# FAA HORIZONS

OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY

JUNE 1966

FAA HORIZONS

**COVER**

This month commemorates the 25th anniversary of FAA's Washington National Airport, a time span covering aviation history from plodding DC-2's to swift jets.
(See story on pages 15 to 18).

**CONTENTS**/JUNE 1966



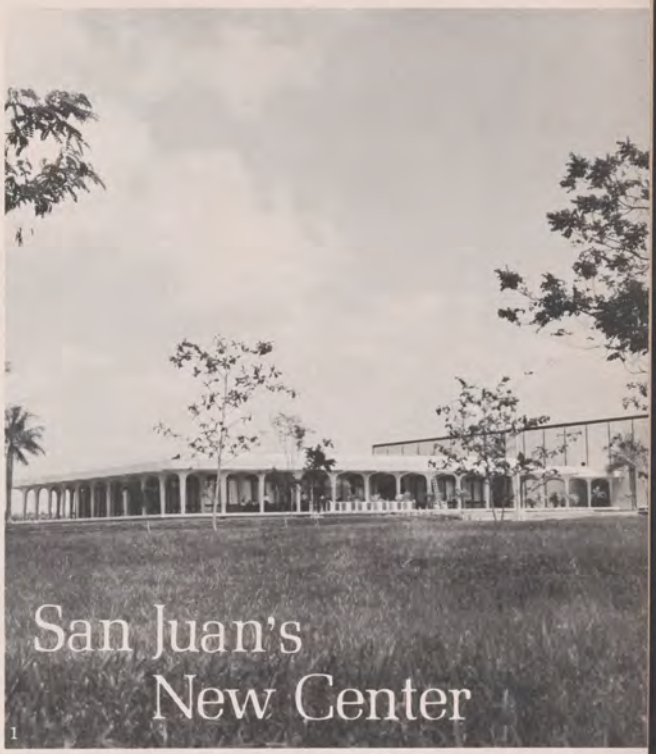




**WILLIAM F. McKEE** Administrator
**DAVID D. THOMAS** Deputy Administrator
**CHARLES G. WARNICK** Director, Office of Information Services
**W. BRUCE CHAMBERS** Chief, Employee Information Division
**ALEXANDER F. GARVIS** Editor
**ABNER B. COHEN** Art Director

**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. Kropf, Western Region; Gilbert E. McCoy, Pacific Region; Edwin L. Shoop Jr., NAFEC; and Mark Weaver, Aeronautical Center.



# San Juan's New Center

**1** *The Agency's new San Juan, Puerto Rico, air traffic control facility which features traditional Spanish architecture is located near the San Juan International Airport. The Center serves the Caribbean and the South Atlantic area.*
**2** *More than 1,000 spectators watched a U.S. Marine Corps honor guard raise the Colors at the dedication ceremonies. Government officials from Puerto Rico and Trinidad were among those present.*
**3** *After making radio contact with three aircraft, general aviation, commercial and military, which were flying overhead, Administrator McKee officially dedicated the new San Juan facility.*

As three aircraft representing general, commercial and military aviation circled overhead, FAA Administrator William F. McKee, officially dedicated the Southern Region's new $3 million San Juan, Puerto Rico, air traffic control facility.

"I now dedicate this facility to them and to the aviation segments they represent," General McKee said.

Then, one by one, each pilot acknowledged the Administrator by radio. The general aviation pilot said: "N341R accepts and salutes the FAA for its effective air safety efforts." The commercial airliner accepted "the services FAA provides in the Caribbean," and a Coast Guard plane, representing all military services, pledged "our unqualified support in safety and the defense of our country."

Earlier, Rafael Durand, Puerto Rican Administrator for Economic Development, said: "I don't believe there is another country in the world where aviation has been of more economic importance than Puerto Rico.

"The new FAA building is a factor of great importance whose modern safety equipment places us in a position to take full advantage of aeronautical progress for the benefit of the continuous economic development of this Commonwealth," Durand said.

FAA Associate Administrator for Programs Arvin O. Basnight and Southern Region Director James G. Rogers also participated in the dedication which was witnessed by more than 1,000 people. Guests at the ceremony and open house included Eric Patience, Trinidad and Tobago Director of Civil Aviation; Ruben Sanchez, Executive Director, Puerto Rico Ports Authority, and other government, military and airlines officials.

The new San Juan air traffic control

facility combines an air route traffic control center (ARTCC) and an international flight service station (IFSS). The ARTCC provides for the safe and expeditious flow of aircraft using the air traffic control facility; the latter provides an air/ground communications link over oceanic control areas and a variety of other flight services. Replacing the former cramped outmoded quarters previously located in the San Juan International Airport terminal, the new facility serves aircraft in an area of more than one million square miles in the Caribbean and as far west as the African coast.

The fusion of the Spanish and American influence is illustrated both in the architecture of the center building and in its personnel. The building was engineered and designed by the firm of Brooks and Barr of Austin, and Horacio Diaz and Associates of San Juan. The Center's traditional Spanish architecture features pointed arches, high arcades and massive space and is circumscribed by arched columns forming a dramatic arcade around the administrative wing of the building. This wing is occupied by area manager Mack R. Wood, Center chief George Dalton, IFSS chief James F. Corretjer, and their administrative staffs.

The box-shaped Operations and Mechanical wing is connected to the offices by a covered portico. Here, 200 employees comprise the staff made up of mainland and Puerto Rican personnel. In the IFSS, 70 per cent of the personnel are Puerto Ricans.

The new facility houses high-powered radar equipment and modern electronic devices similar to those found in the FAA's 21 stateside centers. One unique feature is a heavy-duty air conditioning unit which protects the sensitive equipment from the tropical temperatures.

The ARTCC/IFSS is the hub of a combination of FAA facilities in the San Juan area. Forty miles away, radar antennae towering from the 3,500-feet peak of *El Pico del Este* (East Peak) help maintain remote-control air/ground communications. About the same distance away, almost suspended from the edge of a slope along the Loquillo coastline, is the FAA's troposcatter—resembling a gigantic bedspring, which is designed to send VHF communications signals primarily in one direction, instead of in all directions such as a VOR. By bouncing beamed signals off of the troposphere, the hazard of deflecting signals against mountain ranges is eliminated. The Agency also has two air traffic control towers: one at San Juan International Airport, the other at the general aviation airport near Old San Juan, Isla Grande Airport. Another tower located on St. Thomas and a flight service station on St. Croix, Virgin Islands, are also an integral part of the control area.

The combining of all these facilities, including the new Center, has enabled the FAA to maintain a reliable, expanded aerial vigilance system by which all the civil air traffic in the Caribbean and the South Atlantic can be controlled.

**1** *Amid the tropical climate and near the beautiful beaches of San Juan, Puerto Rico, the Agency recently dedicated its latest air traffic control facility.* **2** *Administrator William F. McKee and Rafael Durand, Puerto Rico's Administrator for Economic Development, participated in the dedication.* **3** *George Dalton is the San Juan Air Route Traffic Control Center's chief.* **4** *Along this bank of consoles and radar scopes the San Juan Center controllers direct aircraft flying in the San Juan and Caribbean area.* **5** *Associate Administrator for Programs Arvin O. Basnight and Southern Region Director James G. Rogers toured the facility during the dedication open house.* **6** *Air Traffic controller Charles Leonard is shown working at one of the Center's radar scopes.* **7** *Serving as coordinator, John F. Harris helps the controllers of the Center's two sectors coordinate flight data.* **8** *In the international flight service station (IFSS), Juan Aguiar maintains air/ground communications with pilots.* **9** *Zenen Mectezuma (left) and Roberto Varela operate the teletype machines which receive and transmit flight data to and from the Center.*
**10** *Among the very attentive spectators at the dedication were these two children who were inspired by the planes flying overhead.* **11** *San Juan area manager Mack R. Wood welcomed Mrs. McKee, who accompanied the Administrator to the dedication, and Southern Region Director James G. Rogers.* **12** *Armande DeJesus of the IFSS records a flight plan on a strip for a flight departing from San Juan.* **13** *Charles R. Harrison, planning and procedures officer at the Center, works on an air space map, planning San Juan approach areas.* **14** *The San Juan Airway Facilities 74 man force that keeps all the electronic facilities in Puerto Rico and the Virgin Islands working effectively, is headed by Robert C. Saunders, AFS chief.* **15** *William J. Malesenke, a fixed industrial electrical maintenance technician, keeps the Center's air conditioning and emergency power units in top working order. Here he checks the temperature control on an air conditioning unit.* **16** *Another AFS technician, George W. Rogers frequently serves as a relief technician, servicing the link repeater facility atop 3,480 foot high El Yunque mountain.* **17** *AFS technician Rafael Cortez-Vazquez checks some of the equipment at the Center.*

# NAFEC SHOOTS FOR **SAFETY**

*Catapult track manager Jack Costello follows the countdown from the control room ready to turn the safety lanyard key for firing. Below: Surplus auxiliary fuel tank ready to go in flammability test of jelled fuels.*

If Frankenstein's monster ever visited the National Aviation Facilities Experimental Center at Atlantic City, he'd know he'd been outdone.

NAFEC has nine of the, ah . . . they call them anthropomorphic dummies. Each is regulated to simulate the human body. Made of rubberized plastic with framing and joints of steel which are adjustable to simulate muscle tension, the anthropomorphics make the same movements as the human body. Head, chest and pelvic cavities hold instruments, usually accelerometers, to measure G-forces. Complete with spinal column and rib cage, they have the same distribution of weight as a human body, generally with the same center of gravity.

Instead of stomping around scaring people, NAFEC's anthropomorphics work for air safety. John Sommers, chief of NAFEC's Structures Section, says, "We use them in some of our crashworthiness tests of aircraft seats, seat belts, fuel tanks and wing sections. The test goals are to develop dynamic test methods for aircraft components and to obtain information for improving existing systems and future designs."

Says Donald W. Voyls, test project manager: "The anthropomorphics contributed ably to a recently completed air-pack-restraint-system test done by the FAA for the National Aeronautics and Space Administration."

The system, developed by the Martin Company, is a proposed system to replace astronaut seat belts and shoulder straps. Tests were run using NAFEC's catapult and track facility which gives the anthropomorphics their kicks.

John Costello, manager of the catapult track facility, said, "The catapult has all the elements of a Cape Kennedy shoot, including a two-hour countdown. There are a total of 30 steps on the check list. After the dummies and/or other components are secured aboard the car, air pressure is built up to charge the accumulators for the catapult and the arresting engines. Brake pressures are checked and data measuring equipment adjusted to record time-position information. Following other minor steps, the catapult is cocked, valves adjusted and set, and a safety lanyard key turned to set the catapult ready to fire.

"The ride starts down the 300-foot track very slowly, seeming to crawl for several yards. Suddenly it builds up to a tremendous speed, close to 100 mph, before coming to an abrupt, jolting stop. Start forces go up to six Gs and stops up to 25 Gs."

The catapult and track is one of the Center's newest aircraft safety test facilities. It began operating in the fall of 1965 after several months of preliminary tryouts and calibration runs. Operation is handled from a control room near the tracks. In addition to John Costello, project technicians Donald E. Eastes, Walter M. Sturko, Lester Wilson and Maurice B. Dungan work on all catapult shoots. Data is gathered by Irving Goldstein, engineer in charge of instrumentation.

