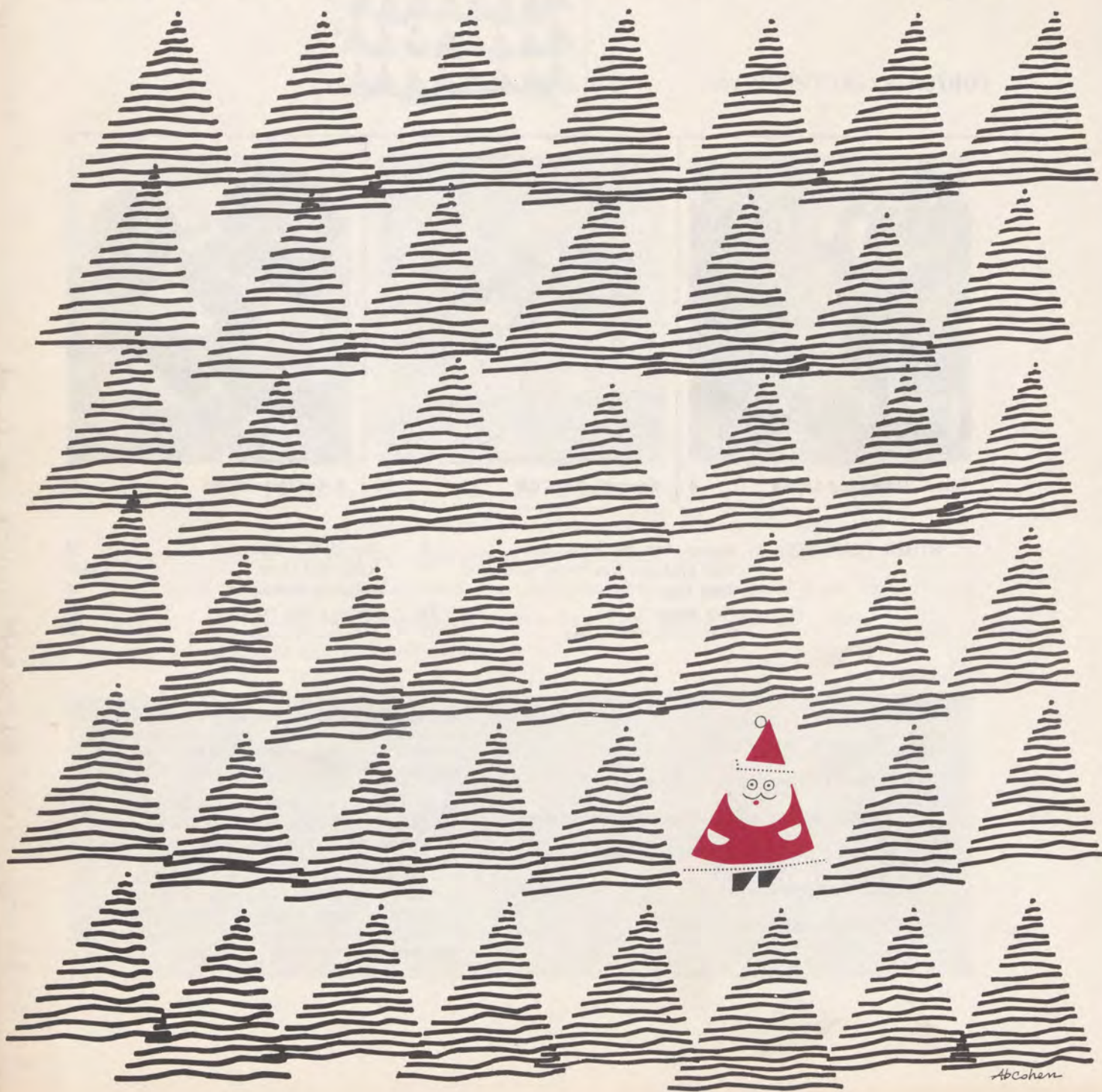


FAA HORIZONS

OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY / DECEMBER 1966



AbCohen



COVER

Season's Greetings to all FAA HORIZONS readers from the Office of Information Services and the Public Affairs staffs of the Regions and Centers. (Cover by Abner B. Cohen).

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FAA HORIZONS, the official employee publication of the Federal Aviation Agency, is published monthly by the Employee Information Division, Office of Information Services in Washington, D.C.

Articles of general interest to FAA employees may be submitted to: Editor, FAA HORIZONS, IS-40, Federal Aviation Agency, Washington, D.C. 20553, Telephone: 962-5574 or contact Regional Public Affairs Officers: George T. Fay, Alaskan Region; Robert L. Fulton, Eastern Region; Jack K. Barker, Southern Region; Joseph H. Frets, Central Region; K. K. Jones, Southwest Region; Eugene S. Kropp, Western Region; Gilbert E. McCoy, Pacific Region; Edwin L. Shoop Jr., NAFEC, and Mark Weaver, Aeronautical Center.



By tradition, the Christmas holiday is our most glowing, festive season. It marks for us a special moment of joy and gratitude.

Also by tradition, the New Year provides us with a fresh start, the opportunity to begin again. It signals us especially to reaffirm our belief that what we are working toward is compelling and, more important, that our motives are just.

Thank you all for making this holiday season particularly joyous for me. The tremendous personal satisfaction I enjoy in my job is possible only because of your loyal and energetic support. The extra measures of service you provide, your determined resolution to find the answers to our pressing problems and your understanding of our goals have renewed my own confidence that the New Year will be one of promise, progress and accomplishment.

Mrs. McKee joins me in expressing our very best wishes to you and your families for the happiest holiday ever.

William F. McKee

"Noise is the most impertinent of all forms of interruption."

When Arthur Schopenhauer, the moody German philosopher, made this statement well over 100 years ago, he probably had little idea of the portentousness of his words.

It has been estimated that the general noise or "unwanted sound" level in major cities in the United States has been rising at the rate of one decibel a year for the last 30 years. And the prospects are that it will continue to increase.

The problem of unwanted sound has been with us since the beginning of civilization, but the cacaphony has been steadily increasing since the advent of the industrial revolution. The wrath of those within hearing was probably first turned upon the steam engine. From there it turned to the noise of trains; then the auto was invented, and so on until the first plane took to the skies. Today—the era of the jet—aircraft noise seems to have reached the top of the list of "unwanted sounds." Not that there haven't been plenty of complaints about piston aircraft, but the high-pitched whine of the jets has merely compounded the problem.

The Agency got into the "noise business" just shortly after the FAA was created and has been working on abating it ever since. Due to increasing public concern with the problem, a special noise abatement staff was created within the Agency which reports to the Associate Administrator for Programs. Headed by Raymond A. Shepanek, the staff is charged with developing an overall noise abatement program.

The responsibilities are: formulation of an expanded system of air traffic procedures and safe aircraft operating procedures and regulations to minimize noise exposure in communities; continuing and initiating technical and economic research programs by the Agency, other government agencies, industry and research and educational institutions to devise ways and means of providing additional noise alleviation; and to coordinate with a special governmental committee that has been set up to work on the problems involved.

Assisting in the program are C. H. (Squire) Williams, Stanley Oleson and George Hunter who, as members of the staff, are responsible for the program's operational, scientific and economic aspects, respectively.

But the problem is not theirs alone. The entire Agency is participating in one way or another at all levels. The groups working on various aspects of the noise abatement program are: **Aircraft Development Service**, whose primary concern is research and development. This involves control of noise at its source, improved techniques for flying an airplane in order to minimize noise and developing techniques for defining and comparing noise levels. James F. Woodall heads the program. The group is working closely with industry to develop quieter engines, related noise suppression devices and measurement systems.

Air Traffic Service is working on flight patterns that will lessen flights over heavily populated areas.

Flight Standards Service is concerned with developing noise abatement flight profiles and noise standards for future certification.

NOISE: Unwanted Sound

Airports Service, the Office of Aviation Medicine and Systems Research and Development Service are working on other phases of the overall program.

In addition, the Eastern, Southwest, Pacific and Western regions each have a full-time noise abatement officer.

Spurred by the President in his message to Congress asking for the creation of a Department of Transportation, an intra-governmental policy committee has been set up to work out a solution which is technically feasible, economically justifiable and equitable. This group includes the White House Office of Science and Technology, FAA, NASA, the Department of Housing and Urban Development and the Department of Commerce.

In directing the formation of this group, the President said, "The jet age has brought progress and prosperity to our air transportation system. Modern jets can carry passengers and freight across a continent at speeds close to that of sound.

"Yet this progress has created special problems of its own. Aircraft noise is a growing source of annoyance and concern to the thousands of citizens who live near many of our large airports. As more of our airports begin to accommodate jets and as the volume of air travel expands, the problem will take on added dimensions.

"There are no simple or swift solutions. But it is clear that we must embark now on a concerted effort to alleviate the problems of aircraft noise."

In order to carry out this project, FAA's noise abatement staff is working closely with the President's committee.

