HORIZONS

Read:
'The Aero Center—
Then and Now'
Pages 4-5

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Full Implementation of EEO Is Emphasized by Secretary

WASHINGTON—"I am absolutely determined that fairness, equality, responsibility and positive effort in the field of equal opportunity shall be both the stated policy and the practice of the DOT and its operating administrations," Secretary John A. Volpe stated at the recent Third Special Equal Employment Opportunity Conference held at Headquarters.

Conference participants also included Administrator John H. Shaffer, associate administrators, directors of regions and centers, chiefs of regional personnel and training divisions and chiefs of civil rights staffs.

Secretary Volpe stressed that the Department would implement fully the President's recent Executive Order in which he stated: "No more serious task challenges our nation domestically than achievement of equality of opportunity for all citizens in every aspect of their lives, regardless of race, color, religion, national origin or sex."

The Secretary said that the DOT intends to meet this challenge. "Certainly, with a work force of almost 100,000, with one of the highest average grades in government, with many of the most challenging and rewarding careers in the Executive Branch, we have the opportunities, and with good will and determination can achieve the progress and the results demanded by the president.

Emphasizing that time-worn excuses and reasons why results are not possible will not be acceptable, the Secretary outlined a three-point program for the Department:

- A significant increase in the overall rate of hiring qualified minorities and women.
- Providing the means for upward mobility for all minority group and female employees so that they will have full opportunity to work at the highest level of their abilities and potential.
- Far greater utilization of minority and female employees in the professional and upper levels of the DOT work force.

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Writer, Educator Joins FAA Staff

KANSAS CITY, Mo.—A newcomer to the FAA in Central Region's Engineering and Manufacturing Branch, A. F. (Jim) Madayag is no novice to aviation and aeronautical engineering. Madayag has a B.S. degree in aerospace engineering from FEATI University in Manila, a Master's in aerospace engineering from Purdue and has been an Engineering Fellow at the Case Institute of Technology.

His textbook, "Metal Fatigue: Theory and Design," has just been published by John Wiley.

For the five years prior to joining the FAA Madayag was on the staff at the University of Southern California as coordinator of advanced technical courses. In the spring semesters of 1967 and 1968 he taught engineering courses in Japan and also managed to find time to teach a semester in Hawaii.

He taught such subjects as aerodynamics, aerospace structures and aeroelasticity at the University of Kansas for three years during an earlier phase of his career.

In addition to his busy teaching schedule, Madayag has served as a consultant to various aerospace industries. While at USC, he co-authored and edited his new textbook. He is now at work on his latest book, "Structures Technology."

His experience as a senior engineer, his consulting activities and teaching background all help him in his present job as an FAA aerospace engineer. Although new to

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Metal Fatigue Expert

Co-author and editor of a new textbook on theories of metal fatigue, A. F. (Jim) Madayag (left), stands by an exhibit of the book in the regional library. Holding a copy is Madayag's boss, John A. Carran, Chief of the Engineering and Manufacturing Branch.

COPCOM Conferees

En route controllers at the COPCOM conference and officials from Air Traffic Service included (seated, from left): John Tilley, Southern; Casper Thielman, Chairman, Central; Ferris J. Howland, ATS Deputy Director; Oran Bell, Southwest; and E. C. Krupinski, ATC Operations and Procedures Division Assistant Chief, ATS; (standing): Chester Hewes, Central; Roy Williams, Alaska; Charles Reese, Western; Calvin Fontenot, Southwest; John Cotter, Eastern; John Kanyock, Eastern; Stephen Brashear, Western; Eugene Parker, Southern; and Frank Boyer, Pacific.

Controllers Explore ATC Problems

By Theodore Maher

WASHINGTON—Problems in both en route and terminal air traffic control were discussed and various solutions examined during the fifth workshop of the Controllers' Operations-Procedures Committee (COPCOM) held at Headquarters recently. The COPCOM program, established in 1963 to encourage controller participation in development of air traffic control procedures, was subsequently expanded to provide controller participation in planning and development of ATC equipment and environmental improvements.

This year, 24 agency controllers, four military controllers and one representative from Canada's Department of Transportation attended the workshop.

Split In Two Groups

During the two-week session, the veteran controllers split into two groups—en route and terminal—for in-depth discussions. Besides being briefed on recent developments in air traffic control and visiting area facilities, they dealt with an 11-item agenda.

The items were suggested by controllers and covered situations the men encountered regularly, such as controller proficiency training, radar separation, aircraft identification prefix and controller in the cockpit. Other topics included the use of the ATC Radar Beacon System, general aviation aircraft type designators, wake turbulence, weather reports governing VFR operations in a control zone, flow control, mandatory radar handoffs and IFR handling at uncontrolled airports.

Briefed On New Systems

For two days, the group was briefed on new ATC systems and equipment, including the ARTS II and III programs, the BRITE-1 tower cab approach control experiments and expanded uses of the BRITE-1 system for the terminal controllers. En route specialists were briefed on the latest developments in NAS Stage A.

To observe the Facility Improvement Program in operation, the terminal group visited Washington National Tower where they had a first-hand look at the new lighting system and new tower cab consoles.

(Continued on Page 7)

FAA Announces Awards For Outstanding 'Saves'

WASHINGTON—Special Service Awards and checks for $400 each will be presented here this week to four air traffic employees who participated in outstanding 'saves'—providing exceptional assistance to pilots of aircraft in distress.

The 1969 winners of the agency's Flight Save Award Program are:

Mandel Moskow, Kahului, Hawaii, Combined Station-Tower.

Edward L. Ward, Kotzebue, Alaska, FSS.

James C. Holyfield and Henry Till, Key West, Fla., FSS.

Moskow assisted the pilot of a small single-engine aircraft after the plane's navigation equipment malfunctioned and its engine overheated after dark. Moskow quickly apprised the pilot that he was headed toward a high mountain, then vectored him in to a safe landing at Kahului Airport.

Ward saved two pilots and one passenger from possible death in the Alaska wilderness when they were marooned during a polar bear hunt. After an extensive and fruitless air search for the three missing men, Ward spent several hours in unproductive attempts to establish radio contact. Finally, he detected very weak, unintelligible signals that seemed to be responding to his transmissions.

With the aid of maintenance technicians, he immediately set up special communications equipment, and established two-way radio contact. By having the lost party use Morse Code to respond "yes" or "no" to a series of questions, Ward was able to ascertain the approximate location of the crash and the fact that although both aircraft were disabled, there were no injuries. A search and rescue mission brought the three men out safely the following day.

Holyfield and Till brought to a safe landing a small single-engine plane caught in the violent turbulence and reduced visibility of Hurricane Gladys. Attempting to get his plane to a safe haven in another part of the state, the pilot was "caught" by the hurricane, blown off course and subjected to severe buffeting and heavy rains.