In the catapult operation, the seven-by-four-foot car is launched by a pusher which gets its power from compressed air. It shoves the car, which rides freely along the track, only part way down the track. The car is then decelerating gradually until it engages the arresting cables across the track. The cables are connected to two Mark 4 arresting engines which operate a combined air and hydraulic system to absorb the stop. Deceleration forces are controlled by adjusting air pressure on the arresting engines, controlling the distance in which the car is stopped. A walk-back brake prevents the free-running car from rebounding along the track toward its launching position after it is caught by the cables.

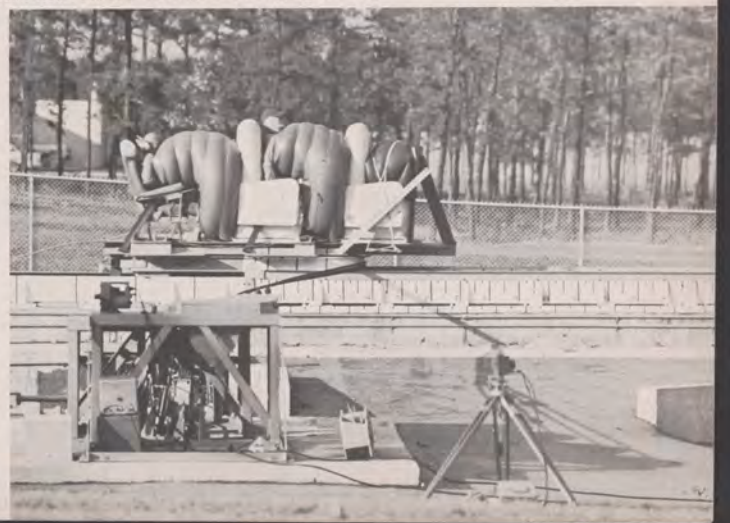
Originally the catapult belonged to the Navy. Called a Mark 4, type A, it was aboard a cruiser at one time and was used to launch observation planes. Parts of the track and arresting gear were assembled from other Navy ships. Before FAA acquired the facility, it was used at the Philadelphia Navy Yard.

The anthropomorphic dummies who often get to ride the catapult are a family of nine—three weighing 200 pounds, three 170 pounds and three 130 pounds.

Thanks to the anthros and the catapult, air safety is getting another valuable assist.

*Lester P. Wilson watches data recording instruments.*
*Below: Harry J. Hogg (left) and Donald E. Eastes check air pressure.*

*Dummies go for 75 mph ride in air bag restraint test; track ruler markings show stopping distances.*



# School Opens

## To Train Alaskan Aviation Mechanics

It takes a special breed of mechanic to work on aircraft in howling winds on the Aleutian Chain or in minus 40 degree winter temperatures with frostbite just a fingertip away.

While Alaskans as a whole are a hardy lot, the "HELP WANTED: AVIATION MECHANIC" ads in the past have not yielded results. Outsiders who came to work usually lasted only a short time and left the state when the going got rough. The state itself has no aviation mechanic schools to train its own.

"A shortage of qualified aviation mechanics threatened to hamstring the further development of aviation in Alaska and its economic future," said Welden E. Bell, supervising inspector of the Fairbanks Flight Standards District Office.

"Here the airplane is the sole means of transportation, with one in 50 residents holding a pilot's license. Many communities become completely isolated when the long dark winter sets in."

The prospects are brighter now, because a year ago Bell and his inspectors recognized the pinch in finding enough qualified crewmembers and mechanics to meet Alaska's present and future aviation needs, and then did something about it. Alaska will soon have its first FAA certified aviation mechanics school to sustain the vast flying effort in America's northernmost state. It enrolled its first class of 30 students on February 28. Training of unemployed and underemployed students who meet education, aptitude and job interest qualifications is being subsidized by the state.

The new school is a team effort by the Fairbanks Flight Standards inspectors and the State of Alaska's Department of Labor. The state's Edward J. Marshall, Manpower Development and Training Officer, worked with Bell in organizing the school. Culminating their year-long efforts, the North Star Borough School of Aviation was officially certified on Feb. 4, 1966.

Soon the new North Star Borough graduates will be answering those help wanted ads, the result of painstaking efforts of State and Federal agencies working together.

"Deeply appreciate assistance FAA has rendered North Star Borough in establishing first certified aviation mechanics school in state," wired Governor William A. Egan. "Understand Welden E. Bell and Vincent Bocchetto of the Fairbanks District Office worked tirelessly to assist in this project. My special thanks to them."


*Instructor Michael J. Fisher (right) demonstrates lathe work to prospective student Martin F. Graefing (left) and Vincent Bocchetto, general aviation maintenance inspector.*

*During the dedication ceremonies, Michael Fisher (left) explains the operation of a gage to officials, from left, Fritz Wien of Wien Air Alaska; Edward J. Marshall, State Manpower Development and Training Officer; Stuart H. Bowdoin Jr., manager, Fairbanks State Employment Office and Harry A. Turnpaugh, chief, FAA Flight Standards Division.*



# JETTING

## *A La Deutsch*

FAA controllers at Tucson are cementing international goodwill in a unique program of pilot training conducted there by Lufthansa, Germany's leading airline.

Each year, from mid-October until the following April, Lufthansa conducts 12-hour-a-day, five-day-a-week proficiency training at Tucson using Boeing 707s and 727s. Next year, the new Boeing 737 will become part of the program.

Since training began at Tucson in 1960, the German airline has graduated 128 captains, 119 co-pilots, 138 flight engineers and 500 maintenance men. The cost so far has been more than $10,000,000 for the training program.

Tucson Tower personnel regularly control German military air traffic, too. At Williams Air Force Base near Chandler, Ariz., young German pilots are receiving training in T-38 jet fighters. These aircraft regularly enter Tucson traffic patterns to practice approaches.

Lufthansa activity in the Tucson area during the training season is brisk. Each jet used for training chalks up at least 200 landings weekly. Sixteen tires must be replaced on each aircraft each week.

The program confronts Tucson controllers with a wide range of aviation activity reflecting various facets of jet orientation. Aborted take-offs, cross-wind take-offs, Dutch rolls, banks, simulated landings and canyon approaches all have become normal at Tucson. One phase of the instruction —emergency descents—is mastered away from the airport for obvious reasons. These maneuvers take place in the segment of airspace from 14,000 to 37,000 feet. Before any practice routine is done in the traffic pattern, it is always perfected off the airways at a safe altitude.

Tucson International Airport was chosen for the program because of the consistently fine weather in the area, the 12,500-foot runway and excellent air traffic control facilities.

Kurt Uvericht, Lufthansa official in charge of flight training at Tucson, expressed his appreciation to the FAA for the outstanding cooperation received from tower personnel. He also cited the help provided by the Tucson Airport Authority, Arizona Air National Guard and residents of the community. He said the training will continue at Tucson at least until 1970.

Speaking for the FAA, tower chief Ralph L. Wheaton stated: "Personnel at Tucson Tower are proud of the part they play in the annual Lufthansa training program and in the training of West German military jet pilots."

Besides Wheaton, the FAA tower staff at Tucson includes Edward L. Contreras Jr., Anthony T. Giambruno, Rodney O. Kinkade, Donald W. Kirkland, Walter G. Koch Jr., Edward F. Korzdorfer, Edward L. Stoddard, Larry D. Waller, Robert M. Watmore and the most recent addition to the staff, trainee Jack R. Hamilton.

*Right: Tucson controllers Larry D. Waller, Edward F. Korzdorfer, Walter G. Koch Jr., and Anthony T. Giambruno assist the German airline pilots.*
*Below: A Lufthansa 727 is on a practice run.*

# A 'Show Me' Engineer

*1 Airport Engineer Herman Lindsey sights through a hand level at a proposed airport site. 2 Conferring about Springfield, Mo., Airport facilities are, from left, Airway Facilities Sector chief R. Norman Bolick, Lindsey and airport manager Lester Jones. 3 Lindsey and Jones discuss a proposed runway extension. 4 From left, William B. Boucher, chief, Kansas City Area Airports Branch; Leo J. McNeil and Charles R. Engdahl, both airport engineers, and Lindsey, discuss a runway plan. 5 Secretaries Audrey E. Mooney (left) and Angela G. Russell help Lindsey with airport planning files.*

That man Lindsey really knows airports!

At one time he looked down on the airports business. That was when he navigated bombers over Germany during World War II on missions to destroy airports and everything on them. Then he was shot down and got his start in engineering. He started at the bottom on the hottest project available, helping dig a tunnel out of Stalag-Luft III. This was the prisoner-of-war camp that inspired the movie, "The Great Escape."

Today, Herman M. Lindsey, armed with an engineering degree and years of experience, is the Agency's airport engineer for Missouri. Operating from the Area Office at Kansas City, Mo., he is the FAA mentor for Missouri airports ranging from sod strips to St. Louis' giant Lambert Field.

When Lindsey is not at his desk studying airport plans, leases and other data related to the Federal-aid Airport Program (FAAP), he is travelling around the state checking on some 40 FAAP projects now under way in Missouri. During fiscal year 1966, the state received $3,303,843 in Federal matching funds for runways, taxiways and aprons, land acquisition, runway lighting and other approved construction at airports under the Agency's National Airport Plan. The plan lists communities where an airport would fit into the long range development of the National Aviation System.

If the sponsor of an airport listed in the National Airport Plan wants to proceed with construction, the sponsor (usually a city, county or state government) submits a request for participation in the FAAP. If this is approved by FAA, the sponsor proceeds with a master plan. The FAA airport engineer reviews the plans and makes recommendations through the Area, Region and Washington Office for final action. The sponsor of an approved project then gets a "grant offer" which becomes a contract with FAA upon acceptance.

From the start of construction to its completion, engineers like Lindsey and his assistant, Charles E. Engdall, review plans and specifications, inspect sites and construction and write volumes of reports. Periodic payments of the Federal portion of the cost are contingent upon their favorable reports.

For every airport listed in the National Airport Plan, there are several smaller airports, including private ones, which are not eligible for FAAP assistance. Their sponsors, too, are helped by the FAA airport engineer. Even the small rancher gets prompt service when he wants to build his own strip. An FAA airport engineer will provide advice to those seeking airport assistance. He will also supply airport planners with advisory circulars and other information on how to build an airport with optimum safety and economy.

Perched on eastern Puerto Rico's highest peak are the Agency's two radar domes.

# ATOP PICO DEL ESTE

Crowning the jagged peaks and crest of Puerto Rico's 3,500-foot *Pico del Este* (East Peak) is an extraordinary FAA facility—two gigantic radar domes that resemble silver space ships floating on an ocean of mist.

*Pico del Este* is the name of a joint-use radar and radio communication facility shared by FAA and the United States Navy. The silver domes shield two types of sensitive radar equipment from the windy salt air. One is an aircraft height-finder radar used exclusively by the Navy. The other is a long-range FPS-67-B radar by the FAA's San Juan Air Route Traffic Control Center for IFR traffic control and also by the Atlantic Fleet Weapons Range for monitoring various activities within Navy warning areas.

