy Administrator Lt. General Harold W. Grant, Southwest Region Director Archie League, and Civil Aeronautics Board Chairman Alan Boyd for high-level policy meetings.

After the meeting in Panama, the others in the group returned to the United States, and Director Basnight and Commander began their two-man tour of South America. Their itinerary included meetings with top South American Government officials, U. S. flag carrier representatives, the U. S. Diplomatic Corps in this vast area, local aviation industry representatives, and FAA personnel throughout Brazil, Argentina, and Peru.

Director Basnight reports that one of the primary purposes of this trip was to determine how FAA can better serve U. S. flag carriers in these countries.

All of the top-level government and aviation industry officials were repeatedly assured of FAA's desire to cooperate in furthering U. S. aviation interests in Latin America.

Another important point continually stressed to all American embassy officials visited is the desirability of channeling more U. S. aid effort into aviation because the airplane is the key factor in economic advancement in Latin America.

During this extensive tour, Basnight and Commander visited the only FAA-certificated foreign repair station in South America, PanAir do Brazil at Rio de Janeiro. Basnight stressed FAA's hope that immediate and concrete steps can be taken, with our aid, to assist other maintenance base operators and aircraft manufacturers in Latin America to raise their standards of operations to ultimately enable FAA certification of their facilities or products.

"Ambassadors" Basnight and Commander report that on every occasion, they were received graciously and, in many cases, enthusiastically; they were overwhelmed by the hospitality extended to them.

The various Latin-American government officials were very pleased with FAA's offer to share U. S. aviation knowledge with them, and it was evident on all sides that our own personnel enjoy very good working relationships with the various government officials in these countries.

In Director Basnight's words, "The trip was most enlightening, encouraging, and mutually beneficial." He is very gratified with these countries expressed desire for an "open-door" policy in the mutual exchange of aviation technology.



Newly appointed Area Manager "Cliff" Rosacrans (2nd from left) beams as he welcomes distinguished visitors to Canal Zone. On his right is Southern Region Director Basnight; on his left Deputy Administrator Lt. Gen. Harold W. Grant, and Southwest Region Director Archie League.



He came through loud and clear. Director Basnight looks quite at home wearing headset and holding mike. Photo was made during a recent tour of Centro de Instruccion, Perfeccionamiento & Experimentacion de Circulacion Aerea, Buenos Aires. Jose Maria Gabrielli, Instructor, beams approval of Basnight's phraseology.



Director of Aircraft Maintenance for the Argentine Airlines, Bernardo Bolatti (r) gives Director Basnight a description of maintenance practices during recent visit to company's Repair Shop in Buenos Aires. Accompanying Messrs. Basnight and Bolatti are (l to r) Frank J. Monaco, Chief Advisor, FAA's Buenos Aires IFO; and Vice Comodoro Eduardo Mattenet, Secretary-General, Direccion Nacional de Aviacion Civil.



An impressive group welcomed FAA "Ambassadors" Basnight and Commander on their arrival in beautiful Rio de Janeiro, Brazil. (l to r) Brig. Castro Neves, Chief, Electronics & Installations; F. H. Horn, Chief, CAAG; Mr. Beckley, Chief, FAA/IFO; Brig. J. C. Araripe, Director, DRA; Basnight; Brig. C. A. Sampaio, Chief, Protection of Flight; Commander.

POWERED FLIGHT SALUTED AT KILL DEVIL HILLS



A Youth Conclave, comprised of two delegates from each state, was part of the two-day program in observance of the 60th Anniversary of Powered Flight and official dedication of the "First Flight Airport" at Kill Devil Hills, N. C. Shown at the banquet at Kitty Hawk are (left, standing) John Bennett, Aviation Representative, Georgia Department of Industry and Trade; Howard Stanley, youth

delegate, Elberton, Ga.; Arvin Basnight, FAA Southern Region Director; Astronaut Lt. Colonel John H. Glenn, Jr.; Robert Moore Travis, youth delegate, Covington, Ga.; (seated, left to right) James F. Niels, businessman and pilot; TWA Pilot Hal Blackburn; and Wanda Hanna, Tennessee youth delegate. This conference centered around the impact of flight upon the daily lives of youth.

"Starlifter" Makes Maiden Flight on Anniversary



The C-141A "StarLifter," U. S. Air Force's gigantic new fan-jet cargo-troop transport plane, roared off Dobbins Air Force Base runway at Marietta, Georgia, for its first test flight on December 17, 1963 . . . exactly 60 years after man's first successful powered flight.

At the controls of this huge aircraft was Leo Sullivan, Lockheed-Georgia's Chief Engineering Test Pilot. This big, beautiful bird's maiden test flight was termed successful by Lockheed, FAA, and the military.

The "StarLifter" is the first aircraft to be developed as a joint private industry-

military-Federal government venture for dual military and civil use.

This plane, the most powerful in the Free World, is powered by four giant Pratt & Whitney fan-jet engines, packing a total thrust of 84,000 pounds. Its fuselage is 145 feet long (25 feet longer than the entire distance covered by the Wright Brothers' first flight in 1903) . . . has a 160-foot wing span . . . flies in excess of 500 miles an hour . . . and is capable of spanning oceans, non-stop, with a 70,000-pound payload. December 17, 1963—another "red-letter" day in aviation history!

Atlanta Flight Service Station Survives Visit by Astronauts



The Atlanta Flight Service Station came very close to a "BATCS" (Breakdown in Air Traffic Service) recently when Astronauts Alan Shepard and Walter Schirra, above, visited the facility. However, after one "orbital flight" over the excitement, a normal "re-entry" was made, and activities returned to normal in time to allow FSS personnel to perform pre-flight briefings duties for the distinguished pilots who were on a routine flight through Atlanta.

"RED" CHANDLER IS AT'S CHIEF



Henry S. "Red" Chandler



James S. Beasley

Henry S. "Red" Chandler was recently named Chief of Southern Region's Air Traffic Division. Chandler, formerly Chief of Operations Standards Division, Washington, fills the post formerly filled by James G. Rogers, now Director of the Alaskan Region. "Red" Chandler is well-known in the Air Traffic field throughout the country and is highly regarded for his depth of air traffic knowledge, his demonstrated managerial abilities as well as for his warm personality. Southern Region is happy to "welcome him aboard."

James S. Beasley, formerly Chief of the International Field Office at Miami, has been named International Aviation Affairs Officer for the Southern Region. Beasley's area of responsibility includes Central and South America, including the Caribbean. He comes to his new post with a fine background in international aviation affairs, having held responsible positions with the Agency.

ECONOMY DRIVE AFFECTS ALL AGENCY PERSONNEL

President Johnson, shortly after assuming his new responsibilities, asked for economy in government and the assurance that the "Government get a dollar's value for a dollar spent."

This request will affect every FAA employee. Everyone, from the junior clerk-typist to the top supervisor, must economize. Principally, workers must keep a high standard of production, performing a "day's work for a day's pay."

The FAA has now reached a leveling off point in its expansion of personnel and growth of facilities. Any "fat" which we might have accumulated in the past years of rapid expansion will be trimmed. In the future we can expect to be called upon to meet the requirements for services in industry, general aviation, and military with little if any increase in personnel or appropriations.

This requires a new look at our work habits and production. It becomes more important than ever that each employee be an efficient, producing individual. Steps must be taken immediately to raise the standards of workers who are producing less than 100 per cent; other steps must be initiated to maintain the efficient worker at his 100 per cent productivity.

If the Agency is placed in the position of receiving no additional operating money or personnel, this doesn't lessen our obligations. Increased aviation activities are already demanding more from the Agency. This serves to point up the need of better utilization to meet the needs of aviation.

It is not just doing things better, but making sure the work is 100 per cent effective. Those employees who cannot meet the challenge of more efficiency may find themselves in unpleasant circumstances. A few unproductive employees can lower the efficiency of the organization, a situation which cannot be tolerated.

It, therefore, becomes incumbent of every employee and supervisor to contribute to the success of the assigned duties. Every employee must conduct a self-analysis to determine his best methods and efforts. More time must be spent trying to master the job instead of complaining of too much work to do.

Employees must grasp the sense of personal responsibility and the courage to face and overcome obstacles. They must face these problems and solve them as their own. The indispensable ingredient of efficiency is responsibility.

Self-analysis should include the three factors closely related to job performance and effectiveness of work: quantity, quality, and attitude. Quantity is the amount

of work accomplished, quality is its value, and attitude is the controlling or guiding force behind the approach to the job.

Quantity tells us how much work is expected as indicated in the job description or by the minimums imposed by the supervisor. This should not be the single criterion in assessing self-analysis. "Can I do more?" should be the measuring stick for the conscious employees in the period we are now entering.

Quality may govern the amount of work an employee produces. Safety and quality should not be jeopardized for quantity, but a good day's work is highly important and desirable. Further self-analysis should determine if the proper work methods are being applied and whether there is a weakness that can be overcome by more practice or added skills which can be obtained through home study or practice.

There is no substitute for quality, which naturally, takes more concentration and effort to accomplish. Adequate recognition and guidance will be given by supervisors in developing latent and potential abilities in employees. The goal can only be reached by job excellence which will assure a full day's work.

Rounding out the three characteristics is a good attitude, required to create harmony between quantity and quality. Proper attitudes on the job form the basis of the employees' contributions and accomplishments in the Agency's long-range goals. Attitude seasons the work, making the accomplishments meaningful and rewarding.

At the Williamsburg Conference early last year, the Administrator, explaining his management philosophy, reemphasized that he wanted the FAA to be the "leanest, cleanest, and keenest outfit in government." He further defined his terms which I quote here: "Leanness means having just the resources necessary—no more no less—to be able to achieve what the people expect of us: good hard muscle, without fat. Cleanness means objectivity and integrity: honest, selfless, dedicated service. And keenness is largely concerned with high morale, initiative, enthusiasm, vigor, humor resulting from high productivity and a sense of achievement . . ."

Since the Administrator made these comments, management has been strengthened in the FAA. Steps are being completed in consolidating the functions of the Agency while still decentralizing them from the Washington office. We are now approaching the highest type of



management in all phases of operations, either by hard past experience or by the current Project Focus. This experience—and the tests in better management concepts—are giving us a better traveled road, so to speak, in our pursuit of economy.

A challenge is an obstacle which can be attacked and overcome. We in the FAA have met these challenges before, and now we are better prepared for the challenges which lie ahead. By combining our talents and initiative, the Southwest Region could become the model and the apostle of the "lean" but efficient segment of a federal agency.

More recently the Administrator spoke of four types of employees in the Agency—thinkers, talkers, watchers, and doers. He stated that in the months ahead the Agency has room only for the "doers."

Southwest Region employees are doers, as their records show. They get satisfaction out of meeting challenges successfully, and morale has been highest when goals were shared in common. Our people know how to plan—to reach the assigned goals and to stimulate the aggressive and efficient team action that makes goals become realities.

In summation, there is an important task ahead, and the only way to face this challenge is with initiative. The job is too big to accomplish with the small "can't-do" thinkers. Every job must be approached with a "can-do" attitude.

Let's accept the challenge and get the job done by being "doers."

Archie W. League

Director, Southwest Region

FIELDS RETIRES, ENDS 25-YEARS IN AVIATION

A couple of obstacles kept Elmer L. Fields, air traffic control specialist at the Oklahoma City Flight Service Station for 21 years, from being a pilot. However, when he looked back on a life studded with rich experiences on his retirement in December, he had accumulated 25 years of service to aviation.

A farm boy near Hammon, Oklahoma, in 1919, Fields at the age of 15 took several flying lessons in a Lincoln trainer, but fell short of a license when his flying lesson money dwindled. In 1927 when he went to Kansas City to resume his chosen career, he again was turned from aviation and entered a business college on the urging of relatives.

Despite being shunted from actual flying, Fields turned his endeavors to the related work of radio communications. He found it both interesting and profitable as a vocation and hobby.

Fields began tinkering with radio when he was a student at Hammon High School, making enough money by building and selling sets to stay in school until graduation. In a setting of contrasts, he rode an estimated 14,000 miles on horseback from his farm home to school, but filled his spare hours with the study of radio fundamentals and construction.

After leaving Kansas City, Fields went to Leedey, Oklahoma, where he worked for the old Public Works Co. for several years. In 1928 he was assigned call letters W5BKN for his amateur station, which he still operates, and was instrumental in setting up radio communications in the 1934 flood in Hammon. Always tinkering with radio, he expanded his hobby to the construction of a television disk scanner in 1932 and was able



Elmer L. Fields

to pick up the two stations then being operated.

Aviation again caught up with Fields in 1939 and he became an aircraft communicator in Monroe, Louisiana, for the old CAA. After a few months there and at the Texas towns of Saltillo and Yoakum, he transferred to Oklahoma City in early 1942.

Fields is proud of his work record, which shows he was late to work but twice in his 25 years with the CAA/FAA. One of these times he was completely snowed in and on the other occasion his clock stopped.

He plans to remain in Oklahoma City and enjoy his retirement status for a few months.

Campaign Renewal Stirs Interest In Occupational and Home Safety

A new safety campaign is now underway in the Southwest Region and will continue through June. It is centered around the slogan, "It's not the RIGHT way—if it isn't SAFE."

Objective of the campaign is to create and stimulate FAA employees in occupational, home, and vehicle safety at all times. It closely follows the successful 1963 campaign, "Safety Everywhere—All the Time."

Items to be covered in the new safety drive include information on why safety is needed, booklets on do it yourself projects, office safety, first aid, which jobs have the most accidents, children in the car, what to do about home injuries, falls, and driving safety. Safety off the job will emphasize the motor vehicle and proper driving habits.

Results of the 1963 campaign have been gratifying. Employees have become more safety conscious and have pushed the accident trend downward in all areas except for accidents involving motor vehicles.

Antique Aircraft Fly-In Attracts Enthusiasts from Several States

More than 400 enthusiasts attended the antique aircraft fly-in hosted by the Louisiana Chapter of the OX-5 Club at the Shreveport Downtown Airport. Planes came from Louisiana, Arkansas, Texas, and Mississippi and included a Travelair, Steerman, and a Pitt Special.

Approximately 50 attended the banquet held in honor of the OX-5 members, their wives, and friends.

LOVELACE FOUNDATION IS SEMINAR SETTING FOR ADVANCED DISCUSSIONS

An advance medical seminar, the first of its kind to be presented by the Southwest Region, was held at the Lovelace Foundation of Albuquerque in November. More than 230 AMEs, representing five regions, attended the seminar which featured addresses by some of the most prominent directors of aerospace medical research.

Dr. A. H. Schwichtenberg, Director of the Foundation's Department of Aerospace Medicine and Bioastronautics, welcomed the participants. Foundation department directors attending included Dr. Ulrich C. Luft, Physiology; Dr. Everett H. Wood, Ophthalmology; Dr. Robert E. Proper, Internal Medicine; Dr. C. J.

Sands, Otolaryngology; Dr. Robert R. Secrest, Internal Medicine; and Dr. Jacek Szafran, Psychology.

At a dinner meeting, Dr. Charles A. Berry, Chief of Aerospace Medical Operations Office, NASA Manned Spacecraft Center, spoke on "Dividends from the Mercury Program and Their Application to Future Manned Space Flights."

Program discussions included "Clinical Procedures in Aviation Medicine" by Lt. Col. Donald E. Flinn, Chief of the Neuro-psychiatric Department of the U. S. Air Force School of Aerospace Medicine. He spoke on screening aviators for psychiatric disorder and cerebral episodes. Dr. Lawrence E. Lamb, Chief of the

School's Clinical Sciences Division, discussed drugs and flying personnel.

Regional flight surgeons in attendance included Dr. Frank K. Raymond, Western; Dr. Charles W. McMillin, Central; and Dr. John D. Dougherty, Southwest. In addition to serving as the host flight surgeon, Dr. Dougherty presented a demonstration of hearing loss by pilots and served as moderator and panel member for the three-day meeting.

Civil Aeromedical Research Institute personnel in attendance included Dr. P. V. Siegel, Chief of the Aeromedical Certification Division; Dr. J. Robert Dille, Chief of the Program Advisory Office; and Dr. Stanley R. Mohler, Director.

WILEY POST AIRPORT DISTRICT OFFICE OPEN



Familiar Wiley Post Airport tower and terminal, long the center of general aviation in the OK City area, is near new General Aviation District Offices.



Entrance into \$300,000 GADO is through FSS which occupies entire first floor. Below, l. to r.: E. G. Igo, FSS Chief; W. Karpenko; E. Britherton; N. Worthy.



Wiley Post Airport, Oklahoma City, assumed a new role in January with the dedication of an FAA District Office Building there, which is a start of a trend toward more efficient operations of facilities and offices.

The building houses the General Aviation District Office, Flight Service Station, Airports District Office, and Engineering and Manufacturing District Office. It is the first building to be occupied by combined offices in the Southwest Region and is among the first of its type in the Agency.

Constructed by the Oklahoma City Airport Trust at a cost of more than \$300,000, the office building is leased to the FAA. The building's design, prominent in brick and glass, closely follows the architectural lines of the adjacent terminal building.

Wiley Post is principally a general aviation airport and the concentrated FAA facilities are expected to be advantageous to the flying public. It is also the principal manufacturing base for the Aero Commander Aircraft Corporation, which produces executive-type aircraft. The company is now in the process of obtaining approval on a jet transport for executive use.

W. O. Karpenko, district airport engineer, is the area coordinator for Oklahoma City. His APDO staff of 12 moved to the new offices from the Post Office Building in downtown Oklahoma City. In moving into the new building from the Will Rogers Terminal, the FSS was able to group all its activities under one roof. The ADIS equipment, formerly in a Wiley Post hangar will operate in the building. E. G. Igo is chief of the 30 employees assigned to the station.

The 13 inspectors and secretaries in GADO moved to their new offices from the nearby terminal building. Roger L. Fancy is the supervising inspector. Dale A. Miller heads the staff of three inspectors and one secretary of EMDO, which formerly occupied hangar space at the airport.



JetStar (top) and Viscount (l.) are efficient executive transports. At right, H. Raulerson, principal maintenance inspector, and B. Clapp, aviation manager, Cameron Iron Works, talk while mechanics make minor adjustments in engine of the JetStar owned by his firm.



