FAA HORIZONS

JULY 1965

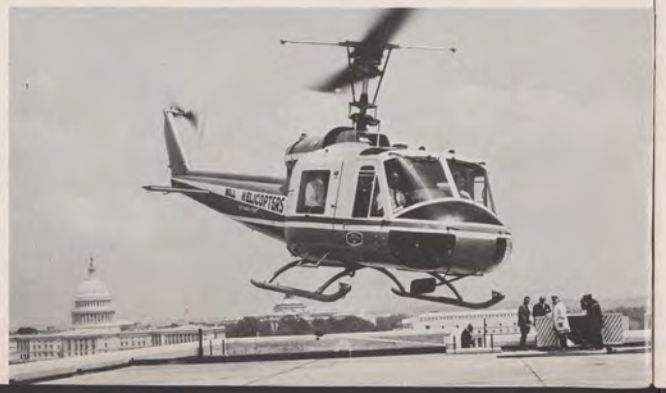
OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY

Eva 7/26/65

"... the best man
for the important job..."
—*President Johnson*

HELIPAD DEDICATED

Administrators of the FAA—past, present and future—took part in the dedication of the helipad atop the Headquarters building in Washington last month as part of a day-long session to brief William F. McKee, incoming FAA Administrator. The conference following several weeks of daily meetings between Halaby and McKee on Agency matters, all designed to effect an orderly transfer of command. As part of the helipad dedication, the Administrators joined Halaby in an aerial survey of the Washington area aviation sites, flying in a 10-place Bell Model 204B helicopter. **Above:** The helicopter makes first landing on the FAA helipad. **Left:** from left, former Administrators Charles F. Horne, Delos W. Rentzel, Elwood R. Quesada, Donald W. Nyrop, Frederick B. Lee, Halaby, McKee and Theodore P. Wright, inspect the roof top helipad after the helicopter survey flight. **Below left:** William F. McKee and N. E. Halaby discuss the usefulness of the new helipad. **Below right:** A Bell test pilot lands the copter on a 40-foot diameter circle marking the touchdown area.



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FEDERAL AVIATION AGENCY

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COVER

Hand raised high, William F. McKee is sworn in as Administrator of the Federal Aviation Agency by President Johnson at White House ceremonies on July 1. Mrs. McKee and son William Jr. listened as McKee took his oath of office.
(See pages 4 and 5).

New FAA Administrator

"...the best man for the important job..."

= President Johnson

William F. McKee

In the White House's Cabinet Room, President Lyndon B. Johnson solemnly addressed a group who had gathered to hear the swearing in ceremony of William F. McKee as the new Administrator of the Federal Aviation Agency.

President Johnson said: "I don't know whether it is more politic to call him General or Mister or Bill but whatever the title of the man, I know that every knowledgeable person in this Government and out of it, calls "Bozo" McKee the best man for the important job that I am assigning him this morning."

The President continued saying that McKee's assignment as the new FAA Administrator was "to develop a supersonic transport which is, first, safe for the passenger; second, superior to any other commercial aircraft; and, third, economically profitable to build and operate.

"All about the man and about his record, I think, is conclusive evidence that he is the man to direct this effort. I am very proud to have him aboard."

McKee comes to the Agency from the National Aeronautics and Space Administration where he was Assistant Administrator for Management Development. He joined NASA on Sept. 1, 1964.

A retired four-star general, McKee left the U.S. Air Force on Aug. 1, 1964 after serving 35 years in the military. He was the Vice Chief of Staff of the Air Force when he retired.

McKee graduated from West Point in 1929 and was first assigned to Fort Barancas, Fla., as a lieutenant in the Coast Artillery Corps. After many artillery assignments, he became Deputy Assistant Chief of Air Staff for Operations in 1943.

Subsequently, McKee became commander of the Air Force Logistics Command, the USAF's multi-billion dollar worldwide logistics operation, where he earned his fourth star in 1961.

He was awarded three Distinguished Service Medals among many other decorations during his lengthy service. In 1957 he was presented the first annual Distinguished Management Award for outstanding contributions in Air Force logistics assignments. #

William F. McKee, FAA Administrator, swears in David D. Thomas as his Deputy Administrator during a special ceremony held at the FAA Headquarters in Washington on July 1.

Above: In the College Station control tower, Easterwood Airport, air traffic control specialists Phileo B. LaFlore and Carl L. Allen (left) handle clearances for cadet operations. Right: Student and FAA inspector taxi to parking apron in one of the six aircraft used by Texas A&M University in their ROTC flying training program.

TEXAS CHECK RIDE . . . *GADO Inspectors In The Saddle*

"OK, your pylon eights were pretty good. Next time try to kill your drift faster. Now turn to 270, climb on up to 6,000 and we'll make with the chandelles and lazy eights." The small single-engine *Cessna* banked gracefully in the Texas sky and buzzed louder as the student pilot started his climb following the FAA flight inspector's request.

This conversation, and others like it, goes on frequently in the skies over Texas A&M University and nearby Bryan, Tex., as Agency flight inspectors flight check and assist college students in their flying training program.

"General aviation district office inspectors," said Don W. Loftin, operations inspector, "work closely with Air Force and Army reserve officer training corps (ROTC) cadets in A&M's flight training program."

Teaming up with the Air Force and Army, the FAA gives valuable assistance in training men for the defense of the United States. In colleges throughout the nation, the weeks reserved for exam cramming also are filled with flight check rides for the flying ROTC cadets. Just as faculty members do during the final days of the school term, FAA's operations inspectors go to work early and stay late to give the required flight examinations.

Texas A&M University is a prime source of officers for the armed services. Tradition has it that the entire senior class of 1917 gave up its studies and volunteered for military service en masse. During World War II more officers claimed Texas A&M as Alma Mater than any other group. Today, the tradition of service continues on this south central Texas campus and is typical of college ROTC programs across the country.

Even with the flight program cut considerably this year, the university will send 38 pilots to the Air Force and 12 to the Army from the current graduating class. This makes a total of some 758 men who have participated in the flight training program since 1958 when the present flight school contractor took over the training.

Although FAA inspectors are seen only briefly by the student pilots, the Agency plays an important part in the program. After the armed service agrees on a flight training program for the college, the FAA becomes responsible for the certification of the school, the type of instruction to be given, the caliber of personnel accepted for the program and the approval of the formal instructions and syllabus.

"We give stage check rides at 12 hours to 10 per cent of the students," said Loftin. "We give another at 20 hours when we spot check 20 per cent, and finally we check ride all students at the completion of 35 hours flight time."

Flying with the cadets gives inspectors the added opportunity to view the standards and quality of flight instruction. From personal observation and their part in the operation, they can recommend training improvements if necessary.

An Air Force spokesman at Texas A&M remarked that the program is an economical method of finding out whether a student could qualify to meet the requirements of piloting today's advanced military aircraft. "It costs us $800," he said, "to wash out a cadet in the flight training program. In regular military training, the cost would be in the vicinity of $21,000."

Working with the university and FAA is the contract flying school, Texas Airmotive Company. Merl Gough, chief instructor and designated pilot examiner, said, "We use six aircraft, six instructors, two mechanics and a helper and a secretary to keep the show on the road."

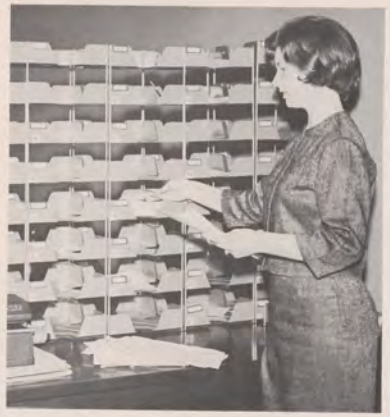
During the 35-hour check rides this spring, operations inspectors William E. Berkebile Jr. and Don Loftin, both of the Houston GADO, spent two days riding with the cadets who were ready for examination. Both Loftin and Berkebile are enthusiastic about their role in promoting aviation.

"Going through the ROTC flying program means a lot to many young men," said Berkebile, "and the FAA is helping make some of their dreams come true for those interested in aviation as a future career." #

Below: Army ROTC Cadet Major Ted Dickie plots his course for operations inspector Don W. Loftin before 35-hour check ride. Right: Air Force Cadet Hale Burr checks oil on walk-around check with William E. Berkebile Jr., operations inspector.

Above: Returning from successful check ride with FAA inspector William E. Berkebile Jr., Air Force ROTC Cadet Captain Kit Alverson wears a satisfied grin. Capt. Donald T. Anderson, USAF, assistant professor of Aerospace Studies talks with cadets. Below: Merl Gough and a cadet check the flight schedule.

Airmen's Licenses Rushed By Return Mail . . .



Above: Kay Atkinson, secretary to Branch Chief Eddie Kjelshus, tackles some of the quarter of a million pieces of mail passing through the branch each year. Below: Kaye Willson grading exams. Below, right: application examiner Eugene Harjo (standing) cross checks applicant forms against master file to determine if individual has another on record. Billy P. Mangum inspects an application to check compliance with regulations.

The avalanche of correspondence flowing into the Aeronautical Center each day is one indicator of the continuing interest in flying.

"Over a quarter-of-a-million pieces of mail are handled each year at the Center," said Eddie Kjelshus, chief, Airman Certification Branch, "and more than 8,000 airman certificates are sent out during an average month."

The essential and increasing business of issuing certificates to pilots and other airmen under the provisions of the Federal Air Regulations is no small undertaking. Not only are certificates issued to pilots, mechanics, flight engineers, dispatchers, riggers and many others, the branch also sends out duplicates in cases of loss or theft—these come to over 10,000 a year. They also record more than 15,000 changes of address, handle 12,000 legal documents related to violations and other matters, and answer almost 17,000 pieces of general correspondence.

"The procedures for getting a certificate aren't complicated," said Eugene Harjo, airman application examiner. "It's about the same thing whether you are applying for a pilot's license or for permission to pack 'chutes."

Last year, for example, there were 92,400 applications for airman certificates. Each person, before making application, had to train and study for his particular specialty. A student pilot had to learn to fly; a parachute rigger was required to know the different packing requirements for a seat pack, a chest, lap or backpack 'chute.

"After a period of training," said Kaye Willson, scoring and reviewing clerk, "these people then took a written examination before an FAA examiner. The exams are forwarded here to our branch of the Data Services Division for scoring."

More than 15,000 written exams, in 31 categories, are graded each month. After an applicant has been notified that he has passed his exam, he then must demonstrate his recently acquired skill before an FAA or FAA-approved examiner. After all this is completed successfully, the examiner helps the student to complete a formal application for a certificate of the required type.

"The application is received in the mail room of the certification branch and is routed to us," said Billy P. Mangum, airman application examiner, "and we go over it very carefully to see that it complies with regulations." After a thorough check, the examiner sends the application to the Systems Production Branch for processing.

"After I finish processing a card," said Wilma Taylor, card punch operator, "it'll have all the necessary information on it. The card, along with thousands of others is then placed in the printer machine."

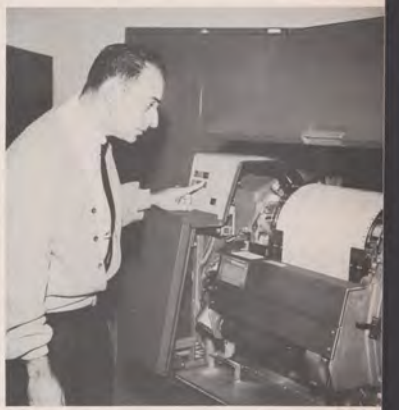
The airman certificates are printed on high-speed equipment, signed and ready for issuance. "Each day's run," said Philip Napoliello, computer operator, is returned to the certification branch and mailed to the applicant."