Currently being installed at *Pico del Este* is additional joint-use equipment, a remote control air/ground communication facility for extending radio contact in the Caribbean and South Atlantic areas. Five main and five secondary antennae now are being installed atop huge towers, affording them the highest geographical position in eastern Puerto Rico. For the staff of 13 airway facilities technicians, who maintain the *Pico del Este* site, headed by Raymond L. Morris, working is an exercise in patience. (While the major construction and installation work was done by the Navy, the FAA has the entire responsibility for resident maintenance.)

Commuting to work itself is a formidable problem. A long, narrow road coils up into the Caribbean National Forest. Squawking birds and furtive mongooses dart across the road, bordered by the dense foliage in which tree ferns grow 80 feet tall and wild orchids bloom in profusion.

This tropical wonder may be a shutter-bug's paradise, but to the FAA maintenance men who must drive two hours from their homes up the steep, winding, and often dangerous road, the ride imposes wear and tear on their nerves, to say nothing of their automobiles.

This is the world-famous "Rain Forest." Part of the Caribbean National Forest, it is so named because of the annual accumulation of 200 inches of precipitation in the jungle-like park. The moisture loosens the soil on the crests and embankments, causing frequent landslides. When these occur, the road is virtually impassable.

This situation has produced an unusual transportation system. When a technician on his way to the site is blocked by the mass of rocks and earth that has fallen across the road, he turns around and drives to the nearest telephone—usually in one of the park's public restaurants. He phones the San Juan Center which radios the technician who is about to go off duty about the slide. Then each technician drives to the landslide point. Here, they get out of their own cars, tramp through the mud covering the road until they reach the other one's automobile, and swap cars for the remainder of their respective trips.

Perhaps most threatening to the technician's peace of mind is the nature of the duty shifts themselves. *Pico del Este* is 40 miles from San Juan, and has only one access. The last five miles of road to the peak, restricted to those with official business, were so difficult to build that the road construction alone cost nearly as much as the entire radar/communication facility. Since soupy mist often threatens safe driving, the men stay at the site for a consecutive three-and-a-half-day shift—12 hours working and 12 hours off for three days; six hours working on the fourth, at the end of which they are off for three days. The cycle then begins again.

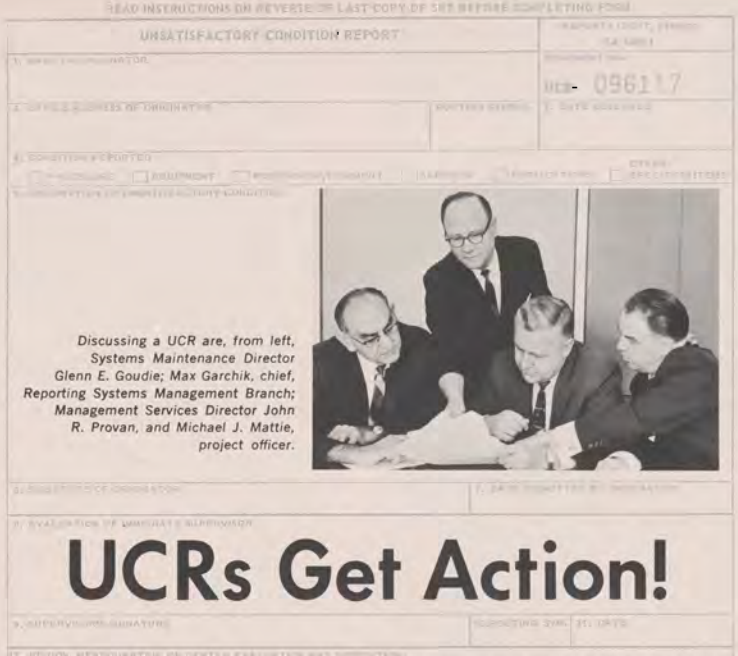
Their home is a plain cabin that has a bunk room, a kitchen, a laundry room, and a living room. The living room contains a variety of "pick-up" furniture: a vintage television set, a radio and phonograph, a sofa, a few chairs, some lamps, and a wooden table. One wall provides the principal source of entertainment: a dart board.

"We don't mind barracks-style life; it's the permanent fog that closes in on you," said airway facilities technician Harold Vance. "You always have the trapped feeling. We're at the end of the world; there's nowhere else to go."

If the mist obscures their vision, it has not beclouded their sense of purpose. Their morale remains high. When asked why they put up with such adverse conditions, they smile and say, "Well, somebody's got to do it; we just cope with it as best we can." They have had no "drop-outs."

It's this unbreakable determination on the part of *Pico del Este* technicians Eddie Bethel, Richard E. DePuy, Harold Vance, Kandall R. Reichstein, John R. Wood, Marcial Rosario, Clifton B. Tucker, Henry M. Shellnutt, Robert A. Forbes, Valentine Peck, Jorge Gonzalez and Danzil Wallace, that assures air passengers in the Caribbean and South Atlantic areas of safe travel.

**The radar site which is usually hidden by low-hanging clouds is maintained by 13 technicians. Top left: Richard E. DePuy, an airway facilities technician, adjusts integrators for the radar's video. Top right: Kendall R. Reichstein, supervisory technician, makes an adjustment on the long-range radar receiver. Lower left: Denzil C. Wallace, electronic technician, works on the transmitter tuner at the radar site. Lower right: The mountaintop facility operated jointly for the U.S. Navy and the FAA is kept in tune by Raymond L. Morris, technician in charge. His group of hardy men maintain this important installation around the clock. They provide faultless radar coverage for pilots operating in the Caribbean area with San Juan, Puerto Rico, as a focal point.**




*Discussing a UCR are, from left, Systems Maintenance Director Glenn E. Goudie; Max Garchik, chief, Reporting Systems Management Branch; Management Services Director John R. Provan, and Michael J. Mattie, project officer.*

# UCRs Get Action!

A Las Vegas secretary complained of eyestrain, a New York controller got a splinter in his finger and a West Virginia tower controller suffered from the noise in the tower cab, yet all three got relief in the same way.

The solution is no medical panacea, but when used according to prescription, it goes a long way toward correcting a wide variety of safety and management problems.

The prescription is Agency Order OA 1800.6 which attempts to steer into constructive channels the natural tendency most people have for kibitzing. Ignoring the number of people killed in the Old West for making suggestions from the side lines of poker tables, Agency management engineers bravely encourage those with a predeliction for saying "Why don't you . . .?" with a program called Unsatisfactory Condition Report (UCR).

In the Program's one year of operation, hundreds of Agency employees have made reports of unsatisfactory conditions. A large percentage of these resulted in constructive changes according to Michael J. Mattie, UCR project officer.

The eyestrain problem reported by the secretary was traced to a regional directives check-list printed in type too small for comfortable reading. A UCR caused the type size to be enlarged by 20 per cent.

The splinter-filled finger resulted when someone forced "shrimpboats" into slots designed for flight strips. After several controllers got splinters from the holder's rough shoulders, a UCR was submitted and the practice was barred.

The tower cab in West Virginia was made less noisy when a UCR pointed out that a noisy teletype machine could be encased in a soundproof box.

Solutions like these aren't necessary on UCRs. This is where the program differs from Suggestion and Awards. The UCR provides a simple and direct means for all Agency employees to advise management of unsatisfactory conditions. It could be an unsafe situation, a system with a chronic unsatisfactory characteristic, a technical publication that is incomplete, inaccurate, illegible or inconsistent, or equipment that is inadequate or incomplete.

The Agency Order bars using the UCR for airing grievances, complaints and personal problems. Barred too are UCRs on the need for routine maintenance and repair, rules or regulations involving housekeeping, administrative practices or working conditions, classified information and misunderstandings or errors in established administrative procedures. In short, the UCR does not replace other reports or established procedures. It is used to give managers a chance "to put on the other guy's hat" and to see how a system works from the point of view of others.

Unlike card players who may be prone to shoot kibitzers, Agency managers do not have the face-to-face relationship across a card table with the people who use, or who are affected by, the systems they devise. For this reason, some way was needed to allow any one of the Agency's 44,000 employees to tell them where unsatisfactory conditions exist. No problem is too small. When different employees encounter and report the same problem, it assumes an added importance for taking prompt corrective action. The UCR program does this.

The new Houston Center was one of the beneficiaries of UCR. The system was used to initiate improvements in communications and support equipment. Everyone—pilots, controllers and maintenance technicians—had a clear route for reporting a problem.

Even the UCR program itself got the treatment. Thanks to UCRs on UCRs, some important improvements are being considered.

While the UCR might not be a cure for headaches, splintered fingers or strained eyesight, it does bring positive relief to sufferers from that helpless feeling that comes from seeing a problem and not knowing what to do about it.

With a UCR, you can **see** and **tell** where it counts.



# National's 25 years

*1 Bulk of National's proposed landing area was Potomac swamp and river bed requiring 20 million cubic yards of fill. 2 First tower chief Victor J. Kayne stands in front*


1

*of phone-booth control tower on roof of unfinished terminal. 3 Bennett H. Griffin was National's manager for 11 years. 4 Hervey F. Law managed a "no man's land" airport. 5 Paul Steiner became National's manager in 1961. 6 President Roosevelt laid the terminal cornerstone and gave the dedication address on Sept. 26, 1940. 7 President Franklin D. Roosevelt watches first official landing at National bringing Secretary of Commerce Jesse Jones in airplane piloted by Bennett H. Griffin.*


2


3


4


5


6

In the 25 years since Washington National Airport was first opened for commercial operations on June 16, 1941, more than 76 million passengers have passed through its gates, and more than 5¼ million takeoffs and landings have been made on its runways by aircraft ranging from DC-2s to DC-9s.

The airport was conceived on Sept. 26, 1938 when President Franklin D. Roosevelt told a press conference he was "tired of waiting for Congress" to pick a site for Washington's new airport despite 12 years of wrangling. Whereupon, FDR chose the mud flats along the Potomac at Gravelly Point, Va., as the new airport location. Two months later, on November 21, the first ceremonial shovelful of dirt signalled the start of airport construction.

Several government agencies cooperated with the former Civil Aeronautics Administration on the project. These included the Public Works, Work Projects, Public Buildings and Public Roads Administrations, all part of the Federal Works Agency; the Corps of Engineers, U.S. Army; National Park Service, Department of the Interior; and the Fine Arts Commission.

Opening day events and those that followed are remembered by many present day FAA employees as well as some who are now with other aviation organizations. Among those still at National (some were there even before the airport officially opened) are: Mrs. Ella M. Brown, chief telephone operator; Clyde N. Holsinger, operating engineer, and James Potter, chief, Utilities Branch; George E. Burdette, painter foreman, Structures and Grounds Branch; Paul Pullman, electrician, Electrical-Air Conditioning Branch; Leroy McCauley, chief, Equipment Maintenance Branch; Thomas D. Flaherty, assistant division chief, and Jesse Turner, assistant general foreman, Maintenance Division; John J. Sudol, fire inspector, and Charles F. Petellat, chief, Aircraft Rescue and Firefighting Branch; Elizabeth W. Turner, chief, First Aid Branch; Walter Stidham, policeman, Police Branch, Operations Division; and John Sualich, airport guide. Louise M. Whitlock, a National telephone operator when the airport opened, now is a General Counsel central files clerk at FAA Headquarters.