Hugh Raulerson and A. C. Falk, aviation manager, Superior Oil Company, examine log of the JetStar (left). Below, Wayne Tuttle, principal maintenance inspector gets right to the point discussing Gulf Stream engine work with mechanic.



Many companies favor the versatile, dependable Gulf Stream (above) for rapid executive travel. Hangar, with viscount tail protruding (below) is only one of 11 executive hangars dotting Houston International airport.



EXECUTIVE AIRCRAFT ROOST AT HOUSTON AIRPORT

General aviation has experienced a tremendous growth during the past few years, and some persons place the count of all aircraft in this category at more than 80,000. Typical of this growth is Houston International Airport, principal center in the Southwest for executive aircraft maintenance and operations.

Now dotting the perimeter of Houston International are no less than 11 hangars of oil, construction, and steel corporations, all supporting operations of their executive aircraft that link the corporations' United States headquarters with their far-flung foreign activities. Scores of other aircraft are based in the immediate Houston area and in the southeast section of Texas serviced by GADO-5.

Hugh Raulerson, principal operations inspector, tells of the change that has taken place in the Houston area since he transferred here 10 years ago. "There were about 125 general aviation multi-engine aircraft operating in the area when I came here in 1953," he called. "And the largest plane used in executive aviation then was the Convair."

Today there is a different picture: three Jetstars, six Gulfstreams, three Viscounts, and one each of the Allison Convair and the F-27 Fairchild, plus numerous twin and four-engine reciprocal type aircraft used by executives. These make up a good portion of the 130 aircraft, including three helicopter operations, using the Houston International for executive, transportation, and training flights.

Nearby—within a radius of 25 miles—five other airports add up an impressive total of aircraft. Andrau Airpark has several executive planes among its 120 single and multi-engine craft, LaPort Airport has 65 multi-engines used mostly in training, Pearland Airport has 92 planes which are mainly single engines, and Genoa Airport and Clover Field count about 45 planes each, some of which are multi-engines.

In addition, there are executive aircraft operating out of Victoria, Beaumont, Orange, and Freeport, plus 22 industrial and 58 agricultural operations in the GADO-5 area. Victoria also has a 23-craft helicopter operation. Operations of 20 repair stations, 66 authorized inspectors, 40 air taxis, and 225 approved airframe and powerplant mechanics are monitored also by the GADO personnel.

As more corporations move into the executive aircraft field and to newer models of aircraft, the complexity of the work for the GADO inspectors also increases. Constant schooling for both the operations and maintenance inspectors is a must to keep them skilled in the new planes, changes in electrical gear, and a variety of other needs. In addition to courses at the Aeronautical Center, inspectors often study in schools maintained by industry. Each new aircraft or modification means another school must be attended.

"We must learn new regulations to stay up with the new aircraft," Raulerson commented. "We deal with a public

that includes people ranging from millionaires to the beginning mechanic—and often we are called as experts in this field."

Continued expansion of executive aviation, accompanied by newer aircraft design, promises to keep the GADO staff in Houston, as well as the entire GADO area, taxed to the limit in their operations schedule. At present Emerson Carpenter is the supervising inspector, and Clarence R. Nelson is the other operations inspector. Wayne Tuttle is the principal maintenance inspector and is assisted by John R. Hull and Bennett O. Kellogg. Clerical help is performed by Miss Virgie Ellison, Mrs. Marion K. Burke, and Mrs. Rosemary Snow.

The present trend in executive aircraft is toward smaller, but faster planes such as the Jetstar and others soon to come off the assembly lines. Commenting on this trend, the manager of one of the Houston-based executive fleets said, "In competition today we have to use jets, or the company executives will go commercial to get to their destinations in the fastest manner."

Charged with the safety of these planes and pilots as well as others in general aviation, the GADO inspectors have to travel equally as fast, and with an increasing knowledge of operations. Their specialized training and years of practical experience facilitate the advising, counseling, and monitoring of this work.

Manufacturing Inspectors Perform Vital Role



Dale A. Miller (l.), manufacturing inspector of EMDO-41, gives a detail inspection to a critical forging to determine that it conforms with the approved design. The part is also checked to determine if previous plant inspections followed FAA approved quality control procedures for the aircraft.

Delivery of a safe aircraft to the flight line involves many people within the FAA, and one important job is performed by a small crew of manufacturing inspectors. It is the work of these men to verify that each aircraft produced for commercial use is identical to the one approved during the type program.

These inspectors are responsible for the security a passenger feels as he fastens his seat belt and relaxes on a flight across the country—a flight which frequently involves less time than it takes the passenger to get from his home to the airport and then from the airport to his final destination.

Three Engineering and Manufacturing District Offices, with a complement of 11 inspectors and two regional office inspectors, support this work in the Southwest Region. A part of the Flight Standards Division, the offices are in San Antonio, Oklahoma City, and Fort Worth.

It would be impossible for these 11 inspectors, by running a detailed inspection of all parts, to determine the airworthiness of the eight to ten aircraft produced in the Southwest Region each day. To facilitate the inspectors' work, manufacturers are required to prepare a detailed outline of the procedure they intend to use to control the quality of their product. A Production Certification Board of top inspectors then runs a detailed evaluation of the manufacturer's facility to see that he is following his outlined procedures and that these procedures are adequate.

The detail and complexity of the procedures will vary with the size and complexity of the product. To keep the program going and to prevent the relaxing or by-passing of steps in the approved procedures, inspectors spot-check the manufacturer's

facility at frequent intervals. Triennially, a Production Certification Board re-inspects the factory in the same detailed manner that was used for the original approval.

As a final check before the Airworthiness Certificate is issued, each aircraft is inspected for airworthiness and completeness by an FAA representative.

Southwest Region's 11 inspectors and two supervisors have a total of more than 315 years of aircraft experience, an average of 24 years per man. Through these experiences they have stored a vast amount of knowledge that helps them know where to look for possible weak spots or "corner cutters" which could create serious problems.

The work is not glamorous. Each malfunction and defect becomes the responsibility of the inspector and generally he receives little praise for his good work. However, as he watches a family park their private plane after a Sunday flight or sees 120 passengers deplane from an international jet, he has a deep feeling of satisfaction and pride that his knowledge helped to make this air safety possible.

Inspectors in the Southwest Region include Dale A. Miller, Corbet F. Dunavin, and Emmett L. Brotherton, Oklahoma City; William H. Messick, Andrew J. Morgan, Francis J. Wagner, James M. Clarke, and Russell Q. Kuhn, Fort Worth; and Claude A. Bandy, Francis C. Stouffer, and A. Vonley Carter, San Antonio. Robert J. Curry and Gene C. Berrier are the regional inspectors, and H. H. Slaughter is Chief of the Engineering and Manufacturing Branch.

These inspectors, as it is with every member of the vast FAA Team, are justly proud of their part in "Today's Air Safety Record."

An Aero Commander's company inspector and the quality control director discuss progress at a typical production assembly line for wing components.



A final functional check of the aircraft landing gear retraction system is being made by inspectors. All systems are checked out before flight testing.



CREWS QUARTERS RISE ON MOUNTAIN DESPITE RUGGED TERRAIN, WEATHER



This is the radar site on Brushy Mountain where crew quarters were built. Partially completed quarters show natural stone used to blend quarters with the terrain.

On top of Brushy Mountain, overlooking eastern Arizona and southwestern New Mexico, construction crews fought nature and often the elements to construct crew quarters adjacent to the Silver City ARSR. The quarters are for the maintenance crews assigned to provide complete surveillance, preventive and emergency, at the facility.

Brushy Mountain came into prominence in August 1963 when the final link in the Southwest Region's area positive control was established. The radar site covers a large section of New Mexico for the Albuquerque Center.

Practically isolated from modern roads, the site can be reached by following a single lane country trail from Mule

Creek to a forest trail which connects with an FAA-built road up the mountain. This road is a twisting and winding trail which seems to disappear into space at hairpin curves devoided of guard rails. Due to the nature of the terrain, the grade is extremely steep and practically impossible to travel in rain or snow.

Construction of this remotely located building has presented numerous headaches to the contractor. His greatest difficulty was the transportation of supplies to the site. If shortages were found in his supplies and equipment, it meant a two-hour to a half-day trip to the "flatlands" as there was no other means of communications to his home office. Often supplies had to wait at the foot of the



mountain for favorable weather.

A majority of the construction workers lived on the mountain during the building of the quarters. Meals were prepared in a house trailer and the men were quartered in a tent.

Also, the maintenance personnel, all rotating from Systems Maintenance Sector 211, lived in a trailer at the radar site. The resident engineer, except in extremely bad weather, bucked the rain and snow in a four-wheel drive Jeep.

The quarters blend with the mountain top terrain and depict a rustic effect of a lodge. The quarters have six bedrooms, each with individual bath, kitchen and laundry facilities, two car garage, and a living room with fireplace.

ALEXANDRIA, WICHITA FALLS NOTE AREA COORDINATORS' LONG SERVICE



Ellie L. Walton

Charles M. Martin

Area coordinator for Alexandria is Ellie L. Walton, air traffic representative at England Air Force Base. Other facilities in Alexandria include the FSS at Esler Field Airport and Systems Maintenance Sector 601.

A native of Bayou Current, Louisiana, Walton attended high school in Melville

and later studied at Southwestern Louisiana University for two years. He was active in sports, band, orchestra, and gymnastics, and participated in the Civilian Pilot Training Program.

Walton entered service with the CAA in Atlanta and was an assistant controller at the Jacksonville Center when he joined the Army Air Corps in 1943. Twenty-six months of his three years of military service were in air traffic control towers. After his discharge, he spent a year at the Jacksonville Center before transferring to the New Orleans Center where he later became a supervisor. He was assigned his present duties in 1957.

Although Walton received his pilot's license while in college, he ceased his flying activities when he entered the military service. Recently he was re-checked and now flies occasionally.

Charles M. Martin, FSS Chief, is the area coordinator of the Wichita Falls facilities which also include the Airport Traffic Control Tower and Systems Maintenance Sector 401. He has been at Wichita Falls since 1951.

Born at Wizard Wells, Texas, Martin attended Weatherford High School, Weatherford Junior College, North Texas State University, and Texas Tech. He obtained a bachelor's degree from the latter college in 1941. He taught school for eight years.

Starting his CAA-FAA career as a journeyman, Martin worked from 1938 until 1943 in Texas, New Mexico, and Oklahoma City. He served as chief of the Abilene FSS from 1943 to 1951, the year he transferred to Wichita Falls.

Martin holds a private license for single-engine aircraft.

CHIEF'S DAUGHTER TAKES TROPHIES IN NEW MEXICO RIDING COMPETITION

Lucy Ann Hunsaker, 11-year-old daughter of George L. Hunsaker, Chief of Albuquerque Tower/RAPCON, won the junior jumping trophies at the New Mexico State Fair and the Pecos Valley Championship Horseshow, Roswell, this season. She returned from the Roswell competition with five trophies, a repeat of her wins last year, after winning trophies for junior jumping, Western riding, and English equitation at the State Fair.

Equestrienne daughter Lucy Ann, who has been riding since she was five, has more than 50 trophies and hundreds of ribbons for her riding accomplishments. Her first prize was won in a costume class as an Indian princess; her latest, a high point rider in both English and Western events at the Pecos Valley show.

She usually shows her horse Dangerous Assignment and her Palomino quarter-horse Trigger Head. Among others was Kitty Catalyte, Golden Palomino state champion for four years. Lucy Ann is now breaking a Shetland pony for some of her friends to show.

It is not unusual for Lucy Ann to go for a ride before breakfast—often before her parents are out of bed. In the afternoon she often plays "horseshow" with younger brother Joe and sister Julie. Joe



Lucy Ann Hunsaker, trophy-winning daughter of Albuquerque Tower Chief, guides her horse Dangerous Assignment over a hurdle at the New Mexico State Fair. She has been riding and winning prizes since she was five.

says he is going to be a pilot, but Julie will probably be a rider.

Riding is only the glamor part of showing horses. First comes their proper

feeding and grooming, which means care from head to foot, plus the cleaning of stalls. The chief's daughter does it all with a champ's determination and gusto.

YOUNG, OLD, SHARE SPOTLIGHT IN NEW ORLEANS

Young and old were feted in New Orleans during the Fifth Anniversary Observance of the FAA. An 18-year-old student pilot was chosen Miss FAA and a 60-year-old grandmother was Mrs. FAA. Both were honored in ceremonies

Participating in the New Orleans observance held at Lakefront and Moisant airports are, (l. to r.) C. O. Reasoner, Harry Arnold, Frank Wilson (Moisant Tower), Bill Franklin, A. W. Koon, O. K. Haley, and the honorees, Mrs. Maynard and Miss Stephanie Huff.



at Lakefront and Moisant Airports in New Orleans.

Miss Stephanie Huff was Miss FAA. In addition to learning to fly, she is studying to be a space-age secretary, after which she plans to return to her native California.

Mrs. John Maynard, grandmother of 12 and the wife of a retired airlines pilot who now operates a flying school, was chosen Mrs. FAA. She has two sons who are airline pilots and a daughter who is an airline stewardess.

Recently Mrs. Maynard soloed her Cessna 150. In 1927 she survived a serious accident with her husband in their then new Stinson "Reliant."

Participating in the ceremonies were the mayors of New Orleans, Kenner, and Slidell and the facilities chiefs in the New Orleans area. They included C. O. Reasoner, Center (also area coordinator); Harry Arnold, FSS; Bill Franklin, Center SMS; A. W. Koon, Moisant Tower; O. K. Haley, GADO-8; Frank Johnson, SMDO (acting); and Larry Falcon, Lakefront Tower.

I&M Bowlers Corner Top Tallies In Albuquerque Tournament Play

Three bowlers of the Albuquerque District Test Office captured Coronado Club prizes in weekly competition at the Sandia Base Coronado Club. All are assigned to the Installation and Materiel Branch.

Ferne Blanchette copped the prize for the best women's high individual score, Charles Ginn took the men's individual high score, and Cliff Lutz boasted the best low ball score.

After 40 games the four FAA teams are closely grouped. Leading at this point of the tourney by a single game was the Horned Toads. Following in games won were the Cow Towners, Pin Spinners, and Gutter Dusters.

WALTON TO PA. SCOUT MEETING

Ellie L. Walton, Air Traffic Representative at England Air Force Base and Alexandria (La.) Area Coordinator, was selected Scoutmaster to attend the Sixth Scout Jamboree in Valley Forge, Pennsylvania.

WESTERN REGION ROUNDUP

A Message from Joseph H. Tippetts

By the time this issue of *Horizons* reaches you, there will have been a great deal of added emphasis placed on economy of government operations. As taxpayers, each of us—and all citizens—must strive for efficiency and economy in government.

The President has called on all employees to give a full day's work for a full day's pay. Mr. Halaby has urged that all FAA employees exercise maximum initiative and ingenuity in finding improved ways of doing our various activities. Improvement is always possible, but it can be realized only when someone gets it moving and that someone is you or I.

With this in mind, the Western Region has adopted the slogan: "There is a better way of doing it. YOU find it."

• **IN THE PUBLIC EYE**—Efficiency and safety record of FAA at Stapleton Field was praised in a *Denver Post* article . . . Seattle flight inspection personnel DALE EVANS, HARLEY HOWELL and DAVID CARR were featured in an article on aircraft rebuilding in the *Northwest Flyer* . . . JOHN F. HAMILTON'S photo appeared in the *Sacramento Bee* in connection with his retirement after 30 years of service. In same photo were two other FSS employees at Sacramento—K. C. FRANCIS and L. J. STEPHENS, who received 25-year pins . . . *Las Vegas Review-Journal* carried two articles on the impact of general aviation on the Las Vegas area . . . *Northwest Flyer* had an illustrated feature on Tacoma's new industrial airport which included photos of MR. TIPPETTS and the Governor of Washington . . . Long Beach airport and FAA personnel at Long Beach were the subject of an entire page in *General Aviation News*. Part of the page was taken up by articles written by H. G. DENNER of the GADO staff and STAN DILATUSH, tower chief. . . ROBERT FARRIS, chief of the Longmont ARTCC was the subject of a feature story in the *Longmont Daily Times-Call*. A photo with the story showed him with KEN SMITH checking a radar training panel . . . *Fresno Bee* carried an illustrated feature on flight inspection. Among FAA employees mentioned and shown in photos are O. B. COX, JOHN S. ZENTNER, JOHN THENO, and LLOYD G. ANDERSON . . . Transfer of FORREST H. COULTER, Ogden super-



Our fellow citizens are looking to those of us in government to do *only the neces-*

sary, do it well and do it with cost consciousness.

visory airways engineer to Denver, as chief of the Plants and Structures Engineering Section was announced in a *Salt Lake Tribune* article . . . *Skyways Magazine* carried photo of JOE BURIS and BOB MATTHEWS, Troutdale tower, receiving long-service pins . . . The *Colorado Rural Electric News* had a photo of the FAA radar atop Douglas Pass between Rangely and Grand Junction.

• **KUDOS**—To EDGAR C. PERRY, JEROLD E. SCHRODER, and ROBERT A. MEHLING of the Sacramento FSS for bringing a pilot safely down to University Airport after he became disoriented in the fog . . . to the crew at Lindbergh Field tower, San Diego for an outstanding safety record. There has not been a major carrier accident on the field despite much adverse weather and dangerous terrain on three sides of the airport. The tower staff includes ED RAY, chief controller, and these controllers: LE ROY AGENBROAD, DON ALFORD, CRAIG CHASE, PETE DALO, DON MULLIN, ROGER STODDARD, DICK WHITE, and JACK WOODS. Assistants are MAX HALL, LEE HOLDEMAN, and JIM PEYTON . . . To WALTER LASKO of the Ukiah, Calif., FSS. LASKO suggested procedures to a pilot encountering difficulty getting his landing gear down. The aircraft was low on fuel and the pilot was also resigned to a wheels-up landing when Lasko gave him advice which enabled him to come in safely . . . To JOHN ZENTNER, Fresno GADO. The statement he took from James Faber, Modesto

pilot has been reprinted as a brochure in the interest of safety . . . To L. R. BOATMAN of the Akron, Colorado FSS who helped bring in a disoriented pilot. The plane had only one gallon of gas on landing. G. H. LAIRD, chief of the Akron station, commented on the "save": "The calm way in which the incident was handled and the reassurance given the pilot, contributed greatly to a safe landing" . . . RICHARD A. McHUGH and FRANK PAULISSEN of the Red Bluff station for their participation in the Tehama County Aviation Association meeting . . . To A. G. WITTER of GADO-1, Boise, for representing the FAA at the Governor's Safety Conference called by GOV. ROBERT E. SMYLLIE . . . To WALTER S. PORTER, chief, Spokane tower, for developing an effective public relations program on control tower activities.