Since the certificates are now printed on a postcard-type form, the mailing system has speeded up. The new owner has only to trim his license from the form to fit his wallet and he's in business.

After the application leaves the key punch operator, it is routed to the microfilm desk where a permanent record is made. Marie Clay, microfilm operator, explained that the original is filed alphabetically by last name and all previous applications are destroyed. Records are more secure and microfilming saves a great deal of space. In 1950, before microfilming was used, 1,400 five-drawer file cabinets were needed to hold all airman records. Now only five specialized cabinets are used.

To the person who is anxiously awaiting his test results, time passes slowly—but actually it takes the center only a few days to score and return a test grade. Handling of all this correspondence at the Aeronautical Center is indeed a sizable task and FAAers of the Data Services Division, who process the bulk of it, can take satisfaction in knowing of their important contribution to the aviation industry. #

Left: Card punch operator Wilma Taylor transfers data from application forms to a punch card, an important part of the final print-out of the certificate. Above: Marie Clay presides over the microfilm phase of the operation. Right: Philip Napoliello, computer operator, checks airman certificates being printed on highspeed equipment. Each certificate is then ready to be dropped into a mail box for delivery to the new FAA license holder.



ATLANTA GADO PUTS THE SHOW ON THE ROAD

Lee J. Mercure, supervising inspector of the Atlanta General Aviation District Office, would be among the last to bill himself as an impresario, but that is what he is as he goes about performing one of his prime functions—promoting flying safety.

He and a quartet of operations inspectors, Douglas B. Moore, John J. Kostura, Robert T. Smith and Roy W. Owen, pooled their flying knowledge and skill to create a colorful, action-packed, animated road show designed to carry the safety gospel to where it will do the most good—the flight instructors and general aviation pilots.

More than 10,000 of the nation's 85,000 active general aviation aircraft are operated in the Southern Region. More than 45,000 of its citizens hold pilot's licenses of one kind or another. With so many planes and pilots the flying safety problem is ever present.

Using slides and charts, flashing lights, motion pictures and actual flights, Mercure and his "troupers" put together a road show for the enlightenment of pilots in Georgia. Already they've played to standing room only audiences in Savannah, Macon, Atlanta, Augusta, Rome, Columbus and Albany. Everywhere the "performance" was greeted with enthusiasm and the eager question: "Where and when do we have our next meeting?"

Atlanta GADO doesn't claim to have developed the cure-all for eliminating general aviation accidents but they have reason to believe they've compounded a prescription that will help reduce the menace.

(While the total U.S. general aviation accident rate has declined slowly but steadily in the past three reporting years, from 34.0 per 100,000 hours in 1961 to 32.1 in 1963, flying hours have increased from 13,602,000 to 15,600,000 in the same period.)

After considerable study, Mercure and his inspectors uncovered two principal causes of flying accidents: *lack of knowledge and failure to follow prescribed procedures.*

They found that the greatest number of accidents, nationwide, occurred during the landing phases of flying—58 per cent, to be exact—all attributable to these two factors.

With this established the GADO inspectors developed an intensive campaign aimed primarily at flight instructors. Through them they hoped to reach students and teach them flight safety habits and procedures from the onset of their training. Reaching all of the active pilots in their area was their secondary objective.

Knowing they would first have to kindle the pilot's desire to attend these safety clinics, Mercure and company devised effective and colorful training aids to capture their interest.

To augment their programs, they developed batteries of graphs, made hundreds of photographs and converted some of them into colorful slides. Some depicted traffic patterns and landing attitudes while others showed factual data on aviation growth, accident rates and their causes, preflight and weather information and check lists. Still others showed in brutal detail just what an airplane looks like after crashing, burning and, in some cases, snuffing out the lives of an entire family.

Gathering "show biz" savvy as they assembled their production, the Atlanta GADO team developed a well-organized "advance" publicity program. They designed dozens of attractive posters which they distribute to fixed-base operators, private industries owning executive aircraft, aircraft rental firms, crop-dusters and other independents within a 50-mile radius of each meeting site. Before each "performance" scores of letters of explanation, along with invitations for support, are sent out and local news media and FAA area coordinators are tapped to publicize the meetings.

These meetings usually fill an entire day, beginning around 9 a. m., with demonstration flights for instructors. These flights generally continue until 3 p. m.

The inspectors, all proficient pilots, take instructors aloft in their own planes for "how-to-do-it" demonstrations, using FAA-prescribed procedures on such maneuvers as take-offs, traffic pattern flying, approaches and landings. They advise the instructors that these demonstrations are intended to standardize proper techniques and they are practical because these are the same maneuvers instructors are asked to execute when they are given proficiency check rides by the FAA inspectors.

Inspector Moore (standing) uses a flip chart in a step-by-step analysis of an aircraft accident. Supervising Inspector Lee J. Mercure (hand in chin) listens intently. Lavish use of visual teaching aids get lessons across in minimum time.

For the evening class session, each pilot is given a prepackaged safety kit containing valuable charts and graphs on flight procedures in critical accident areas, safety advisories, weather and navigation information. Accident trends are graphically illustrated—first in the region and then in their own backyards.

Two printed lists and order forms are included in the kits—one showing FAA-developed educational materials essential to pilots and the other listing all Federal Aviation Regulations which are available at nominal cost through the Government Printing Office.

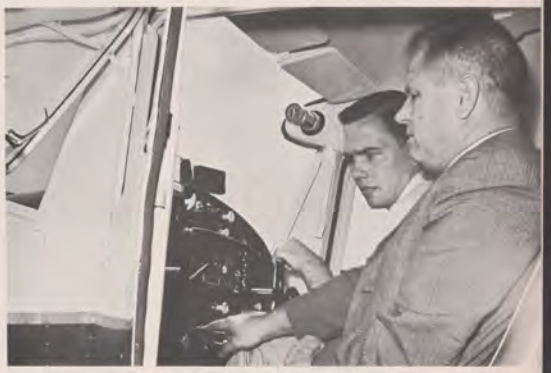
These lists make it so easy for pilots to obtain these vital publications that few fail to order them right on the spot.

During the meetings, good flying habits and the need for increased knowledge is stressed. Instructors emphasize the importance of using printed check lists. Experience has demonstrated that memorized lists take on the nature of a meaningless litany giving rise to a false sense of performing the necessary preflight checks. In following a printed list, pilots actually do the prescribed tasks.

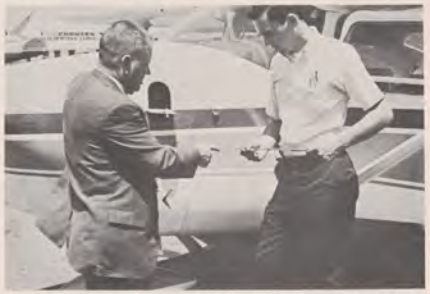
Meetings are concluded with a no-holds-barred question and answer session, a period of much give and take that is welcome to instructors and pilots alike.

Inspector Mercure says: "These clinics are not a cure-all—but we believe we have some pretty good preventive medicine to use against accidents that should never happen." The "patients" seem to like the Mercure prescription. #

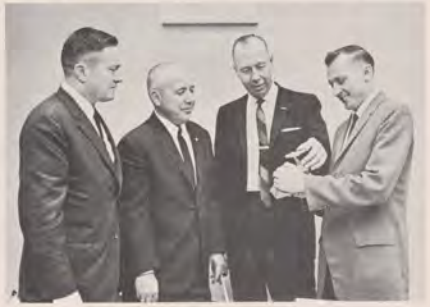
Atlanta GADO Inspector Moore (left) and Robert T. Smith prepare to photo-copy a page from a manual which they will later make into a photo slide for classroom use. Most of the instructional materials used are made by the GADO inspectors.



Above: General Aviation Operations Inspector Douglas B. Moore (dark suit) and Ken Nesbitt, Atlanta flight instructor, run check list before takeoff. Below: Moore watches as Nesbitt checks aircraft oil level. Inspectors in the traveling "show" stress the importance of detailed preflight inspections using printed check list.

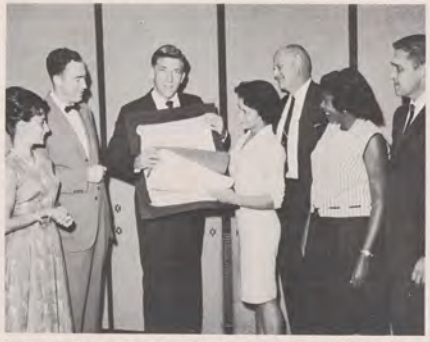


Below: Stormy weather didn't dampen the spirits of these enthusiastic pilots attending the aviation safety education meeting in Savannah, Ga. Studying landing techniques in "hangar session" are, from left: Phillips Hamilton, Coastal Airservice Corp.; Ed Jungemann, Savannah Air Service and Air Sales Corp.; Atlanta GADO Supervising Inspector Lee J. Mercure and Lloyd Hauser, Savannah Area Coordinator.

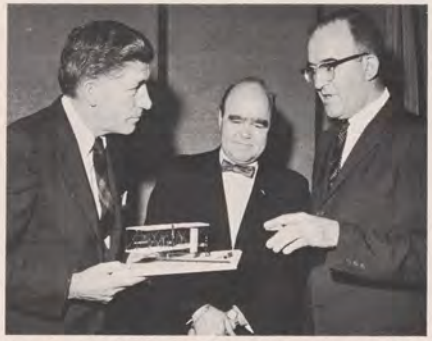


Headquarters Employees Flock to 10th Floor to Say Adieu to Halaby, Grant

Nearly 1,000 Headquarters employees trooped through the line in late June to say "so long and good luck" to Administrator Najeeb E. Halaby and Deputy Administrator Harold W. Grant, Lt. Gen., USAF, departing chief executives of the Agency.



Administrator Halaby displays scroll of employee signatures presented by Antoinette C. McIntire, John Chevalier, Sonja Diethrich (FAA Queen), John W. Davidson and Norbert A. Houska. Some 1,400 FAAers signed the document made by the FA Club.



Less than supersonic air transport expert Frank J. Clifford of the Office of information Services presents a scale model of the Wright Brothers **Kitty Hawk** he made to Administrator Halaby while General Grant checks technical details.

Evangeline A. Iverson, library secretary, echoed Agency sentiment when she said: "Hate to see you go . . . a joy to work under your wonderful leadership."

More flying hours are logged with hands than planes and that's what's going on here as the Administrator and pilot David H. West do a little hangar flying.

Administrator Halaby expresses his appreciation of "services well done" to Installation and Materiel Services Dean R. Field, a 28-year CAA/FAA employee.

Mr. Halaby's Departing Message to Agency Employees

Anyone who seriously believes that Government service is a thankless job, without reward or satisfaction, is either dangerously cynical or grossly misinformed.

It has been my privilege to serve the United States Government in varying capacities for a total of 11 years under the last five Presidents in the last quarter century. I have found these years full of challenge and fulfillment, excitment and enlightenment. I count them among the most rewarding, the most satisfying years of my life. What is greater than to share in the shaping of the safety and progress of our beloved country?

My term as FAA Administrator has been especially memorable for it has enabled me to combine my love of flight with my continuing desire to serve my country. I leave now with mixed emotions—a feeling of satisfaction that a job has been done, tempered by a sense of profound regret that so many cherished associations must change.