Using direction finding equipment, Holyfield and Till established the plane's position and gave him navigational assistance resulting in a safe landing at Key West, despite the fact that the pilot was highly agitated and convinced he would crash into the sea.

The four 1969 winners were selected from among 19 nominated by the FAA's seven regions. Top winners were selected by a review board headed by Ward E. Saunders, an ATC specialist at Headquarters. Other ATC specialists on the board were William P. Carlton, Stewart A. Dawson, David H. Erling and Cyril H. Femrite. William H. Andrews, Chief, Management Programs Branch, Air Traffic Service, was secretary of the board.

Regional nominees not selected for the national award automatically become regional winners and are to be honored in the regions.

Information provided by records of the saves throughout the nation is being carefully studied to determine the kind of assistance most helpful to pilots and the manner in which air traffic personnel can improve the quality of their services to pilots.

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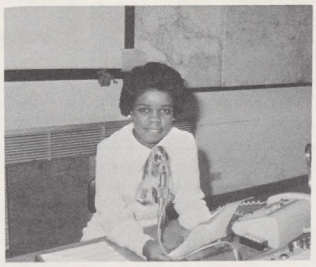
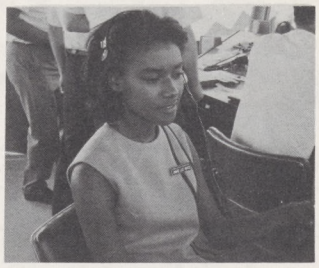
Carol I. Fields (Philander Smith College), Hot Springs Tower says: "My experience has been both educational and enjoyable."



Janice M. Griffin, (Dillard University), New Orleans FSS: "'Interesting, enriching—thanks to my instructors."

Leon A. Bernard (Dillard University), Houston FSS: "The training was beneficial."



Jimmie Lee White (Texas Southern University), Houston Hobby Tower: "I learned judgment and team work and sharpened my responses to unexpected situations."

From the Halls of Ivy ...To FAA

Attracting more college graduates—particularly graduates who are members of minority groups—to full-time FAA employment is the objective of the Southwest Region's recently inaugurated recruiting program on college campuses.

Ten colleges in the region—most of them with a predominately minority enrollment—are represented in the program, which provided jobs for college students both during the summer and later. Under the program, students from the colleges worked at air traffic facilities in Fort Worth, Little Rock, Baton Rouge, Houston, Oklahoma City, and New Orleans, among others.

Following a training period, the 17 students taking part were given job assignments consistent with their capabilities and experience.

Now that the summer training program is over, many of the students are back in college providing word-of-mouth data on FAA opportunities to their classmates. Others have remained on the FAA payroll.

The program was spearheaded by McLendon Wilson, who was the Southwest Region's Equal Employment Opportunity Counselor at the time of the program's inception.

Wilson, who now heads the Houston Area's EEO efforts, felt strongly that college students who complete a worthwhile work experience with FAA will tell others about it when they return to college—thus making it easier for the agency to attract other college graduates. Most of the students had at least a year to complete before graduation.

Recruitment for summer positions started early this year with visits by Wilson to college campuses throughout the region. During these visits, he explained program goals and training requirements to interested students.

Selection was based on both interviews and examinations. The 17 who participated in the program were picked from a total of 155 students who expressed interest in working for the agency.

One of the trainees, Joseph L. Brown, a senior at Philander Smith College, will remain at Little Rock Tower until January when he will return to college to complete his studies. The quality of Brown's work was such that Tower Chief George L. Hunsaker approved the extension. Hunsaker reports that Brown is now capable of controlling light to moderate traffic, under supervision, and to work flight data unassisted.

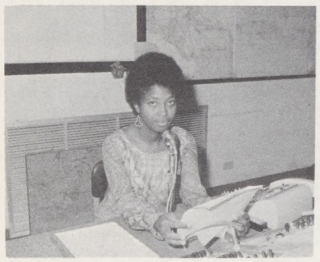
Another of the participants already has a college degree. Miss Willie Lee Johnson, a sociology major with a bachelor's degree from Huston-Tillotson College in Austin, spent the summer at the Fort Worth FSS.

She performed work at weather observer and teletype positions and has since passed the weather observer certification examination.

Schools represented in the program are Philander Smith College, Huston-Tillotson College, Xavier University, Texas Southern University, Dillard University, the University of Southwestern Louisiana, Jarvis Christian College, Arkansas A&M Normal, Langston University and Southern University.

"We are pleased with the results of this program which has given qualified minority members and other college students a glimpse of the many opportunities within the FAA," said Willie Christian, who recently became the EEO Coordinator for the Southwest Region.

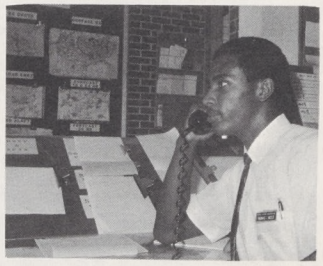
(Not pictured in accompanying photos are Winston G. DeGuir, Xavier University, who worked at the Baton Rouge CS/T; Donald H. Cain, University of Southwestern Louisiana, Lafayette Tower; Guy G. Davis, Langston University, Oklahoma City FSS; and Richard M. Wallis and Michael G. Patton, both of the University of Southwestern Louisiana, Lafayette FSS.)



Virginia Bell (Xavier University), New Orleans FSS: "I have learned a lot."

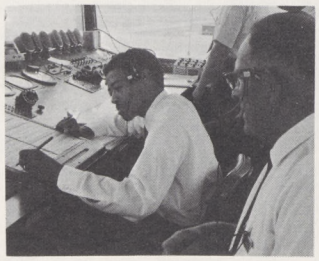
Fayard J. Lindsey (Xavier University), Moisant Tower, New Orleans: "I plan to join the FAA after graduation."

Geraldine Glover (Dillard University), Houston FSS: "A very interesting, exciting experience."

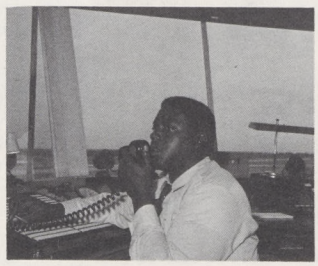


Thomas I. West (Arkansas A&M), Pine Bluff FSS: "Training has been great and promising."

Willie Lee Johnson (Huston-Tillotson College), Fort Worth FSS: "Rewarding, educational, enjoyable."



Joseph L. Brown (Philander Smith College), Little Rock Tower: "I would like to become a controller."



George Phillips (Jarvis Christian College), Longview CS/T: "This is the profession I would like to enter."

Joseph Shorter III (Southern University), Lakefront Tower, New Orleans: "Training was superior. I plan a career as a pilot or controller."