They are utilizing what is called a "systems approach" which breaks the problem down into three major categories:

- Reducing the noise at its source which involves both aircraft and engine design factors.
- Development of air traffic and flight procedures. These involve flight pattern procedures and ways of flying the plane to cut down on the noise.
- Planning guidelines for control of residual noise which means compatible land use planning in airport communities.

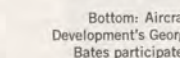
The aircraft industry has spent millions of dollars on research in devising means of cutting down on noise at its source. The development of the turbofan engine which is now used on



Raymond Shepanek, Director of the Agency's Noise Abatement Staff, listens intently to reports by Committee members.



Top: Dr. N. E. Golovin, White House, OST, presides at meeting.



Bottom: Aircraft Development's George Bates participates.

William F. McKee
Administrator

"... The current jet aircraft noise problem is serious. Unchecked and unattended, it would only have worsened. A Government-sponsored program to alleviate this jet aircraft noise problem, however, is now underway. The airlines, the manufacturers and local communities are also being brought in. This anti-noise program will take time, energy and funds from all parties concerned. It will involve sacrifice, but it must be pursued to a successful end. There is no other way." (Delivered at the Economic Club of Detroit.)

David D. Thomas
Deputy Administrator

"We in FAA are the recipients of all the various types of noise complaints — those from individuals, those from communities, from city officials and from those members of Congress whose districts are affected. All these represent a force that must be taken into account. The total number of civil jets in operation today is about 1,000. In 1975, the number of airline and general aviation jets will total about 6,000.

"It was this prospect which, in part, moved the Federal Government to undertake with ALPA (Air Line Pilots Association) an assistance program to alleviate jet aircraft noise."— (Delivered at the ALPA Air Safety Forum.)

Monitoring the noise meter are, from left, C. H. Squire Williams, George Hunter, Stanley Mohler, Robert Randall, Stanley Oleson and Ray Shepanek.



Members of the Program Evaluation and Direction Committee, sponsored by the White House Office of Science and Technology, meet to discuss progress in the Inter-Agency war on noise. It includes FAA, NASA, Commerce, HUD and Defense.

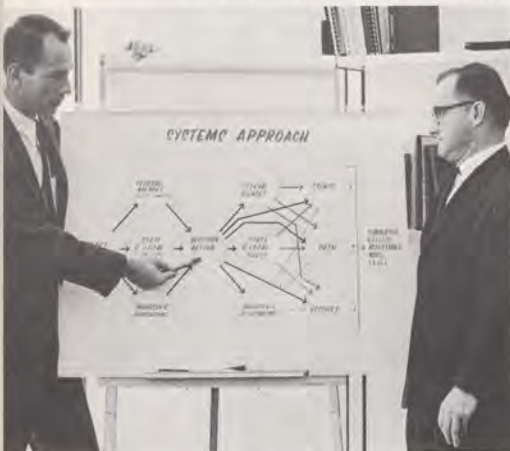


Private industry, vitally interested in the noise abatement program, also attended the White House sponsored meeting. Among those present were representatives of Douglas Aircraft, Pratt & Whitney, Air Transport Association and Airline Pilots Association.





Squire Williams (left) and Raymond Shepanek explain operation of tape recorder that has recorded noise levels to Noise Abatement Staff secretary Carol Poldiak.



Economist George Hunter (left) shows Investment Analysis Division chief George Lanka where his particular project fits into the overall noise abatement program.

Noise: Unwanted Sound / continued

newer jet transports is a prime example.

In addition, the Agency has proposed legislation which would amend the Federal Aviation Act of 1958 to give FAA the authority to regulate in the area of aircraft noise and to set standards. The language of the legislation means, assuming it is enacted by the Congress, that the Agency will require compliance with noise standards as well as compliance with safety standards as a condition to the issuance of future type certificates.

In getting planes on and off the ground more quietly, the Agency has been working on a number of methods. One is the testing and evaluation of a two-segment glide-slope system which will keep the aircraft higher during the initial part of the approach to landing. Another is the rearrangement of many air traffic patterns in order to keep approach and departure courses as much as possible over water, uninhabited or thinly populated areas.

At Washington National Airport, for example, aircraft are required to follow the Potomac or Anacostia Rivers for both arrivals and departures, thus greatly reducing the noise level over the densely populated areas around the airport. Planes are also required to reduce thrust on takeoff after reaching 1,500 feet and maintain this reduction until they have reached 3,000 feet. They must remain at 2,500 feet or higher while en route to their final approach for landing.

A system of preferential runways has also been initiated at many airports which concentrates incoming and outgoing traffic on runways which affect the fewest people.

Getting people away from the source of the noise will, in the long run, be one of the most effective means of alleviating the problem. The continued encroachment of housing developments to within shouting distance of airports across the country has significantly increased in recent years. It is in this realm that much needs to be done.

Effective land use planning is currently being studied by the Department of Housing and Urban Development in conjunction with the Department of Commerce and FAA, in the hope that future planners can arrange a happy marriage between the community and the airport that serves it.

However, there is no single solution to the noise problem for the foreseeable future. The scheduled airline industry has 558 jet airplanes on order for delivery by 1969, thereby nearly doubling the number presently in use. The noise problem can only become more and more severe and spread to more and more airports unless decisive actions are taken in the near future.

"But," says Ray Shepanek, "from our perspective we are approaching the problem with optimism. We are cheered that the aviation industry and local authorities have introduced a variety of noise abatement techniques on a voluntary basis. We are moving forward with new and expanded objectives.

"Aviation has advanced the frontiers of technical knowledge, domestic prosperity and international goodwill. But let us never forget that aviation is the servant not the master of the public. And that makes aviation's obligation even more critical to do something about the noise created by our sophisticated aircraft. The solution will not be easy, nor will it be quick nor will it be cheap but it will be achieved." / *By JoAnne Sloane*

Henry Weeks keeps the framed, time-yellowed newspaper clipping in his office less as a personal memento than as a poignant reminder of how fleeting is time in aviation.

The chief of the Flight Standards Engineering and Manufacturing Division is pictured in a 1954 London "Evening News" story whose headline announces: "These Four Men Hold the Key to 20,000,000 (English) pounds."

Weeks headed a four man CAA delegation to examine the Viscount, which subsequently entered airline use in the United States. Today, only 12 years later, the Viscount is being phased out of service, giving way to a new generation of American-made short range jets. Perhaps more than any other single person, Henry Weeks has had the best vantage point to watch aviation's uninterrupted procession.

As head of the Agency's aircraft certification office, Weeks is primarily responsible for assuring that new aircraft and aircraft components are airworthy. His staff, and their operational counterparts in the regions, work closely with the manufacturers—from drawing board to inaugural flight—to guarantee that each new model of aircraft, engine, propeller and all components meet the Agency's rigid standards of design, construction and performance.

When Weeks joined the CAA/FAA in 1937 as an aeronautical engineer, airworthiness requirements were spelled out in a 58-page document (including illustrations and the appendix). Today, airworthiness requirements appear in four different parts of the Federal Aviation Regulations and number 309 pages.

Then, the rules were rudimentary, making no distinction between small and large airplanes and dealing rather sketchily with "airworthiness factors." Today, the compliance regulations are explicit, the categories of aircraft are precisely defined and the areas of design and manufacture now covered are technological complexities yet unheard of in the late 1930s.

For example, 25 years ago, when Weeks was chief of the Aircraft Engineering Branch in Kansas City, it would have taken only two or three weeks for him and his small staff to review the stress analysis of a new one or two-place airplane. The same kind of review today for a DC-8—if conducted without computers—would take several years and thousands of manhours. And, the stress analysis is but one part of the lengthy certification process.

During the time that Weeks has been involved with aircraft certification, the Agency has issued approximately 500 type certificates for new aircraft, 200 for

new engines and 400 for new propellers. Weeks' career extends from the "stick and wire" days of the 30's to the supersonic era, where aviation is poised today.

Yet the most striking discovery one makes in viewing Weeks' career is how little, not how much, his own work has changed. His mission is the same, his responsibilities basically unaltered and even the size of his staff has remained essentially unchanged. To a great extent, the reason lies with the man himself.

A conservative engineer, the disciplined Weeks sees aviation moving more in gradual patterns than in spurts. This perspective of observing every particular development in relation to the whole has enabled him, and through him, his staff, to keep safety a predominate factor as technology advances.

That his "evolutionary" philosophy also is shared by his associates accounts, perhaps, for the rather unusual degree of loyalty and admiration they have for him. Says his boss, Flight Standards Service Director Clifford Walker, "Henry has kept in imaginative touch with the changing complexity of aviation by dealing with the concrete issues of technology. He speaks without hesitation because he thoroughly knows his business. Yet he maintains an open mind and consistent objectivity."

Weeks is a six-foot, two inches, greying, mustached man who will retire shortly from the Agency. Weeks retires after holding remarkably few different positions in the Agency: an aeronautical engineer for five years; chief of the Kansas City Aircraft Engineering Branch for 11 years, and chief of his present post since 1953.