But above all there is a feeling of pride and appreciation in the record we have made together over the past four years. We not only have met the immediate challenges of this period but also have laid a solid foundation for the continuing development through the next decade of a safe and efficient air transportation system.

Yet none of the achievements of the past four years has given me greater personal and official satisfaction than the continued increase in the productivity of FAA employees. As a result of these and similar employee efforts, we have been able to effect significant cutbacks in the Agency's original personnel and budget projections.

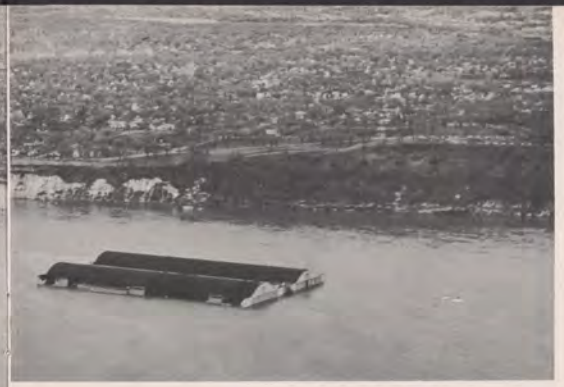
While I believe our accomplishments are impressive, I would be less than honest if I implied that my successor, William F. McKee, is inheriting an Agency or an environment free of problems. Much remains to be done if air transportation in this country is to realize its full potential.

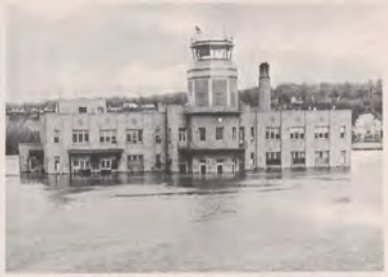
Aviation safety will remain our greatest challenge in the years ahead. The airlines accident rate must be further reduced if we are to prove wrong those gloomy prophets who foresee a "disaster-a-day" by 1990. And the safety record of general aviation continues in need of drastic improvement.

It also is essential that work continue to develop new and revolutionary air vehicles—especially in the areas of very low speed and very high speed, that is, of supersonic and hypersonic flight. Then, too, there are the problems of reducing airport access time, abating aircraft noise, and mitigating the effects of the sonic boom. None of these problems lend themselves to the ready or easy solution.

But my years in Government and private industry have taught me that for every question there is at least one answer. I have every confidence that these and future challenges will be met and that FAA will continue to anticipate not just react, to initiate not just defend and will be eager to innovate as well as serve as the catalytic agent. I also know that in the critical months and years ahead, your able new Administrator can count on the same loyalty and support which you never failed to extend to me.

In closing, let me say without any false sentimentality that I leave FAA with a new respect and regard for the career civil servant. While I am a bit greyer now than I was four years ago, I also am a great deal wiser, and I have you to thank for this broadened perspective. With conviction in the value of our service to the public, with regret for my mistakes and sympathy for your hardships and the greatest pride and joy in achievements we have shared, I bid you all an affectionate farewell. #





Left: The swollen Mississippi River inundated St. Paul's Downtown Airport during the crest of the flood. Above: The flood waters rose six feet above the first floor level of the terminal closing the FAA tower facilities.

FLOODS RAVAGE AREA; NAVAIDS ARE SPARED

Winter and spring combined forces this year to throw a wet and wicked punch at residents on the upper reaches of the Mississippi River.

The mighty waterway, swollen out of its banks by the melting of a record March snowfall, created havoc from Minneapolis to St. Louis. Although damage was estimated at $150 million to private homes and industry, FAA's damages were negligible.

FAA facilities on the lower reaches of the flood area stayed high and dry, but at St. Paul, Minneapolis and LaCrosse, Wisc., the rising waters affected several Agency installations.

The Holman Tower at St. Paul (Minn.), Downtown Airport had to be abandoned when water rose six feet above the first floor level of the terminal building. A standby generator building and a remote communications site on the airport were also inundated.

Howard E. Bondy, chief of the Holman Tower, and his crew hastily moved their operation to a temporary mobile control tower at nearby Fleming Field to handle traffic that was diverted from the flooded airport. The temporary tower, which was crowded and noisy, stayed in operation more than four weeks. When the flood receded, Holman Field was reopened.

Accurate water level forecasting by the U. S. Weather Bureau hydrologists in Minneapolis permitted Systems Maintenance Service crews to remove equipment from the remote communications and standby generator buildings before they were damaged.

Across the river in Minneapolis, Wold-Chamberlain Airport stayed out of danger but Systems Maintenance District Office Chief Donald W. Updike had another problem. The field's instrument landing system middle marker was on the river bank and had to be shut down. After electronic equipment was removed, water crept over the roof of the marker building.

Downstream 120 miles, the LaCrosse, Wisc., Flight Service Station, located on the LaCrosse Airport which is situated on an island in the middle of the river, was affected by the rising water levels. At one time all but one bridge leading to the airport was impassable. The airport and station remained open, although two runways were flooded, but water seeped into underground telephone lines and put the station off the air.

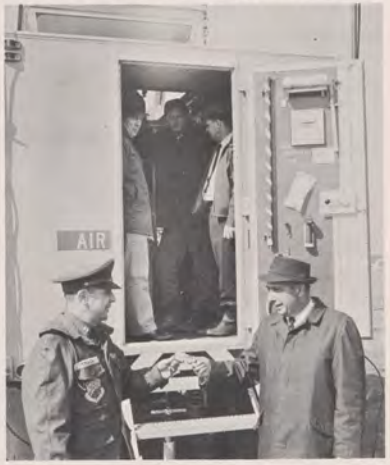
Station Chief Anthony J. Silva and electronic technician Herbert Rugen arranged amateur radio communications from the airport to downtown LaCrosse, where a temporary station was set up in the basement of the telephone company building. Two men from the Minneapolis Flight Service Station were detailed to run the temporary FSS.

Teletype printers were hooked into the telephone lines and weather reports, flight plans and other messages were relayed back and forth on the two-way amateur shortwave radio.

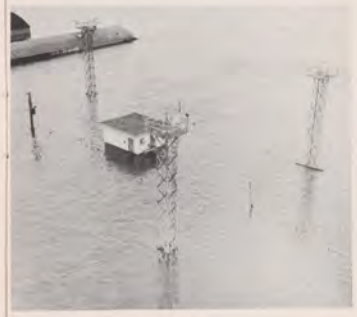
Many FAA employees pitched in to build some of the dikes that saved their own communities from the flood waters.

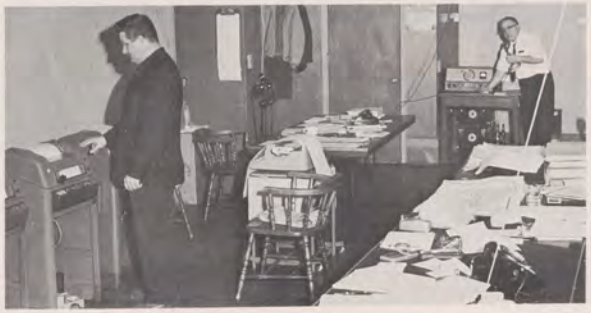
Roger Christensen, an assistant controller in the Minneapolis Center at Farmington, had to evacuate his home during the floods. Two of three bridges crossing the Mississippi River at Minneapolis were underwater, causing delays of two and three hours for employees en route to work at the Minneapolis Center, Air Carrier District Office, secondary Aircraft Maintenance Base and Flying Cloud Tower just outside Minneapolis.

As if the ravages of the flood were not enough, a series of tornadoes swirled down on the northwest residential section of Minneapolis on May 6, as flood cleanup operations were underway, causing further death and destruction. Again, FAA facilities and employee homes were spared. But those in the Agency who pitched in to help their neighbors still feel as if the elements had dealt them a mighty blow. #



Right: A temporary tower trailer was turned over to Howard E. Bondy by the Air Guard for use. Below right: A satellite FSS is manned in the basement of the LaCrosse telephone company by technician Herbert Rugen (left) and FSS specialist Gaylor J. Killilea. Below, left: Electronic equipment was removed before flood waters could damage this St. Paul transmitter site. Left: FAA controllers operating from a temporary Fleming Field tower handled traffic which had been diverted from Downtown Airport.





WILD SHADOWS SPELL DANGER ON THE ICE

Hunter Jerry Knopp of Spokane, Wash., displays a whopping polar bear skin after a recent kill. The beast is skinned on the ice and only the pelt brought back. Cost to hunter for guide, aircraft and other services is about $2,500.

If you go polar bear hunting by light plane over the wind-sculptured ice packs of Alaska, don't squander your time looking for the *bear*—his shadow is the tip-off.

Cruising at 75 knots, airborne hunters rarely spot the bears, perfectly camouflaged as they are against the white terrain. They first look for breaks in the ice where the polar bears, skillful hunters themselves, prey upon the seals and walruses sunning on their ice islands.

The time to unlimber the guns comes when a moving shadow comes into view.

Getting the hunters into the air, keeping an "ear" on them while aloft and checking them in after their hunting sorties is a specialty of the Kotzebue Flight Service Station. Kotzebue is a village of 1,800 Eskimos 30 miles north of the Arctic Circle on the western coast of Alaska, where the North American Continent brushes against Siberia. It is the home of 11 FAA families who man this "last frontier" station, a key facility in the Alaskan Region.

This is a land of extremes with long, sunless winters, and summers bright with almost continuous sunshine. The sun never dips below the horizon for 36 days, starting in mid-June. Here the dog sled stubbornly and successfully competes with the airplane for hunting and getting around the arctic vastness.

Joseph E. Walsh, area manager at Kotzebue, born and raised in Alaska, typifies the hardy breed of men—and women—who serve in remote Alaskan stations where morale seems to rise in direct proportion to the station's distance from civilization.

"What makes serving up here worthwhile is knowing we're doing something vitally important. Flying in Alaska isn't inherently dangerous, but it's no place to get lost or run out of gas. Pilots rely on us," says Walsh.

Busy the year 'round, the action steps up to fever pitch in April when polar bear season opens. Professional hunters and scouts swarm into Kotzebue and Point Hope, 150 miles further north, in their ski-equipped light planes to begin the harvest of the giant bears.

At dawn's first light, scouts and hunters ready their aircraft and gear for the long day's hunt and tune in the Kotzebue beacon frequency for the weather at 6:15 and 7:15 each morning. Originating in the Flight Service Station, the broadcasts cover weather conditions in the hunt area on the icepack between Siberia and Alaska.

Flight plans are filed in person or by radio with the FSS giving all information needed to aid searchers in case they run into trouble.

"These pilots are some of the best in the business and none of them would be caught dead without filing a flight plan," says Ernest M. Crump, chief air traffic control specialist at the FSS.

Using the "buddy system," the hunters fly in pairs over the ice in rectangular patterns searching for the black shadow, the mark of the bear. They keep in touch on the "bush frequency" (3411.5 kc) to lend a hand in the event of trouble. Back at the FSS, the air traffic control specialist also monitors this frequency, following the progress of each flight, ears sharp for emergency calls.

And a good thing, too, by mid-May Walsh and company had already logged a dozen saves with more expected. Pilots, blown off course, were shown the way to go home. The specialists, pilots themselves with a palm-of-the-hand knowledge of the ice pack, help flyers with terrain identification and give them bearings home.

In special cases they contact the U. S. Air Force radar stations in the area for a pin-point fix on the plane. When the mission is urgent, Kotzebue's FSS crew fly search missions themselves.