Administrator to Speak At Maintenance Meeting

OKLAHOMA CITY—Administrator John H. Shaffer will be principal speaker at the agency's Fifth Annual Maintenance Symposium Dec. 9-11 at the Skirvin Hotel here. He is the first FAA Administrator to address the annual maintenance symposium since it started in 1965 and will speak at the symposium banquet the evening of Dec. 10.

The symposium, which will have "Advances in Aviation Maintenance Technology" as its theme, is expected to attract over 600 persons, with representation from more than 30 foreign countries.

Twenty formal presentations will be made by technical experts drawn from the ranks of aircraft and engine manufacturers, electronics firms, government agencies, military services, the airlines, research organizations and general aviation groups. Copies of speeches will be available at the symposium.

The three-day program will open the morning of Dec. 9 with a welcome by W. Lloyd Lane, Director of the FAA Aeronautical Center. He will be followed by Harry A. Turnpaugh, Chief of the Maintenance Division in Flight Standards Service, who will outline symposium objectives.

Turnpaugh noted that the theme of the symposium, "Advances in Aviation Maintenance Technology," has helped create more than usual interest in the forthcoming meeting.

Maintenance Truly a Science

"The increasing worldwide popularity of the annual event can also be attributed to the fact that it provides all interested persons and organizations in the aviation industry a platform upon which to exchange valuable ideas and technical data and update their knowledge of the state-of-the-art," he added. "All who participate come away with a keener appreciation for the fact that modern aviation maintenance is truly a science and not a wrench and screwdriver operation."

Others scheduled for formal talks are James E. Dougherty, Assistant Chief, Maintenance Division, Flight Standards Service, who will discuss "Modern Surveillance of Aircraft Integrity," and Robert A. Burbick, Chief, Regulations and Directives Branch, Maintenance Division, Flight Standards Service, discussing "Status of FAA Maintenance Regulatory Actions." Dougherty also will moderate a special panel on "Condition Monitoring of Air Carrier Aircraft." The panel, a highlight of the three-day affair, will consist of: J. Pontecorvo, Chairman of the FAA's Maintenance Review Board for the Boeing 747; Ken Neland, Technical Assistant for SST Maintenance, Maintenance Division, Flight Standards Service; and several airline executives.

Among the exhibits at the hotel will be an FAA National Airspace System display. Other exhibits will feature manufacturers' products, schools, service organizations, airlines and general aviation operations.

Manager of the 1969 Symposium is Robert B. Phillips, Maintenance Division, Flight Standards Service.

Santa Ana Gets New-Type ILS; 109 More Ordered

SANTA ANA, Calif.—The first of 110 instrument landing systems, ordered earlier this year for installation throughout the country, was commissioned recently at Orange County Airport here.

As part of the commissioning exercises, representatives of local news media were invited to witness a demonstration of the system in one of the agency's DC-3s.

The new ILS is a low-cost, solid-state, contractor-installed equipment unit which facilitates the landing of aircraft in poor weather. The ILS consists of a localizer transmitter, a glide slope transmitter, and two marker beacons. The localizer provides the pilot with an approach path aligning his aircraft with the runway centerline, and the glide slope directs the pilot's descent to the runway. Two beacons, the outer and middle markers, indicate fixed-distance positions with respect to the end of the ILS runway.

A medium intensity approach light system (MALS) with runway alignment indicator lights (RAIL) also has been installed at Santa Ana to provide the airport with an ILS/MALSR system which should be capable of meeting the International Civil Aviation Organization and FAA Category I performance standards.

Blowing the Whistle

Responding to the desk-top "CHANGE" card from Headquarters which urged "blowing the whistle" on poor operational practices, Branch Chiefs in Albuquerque, N.M. recently gave Area Manager E. D. Jacobson the above Texas-size whistle. On hand for the presentation were (from left): Assistant Area Manager Benjamin Zvolanek; Alwin F. Beyer, Flight Standards; William S. Dalton, Air Traffic; James L. King, Airway Facilities; Charlotte P. Spader, General Administrative Staff; and Herb Seay, Personnel and Training Staff.

Helping Hand

Discussing a flight proficiency check with Houston Metro Airlines chief pilot B. C. Smith and president Jay Seaborn is George Seaberg (left), Principal Operations Inspector of the Houston GADO. Officials of the new intra-city airline recently expressed appreciation for the agency's assistance and cooperation during the months when the fledgling operation was new.

261 Years' Experience

Gathered together before retirement are six of nine employees who retired recently in the Alaskan Region with an aggregate of 261 years of Federal service. Seated (left to right) are: Bernard Martin, electrical engineer—33 years government service; M. D. Hutchens, Chief of the Procurement Section —27 years; Jim Ellis, electronic technician—37 years; Charles Wayer, Chief of the Flight Inspection Section—33 years; George T. Stephen, teletypewriter repairman—23 years; and Earl Trejbal, supervisory airways engineer—19 years. Three retirees not in the photo were Carl Aho, utility equipment mechanic leader—25 years; Fred Goff, electronic technician—35 years; and Harold E. Johnson, electronic technician stationed at Kenai, with 29 years government service.

Data Added to IFR Charts

By Don Byers

WASHINGTON—The FAA is now publishing aircraft holding patterns on IFR (instrument flight rules) navigation charts.

Incorporating the holding patterns on the charts will help reduce pilot-controller radio communications, in the same manner that publication of standard instrument departures (SID) for some airports has reduced the communications workload at those locations.

Holding patterns will be depicted on both high and low level IFR charts and appropriate area charts published by both the Government and commercial chart producers, beginning with those dated Nov. 13, 1969.

To avoid clutter on the charts, however, only those holding patterns used consistently by air traffic control will be depicted. Both standard and non-standard holding patterns will be shown.

The agency recommends the following procedures for pilots using the new charts:

- When holding at fixes with charted patterns, pilots will be expected to fly the pattern as shown, unless otherwise advised by ATC.
- When approaching a fix which does not have a charted pattern, pilots will receive instructions from ATC at least five minutes before the pilot is estimated to reach clearance limit, which is current practice for pilots flying IFR.
- If no clearance beyond the fix is received before arrival, and the holding pattern is charted, pilots will be expected to maintain the last assigned altitude and begin holding in the pattern shown.
- If no clearance beyond the fix is received for a non-charted pattern before arrival, pilots should hold in a standard pattern on the course on which the fix is approached.
- In any case of doubt about procedures, pilots should request instructions from ATC.

None of these procedures supersede those already published for two-way radio failure.

New Study Seeks Ways to Obtain Sonic Boom Cut

By Alex F. Garvis

WASHINGTON—A $200,000 contract has been awarded by the FAA to the University of Tennessee to study methods of reducing sonic boom, caused by aircraft flying faster than sound.

During the experimental part of the two-year program, the contractor will conduct both theoretical studies and tests in wind tunnels, ballistic ranges and shock tubes.