Those of the original National Control Tower crew still with the Agency are: C. Browning Walter, assistant chief, Defense Co-


7

**1** *Operations officer Sam Clifford stands in front of National's terminal which served more than 76 million passengers in the past 25 years.* **2** *Operations officer Everett S. Lindley is a former Air Force fighter pilot.* **3** *The airport has 680 acres of land area and 170 acres of water. More than 5¼ million landings and takeoffs have been made on its runways.*

**4** *Operations Office secretary Roberta A. Baker who started at National last April passes the out-going mail to FAA messenger DeWitt Butler who has been at the airport for the past three years.* **5** *Nurse Elizabeth Turner who is chief of the First Aid Branch started at National on June 2, 1941 before the airport opened. Other nurses in the branch are Rita D. Hall, Marie C. Walsh and Mildred W. Spransy. Here Nurse Turner takes the temperature of airport policeman Sergeant Alfred F. Corfield who has been at National for the past nine years.* **6** *Chief telephone operator Ella M. Brown (left) was at Hoover airport for 11 years before coming to National. Bernice M. Pihlstrand working the board (foreground) has been at National for 20 years.*



ordination Staff, Headquarters; Charles D. Stevens, chief, Richmond Tower; Richard Stark, supervisor, Pensacola, Fla., Tower/RATCC; George Brunner, chief, San Antonio International Tower, and L. I. Pearce, Washington Area Office. Others still with the FAA who transferred from the old Washington-Hoover Tower to CAA airway traffic control centers before opening day at National are: William A. Simpson, special assistant to Associate Administrator for Development, Headquarters, and Neal Morrow, Washington Air Route Traffic Control Center in Leesburg, Va.

Victor J. Kayne, now director of the Office of Policy Coordination, Aircraft Owners and Pilots Association, was National's first tower chief. Kayne had been tower chief at Washington-Hoover Airport which was just a mile away from National on the site now occupied by the Pentagon. Washington-Hoover was privately owned by the National Airport Corporation and was managed by Samuel J. Solomon who is still on the Washington scene. After construction of National was started, the CAA approached the Washington-Hoover controller crew and arranged for them to transfer en masse to Federal employment in the new Washington National Tower. "I went on the CAA payroll on June 1, 1941," Kayne said, "which made me the first CAA airport traffic controller. The remainder of my crew came over on June 16 when National opened for full operation."

National's first official traffic, before the airport's full opening to commercial operations, came on the day of dedication by President Roosevelt when he laid the cornerstone of the terminal building on Sept. 26, 1940. There was a parade of aircraft representing a number of airlines and government services led by a twin engine Lockheed flown by Bennett H. Griffin and carrying Secretary of Commerce Jesse Jones. A controller in a small "phone booth" on the roof of the uncompleted terminal building relayed instructions by telephone to the controller in the old Washington-Hoover Tower. The latter then radioed instructions to the aircraft concerned.

When the airport opened for full operations on June 16, 1941, the late John Groves, the first manager of Washington National, was in the new tower to watch the first official arrival. The airlines had drawn straws to see which would be first to land. American Airlines won the honor and arranged for one of its flights that normally arrived slightly before midnight to delay and land at 12:01 a.m. Eastern Air Lines was to be second. The American pilot, however, overdid his delay and did not make it to Washington at 12:01 while the Eastern pilot was right on hand and kept clamoring for a clearance to land. This caused some unorthodox "controlling" in order to conform to the prearranged schedule. "We finally got American in first," a veteran controller recalled, "but Eastern was still grumbling when he was taxiing up to the ramp."

Like most new installations, National's tower had its bugs. Because the CAA maintenance and installation crew had no previous experience with control towers, they did what comes naturally to any good radio man—they tuned the receivers to peak efficiency. They were so efficient that the controllers heard airplanes calling the Chicago and Burbank control towers just as loud as those National was trying to work. The maintenance crew stayed in the tower for the first three days, and the tower chief spent the first 72 hours on continuous duty until "we were sure that everything was going to keep on working."

Richard Stark of the original tower crew became National's second tower chief; then came Stanley Seltzer, now director of air navigation and traffic control, Air Transport Association, Washington; Thomas Basnight, director of regulatory matters, Air Line Pilots Association, Washington; Daniel E. Barrow, Deputy Director, Central Region; Paul Moore, Air Traffic Operations and Procedures Division, and Joseph Vivari, Airspace and Air Traffic Rules Division, FAA Headquarters; George Ashley, tower chief, Greenville, N. C., and Glen Tigner, present chief at National.

Paul Moore, who entered the tower in 1942 as a trainee, served two terms as tower chief, from June 1956 to March 1957 and from September 1961 to April 1965. "When I started," Moore recalls, "We had a total of nine people, including the chief." Today the tower personnel complement is 100. During the tower's first full year of operations, 1942, it handled 77,348 takeoffs and landings. In 1965 it handled 308,972. On some of its busiest days the tower handled almost a thousand operations.

Thomas Basnight began at National as the captain of a crash boat, but his duties were varied. "I remember being assigned the duties of installing vending machines in the ladies room and pumping rain water from battery pits on the ramp," he said. "Things were not as sophisticated in those days." Tom transferred to the tower in August 1941. Before he left the Agency in 1952, Tom had served as tower chief at Charleston, W. Va., and Norfolk, Va., as well as at National.

Through the years the universal cry of all of National's airport managers, including Edgar B. Franklin, current manager, has been **space**, or the lack of it.

"I became airport manager in 1943," said Hervey F. Law. "Already the terminal was too small. Those in charge of construction had thought it was going to be a white elephant, so they cut about 300 feet off the north end, saying we would never get enough traffic to fill it".

Law had a unique problem at National. The airport was a no man's land belonging neither to Virginia nor to the District. When the District of Columbia originally was formed, its boundary went to the west shore of the Potomac. When the airport was built, the field went out into the Potomac on filled land, thereby making a new west shore. The question was, "Did D.C. go to the old or the new shore line?"

Once, when the airport had a robbery, police from neither the District nor Virginia would respond. Each said the airport did not belong to them. When a guard died, the airport couldn't get a coroner to declare him dead. "I had to put out a rather unofficial order," Law recalled, "saying that nobody could die on the airport. They could get awfully sick, and then they would be carried in an ambulance to the District or Virginia where they could be declared dead." It took three years before Congress passed a bill declaring where the property line was. The new boundary placed the airport in Virginia.

Before leaving National, Law hired two future airport managers—Paul Steiner, who started as Law's assistant and became National's manager in 1961, and R. Dan Mahaney, who came to National as head of safety operations and became manager of Dulles International Airport this year. Law left National in 1947 to go with the Port of New York Authority as general manager of its four airports. He retired from that post in 1963 to his "place on the water" at Turkey Point, Md.

Bennett H. Griffin, a well known pilot who set several air records from New York to Berlin in the early 30s, held the reins at National longer than any other airport manager. He was there for 11 years from 1947 to 1958. A lot of improvements went in during this time. Size of the terminal was increased, six big hangars were built, gate positions were more than doubled, the gasoline supply system trebled, and automobile parking went into "every vacant foot I could get."

"When I came here," said Griffin, "the airport revenues were about $850,000 a year. When I left they were close to $4 million." Griffin is now an airport consultant in Washington.

Lucius W. Burton, now also a Washington airport consultant, followed Griffin as airport manager until 1961 when Paul W. Steiner, then assistant manager, became head man. "I think from the time of my coming until I left in 1963 to become manager of Dulles International Airport—and still continuing—there was always the need for expansion," Steiner said. "While I was there the terminal building was further enlarged for passenger conveniences and airline requirements as well as for concessions and revenue producing activities. When I first came to the airport it served about six airlines. Now there are 12 with the 13th soon to be added."

Now Steiner is enjoying his retirement in Falls Church, Va., after leaving the airport business in 1965, "not doing anything particularly, playing golf and spending some time in a small electrical appliance repair shop where the proprietor gives me an opportunity to enjoy his facilities."

Edgar B. Franklin came to the airport in May 1962 and became


1


2

3

4

**1** *National attracts crowds of sightseers.* **2** *Architecturally the terminal facade resembles neighboring Mount Vernon.* **3** *Secretary Helen K. Brewer discusses some airport correspondence with Washington National Airport Manager Edgar B. Franklin.* **4** *Fire Chief Charles F. Petellat who started at the airport during its construction in 1939 discusses work with fireman Marcus B. Williams.*



its manager in June 1963. Like all the other airport managers his problem is space. "We are accustomed to sitting in each others laps," he said. "I think the only way we have been successful in coping with limited space is through the spirit of cooperation of all of our tenants, including the airlines and concessionaires."

The airport employs approximately 5,600 people. Of these, 515 are FAA employees. In addition, there are approximately 4,400 other workers employed by the Department of Defense (Corps of Engineers, U.S. Coast Guard and Military Airlift Command) on the airport property. The total annual payroll is in excess of $60 million.

One of the most acute problems at National, according to Franklin, is limited parking space for automobiles and airplanes. Currently, the airport has public parking spaces for 1,514 automobiles, plus 211 metered spaces. Airplanes have 29 gates, but by double parking some airplanes, the airport has developed a total of 39 gate positions.

When the airport opened, it had one hangar in operation and five under construction. Today the airport has 12 hangars. The terminal has been enlarged from 210,279 square feet of floor space on opening day to 267,383 square feet. Airplane gate positions have increased from 13 to the present 39. Although the airport opened with four completed runways, only three are now used. The main north/south instrument runway is 6,870 feet long. The others are 5,212 and 4,724 feet long. The shortest east/west runway 4,100 feet long, was closed in 1946. It is now used for badly needed aircraft parking.

Despite its cramped quarters—680 acres of airport land area and 170 acres of water, the airport is a real moneymaker for United States taxpayers. In the 25 years of the airport's operation, revenue exceeded appropriations for 20 of those years. Revenue for 1965 was approximately $5.5 million. Congressional appropriations for the same year for airport operation and maintenance was $3.6 million, leaving a sizeable sum to be turned back to the U.S. Treasury.

During the airport's first full year of operations, 1942, it handled 459,396 passengers. In 1965 it handled almost seven million. Introduction of the new short range jets at National on April 24 of this year is expected to bring a new surge in passenger traffic, forecast to reach 17 million passengers by 1980. This increase will add an estimated 800 new airport jobs and increase the payroll by about $7 million.

"We would like to expand our passenger and baggage-handling facilities and our auto parking, already inadequate for present day traffic, to accommodate these increases," said Arven H. Saunders, Director of the Bureau of National Capital Airports which oversees the administrative management of both Washington National and Dulles International Airports. "After 25 years of faithful service we believe that Washington National deserves a little face-lifting."

In May 1966 the FAA awarded a contract for an architectural and engineering design study to be used as a basis for planning and eventual modernization of National. The study will provide the FAA with four alternative plans for meeting National's air traffic needs of the '80s.

Washington National Airport has a place in history as the site of Abingdon mansion which was the home of American pioneers for a full century before it was bought by Martha Washington's son, John Parke Custis, in 1778. Now, as one of the busiest airports in the world, it is and will remain an historic landmark of the Nation's Capital serving the people who make history./*by Marcella Harp.*



# Three New Agency Management Posts Created; Four Executives Reassigned

George S. Moore

Clifford W. Walker

James H. Mollenauer

Clarke H. Harper

Four top-level career executives have been reassigned following the creation of three new Agency management posts.