On the eve of his retirement, perhaps one of the most meaningful accolades he received was from George Moore, Deputy Associate Administrator for Programs: "As a pilot, an engineer and an executive, Henry Weeks has a remarkable feel for how aviation moves. His aeronautical baptism came at a time when aviation, too, was in its infancy. In large part, aviation has matured to its present level of safety and reliability because of his single-minded concern for the people aviation serves."

By Sue Silverman



During aeronautical engineer Henry Weeks' CAA/FAA career, "... aviation has matured to its present level of safety ..."

Rates High on TV...

While three elementary school youngsters toured FAA and aviation facilities in the Fairbanks, Alaska, area recently, television cameras were beaming the story back to Fairbanks classrooms via television.

Wide-eyed Danielle Hall of the Hunter School, and two energetic boys, Doug Davis of University Park School and David Thumma of Denali School, were picked to star in this television tour of the Agency's facilities. The supporting cast included the men and women who man the many Alaskan Region facilities in the Fairbanks area.

As their classmates watched on classroom TV screens, the trio visited the Fairbanks Air Route Traffic Center at Fort Wainwright, Fairbanks International Airport and its combined station/tower, an Agency flight inspection DC-3 and a Wien Air Alaska F-27 airliner.

The work of the FAA was explained in simple terms to the three little visitors and their classroom viewers. The Agency's activities were compared with familiar automobile surface travel, highway construction and road maintenance.

"By relating to familiar objects the students were then better able to understand the subject," said Michael Stowers, technical director and assistant supervisor of instructional television (ITV) for the North Star Borough Department of Education, which is presenting the series locally under a Federally-supported grant.

The TV tour of the FAA was the first of two programs of a series designed to show school children how the Federal government operates in the interior of Alaska.

Fairbanks Area Office executive assistant Maurice Boslet prepared the script used for the educational television presentation. Mrs. Mildred Wenger, an ITV teacher whose husband, Clyde, is an air traffic control specialist at Fairbanks International Airport control tower, accompanied the youths on the tour and the airplane orientation ride.

Their flight aboard the Region's Flight Inspection DC-3 proved to be the highlight of the tour. The trio looked on in amazement as the flight crew checked the navigational aids along the Alaskan airways.

Wien Air Alaska Airlines also participated in the educational TV program. Their flight crews prepared a simulated flight for Danielle, Doug and David on an F-27 flight to Nome, Kotzebue and back to Fairbanks. Preflight and check list pro-



Danielle eagerly awaits her flight in FAA's plane.



Michael Stowers, Mrs. Wenger and the youths are briefed by controller Clyde Wenger at Fairbanks CS/T.



The TV viewers watched the "stars" follow along as a Wien Airlines crew preflight their F-27.

Norman Jones briefs visitors on Center's activities.



cedures were observed by the students, who then visited the Fairbanks International Airport Combined Station/Tower to watch the handling of the flight plans by air traffic control specialists.

The students were then taken to the Fairbanks Center where Center chief Jerome Lardy explained how their flight had been processed.

"Highly successful," was ITV Director Stower's report after the first program. The students and teachers in the Fairbanks schools were unanimous in their praise of the programs. They felt they had a much clearer picture of how the Agency serves aviation in Alaska.

"And besides," Mrs. Wenger said, "through the medium of television we can now take students to places where it would be impractical to take an entire class."

Wily Knighten (back to camera) explains how the Agency flight checks nav aids.





Research assistant Marlene Wicks attaches biomedical sensors to Dr. Charles Crane, biochemist at CAMI, prior to a flight. Sensors give indication of nervousness.

Dr. Carlton Melton Jr., research physiologist, studies results of inflight heart rate and eye movement tests.

PILOT STRESS

Nervous tension in student pilots is object of study



J. A. Davis and instructor J. R. Eiford taxi out for takeoff. The flight will be monitored continually.



Florence Vance takes temperature of Davis Warner, a Flight Standards electronic engineer, while Marlene Wicks prepares to attach biomedical sensors.

Flying instructor J. R. Eiford briefs student Dr. Charles Crane before takeoff. A Cessna 150 aircraft is used in the program to study pilot stress.

Human guinea pigs are having the state of their nerves tested at the Civil Aeromedical Institute (CAMI) in Oklahoma City.

Nervous tension in student pilots is being studied by CAMI's physiology laboratory as part of an over-all program designed to evaluate stress in aviation.

A group of non-pilots at the Aeronautical Center agreed to act as guinea pigs while learning to fly in a study being conducted by Dr. Carlton E. Melton Jr., a research physiologist, and Dr. Charles R. Crane, biochemist.

Flight training is conventional except for wiring the students with biomedical sensors during each flight and providing each of them with a capsule before the flight. The

capsule, which may or may not contain a tranquilizer, is given before dual flights but is withheld during solos.

"We are interested in evaluating nervous tension in student pilots," says Dr. Melton. "since tension appears to be the biggest factor tending to compromise safety in flight training. A relaxed student is, generally, a good student."

In order to assure complete accuracy in the testing, tranquilizers are given on only half of the dual flights and a blank capsule is given before the other flights. Neither the student nor the instructor knows when medication is being given.

The biomedical sensors are used to measure heart rate and lateral eye movement.

Conversations between student and instructor are recorded. The heart rate and eye movements indicate the degree of alertness or excitement the student feels during flight maneuvers, and the voice record tells the physiologist what maneuver is being performed. Additional lab tests provide other information about flight training stresses.

The purpose of the experiment is to promote air safety by providing greater insight into the stresses experienced by student pilots. The information would be useful both to instructors and to aviation medical examiners.

The study is one of several projects CAMI has undertaken to further understanding of the human factor in aviation.

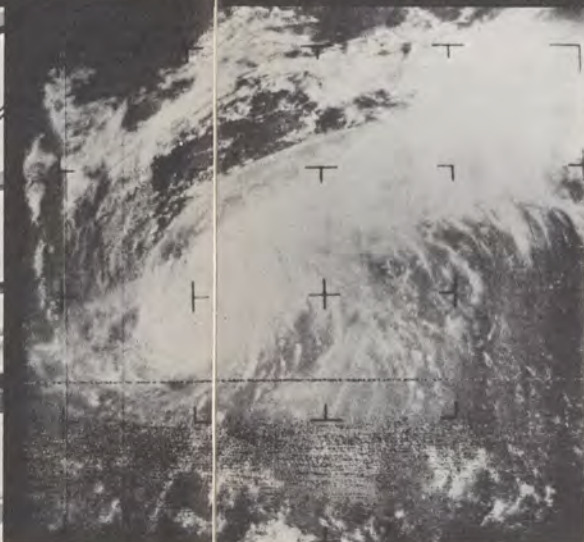
Edward Griffith (kneeling) and Jule McDowell add extra guy lines to VHF/DF antenna tower at Miami Airport.



Edward Lindsey, Airway Facilities Sector, tightens lines on trilon tower at Miami International Airport.



AFS chief Jule McDowell ties down ILS localizer antenna at end of a Miami runway.



Hurricane Inez as recorded aboard FAA plane from weather satellite.



"An ounce of prevention" for Inez visit.

Prepared
for

'WACKY INEZ'

A storm dubbed "Wacky Inez" left her birthplace in the Atlantic Ocean not long ago and soon grew to full hurricane force, sustaining winds of 75 mph or better. During its life span, Inez killed more than 160 persons and caused millions of dollars in damage.

While Inez followed a jagged path around the Caribbean area, an Agency plane based at the National Aviation Facilities Experimental Center in Atlantic City recorded what is believed to be the first photograph of a hurricane ever transmitted from a satellite and received by an airplane in flight. Inez was photographed as she was traveling over the Bahamas. The hurricane showed up on one of several photos recorded on weather facsimile equipment aboard the plane which was flying 70 miles off the New Jersey coast.

Meanwhile, in the Southern Region areas off Puerto Rico, the Virgin Islands and Florida, FAA personnel were ready for Inez's visit. The Miami Area Office also was prepared for Inez's visit long before she arrived.

Although possible damage and facility outages have plagued the Agency in other storms, there was no damage at facilities in Miami and only slight damage in Key West. Good planning by many FAA men and women, particularly Airway Facilities technicians, paid off. Without hesitation, each man followed the established hurricane alert procedures, most of which they devised over the years.

Fuel tanks of all emergency power units were "topped off"—filled to capacity, generators were test run, loose objects were secured, guy wires on antennae structures were checked and tightened, additional lines were added where needed, antennae were tied down and VOR/VORTAC "cone" doors were secured and taped for water tightness.

Although Inez did damage elsewhere, she didn't affect FAA. Men like Jule D. McDowell, Airway Facilities Sector chief in Miami, and members of his staff, were mobilized for Inez. They had made the necessary preparations and avoided possible damage.

In addition, Airway Facilities technicians worked throughout the storm's fury keeping FAA's facilities on the air. When the storm's winds peaked to 80 knots, they turned off the airport surveillance radar, let the antenna "free wheel" in the wind. The antenna was undamaged. "Wacky" Inez turned out to be just another unwelcome visitor to Miami and Key West. When the next storm comes, the men and women in the Southern Region once again will be ready to face any of Inez's sisters.



just another day

The GADO Inspector

The phone rang in the small, unpretentious GADO office. A motherly voice on the other end asked for material on aviation for presentation to her Girl Scout troop. The phone immediately began to jangle again. An irate homeowner was complaining about low-flying planes which had kept him up during the night.