• **SCATTER**—All Reno FAA offices participated in the United Fund campaign with the CS/T, DAE and GADO having 100 per cent contribution . . . GERALD PETTIBONE, ATAS at Denver, informs us that some personnel at the Denver center witnessed a record parachute jump by WILLIAM DRIVER from an altitude of 33,400 feet, involving a free fall to 7,000 feet. Temperature at jump altitude was 75 below zero . . .

• **IN THIS ISSUE**—We are beginning a series of aviation historical pages—hope you like them . . . Foreign students teach many an important lesson in "diplomacy," and thus help cement goodwill, so they're featured this month.

The "Salty Side" of FAA

Yes, FAA has a "salty side"—and even a "navy" of sorts.

There are a number of facilities throughout the nation which can best be reached by boat. One of the most interesting of these is the San Diego VORTAC. The San Diego VORTAC site is located in Mission Bay on an island specially built for this facility.

The island, no bigger than a football field, has been named Ski Island.

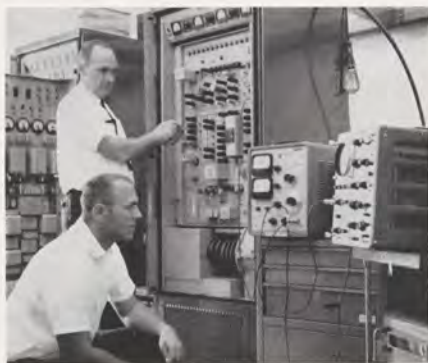
In addition to knowing the many complexities of the VORTAC system, the technician assigned to the San Diego VORTAC must also be able to handle the 16-foot motor boat used for transportation to the site. The trip to Ski Island normally takes only 10 to 15 minutes. But in foggy weather, navigation could be a problem and one could spend a *lot* longer en route on a foggy night.

Despite its inaccessible location, the San Diego VORTAC has not sustained any long outages since it was commissioned in October of 1961. The Civil TACAN equipment has been installed but has not been commissioned as yet.

One interesting sidelight on construction of this site was the episode of the "flooded snorkel". It happened when Fred Fernainy, the resident engineer, was checking the contractors' job of laying a power cable underground from the mainland to Ski Island.

Fred had to walk along the bottom of the bay the full length of this cable to inspect the job. Several times, the six-foot snorkel he was using became flooded with water from waves made by water skiers and boats in the bay.

"I guess Fred learned how to hold his breath during those situations of near panic," one of Fred's colleagues commented.



Above: W. Slocum, SEMT, adjusts TACAN equipment at Ski Island as F. Stubbe, technician, checks scope. Below: San Diego VORTAC site on Ski Island.



FAA boat tied up at dock on Ski Island, no larger than a football field.



FAA Horizons



LAX Remember When? . . .

From time to time, we'll run a "Remember When?" feature—a glimpse into the yesterdays of the airfields so familiar to FAA personnel.

Relying on photos alone for this month's feature, we see Mines Field (now Los Angeles International Airport) as it looked way back in the thirties—and another shot, taken in the same direction—as it looks today. Remnants of the old group of Mines Field buildings still remain and can be seen in front of the FAA District Offices and Hangar.

For good measure, we have included a photo of the "Graf

Zeppelin", named after the famed German inventor, when the dirigible visited LAX in the '30s, during a coast-to-coast tour. The aerial giant was 778 feet long and had a capacity of 3,708,600 cubic feet of hydrogen. Its cruising speed was 70 mph, and it could fly more than 7,000 miles non-stop.

We're indebted for those historic—and modern—photos to Bill Echols of Airport Photography.

Do you have some old aviation photos for use on the "Remember When?" page? Send them along. All photos submitted will be returned to the owners.



February, 1964



(Above, l.), Director Tippets briefs foreign students during a recent visit to Regional Office. W. S. Hardee (seated, r.), and G. Kroff (back to camera) participated. (Above, r.), Claire Walters congratulates Ibrahima Santara, Mali, Africa, following his completion of flight training at her school in Santa Monica.



YOU'RE AN AMBASSADOR, TOO

Each year, scores of foreign students take up temporary residence in the Western Region as part of an international program aimed at familiarizing them with FAA policies and procedures.

The sort of reception the foreign visitors get at FAA facilities determines, of course, the kind of impression of America they carry back with them to their own countries.

Garrison Costar, who heads the FAA International Liaison Office in Los Angeles, recently completed a survey that showed that FAA employees throughout the region were being "good ambassadors" in every sense of the word.

Costar stated, after returning from a tour of the region: "There are many instances of home-type hospitality being extended to these foreign visitors by FAA personnel. Our personnel have come forward to loan linens, blankets, cooking utensils, silverware, dishes, and even TV sets so that the visitors would not have to buy them. They have done much for the development of friendship between our respective countries—and certainly much more than is expected of them."

Costar paid special tribute to the personnel of towers at Bakersfield, Fresno, Stockton, Monterey and Oxnard, who had been especially helpful in assisting five newly-arrived Guinean Air Traffic Control Trainees.

Typical of the courtesies extended the foreign guests was a

tour of the Lake Tahoe area provided for Bangoura Martin of Guinea by Carl Estep, chief of the Stockton ATCT. During the trip, Bangoura was able to meet Arthur Godfrey personally and to chat with him for about 20 minutes.

"After visiting all of our Guinean trainees, I was favorably impressed by the manner in which each of the tower chiefs had developed a personal interest in his respective trainees and had made others aware of the importance that their impressions of the U. S. be good ones," Costar reported.

The considerate attitude toward foreign visitors to our shores is shared by others besides FAA personnel. A typical example concerns Ibrahima Santara 21, of Mali, Africa. While here on FAA orientation, Santara expressed an interest in learning to fly. Claire Walters, who operates a flying school at Santa Monica, arranged to provide him instruction, virtually at cost.

Today, Santara is an enthusiastic pilot, having completed his cross-country (Fresno-Salinas-Santa Barbara.) In one more typical instance, a favorable impression concerning America is carried back to a foreign land.

Costar and others working closely with foreign visitors to FAA facilities feel that every American these visitors meets is, in a sense, an ambassador for the U.S. In this manner, FAA employees can assist in the vital American task of promoting international goodwill and understanding.

HORIZONS Visits BURLEY, IDAHO



Ribbon-cutting ceremony for new building at Burley. From left are: D. W. Lane, FSS Chief; Mayor of Burley, Leonard Salmon; and S. H. Brewster, Chief, FMS.

Back in 1885, a Colonel Miller took up a homestead of 1,260 acres near the Snake River at Burley, Idaho. At about the same time Mrs. Miller put in a claim on 480 acres in an area which is now the Burley townsite.

The town, in Cassia County, 42 miles east of Twin Falls, has a population of 7,508 and has grown to be an important agricultural center in Southern Idaho.

One of Burley's important events last summer was the dedication of the new \$200,000 FAA building at the city's municipal airport. An open house and traditional ribbon cutting celebrated the occasion.

The FAA complement at Burley consists of seven specialists and four SMS personnel, contributing approximately \$80,000 annually to the city's payroll.

Here is how Dean W. Lane, chief of the Burley FSS, describes the area in a letter to the editor of *Horizons*:

"To say I like Burley could be an understatement. Besides having the newest and best looking station in the Western Region (and perhaps the whole U.S.) there is trout fishing, water skiing, golfing, trap shooting and bowling. All within one mile of the station.

"Burley is considered the center of pheasant hunting. There is also duck and goose hunting within five miles of the station.

"We are about two hours drive from Sun Valley for skiing, deer, antelope and elk hunting.

"The above, along with a mild and healthful climate, make this area very attractive."

The line forms to the right.

New FAA offices at Municipal Airport cost about \$200,000 in building and equipment. Protruding tail of the Queen Air seems to add the official Agency touch.



A THOUSAND HANDSHAKES

If count were kept, the number of handshakes exchanged by the Western Region director undoubtedly would exceed a thousand every month or so.

His responsibilities call for him to meet the public constantly—virtually on a daily basis—and at the same time to confer regularly with his own personnel. Demands on his time for speeches at dedications, civic gatherings and governmental meetings are heavy.

Some inkling as to this heavy schedule on Mr. Tippetts' part is indicated by the photos on this page showing typical meetings with individuals and groups both inside and outside the agency. Represented, of course, is only a small percentage of his total activity.



Congratulating Joseph J. Tymczyszyn on winning the Burroughs Award for outstanding achievement as a test pilot. "Tym" heads West Coast SST office.



Conferring at Travis AFB are Mr. Ullman, FAA liaison officer, Mr. Tippetts, Gen. W. Brandon. (Below) Tippetts, congratulates Oakland ARTCC Chief F. Marks.



Mr. Tippetts addresses Torrance dignitaries at runway dedication.



(Below) Tippetts, congratulates Oakland ARTCC Chief F. Marks.

PERSONNEL PIPELINE

The focus during calendar year 1964 on personnel management matters will be expanded toward the following:

1. Implementation and refinement of our Merit Promotion Program with greater authority vested in field facility chiefs in determining selections.
2. Expanded use of the Performance Improvement Program as a means to supplement and eventually replace our present performance rating system. The substitution of PIP for the performance rating system will require Civil Service Commission approval.
3. A more positive approach to the problems of minority groups and efforts to equalize employment opportunities.
4. More training and advice to supervisors on their role in implementing Executive Order 10988. (This Order sets forth the policy of dealing with employee organizations.) This emphasis is expected to take shape in early 1964 and will consist of training FAA managers on their role in labor relations.
5. Expansion of the Agency's Executive and Management Development Program.
6. A renewed emphasis on recognition and awards, particularly in light of the FAA's delegation of this program to operating division offices.
7. A more frequent look-see at jobs and job sheets and how well they match; to-

gether with more training on the responsibilities of supervisors for classifying jobs.

8. A more professional approach to employee safety problems and the prevention of accidents.
9. More frequent evaluations and studies of personnel management practices.

FAA's Accident Record

In a recent report issued by Washington, over 1400 FAA employees were injured on the job in Fiscal Year 1963, of which 313 were disabled and 4 were killed. These figures are somewhat cold but they represent a tremendous amount of employee and family suffering, loss of earning capacity and certainly a waste of manpower.

The Western Region had a total of 173 accidents, of which 137 were non-disabling and 3 were disabling; 95 were motor vehicle accidents which cost \$23,184. Three of the 4 fatalities occurred in the Western Region.

Each Region now has a professional safety engineer on its staff and FAA's approach to the safety program is shifting to one predicated on the basis that accident situations indicate a weakness in the management system and not just the individuals involved. A lot of progress has been made in the area of radi-

ation in and around high powered radar sites, hazardous noise around equipment and aircraft, procuring safety devices and personal protective equipment, and developing an attitude of safety consciousness among all employees.

Future plans include the preparing and issuing of directives in specialized areas and a more conscious review of accident producing weaknesses together with more vigorous corrective measures.

According to a recent Washington office summary, the following are active projects now underway with estimated completion dates as shown:

1. Revision of position classification standards for ATCS. Estimated completion date—March 31, 1964.
2. Training program for supervisors in promoting better understanding of position classification. This training package has a target completion date of March 31, 1964.
3. Revision of classification standards for EIT's. Estimated completion date—May 29, 1964.
4. Revision of classification standards for avionics technician GS-856. Estimated completion date—June 30, 1964.
5. Revision of qualification standards (not classification) for EMT GS-856. Estimated completion date—February 28, 1964.

JACKRABBIT 'RUNS' FAA VEHICLE OFF HIGHWAY

A jackrabbit "ran" a Federal Aviation Agency vehicle off the road recently.

The rabbit—undoubtedly a "Bugs Bunny" type—didn't have to exclaim: "What's up, Doc?" He merely appeared in the path of the car. The driver swerved to avoid hitting the critter, the car went into an uncontrolled skid then left the road and overturned.

The driver was injured, though not seriously. Car repairs cost about \$500.

The cause? George McCord, Regional Safety Officer, mentions two factors.

"Speed-driving too fast for conditions—appears to be a primary cause," he said. "A muddy road surface contributed to loss of control."

But, as McCord points out, the Agency's Occupational Safety Program is not designed to place "blame" on individuals. It is to find the causes of accidents—and prevent their repetition.

McCord added these other points: Speed too fast for conditions figures

prominently in the region's vehicle accidents. This basic speed law is explained in state vehicle codes with which all licensed drivers must be familiar. To say that no one shall drive "faster than is safe" may sound like an attempt to legislate judgment. In reality, it tells us that it is our responsibility to observe conditions and adjust our speed in order to maintain control. A conservative decision will result if we consider the need for evasive action. Road surface condition will be an important consideration throughout the winter.

One of the compelling reasons for active accident prevention is the avoidance of financial loss. The annual cost to the General Services Administration for vehicle - accident damage is nearly \$5,500,000. Individual agencies which use GSA vehicles pay damage costs in addition to this figure when the actions of their own drivers are responsible for the accident.

2 Employees—80 Years' Service



Formal presentation ceremony was held in Mr. Tippetts' office to honor two employees who received their 40-year emblems recently. The employees shown with Mr. Tippetts, are Henry M. Bray, left, chief of the Boise FSS and Edward G. Deziel, right, chief of the Fresno FSS. Both men started their federal careers with the Lighthouse Service in 1931, Bray in Fort Worth, Texas and Deziel in Providence, R. I.

SACRAMENTO FSS AIDS LAW IN THRILLING CAPTURE OF TWO DESPERADOES

Probably the only bank robbers to use FAA services to advise police of their ETA landed at Sacramento Municipal Airport in the early morning hours recently. A few hours after killing a California Highway Patrol Officer, the gunmen chartered a Cessna 310 in Reno to fly to Sacramento to catch an airliner for Mexico, apparently failing to realize the chartered aircraft would have been able to take them to Mexico.

A VFR flight plan on the Cessna 310 was received by Sacramento Flight Service Station from Reno CS/T a few minutes before the California Highway Patrol telephoned the Sacramento Tower to check on a tip that two bank robbers were flying to Sacramento.

While the tower and FSS were comparing notes regarding the flight plan and the telephone call, four Sacramento city policemen entered the FSS.

The FSS advised the officers the ETA of the aircraft was about 30 minutes. Meanwhile, an Aztec landed and taxied to the flight line for servicing. When the line attendant was told about the ap-

proaching desperadoes, he vehemently requested that the Cessna 310 go elsewhere than his gas pit if police anticipated gunplay.

Arrangements were coordinated by the Police Department, Betty J. Johnson, Tower Operator, and Art Walters and Pat Elton on duty in the Flight Service Station, to have the Cessna 310 unload passengers in front of the terminal.

After the aircraft had reported over Folsom (the possible future home of the gunmen), police secreted themselves behind convenient airport equipment and telephone booths. A few minutes later, the Cessna landed. Upon receiving instructions from the tower to make a 180 on runway 20, it taxied in toward the terminal building. The pilot parked the aircraft and shut off the engines. Two men, one carrying a briefcase, emerged from the aircraft and walked toward the terminal building. Everything appeared in place and ready. Police officers were hidden, FSS operators and Weather Bureau observers lined up at the FSS second story window to take in the action.

The tower operator was watching intently from on high. A few steps away from the parked Cessna, the two gunmen hesitated and peered into the shadows, hearing voices but unable to locate anyone.

The man carrying the briefcase reached his right hand into his jacket quickly and then withdrew it very slowly. A policeman shouted, "If you do that, you're dead."

The robbers then raised their hands, after setting the briefcase down, while police shook them down and handcuffed them.

More policemen arrived along with photographers and newsmen. The briefcase was completely ignored (but later recovered) while officers and newsmen milled about. Subsequently, it was reported to have contained over \$40,000.

The quick apprehension was made possible by FAA cooperation with law enforcement officers. The episode at Sacramento constitutes a dramatic example of vital FAA service our personnel are not ordinarily called on to render.

JOHN H. HILTON JOINS REGION AS CHIEF OF AIR TRAFFIC DIVISION



John H. Hilton, New Chief of Air Traffic Division.

John H. Hilton, the new chief of the Western Region's Air Traffic Division has had an intensive background in Air Traffic Control, beginning 22 years ago when he became an Air Traffic Control trainee at Louisville, Ky.

Hilton held progressively more important posts in the CAA and FAA. He served successively as Assistant Controller, Controller, and Chief Controller at Louisville and also as Chief Controller at Milwaukee and Indianapolis.

In November of 1948, he was transferred to Washington headquarters of the then CAA as an Airways Operations Specialist in which capacity he assisted in development of plans for improving the national Air Traffic System.

He served as chief of the Systems Requirements Branch, Airways Operations Division from June 1955 until October 1956 and then became deputy chief of the Planning Division, Office of Air Traffic Control. In April of 1957, he was named Chief of that division.

FAA positions which Hilton held subsequently included Assistant Director, Bureau of Air Traffic Management; Assistant Director, Air Traffic Service; Chief, Operations Evaluation Division; and Chief, Regulations and Procedures Division.

In November of 1963, he was named Chief of the Air Traffic Division, Western Region, succeeding L. Ponton de Arce who retired after more than 30 years of federal service.

Hilton, 46, was born in Cleveland, Ohio, and received his early schooling there. He attended Roosevelt High School in Ypsilanti, Mich., and is a graduate of the University of Michigan where he obtained a degree in Political Science in 1939. He did post-graduate work at Eastern Michigan University in Ypsilanti.

Hilton flew as a private pilot from 1941 to 1945.

He has been active in church and service club work and is a past president

of both Lions and Toastmasters clubs.

"I want to say 'hello' to the people in the Western Region, friends and strangers alike," Hilton said on taking over his new duties in Los Angeles. "I hope we soon get to know each other better. I plan to visit all Air Traffic Division facilities in the coming months to help make this possible.

EQUAL JOB CHANCES STRESSED

A discussion of what Mr. Tippets referred to as "one of the most vital issues of our generation—equal job opportunities" took place in Los Angeles as we were going to press with this issue.