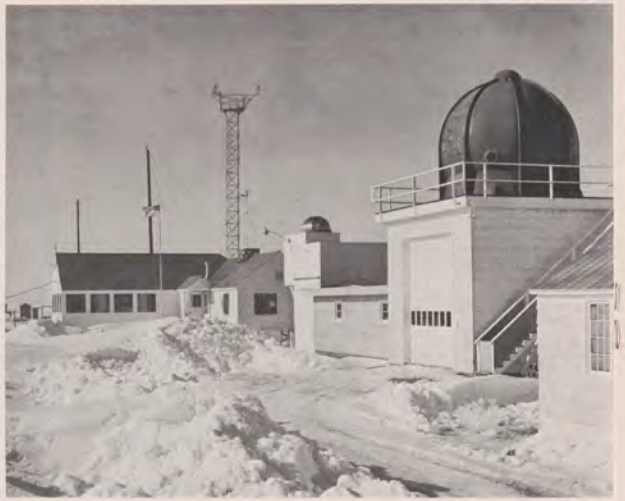
The "customers" like the way Walsh and his team perform. In a recent letter to Alaskan Region Director James G. Rogers, Anchorage pilot Jeff Brown spoke for the airborne hunters. He wrote:

"Having been engaged in guiding polar bear hunters on the ice pack for the past three years, I have had unlimited contact with Kotzebue Radio. In my opinion, shared by all the guides, Kotzebue Radio is the most outstanding FAA station in Alaska. Their work can be summed up in a word—professionalism. The specialists, to a man, are among the finest to be found anywhere. I would also like to commend the maintenance personnel for their efforts.

"It is virtually impossible to be anywhere on the ice and not be able to pick up Kotzebue with good ADF (automatic direction finder) equipment. In closing, I would further say that because of the high proficiency of the personnel at this station, many accidents have been avoided, and that certainly many lives have been saved."

High praise for professionals—from professionals flying the toughest terrain in the world. #

Above: There's no shortage of snowballs for the kids of Kotzebue. From left: Dean Ianelli, Michael and sister Eva Shoemaker, Zona Lie and brother Michael, all children of FAA and Weather Bureau personnel. Right: Kotzebue FSS in summertime. The Arctic Ocean is in the background. Below: A typical portion of Kotzebue where the summer sun never dips below the horizon for 36 days.



Left: John F. Thome, chief of electronic maintenance at Kotzebue tunes a receiver. Above: Carolyn Austin is a part time clerical worker in the area manager's office and is the only female employee at Kotzebue. Husband John R. is a weather forecaster with the Weather Bureau in the FSS. Above right: Air traffic control specialists Albert H. Guthrie (left) and Robert R. Levine are busy handling flight plans of polar bear hunters and scouts in the area. Right: Ernest M. Crump, chief, ATCS, adjusts equipment as area manager Joseph E. Walsh checks instruments.

GROUND BREAKING AT PUEBLO DIGS UP HISTORY

At Pueblo, Colo., not long ago there were the usual ceremonies, with the usual speeches to mark the ground breaking for a new FAA airport traffic control tower.

When it was over, Herbert A. Amman, chief of the combined station/tower at Pueblo, dug a little bit into the history books and found that a great procession of ground breakers had preceded the FAA at the site.

One was young Lieutenant Zebulon Montgomery Pike, for whom Pike's Peak was named. On Nov. 26, 1806, he and his venturesome band traversed the area. The expeditions of General John C. Fremont crossed it no less than four times—two going and two returning.

Amman did not forget the men who founded Fort Cass and Fort William just a little more than a mile south of the present airport, nor the families of the Mormon battalion fighting under General Philip Kearny in New Mexico in 1846. The soldiers had sent their wives and families to join a colony of co-religionists at the confluence of the Fountain and Arkansas Rivers a mile downstream from Fort Pueblo. This community, incidentally, became the first permanently erected log cabin settlement in Colorado.

In later years a man standing on the spot where the new tower will rise might have seen Cherokee Indians moving along a ridge directly north of the airport, seeking gold and buffalo; or Green Russell and his brothers who followed the Cherokee in 1858 and made a fabulous gold strike at Russell Gulch near Central City.

Present at ceremonies for Pueblo's new control tower were (from left) Pueblo Aviation Director Jack Keeler; WE Director Joseph H. Tippets; City Council President Mrs. Georgia Farabaugh and U. S. Senator Gordon Allott.

Of the land that will house the tower, one of the Russells wrote in his journal: "Our road climbed steadily and we could look back on the bare, level plain, without tree or shrub except where the river ran between cottonwood-shaded banks."

Tower Chief Amman stressed the contrast between those hardy souls who spent weeks and months conquering the unknown Colorado territory with present day air travelers who fly above it in comfort and luxury at hundreds of miles an hour.

Familiar Faces Are Fans of FAA

Hollywood luminary Danny Kaye, an enthusiastic amateur flyer, recently was presented his instrument rating by Western Region Director Joseph H. Tippets, at the Van Nuys Airport.

Movie and TV star Cliff Robertson chats with George S. Moore, Director, Flight Standards Service. Robertson visited Washington headquarters to check on antique aircraft certification.

Snake Bite Victim's Life Saved With FAA, Air Force, Navy Aid

The Federal Aviation Agency, the Navy, the Air Force and a snake farm formed a quadruple alliance last February to save the life of a University of Louisville Medical Center laboratory assistant who had accidentally injected herself with deadly snake venom.

The victim, Mary E. Rayborn, who was allergic to the anti-venom serum normally prescribed, was rushed to a hospital where preliminary treatment was given. However, special treatment was sought from her supervisor, Dr. Joseph F. Gennaro, who was in Florida.

Recalling a similar incident, Dr. Gennaro called on Bill Haast, a Miami herpetologist, who had been bitten countless times by poisonous reptiles and whose blood could be used for a life-saving transfusion. Haast readily agreed to donate his blood.

Dr. Gennaro was flown to Louisville in a Navy jet to await the blood and administer the transfusion, while an Air Force F-104 delivered the blood.

Strong headwinds reduced the F-104's ground speed so drastically that the only way the pilot could complete his mission to Louisville was to maintain a high altitude to conserve fuel and then to fly an unrestricted descent.

Here the FAA came to his aid. Controller Tom Featheringill, Indianapolis ARTCC, cleared the heavy night traffic out of the jet's flight path and approved a straight-in approach 50 miles from Louisville's Standiford Field. At the 30 mile mark, Louisville Tower approach controller John Broadshaw took over and monitored the jet to its final touchdown. Twenty-four hours later Miss Rayborn was fully recovered thanks to the life-saving quadruple alliance.

San Francisco Tower Minimizes Aircraft Noise in Airport Area

"For their contributions in devising operating procedures which minimize aircraft sound, and for their cooperation in adhering to these procedures," the San Francisco Tower has received the unanimous vote of appreciation of the Board of Trustees of the San Francisco International Airport Sound Abatement Center.

In addition, the resolution pointed out that controllers have kept the San Francisco sound abatement director informed concerning changes in flight procedures, thus enabling him to handle complaints more intelligently.

55-YEAR-OLD "BIRD" STILL CRUISING AIRWAYS

Mythology's flying Greeks, Daedalus and Icarus, would have felt a certain comradeship recently had they been on hand to greet Cole Palen, of Rheinbeck, N. Y., when he landed his *Thomas Aeroplane* at Flushing Airport after a three-day, 35 mph flying jaunt at top speed to New York City.

Manufactured between 1910-12, the pre-World War I *Thomas* sports a 1917 OX-5 engine, but originally was equipped with an OX-2.

Palen flew the craft from Rheinbeck in easy stages, stopping at Stormville, and Armonk, N. Y., en route to Flushing Airport. The trip took three days, since all flying in the vintage aircraft was done in the early morning hours to take advantage of light wind conditions. The *Thomas* was assembled by Palen from photos and consultations with its 87-year-old designer, William T. Thomas, who lives in Florida and still follows aviation as a hobby.

Palen has four pre-World War I aircraft and 12 World War I and 1920 vintage planes in his fleet at Rheinbeck Aerodrome, N. Y.

The bold aviator at the wheel is Cole Palen. FAA inspectors Daniel Radice and Charles Waters take a look.

Eastern Region's supervising inspector Richard Kleinert and inspectors Daniel Radice and Charles Waters of the LaGuardia Flight Standards District Office were on hand to greet *Thomas* and pilot when they landed at Flushing Airport.

Cole Palen and the aircraft also were featured on the TV program "I've Got A Secret." Highlight of the show occurred when the plane was placed on display for the audience.

Administrative Management Grads Get Assignments

Twenty graduates of the Agency's Administrative Management Development program who completed a one year training course in June have been assigned to new positions. The group, selected from technical posts throughout the FAA, have been assigned to positions which promise to broaden their work experience and contribute to their development as general managers.

(See other story in Personnel Pipeline column on page 30.)

The new assignments are:

Paul K. Bohr, from I&M, Central Region to Office of Budget, Washington; **James Bispo,** from I&M, Western Region to Budget Division, Pacific Region; **Melville King,** from I&M Division, Pacific Region to National Airspace System Special Projects Office, Washington; **Bernard C. Groseclose,** from supervisory ATCS, Southern Region to appraisal specialist, Southern Region; **James R. Vrooman,** from chief, SMDO, Alaskan Region to area manager, Alaskan Region; **Robert G. Cardin,** from ATC specialist Southwest Region to employee relations officer, Office of Personnel and Training, Washington; **Cyril Femrite,** from Office of Personnel and Training, Central Region to Executive Staff, Flight Standards Service, Washington; **William R. Ramsey,** from I&M Division, Central Region to Airports Engineering, Central Region; **Albert E. Houck,** from ATCS, Southern Region to Staff Validation Team, Southern Region; **Robert M. O'Brien,** from ATCS, Eastern Region to National Airspace System Special Projects Office, Washington; **Robert L. Gingles,** from ATCS, Southern Region to Office of Management Services, Washington; **Quentin Taylor,** from I&M, Washington to Office of Appraisal, Washington; **Arthur R. Fillebrown,** from FAA Academy to Office of Personnel and Training, Washington; **George H. Carr,** from I&M, Washington to Office of Management Services, Washington; **Ernest P. Fernsten,** from SMS, Eastern Region to Office of Management Services, Washington; **David D. Beyer,** from Flight Standards, Alaskan Region to Regional Appraisal Team, Alaskan Region; **Edmond P. Kennedy,** from SM Area Office, Eastern Region to Regional Staffing Validation Team, Eastern Region; **John Munds,** from ATD, Western Region to Planning Evaluation Staff, Western Region; **Clyde J. Humphreys,** from I&M Division, Central Region to Executive Staff, SMS, Central Region; and **Robert Kirby,** from ATCS, Western Region to Flight Standards Division, Central Region.

Rea Named FAA Academy Director; Will Direct Some 1,000 Students

Dr. Charles Dale Rea, veteran educator and commercial pilot, has been named Director of the Federal Aviation Agency Academy at the Aeronautical Center in Oklahoma City, Okla.

Dr. Rea fills the vacancy created when Enar B. Olson left last November to become executive officer of the FAA's Southwest Region.

Rea came to the FAA from Humboldt State College in Arcata, Calif., where, for the past two years, he was associate professor of education and asistant executive dean.

For 13 years Rea was President of Fort Lewis A&M College in Durango, Colo. Under his leadership, Fort Lewis A&M progressed from a state supported junior college to a full four-year accredited liberal arts college. He had a year's post-doctoral study at the University of California in 1962-63.