This is a typical beginning to another busy day of being advisor, teacher and jack-of-all-trades to the flying and aviation-minded public.

General aviation operations inspector James W. Grant is one of 241 such GADO inspectors located strategically around the country who serve the public.

Grant, who has been with FAA for seven years, is one of two inspectors working out of Meacham Field in Fort Worth. An average day might include the certificating of airmen, flight schools and air taxi operators, both aerial and ground surveillance to check compliance with the Agency's safety rules, investigating an accident, sitting in on a violation case

Dr. Dora Dougherty performs pre-flight check of aircraft under the watchful eye of inspector James Grant as part of her proficiency check.



hearing, giving proficiency tests, answering telephone and in-person inquiries and spending time in the classroom in order to keep up to date on the latest aircraft.

One of Inspector Grant's many services to the flying public is the giving of proficiency tests. This is strictly a courtesy for the private pilot, but is required for flight instructors for renewal of their certificates each two years and for IFR air taxi operators.

Through this medium the FAA is not only able to maintain its safety standards but can also keep the pilot current on methods and procedures.

The purpose of the proficiency check is to ascertain whether the pilot is master of the machine and whether he has the same capability he had when he started flying.

These checks are just as important for the experienced pilot as they are for the novice, which is why one of the nation's top women aviation authorities visited Inspector Grant at the Fort Worth GADO recently.

The applicant was Dr. Dora Dougherty, chief of the Human Factors Division of Bell Helicopter Co. in Fort Worth, who was recently appointed chairman of the FAA's Women's Advisory Committee on Aviation.

After taking her through the various maneuvers and simulated emergencies and giving her an oral exam on new techniques and standard procedures, Grant pronounced her "outstanding."

Another important service to the public the Operations Inspector performs is that of advisor and expert on all types of aircraft. A great deal of time and study is needed to keep current on the more than 100 types of planes in the air today because he may be asked to flight test or advise on one or all types at any time.

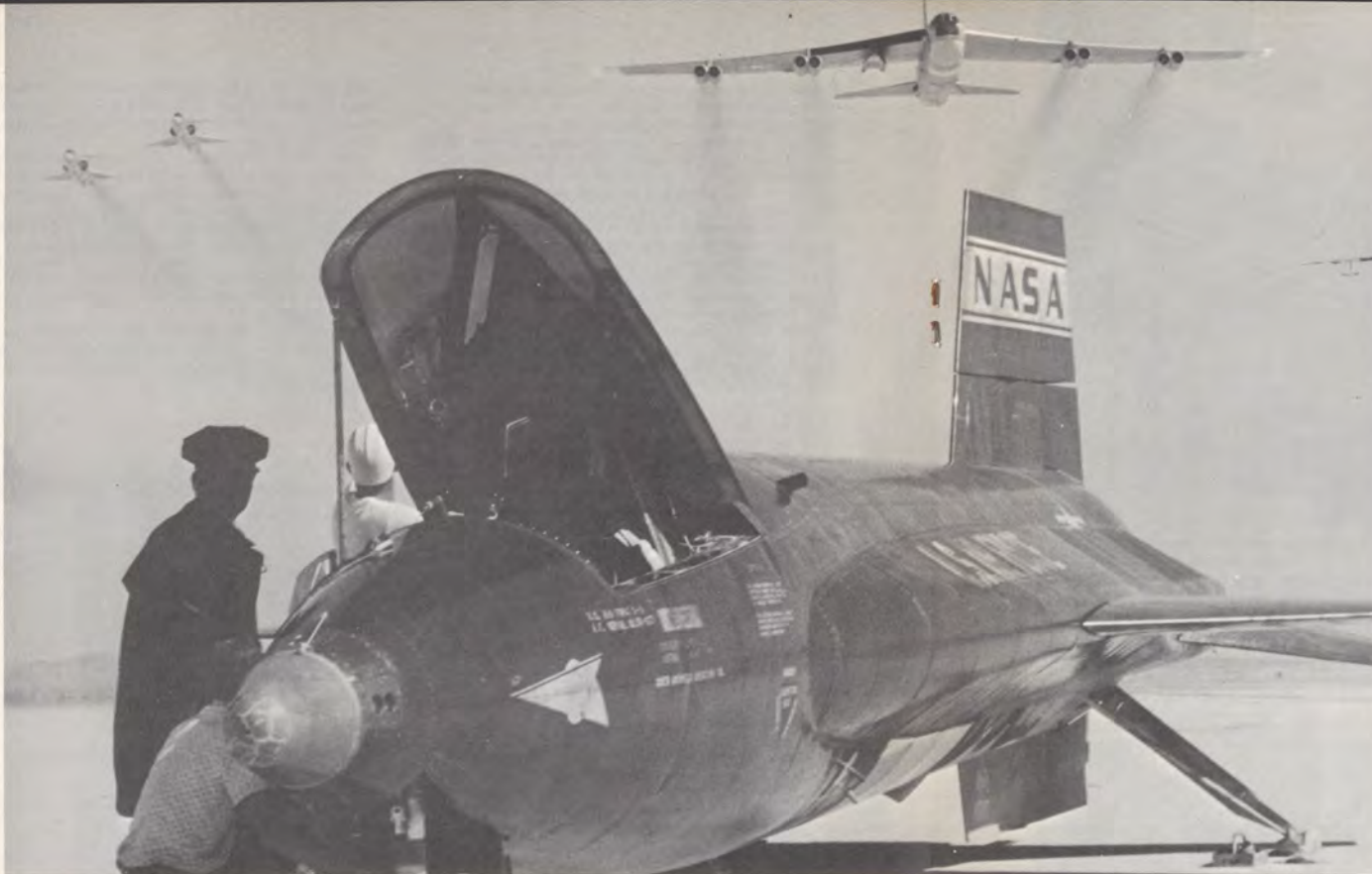
Inspector Grant and his dedicated counterparts get a lot of satisfaction out of their jobs. They know that through their efforts many lives are saved every day and the highways of the air are much safer.

Right: Typical of the Agency's dedicated GADO inspectors are Supervisory Inspector Ray Beckelman (right) and James Grant.



Below: Inspector Grant runs through a check list with Dr. Dougherty prior to takeoff.





Special considerations are necessary to provide air traffic control for the 4,100 mph X-15.



FAAers contend with wingless spacecraft of the future.



Lunar Landing Research Vehicle is another controller problem.



The gleaming, coal-black, supersonic streak descended over the blazing expanse of the Mojave Desert, maneuvering carefully from rarified airspace where tomorrow's planes will fly to a heading that brought it in to a safe landing at Edwards Air Force Base, Calif.

Safely bringing in the X-15—and a whole family of others like it—is the job of the 31 air traffic control personnel and 23 electronic technicians who work at the Edwards Radar Approach Control (RAPCON) facility.

These FAA employees work in a futuristic aviation atmosphere. Edwards is the site of the Air Force flight test center and the Aerospace Research Pilot School which turns out space pilots, project managers and consultants. Among the graduates of this "exclusive" school are famed astronauts Gordon Cooper, James A. McDivitt and Edward H. White II.

The NASA Flight Research Center, concerned primarily with transonic and supersonic flight research, is also located at Edwards. It is a focal point for high performance aircraft

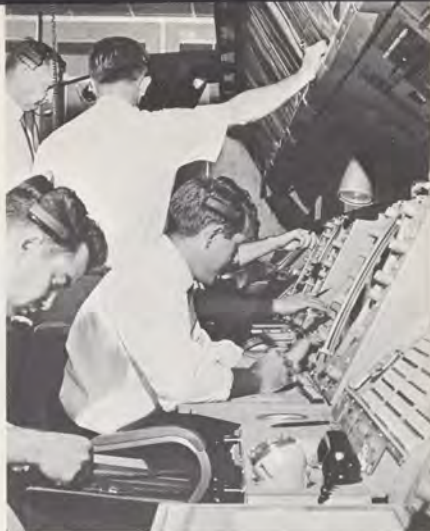
testing. Among the many studies carried out here is one on development of a Lunar Landing Research Vehicle.

Edwards RAPCON began operation at this unique airbase in July 1961. It is the longest in the world if you add the hard-packed surface of Rogers Dry Lake to the main 15,000-foot concrete strip, bringing the total usable runway to around 12 miles. To provide air traffic control to "tomorrow's aircraft" such as the X-15, special considerations must be kept in mind.

"During X-15 flights for example, an engineer on the ground is in constant radio communication with the pilot, who relays information on system performance," said William C. Cable, RAPCON operations officer. "Our controllers keep off the frequency as much as possible to keep from interfering with this flow of vital test information. We transmit to the test pilot only when we have urgent information on traffic."