The day-long program stressed minority viewpoints, and representatives of these groups were present to express their views.

Among guests speakers were Loren Miller, Los Angeles attorney and a leader in NAACP activity; Carlos F. Borja, Jr., deputy attorney general for the State of California and active in promoting Mexican-American understanding; Dwight R. Zook, head of personnel services for North American Aviation; and Sidney E. Tarbox, deputy director, Los Angeles Branch Office, U. S. Civil Service Commission.

CENTRAL REGION NEWS

BONDS ARE GOOD BUY, DIRECTOR POINTS OUT

By the time this issue of HORIZONS has been distributed, you will have received your first pay check containing the January salary increase. Perhaps some of you have already made specific plans for using the additional income. Others among you may have no choice but to use it to pay pressing bills. Fortunately, most of us will have some choice in how we spend the extra money. May I suggest putting all or part of it in United States Savings Bonds through the Federal payroll savings program?

You have heard me make this suggestion before. I do so again now because this is a particularly good time to begin buying bonds, or to increase the amount you are now buying. With this pay raise it can be done quite painlessly—without reducing by a single dollar our accustomed take-home pay. I also urge you to apply your raise to payroll savings bonds because your participation in the program is beneficial in so many ways: it helps the United States, it helps FAA, and it helps the employee who participates.

The Treasury Department tells us that financing a large proportion of the national debt through long-term obligations such as savings bonds stabilizes the refunding process against short-term fluctuations in the credit market. The result is more economical financing and greater confidence in our Government.

I am sure you join me in wishing high participation in the program by FAA em-

ployees. It is one more way by which we can demonstrate that we are a responsible group of employees, confident in our Government, and anxious to be of service in whatever ways we can. Undoubtedly there are some Central Region employees who cannot afford to buy bonds, even after the two salary increases, but surely this number cannot amount to 46% of our people. Yet, the records show that only 54% are now participating in the program. Do you think 90% is an unreasonable goal? Remember, you can have as little as \$3.75 per pay period deducted for bonds.

There are, of course, investments which offer higher returns than the three and three-quarters per cent interest which United States Savings Bonds earn, but there is *no* better way of saving money. *Regularity* is the secret in saving. For example, if you are in the first step of GS-9, your January raise amounted to \$355 a year or \$13.65 per pay period, before taxes. If you were to apply \$9.38 of this amount to savings bonds, you would have accumulated, after seven years and nine months, \$2,163. Savings bonds offer other advantages too: they are safe, effortless to acquire, can be cashed anytime and the interest is tax-exempt until the bonds are redeemed.

I might add that the delays experienced in receiving bonds have been almost eliminated. Under the new payroll system bonds are delivered within one week fol-



lowing the pay period in which the final purchase amount is deducted.

It is not at all difficult to join the payroll savings program or to increase your present allotment. To join originally, fill out Treasury Form 2254; to increase your savings use Form ISBC-2254-A. In the belief that most of you who have not participated in this program in the past will now want to do so and in the hope that many of the 3,652 participating employees will wish to increase the amount of their deductions, I am asking every supervisor to see that each of his employees receives one of these forms.

Let us join together in helping both our country and ourselves through participation in the savings bond program.

J. M. Beardslee
Director, Central Region

WILDERSON, RAY, RECEIVE AWARDS PRESENTED BY DEPUTY DIRECTOR

(Photo, left). A. K. Wilderson (center) Flight Service Specialist, Garden City, Kans., FSS, receives the Region's first Certificate of Achievement from Deputy Director Henry Newman at left. He assisted crew of an Army light twin in extinguishing an engine fire after the plane made an emergency landing. In addition to earning the FAA's highest Regional award he also received praise from the Army.

(Photo, right): That's a \$250 smile on the face of James Ray (center) as he accepts check and Special Service Award from Mr. Newman, right. Ray earned the double award for the design, electronic engineering and manufacturing of



the Region's Resources Planning Map kept on display in the Executive Confer-



ence room. His boss, I&M Division Chief, Alan H. Glass, is at left.

O'CONNOR AND ATKINS FETED UPON RETIREMENT



O'Connor gets retirement certificate from Pikell.

Burl B. O'Connor, Chief of the Flight Service Station at Chanute, Kansas, since November 1, 1946, retired from the Federal Aviation Agency effective December 21, 1963. O'Connor had completed 34 years and ten months of government service.

At a retirement dinner given in his honor on December 7 which coincided with his 55th birthday, J. W. Pikell, CE-524, presented O'Connor with the Agency's Certificate of Retirement.

O'Connor's government service began in 1928 with an enlistment in the U. S. Navy which lasted through 1932. Soon after discharge he was employed by the Army Engineers in St. Louis as a radio operator. His next transfer was to the Civil Aeronautics Administration in 1939 when he served at Wichita as a communicator, then moving to Columbia, Missouri, as Station Chief.



L. S. Rich says goodbye from everyone to Atkins.

Approximately 50 friends and fellow employees helped Gael E. Atkins, Livingston, Montana, FSS Chief celebrate his retirement last December 7. Present also at the occasion was L. S. Rich, CE-524.1, who presented Atkins with a Certificate of Retirement signed by Administrator Halaby.

Atkins retired effective December 20 following more than 30 years of Federal service, 28 years with the FAA and predecessor agencies. He first joined the ranks of civil servants in December 1935 when he accepted a position as Assistant Airway Keeper at Sidney, Nebraska. A year and a half later he moved to King Hill, Idaho, as Junior Radio Operator. Later moving to Billings, Montana, and Ephrata, Washington, he settled in Livingston, Montana, in July 1946.

At the time of his retirement he was Chief of the Flight Service Station.

Four Persons in the Region Are Given the First Increase Awards



Four persons pictured above were among the first to receive the new Quality Within-Grade Pay Increase Award as a result of continued high performance in their respective jobs. Alphabetically, from top to bottom: Barbara Anderson, Secretary, Minneapolis Tower, shown with Asst. Chief Ed Blazejak; Emily McClure, Realty Assistant, CE-724, shown with Materiel Branch Chief B. G. Braithwaite; Glenn E. Nash, CE-535.3 is shown receiving award from Henry L. Newman, Deputy Director; Evelyn M. Simons, Secretary to G. C. Kimsey, Chief, Procurement Section, CE-728, shown with Mr. Kimsey.

CENTRAL REGION PRESENTS TWO LONGEVITY PINS

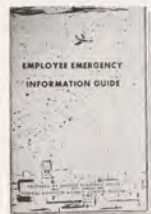


Thirty-five years of government service were recognized when Miss Bertha Gasser received a service award pin in December. Making the award was John A. Carran, Chief, Engineering and Manufacturing Branch. Miss Gasser joined FAA in Washington and also served at Chicago and Detroit before coming to the Kansas City Office. She is currently an Editorial Assistant.



A record was set in the Central Region when the first service award for 45 years service was presented to Mr. Merlin J. Cone, Flight Service Specialist at the Joplin, Missouri, FSS. When presented with the diamond pin by Henry L. Newman, Deputy Director, Cone promised to return in five years for another. Looking on at the right is George W. Kriske, Chief, Air Traffic Control Division.

Central Has Coordinated Emergency Plan



As a Federal Agency, the FAA would play a vital role in the defense of our nation should this country ever become involved in another national emergency.

Because of this fact the Agency has made plans to insure the continuity of operations if an emergency is declared. This is important because of our supporting role of all military aviation.

Kansas City, as a transportation hub and industrial complex, and the nearby military bases and missile sites would undoubtedly be among an enemy's targets. Preparations have been made, however, to provide for the continuous operation of the Regional Headquarters by survivors through alternate plans developed by the Central Region's Defense Readiness Officer in conjunction with the Office of Civil Defense and the Office of Emergency Planning.

Each FAA facility and field office also has an emergency plan developed under Central Region Order CE 1900.2. As an employee you should be fully aware of your responsibility should an attack be made upon this country. Your family should know your part of the over-all plan and should know what they must do to provide themselves with maximum possible protection in the event of a nuclear attack.

Employees in the Regional Office have been issued a pocket-size booklet entitled "Employee Emergency Information Guide." A modified edition is being prepared for field use. It should be read thoroughly and the appropriate blanks filled out to your specifications. Then, when it is needed, it will be most useful. Keep it handy at all times and be prepared to respond should the need arise.



Perhaps the most maligned, misunderstood and often most overlooked group of employees in the Regional Office, is the Mail Unit personnel. Nevertheless they carry on in the Post Office tradition that despite the difficulties encountered, the mail must be delivered.

Each month more than 197,000 individual pieces of mail pass through the Mail Unit—including all incoming and outgoing mail. Parcel post packages increase the total mail count another 2,200 pieces. This means that each of the five employees handles an average of at least 1,810 pieces of mail each day. Actually, the count is greater for every piece of mail is handled by at least three of the five employees during the routine of sorting, opening, identifying, boxing and delivery of the daily mail.

Is it any wonder then that an occasional piece of mail is mis-routed, or delayed as it passes through this beehive of activity? The real wonder is that mail is not actually lost

rather than only being mis-routed or delayed.

Let's look at an average day in the Regional mail room. William Vaughn, Supervisor, has four mail clerks working for him—James Gibson, Charles Taylor, Rupert Franklin and Raymond Duke. These five people begin the day by picking up the mail at the nearby Post Office Sub-Station at about 07:30 a.m. The mail must then be pre-sorted into regular envelopes or "flats" which must be opened and the contents sorted, newspapers, magazines, "good mail," and "trash mail." After the pre-sorting is done, the envelopes are opened and the address is read for each piece to determine in which of the 70 distribution boxes the piece is to be placed.

Much mail comes already marked with a route slip or "buck slip" which is easily read and which makes identification easy. However, a great amount of mail from the field offices and nearly all mail from outside the Agency must be analyzed carefully to determine proper addressee.



Left: Charles Taylor, Mail Clerk, and William Vaughn, Supervisor, bring in the morning mail. Below: William Vaughn, Mail Unit Supervisor, looks up from logging certified mail, one of the functions performed by clerks in R.O. Mail Room.



THEY CARRY ON TRADITION... THE MAIL GOES THROUGH

After the first of the morning mail has been sorted, the messenger begins the daily routine of pick-up and delivery to the 70 points within the two Regional Office buildings. As he picks up mail at any one point, the messenger constantly sorts the mail so that if any is for a stop further along the route it will be delivered rather than returned to the mail room for sorting and re-boxing.

Outgoing mail procedures involve sorting the mail picked up from within the headquarters, identifying which of approximately 300 outgoing boxes it belongs in and then boxing properly and accurately.

Mail is "pulled" twice a day for all practical purposes. At 1:00 p.m. all mail is removed from the outgoing boxes and placed in large envelopes or small, depending on the amount, sealed and bagged for Post Office pick-up at 2:00 p.m. This is the bulk of the day's mail and goes at this time to cooperate with the U. S. Post Office Department's National Improved Mail Service Program. At approximately 4:00 p.m. an additional mail pull is made to cover those facilities not benefited by the NIMS Program and other mail brought in late that is marked "Urgent" or "Airmail."

The amount of mail varies each day but normally the heaviest incoming mail arrives on the Monday morning following payday, when the Time and Attendance envelopes add some 300 additional pieces to the usual high Monday count. Outgoing mail is heaviest on Friday, as could be expected although it is fairly constant all during the week.

Mail requiring special handling includes the incoming Time and Attendance reports mentioned above, outgoing savings

bonds which are mailed on alternate weeks and any urgent or restricted mail which is sent registered or certified to insure delivery or proof of delivery.

Certainly, with an operation involving mail volume of this magnitude, some errors can be expected. But the mis-routing errors are not always the fault of the mail clerks. The manner in which a great number of offices mark inter-office correspondence is sometimes misleading and certainly far from standardized. Many fail to utilize the standard route slip and simply mark the reference numbers down the side of an already cluttered page. An additional slip of paper stapled to the correspondence (no paper clips please) which the proper routing(s) will insure speedy and accurate delivery. Please note the reference to no paper clips. These fasteners have the bad habit of falling off during sorting and mail intended for one person may end up on the desk of another person in an entirely different part of the building. The use of special messenger envelopes (SF-65) is encouraged for any correspondence too thick to be stapled conveniently.

Correspondence prepared for mailing in separate envelopes should be addressed accurately, including the new ZIP code number which will expedite delivery at destination.

The employees in the mail unit have a tremendous responsibility each day, for if important or urgent mail is not delivered promptly serious problems can result. Readers can assist by heeding some of the ideas presented in this article. Any problems regarding the mail service should be directed to the Chief, Office Services Section, Administrative Services Division, CE-41.3.



Above: Vaughn and Taylor open sacks before routing correspondence to executive desks. Below: Rupert Franklin and Vaughn shown pre-sorting mail. Separating "flat" mail from "letter" mail is a big job.



Above: James Gibson, Mail Clerk, operates the automatic letter opener. Below: After sorting and boxing mail, Ray Duke, Clerk and Messenger, makes deliveries to the 70 points throughout CE buildings.



Above left: Charles Taylor mailing out December issue of HORIZONS. Right: Vaughn and Gibson seal the big "flats" after inserting mail for field. Below: At 1:00 p.m., first "pull" of the day's mail is made.



A study in concentration can be observed on the faces of these men who gathered for Work Management conference. Clockwise beginning with man at bottom left: Marvin Jurgen, (with back to camera, Chief Data Processing Branch, CE); Robert Smith Washington Management Analyst; Hudson, CE, MAD; Scott, MS-100; Siegmund, Moore, Erickson, Barfield, SO ASD; Gardner, SO MAD; Chester Wells, SO Exec. Officer; Willoughby, AC MAD; Burton, AC ASD; Davis, CE Publishing and Graphics Branch; McDuff, SW ASD; Ashley, WE ASD; Kaylor, PC ASD; Nestor, PC MAD; Thompson, CE Property and Services Branch.



Representatives of the seven regions, the Aeronautical Center and Washington who met in Kansas City December 2-4 are shown here. From the left: John B. Moore, AL, Chief ASD; William N. Barfield, SO, Acting Chief ASD; Joseph Nestor, PC, Chief MAD; Vincent F. Burton, AC, Chief ASD; Stanley J. Erickson, AL, Chief MAD; Robert E. Smith, Washington Management Analyst, MAD; Chalmers F. Frazer, SE, Chief, MAD; Michael J. Whalen, WE, Management Analyst, MAD; Gilbert Kaylor, PC, Chief ASD; John I. Willoughby, AC, Chief, MAD; Raymond R. McDuff, SW, Acting Chief ASD; Victor T. Gardner, SO, Chief, MAD; Norman B. Hudson, CE, Chief MAD; Tom Scott, Washington, MS-100, ASD; Lawrence L. Hopper, CE, Management Analyst, MAD; William H. Siegmund, EA, Chief ASD; Donald F. Randolph, CE, Chief ASD; Monte E. Davis, CE, Chief Publishing and Graphics Branch, ASD; Wade H. Ashley, Jr., WE, Chief, ASD; Joseph S. Thompson, CE, Chief Property and Services Branch, ASD.



Conference chairman Don Randolph, Chief ASD, CE, uses his hands for emphasis during the meeting. Clockwise from Randolph are: Hudson, CE MAD; Scott, MS-100 Washington; Siegmund, EA, ASD; Moore, AL ASD; Erickson, AL MAD; McDuff, SW ASD; Whalen, WE MAD; Ashley, WE ASD; Kaylor, PC ASD.

WORK MEASUREMENT SEMINAR TAKES PLACE IN KANSAS CITY

Fifteen representatives from Washington, the Aeronautical Center and the Regions gathered at Kansas City December 2-4 to hear Central Regional personnel explain how a work measurement system piloted in the Central Region might be adapted by other Regions.

The conference, led by Administrative Services Division Chief D. F. Randolph, Management Analysis Division Chief N. B. Hudson and Robert Smith, MS-520, traced the origin of the Work Measurement (or Performance Reporting) System, explained the initial system design and attending differences and variations in operating conditions, etc., pursued the Pilot Study and subsequent establishment of standards, and finally, reviewed the necessary validation re-check and the conclusions and recommendations forwarded to Washington.

Meeting with considerable comment and discussion was the Performance Reporting System Manual, born of the study, and its development into a clear and expert guide which can be easily adapted by another region desiring to implement a PRS program of its own.

Truly an exhaustive study, the origin of the new ASD Performance Reporting System lay in the early 1962 Washington attempt to collect statistical and man-hour data from each region which would reflect significant division workloads and the man hours devoted to such workloads.

A Washington letter (MS-1 dated April 1962) initiated a three-month trial period study. With it was furnished selected work unit and man hour description and data collection forms. These had been designed for regional use in reporting the selected work units to be accomplished and the man hours to be expended in their accomplishment.

The resulting material gathered from the several regions was collated and analyzed by Washington ASD staff members and subjected to comparative and statistical techniques. The accumulated data was found to be inconclusive for use as a basis for establishing standards of performance which could be used by all regions. This was due to irreconcilable discrepancies in the volume of selected work units and man hours reported which appeared to result from both inadequate work unit and man hour description and from misinterpretations of the descriptions which had been disseminated for use.

The 1962 trial period, therefore, served to focus attention on the need for better defined objectives and coverage desired in any ASD system, and the need to confine any initial system to a highly controlled environment so that a system capable of meeting both regional and Agency management data needs would result from the development effort.

A determination was made that a one-region effort would provide for better control and evaluation techniques. With this in mind, a request was made to the Central Region early in February 1963 seeking Regional concurrence with the development and conduct of a pilot study aimed at providing a basis for an Agency-wide performance reporting system.

With Regional approval the chiefs of the Administrative Services and Management Analysis Divisions joined with a staff technician from the Washington Management Engineering Branch to work out the basic system design phase.

At the outset it was recognized by both Washington and the Region that there were considerable differences and variations in operating conditions, functional coverage, and scope

of support activities conducted by the Administrative Services Division of each region.

Therefore, the prime requirements designed into the pilot study collection system were deliberately aimed at the specific ASD operations as conducted in the Central Region. No attempt was made to build in sufficient flexibility to enable a direct transplantation of the system to other regions at some future time, although operational similarities and differences between regions were used as background for identifying basic system requirements.