**George S. Moore,** currently Director of FAA's Flight Standards Service, was named Deputy Associate Administrator for Programs. This is a new post under the Associate Administrator for Programs, Arvin O. Basnight.

Moore has been with the FAA and its predecessor agency, the Civil Aeronautics Administration (CAA), since 1945. Since 1963 he has been Director of Flight Standards Service, which establishes and enforces safety standards for aircraft and airmen, licenses ground and flight schools and aircraft repair stations and flight checks U. S.-owned air navigation aids throughout the world.

Moore started with CAA as a supervising air carrier inspector and became chief of the Flight Standards Division in FAA's Southwest Region in 1960. He transferred to Washington in 1961 as chief, Safety Regulations Division, and in January 1962 became Deputy Director of Flight Standards Service.

A native of Hartford, Conn., Moore holds a B.B.A. degree from Holy Cross College and an L.L.B. degree from Southern Law University, Memphis, Tenn. He was a naval aviator during World War II and currently holds an Airline Transport Rating, the highest pilot certificate.

**Clifford W. Walker,** who has been Deputy Director of Flight Standards Service since 1964, replaces Moore as Director. A career civil servant, he has been with FAA/CAA since 1947. Before coming to Washington, he had been chief, Flight Standards Division in Southern Region, since 1961. Previously he had served tours of duty in Seattle, San Francisco, Los Angeles and Miami.

A native of Little Rock, Ark., Walker became a pilot in World War II and subsequently flew as an airline pilot from 1945 through 1947. He holds an Airline Transport Rating and currently is an active pilot.

Walker attended George Washington University before entering military service and is a graduate of the Air War College.

**James H. Mollenauer** was named Deputy Associate Administrator for Development—also a new post. He will serve under Joseph D. Blatt, Associate Administrator for Development. He has served in an acting capacity in his new position since February.

Mollenauer, a veteran electronics engineer, was Director of the Agency's Systems Research and Development Service from October 1965 to February 1966. He joined FAA in 1958 after two years at the Air Force Cambridge Research Center, Bedford, Mass., where he specialized in the development of air traffic control programs for joint air defense and civilian aviation use. Before joining the Air Force in 1950, Mollenauer had been employed in private industry.

A graduate of Pennsylvania State College in 1942, Mollenauer holds a B.S. degree in electrical engineering. During World War II he served in the Air Corps and was discharged a Major.

**Clark H. Harper** was named Deputy Associate Administrator for Administration, a newly created position under Alan L. Dean, the Associate Administrator.

Harper had been Assistant Administrator for Appraisal since December 1963. From 1959 through 1963 he had been Budget Officer and Director of Budget for the Agency.

A career civil servant, Harper has been with the CAA/FAA since 1942 and has held numerous positions in the areas of budget, management, administration and supply. He began his Government career in 1934 with the Home Owner's Loan Corporation in the Office of the Treasurer.

In World War II, Harper joined the Army Air Corps as a Private and was discharged a First Lieutenant. He attended Benjamin Franklin University and the U. S. Department of Agriculture Graduate School, both in Washington, D. C.

In 1963 Harper received the Federal Government Accountants Association award for Outstanding Achievement in the Improvement of Financial Management in the Federal Service. In 1964 he received the FAA's Meritorious Service Award for extraordinary skill in developing and executing budget planning and fiscal resource management programs.

# Federal Air Surgeon Named Aerospace Medical Association Vice President

Dr. Peter Siegel, the Agency's Federal Air Surgeon since August 1965, was elected a vice president of the Aerospace Medical Association recently. He is one of four vice presidents elected by the 4,500-member group.

The association stimulates aerospace medical investigations and study and maintains cooperation between medical and other sciences relating to aeronautical development and progress. One of its prime objectives is the promotion of safety in aviation and astronautics.

Dr. Siegel joined the FAA in 1961. Before his appointment as Federal Air Surgeon in 1965, Dr. Siegel served as chief of the Agency's Aeromedical Certification Division, Office of Aviation Medicine, Oklahoma City, where he established a data processing system for airman medical records.

# OSCAR BAKKE RECEIVES CAREER SERVICE AWARD

Oscar Bakke, Director of the Eastern Region, was one of 10 recipients of the 1966 Career Service Award presented by the National Civil Service League.

In announcing the awards, League President J. Edward Day said that Bakke and the other nine winners "are the career men and women behind the headlines who make our Government work." He also noted that the winners represent 243 years of public service.

Bakke was cited particularly for his imaginative development of unique information techniques in controlling and appraising management effectiveness within his Region.

Later, President Lyndon B. Johnson spoke to the award winners in the Cabinet Room at the White House. ". . . Your achievements have singled you out as being men and women of excellence, and excellence is not easy to come by, either in or out of Government," the President said. ". . . I want to especially commend you, thank you, and say to you that I don't believe there is a higher calling than Government Service . . ."

With the FAA since 1960, Bakke served one year in Washington as Director of the Bureau of Flight Standards before assuming his present position. Prior to joining the FAA, he served for 14 years with the Civil Aeronautics Board. His CAB career began in 1946 as reports editor, a position he held until 1947 when he was reassigned as a flight operations specialist. In 1956 he was promoted to Director of CAB's Bureau of Safety, and served in this post until transferring to FAA.

During Bakke's 25 years of professional experience in aviation, he has served many times as representative and chairman of U. S. delegations to the International Civil Aviation Organization. Formerly a command pilot in the Air Force Reserve, Bakke is the author of several Air Force manuals and publications on instrument flying and radio navigation.

Eastern Region Director Oscar Bakke (center) was presented the 1966 Career Service Award by Weston Rankin, National Civil Service League treasurer, as Administrator William F. McKee observed approvingly. Bakke was one of 10 government employees honored.

Born in Bergen, Norway, on June 8, 1919, Bakke graduated from Wagner College, Staten Island in 1941 with a B.A. degree. While attending Brooklyn Law School, he was called to active duty with the Army Air Corps in October 1941. He was discharged a Major in January 1946 after serving as an instructor pilot in the Air Training Command and as an air navigation specialist on the Air Corps Instrument Flying Standardization Board. He currently holds an Airline Transport Pilot's rating.

## Burbank Tower Controllers Honored

*The Air Traffic Control Association cited Burbank Tower controllers for demonstrating "outstanding dedication, ingenuity and teamwork" when their tower was destroyed by fire. Merle N. Nichols (left), Los Angeles Tower chief, presented the ATCA awards to Thomas W. Davis, John D. Fraser, Kenneth B. Dickinson and John M. Martin. Assistant area manager Joe A. Orr watches.*

## NAFEC Testing Program Includes Many Aviation Safety Projects

Some typical projects operational during the past month at the National Aviation Facilities Experimental Center at Atlantic City included:

- First operational testing on any part of the new NAS model—the air route traffic control center of the future. The completed digital radar channel sector was checked using simulated traffic and then, later, live traffic.
- A new bright display for airport surface detection equipment was developed so that controllers can look at the "radar map" of an airport without having to shield the scope. The equipment is scheduled to be tried out in field tests at O'Hare Tower.
- Weather Bureau's special research group at the Center has received its first batch of film recording variations in runway visual ranges during low visibility conditions. The film is coming from new compact cameras called photo-packs, designed by the group and built at the Center. Three airports, O'Hare, Kennedy and Stapleton Field at Denver, each have the new equipment.
- Ten student instrument pilots started flying a newly-acquired plane equipped with an experimental flight instrument panel to find the total time it takes to pass an instrument course, using the new instrument panel. Results will be compared with another group that learned on a standard panel.
- Airplane fuel, gelled to various consistencies ranging from that of apple sauce to lard, was put in surplus drop tanks and slammed into flames at a speed of 85 mph by the Center's catapult to compare flammability characteristics. In other tests, drop tanks were scraped along a runway, towed by a truck, and were deliberately ignited. (See catapult feature story on pages 6 and 7.)
- One Center group spent a day high atop a New York City skyscraper where they tracked an FAA plane flying along proposed helicopter routes to verify adequate radio coverage for navigation.
- The performance of two new planes, the Fairchild-Hiller 227 and the Aero *Jet Commander*, was measured by the Center's photo-theodolite system, a four-station optical tracking layout.
- Huge fires, fed by as much as 1,600 gallons of fuel, were deliberately set off and then extinguished to define requirements for adequate airport fire protection. Both dry chemical and liquid foam were used.



# NEW DEPUTY DIRECTOR OF CENTRAL REGION NAMED

Daniel E. Barrow

Daniel E. Barrow, a 24-year career civil servant and air traffic control expert, recently was named Deputy Director of the Central Region.

Barrow, who was chief of the Airspace Regulations and Procedures Division, Air Traffic Service, in Washington Headquarters, succeeds Donald S. King who recently was named Director of the Installation and Materiel Service.

The Central Region, headquartered in Kansas City, Mo., employs 6,040 people in Montana, North Dakota, South Dakota, Minnesota, Wisconsin, Michigan, Indiana, Illinois, Missouri, Kansas, Nebraska and Iowa.

Barrow, who joined the Civil Aeronautics Administration in 1942 as a trainee air traffic controller, worked as an airport tower controller at Providence, R. I., Niagara Falls and Buffalo, N. Y., and Indianapolis. He also served as chief controller of the Wichita, Kan.; Louisville - Standiford; Washington National, and Chicago Midway airport control towers.

From Chicago Midway Tower he transferred to the Chicago Regional Office (it was later moved to Kansas City) as assistant chief of the Airport Traffic Control Section. His next move was to the Air Traffic Service in CAA's Washington Headquarters where he worked as an air traffic specialist. Subsequently, he transferred to Kansas City as assistant division chief of the region's Air Traffic Control Division.

In 1954, Barrow left the CAA to work as an air traffic advisor to the Director of Operations, U. S. Air Force.

He received the USAF's Exceptional Civilian Service Award in 1956 for co-authoring and developing the Area Positive Control concept which subsequently was adopted as a nationwide program for flight operations above 24,000 feet altitude.

He returned to FAA (successor to CAA) in 1958 to become deputy chief of the Requirements and Procedures Division, Air Traffic Service. He later became chief of the Air Traffic Procedures Branch, Systems Requirements Division and, in 1964, the Airspace Regulations and Procedures Division.

Born in Boone, Iowa, Barrow attended Indiana Central College in Indianapolis.

## AT WORK IN VIETNAM

*Thirteen FAAers who volunteered for duty in the Saigon Area Control Center, South Vietnam are: front—radar airway facilities technicians Donald E. Powell, Jerry E. Lee, Kenneth A. Wood and George W. Weimar; rear—radar air traffic control specialists Paul C. Mitchell, Pierre E. Collins, Donald G. Givens and George Kupp, and radar technician John K. Mitchell. Besides controlling traffic and maintaining equipment, they also give on-the-job training to the Vietnamese. Not shown are radar ATC specialists Paul R. Garrigan, William J. O'Connor and John R. Ryan and technician Lloyd H. Yepsen.*

## Veteran Pilot Named Director Of New Noise Abatement Staff

Raymond A. Shepanek

A Noise Abatement Staff was established by the Agency recently to carry out its part of President Johnson's request to "embark now on a concerted effort to alleviate the problems of aircraft noise."

Raymond A. Shepanek of McLean, Va., a veteran pilot and career civil servant, was named director of the new staff.