The RAPCON must reserve altitudes and space for the X-15 when it enters the Edwards airspace. Because of its

A B-52 flies over Edwards Air Force Base in California, site of the Agency's RAPCON facility.



There is never a dull moment at the RAPCON for crew members, from left, Robert Earl, Robert Makson, Curtis Tyree and Thomas Applegate.

EDWARDS RAPCON / continued

small surface, the X-15 does not present a good radar return and is not transponder equipped. However, communications on the assigned radio channel provide controllers with position data.

Besides providing air traffic control for Edwards AFB, the RAPCON also provides approach control service for Palmdale Airport at Air Force Plant 42, China Lake Naval Ordnance Test Station and George Air Force Base at Victorville, Calif.

Two radars serve the RAPCON, one at a remote site at Boron is the ARSR en route type; the other, an ASR-5 terminal surveillance radar, is used for approach and departure control work.

Dean D. Martin is chief of the RAPCON. His staff includes: Jack Buckley, Richard Pettit, Robert Waligora, William Cable, Wesley Clanton, William Holmes, Donald Layton, Ralph Morgan, Curtis Tyree, Irvin Anderson, Thomas Applegate, Norman Hagerty, Thomas Hickman, Clarence Karels, Donald Kirkland, William Kruschke, Irvin Mailberg, Robert Maxson, James Means, Robert Newbry, Joe Partridge, Adam Quant Jr., Carl Sheetz, Albert Sickinger, Juel Swartz Jr., Robert Earl, Thomas Green, Robert Pease, Jean Wendling and Mary Fejeran.

Richard L. Williams heads the Airway Facilities Sector at Edwards. Other technicians at the Sector are: Harold Brooks, William Buck, Jesse Davis, Armin Dreier, Monte Hammond, Thomas Marshall, Joseph Polanski, Milton Scholz, William Slaton, Keith Wilkason, Allie Cage Jr., Carroll Cansdelle, Joseph Neeley, Kenneth Pasmore, David Russell, Guy Shattuck, Marshall Starr, Elizabeth Cranney, Forrest Clark, Gerald Caywood, Roy Pelkey and Donald Farley.

FAA's contingent at Edwards AFB has a vital and challenging task closely tied in with approaching horizons of American aviation—tomorrow's aircraft.



Above: Watch supervisor Robert Waligora checks the log. Below: Operating crew members, from left, William Holmes, Thomas Hickman, Thomas Green, Irwin Mailberg and Donald Kirkland are always on their toes.



Boston Center Caters to All



The Boston Center at Nashua, N.H., controls general aviation traffic as well as the huge jets which fly the transoceanic routes. Here a Center Flying Club aircraft flies over the facility which is nestled in a magnificent forest area.

Alaskan Region to Provide On-the-Job Training



Alaskan Region Staffing Validation chief Donald Kiel (right) briefs high school teacher Mrs. J. R. Prator on FAA employee benefits. Mrs. Lois Cook (left) will handle the arrangements for the work-study program.

The Alaskan Region is developing a program to provide on-the-job training for high school business education seniors.

In cooperation with the West High School Business Education Department in Anchorage, the Region is preparing a work-study program which calls for the students to work for two hours per day in the Agency.

"The 48 students chosen for the program that will begin next January were recently given an orientation tour of the Regional Office to learn about our programs, our equipment and administrative functions," explained Mrs. Lois Cook,



Mrs. Ivy Moore, regional librarian, demonstrates ease of locating specific reports on the Library's Information Retrieval System to high school student Frances McBeth who will participate in on-the-job training.

supervisory clerk-stenographer in the Airway Facilities Division, who is in charge of the project. Supporting the program are the Personnel and Training Division and the Airway Facilities Division clerical pool.

"We all expect to benefit from this program," says Personnel and Training Division chief Clyde E. Shoe. "The young ladies will gain practical experience and will learn about the workings of the Agency. And, if some of the students are hired by the Agency after graduation, the experience which they have gained by that time will help them transition into permanent assignments."

President of Korean Aviation College Tours FAA Facilities



Martin Davis (right), Western Region Central Air Dispatch, explains the operation of FAA facilities to Korean Aviation College president Hyo Khung Song (center) and his companion Nak Hun Song.

South Korea's National Aviation College president, Hyo Khung Song, recently completed a tour of the FAA that took him to facilities in Washington, New York, Chicago, Oklahoma City and Los Angeles.

During his visit to the Western Region, the top Korean aviation official said his tour of the FAA Academy provided a great deal of information upon which to base improvements and expansion of Korea's National Aviation College.

"We appreciate the close tie which is being formed between the FAA Academy and our college," he said. "We plan to have the FAA Academy's directed study courses made available to our students."

At each of his FAA stops he was given brochures, pamphlets and technical materials upon which to base the Korean college's planned expansion. "We are deeply grateful for all FAA has done to make this visit a most fruitful one," the foreign dignitary said.

International liaison officers, including Rupert E. Herr, coordinated the trip.

Gen. Maxwell Tours SST Plant



SST Development Director Gen. J. C. Maxwell studies proposed materials and structures for the SST at the Lockheed Aircraft Corporation's Rye Canyon, Calif., Research Laboratory.

news briefs

Bruce H. Lauderdale, controller at the Spokane Air Traffic Control Tower, has been nominated for the Air Force "We Point With Pride" commendation.

Carl Menton, Area Manager at Nome, had some four-legged trouble recently when hundreds of reindeer invaded the Nome Airport. Traffic was tied up for 2 hours.

William Morgan, Deputy Director of Air Traffic Service, Washington Headquarters, and Seattle Area Manager **Robert Blanchard** attended the Air Transport Association's regional meeting in FAA's Anchorage office.

Lawton Tower reported that traffic increased from an average of 125 a day to 975 when 56 Civil Air Patrol cadets from 31 states converged on this south Oklahoma town for an encampment and a month of learning to fly.

Idaho Falls Tower and Flight Service Station personnel were complimented for their outstanding cooperation by Secret Service representatives making arrangements for the recent visit of President Johnson to Idaho Falls.

Klamath Falls, Ore. controller **Fred Baker** has his own "travelling tower" which he uses at "fly-ins" throughout the state.

Tower chief **Clifford Ward**, watch supervisors **John Gabso** and **Walter Bird** and the Burlington, Vt., Control Tower all recently marked two decades of air traffic operations.

Benjamin Riccardi and **Jack V. Florich**, firemen at NAFEC, recently completed a Scuba diving course at the Navy's Underwater Swimmers School in Key West. NAFEC test pilot **Bernard J. Hughes** has been named to command the 177th Tactical-Fighter Group based at the Center.

ELONGATED DC-8 CERTIFICATED

An FAA type certificate was presented to Douglas Aircraft Company for the DC-8-61 aircraft, culminating nearly two years of work by the Douglas Company and engineers of the Western Region's Aircraft Engineering Division.

The new DC-8-61 is about 37 feet longer than the Series 50 DC-8.

Recently the DC-8-61 flew non-stop from Long Beach to Tokyo, 5,560 statute miles, in just over 11½ hours, and then flew from Tokyo to Winnipeg, 5,850

statute miles, in less than 11 hours.

Lee R. Stephens of the Salt Lake City Airway Facilities Sector was named a runner-up in the Utah State Junior Chamber of Commerce "Spoke Program" which gives recognition for outstanding community service. International Liaison Officer **Rupert E. Herr** has prepared a booklet aimed at providing orientation for Western Region employees who come in contact with foreign visitors.

Theodore Anselmo of the Accounting Division has prepared a report showing a 100 per cent utilization of air coach travel for the Western Region.

THREE GUAM EMPLOYEES COMMENDED FOR 'ASSIST'

Three Guam Area Office employees recently were commended for "the prompt and proficient manner" in which they assisted in averting the possible loss of life and equipment.

Electrical lineman **Bernardo Lastimoza** and airway facilities technicians **Albert Dietz** and **Rudolf Sharp** were working on the precision approach radar antenna at the runway of Andersen AFB on June 24 when a flight of B-52s returning from Viet Nam encountered a heavy down-pour over Guam. The resulting poor visibility caused several B-52s to execute

ALAN BOYD NAMED



Alan S. Boyd, designated by President Johnson to head the new Department of Transportation, is no stranger to the transportation field. His diversified background includes aviation, railroads, highways and public utilities.

missed approaches—a potentially dangerous situation—considering the minimum fuel load of the returning aircraft. The three technicians, on extremely short notice, restored the radar antenna to service, "despite existing hazardous conditions caused by missed approaches and inclement weather."

Lyle Kilpatrick, chief of Guam Airway Facilities Branch, said, "Your exhibition of professionalism in returning the equipment to operation in time to allow precision approaches by the aircraft is deserving of this commendation."

AVIATION ROLE EXPLAINED TO DAYTON CHILDREN



Conducting round table discussions with 22 Dayton aviation science students were, from left, Colin Rogers, AFS chief at Wright Patterson AFB; John Zinger, Dayton RAPCON; Dale Ropp, Cincinnati GADO; Leslie McGuire, Dayton FSS, and Fred Levey, chief of the Dayton FSS.