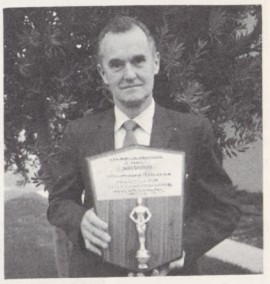
"The study in no way affects the earlier decision by President Nixon and myself to prohibit supersonic flights overland," Secretary of Transportation John A. Volpe said. "The research will be designed to advance our knowledge about the sonic boom and perhaps take us a step closer to overcoming its disruptive effects.

"The study," he said, "will be used to help the FAA establish future noise and sonic boom certification standards for new aircraft, as required by Congress in legislation passed last year."

Results of the research may enable designers and operators to devise effective evolutionary modifications on the first generation supersonic transports to achieve better sonic boom suppression. The research also is expected to contribute to the design base for the next generation of supersonic and hypersonic transports.

Included in the study will be an assessment of numerous sonic boom theories and programs presently available. In addition, the University will explore unconventional supersonic designs in an effort to suppress a sonic boom.

Some of the unconventional design features to be studied include the use of lifting surfaces, engine and exhaust jets (jet flaps) and novel configurations of volume displacement.



Honored

Supervising Inspector Roy Outcen of the Ontario, Calif., GADO was recently presented a plaque for his outstanding contribution to general aviation by the Pomona Valley Pilots Association.

FAA HORIZONS

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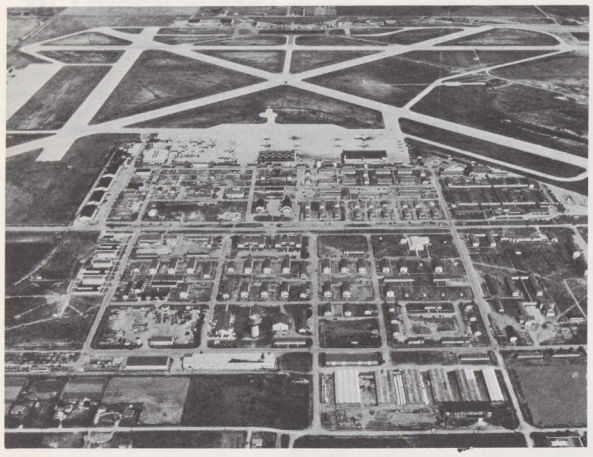
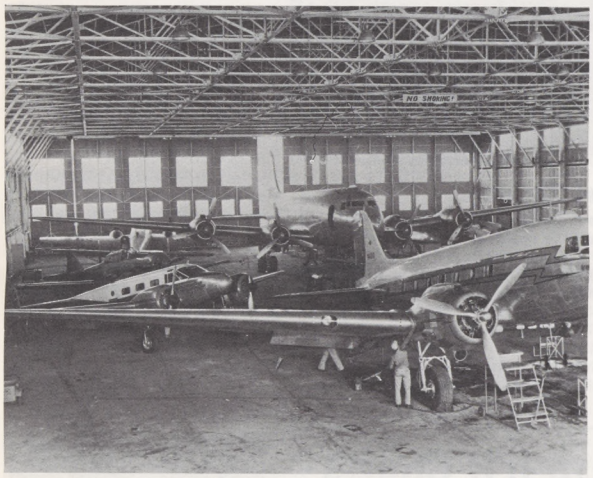
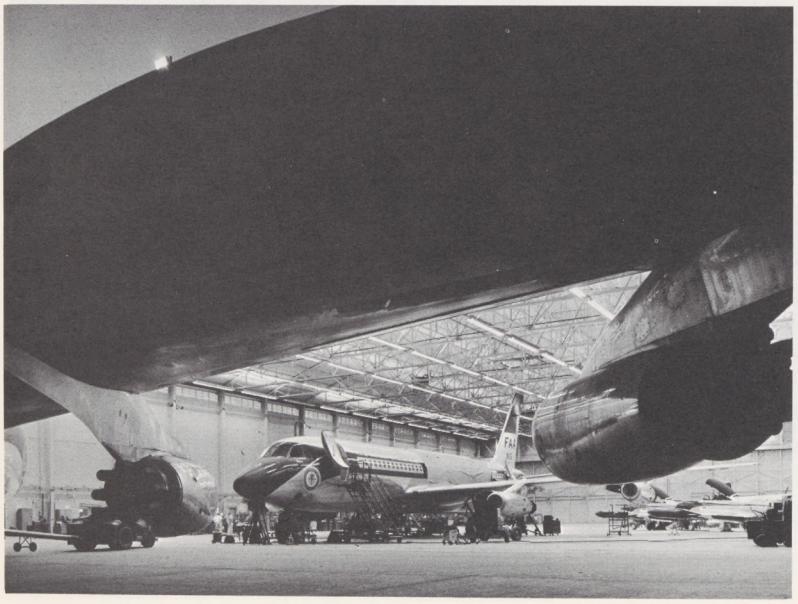


Back in 1946, the Aeronautical Center presented a far different picture (above), than it does today (right).



There are vast differences in the size of aircraft and the space Aeronautical Center employees had to work on them when we compare the interior of a hangar, photographed in 1947 (above), with today's ASB hangars (below), which can accommodate the biggest jets.



The Aeronautical Center: THEN and NOW

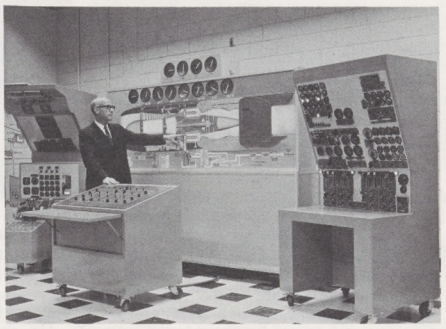
By Mark Weaver

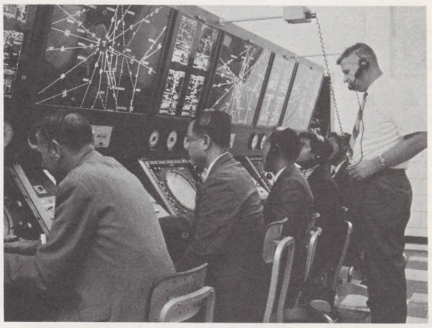
Twenty-three years ago—when the FAA Aeronautical Center at Oklahoma City had its real beginnings—the center consisted of a series of World War II vintage prefab hangars. Its total staff was less than 200.

Today's permanent staff at the center is near the 4,000-mark. There are 1,600 students in daily attendance at the Academy. For the most part the old prefabs are gone—the center now is housed in a number of gleaming, modernistic brick structures worth more than $40,000,000.

Today's Aeronautical Center maintains the agency aircraft fleet, trains air traffic controllers, electronics technicians and other specialists and keeps tabs on hundreds of thousands of aircraft and airmen records.

The photos on these two pages illustrate graphically the great strides that have been made in this major national hub so vital to the agency in the fields of training, supply, logistics, records, research and maintenance in a few short years.