His office will work closely with the White House Office of Science and Technology, National Aeronautics and Space Administration, Department of Commerce and Department of Housing and Urban Development and the aircraft industry.

It will be the responsibility of the Noise Abatement Staff to direct FAA's participation in the total Government campaign to bring relief to areas disturbed by aircraft noise.

Objectives of the staff include the development of aircraft noise measurement standards, formulation of aircraft noise standards, development of air traffic procedures and aircraft operating procedures to minimize noise and initiate research programs to provide additional noise alleviation.

Shepanek was born in Chicago in 1916 and was graduated from Loyola University in 1938. He served in World War II as a naval aviator and is a Captain in the Naval Reserve. He joined FAA's predecessor agency in 1947 as an aeronautical inspector in New York. He also served in London, Kansas City and Washington in a variety of assignments. Shepanek holds an airline transport pilot rating, an airframe and powerplant (mechanic's) certificate, a flight navigator certificate and a flight instructor rating.

# CENTRAL REGION TECHNICIANS GET A REAL WORKOUT DURING BLIZZARDS

When two midwestern blizzards knocked down power lines and made roads impassable last March, Central Region airway facilities technicians were given the added task of shoveling snow and traveling on snow shoes to make needed repairs.

At Philip, S. D., **Irving E. Kitley** walked a mile over snow-blocked roads to the VOR site to investigate an alarm reported by Pierre, S. D., FSS. He found the control line out, but the VOR was functioning normally on auxiliary power. This was the first of several trips Kitley made by foot and later by tractor to keep the VOR on the air.

**Marvin L. Russell** restored the TACAN at the Dupree, S.D., VORTAC after walking two miles from the highway, shoveling snow out of the power and equipment rooms and mopping water that had dripped from the ceiling after snow had entered the airspace between the ceiling and counterpoise deck.

**Elwood D. Kielhorn,** electronics maintenance technician at Pierre, S. D., helped police and civil defense officials restore emergency radio communications and participated in a dramatic rescue. Kielhorn was en route to the radio site with county civil defense director **James Mulloy** and **Eldon Lindquist** of Western Communications Inc. when they found a couple stranded in their stalled car for more than 17 hours. Their heater had kept them warm until they ran out of gas. Then for several hours they burned paper inside the car to keep warm. Later Kielhorn and **Fred Nicol** were among the first to reach the airport where air traffic control specialists **Raymond Heinold** and **Harold Bolyard** who had been on duty from Thursday through Saturday.

**Gerald J. Edlund** restored the Pierre RCAG after commercial power failed and the engine-generator stopped because of ice and snow blocking its ventilators. He walked two miles to clean out the power room and restart the engine.

From Duluth, Minn., **H. V. Horton** reported the situation his Airway Facilities Branch, MSP-400, had dealt with: "On March 3, icing of power lines gradually weighed down long spans, and the wind whipped them so violently that it appeared that every overhead wire would snap. In some cases the power company tied ropes to the lines then tied the ropes to the ground to prevent the whiplash. At 10:50, the LOM/OM went off the air and remained without power for 72 hours. The DLH/VOR and TACR were giving intermittent alarms due to starting and stopping of the engine generator. We called **Stanley Jedlicka** back from annual leave at 2:00 p.m. and **Louis R. Ouellette** opened the road to the VORTAC for Stanley."

This was just the start of a tough weekend for Oullette, Jedlicka and W. J. Sorenson. At least six facilities were out of service, roads were impassable to automobiles and visibility was zero. The Agency's 4-wheel drive vehicle was pressed into service, yet snowshoes were necessary for several miles. Jedlicka even tried a rented "ski-doo," but abandoned it for snowshoes after he was spilled three times and dragged once.

**R. J. Connett** reported from Airway Facilities Sector at Farmington, Minn., that Harlan Schieche was snowbound on duty for 32 hours during the March 22 storm. During that time he corrected several problems in the air surveillance radar and subsisted on emergency rations stored at the facility. In the second day of the storm, **Harold Johnston** and **Walt Stringer** were stuck in a plow-equipped truck while trying to open a subsector road. Unable to proceed by foot due to zero visibility and deep snow, they spent 12 hours with the truck. Maintenance liaison officer **Gerald Jones** was credited with organizing available sector personnel into an effective force against the many crises that threatened both the facilities and the health and welfare of his men.

Pierre, S. D., was hit for a second time during the March 22-23 storm and **Marvin Russell** was stuck at the VORTAC all night.

A day described by **Leroy A. Spear** of the Green Bay, Wis., AFS, summed up all the experiences of technicians throughout the area:

"Received call at my residence that a facility at the airport was alarming. A blinding wet snow storm was in progress accompanied by 60-knot winds. Snow and darkness at the airport made it almost impossible to find the runway leading to the facility. The airport administration building was closed and all airport lights were out except those on the active runway, and those were obstructed by snow. After inching along the runway and plowing through unseen snow drifts, I found the driveway to the facility, but it was blocked by three feet of snow. I walked to the facility. I ascended the ladder with a broom to clear away packed snow while the wind almost blew the ladder from under me. After I removed the snow from the TACAN antenna and the monitor antennas, the alarm ceased and the facility was restored to normal. On return trip, got stuck in the soft runway grass so I abandoned the vehicle".

## Paula Stanley Crowned Washington's 1966 Miss FAA

*Paula Stanley (left photo) was crowned Washington's Miss FAA for 1966 by Administrator William F. McKee at the Federal Aviation Club's recent dance. Runners-up were Joan Davis and Evangeline Iverson. They were selected from a list of 10 finalists shown on the right. They included: from left—Joan Davis, Evangeline Iverson, Rita Miller, Rosemary Petruso, Linda Probst, Pat Shingledecker, Paula Stanley, Marci Thompson and Beverly Winfield. Not included in photograph: Kathy Johnson.*



## Honor Washington National Employees

*Three Washington National Airport employees were singled out for special awards recently. Top left: Thomas D. Flaherty (right), assistant chief, Maintenance Division, was selected Washington National Airport's Employee of the Year for his work in maintenance and airport improvements. Here he receives the congratulations of Airport Manager Edgar B. Franklin (left) and Arven H. Saunders, Director, Bureau of National Capital Airports. Top right: Also receiving awards from Director Saunders were Leroy H. McCauley of the Equipment Maintenance Branch and Ray W. McNall, Maintenance Division.*

## Anchorage Science Fair Director Ted Young Lauded for '66 Effort

Ted R. Young, electronics engineer in the Airway Facilities Division in the Alaska Regional Office, was commended for his work as Director of the 1966 Greater Anchorage Science Fair.

Young, and other FAAers who served as judges, were lauded by A. G. Hiebert, manager of KTVA, Northern Television, Inc., in this letter to Regional Director George M. Gary:

"As a past director of the Greater Anchorage Science Fair, I had the pleasure this year to observe the organization behind the biggest and best Science Fair ever held in our area. Ted Young, as Director, did an outstanding job of organizing and leading the Fair to its conclusion. I think Ted's performance has been excellent and should be recognized. The future success of the Greater Anchorage Science Fair is assured by virtue of the solid foundation these personnel of yours have built for this very worthwhile event."

Young has been Fair Director for the past two years.

# EVALUATOR SEES A PILOT 'SAVE' IN ACTION AT PASO ROBLES FACILITY

Saving a disoriented pilot becomes a simple matter with new doppler-type VHF-UHF direction finders (DF) installed in flight service stations. Many DF "saves" have been reported since their installation.

It is rare, however, that an FAA evaluator is on the scene when a pilot is being "saved."

But such was the case when Schuyler M. (Slick) Gardner of the Western Region Evaluation Branch flew to Paso Robles, Calif., on a recent routine evaluation mission.

In the vicinity of Paso Robles Airport, Gardner began a simulated lost aircraft problem using the DF-facility. Suddenly, a feminine voice broke in on the frequency to inquire uneasily: "Paso Robles Radio, this is Cherokee 45W—could you please describe your runways to me?"

Robert L. Horton, the specialist who had been working with Gardner, described the airport and surrounding terrain.

"But it doesn't look quite right to me," the lady pilot replied. "The runways I see look plowed and covered with dirt."

"Please depress your microphone button for 30 seconds so we can check your position," Horton replied. Referring to the direction finder scope, he advised the lady she was northwest of the station, probably in the vicinity of Camp Roberts.

"Climb to and maintain 5,500 to remain above the Camp Roberts restricted area," Horton advised.

A relieved voice acknowleged.

William K. Vanderpool, chief of the Paso Robles FSS, then came on the air to ask for a description of the terrain. With the aid of this description and VOR readings, he informed her that she was 28 miles northwest of Paso Robles.

Every two or three minutes, Paso Robles specialist asked the pilot to transmit a signal for a steer. When the radio signal was received on DF, a bright line flicked on the scope. By depressing a sensing button, the FSS crew was able to determine the signal's direction and issue appropriate headings.

Soon the Cherokee landed safely at Paso Robles Airport. The pilot, Mrs. Grace Ellis of Concord, Calif., strolled briskly into the station and said she was grateful for the FAA assist. She explained she was on her third cross-country and had a total flight time of only 60 hours.

Meanwhile, on his return to Los Angeles, Gardner was able to write an evaluation report based on an actual DF "save" rather than on a simulated problem.

Relieved after being saved by Paso Robles Flight Service Station personnel, Mrs. Grace Ellis, a pilot, had her cross country flight entered in her log book by Paso Robles FSS chief William K. Vanderpool.

Sign up today for U.S. Savings Bonds through the automatic Payroll Savings Plan.

# your health

FAILURE TO FOLLOW doctors' orders is a baffling paradox of modern living. Once health returns after an illness and anxieties leave with the fever and the pains, the doctor's advice is often forgotten and unheeded. The old comfortable rut of habit returns. Starchy foods come back on the table and pills are left untaken and prescriptions left unfilled.

While almost everyone fails to follow doctor's orders at some time, nearly one-third of all patients fail to follow doctor's orders at all. Those least likely to follow orders are persons between the ages of 45 and 60, more likely a woman than a man, and those from a lower socio-economic level and probably with a lower level of education, a recent study revealed.

Orders most frequently ignored are those which require the patient to change his personal habits or behavior—stop smoking, lose weight, get more sleep. Delays are frequent when an illness calls for surgery. There is frequent noncompliance when the physician advises eye and ear examinations. Medicinal advice is more apt to be followed than that suggesting surgery. There is a way to good health. Follow the physician's orders.

# -and safety

SAFETY IS NOT A ONE-TIME THING. One good stiff lecture or even a harangue about potential hazards will never bring the safety sinners into the fold. The art of persuasion through face-to-face conversations, timely and frequent, will have better results. It is up to the supervisor to persuade his employees to be safety conscious. Safety hazards lurking under a barrel may be brought to light by a healthy two-way exchange. Changing attitudes are danger signals. When an employee is preoccupied his mind may not be on his job, and that is when he is likely to be hurt. A change of assignment may be in order if the employee is not capable of doing his regular work. And no favorites are allowed in the safety game. The favored and less-favored employees play by the same set of rules, or someone may get hurt. Generalizations about working safety are what they are—generalizations. Be specific; praise the employee for what he is doing correctly and, if necessary, point out possible improvements.