Holds Commercial License

An Air Force veteran of World War II and the Korean conflict, Rea is in the USAF retired reserve with the rank of Lieutenant Colonel. He holds a commercial pilot's license with instrument rating.

Born in Olathe, Kan., in 1913, he attended high school in Pueblo, Colo., and received a B.S. degree in economics and sociology from Colorado State University in 1963. He received an M.S. degree in education from the University of Southern California in 1941, and an Ed.D. degree in educational administration from the University of Colorado in 1952.

Arcata Flight Service Station Saluted by Postmaster General

The Arcata, Calif., Flight Service Station has received a Special Citation from the Post Office Department for services provided during last winter's disastrous floods.

Lawrence H. Payne, chief of the FSS, received the citation on behalf of his personnel.

Signed by Postmaster General John Gronouski, it reads: "For unusual and outstanding assistance to the Post Office in helping to restore and maintain postal services under the most adverse conditions following the disastrous storms, floods and destruction which struck Northern California in December 1964. These acts of unusual courage and concern for fellow citizens deserve the highest praise and appreciation."

AIRPLANES CAN GET INTO THE FUNNIEST SPOTS

Icecapades at McGrath. **Commando** cargo aircraft being towed off frozen Kuskokwim after overshooting runway.

Things were really hopping at McGrath Flight Service Station in Alaska recently when a C-46, operated by the Sky Van Company of Anchorage, overshot the runway on landing. The *Commando* plowed through snowdrifts for 100 feet and whizzed out on the frozen Kuskokwim River before coming to an embarrassed halt. Neither aircraft nor crew suffered damage. The problem was to get the *Commando* back on the runway.

John J. Cooksey, plant maintenance supervisor at McGrath, came to its rescue. Cooksey is typical of the "stay loose" foremen in Alaska who never know what strange job tomorrow may bring.

John supervised the building of a long snow ramp running from the river to the runway end, packing it down firmly with a caterpillar tractor plow.

The plan was to let the ramp freeze solid then taxi the aircraft but the temperature went up instead of down.

This didn't daunt Cooksey or his helpers—they laid plywood under the wheels and towed the reluctant *Commando* up the snowbank and into takeoff position, none the worse for wear.

Thanks to the ingenuity of McGrath FSS personnel the old *Commando* soon was back in the air where she belonged but with some ice skating time in her log.

Seattle Quake Shakes Area But FAA Damage Is Nil

When the earth shook in the Seattle area recently and seismographs registered one of the Northwest's most serious quakes, FAA facility chiefs were quick to report no injuries or equipment damage.

A few filing cabinets did fly open; the contents of some shelves spilled onto the floor; radar service was interrupted briefly and Dean V. Stenger, a materiel specialist assigned to the Seattle ARTCC, was slightly bruised by a falling light fixture—otherwise it was business as usual.

But the FAA made the front page anyway. The Seattle *Daily Times* carried a picture of Air Carrier Inspector R. Lee Jones, his wife and their four boys, with a story about how normal family life was disrupted as a result of the quake. Two junior high schools in the area where the Jones' live were evacuated.

The quake lasted about 45 seconds. It toppled some walls in the downtown Seattle and Tacoma areas, broke a number of windows, and shattered a few gas and water mains.

(Editor's Note: The following first person account of the recent Seattle earthquake was written by Charles L. Welchko, chief of the Boeing Tower.)

When the quake hit, the personnel on duty were David L. Webster, local controller; Roger J. Denker, flight data; and Robert L. Davis, ground controller.

I was in the tower cab and alerted the others that we were having an earthquake. Actually there was little need for such a warning. It was obvious what was going on. We have no estimate of the degree of sway, but our three-tier bookcase toppled to the floor, as did ashtrays, coffee pot and other loose items. We moved toward the center of the cab and knelt down to avoid flying glass if the windows shattered. From this position, Webster continued to control air traffic.

As you know, the tower cab, ready room, recorder room, chief's office and supply room are all atop a smaller single supporting structure. Thus, this top-heavy structure was shaken and swayed to an alarming extent. Frankly, I fully expected the thing to topple over. But it held together, and after picking up the pieces we found no serious damage whatsoever. Only three minor cracks appeared near the elevator shaft.

Advanced Radar Traffic Control Receives Wide Public Acclaim

Atlanta Tower's new Advanced Radar Traffic Control System (ARTS) has already generated great public interest, both local and national.

Although the operational check-out of this phenomenal research and development program was only begun in April, the American Broadcasting Company and Time magazine have quickly turned their national spotlights toward Atlanta.

In mid-April, ABC dispatched Jules Bergman, its science reporter, and a local technical crew to Atlanta to film ARTS in action in the TRACON (IFR) room at the Atlanta Tower. Southern Region's Beechcraft *Baron* (featured also in this film) gave the new system a thorough workout during the filming.

Atlanta Tower is the only tower presently equipped with the special ARTS electronic computers and related hardware. The *Baron* has been outfitted with a new altitude reporting transponder.

The *Baron's* new airborne equipment automatically furnishes the computers in the tower with exact altitude, direction and speed in addition to aircraft identification. This vital information is then automatically projected and pictorially associated with the airplane's "blip" on the controller's radarscopes in the TRACON room.

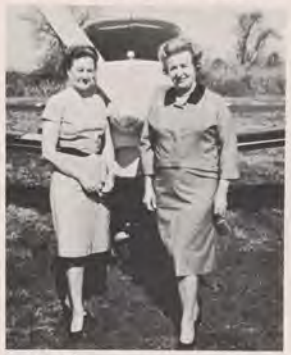
Time magazine's science reporter visited the Atlanta Tower where she was given a detailed briefing and demonstration of this program also in April. Time's coverage of this project was featured in the science section on April 23.

Visitors Flock to Visit the FAA Aeronautical Center in 1965

The Aeronautical Center estimates that well over 5,000 visitors will take the grand tour of the Oklahoma City FAA facility this year. So far they are checking in at the rate of 100 a week, a figure that includes neither the "drop-in" who shows up alone (or with 10 or 12 friends) saying: "Just happened to be in town . . .", nor those who come for one phase of the operation and are given a guided tour by their hosts.

Visitors represent news media—newspapers, magazines, radio and television; they represent colleges, high schools, grade schools and graduate schools. They also come from industry and the U.S. government and from most of the free nations. The present schedule calls for 15 a month with a provision for more.

Fems Compete in Air Races



Doris Weller (left), a specialist in the Dallas FSS, and Mrs. Edna G. Whyte, of Fort Worth, finished fourth in the All Women's International Air Race from New Jersey to Nassau in May.

Low Visibility Airport Lighting Is Studied by NAFEC Engineers

Agency efforts to improve airport lighting, in order that planes may take off and land during periods of low visibility, were outlined before a recent Atlantic City conference of the Illuminating Engineering Society by two military officers assigned to NAFEC.

Major Leslie G. Rutherford, USAF, told the lighting experts that following an ICAO recommendation to standardize the inner 1,000 feet of the 3,000 foot lighting system, four varied patterns now are being tested. In general, these systems involve adding red lights left and right of the existing standard row of five white lights. However, Rutherford said, pilots seem to prefer a triple row of red lights on each side of the white.

The second officer, Lt. Russell E. Gilmore, USN, discussed the critical problem of guiding the pilot after touchdown in low visibility.

Tests have shown that some pilots confuse runway and exit lighting even with visibility as high as 1,000 feet. He said that changing the color of exit lighting from white to green and increasing the fixture spacing helped eliminate the confusion. Tests are being continued, however, in order to determine the minimum visibility at which a pilot can safely roll-out.

JOLIET FSS TRIGGERS RESCUE IN SOUTH AMERICA

The eight occupants of two light planes which crash landed in the Amazon jungle in April might well owe their rescue to the concern of a Chicago woman and the astuteness of FAA personnel at the Joliet, Ill., Flight Service Station.

Mrs. Alfred M. Fox, worried at not hearing as scheduled from Dr. Edward V. Stalzer and his wife, Gisela, who with seven others were making an aerial tour of South America, phoned the Joliet FSS.

Joliet FSS Pitches In

Watch supervisor Harold W. Martin took the call. After getting the facts, Martin assured Mrs. Fox he would do what he could. He promptly relayed the conversation to station chief John N. Loughton who set the rest of the Joliet FSS crew—assistant chief Harold Michael and Cancy J. Colao—into action.

The Miami International Flight Service Station and U.S. Customs were given the details as related by Mrs. Fox and an alert was flashed to authorities in South America. Within a day, the probable crash site was narrowed to a 1,600-mile radius area. The Brazilian Air Force located the crashed planes within 15 feet of each other in a rough clearing along the Amazon River between the cities of Brasilia and Belem.

As later recalled by Dr. Stalzer, who suffered a broken arm, the planes encountered bad weather and low ceilings, became lost and ran out of fuel. Controlled landings were made, within minutes of each other, but stumps in the field wrecked the planes. One of the injured sustained a broken back in the emergency landing.

In a letter to Administrator Halaby, Mrs. Alfred M. Fox stated that her call was made on Tuesday ". . . my friends were rescued on Thursday and flown out to hospitals on Friday by the Brazilian Air Force at the request of the United States State Department."

What started as a routine phone call ended as the first recorded long-distance rescue of persons forced down in the Brazilian jungle.

FSS SPECIALIST HAS 200 SONGS TO HIS CREDIT

Flight Service Station Specialist Otto (Gene) Davis of Ponca City, Okla., FSS, was a pro at the mike before he ever came to the FAA.

This came to light recently when a song Davis wrote more than 10 years ago turned up on an album of recordings by the late Jim Reeves of Grand Old Opry fame. (The ballad, "There's That Smile Again," appears on "The Jim Reeves Way," under the RCA Victor label).

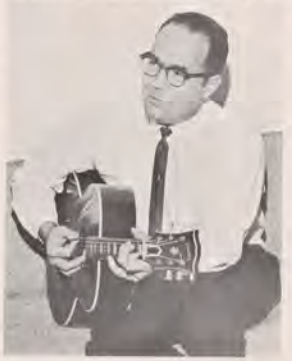
Davis has been interested in music all his life. He got his first guitar when he was 12. A few years later he was playing and singing at radio stations and Saturday night country and western shows around Pine Bluff, Ark., where he lived.

Following a tour of duty in the Pacific during World War II, Gene entertained in California before returning to Arkansas where he majored in music at Ouachita Baptist College.

After college he worked for the Army in Pine Bluff and during that time—in the fifties—wrote more than 200 songs, all in the country, western and gospel traditions. About 25 were published and some 15 of them recorded by such artists as Leon McAuliffe, George Jones and The Browns. He has recorded eight himself which appear in four single releases on King Records.

In recent years Davis has limited his musical activities to singing in the choir and writing gospel songs. However, he might be back in the other groove again. The new Jim Reeves record has put him in touch with many old friends in show biz who want him to write original songs for them.

Otto (Gene) Davis who has been strumming his guitar since childhood has written country and gospel songs.



WESTERN REGION GOES ALL THE WAY WITH LBJ ON 'MISSION SAFETY-70'

Emphasizing the President's "Mission Safety-70" program of occupational safety, the Western Region has intensified its efforts to save lives and prevent injuries on the job.