FAA's role in aviation was explained to 22 students of the Oakwood Public School System in Dayton recently by Eastern Region personnel from Dayton and Cincinnati facilities.

James Schantz, science instructor from the Oakwood School System, requested the FAA aviation science briefings.

Participating in a round-table discussion were **Colin D. Rogers**, chief, Wright-Patterson AFB, AFS; **Leslie A. McGuire**, chief, Dayton FSS; **Frederick F. Levey**, chief, Dayton AFS; **John Zinger**, assistant chief, Dayton RAPCON; and **Dale Ropp**, Cincinnati GADO.

Nine additional hours of instruction were given by four other FAAers: **Richard Dunphy**, Dayton RAPCON; **Edward Ambrose**, Dayton FSS; **Richard Bailey** of the Wright-Patterson AFB, AFS, and **Gerry Kalifoot** of the Dayton AFS.

DO-IT-YOURSELF TRAINING PROGRAM IS EFFECTIVE IN ALASKAN REGION



Anton Lompa, air traffic control specialist, Anchorage FSS, types position reports of North Pacific and Polar flights. These reports go directly into the ES-3 system.



Correct placement of parts into the ES-3 supervisor's console is demonstrated to students, from left, Frederick Dyba, Keith Landers and Chad Jasper by instructor Balford Sumner during the Region's special training program.

Airway Facilities electronics engineers in the Alaskan Region have established a "do-it-yourself" maintenance training program to service the ES-3 Telegraph Switching System.

Manufactured by the Philips Telecommunicatie Industrie at Hilversum, The Netherlands, the high speed message switchboard installed at the Anchorage International Flight Service Station is the only system of its type in the Agency's vast communications system.

Anchorage's ES-3 is capable of receiving 600 and transmitting 850 messages per hour. These messages can be routed by the Automatic Register (computer) or semiautomatically by air traffic

control personnel reading the heading of incoming messages and selecting the proper routes.

Each message is stored in ferrite cores as it is received at the center. Messages also may be stored in other ferrite cores or magnetic tapes, if the destination route is busy.

Provision is made to automatically check incoming sequence numbers and when an error is detected, it is indicated by the system. Outgoing message numbers are provided automatically. The necessary program for automatic routing of messages is stored in ferrite cores.

A relatively trouble-free system, the ES-3 is, nevertheless, complex. The sys-

tem uses computer technology combined with numerous relays. Approximately 20,000 diodes, 15,000 transistors and 10,000 relays are used in the system.

To keep the system in running condition, the Region has operated its own training program since September 1964. At that time seven technicians were trained at the Philips factory.

Training was moved to Anchorage in late 1964 where it has continued ever since. Translations of the Philips technical manuals simplified instructions considerably and the knowledge and experience gained in maintaining the system have been passed on to new groups of students. Classes are currently being conducted in Anchorage by instructor **Balford Sumner**.

Pacific Grandmother Conquers Crippling Handicap

A 56-year-old grandmother who spent three years fighting the effects of a crippling stroke recently went to work in the Pacific Region's Flight Standards Division in Honolulu.

Mrs. Nancy Holokai Lum was hired by the Agency after having won a long, uphill battle to regain her health. Mrs. Lum, completely paralyzed on one side, not long after her stroke, began an ambitious program of self help toward restoring the full use of her limbs and her technical skill in typing and shorthand.

She took a refresher course for handicapped secretaries and stenographers which, she said, helped her tremendously and gave her confidence. Upon completion of the course, she sought assistance from a counselor for the Manpower Project which is sponsored by the Rehabilitation Center of Hawaii, the U. S. Department of Labor and the Association of Rehabilitation Centers.



Mrs. Nancy Holokai Lum is very happy to be back at her typewriter after a three-year battle to overcome the effects of a crippling stroke. Mrs. Lum now works in the Pacific Region's Flight Standards Division.

Experiment to Test Feasibility Of Flashing Message to Pilots

The familiar method of running a news flash across the bottom of a television screen has been given a new twist at the National Aviation Facilities Experimental Center in Atlantic City.

There, the engineers are working on an idea to determine whether messages could be sent directly to the pilot's cockpit and flashed on an instrument on his panel.

"This could relieve some of the radio communication between the pilot and air traffic controller," project engineer **William Sullivan** said.

The Center is also testing the use of small airborne printers which would print messages from the ground on a printer in the cockpit, and four-digit displays that can show clearance changes in such numbered items as altitudes and radio frequencies.



A Honolulu ear, nose and throat specialist, Dr. Kazuo Teruya participated in Wake Islands' Specialty Health Clinic.

Wake Island Medics are ready to serve

A HEALTHIER ISLAND

A towheaded five-year-old slips off a tree and fractures his elbow. . .

An electronics technician accidentally touches the wrong electrical wire lead and suffers a second degree burn on his hand. . .

A Japanese fishing vessel sends out a desperate radio message—a crewman is near death with lobar pneumonia. . .

Each of these emergencies occurred on or near the V-shaped Pacific coral atoll, Wake Island. And in each case an FAA medical officer was available for treatment or consultation.

Wake, administered by FAA since the cessation of World War II, was once a quiet fueling stop for trans-pacific flights. The island today has a bustling community of 1,600 permanent residents, including 400 women and children.

The United States involvement in Viet Nam sends almost 400 military troops and flight crewmen through Wake daily at all hours of the day and night making Wake a major stepping stone to the Southeast Asian area.

The island's population is made up of FAA employees and their dependents, Air Force and Coast Guard personnel, and civilians employed by private contractors. Along with the transients, they rely upon the medical services offered by the FAA Medical Dispensary.

Round-the-clock services are provided by a staff of two medical officers, Dr. Robert Nelson and Dr. Jose Rosal, both general practitioners; five nurses, a laboratory technician and a dentist. The facility has five hospital beds and is equipped with modern medical tools needed to properly diagnose and treat patients with varying illnesses and injuries.

The medical staff during the last fiscal year alone handled over 10,000 home and office calls, ranging from a common cold to more serious illnesses.


Ships and fishing vessels plying the Central Pacific often make emergency stopovers to drop off ailing crew members. Dr. Rosal, who has been ministering to the medical needs of Wake residents for the last 10 years, has aided many patients from these doctorless ships.

"Of course we bill the employers of these crew members we treat at the dispensary," said Rosal. FAA dependents and other non-FAA connected employees are also charged a nominal medical fee for visits. Islanders hurt in industrial accidents are treated at no cost.

In order to provide extended medical care on Wake and to reduce the number of medical evacuations to Honolulu or to the Western Pacific, a system of Specialty Health Clinics was started in the summer of 1965 on a trial basis.

Before the clinic system was begun, patients needing the treatment of a specialist were flown to the nearest large metropolitan area, Honolulu, Hawaii, over 2,000 miles away. As a result of this inconvenience, a request for medical specialists to visit Wake resulted in a most gratifying response—about 15 called the first day to express their willingness to make professional visits to the island.

Some of the medical specialists who have taken part in the Wake Specialty Health Clinic program have included: Dr. Claude V. Caver, specializing in dermatology; Dr. James Johnston, ophthalmology; Dr. Kazuo Teruya, ear, nose and throat; Dr. Harry Nakata, obstetrics and gynecology, and Dr. James Ball, internal medicine.

Medical services received by Wake Islanders may not be as complete and extensive as those found in large United States cities, but the Wake medical staff members are doing their best to make life on "the rock" healthier if not a little more bearable. 



Jocelyn Choy (left) relaxes with brother, Carleton and sister, Susan, while her mother, Mrs. Carla Choy talks to specialist Dr. Kazuo Teruya about Jocelyn's special throat examination.

FAA medical officer, Dr. Robert Nelson and nurse Madeleine Jacquet often treat servicemen who pass through Wake Island.



your health

Jack Frost is not really as friendly a fellow as he has been pictured.

When he comes along during the winter months, you take a chance on frostbite injury if you don't take proper precautions. However, frostbite can best be avoided through overall physical well-being, proper clothing and using your head when working outdoors. Exhaustion, illness, hunger or injury greatly increase the chances of frostbite.

The first signs of frostbite are feelings of pins and needles, then a prickly feeling and then numbness. The affected area will turn white or gray, then red. Do not rub or massage the affected tissue, just get into a warm room as soon as possible. Make sure the tissue is thoroughly thawed out before going out of doors again.

To avoid frostbite:

- Dress warmly and provide adequate protection for the face, head and neck.
- Eat plenty of fats and carbohydrates which produce body heat.
- Keep feet and hands dry and avoid activities that create perspiration.

-and safety

Being a pedestrian can be every bit as hazardous as being behind the wheel of an automobile. But like a driver, a pedestrian can do much to prevent accidents.

Do not cross an intersection after the light has changed to amber or the pedestrian sign has switched to "Don't Walk." This has accounted for 42 per cent of all United States urban pedestrian deaths last year.

Another good way to end up an accident statistic is by jaywalking. Trying to save time by crossing in the middle of the street doesn't pay. The few minutes it might take to go to the corner and cross with the light is not a matter of life or death. Jaywalking is.