The pilot study group's efforts resulted in the publication in May 1963 of a "Guide for Work Measurement—Pilot Study." Next, following the prepared guide, supervisors and employees were given training in the methods and means of conducting the program. Forms developed locally were used to simulate a complete dry-run before beginning the first preliminary "Test Week." Throughout the training process continual clarification of instructions and refinement of procedures was maintained.

The actual Pilot Study Period began on May 13 and continued through June 21 to obtain a total of six successive weeks of actual work experience data. Summarization assignments were then given to the Branch Chiefs which were to be evaluated individually with the Division Chief prior to final summarization and transmittal to Washington on July 3. This was done after a validation re-check proved the soundness of the techniques applied, and attested to the relative accuracy of the data collected during the test period.

Having examined the data, established reasonable standards, and re-checked the validity of the findings the following four

basic conclusions were drawn:

1. A reporting system of this type was feasible for providing management needed information as to current workloads and man-hour application. It would also prove useful to management as a means of forecasting manpower requirements for budget purposes.

2. The CE system was not directly transplantable to other regions because of plant, equipment and procedure variations. It was, however, adaptable by other regions with appropriate local modifications to compensate for such differences.

3. The system lends itself to productivity effectiveness judgments, once a fairly compatible reporting system is installed in each region.

4. Some procedural cleanup and work method improvements result solely from the system development and installation process alone.

Recommendations to Washington included the suggestion that any Performance Reporting System developed in other regions would need a similar period of in-use validation before being accepted as a management tool, the same as was done in the Central Region, and that other regions should be given instruction in the system developed by ASD in Central Region so that adaptation and installation could proceed in all regions.

The outgrowth of the summary recommendations by the Central Region was the meeting held in Kansas City in December. Following the successful completion of the conference the representatives returned to their respective regions with instructions to submit a schedule to Washington for the implementation of the program as soon as practical.



University of Iowa football fans take their football seriously enough to fly from the far corners of the U.S. to home games. Controllers from the Cedar Rapids Tower set up temporary shop that handled 1,089 operations.

TEMPORARY TOWER DOES BIG BUSINESS

Controllers from the Cedar Rapids, Iowa, Airport Traffic Control Tower come into the *HORIZONS* Spotlight this month in a story about a temporary tower manned at the Iowa City Airport during home football games at the University of Iowa.

This service has been provided in the past by the FAA, for a nominal cost, at the request of the Iowa City Airport Commission. It has been a very effective means for providing a measure of safety to arriving and departing aircraft using the airport during game days.

A total of 1,089 operations were handled without incident during the four home games played this year. The count surpassed the previous two years. This year is was not unusual to have in excess of 100 aircraft arriving in any one-hour period between 11:00 a.m. and 1:00 p.m. on game days.

The tower was built by the local airport commission and consists of a 10 x 10 foot collapsible wooden structure fastened atop the roof of the terminal building by guy wires.

During "normal" operations one controller handles the radio on local control, one on ground control, and one controller acts as aircraft spotter on the rooftop. Occasionally, SMS personnel will assist as spotters and will relay information to the local controller concerning aircraft entering the traffic pattern.

Linemen guide arriving planes to the parking area between the terminal ramp and the North-South runway which is the preferential runway wind conditions permitting. This procedure provides quick turn-off capability on to the sod parking area since the transition from concrete to sod is level and flush mounted runway lights offer no hazard.

Departure operations are handled differently since 90% of the aircraft leave the field within the first hour following the end of the game. One controller remains in the tower on local control, one is stationed on the active runway with a red and a green flag, and a third positions himself on the

taxiway approaching the active runway.

An SMS technician parks his radio-equipped vehicle in a manner that the headlights can be observed by both controllers on the ground. He also monitors the tower ground control frequency.

The controller on the runway lines the aircraft up two abreast to complete their preflight checks. Large aircraft perform this on the taxiway. Using a green or red flag to indicate take-off or hold instructions, the controller is then able to clear departures at the rate of about two a minute. Upon receiving instructions via radio that the tower has an inbound aircraft under control, the SMS employee blinks the vehicle headlights as a signal to clear the runway for the arrival.

Normally no more than ten aircraft are lined up on the runway at any one time, but using this procedure enables the controllers to clear the greater share of the planes between 4:00 and 5:00 p.m. Normal operation is again established for the remaining few desiring to leave that evening.

To help make the operation the successful one it is, the dates of operation of the temporary tower are widely advertised through NOTAMS, Airmen's Guide, and by the Iowa Aeronautics Commission newsletters well in advance of the first game date. In addition all adjacent Flight Service Stations and the FSS in the city of the visiting team broadcast this information on game dates.

Hours of operation of the temporary tower are from 10:00 a.m. to 6:00 p.m. with personnel generally on hand early to make equipment checks for the day's operation. Heavy vehicular traffic usually delays personnel arrival at their homes in Cedar Rapids until sometime after 7:30 p.m.

Personnel manning the temporary control tower and providing the maintenance support are to be commended for their excellent work in handling the heavy volume of traffic without an incident.

PROTECTION AND SURVIVAL BRANCH IMPROVES AIR PASSENGER SAFETY



John J. Swearingen, Chief of the Protection and Survival Branch of CARI, shows Distinguished Service award he has received from the Flight Safety Foundation to Dr. Stanley Mohler, Director of CARI, right.



Two of the test dummies are shown which are used in the various day-to-day research projects which are conducted in the Protection and Survival Branch.

John J. Swearingen speaks softly when he carries on a conversation, but his powerful words and work have been felt in every phase of modern aviation.

Swearingen, Chief of the Protection and Survival Branch of the Civil Aeronautical Research Institute, has received many awards for his work, but the most recent, and probably the most outstanding, is the 1963 Award For Distinguished Service, given annually by the Flight Safety Foundation.

He received the award, one of only two individual awards given by the Foundation each year, in Athens, Greece.

Swearingen received the Award for his outstanding contributions to air safety through original studies. He conducted some tests on himself at great personal hazard. During the course of his vertical impact studies, in fact, he actually sustained injuries.

Howard Hasbrook, a member of Swearingen's department, received the award a few years ago.

The Federal Aviation Agency is the only organization to have two such award winners on their staff.

Two Vital Interests Involved

In looking at the current picture of the Protection and Survival Branch, John Swearingen and his staff have two key things in mind. One is the protection and the safety of persons when flying or

riding in an aircraft. The other is the survival if an accident or crash should happen in the air or on taking off or landing.

Swearingen is a veteran of 15 years of service with the CAA/FAA. He was the Director of the first Civil Aeronautical Research Laboratory that originally was located in Oklahoma City but later moved to the campus of Ohio State University.

Swearingen can be called the "father of the organization," for he battled long and hard to keep the laboratory alive through the budget-cutting Congress of the 1950's. Today's Civil Aeronautical Research Institute is an outgrowth of that first organization. With the help of many men—men as dedicated as John Swearingen—it has expanded into many fields of civil aviation medicine. Its research and development ramifications have improved safety in every field of transportation and travel.

Centers of Gravity

Through his research, Swearingen has formed some strong opinions. One concerns the placement of seats in an airliner. Swearingen said, "If a 40-G strength seat ("G" meaning gravity or normal standing still weight and then multiplied by forty) and a 40-G seat belt and tiedown were put together with the seat facing backward, almost everyone could walk away from crashes where the

fuselage remained intact and no massive conflagration had occurred in the first minute or two following the impact. I don't think most people would mind riding backward, for once in the air, there is no feeling of motion anyway. Anytime I fly, I always sit in one of the rear-facing seats next to the bulkhead or a wall if I can."

Swearingen and his staff have found that passengers are often injured in a crash because the seats come loose from the floor. One reason the seats come loose in a crash is that a passenger involuntarily kicks the seat in front of him when his legs fly up.

Center of gravity studies are one of the major projects for Swearingen. He has found, through his studies, the center of gravity of children is much different than that of an adult. A machine that is the only one of its kind in the world shows the exact center of gravity of a human.

"A properly designed seat," Swearingen said, "not only can keep people from being killed when properly used, but will keep them conscious and able to get out of the airplane after a crash."

The researchers found that on occasion people were alive after impact but either were unconscious or injured so badly they could not get up and out of the plane to save themselves from an ensuing fire.

These points merely touch upon the depth of work performed by this Protection and Survival Branch at CARI. Their work continues, day after day, insuring future safety for those who fly.

COME ON IN THE WATER'S FINE

Many Aeronautical Center employees enjoy the spring and summer months at Oklahoma lakes. There are out-door clubs at the Center.

DR. SCHWICHTENBERG SEES AERONAUTICAL CENTER



Dr. Al Schwichtenberg, Chief of Aerospace Medicine at the Lovelace Foundation, Albuquerque, N.M., was a visitor at the Aeronautical Center late last year.

Most of his time at the Center was at the Civil Aeromedical Research Foundation, and in Oklahoma City for the Oklahoma City Clinical Society meeting. He is showing a model to Dr. Stanley Mohler, Director of CARL.

At the far left is another guest at the meeting, Dr. Charles Berry, Chief Medical Officer for the NASA Manned Lunar Landing Program.

Others in the picture are Howard Hasbrook, Chief of CARL's Crash Safety Section, Dr. Berry, Dr. Peter Siegel, Chief of the FAA Aeromedical Certification Division and Dr. Berry's host, Dr. Gunter Haase, Oklahoma University.

J. J. SWEARINGEN RECEIVES COMMENDATION LETTER

The following letter was received by John J. Swearingen, head of the Protection and Survival Branch of the Civil Aeromedical Research Institute.

The letter, written by Gen. Harold W. Grant, Deputy Administrator of the FAA, praised Swearingen for his Award by the Flight Safety Foundation.

"Dear John: I was pleased to hear that the Flight Safety Foundation had recognized your notable work and accomplishments in the field of aviation passenger safety. The Award Distinguished Service to Air Safety presented to you at the re-

cent seminar in Athens was indeed well deserved.

"I would like to add my personal congratulations on behalf of the Agency.

"Your work in conducting impact studies and in other areas has reflected well upon you and the FAA. I know that much of your work was conducted without regard for your personal safety in an effort to obtain broader knowledge.

"We all look forward to your continued dedication and contribution in better achieving the Agency's primary mission."

Center Employee Kills Big Elk

Everette R. Wagg, Avionic Inspector, Aircraft Services Base, shot a prize while hunting in Colorado last fall when he killed a 900-pound elk near Del Norte. This was one of the largest elk reported killed in the state, and the Aeronautical Center employee found that the elk had nine points on one side of his antlers and 13 on the other side. There were four hunters in the party and they camped at 11,000 ft.



William J. Schulte Receives NATA Award at Miami Meeting



William J. Schulte, (left), Assistant Administrator, Office of General Aviation Affairs of the Federal Aviation Agency, is shown receiving the annual National Aviation Trades Association award from Sam Freeman.

He received the award "for his outstanding contributions which have achieved better relationships between government and industry, and advanced the cause of general aviation."

Schulte, a native of El Reno, Oklahoma, received the award during the annual banquet in December, climaxing the NATA/NATC/NPA convention at Miami Beach, Florida.

Christmas Tree Brightens Lobby



The Aeronautical Center headquarters building was brightened during the Christmas season with a beautiful Christmas tree in the lobby of the Headquarters building. Taking part in the decorating of the tree were, left to right, Ed Rowland, Tom Collin, Welcome Holiday and Jane Fanning.

TRAVELING INSTRUCTORS TRAINED 916 IN '63 SKILL 'POLISHING' TRY

The introduction of new high speed jet transports and the tremendous increase in all aspects of aviation, are just two of the reasons for the many new controllers in the Air Traffic Service in recent years.

Fast-moving expansion of facility complements during the past few years has necessitated changes in the number of controllers a supervisor can handle.

The position of the Air Traffic first-line supervisor was created as a result. When many hundreds of controllers were upgraded, supervisors wanted to improve their skills to help reduce air-traffic incidents. To meet this requirement, a special task force was organized by the Air Traffic Training Division of the FAA Academy to design a course which would relate known and accepted supervisory principles to the specific job responsibilities of the Air Traffic first-line supervisor. This task force was composed of selected air traffic control specialists from the division staff, each of whom held a position in the Air Traffic field operation staff equal to, or above the present coordinator level. The group thoroughly researched the job functions of the Air Traffic first-line supervisor and determined the principal problem areas. After intensive training in selected supervisor and management areas, this team, working



Staff and instructors in first-line supervisors course (standing): Charles Pratt; Warren Ballard; Dick Kollen; Dale Green; Bob Jordan; Winston Hatch; Lou Bell; Dave Graham; and Gerry Welch. (Seated): Boyce Hill; Charles Hough; Alton Waldin; John King; Harry Crouse; and Otto Warren. Not present, Bob Simmons.

cooperatively with other Agency training specialists, designed a special course.

For the first time in the history of the FAA Academy, the course was taken directly to the student applying "The mountain moving to Mohammed" axiom.

Since March of last year, the Academy instructors have traveled thousands of miles teaching courses to the students in all FAA regions.

Boyce Hill and Gerald Welch returned

last November from the Alaskan Region and Winston Hatch and Dick Kollen returned from the Pacific Region, a trip which included Guam, Wake and Hawaii. The return of the teams brought an end to 1963 classes in which 916 students completed their course. Approximately 648 remain to be trained in 1964.

The program has been well received by all participants, as well as the management of the Agency.

DOES
ANYONE
HERE
REMEMBER
WHEN . . .



This is how the flight line of the Civil Aeronautics Administration looked at Will Rogers field (top, l.), soon after WW II. The aircraft components repair building' (below, l.) as it was in 1946. Inside the maintenance hangar (top, r.) in 1946. Contrast these early birds—the C-47, the C-54, and the T-6s—with the modern jets (below, r.) housed in this modern hangar at the Aeronautical Center.



CIVIL AEROMEDICAL RESEARCH INSTITUTE IS ONLY ONE OF ITS KIND

It has been said, by many Aeronautical Center employees, "We work in one area and know virtually nothing about the other functions of the Center."

With this in mind, *Horizons* will provide a brief word and picture story of the various functions of the Aeronautical Center in the next eight issues.

Aeromedical Research

Standing at the south end of the Aeronautical Center is the Civil Aeromedical Research Institute.

The modern, three-story building is 16 months old, and from the opening week, CARI scientists have been delving into many interesting and exciting phases of civil aeromedical medicine.

If you were to walk into the office of Dr. Stanley Mohler, Director of CARI, you would immediately be gripped with the enthusiasm of the man, his work and his staff.

A year ago last October, CARI moved from the "North Base" of the University of Oklahoma at Norman into the new, excellent building at the Center.

CARI Building Unprecedented

When the idea of construction of the building at the Aeronautical Center was finalized, it was agreed that the whole structure should meet the needs of the researcher.

So, the planners went to the scientist and said, "What do you want?"

Various ideas were brought forth, and were woven into the structure.

Rather than construct a building and place the man in it, the idea was to take the needs of the man, build that sort of requirement for him and let him go from there.

CARI Has Six Branches

There are six basic Branches in the CARI operation.

They are: Pharmacology-Biochemistry, Dr. Paul W. Smith, Chief; Environmental Physiology, Dr. P. F. Iampietro, Chief; Neurophysiology, Dr. Pei Chin Tang, Chief; Biodynamics, Dr. Bruno Balke, Chief; Psychology, Dr. George T. Hauty, Chief; and Protection and Survival, John J. Swearingen, Chief.

The six Branches are of about equal size in staff, but the scope of their research deals with various physiological and psychological elements of the human being.

The studies probe into a number of areas of aeromedical research and have the basic aim of providing safer flight on and off the Civil Airways of the Nation.



The three-floor Civil Aeromedical Research Institute building is believed to be the only one of its kind in the world. Architects planned the building to fit present and future requirements of researchers.



A combination of work and play might be a way to view serious ditching experiments carried out in the 16-foot-deep, 40-by-40-foot tank in CARI building.



Dr. Bruno Balke strides along at a brisk clip in his hike to "nowhere" on the treadmill of the CARI Biodynamics Branch of CARI. Purpose? Safety in flight.

In looking at CARI and its custom-tailored building, you find ultra-modern equipment. Visiting scientists have described CARI as one of the finest interdisciplinary research centers in the U.S.

In the basement of the building in the Environmental Physiology Branch, intricate measuring devices show the various body functions under different atmospheric and temperature conditions.

A large climatic chamber, where temperatures can be produced from -80 to +180 degrees Fahrenheit, humidity levels from zero to 100 per cent, and winds up to 50 knots, is located in this area. It is supervised by Dr. P. F. Iampietro, Chief

of the Branch. Two smaller chambers produce everything but the wind.

Center of Gravity Important

Another area of study is made by the Protection and Survival Branch.

Under the leadership of John J. Swearingen, this Branch has been determining the center of gravity of humans. Study of seating and support of seats in aircraft is being done. This has cut down injuries and prevented deaths in aircraft crashes.

A huge tank, 40' by 40', in which water temperatures can vary between 34 degrees and 120 degrees, room temperatures from freezing to 120 degrees, and humidity from a zero to 100 per cent, is included in this area.

Complete darkness may be attained for night ditching tests. Also underwater movies can be made through windows in the tank.

The Pharmacology - Biochemistry Branch is devising better protective means for aerial application pilots and in studying radiation and ozone toxic hazards in higher altitudes.

The Biodynamics Branch closely studies the human body under many physical stresses and strains. Recently it has evaluated the physical fitness of several thousand air traffic controllers.

Certain Key Selection Tests Given

The Psychology Branch has conducted many functions, including the research in the selection of controller trainees. Through certain psychological tests, it is now possible to predict, with a high degree of confidence, an applicant for controller training to complete the course of training.

Another research project deals with the aging factor in pilots and other airmen. Done at Georgetown Medical Center, it is carried out through periodic re-evaluation of the same pilots . . . to determine the physiologic and psychologic changes which go with disease-free aging.

Future Will Bring New Problems

With the development of the next generation of civil aircraft, from the SST and vertical take-off-and-land aircraft to the ultra-light and business planes of private aviation, CARI research will take on new and interesting analysis and study. CARI is meeting the new phase of civil aviation and is contributing to the Agency's mission of increasing the safety of flight and fostering the growth of civil aviation throughout the world.

MUTUAL AID PLEDGE GROUP CHOOSES ITS LEADERS



One of the many worthwhile organizations at the Aeronautical Center is the Mutual Aid Pledge System.