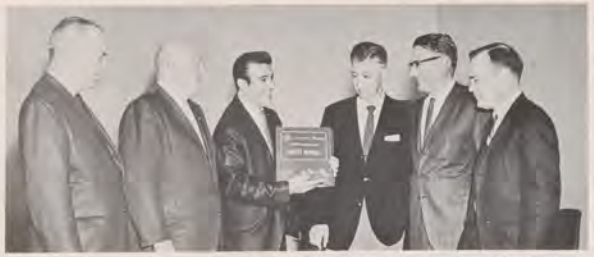
The program was broadened when two major steps were put into operation by Vincent C. Baron, chief of the Engineering-Management Safety Staff, Systems Maintenance Division and the Region's Occupational Safety Officer, George M. McCord.

First, safety officers were designated in all of the region's SMS districts and sectors to serve as focal points of safety knowledge and skills. A regional office briefing, orientation and training session and attendance at the Western Safety Congress paved the way for the new safety officers.

Second, a new safety manual outlining the duties of the safety officer and including such data as the mission, policies, responsibilities and procedures, was issued by the region.

The safety officers throughout the region carry out evaluations of facility safety and follow up to assure correction of deficiencies.

"Safety officers are encouraged to become active in local safety organizations and to confer with local safety officials," Baron said. "This will enhance their knowledge of safety and create a better FAA-community relationship."



Safety meeting in Western Region. From left: Leland P. Hughey, ass't. chief, Systems Maintenance Division; Joseph H. Tippets, Director; Vincent C. Baron, chief, Engineering Management and Safety Staff; Edwin A. Richardson, Hygiene Engineer; Hervey E. Aldridge, chief, Systems Maintenance Division, and Joseph C. Caldwell, Safety Engineer.

Baron pointed out that the Agency's employees, particularly in the West, are exposed to a wide range of environmental and occupational hazards.

"These range from snake bite to frost bite, from avalanches to rock slides, from baking heat to biting cold," he said.

"Our maintenance employees must be steeple jacks and mountain climbers. They must know how to use snowshoes, skis, over-snow vehicles and snow removal equipment."

The "Mission Safety-70" goal to reduce Federal work injuries and costs until a 30 per cent reduction is achieved by 1970 is reportedly showing encouraging results within the region under their occupational safety program.

TWO MOTORIZED EMERGENCY UNITS SERVE EASTERN

Eastern Region's Bill Kingston, air carrier accident specialist, and Lloyd Boggs, chief, Installation and Materiel Service's provisioning unit, are back in the foraging business again (*FAA HORIZONS*, April 1965).

Not content with puting together one motorized emergency unit to carry the Agency's accident investigation flyaway kits, now they've gone ahead and built another in a military surplus 1½-ton truck obtained from Ft. Dix, N. J.

The two trucks can be rapidly loaded with over 3,000 pounds of accident investigation material which includes cold and foul weather gear and communications equipment. Ready to roll at a moment's notice, the vehicles also are available for use in Civil Defense, state and regional airlift planning and natural disasters.

Other than emergency work, the trucks are used in the Region for normal truck transportation requirements.

Enstrom F28 Is Certificated

Enstrom F28, first all-new helicopter to be built in America for 10 years, received its approved type certificate from FAA recently. Built in Menominee, Mich., by R. J. Enstrom Co., it is a three-place, 100-mile-an-hour model with a gross weight of 1,950 pounds and will sell for around $30,000. The firm reports orders for 29 and expects to begin deliveries late in 1965. Enstrom will build a trainer, and executive agricultural types of the 'copter.

Controllers Atop Stone Mountain Monitor Sky-Diving Competition

Thirty-nine of the nation's most accomplished skydivers, or sport parachutists as they prefer to be called, descended on Georgia's Stone Mountain Memorial Park for their 3-day National Masters Sky Diving Competition in early May. These high-flying folks had come to dive out of airplanes far above the earth for fun, dazzling trophies and large cash prizes.

To insure the safety of the parachutists, their jump plane and other aircraft flying in the area, Atlanta Tower's Air Traffic Controller John H. Wilworth and maintenance specialist W. F. Wood of the Atlanta Systems Maintenance Sector were "airlifted" via the scenic skyway to temporary duty posts in the forestry tower on top of Stone Mountain. From this vantage point, they monitored radio frequencies and coordinated the jump plane's maneuvers. Communications were handled by citizen band radios.

The contest was limited to experienced parachutists who had completed a minimum of 200 jumps each. The parachutists made a total of 273 jumps.

Agency's Exhibits at Teterboro Seen by Thousands at Air Show

FAA personnel from Eastern Region's Teterboro Tower, FSS, GADO, EMDO, and SMS manned the Agency's exhibits at the 5th Annual Teterboro Aircraft Show recently. Thousands of aviation enthusiasts from the Northeast flocked to see aviation's latest configurations, gimmicks and accessories sponsored by Teterboro aircraft dealers, and the Port of New York Authority who operate the airport.

FAA told the story of its many operations to make flying safer and more pleasant. An innovation for this year's program was the showing of movies and other audio-visual aids and a seminar-type program in which aviation experts discussed current aviation problems and programs.

FAA Amateur Radio Club WA4SBF Reports Weather During Crisis

When a tornado roared into the Muscle Shoals, Ala., area disrupting all teletype, interphone and telephone communications at Southern Region's Muscle Shoals FSS, the FAA Amateur Radio Club Station WA4SBF at Memphis, Tenn., established and maintained contact with other amateur radio stations in the area until normal communications channels were restored.

This ham radio station was manned by air traffic controllers Charles A. Long (W4MRD), William C. Corbitt (WA4-KZP), and Dan E. Bergan Jr.

Through the excellent cooperation of these amateurs, (two took time off from work to help), a ham radio station was set up at the Muscle Shoals Airport to facilitate the exchange of weather and aircraft movement data between the Flight Service Station and the Air Route Traffic Control Center at Memphis.

Amateur radio stations assisting in the Muscle Shoals area were WA4OCL, K4ROR, WA4HFE, K4UVJ and W4ZSI.

TWO OLDTIMERS RETIRE

Vergil S. Murphy of I&M's Project Management Branch in the Southwest Region retired May 22, 1965 after 28 years of Federal service. At one time in his career Murphy served as technical consultant and adviser to the Iranian government's Department of Civil Aviation.

James E. Bernsteen, general mechanic at Yakutat, Alaska, retired May 26, after nine years Federal service.

INTEREST RATES MAY NOT BE WHAT THEY SEEM

When you borrow money or buy on the installment plan and agree to repay a certain amount each month, do you know the real rate of interest charged? Interest rates can confuse even professionals and advertisements can lull even the alert and prudent.

Here's what the experts have to say about buying on installment or borrowing money.

When buying on the "time plan" read and understand the contract. Don't rush. Never sign a contract with spaces left blank and be sure that it tells: exactly what you are buying; the purchase price; interest and service charge in dollars or simple annual rate; total amount due; down payment; amount and number of payments; dates due and trade in allowances, if any.

Ask what happens if you can't pay. Know to whom you make all payments and be sure you get a copy of the contract to keep.

Before borrowing money and before signing anything, ask how much cash you will actually get and what the simple annual rate is. Find out how the lender figures the balance due if you have to refinance.

Consumer credit comes from banks, credit unions, finance companies and retail stores. Some charge more than others. It pays to shop around and find where the credit rate is lowest and most convenient. Find out how much you are paying for the use of credit. Ask yourself, "Is having something *now* worth the added credit cost?"

Other things to consider is how your decision will fit into your budget and plans. Be sure you can meet the payments after all other bills are paid. Will you have money left for emergencies?

Here are some typical credit charges. If charges are based on the *beginning amount owed* and are included in the 12 equal monthly installments:

If Charged:	Simple Annual Rate Is:
$ 4 per $100 or	4% per year— 7.4%
$ 6 per $100 or	6% per year—11.1%
$ 8 per $100 or	8% per year—14.8%
$10 per $100 or	10% per year—18.5%
	1% per month—22.2%

When charged only on the *unpaid amount owed:*

If charged:	Simple Annual Rate Is:
3/4 of 1%	per month on unpaid balance 9%
5/6 of 1%	per month on unpaid balance 10%
1%	per month on unpaid balance—12%
1¼ %	per month on unpaid balance—15%
1½ %	per month on unpaid balance—18%
2½ %	per month on unpaid balance—30%

This information has been issued in pamphlet form by the U. S. Department of Agriculture at the request of the President's Committee on Consumer Interest. It is available from the Government Printing Office, Washington, D. C. 20402 at five cents a copy.

FAA Wife Takes Leading Role in Volunteer Work

Mrs. Edwin B. Rarer, wife of the FAA Systems Maintenance District Office supervisor in Salt Lake City, exemplifies the vital role an FAA wife can play in community affairs.

Since the Rarers moved to Salt Lake City in 1951, Mrs. Rarer has taken a leading role in volunteer and charity work, and has been particularly active in the Young Women's Christian Association. Recently, she was elected president of Salt Lake City's YWCA board of directors.

Mrs. Rarer encountered no difficulty getting acquainted with her new surroundings when her husband was first transferred to Salt Lake City. She visited the public library, State Capitol building, the zoo, museums, art exhibits and found everyone very friendly. Later on, she volunteered and took part in various civic drives.

Health and recreation activities, social get-togethers, bridge and oil paintings are all part of the YWCA program that Mrs. Rarer now heads.

The outstanding community work Mrs. Rarer has performed is an example of what can be done and is being done by FAA wives.

Mrs. Edwin B. Rarer (third from left) meets with members of community volunteer group in Salt Lake City.

CAVE MAN WORKS IN WASHINGTON HEADQUARTERS

An FAAer who is an avid spelunker —one who makes a hobby of exploring caves, is credited with the discovery of one of the world's six largest caves.

Kennedy Nicholson, an aeronautical information specialist in the National Flight Information Division, FAA Headquarters, came upon the cave in Bath County, Va., six years ago. Known as Butler's Cave (after the landowner), several pits in the cave are large enough to hold the Washington Headquarters Building.

Helectites, resembling hanging windblown spaghetti, and rare type of gypsum flowers abound in the cave, Nicholson said.

Further exploration of the cave has been assigned to Nicholson and two otheer members of the National Speleogical Society, while detailed surveying and mapping will be conducted by the Nicholson family, Pennsylvania State University and Virginia Polytechnic Institute.

Son, Mike, as active an explorer as his father, last September discovered that the cave had a heretofore unknown fifth level.

Presently Butler's Cave can be reached only through a narrow crevice but efforts are under way to make it more accessible. Until then it will have to remain the private world of the spelunker equipped, with carbide lamps, lots of energy and courage.

Automated Air Traffic Control Is Symposium Theme

Eight hundred Government officials, scientists, engineers and aviation industry representatives from approximately 100 member nations of the International Civil Aviation Organization are expected to attend the FAA's Third International Aviation Research and Development Symposium at Atlantic City, Nov. 1-3.

Theme of the symposium will be automation in air traffic control. Technical papers and panel discussions will be devoted to recent research and development accomplishments in air traffic control automation.

The symposium will be under the direction of the Systems Research and Development Service and the Office of International Affairs. Neal A. Blake, an executive staff member of the SRDS System Design Team, has been designated technical chairman.

Technical sessions will be held at Haddon Hall Hotel in Atlantic City and demonstrations and a tour of research and development projects will be held at FAA's nearby NAFEC.

Two FAAers Receive Bachelor of Science Degrees

Two FAAers received bachelor of science degrees from Rutgers University at June commencement exercises.

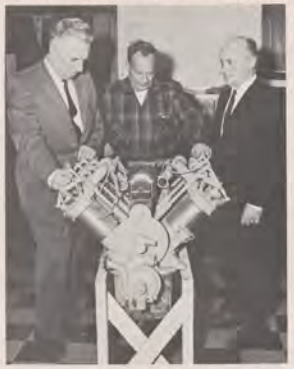
Victor Silving, an air traffic control specialist at Philadelphia International Airport, received his BS in management, and Hugo B. Rossbach, digital computer systems programmer at NAFEC, in accounting.