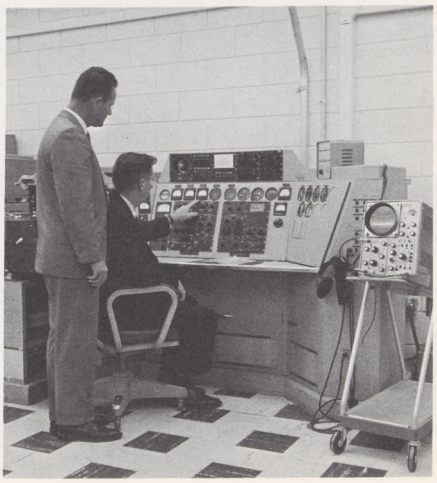


Detailed, "cutaway" mockup vividly illustrates jet engine systems to today's air carrier maintenance employees (above), A 1947 Flight Standards class (below), had to do without such aids in the hydraulic and electrical systems laboratory at the "old" Aeronautical Center.

Back-lighted sector panels, radar and rapid radio communications which expedite training of today's air traffic controllers (above), are in sharp contrast to the handwritten flight strips and relatively unsophisticated teaching aids in vogue a quarter of a century ago (below).

Flight inspection avionics gear of the late forties was non-solid state, ponderous and awkward to handle (above). Today's equipment (below), housed in a modern console, can flight check a number of ground navaids simultaneously.

Three modern hangars make up today's Aircraft Services Base (above). Each hangar has three stories of office or shop space on each side—a far cry from the maintenance hangar (left), designed strictly for prop aircraft such as the DC-3.



Doctor Helps 'Sell' Aviation Safety

By Thom Hook

OKLAHOMA CITY—As Chief of the Aeronautical Center's Aeromedical Research Branch, Dr. Harry L. Gibbons, a stocky former Army flight surgeon, has the job of overseeing 75 employees, including 20 scientists with Ph.Ds.

His leisure hours are as filled with activity as is his job. For one thing, he's greatly in demand at pilot seminars and rarely turns down the chance to appear on aviation safety panels.

On a fairly typical day recently, he reported for work, finished immediate business, then dashed for the airport to fly a Mooney (he's a commercial pilot with single-, multi-engine and IFR ratings) to his 10 a.m. speaking engagement in Stillwater, Okla.

With the help of FAA's James W. (Pete) Campbell, who arranged to have a car waiting for him at the Stillwater airport, Dr. Gibbons arrived at the flight instructors' meeting right on time.

"We've been flying more than half a century," he told the instructors. "We've seen fantastic improvements in hardware, navigation aids, fuels and the like—but we're still using the same model pilot."

By lacing cold facts on aviation medicine with humor, he kept his audience captivated. He told, for example, about the rich Texas pilot who wrote him and told him not to worry about his deteriorating vision. "I've had my prescription ground into the cabin glass of my new Bonanza, Doc!"

In a typical talk, Dr. Gibbons will tell of the dangers and warning signs of vertigo, hypoxia and hyperventilation. He will outline aeromedical research conducted at the center and urge pilots to take the special one-day center course in altitude chambers so they can detect hypoxia at its onset when flying above 10,000 feet with insufficient oxygen.

In his Stillwater talk, he illustrated how misleading sensations caused by fluid movement in the inner ear can be demonstrated to students merely by blindfolding them and twirling them on a revolving chair.

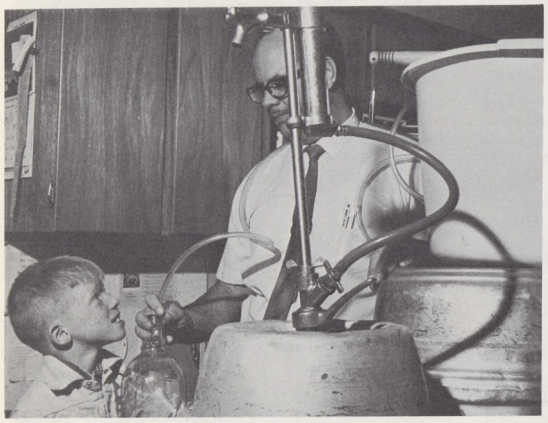
He cautioned pilots that although aspirin may be all right, tranquilizers or anti-histamines taken before flying will make them drowsy.

He showed a slide depicting blood alcohol content percentages associated with drinking and flying.

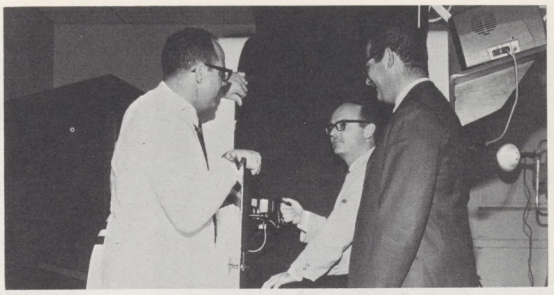
He concluded his talk by recommending use of ear stopples in flying and urged the instructors to demonstrate to their students how, on long cross-country flights, ear stopples reduce fatigue while enabling pilots wearing them to hear their radios even better than without the "plugs."

Another spare-time activity of Dr. Gibbons' is writing for medical periodicals. He has had 15 articles published, including some in "Environmental Health," "Flying Physician," and "Aviation Medicine."

He enjoys brewing root beer at home and has concocted more than 600 gallons of the beverage over the years for his family and friends. Once, when the yeast content was inadvertently doubled, a batch blew up; fortunately, nobody was injured.



Seven-year-old son, Mark, lends assistance as Dr. Harry Gibbons completes a batch of homemade root beer in the kitchen of his home in Norman.



A leader in studying spatial disorientation at the FAA Civil Aeromedical Center, Dr. Gibbons (left), observes as Dr. William Collins "flies" a specialized Vertigon simulator shortly after delivery of the first production model last Spring. Louis Ziegler (right), represented the manufacturers.

Dr. Gibbons spoke on, "Aviation Medicine And You" at the Plantation Party of the Aircraft Owners and Pilots Association at Atlantic City.

Employee's Youth Work Erases 'Generation Gap'

SPRINGFIELD, Va.—Few persons over 21 have bridged the generation gap as successfully as Clifford L. Weaver.

As Chief of the Flight Standards Branch, Washington Area Office, Weaver's job generally calls for him to put in more than the normal 40-hour workweek. Yet, somehow, he manages to devote just as many hours each week to youth sports activities in his community. He wears many hats. He's president of the Springfield Little League, which administers the baseball activities of more than 900 boys, aged 8 through 12, with an annual budget of about $20,000.

He's a member of the Board of Directors of the Springfield Boys Club, numbering 1,800, and is in charge of registration for all club activities, including football, soccer, basketball, bowling, wrestling and golf.

He's head coach of the Springfield Boys Club 115-pound football team known as "Weaver's Raiders."