New officers were recently elected, with Henry Bridges elected President.

These are the officers and Board members:

Standing: John Park; Robert Sypher;

vice president; Bridges; Jack Hamm; and John Patterson.

Seated: Margaret Hood; George Dane; and Grace Gaddy, Secretary.

MAPS is made up of Aeronautical Center employees. Members contribute a certain amount of money to the family upon the death of a member.

RED CARPET OUT AGAIN



Emilio Asistores, Assistant Director, General Aviation for the Philippines, was an Aeronautical Center visitor late last year. He is shown with Darwin Maurer, International Liaison Officer at the Aeronautical Center. Asistores was here for the National Aviation Systems Course conducted by the FAA Academy.

"Operation Voice" Visits Made by The American Red Cross Ladies

The ladies of the American Red Cross of the Oklahoma County Chapter, paid their annual visit to the Aeronautical Center in December.

Their mission was "Operation Voice Visits", with tape recorders ready for the foreign students in the Academy.

The tapes are made by the students, and then mailed home, for a vocal visit with their families.



Signing up for the tape recordings, Mrs. S. S. Lindsy, Red Cross Volunteer, keeps the books while Abdul R. Nejrabi and Qulamuddin Admadi, Afghanistan, sign up. Mrs. R. C. Johnston helps them. Working with the transcriber is Cissoko Sahn, Guinea, West Africa. Volunteers are Mrs. H. E. Wilkes and Mrs. J. W. Jule.



Choralists Get Back into the Sing of Things with New Leader

One of the best known groups at the Aeronautical Center has gotten back into action after a lapse of a few months.

The Choralists, the Employees Association choir, presented a Christmas program for the Center employees in December and now are planning a spring program.

The organization has a new director, J. B. Dreadfulwater. Mary Ohler is the accompanist.

NEEDY ARE HELPED BY PUBLISHING AND GRAPHICS



For the past three years, the Publishing and Graphics Branch at the Aeronautical Center observed the Christmas Season by giving gifts to a needy family.

Fifty employees of the Branch skipped their "Christmas Card and Gift Exchange" to put money into the fund. In addition to the cash, a collection of clothing, bedding and toys was given to the "Christmas family."

This past Christmas, the family was selected by the Salvation Army which described the plight of five children and their parents, whose home was lost in a fire.

A committee of branch employees, who handled this project include, in the photograph, Bill Montgomery, Harriett Marshall, Bob Haney, Virginia Owen and Glen McCaslin.

Wake Island Padre Takes Short Course in Air Traffic Control

"The only Padre with a GS rating" is the way a recent ATC Indoctination Course member described himself.

Father Canice F. Cartmell, O.F.M. (Capuchin), was at the Aeronautical Center late last year and took part in the course at the Academy. He is stationed at Wake Island, and serves about 1,500 people. He compares his job to a Chaplain on a U.S. Navy ship.

Father Canice was born in New York City and was educated in schools in that area. He entered the Capuchin Order in 1944 and has traveled to a number of states. He finished his theology training at Marathon, Wisconsin, and was ordained in New York.

He was stationed on the Marianna Islands in 1953.

VALENTINE DANCE SCHEDULED

The annual Employees Association Dance is scheduled for February 7, a week before Valentine Day, Chairman Jane Fanning has reported.

The Zebra Room of the Municipal Auditorium will be the location, with the dancing starting at 9 p.m.

Two big, all-Center events were highly successful last year. The Employees Association picnic attracted over 5000 people to Springlake Park last August and the annual Christmas Dance brought out a capacity 600 at the Moose Lodge.

I&M EMPLOYEES REWARDED



Nine Aeronautical Center employees of the Installation and Materiel Depot recently received Suggestion Awards from Warren E. Nauman, Manager of the Depot. Left to right, front row: Herman Moore, Clyde Johnson, Erling Barkost. Back row: Jimmy Ogle, Edwin Mitchell, Richard Williams, Nauman, Al Camp, Leo Gattin and Clyde Mathey.

ONE MAN DOWN AND ONE TO GO



Leo Weston, PT-956.5, right, receives congratulations and one of the gifts presented to him by the people in his area before his marriage in November. Al Koleno, Leo's supervisor, gave him the gift.

The bride was Helen McLaughlin. They were married at Philadelphia, Pa., Nov. 30.

Weston and his buddy, Dwain Earl, of the same section, were the last hold-outs. Now Earl is the only bachelor left.

ACCIDENT INVESTIGATION SCHOOL SUCCESSFULLY COMPLETES SESSION

The National Aircraft Accident Investigation School at the Aeronautical Center is the first of its kind in the world. If the first session was a fair example of its offerings, the NAAIS represents a major step forward in accident investigation.

Sponsored jointly by the FAA and the Civil Aeronautics Board, the school seeks to establish a uniform system of investigation. As the school's Dean, Marion Roscoe has said, "There is no pattern to aircraft accidents, but there must be a pattern to accident investigations."

Within minutes of an announced air disaster, Federal investigators are en route to the site of the tragedy. FAA and CAB teams work together to fit together the parts of the sad jigsaw puzzle to discover the cause. After exhaustive study and evaluation, the CAB issues what is called "the probable cause"—a lengthy statement of what has been determined as the prime contributing factor. In many cases, investigation of an accident exposes safety problems that are unrelated to the accident, but these by-products are almost as beneficial as the discovery of the probable cause itself.

Investigation teams reassemble the fragmented pieces of a crash. As much as possible, they reconstruct the airplane. One group is responsible for fitting the broken tail section together; another group refits the fuselage; a third works on

the engine. Medical examiners have the unpleasant job of analyzing human bodies to determine the physiological cause of death. In short, investigating an accident is no hit-or-miss proposition. It is detailed and comprehensive. In rare cases, the probable factor of the accident is impossible to ascribe to tangible evidence and can be recorded as "an act of God."

The reasons are obvious why the need for the National Aircraft Accident Investigation School is imperative. Depending upon the size and complexity of an accident, teams must possess an expert knowledge of maintenance, operations, flight inspection, flight test engineering, air traffic control—in short, in every aspect of aviation.

The NAAIS not only trains investigators in the latest techniques of accident evaluation, but equally important, encourages uniformity of procedures. The CAB and FAA both hope that as a result of its joint academic venture, the two agencies will communicate and coordinate more expeditiously when an accident occurs.

The school establishes a logical order of priorities of suspect areas in a crash. It teaches the course of systematic investigation. Simulated crashes in an academic atmosphere create practical problems involving damaged aircraft structure, accessory components, flight recorders, etc.

The student investigator is taught how to develop the history of the flight, how to reconstruct the sequence of events preceding the crash, how to establish the configuration and altitude of the aircraft at the time of impact, how to chart wreckage distribution diagrams, and how to determine whether fire occurred before or after impact. Environmental aspects of aircraft operation are studied to familiarize the investigator with the airways system and weather phenomena. In addition to learning about the aircraft and its operating environment, the third element of the total investigative area, is personnel or the human element. Human factors affecting safe operation of aircraft are studied and analyzed with the assistance of the FAA's Civil Aeromedical Research Institute. Realistic situations such as witness interviewing and participating in public hearings are simulated for practice and experience.

The Aeronautical Center was the likely site for the school. Flight Standards and Air Traffic Services are available to set up simulated problems. The General Counsel's Office is nearby to give advice on legal responsibilities both in accident investigation and in joint FAA-CAB activities. The Installation and Materiel Depot provides procurement and contractual aid in acquiring aircraft wreckage.

The next group is scheduled for spring.

BIG STARLIFTER MAKES FIRST FLIGHT



America's new fan-jet carrier, the big C-141 STARLIFTER, made its first flight at Dobbins AFB Georgia, on December 17. It is seen here moving under its own power for the first time since being rolled out of the Lockheed factory on August 21. The fast freighter and troop carrier, which will put the entire world within one-stop range was developed by the Air Force to modernize the Military Air Transport Service's airlift. It also will be certificated by the Federal Aviation Agency for use as a commercial carrier.

Richardson, Brooksher Move Up in Job Change



H. R. Richardson, (seated) and Don Brooksher long have been known for their work in the Academy's training program. Richardson was Chief of the Supervisory Development Branch (Basic) for several years. Don was his right hand man until a few months ago when new duties developed. Richardson remains in the Management and General Training Division, but Chief of a new activity—Material Management Training Branch. Brooksher has moved into Richardson's former position. His new position is to direct an agency-wide training program, much of which is to be conducted at the Academy. The courses are: (1) Provisioning, Cataloging and Standardization; (2) National Inventory Control and Distribution; (3) Procurement Management Courses; and (4) Procurement Management Courses for Technical Personnel.

KNOW YOUR FAA AIRCRAFT?



The FAA has more than 130 aircraft of various sizes and shapes, with many of those based at the Aeronautical Center. Do you know this aircraft? Although not actually based at the Aeronautical Center, the C-135 is directly connected with the Center through the Flight Inspection and Procedures Division, National Field Operations Headquarters. The "flying submarine," as it is called by crew members, spans the nation checking air navigational aids.

Dr. Hinshaw Collects \$250 for Sustained Superior Performance



Dr. Lerner Hinshaw, Chief of the Renal Physiology Section, Environmental Physiology Branch, CARI, recently received a \$250 Sustained Superior Performance Award from Dr. Stanley Mohler, Director of CARI.

To the left in the picture are Dr. P. F. Iampietro, Chairman of the Branch, and Tom Emerson, Assistant to Dr. Hinshaw. Emerson is a PhD. graduate student at the University of Oklahoma.

The photographer joined Drs. Mohler and Iampietro in finding Dr. Hinshaw in the middle of a study, dealing with chronic effects of aerial applicator insecticides on the kidneys of persons engaged in crop spraying. The Award was given because of Dr. Hinshaw's superior achievements in bringing new light to the physiology of the medical hazards of aerial applicator work.

Check and Citation for Galles



Wayne Gallas, left, of the Installation and Materiel Depot, received a Sustained Superior Performance Citation and check from Warren Nauman, Manager of the Depot, recently.



"Space-Age Queen" Jeanne Brum, C&S, assists Herbert A. Young, FS, to call attention to X-ray machine. Right: Cross-section of the crowds that flocked to see FAA exhibits at the Space-Age Fair at Honolulu International Airport.



Pacific Region in Space-Age Fair



Taking advantage of a double-barreled publicity opportunity, Pacific Region made some community-relations mileage when the Space-Age Fair and the first anniversary observance of the new terminal at Honolulu International Airport were held simultaneously during the month of November.

The region's Public Affairs staff spearheaded the organization of an attractive, eye-catching display—the largest at the Space-Age Fair. Much of the exhibit's success was due to the excellent cooperation given the PA staff by the various divisions.

The Administrative Services Division provided photos and other art work.

Flight Standards provided a metallurgy X-ray machine and an array of sample negatives and devices.

Air Traffic supplied a huge training device from the Honolulu ARTCC which depicted the network of Hawaiian Airways; also, the Honolulu Flight Service Station set up a slide projector with running tape commentary on pilot briefing, and personnel to help man the booth; ATD also assisted in the preliminary decorating.

Systems Maintenance supplied a teletype-testing unit, plus two printers (one with a tape perforator), one at each side of the display, and connected so that they printed simultaneously.

The film "Private Pilot" was shown continuously in a little theater booth within the display area.

At the Honolulu International Airport Terminal a large display was installed in the huge lobby, depicting the various activities of FAA. The display occupied a prominent place in the terminal building.

An estimated 43,000 people visited the FAA display booth at the Space-Age Fair. A considerable number also saw the display in the terminal building.



Mow (left) receives Toastmasters Club Charter from District Governor Takaguchi.

FAAPAC Toastmasters Club Receives Charter

The Pacific Region's FAAPAC Toastmasters Club received its official charter from Toastmasters International at a formal ceremony at the Fort Shafter Officers Club December 5.

The meeting was especially interesting in that the wives of the Toastmasters were invited. Also, the meeting was attended by Captain Hugh K. Laing, Deputy Director of the Pacific Region, who represented the Director officially, and by Mrs. Robert I. Gale, who represented the Director socially. Mr. Gale was on official duty in Washington.

Hal Henderson acted as Chairman of the Charter Night Meeting. Toastmaster of the evening was Ken Doolin, and Gil McCoy was Topic Master.

George Loomis, Area Governor of Toastmasters, installed the following newly elected officers for the first half of 1964: President, John Mow; Educational Vice-President, Don Harby; Administrative Vice-President, James Sanders; Secretary/Treasurer, Richard Caldwell; Sergeant-at-Arms, Hal Henderson.

District Governor Charles Takaguchi presented the charter. The club presently has 23 charter members and meets on the second and fourth Wednesday of each month at a noon luncheon. As applications continue, it is hoped that the authorized membership of forty will soon be reached.



Gov. Loomis installs (l. to r.) Henderson, Carawell, Harby, Mow, Sanders.



John Del Rosario gives forth with his "Vocal Variety" speech. Below: Serious expressions reflect mood of Jim Sanders' "Be in Earnest" speech.



FAA Horizons

HUNTING ON WAKE ISLAND

FAA Technician Cops Biggest Bag

The newly formed Wake Island Gun Club quietly made arrangements for the noisiest event of the season—the big Thanksgiving turkey shoot—and it went off with a bang!

Leialoha Ahuna, FAA Electronic Technician, bagged the top twenty-pound turkey prize with a score of 244 out of a possible 450. Second and third place birds went to Pros Rivera, Jr. and Vincent Reyes, with 229 and 215, respectively. Both are employed by Facilities Management Corporation on Wake.

Rules of the contest required competitors to fire five shots at each of five standard turkey targets for a possible total of 450 points. In addition to the top turkey prizes, winners of the individual relays were given large pumpkin pies. Twenty such prizes were awarded.

The energetic organizer and president of the club, Ralph W. Fisher, Sr., reported that interest in the shoot was exceptionally high and competition was keen. Many would-be



Three winning shooters display their particular stances. They are (l. to r.), Leialoha Ahuna, Pros Rivera, Jr., and Vincent Reyes, using .22 caliber rifles.

contestants were turned down because of the record entry list, which totaled 46. The Club's Secretary/Treasurer is Raymond Chung. Fisher and Chung are both Electronic Technicians, Systems Maintenance Division.

One of the backers and mainstays of the Gun Club is Ted Awana, Chief of Protective Services on Wake Island. Ted has overall supervision of the police and fire departments and the crash rescue boat activity.

Ted has been with the FAA for one year, after having served for 14 years in the Honolulu Police Department and 12 years with the Hawaii State Fire Marshal's office. Ted has encouraged the formation of a gun club and assisted in its organization. He has participated in many gun and pistol competitions, his most recent resulting in third place in the Hawaii State Pistol Championship meet last November 30. In this match he was pitted against the top pistol marksmen of the Pacific.

Ted Awana, Chief, Protective Services, Wake Island.



February, 1964

One of the relays on the firing line.





Orville Wright flies "Dayton Flyer" at Kitty Hawk.

THE STORY OF FLIGHT



Left: America's first woman pilot, Blanche Scott, poses after her first solo flight in 1910. Right: Glenn Curtiss flies his "June Bug" over 2000 yard course.



An early flying enthusiast, Theodore Roosevelt (left), sits next to Arch Hoxie of St. Louis before the takeoff.



Pilots stand in front of bi-winged trainers, lined up on English field during First World War.



The SPAD, French-built, was the Allies' best fighter during World War One. Americans piloted these planes in air combat because U.S. did not have an operational fighter ready for overseas duty.



Left: "Captain Eddie" Rickenbacker was America's leading ace with 22 enemy aircraft and four balloons destroyed. Right: Boeing seaplane carried first air mail between Seattle and B.C.



(Ed. Note: Two part series commemorating 60th Anniversary of Powered Flight) Part I.

Sixty years ago on a lonely, sandy beach at a place called Kitty Hawk, North Carolina, two brothers named Orville and Wilbur Wright, flew a fragile "heavier than air machine" in what is recognized as man's first powered flight.

Triumphantly, Orville wired his father in Dayton, Ohio: "We have made four successful flights this morning, all against a 21 mile wind. We started from the level, with engine power alone."

The date was December 17, 1903. "Two ambitious bicycle mechanics from Dayton," the New York Herald reported, "had flown their 'Dayton Flyer' at a height of 60 feet for 60 seconds."

Their flight was the culmination of the dreams of all men who had ever studied the birds in flight and wondered if some day man, too, would fly.

The Wrights were not the first to dream of flight, or to experience its sensations. Balloonists and glider pilots many years before had savored the thrill of soaring through the air—if only for a few brief moments. To credit any one of them with being the first to fly would be a disservice to the many down through the centuries who "tried their wings."

Concepts of flying are related in ancient Greek Mythology. Recapturing the spirit of all men who ever wanted to fly is the

myth of Daedalus and Icarus, who were imprisoned by King Minos of Crete. Daedalus, the father, fashioned wings of wax with which he and his son escaped their prison to fly to Sicily. Daedalus warned Icarus not to fly too high because the sun would melt his wings. Heedless of this advice, the son flew ever higher until his wings dropped off and he fell into the sea. The father, keeping to the lower altitudes, reached Sicily safely.

The idea of flying was not the province of dreamers and story tellers alone. Early scientists pondered the problems of flight and designed crude machines and gliders based upon their studies of "birdlike motions." In the thirteenth century, Roger Bacon speculated that "the air was a kind of fluid upon which an aerial vessel might float." Later, Leonardo da Vinci filled countless note books with detailed, practical ornithopter sketches.

The first significant flights were made in 1889 by Otto Lilienthal, a German engineer. Based upon his observations of birds, Lilienthal designed huge wings which carried him distances of 400 feet "utilizing the properties of air," he explained in his book *Experiments in Soaring*.

There followed a period which saw some of the strangest winged contraptions ever conjured up in the mind of man. Vaguely resembling birds, most were a maze of struts, wires, and cloth, powered by steam or muscle power. The fact that none of them ever got off the ground did not deter the early designers in their rush to perfect a flying machine.

Balloonists and glider buffs were having a better time of it. A wealthy Brazilian, Alberto Santos-Dumont, had gone to France at the turn of the century, and was making regular ascents in his giant balloon. In this country, Octave Chanute made numerous flights in his bi-winged glider.