Rossbach was vice-president of his class and will represent it on the Rutgers Alumni Federation.

ALASKA BRIEFED ON SARDA

Federal and state officials in Anchorage, Alaska were briefed recently on the State and Regional Defense Airlift (SARDA) plan by Flight Standards Civil Aviation Readiness Officer Raymond A. Shepanek, (second from right), of Washington. Among those attending were, from left: Edward R. Sanders, chairman of the Transportation Group; George Sharrock, chairman of the Air Transportation Committee and Alaskan Governor Egan's special assistant John R. Alcantra.

49th State Wing of OX-5 Club Elects New Prexy at Anchorage



Reminiscing over the qualities of the Curtiss-built OX-5 engine are, from left: Alfred K. Young; Fred B. Seltenreich, an airplane supplier in Anchorage, and his brother, Bud S., a Flight Standards District Office supervisor.

The Alaska Wing of the OX-5 Club of America has a new pilot at the controls, Alfred K. Young, general aviation operations specialist in Flight Standards Division, who was named president of the club in March. Young is also on the 10-man National Board of Governors.

"We're going to try to boost our membership in the 49th State," said Young. "We have many veteran pilots up here —at least 100 who qualify as potential members. This includes Alaska's Governor William A. Egan."

The sole eligibility requirement for membership in this unique club is to have flown an OX-5 powered aircraft solo prior to Dec. 31, 1940 or, prior to that date, to have owned such an aircraft, or helped design, repair, maintain or operate such aircraft.

The Curtiss OX-5 engine had its heyday during and shortly after World War I. The 90-horsepower V-8 was the first mass produced U. S. aircraft engine of the war.

Following the war, thousands of engines were sold for surplus at $25 apiece. Fully-equipped planes sold for $250. Thus the Curtiss OX-5 engine was in common use throughout the nation as the United States became aviation minded. And most of the pilots who learned to fly in the U. S. from 1915 to 1940 were trained in the OX-5.

Across the nation there are 8,000 OX-5 Club members, many of whom are no longer flying.

THINGS REALLY JUMP AT THE 'FROGTOWN TOWER'

FAA went to the famed Jumping Frog Jubilee in Angels Camp, Calif., this year—but not to enter any frogs in the jumping contest. The Jubilee was held at the Calaveras County Fairgrounds which is equipped with a 2,400-foot oiled surface runway. So heavy is the traffic to the Fairgrounds during the annual Jubilee that the board of directors appealed to FAA for help in setting up a temporary control tower.

M. Carl Estep, chief of the Stockton Tower, arranged to set up the tower and during the two days of the Jubilee "Frogtown Tower" personnel handled 540 operations.

But this alone does not tell the full story of how busy air traffic actually was at this ordinarily sleepy mountain village.

"It seemed everybody wanted to come in at the same time," Estep reported. "For a while, things got pretty thick and about half a dozen planes were stacked up waiting to get in."

Estep took an active part in the Jubilee both this year and last, and like most of those with official duties, was dressed in 49'er regalia.

Personnel from the Stockton Tower who manned the facility from 8 a.m. to 8 p.m. during the event included Carl B. Starnes, Edward E. Welsh, Roy G. Naylor, Walter H. Daigle, Terry B. Goodman and Robert D. Noble. Frank E. Taylor of the Stockton Systems Maintenance Sector installed the equipment for the tower and kept it in top running order.

Unidentified lad, and friend, heading for the big leap.

The colorful Jubilee this year attracted almost 100,000 persons to California's secluded "Mother Lode Country" at the Sierra Nevada foothills. The annual celebration dates back exactly 100 years this summer to the time when Mark Twain first published his story, "The Celebrated Jumping Frog of Calaveras County."

Stricken Woman Lauds Tahoe Controllers for Help

Two controllers at the Tahoe, Calif., Tower, Elwin T. Newberry and H. Russell Bracken, have been commended by the National Association of Women in Construction (NAWIC) for their alertness in a recent emergency.

The controllers were given five minutes notice that a plane was to land with a seriously ill woman aboard who required inhalator service.

By the time the plane touched down, both the emergency inhalator squad and an ambulance were awaiting the woman.

Mary G. Glowers, a passenger in the plane and a member of NAWIC, later wrote a "thank-you" letter to the airport manager declaring: "Our pilot was surprised to find how well your tower coordinated our landing with the inhalator squad and ambulance. He stated that he never has received such efficient cooperation in all his years of flying."

McClellan RAPCON Chief Rushes Data to Scientist

Following terse, no nonsense instructions, Hart H. Mark, chief of the McClellan RAPCON, Sacramento, Calif., stuffed an envelope with fact sheets, pictures, radar manuals and related data and rushed it off to a correspondent who wrote that he needed the material for a research paper.

Along with it went a letter applauding the scholar's interest and urging him to seek a definite goal and work hard toward reaching it.

The exchange was prompted by a letter from student John Abt who concluded his request for information with the postscript: "Please do not be afraid to send hard-to-understand electronic comments because I have taken a mail order course in electronics and understand the principles of radar."

John is a well-known science figure in sixth grade circles.

Military, Civil Pilots Briefed By Nenana FSS for Summer Round

For the third successive year, flight service specialists from the Nenana, Alaska, FSS held a day-long briefing for military and civilian pilots from nearby Clear Air Force Base, Alaska, the location of the ballistics missile early warning system.

Some 50 airmen attended, most of them civilian technicians from the Radio Corporation of America who man the station and its giant antenna—longer than a football field.

The group was given a thorough review by Archie A. Frye, senior air traffic control specialist at the Nenana FSS.

TEMPLE IS RATTLER WRANGLER

When the summer vacation season is in the offing and most men dream of golf courses or fishing tackle, George H. Temple, chief of the Systems Maintenance Sector at San Angelo, Tex., finds his thoughts straying to rattlesnakes.

Temple is a regular participant in the annual rattler roundup sponsored by the Texas Department of Safety. This year he joined a group of men from a nearby airbase and spent several days bagging the deadly reptiles.

The safari goes into the desert armed with mirrors, snares, hooks, steel containers and wire mesh cages. The mirrors are used to reflect light into crevices and other places snakes are likely to be hiding; hooks and snares remove them once they're spotted; containers and cages carry them back to civilization where they are either destroyed or turned over to pharmaceutical and medical organizations for their venom.

The snake-hunt is considered a sporting event by the hardy members of the expeditionary force. As they say in France, "Chacun à son goût."

ON THE SCOPE

MILESTONE: C. C. Watson (left) chief, Washington ARTCC, and R. W. Markham, president of NAGE local, sign first center employee/management agreement.

WATCHWORD SAFETY: Atlanta Aircraft Maintenance Base at Fulton County Airport worked all through 1964 without a single lost-time accident. Southern Region Director Arvin O. Basnight (left foreground) presented a handsome plaque to Ervin O. Tucker, maintenance supervisor, in commemoration of the record.

RADAR EYES: Controllers at the Chicago Center receive awards from their chief, Raymond Belanger, (second from right) for using radar to guide pilots to safety in emergencies. From left: Thomas A. Hamman, Rolla W. Sanders, Robert Throne, Terry Doss. Far right: Martin Lauth, chairman, local chapter ATCA.

THINKER: Joseph Martin (center) of Boston ARTCC gets check for his idea of computer routine that prints additional space to be protected at turning points.

SUCCESS: John A. Ferraro, first man to pass aircraft powerplant mechanic exam since Aircraft Services Facility was organized at NAFEC, receives his certificate from Chief Inspector Charles E. Straubel.

HALF MILLIONAIRES: From left: A. A. Oubari and William Walker are congratulated by Tower Chief James F. Burkhart for completing the 500,000th flight operation at Gillespie Field, San Diego.

HONORED: John M. Cyrocki, FAA nominee for the William A. Jump Award, presented annually to an outstanding Federal employee under 37. The Agency stressed Cyrocki's contributions to air safety.

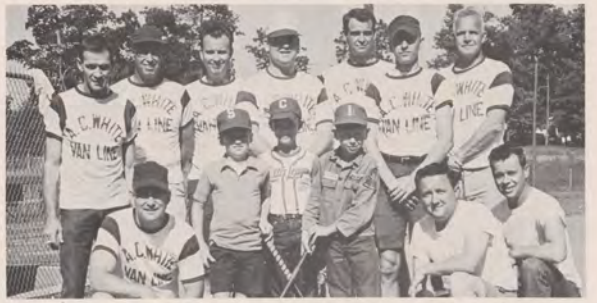
AFTER HOURS

THE HANDS TELL THE STORY: Newly appointed Pacific Region Director Phillip M. Swatek and his wife study Island lore under the tutelage of Betty Roth.

BALL-ERINAS: Champion Headquarters lady bowlers: Catherine V. Frazelle, hi-average; Elsie M. Woods, hi-game scratch; Darlene Carter, hi-series scratch.

LOOT: Beaming Headquarters bowling champs show trophies. Bernard Isralow, hi-series scratch; Gus J. Sandors, hi-average; Jiles Ritnaur, hi-game series.

SAVANT: Pedro Pascua (right), Pacific Region's nonstop scholar, gets another diploma from Charles J. Miesel, his boss. Study is Pedro's hobby.



PLAY BALL: Southern Region's flag-winning softball team poses for its portrait. Kneeling, from left: Donald D. Dyer, (boys are unknown), Gene Faulkner, Donald L. Reininger. Standing, from left: Albert B. Cox, R. B. Eggers, Wayne Thompson, Terry L. Williams, George Rose, Frank Praslicka, W. G. Michels.

SHOOTIN' IRONS: Great Falls, Mont., RAPCON crew-chief Orloff P. Morrow has about 40 guns, including this '76 buffalo gun and Colt .45 "Peacemaker."

WINNERS ALL: Eastern Region Deputy Director Wayne Hendershot presents trophies to winners in FAA International Bowling League. From left: Walter Kies (160 average); Frank Schaefer (160); Evelyn Daab (130); Capt. Hugh McEvoy (166); and John Moriarty (166).

MORE WINNERS: High award winners get mementos of skill from Eastern Region Deputy Director Wayne Hendershot. From left: Ken Dyste, high game; Edna Schmittou, second high average; Linda Gavers, second high series; Jim McMahon, high average.

YOUR HEALTH

ATHLETES BEWARE. Summertime is barefoot time, so be on the lookout for athlete's foot and other fungus growth, especially with children.

Four common skin diseases caused by a fungus growth are: ringworm of the feet, ringworm of the scalp, ringworm of the body and ringworm of the nail. The most common of these is ringworm of the feet or athlete's foot. The most stubborn one to cure is ringworm of the nail. These four diseases are more annoying than dangerous and are serious only when they cause breaks in the skin where other infections can enter. They all need prompt medical treatment.

The symptoms of athlete's foot are a dampness between the toes, scaling, itching in most cases and small blisters on the feet. There are several forms of it and each one needs its own treatment. Self-treatment can make athlete's foot worse. Let your doctor decide and tell you what to do.

Ringworm of the scalp is contagious. It is spread in many ways, and usually to children. A dog or cat with ringworm can transmit the disease to a person. Scalp ringworm causes a patch of hair to break off near the roots and leaves a bald, mangy looking spot on the head. If your child gets this infection take him to your physician immediately.