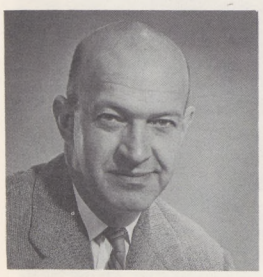
He's a member of the District IV Little League Board of Directors, administering northern Virginia Little Leagues.

He's president of the Babe Ruth Baseball League, comprised of some 500 boys, aged 13 through 18.

To handle the workload involved in all these activities, Weaver has an office at home fully equipped with furniture, files, typewriter and telephone. As for reaching him by phone, more often than not callers get a busy signal.

And if the work he does at home isn't enough, Weaver drives a minimum of 2,500 miles each year to carry out responsibilities in support of Springfield's youth activities.

His attitude about all this is about what one might expect: "I wish I had time to do more."



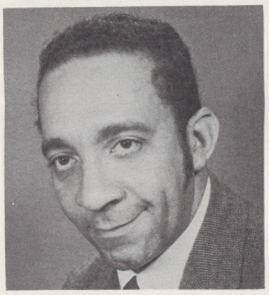
Clifford L. Weaver

Collision Warning Devices Studied

MELVILLE, N.Y.—A $279,032 contract has been awarded by the FAA to Melville Space and Defense Systems Division of the Control Data Corp., to study pilot warning instrument (PWI) systems that would improve a pilot's ability to detect other aircraft in flight.

The study could ultimately lead to specifications for the production of a practical and acceptable PWI —an airborne device to warn a pilot and assist him in spotting other traffic flying in his general area.

Studies disclose that most midair collisions result from the failure of pilots to see other aircraft. An instrument such as PWI would greatly enhance chances for visual detection and thus greatly reduce the possibilities for midair collision under visual flight (VFR) conditions. Simulation work will be carried out at NAFEC, using films and computers.



William L. Booker
Civil Rights Officer, Eastern Region

Civil Rights Post In Eastern Region Filled by Booker

NEW YORK—William L. Booker has been named the Eastern Region's first Civil Rights Officer.

Booker, 37, a native New Yorker, has been with the FAA 14 years as an engineer in the Airway Facilities Division.

As Civil Rights Officer, Booker is principal staff advisor to the regional director on all civil rights and equal employment opportunity matters. It is his responsibility to assure equal opportunity in the region's own employment practices as well as those of contractors and other organizations doing business with the agency. He also is responsible for conducting investigations of alleged or suspected discriminatory practices.

An Air Force veteran, Booker makes his home in Queens, N.Y. with his wife, Lillie, and their three children, Stephen and Stephanie, 17-year old twins, and Sharon, 15. He is a member of the Rochdale Negro Cultural Society and the Southeast Queens Association of the Civic Organizations.

Home-Built ALS Displayed

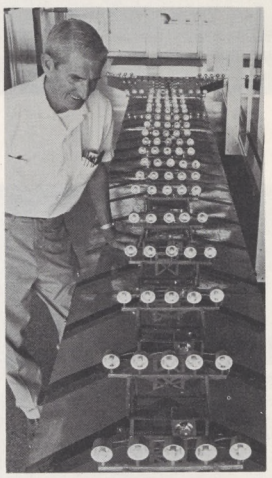
BAKERSFIELD, Calif. — A working scale model of an airport approach light system, complete with flashers, light bars and flush lights, has been constructed by an employee of the Bakersfield Airway Facilities Sector in his spare time over the past three years.

The fully-operational ALS was displayed recently at a local air show by its proud builder, Dave Kimball, a general equipment repairman.

Twenty feet long and two feet wide, the scale model is equipped with a five-step intensity control system and sequence flashers utilizing 208 light bulbs.

Kimball made the model from parts of old pinball machines and record players. He used aerosol caps for light housings.

Besides being a meticulous craftsman, Kimball is an outstanding citizen. Over the past 32 years, he and his wife have cared for more than a hundred foster children. At present, the Kimballs are making a home for four foster children, ranging in age from four months to 15 years.



Model Approach

Inspecting the working model of an approach light system he built is Dave Kimball of the Bakersfield Airway Facilities Sector.

Buying More Bonds

Pacific Region Director Phillip Swatek (right), holds a Treasury Department Certificate of Award for outstanding leadership during the recent campaign which saw Bond participation increase to 90 per cent—up 18.5 per cent over last year. Behind award is Elmer Rustad, national director for U. S. Savings Bonds, who presented it. Present were (from left): Chuck Souza, Flight Standards Administrative Officer; Bill Hanifin, Hawaii State bond director; Chuck Demaree, Assistant Chief, Flight Standards; Rustad and Swatek.

DIRECT LINE

This is your direct line to the top! Your questions will get answers! Employees are encouraged to discuss questions with supervisors or their local personnel office, but for those who do not have ready access to a personnel office, this column will provide an opportunity to get questions answered. Send your letter to Acting PT-1, Federal Aviation Administration, 800 Independence Avenue, S.W., Washington, D. C., 20590. Ground Rules: • All questions must be signed. • This column should not be used to supplant formal grievance and appeals procedures. • Questions should concern personnel and training policies, programs and procedures, not operational or technical matters. What's your question?

Question: What is the agency career progression plan for education specialists, GS-1710?

Answer: The Administrative Career System permits an education specialist to pursue career advancement in his own organization or another organization with similar requirements. You may progress in your present series to the Office of Training in Washington or you may cross over to other series such as GS-201, 212, 221, 230, 235, 301, 340 or 341. See Appendix 2 of the FAA Career System Handbook, 3410.4A or your personnel office for more specific information.

Question: Why are per diem rates reduced after 30 days at the Academy? The DOD and other Federal agencies do not reduce rates and authorize full per diem for the duration of training. During my recent tour of duty as a DOD civilian employee, I attended training for six months and received full per diem for that time. I am preparing to attend training at the Academy for nine months and would like to know why per diem rates are reduced by the FAA only, when the cost of living does not diminish after 30 days?

Answer: Provisions of paragraph 741, Travel Handbook 1500.13, require that after 30 days of training at the FAA Academy the per diem rate is reduced for the 31st and subsequent days. This requirement is based on Standardized Government Travel Regulations which require Government agencies to authorize only such per diem allowances as are justified by circumstances affecting the travel. Where an employee attends the Academy for more than 30 days, the per diem rate is reduced because the employee can obtain lodging at lower rates for extended periods of time. Without full particulars on the examples you give we cannot make valid comparisons between our per diem practices and those of DOD.

Question: In the Aug. 4 "Direct Line" you responded to a question concerning interchange of personnel between foreign and domestic regions. In clarifying paragraph 23, Handbook 3330.6, you stated, "Most foreign positions have special qualification requirements which are critical to success in a foreign environment." Would you specify the special qualification requirements necessary for foreign assignments but not necessary for overseas duty?