## A 'PROUD' PROGRAM

*Redheaded Aeronautical Center Secretary Mrs. Sherry Haley affixes a PROUD Center sticker to her car's rear window which advertises the Center's PROUD program. Designed to instill pride of workmanship in all its employees, the Center advertises the PROUD program in INTERCOM, bulletin boards and employee news.*

# Kudos to FAA in the Congressional Record

William T. Clark, a Columbus, Ohio, resident says he has discovered in FAA a new world of Government efficiency and dedication.

Clark's desire to become a private pilot led him to the FAA and Eastern Region personnel at Port Columbus Airport. He described his meeting with the FAA in a letter he wrote to Congressman Samuel Devine of Ohio.

Impressed by the letter, Congressman Devine noted in the Congressional Record: "General William McKee and his staff are certainly to be commended for the outstanding service rendered by these dedicated people, and other agencies of our Government would do well to emulate the practices of the FAA personnel in Columbus."

Clark's letter to Congressman Devine stated:

"From time to time I have had the urge to write to you concerning Federal agencies. I have suffered abuse or worse still, utter disdain, every time it has been my misfortune to tangle with a Government employee. Finally I write concerning the FAA.

"As many men in, if you'll pardon the familiarity, 'our' age group, I wanted to fly from the time I took my first ride in 1928. After I left the service . . . it was not until July 1965 that I was in a position to take another crack at flying. When I realized I was going to fall into the tender mercies of another Government agency I nearly tossed over the whole thing, but I still had the urge and it was now or never. I made my first trip to the FAA at Port Columbus for my student permit. I was warmly greeted by the receptionist, given more assistance than anyone could reasonably expect, met the gentleman in charge, who actually made time to answer my questions and left convinced that the FAA could not possibly be a Government agency.

"I was actually invited to visit the tower where three men with the memory of elephants and the patience of Job directed, guided, cajoled and led the little 150s and the big 707s in neat order without once falling back on abuse or disdain. These people are all nameless for the most part to me and I, certainly, to them. I don't know any possible way they could be thanked for their dedication, concern and plain devotion to their jobs and the lives of those who are under their control. So I shall thank them to you and you can relay this to whomever should have it.

"Specifically among the dozens of people and voices is the tower controller who when told 'this is my solo flight' said 'We understand. We'll watch out for you,' and did by calling me before I called him to make my three 'first' landings simpler. At least a half dozen voices in the FSS were ready with anything you needed and with concern that you understood the weather situation. One of these is a lady who if asked will tell you it's not fair weather for students to try their wings. The smooth, even, unexcited voice of the radar operators who take the time to watch for traffic for a Cessna 150 flying marginal VFR. Last and certainly not least is the man who offered to give up his Christmas Eve to give a flight test to a total stranger, William Hubbard. Only the weather prevented it, and when I took the test flight I found not a hidebound check rider but still another instructor more interested in safety than a 1, 2, 3, pass-or-fail check ride. In the entire 50 hours from student permit to flight test I did not encounter a single instance of rudeness, not one sneer, not one tone of irritation or impatience. Every person I asked for assistance, information, or just wanted a question answered went out of their way to help and did it with interest. It has been an unbelievable experience.

"So, I finally got around to writing about a Government agency. Would that we could have more like the FAA."



# FAA/AIRSPACE EXHIBITS ROLL IN WESTERN REGION

Two FAA visual displays recently went on tour with a mobile education science exhibit in California. The displays showed the FAA and the National Airspace System in action.

The mobile exhibit, which was prepared and shown by the Hawthorne Christian Schools of Hawthorne, Calif., was mounted in a semi-truck trailer van entitled "The Airport in Action."

In a letter to the school, Western Region Director Joseph H. Tippets wrote, "All of us were most impressed with the fine exhibit prepared by the Hawthorne Christian School, particularly the manner in which you were able to display that portion of the exhibit relating to our Agency."

More than 500 people, exclusive of FAA employees, toured the exhibit. On tour for two weeks, the exhibits visited Hawthorne, Harbor City, Mira Loma, Rancho Mirage and Fresno.

On March 30, the display was set up at Western Region Headquarters where FAA employees had a chance to see it.

# Dr. Stanley Mohler Receives 1966 Boothby Award

Stanley R. Mohler, M.D., an Agency aeromedical research scientist, received the 1966 Walter M. Boothby Award at the annual meeting of the Aerospace Medical Association in Las Vegas, Nev.

Dr. Mohler was cited for his research in pilot fatigue and emergency airplane evacuation which was accomplished during his four years (1961-1965) as Director of the FAA's Civil Aeromedical Research Institute (CARI), now called CAMI, at Oklahoma City.

The award, established in 1961 in memory of Dr. Walter M. Boothby, former Mayo Clinic aviation medicine researcher, is given for outstanding research in health promotion and disease prevention in professional airline pilots. It carries an honorarium of $1,000.

Selections for the award, sponsored by the Aviation Insurance Agency of Atlanta, Ga., are made by a committee of Association doctors.

After four years at CARI, Dr. Mohler transferred to the Agency's Washington Headquarters in 1965 as chief, Aeromedical Application Division, Office of Aviation Medicine. In this position he oversees the application of research results to civil aviation—particularly in new aircraft types such as executive jets and future 700-passenger airliners. He also works closely with airplane designers to improve safety for both pilots and passengers.

Prior to joining the FAA in 1961, Dr. Mohler worked at the Center for Aging Research, National Institutes of Health, U. S. Public Health Service, Washington, D. C.

A native of Amarillo, Tex., Dr. Mohler attended the University of Texas following military service with the U. S. Army. He received his M.D. degree in 1956. After graduation, he joined the U. S. Public Health Service.

## GRANDY RETIRES

*Retiring supervising inspector Harold L. Grandy of the Cheyenne General Aviation District Office receives certificate from assistant area manager Charles M. Demaree. Grandy spent 21 of his 25 FAA years in Cheyenne. The Wyoming State Aeronautics Commission gave the retiring veteran a special award for his outstanding work.*

# tech talk

FAA TIES IN WITH AUTODIN. Future demands for communications at major FAA facilities were considered when the Agency acquired AUTODIN service. AUTODIN, for AUTOmatic DIgital Network, is a system of the Defense Communications Agency which serves a diversified community of subscribers. Through overseas switching centers in Europe and the Pacific, the system provides worldwide coverage for the military departments, State Department, FAA and other Government agencies.

In FAA, all ARTCCs, regional offices, NAFEC, the Aeronautical Center and Headquarters are tied together with AUTODIN teletypewriter terminals. These terminals can be reconfigured into high-speed operation when the traffic demands.

AUTODIN allows intercommunication between diversified methods of data interchange. Teletypewriters, magnetic tape terminals, punch card terminals and computers can interchange information through the system with a teletypewriter message often ending up as a punch card or as a magnetic tape recording for direct processing through a computer.

Security is assured by link encryption. FAA technicians are working closely with Western Union technicians to work out the inevitable growing pains of incorporating FAA equipment with AUTODIN.

FILTER CUTS RADAR INTERFERENCE. Radio astronomy and FAA radar have been made more compatible through the efforts of two divisions in Systems Research and Development Service. The Frequency Management Division and the Communications Development Division teamed up to clear the air when FAA radar caused interference with nearby missile sites, observatories and telephone services.

To remove the offending signals, SRDS developed a high power band pass filter. A prototype was tested early this year at the Fort Heath, Mass., air route surveillance radar site which had caused problems for the Harvard Observatory radio telescope.

During the tests, the radio telescope's 60-foot antenna was beamed at the Fort Heath radar site and the radar signal was monitored at both 1335 and 1420 megacycles. After a filter was installed in one of the channels, the intensity of the interfering signal was reduced by more than 50 db (a signal strength reduction of 100,000).

Similiar steps are planned at Hamilton, Mass., and at London, Ohio.

# OVERWATER PILOTS RECEIVE SPECIAL TRAINING


Honolulu Tower controller Bill Weeks conducts courses on radio navigation and ditching procedures for the Hawaiian area's pilots who fly between the islands.

Hawaii-based pilots now can get expert instruction on radio navigation and proper ditching procedures because controller Bill Weeks was impressed with one pilot's need for such training.

With the cooperation of private flying clubs in the Honolulu area, Weeks now conducts courses to help give private pilots the knowledge they need for safer over-water flying between the Hawaiian Islands.

"It's easy to get disoriented and lost over water," Weeks says. "There is no point of visual reference, no landmark against which a pilot can check his position."

Weeks started the voluntary program shortly after a light plane ditched in the ocean south of Honolulu and claimed three lives. The pilot had been in contact with the Maui Tower when he went down. In spite of the expert help of air traffic control specialists, the plane couldn't be saved because the pilot was unfamiliar with radio navigation techniques and with the equipment on board his plane.

Weeks, who holds a commercial pilot's license, credits the success of his program to the support he has received from tower chief Bob O'Hara and operations officer Ken Fisher of the Honolulu Tower. With their cooperation, Pacific Region recently adopted Week's suggestion that all Pacific controllers be required to be familiar with aircraft VOR equipment. Every Pacific Region facility now maintains a complete registration list of local general aviation aircraft which includes make, model, color, registry and type radio navigational equipment aboard. Also posted are graphic illustrations of the various types of radio navigational aids including five or six steps of simplified instructions in their use.

Weeks modestly says, "If lives can be saved through these training sessions, I'm happy to contribute my time to help the pilots stay alive."

## Elmendorf Ground Breaking

*Ground was broken for a combined air traffic control tower and radar approach control facility at Elmendorf AFB, Alaska, by, from left, Alaskan Regional Director George M. Gary, Swalling Construction Company president Albert C. Swalling and Colonel Olin E. Gilbert, Alaskan Air Command. The cost is over $1.4 million.*

# Cost Reductions, Increased Services Highlight Seventh Annual FAA Report

Continued air safety and more efficient air travel in a year of record activity highlight the Federal Aviation Agency's Seventh Annual Report submitted to the President and the Congress recently.

The report, covering fiscal year 1965, describes significant FAA cost reductions achieved while meeting increasing demands for aeronautical services.

The supersonic transport development program moved into an 18-month phase of accelerated design work leading toward initial prototype construction by the end of 1966.

New rules were issued requiring greater safety margins for certain aircraft landings on wet or slippery runways, higher equipment and operating standards for air taxi operators and for commercial operators of small aircraft, and new standards for passenger evacuation of larger air carrier or commercial aircraft in emergencies.

Field tests of a computerized air traffic control system were started and contracts were let for major components of the en route phase of the future, semi-automated national airspace system.

The first facility combining distance measuring equipment (DME) and an instrument landing system (ILS) was commissioned. Designed to make approaches to airports during poor weather safer and more efficient, the DME-ILS combination gives pilots continuous distance-from-the-runway information.

Field tests of a newly developed waveguide glide slope ILS antenna indicated that this antenna will provide, at less cost, the accuracy needed for automatic all-weather landings.

In continuing its efforts to assure pilot proficiency, FAA established a General Aviation Jet Training Standards Board to develop and recommend standards and procedures for aircraft-type ratings, flight checks and transition and recurrent training for operators of general aviation (non-airline) turbojet aircraft.

Also in the interest of pilot proficiency was FAA's issuance of a new flight instructor's handbook to be used as a basis for initial flight instructor testing. In addition, a new Federal Aviation Regulation requires biennial requalification of all flight instructors.