Across the Atlantic, the Europeans were equally struck by the flying fever. The man who captured the imagination of all was Louis Bleriot, a Frenchman who piloted his 28 horsepower machine across the English Channel from Calais to Dover in 1909.

Close on the heels of the Wrights in designing a machine that would fly was Glenn Curtiss. On July 14, 1908, he piloted his "June Bug" over a 2000 yard course and won the Scientific American Trophy. Later, Curtiss won a \$10,000 prize offered by the New York Herald for piloting his June Bug from Albany to New York City, a distance of 150 miles. The flight time was two and a half hours.

Flying really came of age during the first World War. The sport of daredevils suddenly received the attention of the warring governments in Europe. The value of the airplane as the "eyes of the artillery" for directing fire and for reconnaissance was quickly recognized.

At first the war did not touch the aviators on either side. They waved to each other in passing. They were members of the fraternity of the sky, aloof and far removed from the dirty

war being fought in the trenches below—that is, until one day somebody pulled a gun and started shooting.

In quick succession, the planes of the Central Powers and Allied forces were equipped with crude guns for carrying the war to the skies. Later, machine guns, synchronized to fire through spinning propellers, were mounted on the aircraft and the first "dogfights" began in earnest.

Although the first World War seems to have been fought a long time ago, the names of the early "Aces" are known to young and old alike: Von Richthofen and Udet of Germany; Fonck and Guynemer of France; Bishop of Canada; and Rickenbacker of the United States. These were the knights of the blue who dueled above the battlefields in their Fokkers, Albatrosses, Sopwith Camels and Spads. They, and their comrades in arms, proved the worth of the airplane as a first line weapon of war.

Following the Armistice, the competition for records began in earnest. All over America, barnstorming gypsies in their "Jennies" thrilled crowds at air shows with their daring airmanship. Suddenly all America had caught the flying bug.

Some sober airmen were laying serious plans to capture the biggest flying jackpot of all—the first flight across the formidable Atlantic Ocean. One of these was a curly-haired, lanky midwesterner named Charles A. Lindbergh . . .

Next: From Lindbergh's flight to the SST.



BUSY PLACE. Far left, D. Tierney; Chief J. Morin at Supervisor's desk; at chart, R. Fafard; June Champion at teleprinter; and Robert Tomida, on temporary loan from IFSS. Below: Ed Planton gets the word.



CCC COMMISSIONED IN PACIFIC

The Communications Control Center for the Pacific Region was commissioned November 15, at which time it became fully operational. The Center, staffed around the clock, is designed to provide a continuous capability to connect any facility or any key official with any other facility or official, whether in the Pacific, in California, Alaska, or in Washington. Several methods of communicating are employed which utilize landline phones, teletypes, radio, and radio teletype.

The Center serves as the focal point for collection and dissemination of operational data, permitting instantaneous communication by the Director with other headquarters, and with his staff and facility personnel. Also, the conferencing capabilities of the new system expedite the flow of information and provide the Director with the flexibility he needs to accomplish the Agency's mission.

Most of the equipment is new and includes some of the latest in pushbutton dialing.

The Center is under the supervision of Joe Morin, who is directly responsible to the Regional Director. Joe, formerly of the Honolulu IFSS, has four additional Communications Duty Officers: Roger Fafard, formerly of Honolulu Center; Donald J. Tierney, formerly of the Honolulu Tower; Judson Munsey, formerly of the Guam CERAP; and Edward R. Planton, formerly of the Phoenix Center.

In 1959 the I&M Division had a requirement for a teletypewriter circuit between the regional office and Wake Island in connection with the installation of equipment to support the Pacific Missile Range. Also, a single side-band circuit between Wake and Guam was utilized to make possible direct teletype between Honolulu and Guam. Between Honolulu and American Samoa a single sideband is used, with "ham" equipment. Canton Island can also be contacted through the "ham" circuit. This equipment serves as an additional important link in the executive communications system.

"Masa" Sasaki, asks okay to enter. Mill Goodlin (bottom, left), talks to Samoa via "ham" set. Judson Munsey (right) records phone conversations for later use.



KENNETH L. FISHER, KANEHOE SPECIALIST, HAS A UNIQUE ASSIGNMENT

A unique position in the Pacific Region is that assigned to Kenneth L. Fisher, as Resident Air Traffic Representative at the Kaneohe Marine Corps Air Station. The assignment is unique, in that it is the first—and to date—the only such assignment in the Pacific Region. There are similar assignments in other regions, however.

Ken's duties are varied and comprehensive. He serves as liaison between the Marine Corps and FAA, and as technical advisor to the Marine Corps on training matters, air traffic control, aerial demonstrations, traffic patterns, and accident investigation. He also administers certain FAA examinations at Kaneohe.

The Air Traffic Division feels that the presence of the Resident ATREP has promoted increased awareness of FAA's activities and services, and has resulted in more efficient handling of mutual problems.

Ken has a highly qualifying background for his current assignment. He was a heavy bomber pilot during World War II with the 15th Air Force in Italy. He has spent 13 years as a fighter pilot with the Hawaii Air National Guard (current in F-102), presently is Oper-



Ken discusses air traffic with Capt. Wiley Gable (left) and Capt. Z. V. Lamascus at Kaneohe.

ations Staff Officer, 154th Fighter Group. He has been with the FAA since 1947. He spent time on Canton and Wake Islands with Plant and Structures and, since 1950, has been in the Air Traffic Division as Tower and Center controller. He hails originally from Redlands,

California. His wife, Honey, is a native of Waimea, Kauai. The Fishers have two daughters, Pamela and Ceseli; the family lives in Kailua. Ken is an avid golfer, admits to shooting a "fair" game, but claims his eight handicap is grossly over-rated.

Visitors from East-West Center



The three gentlemen seated were visitors to the Pacific Region facilities. They are assigned to the East-West Center on the University of Hawaii campus, attending a Middle Management Training Seminar. From left, they are: Murari Bahadur Chhetry, from Nepal; Ramon O. Teodoro, Philippines; and Kanthimathina Divarism, India. Seated with them is Daisy Kiakona, Placement Officer, P&T Division. Standing, left to right: George E. Rugg, Training and Employee Development; Stephen P. Souza, Compensation and Employee Appeals; Arthur J. Dalton, Occupational Safety and Employee Services; Thomas M. Shields, Jr., Compensation and Employee Appeals; and Vernon Tjyson, Training and Employee Development.

PACIFIC TO WESTERN



After fourteen years with Pacific Region, Sam Myers departed for Los Angeles and a position with the Western Region. Above, he displays his usual fine form as he accepts scroll memento from Norman Thompson, Chief, Systems Maintenance Division.

IFSS ELIMINATES TAPE BOTTLENECK BY ESTABLISHING NEW SCHEDULES



Before. Under old procedures above, tape relay handling was almost unmanageable. Lelen Lum and Tomas Deboma try to catch up. After. David Kaluhiwa and Ronald Okai handle tapes with ease under new procedures.



By employing a simple change in procedure, a bottleneck which caused considerable delay and difficulty, not to mention time lost, has been eliminated in the Honolulu International Flight Service Station in Diamond Head Crater.

The original problem arose because of the necessity of IFSS personnel to adhere to minute-by-minute schedules in transmitting meteorological data to San Francisco via radioteletypewriter circuit.

A specific number of minutes was allotted to each weather bulletin and, when a particular bulletin had been transmitted, another could not be started until the end of the allotted time for the previous bulletin. Thus, when relays of short weather bulletins were completed prior to termination of the time allotted, personnel had to wait until the next scheduled transmission.

This, in turn, resulted in many teletype tapes being temporarily "stored" by hanging them on the equipment until the start of the next schedule. In the meantime, one person had to watch the clock continuously, to determine the start of the schedule.

Intervening circuit time was lost. In addition, meteorological data was often not sent to San Francisco in time to meet onward relay because of a delay in receipt of the message at Honolulu, causing a schedule to be missed.

The IFSS finally eliminated the bottleneck by setting up schedules in twenty-minute blocks, with specified meteorological data to be transmitted any time within a given block. Thus, when two or more bulletins are being received, the shorter bulletins may be transmitted immediately upon receipt, while the longer bulletins are still being received. Data can now be kept moving, eliminating the "storage" problem and the accompanying bottleneck.

REGION'S WORKHORSE GETS PRIMPED FOR NEW YEAR

Louise S. Carlstrand, Personnel and Training Division, pauses at Flight Standards Division hangar to retouch the designation of Pacific Region's Constellation, N-65. Louise has a sentimental interest in N-65, since she was responsible for the number the aircraft bears.

When the region's old workhorse, a Douglas DC-4 (N-65), was retired in 1962 Louise, through the suggestion system, recommended that the designation N-65 be transferred to the replacement air-

craft. The suggestion was approved and Louise received a \$25 award for her recommendation to preserve the memory of the Region's fine old aircraft which had served so long and faithfully.

Since Christmas was approaching, Louise thought it would be a good idea to touch up the number for the start of the new year.

(The photographer just "happened" to be passing by and snapped the picture.)



STATION MANAGERS VISIT ANCHORAGE FOR ANNUAL THREE-DAY CONFERENCE



These men run the show for the Federal Aviation Agency in the Alaskan Region. These 35 men represent a wealth of talent acquired through years in aviation.

Personnel of the Office of Director, Alaskan Region and Station Managers grouped together during the annual three-day Station Manager's Conference held Nov. 20-22 in the FAA Headquarters Building.

Front row left, Joseph E. Walsh, Kotzebue; Alan I. Haferbecker, Tanana; Harmon A. Williams, Yakataga; Col. Ralph G. Taylor, Jr., Deputy Director, Alaskan Region; James G. Rogers, Director, Alaskan Region; Robert T. Williams,

Executive Officer; Ormond O. Robbins, Northway; Donald E. Darling, Iliamna; Jonathan C. Lawton, Kenai, Second row left, Darell G. Bricker, Bethel; Albert Burnham, Aniak; Richard H. Collins, Minchumina; Ralph L. Hazleton, Nenana, James H. Seitz, Cordova; Sanford Peterson, Fairbanks; William O. Nesbit, Bettles; Wesley S. McIntosh, Gulkana; Clarence C. Holmberg, Talkeetna; Carl E. Fundeen, Annette Island. Third row left, Marion J. Figley, McGrath; John R.

Andrews, Sitka; William I. Conyers, (Acting) Anchorage; James R. Heay, Homer; Edward E. Jones, (Acting) Moses Point; Lawrence D. Smith, Galena; Elmer I. Williams, Cold Bay; William J. Johnson, Juneau; Joel R. Caudle, Nome; Jesse H. Jones, Summit; James O. Porter, Yakutat; Back row left, Raymond F. Harry, Farewell; Jacob H. Holzenberg, Big Delta; Darrell Chaffin, Woody Island; William Blacka, Unalakleet and Carl L. Melton, King Salmon.

Navy Praises Nome FAAers for Outstanding Assistance in Tests

The U. S. Naval Air Development Center conducted an important field strength measurement in Alaska. One of the sites utilized for this work was the FAA facility at Nome. The following is a quotation from a communication received from the Commanding Officer:

"The results obtained were highly gratifying. A large degree of credit for the success of the Nome operation goes to Mr. Ray Caudle, the FAA Station Manager, and his crew for the outstanding assistance rendered in supplying facilities, transportation and other courtesies.

"The Commanding Officer, NAVAIR-DEVCCEN, therefore takes great pleasure in extending his appreciation for the outstanding cooperation of your personnel."

It is gratifying to realize that our Federal Aviation Agency personnel and facilities can be of help to other government agencies.

Director's Wife Is Hostess



Mrs. James G. Rogers greets station manager's wives who attended a luncheon held at the Westward Hotel during the annual Station Manager's Conference. From left, Mrs. William Blacka, Unalakleet; Mrs. Carl Fundeen, Annette Island; Mrs. Joel R. Caudle, Nome; Mrs. James G. Rogers, Mrs. Artie Porter, Yakutat, and Mrs. Larry Smith, Galena.

ATC'S FINISH FIRST-LINE SUPERVISOR COURSE



Special management course for air traffic service supervisors. Certificates were won by 45 participants.

Representatives from six Alaskan air traffic facilities completed a seven-day course in techniques of supervision, at the Regional headquarters building. Certificates of successful completion of the First Line Supervisors' Course were issued to 45 participants, who attended one of the four classes held during October and November.

The special management course for air traffic service supervisors was conducted by Boyce Hill and Gerald Welch, instructors from the FAA Academy. More than 1200 supervisors have received this training in a nationwide project of the Agency. Messrs. Hill and Welch were one of five teams that presented the

course in ARTC Centers and Regional Offices throughout the country.

The program is a continuing one, designed to increase the effectiveness of facility management. As these first-line supervisors—most of them air traffic facility coordinators—advance, their successors will receive the same training. Instructors: Boyce N. Hill and Gerald M. Welch, Oklahoma City. Participants seated, from left, James E. Carter, Ralph D. Hulfer, Edmund J. Shields, Harold S. Anderson, Richard J. Moore and Jerome E. Lardy. Standing, from left, Wallace D. Leask, Clyde N. Sterling, Bruno H. Zamorski, Frederick W. Dingley, Joseph F. Skurka and W. George Leese.

IT'S AN EVEN DOZEN OVER AT THE JENSEN'S HOUSE



Woody Island Station personnel think that when a man gets an even dozen youngsters it is news. This is the situation in the James T. Jensen family.

Jensen, an FAA employee for the past 14 years, is a supervisory air traffic control specialist at Woody Island. Formerly stationed at Unalakleet for two years, he transferred to Kodiak in August of this year. He also served at the Anchorage Station and for the Western Region.

The family are front row left, Jonathan; Janathan; wife, Sue, holding Bruce; Jim, father, holding Betty Jean; Billie. Second row left, Michael, Leslie, Lorie, and Coleman. Rear, Jim Jr., Edwin, Rosa.

Regional Personnel Earn Thanks For Excellent Work Performance

The following letter from David L. Conger, Realtor of Vallejo, California, was sent to Administrator Halaby. A copy of the letter and an endorsement to the Alaskan Region was forwarded to be placed in personnel files where applicable.

"I have been flying for 20 years in the military service and as a civilian. "I and my family have just returned from a 7,000 mile trip through Alaska in a Cessna 310.

"I want you to personally know that the personnel at your FAA stations in Alaska are the finest I have ever met.

"Both in the air and on the ground they were extremely helpful and cooperative.

"I wish to particularly commend Dave Harmon, Nome; Dick Sacket, Nome; Thayer Kessler, Cold Bay, (formerly Nome) and Pete Davison, Kotzebue.

"These men reflect great credit on your agency."

Newly Wed Gravens at McGrath Cut Cake at Wedding Reception



The new couple carry out their traditional role.

On Saturday, November 23, Robert Graven, McGrath FAA electronic technician and the former Edna Sweet of Bellview, Washington, were married in the FAA recreation hall at McGrath. The ceremony, performed by Mrs. Dorothea Williams, Magistrate of McGrath, was followed by a reception held in the hall.

A wedding cake, a consolidated masterpiece baked by Mrs. Marion Figley and Mrs. Hugh Keller, was served the wedding guests immediately following the ceremony.

FAA Horizons

RCCC

Communications Nerve Center



RCCC duty officers. From left: Richard Inman, Chief; Milo Rousculp, Leonard Zaber and Robert E. Thomas. James Ray is not shown. Below: Rousculp at RCCC console. Phone is direct line to Washington, D. C.



Sancti Welding is preparing messages for the 100 WPM teletype circuits.



"All I do is dial a two-digit number and I can speak to any regional office in the agency", explained Dick Inman of the Alaskan Region's Communications Control Center.

Now fully operational, the RCCC provides instantaneous, round-the-clock telephone, interphone and teletypewriter contact with the far flung regional offices, Air Traffic Control Centers, and the Washington Headquarters of the Agency.

"Why the need for such rapid communications?" Horizons asked Inman. "How does the new system differ from the old?"

Inman said communications have been centralized at the executive management level to concentrate and accelerate action during an emergency of any kind. Previously, in the Alaskan Region, much of the communications traffic of vital interest to the Director or to members of his staff, was routed through the Anchorage IFSS. The watch supervisor at the station had to divide his time and attention between his air traffic duties and servicing the Regional Office communications needs. This was a highly undesirable arrangement—especially in a situation where quick action was required by the director or a staff member.

The Cuban crisis in October of 1962 gave impetus to establishing control centers in each regional headquarters. The Southern and Southwestern regions were the first to have operational RCCCs. Based upon their experiences and pioneer efforts, the agency directed in July of 1963 that each region establish similar centers.

Dick Inman is supervisor of the RCC and serves on the Director's Staff. He heads a team of four duty officers and two teletype operators. The duty officers were hand picked from the Air Traffic Division because of their broad knowledge of the workings of FAA and their job performance as air traffic controllers.

The RCCC duty officers monitor the activities of the region, keeping a lookout for matters of sufficient importance that warrant expeditious action. Air disasters, national emergencies, overdue aircraft, sabotage, status of equipment and navigational aids are a sampling of the concerns of the RCCC. Keeping tabs on the whereabouts of key personnel is also part of their job. "The officers find the work interesting", says Inman. "They never know what action will be required of them when they answer an incoming call. It could be an aircraft accident, a traffic deviation report, a request for a range course ground check, or an emergency call from a remote facility for Jack Jefford to fly out a critically ill employee. You just never know".

In an age of faster flying aircraft—with supersonic transports just over the horizon—the need for instantaneous communications is a necessity. The communications control centers tie together the widely separated locations of the agency into a close knit organization ready, willing and able to handle any problem that comes its way.

February, 1964



Kenneth L. Wood, Chief, Flight Service Station, Merrill Field, at desk.



Specialist briefs pilot on weather conditions.



Air Traffic Control Center assists VFR traffic through dense traffic areas upon request.



Experts help with the flight plans.

Flight Following - A Helping Hand



Curb service at Merrill Field FSS. Below: Pre-flight briefings and flight following service add up to happy landings for Alaskan pilots.



A student pilot, flying under visual flight rules, pokes his nose into a cloud and becomes disoriented. Excitedly, he calls Anchorage Center/RAPCON for assistance. He receives a radar steer and is led out into the bright sunshine.