Answer: On foreign assignments, employees must meet not only FAA requirements but also whatever special requirements are imposed by foreign governments and the Department of State. These may include, but are not limited to: the ability of the employee and his family to deal effectively with persons of different cultures, customs and religions and to adjust to a small, closely-knit society and the ability of the employee to handle new and unique situations without precedent. Other requirements include more stringent medical standards for the employee and his family and a full field investigation leading to a secret security clearance. Knowledge of a foreign language may also be a special requirement.

I was hired by the Pacific Region as an ATCS, GS-6 on June 16, 1968 under a training agreement which made me eligible for promotion to GS-8 after satisfactory completion of six months of training. Under new classification standards effective Dec. 15, 1968, I was promoted to GS-7. Time in both grades was to be credited toward the six months required for promotion, now to a GS-9. I have three questions:

Question: Would this exception to the Whitten Amendment (time in grade requirement) make me eligible for promotion on Dec. 29, 1968?

Answer: Yes, so far as the time in grade requirement is concerned.

Question: Is it necessary to be certified before being promoted to GS-9?

Answer: Yes, you must have a valid ATCS certificate to be eligible for promotion. This policy (see Notice N 3120.12), applies nationwide.

Question: Referring to oceanic manual control positions, N 3120.-12 specifies that I must be fully checked out on the interphone (developmental) position. Does this mean I must be checked out on and be able to perform oceanic manual control duties without supervision?

Answer: You must be checked out on oceanic manual control to be eligible for promotion to GS-9. In performing such duties, you would be expected to be under general supervision.

Saves

(Continued from page 1)

Each year, more than 4,000 pilots in distress are helped by agency air traffic personnel. Many —and perhaps most of these pilots —would not have been able to make a safe landing without help from the man on the ground.

"Nevertheless, these professionals consider 'saves' just part of their jobs," said William Flener, Director, Air Traffic Service. "Through technical experience, a thorough knowledge of geography in their local areas and familiarity with aviation facilities, these dedicated employees are able to provide a happy ending to hundreds of emergencies each year. They take real pride in the job they do and the agency takes pride in their life-saving achievements."

ATCSs Get Together

Terminal air traffic controllers discussed common problems at a meeting of the Controllers' Operations-Procedures Committee at Headquarters recently. They were (seated from left): Jack McDonnell, Western Region; Jack Kilmer, Southwest; C/M Sgt. Roland A. Marean, USAF; C/M Billy Karr, USAF; DeWayne Petsel, Central; and Edward W. Peoples, U. S. Army; (standing): Doyle Gregg, Southwest; William D. Bearden, Southern; John L. Bush, Southern; William Brown, Eastern; Gabriel A. Bodenski, Eastern; Firman R. Brooks, Alaska; S/M Sgt. John R. Alexander, USAF; Elmer R. Jones, Central; Norman C. Norton, Western; and Louis V. Paresa, Jr., Chairman, Pacific.

EEO

(Continued from Page 1)

Speaking of the third point, Secretary Volpe particularly called for the increased use of minority and female employees in the Coast Guard and as air traffic controllers, electronic technicians, engineers, architects and flight standards inspectors.

Reviewing recent progress at a luncheon meeting, Secretary Volpe said, "As of today, we have seven minority group employees on board in supergrade positions. We have another seven in process. In addition, we now have three minority group persons holding executive level positions." He added that these employees were "without question the best-qualified of all applicants."

Speaking of the future, he cautioned: "We cannot stop here. To make sure this effort is maintained, I am directing our personnel and civil rights people to establish procedures to assure that we continue this aggressive outreach action to identify qualified minority candidates for consideration in filling every high-level position in this Department."

The agency's commitment, as summed up by Administrator Shaffer, is as follows: "FAA's plans for the future are to intensify and accelerate our agencywide efforts. The thrust of our efforts will be directed toward making better-known among the nation's minorities career opportunities in FAA, the development in conjunction with Federal, state and local manpower agencies of training programs designed to enhance entry of minority group persons into our work force, and the continuance of programs to assure that all the talents, skills and qualifications of all minorities entering or now employed in the agency are fully utilized and that challenging career development opportunities are provided to all."

The Administrator explained that a new awareness of civil rights obligations has been created within the agency and that this spirit will be sustained through greater employment involvement both on the job and in the community.

"By involvement, I mean affirmative participation in our equal opportunity commitment," Administrator Shaffer said. "The result will be an FAA where equality of opportunity is a fact and where our complexion and ethnic mix is representative of this nation's people."

Controllers

(Continued from Page 1)

At Washington Center, they saw TV monitors in each sector displaying weather and other flight information. In other centers such information is available only on a centralized board which may not be convenient to some sectors. New carpeting providing both foot comfort and noise suppression also impressed conferees.

Members of the two groups came up with 54 recommendations. Of these 23 concerned items on the agenda and 31 were on non-agenda items brought up at the workshop. The recommendations are currently being analyzed and evaluated.

Educator

(Continued from Page 1)

the job, he is somewhat familiar with FARs pertaining to engineering, design and flight, but admits that there are more regulations to become familiar with than he expected.

Madayag is presently teaching Aerospace Structure II at the University of Kansas, and looks forward to teaching a different course next semester. He hopes soon to see FAA acquaintances who attended the two-week courses he developed and conducted primarily for FAA engineers and managers while at USC.

By Sue Silverman

These days, it's pretty hard to find a family movie with a G Rating. Of course, there's always the Yuletide tradition in many families to pack up the kiddies and take them to the local theater for the latest Walt Disney release.

But did you aviation buffs know that some of the finest films available on aviation weather were produced by Walt Disney as training devices for the Department of the Navy? They are so good, in fact, that FAA has purchased several prints and stocked them in the Film Library for distribution along with our own films.

Because a series of these films have the common title, "Meteorology," it is vitally important that you be precise in ordering them *by number* from the Film Library.

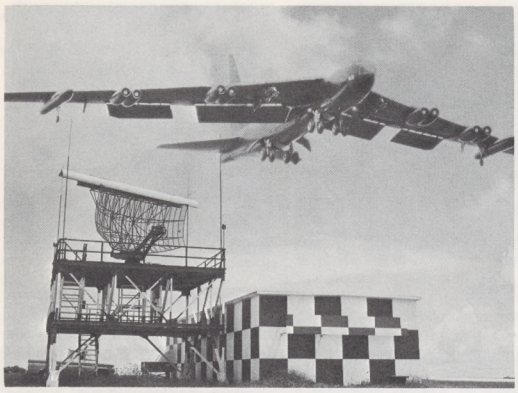
Subtitles are self-explanatory: "Ice Formation on Aircraft," FAN-100, 20 minutes, 1960. "Fog and Low Ceiling Clouds—Advection Fog and Ground Fog," FAN-101, 25 minutes. "Fog and Low Ceiling Clouds—Upslope Fog and Frontal Fog" FAN-102, 10 minutes, 1962. "The Cold Front," FAN-103, 15 minutes, 1962. "The Warm Front," FAN-104, 20 minutes, 1962.