The crisis in the Dominican Republic and the Vietnam conflict made special demands on FAA. For example, during the emergency Air Force airlift to the Dominican Republic, peak air traffic loads were tripled at the Miami Air Route Traffic Control Center.

FAA stepped up its cost reduction programs and achieved economies of approximately $20 million during fiscal year 1965.

Gains in employee productivity enabled the FAA to operate and maintain its network of air traffic control and air navigation facilities with fewer positions than would have been needed under fiscal year 1962 productivity levels and staffing standards.

Substantial savings also were achieved through joint use with the Department of Defense of long-range radars and other equipment, and also through integrated FAA-DOD point-to-point commercial wire communications services.

The FAA's Seventh Annual Report contains chapters on Aviation Safety, Airspace Control and Facilities, National Defense, Fostering Civil Aeronautics and Air Commerce, Administration, and statistical tables on accident rates for U. S. airlines and general aviation.




1

2

3

4

5

6

# names & faces

**1** *Tops in Toastmasters for New Jersey, Delaware and eastern Pennsylvania is NAFEC's Lt. Russell E. Gilmore, USN, an airport lighting expert.* **2** *For his participation in the ICAO Accident Investigation Division meeting in Montreal, John M. Cyrocki, Flight Standards chief, Pacific Region, was honored by CAB.* **3** *Antoinette George, secretary in Eastern Region's Washington Area Office, is $12.80 richer because her suggestion simplified control of written examinations.* **4** *Watch supervisor Margaret Gaines Fairchild of Greater Cincinnati Tower greets Central Airlines Capt. Ty Youree who piloted the two-millionth air carrier operation handled by the tower in its 19-year history.* **5** *TV viewers in Boise, Idaho, got an insight into air traffic controller qualifications when FAA tower controllers Delphine J. Aldecoa (left) and Sylvia A. Burkey were shown at work on a 30-minute local program.* **6** *Charles W. Crane tries an electronic door opener at the Olathe, Kan., AFS, which he and Robert Shadoin designed and built. The door can be opened only when the right combination of buttons is pushed.*

**1** *Alaskan Region Flight Standards got a step nearer its goal of 100 per cent membership in Toastmasters when five inspectors were sworn into the Anchorage chapter. From left, William Shuldt, James McFarland (not FAA), Bud S. Seltenreich, Delbert Carlson, David Martin (not FAA), Edward Allen and Eugene Stoltz.* **2** *Glenn E. Essley, Great Falls, Mont., Center, received an "Invalid Certificate" from fellow employees after accumulating 2,000 hours sick leave.* **3** *Welcoming Lewis Burkart Jr. into the "Gallon Club" for having given a gallon of blood to the Friendship Airport blood bank are, from left, Beverly Shields, Anita Fischer, Burkart, blood bank chairman S. E. Emmons Jr. and Sandra Higgins.* **4** *Eastern Region Air Traffic Division chief, Robert W. Martin (center) is flanked by award winners, from left, Kenneth Galbraith, Marie Capo, Uriel Flax and Henry Skubik* **5** *The Aeronautical Center's Committee on Employment of the Handicapped was honored for its accomplishments by Dr. Waldo Stephens, Chairman of the Governor's Committee. From left: Don Davis, Center Director W. Lloyd Lane, Donald L. Price, Dean S. Anderson, Margo Tuller, William L. Shelton, Dr. Stephens, Charles P. Head, Jane Fanning, Harold F. Webster and Lewis Chestnut.* **6** *Martin C. Elliott (right) receives the Seattle Area Engineer of the Year Award from Seattle Area Manager Robert O. Blanchard.* **7** *Nelson D. Jump, chief, Personnel Operations Division, congratulates personnel management specialist Al Faison for being named speaker of the day by the FAA Headquarters Toastmaster's Club. Faison, a former air traffic control specialist, is in training in the Office of Personnel and Training under FAA's Inter-Agency Career Development Program.*

**8** *Howard E. Nugent of Whitewater, Wis., (right) is congratulated by Flight Service specialist LeRoy Elfstrom on being the 1,000th to take the pilot written examination at the Rockford, Ill., FSS.* **9** *Doris Anderson recently joined the Electro-Mechanical Section of Pacific Region's Airway Facilities Division to become the first lady engineer to join the traditionally all male ranks of Pacific Region engineers.* **10** *Pacific Region's Safety Contest ended in a four-way tie when four areas kept a perfect safety score with no industrial or motor vehicle accidents for FY 1965. From left: area managers Donald F. Epler, Maui, and Herbert O. Williams, Molokai, Director Phillip M. Swatek, area managers Joseph A. Soares, Kauai, and Ambrose (Pete) Morrison, Hawaii, and regional safety officer James A. Forsyth.* **11** *Ralph M. Howell, assistant air defense liaison officer representing FAA at 30th NORAD Region, received a certificate of achievement from Maj. Gen. Frederick R. Terrell, Commander, on completion of his assignment.* **12** *Admiring the new Springfield, Mo., direction finder are, from left, H. H. Hayes, FSS chief; R. N. Bolick, AFS chief, and Lester Jones, airport manager.* **13** *Airway Facilities Sector chief C. S. Moeller, AFS-768, Greer, S.C., (left) presents awards to electronics maintenance technician Arch M. Ramsey, Janice O. Yeargin, clerk stenographer in Moeller's office and electronics maintenance technician Hiram F. Sexton. Willis T. Sherman (not in photo) was also presented an award.* **14** *Cleveland Center award winners got a bonus with their cash awards when Deputy Administrator David D. Thomas dropped in to present certificates. From left, area manager Ralph Link, Thomas, Richard Rago, Charles Russell and Ralph Skufca.*

# personnel pipeline

## PRAISE FROM PERSONNEL FOR FAA WIVES

After visiting 12 of the more remote sites in Alaska with Regional Director George Gary, Robert H. Willey, FAA's Associate Administrator for Personnel and Training, lauded FAA wives for the important role they play in "orienting Agency newcomers to the area as well as contributing their time and effort to the interests of the community." "They deserve the Agency's thanks and appreciation," he said. Chatting with an unidentified electronics maintenance technician are, from left, Charles W. Muhs, supervisory air traffic control specialist at Iliamna; Willey, Gary, and Robert Williams, executive officer, Alaskan Region. "I was pleased and impressed by the appearance of the facilities and the morale among the employees," Willey said.

## YOUTH PROGRAM EXPANDED

The nation-wide Youth Opportunity Program (YOP) will be expanded to 1¾ million jobs this year, compared to 1 million in 1965, Vice President Humphrey announced recently. Last year the FAA employed 650 YOP youngsters in general clerical, typing, general labor and trade helpers jobs throughout the United States and in Puerto Rico. The YOP provides meaningful summer work and training opportunities for needy boys and girls. In 1966, summer employment for these youths will stress training and counseling for all those involved in the program. The Civil Service Commission has developed instructional guidelines for supervisors. The instructions will enable supervisors to teach the young workers how to become effective workers and how to prepare for permanent employment. The Agency is currently developing internal guidelines to familiarize supervisors with the program.

## BENEFITS OUTWEIGH COSTS

Government cost of employee fringe benefits in the FAA are worth 23½ per cent of payroll costs. This fact should bring some solace to those who lament the difference between take-home pay and gross pay. The Government's and employee's contributions for such benefits as life insurance, health benefits, retirement, injury compensation and leave total $100 million per year. Employee contributions make these fringe benefits, all described in recent HORIZONS articles, worth even more. An employee's individual share in the $100 million pot varies with length of service, duty station and a number of other factors, but a mean average would give everyone a share equal to 23½ per cent of his basic salary. A $5,000 annual salary is really worth $6,175 because the employee's fringe benefits are worth $1,175.

## James E. Dow Named To Attend Princeton

Director of the National Airspace System Special Projects Office, James E. Dow, will attend the Woodrow Wilson School of Public and International Affairs, Princeton University, during the academic year 1966-67. The Princeton Fellowship, one of the most coveted opportunities available to mid-career managers, went to Dow at the 22-year point in his Government career that started as a controller and progressed through top level management and technical positions.

## Career Service Award To Edward J. Pierson

A crew chief in Moisant Tower, New Orleans, Edward J. Pierson will spend the academic year 1966-67 on the Cornell University Campus under a $1,000 fellowship to cover expenses beyond those paid by the Agency. Pierson will work toward his Ph.D. after having earned both his B.A. and M.S. from Tulane University while holding down a full-time job as a controller for FAA. The fellowship was granted by the National Institute of Public Affairs.



1

2

3

## PAGO PAGO WEATHERS WORST HURRICANE IN ISLAND HISTORY

All of the FAA's 36 employees and dependents will long remember the angry hurricane which left more than 50,000 Samoans homeless, with 11 dead and more missing. Before the full force of the hurricane hit the island chain, FAA dependents were evacuated from the Tafuna housing area into the concrete IFSS receiver building. **1** After the blow was over, a Samoan boy stands amidst the wreckage. **2** Bob Luuwai flashes out first word from stricken Samoa using jury-rigged antenna. **3** One little Samoan didn't like what she saw after the winds subsided. **4** Mrs. Satsuko Kobayashi, wife of Pago Pago IFSS boss, points to canvas shades that were virtually useless during height of storm. All FAA dwelling units were completely drenched. **5** Area manager Jack Tittle holds part of a 500-pound bread shipment donated by a Honolulu bakery and flown on FAA aircraft to Samoa. Honolulu residents responded generously to hurricane victims' needs with tons of food and clothing. **6** Sweet potato cuttings flown to Samoa by FAA aircraft will supplement the taro crops destroyed by the storm. Inspecting the cuttings are, from left, property and supply officer Hugo Gebauer, Sioeli Fuimano and Taumu Lalau, all from FAA's Samoa Area Office.

4

5

6

### Mrs. Eva Rosario

When the ultra-modern San Juan Air Route Traffic Control Center was being constructed by a Puerto Rican contracting firm, Eva Rosario frequently was called away from her job as time attendance clerk in the Center to act as interpreter when language problems occasionally impeded progress. The mother of three children who speak Spanish as their native tongue and the wife of a Puerto Rican executive, Eva's dark hair, flashing eyes and slight Spanish accent belie the fact that she actually is a native of Batesville, Ark., where her mother still lives. Eva is no stranger to aviation. She was an Air Force radar operator at Stewart Field in Newbury, N.Y. Her husband, Antonio, was Superintendent of Operations, Air Division, Puerto Rican Port Authority, before being named to his present post, administrative assistant to the Director of Eastern Airlines' Caribbean Office.

# FAAers on the job

### William A. Dolan

"Accustomed as I am to public speaking" is a switch on an old speechmaker's cliché. However, it speaks eloquently for William A. Dolan, electronics design coordinator, who works in the Airway Facilities Division in the Alaskan Region. Off duty, Bill serves as publicity chairman of Toastmasters International in Alaska and is an active participant in the group. A graduate of Seattle University with a bachelor of science degree in electrical engineering (electronics), Bill has served in Alaska with FAA for eight years. His wife, Virginia, and sons Steve and Bruce, don't mind his spending evenings away from home with the "boys." They know that while he is striving to improve his elocutionary talents, he is also telling more people about the activities of the Agency.