Two hunters following moose tracks land their single-engine aircraft on a short patch of ground. On landing roll, the right gear strikes a stump; the airplane noses up and shatters the propeller. A short while later, realizing that they are overdue back at Merrill Field, Flight Service alerts Search and Rescue to start rescue procedures.

Two stories with happy endings—thanks to a big helping hand from FAA.

But how many end in tragedy? Ken Wood, Chief of the Flight Service Station at Merrill Field says more accident stories could end happily if only pilots would avail themselves of the many services offered by FAA. "Why, we'll do just about anything for a man, except fly his airplane for him—if he'll only ask us for our help."

Take VFR Flight Following for example, perhaps one of the best—and least used—services provided by FAA.

By definition, VFR—Flight Following Service provides a means whereby pilots can receive In-Flight Service on an orderly, systematic basis through flight condition reports which are prepared specifically for the particular flight at regular intervals. "Putting it another way", says Ken, "It's like having a bunch of extra hands in the cockpit helping a pilot perform his myriad duties as he proceeds point-to-point to his destination. Like keeping track of the plane's position, double checking computations to make those ETAs on schedule, getting weather data the easy way, by radio, instead of trying to

figure Wha hoppin when the sky came down, or the wind shifted: These are some of the services the FSSs offer a pilot if only he'll ring FAA in on his flight planning. Besides, it takes a lot of the sweat out of navigation, and makes the flight less lonesome, knowing that you can talk to people on the ground who are as interested as you in your getting to your destination."

How does flight following work? How does a pilot go about requesting this service? What special equipment does he need in his aircraft?

First of all, any pilot with two-way radio in his aircraft can request flight following. He begins by filing a VFR flight plan and asking for this service on his clearance request. The flight service specialist reviews the flight plan with the pilot, checking proposed flight time and designating Flight Watch Stations en route which the pilot must contact by radio when passing over them. A thorough pre-flight briefing must be done. This includes a check of terrain, weather and wind data, and computations of ground speeds and fuel consumption to ensure that estimates over en route Flight Watch Stations are reasonably correct. Finally, the pilot must report his "off" time to the departure station.

The flight following machinery is activated and the pilot's progress is followed en route to his destination, as he makes position reports over the prescribed stations.

A safe pilot will use Flight Following on every VFR flight, Wood advised. If trouble develops, communications fail, or the aircraft wanders off course and runs out of fuel, it's a comfort to a pilot to know that all of the resources of FAA are available to help him out of his predicament.

For example, whenever contact cannot be established with an aircraft being flight watched within 30 minutes after estimated reporting time over a station, the stations ahead and the destination are advised. If the aircraft fails to report over the next station at the expected time, the destination is advised and starts a communications search, contacting all check points along the flight path. This includes radio and telephone contacts with stations en route. A visual check at airfields is also initiated.

Within one hour after estimated time of arrival at destination, or at fuel exhaustion time, whichever occurs first, the aircraft is presumed lost and an extended communications search is begun to contact all stations and airfields in the general area of the flight within the flight range of the aircraft. If this is unproductive, Search and Rescue Coordination Centers are alerted and the rescue effort goes in high gear.

"VFR Flight Following really pays off in an emergency situation", Wood declares. "It's too bad everybody doesn't request it. This is one case where people don't seem to want something for nothing. Perhaps we should try to sell the service to get more takers: charge five cents a mile with a big special for weekend flying."

Horizons is sure that it will never come to this. It's too good a service, especially in Alaska, for any pilot flying VFR. And there isn't that much to flight planning to make it burdensome for any pilot no matter how short or long his flight. Besides, the specialists in the FSS's are waiting for the chance to spin the computer with any pilot and pitch in on any aspect of flight planning.

ANIAK

The traveling crews are still busy completing installation of cable from White Alice to FSS, and new plumbing and electric stoves in the houses.

The new electric stoves are sheer luxury compared to the old oil burners which were difficult to bake in, we've been told. So on the day the new electric was installed in the Burnham household, Claire decided to bake two pies. She told Al of this, who could hardly wait for the end of day to try some. Upon arriving home he promptly asked how the pies turned out.

Claire said they turned out fine so she gave them to the traveling crews—Both of them! Al soon recovered from his temporary relapse and I believe has since enjoyed several pies baked in the new "electric."

SATCS Bob Thomas returned from leave with his wife to Brookfield, Mo.

The Thanksgiving Party was a success with FAA, White Alice and town folks in attendance.

Another fire in Aniak. On the morning of November 8th two warehouses belonging to NCA were destroyed by fire. However, the mail and freight stored there was rescued by the quick action of Al Burnham and other FAA personnel who rushed to the scene to give assistance.

J. M. Christensen

ANNETTE

FSS Leonard Davis transferred to Chief FSS at Unalakleet.

Electricians George Thompson arrived on November 14 and M. K. Murphy arrived on November 21 to assist Herman Wunderlich with the ALS Heater Installation, the National Bureau of Standards Power Installation and the replacement of part of the primary cable to our Dock.

Construction Lead Foreman Frank Fields and a five man crew arrived on November 14 to begin clearing a plot and erecting two towers and placing equipment trailer for the National Bureau of Standards Project.

On November 5, 1963 the town of Metlakatla held its election for mayor and councilman. Henry S. Littlefield was elected Mayor, winning over present Mayor Ryan by a three to one margin.

The Annette Rod and Gun Club had a very successful turkey shoot on Novem-

ber 10. A little over two hundred dollars was cleared.

ALTA Construction Company of Anchorage arrived to construct the new school in Metlakatla.

Carl E. Fundeen

BETHEL

SATCS Knight made a familiarization flight during the month on NCA bush flight to Platinum and Cape Newenham.

A wee one arrived at the station. ATCS Roy Womack and wife were blessed with a girl November 22nd; all three are doing well.

Nearly all ATM personnel experienced some sickness during the month from a near epidemic of influenza at our station.

The construction of the new H marker building has been completed and is now ready for electronics installation which is scheduled for the first part of January. The resident engineer, Galen Stewart has done an outstanding job on all of his work at this station.

All the facility chiefs and the station manager attended a one-day Civil Defense lecture conducted by the University of Alaska which was held in the local National Guard Armory.

The month of November was generally clear and colder than normal, resulting in many planes still using wheels. Also the IFR contacts were reduced with all the clear weather.

Darell G. Bricker

BETTLES

Emergency Medical Service was used during the month for transportation to Fairbanks of EMT Hurley's infant son. The trouble was found to be a rupture and at last report he was doing well. A Wien Alaska Airlines freight haul aircraft was departing for Fairbanks at the time so transportation was quickly arranged.

SEIT Sidebottom and EIT Hanson arrived for equipment modification and accomplished the job quickly, neatly and departed on the next available aircraft.

SEMT Julian W. Morrison returned from leave and the Academy, releasing REMT Donald H. Farley for return to Anchorage.

The weather during the month was generally cold and clear with a low of minus

37 recorded. Total snowfall to date is eight inches.

William O. Nesbit

CAPE YAKATAGA

November was a month of coming and going. Juanita Skipper began a vacation "outside," leaving our foreman mechanic to batch.

Mrs. Myra McDonald, Terry Williams' mother, came in from Cordova for a week's visit. Cape Yakataga ladies gathered for one afternoon of coffee and conversation with Mrs. McDonald as guest of honor.

Relief ATCS Jim Formella had some dental trouble which called him to Anchorage for a week. Glenn Mast, regularly at Cordova, has been assigned here for some sixty days.

Young Doyle recovered nicely from a painful dislocation of a kneecap, but Isabelle was still being mighty careful of her back, injured in a fall, when ATCS Doyle Shaw and family left to spend six weeks vacation in the "South 48."

Harmon Williams attended the Anchorage conference of station managers in November. Unfortunately he was weathered out of Cape Yakataga during the community's big Thanksgiving dinner.

Mechanic Montie Condry's sister, Viola, arrived from Nebraska a day after the holiday. Vi was too late to share in the November ice skating but she viewed our first big snow of the season.

E. T. Zumwalt

COLD BAY

Our Station Manager E. I. Williams is now attending the Management Institute in Berkeley, California.

IFSS: Flying Tigers L149H taxied into a Flying Tiger ground servicing vehicle causing substantial damage to number two propeller and the ground servicing vehicle plus minor damage to number one propeller. Both number one and two props were changed and number two engine was also changed as a precautionary measure. Ground crew was taxiing the aircraft at the time of the accident. No injuries to personnel involved. Exact GMT of accident: November 240755. Bradshaw arrived Tuesday, November 26, to investigate.

E. D. Dhabolt

FAA Horizons

FAIRBANKS

The people of Fairbanks are experiencing somewhat drastic changes in temperatures lately. Within the last month there has been a 60 to 70 degree temperature differential. This upswing in temperatures has brought many tempers down to normal with a few high and low records broken. The weather bureau has called upon their team of expert guessers to venture reasons for this unusual phenomena.

Other than this, Fairbanks FAA station traffic has been rather slow due to low temperatures. Fred McGuire missed out on all of the abnormal weather by basking in the sun in Mexico City while out on leave. While Martin Ondra and family spent an enjoyable 3 weeks in Pennsylvania. Paul M. Leschig, Tower Facility Chief, spent two weeks in the Regional Office for familiarization, and Thomas Rogers spent three days in the Regional Office in collaboration with other specialists in the P.I.P. program.

Charles Stack and Erland Stephens attended a first line supervisors course at Anchorage. Also during the month, Major Grotts and Gabriel Wesley traveled to Anchorage for detailed assignments concerning the new ADC/FAA AF10 program. ATCS Frank Scott and Joseph Grube were assigned to the Regional Office to assist Air Traffic in preparation of the P.I.P. standards for center personnel.

Many electronic and plant personnel have been busy with different facilities as the change in the weather causes complex problems with equipment. Murphy Dome also experienced heating problems with minus-30 degree temperatures and 25 mph. winds.

ATCS James Thorne transferred to the Anchorage Center RAPCON. SATCS Jerome Lardy was assigned to the Fairbanks Center/RAPCON to assume duties of Facility Security Officer.

Jim Carew completed GPX-9B school at Oklahoma City. Bob Mailander was selected for an EMT position at Murphy Dome. Ed Sheppard terminated his position with the Agency on November 21 and returned to the smaller states. Bill Higginson turned in his resignation to be effective in February in answer to a higher call—that of the ministry. Norm Hoogerwerf was promoted to GS-11 and was assigned to the Radar section. Elec-

trician Nakarado terminated his job with FAA this month.

A program of fire prevention and protection has been instituted with Roy Campbell as Area Fire Marshal, and Norm Hoogerwerf as Unit Fire Marshal.

Gurden E. Pendergraft

GUSTAVUS

Old Man Winter has provided a test run for cold weather operations at this station. A quick freeze revealed that water pipes can still be rendered inoperative. Better than a foot of snow adequately checked out our snow removal equipment. A subsequent thaw has provided bare ground and a warm interlude to provide time to correct any noted deficiencies before he (Old Man Winter) decides to establish his semi-permanent residence in earnest.

During November, Stanley Erickson and Max Cutshall modified the standby engine generator at the range site. Wilfred Bordeau and Gordon Hackett completely rewired the MK building, installing a new circuit breaker assembly and new overhead lighting which can easily be defined as a visible improvement.

R. Melander

HOMER

FSS Specialists had an opportunity during the month to work some live VOR orientation problems, both in-flight and from the air-ground console when Mr. Consual visited the facility.

Mr. Claire Jensen and Mr. Inskip from the Weather Bureau in Washington, D. C. were visitors at the Homer FSS during the month.

K. E. Lunsford, EMT Trainee completed DFF-100 during the month and is scheduled to attend VOR school at the Academy commencing December 23.

Art Lappi spent a couple of days on the station checking out the new water system. He seemed to be satisfied that all was going well.

James R. Heay

ILIAMNA

A station familiarization trip was made during the month to a few airports in our area. Not all of the airports were covered.

Our station manager D. E. Darling departed on annual leave during the

month with yours truly acting as station manager.

We lost general mechanic Robert Todd who was selected for a position in Anchorage as a welder. He is departing the area sometime this month.

Edgar C. Medford

JUNEAU

Juneau for the month of November saw lots of unseasonal cold and windy weather. Seldom even in January or February does our temperature drop below ten above. In November we had several days of zero weather, plus some very windy days.

Charles Osgood a FAA employee, who is also active in the local C.A.P., made two exceptional "finds" while on missions for the Coast Guard Search and Rescue Unit. He located an overdue boat in a matter of minutes after it was reported overdue. Charles found a downed twin engine private aircraft within an hour after it was reported crashed. A big community "Thank's" to Mr. Osgood for this fine work.

The Fedair II power barge rescued two little girls from Sisters Island under very severe weather conditions. The girls are children of the Mechanic stationed on Sisters Island. They were taken to Gustavus and a FAA plane flew them to Juneau for medical attention.

The high winds in Juneau cost us city power for several hours a few days ago. Our standby power came up in less than twenty seconds. This should give our maintenance people at least "E" for excellent.

KENAI

Loren Horn, our stranded mechanic who spent three nights out in the wilds, advises that he has purchased a heating pot and it will be a permanent piece of equipment in his aircraft.

Horn departed Kenai on Sunday, November 25, in his Cessna 180 with a teacher from Kenai to hunt caribou in the Talkeetna Mountains. They landed their plane on a lake to hunt on foot. When they returned to go back with their kill, the plane failed to start because of the severe cold. A search and rescue alert was initiated and the hunters were found and they received assistance to get their plane airborne.

J. C. Lawton

-S-T-A-T-I-O-N-N-E-W-S-

McGRATH

The marriage of Mr. Robert Craven, McGrath FAA Electronics Technician, to Edna Sweat, formerly of Bellview, Washington, highlighted the news events in McGrath for the month of November.

The ceremony was performed by Mrs. Dorothea Williams, Magistrate of McGrath. The wedding took place in the recreation hall at 7:30 p.m., Saturday, November 23. "Bud" Liddell was best man and James Large gave the bride away.

The wedding cake, a consolidated masterpiece by Mrs. Figley and Mrs. Keller, was served at the reception, which was held immediately following the wedding. SEMT Floyd W. Bithell was on annual leave during the month, returning to duty November 30. EMT James Large acted as SEMT during Mr. Bithell's absence.

William P. Curry

MOSES POINT

Relief ATCS Earl "Martoonie" Perry left for Aniak, and was replaced by Joe Dale. Joe brought his wife Marie with him, and just as we were getting to know them, Joe received word of his transfer to Rocky Mount, N. C. They'll be leaving shortly for the South "48" via Volkswagen power.

Odr Ravens' Club has received more information on our Foster Parents child, Demetrious Adamos. He is eight years old, lives in a remote village, and is quite handsome. We are told he is very bright and likes to play ball. His family is extremely poor, and would often be hungry were it not for our small financial assistance. It makes all of us a little proud that even in such a remote place as Moses Point, we can extend a helping hand to this family across the sea.

The club also celebrated Halloween in style. The children decorated our Recreation room with witches, pumpkins, etc., and the women cooked a turkey dinner with all the trimmings—real tasty!

The fox began to show themselves, and even come on the station proper, making the women a little leery to venture out at night. I hope it will be too cold for them soon. Probably the urge for food is a compelling force.

C. Norcisso

NOME

As part of its responsibility to the people of the State, the University of Alaska, under contract with the Department of Defense, Office of Civil Defense, held a one day conference for local government officials and other influential persons in Nome on November 21, 1963. The conferences stressed the continuing need for civil defense, and reacquainted the participants with current preparedness programs. Mr. Anthony L. Martinez was acting station manager during this period and represented the FAA at the conference. It was pointed out to civil defense officials that the FAA is committed to the Department of Defense in times of emergency. However, we would assist with planning to the maximum extent possible.

Our FAA/MARS equipment has been installed in the airport housing area. Electronics personnel did an excellent job on this installation. As soon as we acquire a station license we will be ready to go on the air.

Nome flight service specialist Barney Ban was detailed to Moses Point for approximately 90 days to provide needed relief at that station.

The new Nome Power Plant is approximately 80 per cent completed, and the present target date for commissioning is on or about February 1, 1964. We anticipate that this new power plant will decrease our problems with low voltage, and overall service will be improved greatly.

Joe A. Caudle

WOODY ISLAND

Santa Claus had another stocking to fill at SATCS Jim Jensen's Woody Island home this Christmas. Bruce Lee arrived November 9, in time to hang up his sock along with the other eleven Jensen children.

Following the ever increasing family around has been quite a job for Santa. They have lived in Kotzebue, King Salmon, Anchorage, Tanana, Nenana, Juneau, Unalakleet and Woody Island. Only once did the Jensen system of keeping track of their lively youngsters break down. While the family was on leave, young Eddie did not answer once when his name was called at lunch roll call. A frantic back track to the last filling sta-

tion stop found Eddie absorbed in watching a cow being milked. He was totally unaware he had been left.

Jim is thankful his family likes wild game, for his hunting ability helps keep the grocery bills down.

He says, however, "I surely wish I could hunt or trap shoes—outfitting this family with footwear makes a hundred dollar bill look mighty sick!"

Work on the dock repair project is progressing much faster than expected. We are thankful for their rapid progress and expected early completion as daily use of the dock by students and other personnel during construction presents a definite safety hazard, even though we have had excellent cooperation from the contractor. Also, during the past year, since the dock was badly damaged last Xmas day, we haven't been able to drive a truck within two hundred feet of the loading zone at the end of the dock, necessitating man-handling all freight and station supplies across the damaged area.

D. F. Chaffin

YAKUTAT

During the month of November, Yakutat operations and happenings were strictly routine in that everything was normal. Normal in that something was predicted. Predicted in that someone would get lost.

A local State employee, and a local Federal employee (not FAA) went moose hunting, expecting to stay out a day or two. A heavy snow storm moved in and prevented their pilot from picking them up at the appointed time. When the weather cleared, no sign of the two hunters could be found and they were not at their designated camp site.

After two days a major search was initiated which involved the time and equipment of the local pilots and about everyone else who could be contacted. The lost men were located by the SEMT, Don Treichel, flying the FAA Flying Club aircraft. He radioed the station, who advised the Foreman Mechanic, Fred Miller, who went out in a tracked amphibious vehicle and brought the men back to safety. Cold, hungry and exhausted, but otherwise okay.

There is no doubt but that if they had not been located that day the incident would possibly have ended in a tragedy.

Harold H. Griffith