Each of the films gives an animated illustration of how these weather conditions affect flight. In the case of the film on ice formation, viewers learn how structural ice interferes with normal flight procedures. In the other films dealing with fog and clouds, an easy-to-understand explanation is given about how these phenomena are generated, what hazards they present to flight safety, and how pilots can plan a course around them.

Other inquiries should be addressed to the Office of Public Affairs, PA-30 in Washington.

Fond of All Three

Choice of three beverages is a tough one for ATR-rated pilot Roscoe D. Foster of Flight Standards at Southern Region headquarters. His three daughters, stewardesses with different airlines, are (from left): Claire; (Delta); Cathy, (TWA); and Louise, (Southern.)



One of numerous Strategic Air Command B-52s lands at Andersen AFB, Guam after completing a mission in Southeast Asia. During the mission, enroute and terminal control are supplied by the FAA Center/RAPCON. In the foreground is an FAA-maintained and operated Airport Surveillance Radar (FPN-47) unit.

Outer walls of the Guam Center/RAPCON (CERAP) are built to withstand the devastating storms that now and then plague the usually lush, peaceful Pacific island.

Where East Meets West . . .

Guam's CERAP 10 Years After

By Anthony J. Stark, ATCS

A lot has happened in the ten years since June 1, 1959 when a force of 13 FAA air traffic controllers arrived on Guam to take over the Air Force-operated Guam Center, now known as the Combined Air Traffic Control Center and Radar Approach Control Facility (CERAP).

Watch Supervisor Wilfred (Gerk) Gehrkin, one of that original contingent, remembers most vividly Typhoon Karen which struck Guam on Nov. 11, 1962, devastating more than 80 per cent of the island.

"Water flooding the facility forced us to shut down all electrical components, including the radar being used by the weather people to track the typhoon," he remembers. "They weren't too happy about it, but I couldn't take the chance of electrocuting anyone. The typhoon bulged the walls inward and the building began to come apart here and there. We ripped out sections of control sectors to shore up walls. At times it seemed as though we were holding the building together by hand."

Since then, typhoon-proof structures have been built on the island.

Also noteworthy is the increasingly significant military role the CERAP has played in the span of the past ten years. Tallies show that as much as 75 per cent ofthe traffic is military.

Andersen Air Force Base on Guam is the home of the B-52 bombers supporting the war effort in Vietnam.

Returning from a mission recently, a flight of B-52s flew through a severe lightning storm which knocked out Air Force navigational aids, including the precision approach radar usually used to guide the huge aircraft in. The delicate task of bringing the planes in with surveillance radar at a time when visibility on final approach was about a quarter of a mile was carried out by CERAP controllers working closely with SAC officials. All planes got in safely.

For professionalism and cool performance in that emergency, CERAP personnel were commended by the boss of B-52 operations in the Western Pacific and Southeast Asia, Lt. Gen. Alvin C. Gillem. Singled out for special mention were coordinator Addison Reynolds and Controllers Larry Grajek, Norman Crawford, Bill Dicksion and J. L. Devoll.

Air traffic control service is provided also to the 54th Weather Reconnaissance Squadron at Andersen AFB which flies C-130 Hercules "typhoon-hunter" aircraft daily on far-ranging missions to gather tropical storm information. Another Andersen-based unit dependent on CERAP services is the 79th Aerospace Rescue and Recovery Squadron, whose C-130s help recover returning spacecraft splashing down in the Pacific and perform search and rescue missions for the Rescue Coordination Center.

The CERAP complement on Guam now numbers 55 persons, most of whom came to the island from the mainland to serve two-year contracts which may be extended for an additional two years.

"Guam must be a tremendously popular assignment," said CERAP Chief Ed McCarter. "For every opening here, I regularly receive at least a hundred applications."

One reason for the attraction is the island's excellent hunting and fishing. Hunters, including Supervisor Dave Whitehead and Controller Norm Crawford, report that wild pigs and deer abound.

Guam has a number of fine golf courses and among those who excelled in amateur tournaments are Controllers Will Jackson, Don Kramer, Pete AhNee and John Sexton.

Controllers Larry Grajek and Ad Reynolds coach Little League baseball and Pop Warner, League football. Another controller, Bill Edenfield, uses his leisure time to emcee floor shows at island night clubs and a colleague, Frank Akana, can often be found playing bass fiddle in one of the club's orchestras.

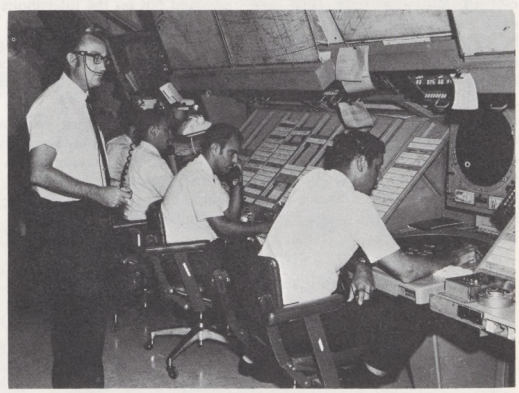
Each year, the FAA Association sponsors a magnificent Hawaiian-style luau.

The most striking changes CERAP personnel have observed in the past ten years are in the island's economic life. What was formerly a somewhat lonely, sparsely populated tropical outpost has become a modern, bustling, typically-American community of 100,000, boasting movies, supermarkets and even traffic jams. Traces of the old Guam remain—tall, graceful coconut palms, broad-leafed banana plants, breadfruit trees, and jade-green reefs.

One of the CERAP's notable distinctions is that it is the agency's easternmost and westernmost center, at one and the same time. Because it is west of the International Date Line—where the sun rises first—it is the easternmost facility in the system. Because it is 5,204 nautical miles southwest of the San Francisco VORTAC, it is farther west than any other FAA center. So Guam is literally where "East meets West."

Among the achievements for which personnel of the CERAP take special pride is selection of the facility twice—in 1966 and 1968—as the Pacific Region's Air Traffic Facility of the Year.

In Terminal Section (left to right), Coordinator Anthony J. Stark gives handoff on a departing bomber to center. Departure controller Edward A. Myers listens in while controller Carl A. Minnich hands off an inbound flight to tower controllers. Arrival Controller Roger M. Christensen gives instructions to arriving B-707 as precision radar Controller Gerald F. Coleman gives approach to bomber.



While across the room in the center section (left to right), Coordinator Bernie C. White monitors a busy controller, manual Controllers Carl A. Minnich and Leroy Rosa work interphones providing oceanic separation. En route radar Controller William Reavely accepts radar handoff from terminal section.

Supervisor David Whitehead coordinates tricky altitude reservation with Manila Center from the Guam Center/RAPCON.