To avoid becoming an accident statistic:

- Make sure that the drivers of cars backing out of driveways have seen you approaching along the sidewalk.
- Wear at least one light colored piece of clothing if you take a stroll at night.
- If you have car trouble, wait for help. Pushing a car along a roadway can be dangerous.

AGENCY HAS BOOTH AT OAKLAND'S 'JOB FAIR'



Martin Bazik (second from left) and David Green, Western Region Personnel and Training, explain job opportunities to groups at the Oakland, Calif., job fair.

San Francisco area personnel officials recently played a major role in helping unemployed and under-employed members of minority groups in Oakland, Calif.

At a two-day Job Fair, the San Francisco Area Personnel Office worked closely with Fair officials in planning a booth that would give potential job applicants the best possible information on FAA career opportunities.

The FAA booth was manned by Personnel and Training's Martin Bazik and Richard Morris, and by Bill Barry and

Greg Maguire, Roland Paris, telecommunications operator from the San Francisco IFSS, and flight data aide David L. Green from the Oakland ARTCC were also present to answer questions from prospective applicants in terms of their own experience.

During the two-day Job Fair, FAA representatives interviewed 324 prospective applicants.

"We feel that wide coverage was given to all available job openings within FAA," reported San Francisco Area Manager Hervey Aldridge. "There were other side benefits, too. A school teacher who visited the Fair asked us to send a representative of the Agency to her elementary school to discuss FAA with her students. And perhaps in an elementary school is as good a place as any to begin stressing equal employment."

Aldridge added that the major objectives set for FAA participation in the Fair had been realized: bringing across to the community at large, and especially minority segments of it, the fact that FAA welcomes all applicants who want to talk to them about jobs.

Indianapolis Center Helps Lost Pilot to Safety

A Piedmont Airlines pilot and the Indianapolis Air Route Traffic Control Center teamed up recently to guide a lost pilot to a safe landing at Stanton, Ky., with only drops of fuel left in his tanks.

The pilot was flying a Cessna 182 in hilly country near Erving, Ky., when he became lost and called the Indianapolis Center for help. Controller John Joswick

located the small plane on radar and guided him to the Stanton Airport.

The pilot could not see the airport, even after the controllers flashed airport lights. Finally, an airline pilot, overhearing the radio conversation, offered to help. He circled directly over the field until the Cessna pilot saw him and helped guide the lost pilot to a landing.

Advanced Radar Traffic Control System Is Success in Atlanta

Evaluation of the advanced radar traffic control system (ARTS) at the Atlanta Control Tower proved it to be a great success. Gordon L. Hurst, air traffic expert from the National Aviation Facilities Experimental Center, told the Air Traffic Control Association Convention recently.

Hurst, the project manager, reported that the tower personnel requested the continued use of the equipment, which he said is "the best possible indication of its success."

ARTS uses computers and other electronic equipment to automatically track targets and to present alpha-numerics that give identification and altitude of airplanes directly on the radar displays.

FACILITY WINS ADC AWARD

The Western Region and Airway Facilities personnel at the Mount Laguna Air Force Station, Calif., were honored recently by the USAF Air Defense Command.

General Thatcher forwarded a certificate of recognition for the FAA's efforts in the ADC Electron Tube Award Program. The award reads, "For achievement of the highest percentage of productive life goal and the life record of 31,510 hours for the L-3250 klystron used in the AN/FPS radar."

In his letter General Thatcher said, "Please express my appreciation to the maintenance personnel of the Laguna AFS for their excellent performance while participating in the ADC Electron Tube Life Improvement Program."

PEARL HARBOR MEMORIAL SERVICES TO BE HELD

On Dec. 7, 1966, the 25th anniversary of the attack on Pearl Harbor, many FAAers will remember the event with more than cursory interest.

James E. Sinnott, a controller at Fairchild RAPCON, Spokane, Wash., is District Director of the Northwest Region of the Pearl Harbor Survivors Association. The group is composed of members of the U. S. Armed Services who were in Pearl Harbor during the attack. "At one time we had three Pearl

Harbor survivors working here at the RAPCON," Sinnott said. "Now we have only two, Raymond Daves and myself."

Each year the Association holds military memorial services on December 7. This year the ceremonies will be held in Honolulu and more than 2,000 members of the association are expected to attend. Sinnott plans to go to Honolulu for the occasion. Sinnott was a Navy radio operator stationed at Ford Island during the Pearl Harbor attack.

DEMING AIRPORT BEAUTIFIES



Sparkled by an Agency Flight Service Specialist, the Deming, New Mexico, Airport underwent beauty treatments. The First Lady, Mrs. Lyndon Johnson, would be delighted with the results.

retirements



L. E. Dettlinger (left), Boston Area Office, presents Frank Warden, Otis, Mass., RAPCON, with his retirement certificate at a banquet in Warden's honor. He is retiring after nearly 24 years in government.

Sarah Scally, secretary to Western Regional Director Joseph H. Tippetts, is retiring this month after 38 years in Government service. She also has served as secretary to three other regional directors in the CAA/FAA since entering Federal service in 1928.

She has received several performance awards. In addition, she was a former candidate for the "Miss Federal Secretary" award.

tech talk

Two recent contract awards have sparked renewed public interest in the FAA aircraft collision prevention program. They call for design and development of feasibility models of airborne range/altitude monitors. The instruments measure and display to the pilot information on aircraft within range of his own aircraft.

Each contract takes a different approach. One method employs a time-frequency technique, which establishes a precise time reference between all aircraft within air-to-air communication range. The equipped aircraft displays range and identity of other aircraft penetrating a protected volume of airspace 1,500 feet above and below and up to 60 nautical miles distant.

The other method is based on the air traffic control radar beacon system (ATCRBS), which provides the pilot a display of range and identity of other transponder-equipped aircraft within the area.

Four items of equipment, furnished under the contracts, will be installed in FAA aircraft and flight-tested to produce concrete data on methods which have proven technically feasible in a laboratory environment.

These contracts represent only one phase of the total SRDS-managed Air Derived Separation Assurance (ADSA) program. In addition, two in-house efforts are underway. One uses a modified DME (distance measuring equipment) with additional hardware furnished by the Navy. The other is an extension of a computer/simulation study, projected through the application of real-time and fast-time dynamic simulation at NAFEC.

The latter is expected to have an impact on final equipment design of a full collision avoidance system, and provide a basis for rule changes and operating procedures which might be introduced. Simulation will also be of value in designing the flight test program for the contractor-furnished equipment described.

The Air Derived Separation Assurance program to reduce the hazard of mid-air collision has been underway since 1958. Some major problems still remain to be solved, but project engineers are confident that the work now underway will lead to a successful collision avoidance system which will supplement the air traffic control system.



Top: Controller Pete Davidson of the Unalakleet FSS volunteered to fly a severely injured Eskimo from a nearby town to the hospital in Nome, saving the man's life.

Above: Pacific Region Director Phillip Swatek (left) presents Guam Area Manager George Harris with the Region's annual Safety Trophy for having the lowest disabling injury frequency rate.



Above: The St. Louis Approach Control Facility moved to the Kansas City Center recently when the St. Louis radar was shut down for maintenance. Controllers (front to rear) Chester Shelton, Archie Counts, Eugene Olsten, Frank Hale and Autre Wilson appear unperturbed at the relocation.



Top: The Air Power Trophy for outstanding contributions to safety and aviation progress was presented to NAFEC by the New Jersey Air Force Association. With the trophy are Center Director Jack Webb (right) and his deputy, Robert Cannon.

Center: The Seattle Center received Certificates of Achievement for an entire year without a system error. Larry De Wolf, R. A. Pierson, Robert Blanchard, Clyde Van Horne and Harry Suffron accepted the awards for Center personnel.

Above: Deputy Administrator David Thomas (left) presents Central Region Director Edward Marsh a "Minuteman Flag" for Savings Bond Campaign.



Top: Virginia MacCracken, Denver Center, is one of only two women watch supervisors in the Agency.

Above: Ben Rock, Teterboro, N.J., EMDO wins trophy for "Best Restoration of Stinson 103 Series" from Al Bachmann of Prop & Wing Club.



Top: Supervisory procedures specialists from all regions met at the Aeronautical Center to discuss implementation of the new Terminal Procedures Manual of Criteria now scheduled to become effective March 1, 1967. Howard Flohra of Flight Standards Service was chairman of the conference.

Above: Eileen Vernon accepts a Certificate of Merit on behalf of the Eastern Region from AFA National Director Julian Rosenthal as James Pyle looks on. The Certificate was presented for the Region's support of aviation education.

names & faces



Top: Lester Griffey (center) won the Pacific Region Director's Safety Trophy. Congratulating him are Ed Shivers (left) and Art Medeiros.

Center: Hubert LaCroix (center) of Management Services was awarded a Government-wide Paper Management award for reducing a cataloging system by nearly 2 million pages per year. Management Services Director Ernest Spiekerman (right) and J. Meisel congratulate him.

Above: The San Francisco Area Office celebrated its first anniversary with a birthday party.



Top: Southern Region Director James Rogers (right) presents a check from the USAF to Richard Ladzinski for development of a surveying instrument.

Center: Columbus Tower chief Charles Vermillion (left) presents a \$50 employee suggestion award to Donald Rawlings.

Above: James Cancro, FAA Southeast Asia electronic consultant, presents USAF Col. Wearth with a Joint Venture plaque when the AF fighter base control tower in Phan Rang, Vietnam, passed its flight check.



Top: Florence Kemerer and Larry Navarra fill the last of 1,200 boxes of records transferred and destroyed in the recent HQ clean-out of files.

Above: Electronic technician Lloyd Allred is the Salt Lake City Area's nominee for "Handicapped Employee of the Year."



Center: Walter Shaw, FAA Depot, has been named the Aeronautical Center's Outstanding Handicapped Employee. He receives a plaque from Director W. Lloyd Lane.

Above: From left, Ted Kefaliotis, Dick Mitchell and John Nasworthy of the Airways Facilities staff at Boron, Calif., were awarded Sustained Superior Performance ratings and cash awards.



Top: Mrs. Francis smiles proudly as her husband King, FSS chief at Elko, Nev., receives \$865 for a suggestion that reduced FSS workloads.

Center: Hazel Smith, secretary at the Detroit General Aviation District Office, accepts retirement plaque from W. L. Jeffrey. Hazel has worked at the GADO for nearly 19 years.

Above: Boston Area assistant manager William Cullinan Jr. (left) receives Certificate of Appreciation from Richard Calandrella for support of the International Service Agencies campaign.

WILLEY CITES NEEDS FOR FUTURE

"You and I work for one of the best 'bosses' in the world—the Federal Government—and there is no more progressive organization of the government than the Federal Aviation Agency." Thus, Associate Administrator for Personnel and Training Robert H. Willey summed up the ever increasing benefits for government workers to the recent Air Traffic Control Association convention in Miami. He asked the convention to give serious individual consideration to the challenges of service, career, technology, fitness and self growth which, he stated, would better prepare them to meet the demands of the future.

NEW TRAINING PROGRAM

The Agency is developing a new National Procurement Training Program which will consist of six major subjects—Personal Property Administration, Real Estate and Utilities, Small Purchase Transactions, Construction Contracts, Placement and Administration of Contracts, and Pricing Techniques. It was developed by the offices of Personnel and Training and Installation and Materiel and the FAA Academy. The first class is expected to be held early next year.

GRIEVANCE EXAMINERS GRADUATE

A series of training courses for grievance examiners was completed recently and an examiner has been placed in each of the regions and centers and at the Office of Headquarters Operations. Their task is to conduct inquiries into grievances which have been referred to an appeals official and to report their findings and recommendations to the appeals official. They will also hear employee appeals from adverse actions in cases involving suspensions of 30 days or less.

NATIONAL INTERN PROGRAM

A plan to bring college graduates into the Agency for training for future managerial positions has been developed by the Office of Personnel and Training. The new National Intern Program is essentially an extension of the Headquarters Operations' intern program which has operated successfully for some time. To be considered for the program, applicants must have met all the necessary requirements of the Management Intern portion of the Federal Service Entrance Examination. Nineteen temporary positions have been authorized, one to be assigned annually to the Office of the Director of each region and center and nine to be assigned to the Manager of Headquarters Operations. The object of the program is to develop the trainee into a well grounded professional within three to five years.

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personnel pipeline



FAAers on 'Location' for EEO Film

Gathered together on "location" at Dulles Airport are most of the cast for the forthcoming Agency film, "How About Billy Wilson?" The film is part of the Agency's Equal Employment Opportunity Program. Shown kneeling are Al Faison (left) and Don Higgins, who have major roles in the film, with a group of local Virginia high school students.



Philippine Official Visits HQ

Philippine Civil Aviation Director General Colonel De Guia meets with Associate Administrator for Personnel and Training Robert Willey on a recent visit to Washington Headquarters. The Colonel was interested in FAA personnel policies.

Movers take out the last load of office furniture from the Region's former Headquarters Building.



Central Region Headquarters in Kansas City, Mo., is located in this new Federal Office Building.

Director Edward Marsh's new office is now located on the 15th floor.

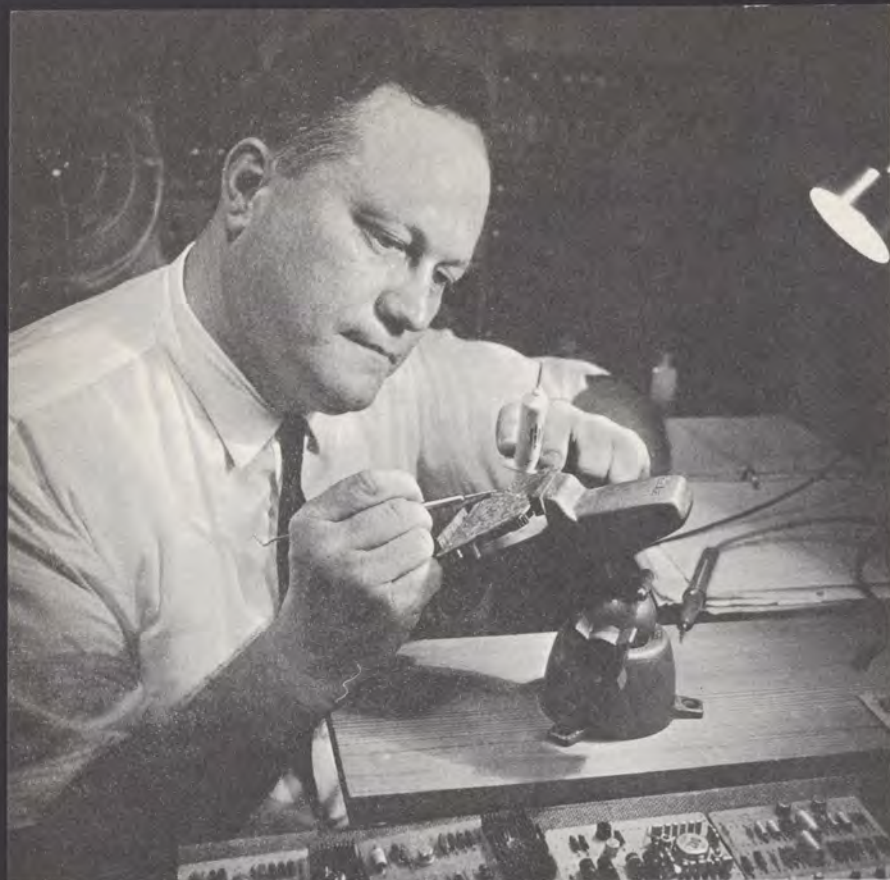


In their new office is the Region's Engineering and Manufacturing Branch.



Central's New Home

When moving day arrived at the Central Region Headquarters recently, everyone was ready. The transfer of equipment and records began on Friday and when the offices opened on Monday, the Region was open for business in the new Federal Office Building located in downtown Kansas City, Mo. The Region now occupies three floors in the attractive new 18-story building made of concrete, aluminum and glass. Everyone pitched in to make the move as smooth as possible. The Regional Director Edward C. Marsh now directs the region from his 15th floor office. Most of the region's printing equipment was transferred to the General Services Administration in a one-stop printing plant located in the new Federal Office Building. Everyone seems to like their new home.



Kenneth H. Quin

His vocation as an electronics engineer is also his avocation. The Mississippi-born Quin is currently working at home on a project to develop a digital computer circuits trainer from low-cost plug-ins. Quin, who is assigned to the Airway Facilities Division, has been with the Pacific Region since 1961. He has developed several new methods of instrumentation, including an error-detecting comparator and a radio diversity monitor, which are currently used in an FAA research and development antenna evaluation project. When time permits, Quin also doubles as a writer of technical articles for magazines. But, he says, he usually writes more than the publishers buy. Two of his books have been published since 1963. The first was an operations and maintenance handbook on underseas cable systems. The second, published recently, contrasts greatly with his usual interests: it is a three-volume family history of the Quin clan reaching back to 1014 A.D. A newspaper reviewer called it one of the "most exciting" books of its type ever published.

FAAers on the job

Edward J. (Mike) Banke

Ever since his wife took a paleontology course in college, Mike Banke has been "digging" the fossil scene. Mike, a Southern Region artist in Atlanta where he does illustrations and cartographic work for the Air Traffic Division, is a graduate of the Atlanta Art Institute. His graphics work deals primarily with air routes, restricted airspace and transition zones. But weekends generally find Banke camping in northwest Georgia, scouting the land for specimens to add to his already huge collection. With a pickaxe in one hand and a geiger counter in the other, Banke collects radioactive carbon data from his finds, corroborating the information later with the geology department of Georgia State College. Most of the fossils he finds belong to what is called the "Pennsylvania Era," a time roughly referring to 23-45 million years ago. He finds his fossils most abundant on top of Georgia's Turkey and Lookout Mountains. So far he has collected more than 300 separate specimens.