Body ringworm also is contagious and, again, children have it more frequently than adults. They get it by contact with another child who has it or by handling cats and dogs that are infected. This type of ringworm usually occurs on the face or neck. The patches are generally ring or oval-shaped; they are slightly raised, pink or scaly with a clear space in the center. Usually, one to four rings appear. Your doctor will know the best treatment for each case.

The most difficult of all to cure is ringworm of the nail. The fungus growth can work entirely through the nail, causing it to become discolored, pitted, grooved, and brittle. Do not delay a cure by trying to treat this infection yourself. Go to a skin specialist if there is one near you; if not, go to a doctor or hospital clinic. And remember, ringworm of the nail too is contagious.

MYTHS ABOUT SLEEP. Here's a good one: An hour of sleep before midnight is worth two hours after midnight. The Life Extension Foundation maintains that it doesn't matter when a person sleeps as long as he gets a minimum of seven or eight hours in a 24-hour period. Other myths about sleep, some research in the field, and a few hints on curing insomnia are explored in a leaflet, "Who Needs Sleep?" You may receive it free by sending a stamped, self-addressed envelope to the Life Extension Foundation, 11 E. 44th Street, New York, N. Y. 10017.

OLD EATING HABITS. Older people often continue to eat at 65 as they did at 45. Because they need fewer calories at 65, however, they become overweight says the Department of Agriculture, even if they follow nutritionally sound diets. A study in Rochester, N. Y., showed that more elderly women are overweight than men.

...AND SAFETY

MOTHBALLS: STRANGE KILLER. Four baby boys in Canada died in the last two years because they slept on bedclothes that had been stored in mothballs. The children reportedly inhaled the mothball vapors which triggered severe jaundice, causing destruction of brain cells and death.

The strange factor was that three of the boys were Chinese and one was Italian. Doctors said that the youngsters were susceptible to mothball death because they were born to mothers with a hereditary deficiency that deprived the children's red blood cells of oxygen. This rare hereditary deficiency is most common among Italians, Greeks, Negroes and Chinese.

Doctors warn that probably 30,000 United States youngsters of these four ethnic groups could be threatened by mothball vapors. They suggest that all babies born to these groups be screened by a simple test that can be done in any hospital.

BABIES NEED SEAT BELTS, TOO. Your young child, standing up on the seat of a car, can be thrown forward and killed in case of a sudden stop, even though you don't have an accident.

Recently, the New Jersey Automobile Club reported two fatal incidents of this type. In each case, a two-year old child was standing on the back seat of a car when the driver slammed on the brakes suddenly, and the child was hurled forward, striking his head on the back of the front seat and breaking his neck. Even at 30 miles an hour, a quick stop would pitch a 30-pound youngster forward with the deadly force of 900 pounds. It would be impossible to catch the child or break his fall.

All of which proves that although you are never involved in an accident, a seat belt may still save your child's life. Youngsters six and under can wear a restraining harness. Or, if you wish, a child of three can be put into an ordinary lap-type seat belt, as long as it can be adjusted snugly.

ANTI-POISON ADVICE. Here are a couple of tips on preventing poisonings:

Be careful that you don't mistaken poisonous camphorated oil for castor oil. The two are often confused, says the National Clearinghouse for Poison Control Centers. Adults have picked up bottles of camphorated oil from drug store shelves, thinking they were buying castor oil, and parents have accidentally given children camphorated oil.

It's a good idea for mothers to taste a baby's formula before giving it to him. The American Academy of Pediatrics says that this enables you to spot "such hazardous errors as substituting salt for sugar"—a mistake that not long ago caused the deaths of six babies in a New York hospital.

TECH TALK

FACTS AND FIGURES. Concealed in the 212 approach lighting systems (ALS) installed and operated by the Agency at major airports coast-to-coast is an amazing welter of facts and figures.

In a night approach the system is seen as a giant incandescent ladder with a center strip of lights that appears to be a continuous stream of man-made lightning discharges. These shoot the length of the AL system at about 3,600 mph with an intensity several times that of the sun. Installed at a cost of $37 million-plus the 212 systems require enough power to supply a city of 12,000.

The system would yield the equivalent of 150,000 hundred-watt bulbs, enough to illuminate a six-room house for 6,000 years; the underground cables, if spliced together, would stretch from Washington, D. C. to Los Angeles. If all the steel supporting towers were placed end-to-end the result would be a single tower more than 100-times taller than the Empire State Building.

Moving the systems would require a fleet of 1,200, 20-ton trucks in a bumper-to-bumper convoy 25 miles long.

This is a far cry from the days when air traffic came under the Lighthouse Service and fields were illuminated and marked by long rows of oil lamps.

SNOW JOB. Sleigh bells have less than a merry ring for Systems Research and Development Service engineers who view snow-covered airports as unquestionably expensive and potentially dangerous.

Traditional manual and mechanical methods of removing snow, ice and slush accumulations are slow and costly. A survey of eight representative busy airports estimated these costs at $900,000 in the winter of 1962-63 with an expected climb to between $3 and $4.5 million in 1975-76. These figures include cost of removal, plus dollar penalties incurred by airlines because of delays, diversions, cancellations and accidents.

SRDS recently undertook a program to develop the best chemical method of combating the problem. The objective was to develop a chemical product capable of melting snow, ice, and slush at temperatures of —10 degrees F. or less. It was important that the product be reasonable in cost, non-corrosive to aircraft, and not cause deterioration of runway pavement.

After a series of experiments with nine different de-icing mixtures combined with potential corrosion inhibitors, one was determined superior to the rest. The prime candidate is a mixture of 75 per cent tripotassium phosphate and 25 per cent formamide. It has a nominal application rate of 2 oz. per square foot, to produce melting at —10 degrees F., minimal corrosion to airplane structural materials, and slight spalling effect, at most, on concrete.

Since this is a new formula field testing is necessary to determine effects under various actual conditions, including effects on airport pavement and grass. Partial testing was conducted during the past winter by the U. S. Air Force in cooperation with the Royal Canadian Air Force at Ottawa, Canada. Additional testing will be done this coming winter at NAFEC and by other Government agencies. Final results are expected to be available early in 1966.

The product costs more than the common salts, sodium chloride and calcium chloride. However, if tests show it to be satisfactory for occupational use, the formula will be used where the benefits and safety override cost considerations.

Research and experimentation were done by the Monsanto Research Corporation under FAA contract. In the course of their work, they found that an inexpensive inhibitor added to calcium chloride, commonly used on streets, will reduce its objectionable corrosive effects. This may be of widespread interest to highway departments and airport managers for road application.

OVER AND OUT. City fathers and other interested groups coast-to-coast are taking an alarmed look at urban sprawl, a post WW II phenomenon that is moving major airports further from the metropolises they were built to serve. As housing developments and their supporting communities continue to mushroom around the city's perimeter, the ground time from airport to city center sometimes exceeds the flying time from the airport to destination.

A possible solution to the problem lies in expanded use of V/STOL (vertical/short takeoff and landing vehicles), such as New York Airways' plan for helicopter operations from mid-Manhattan to metropolitan airports.

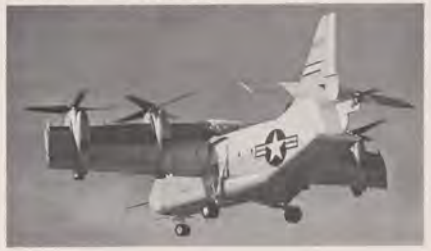
Today, V/STOL aircraft are limited in effectiveness, particularly in IFR conditions, because they must use navigational equipment designed for fixed-wing aircraft. The Project Beacon report, issued in 1961, concluded that special navigational facilities would be required to permit efficient helicopter operations in some terminal areas "if anything approaching their full potential is to be obtained."

Recently, SRDS navigation engineers successfully conducted the first of a series of flight tests to check out the potential of a new low approach instrument landing system (ILS) for helicopters. Further evaluation of the system will be done at NAFEC with U. S. Army participation. New ground equipment consists of a compact localizer and glide slope transmitter/antenna package mounted in a cylindrical radome less than five feet high.

Operating at microwave band frequencies, the unit is particularly suitable for the small areas occupied by heliports. The vertical approach angle can be set to any desirable glide slope between 3 degrees and 90 degrees. Airborne equipment is standard ILS instrumentation converted to accept the higher frequencies of the transmitters.

Other projects designed to meet the special needs of steep gradient aircraft include: • Develop and adapt a high-resolution airborne mapping radar as a prime helicopter navigation aid. This radar will have a beacon mode of operation. • Improve ground beacon antennas and related monitor display system. This project is being conducted jointly with the U. S. Air Force. The V/STOL navigation system program is managed by Ralph B. Ladd, of SRDS.

The XC-142A tri-service V/STOL hovering with wings at -90° takeoff position.



PERSONNEL PIPELINE

WHAT'S WITH THE WHITTEN AMENDMENT?

The Whitten Amendment to the 1952 Appropriation Bill requires that an employee normally serve one year in grade before being eligible for consideration for promotion. It also requires an annual review of all positions established or upgraded since September 1950 to determine (1) whether the position description accurately reflects the duties being performed by the employee, and (2) whether there is still a legitimate need for the position. The supervisor and employee in the position should review the description and update it where necessary. Since the position description specifies the official duties assigned to an employee, it forms the basis for performance improvement discussions, performance ratings, quality pay increases, sustained superior performance and outstanding ratings where the employee exceeds the job demands, and, lastly, the grade and salary. Consequently, the position description should be current and accurate.

DOLLAR$ FOR YOUR IDEA$

A suggestion within one's job responsibilities may result in extra cash if it clearly exceeds the applicable job performance requirements. A suggestion is a constructive idea, submitted in writing, intended to accomplish a job better, faster, and/or cheaper than is presently being done. Obviously proposals to improve working conditions or enforce existing rules or regulations, or in fact anything that can be accomplished through normal or customary action, cannot be considered as suggestions or processed under the Employee Suggestion Program. For best results the employee should discuss his ideas with his supervisor; if they don't fit into the suggestion program, they could very well lead to a Sustained Superior Performance Award, a Special Act or Service Award, an Outstanding Performance Rating, a Quality Step Increase, or even something higher. For complete information read Order PT 3450.3.

THIS IS YOUR LIFE INSURANCE

Fringe Benefits which cost FAA over $3.8 million during fiscal year 1964 gave employees over $390 million in life insurance protection. Each employee is covered for an amount approximating his annual salary at only a fraction of the normal cost to the individual. Life insurance coverage is based on one's salary. If your annual salary is $7,070, the coverage is equal to the next thousand above your annual salary or $8,000. The insurance is issued automatically when you are hired by the FAA unless a waiver is signed by the individual. The group life insurance plan provides both life insurance and accidental death and dismemberment coverage at a very low cost. The accident and dismemberment feature is cancelled with retirement or job termination. However, the life insurance coverage continues in such cases as (1) after job termination, for 31 days, without cost to the employee; (2) after retirement, without cost to the employee; (3) during non-pay status periods for as long as 12 months, provided the individual pays his premiums; and (4) while drawing benefits under the Federal Employees Compensation Act, without cost to the employee. On retirement, the amount of coverage is reduced by 2 per cent per month until the coverage is down to 25 per cent of the original amount. Retirees and those receiving Federal Employees Compensation Act benefits can convert the amount of their group policy coverage to one of several forms of individual insurance without a medical examination. As with other term insurance, you cannot borrow money on the group policy or assign it as collateral for a loan, but it is protection for you and your survivors regardless of whether your injury or death occurs on the job or off.

SCHOOL FOR EXECUTIVES

The problem of how to get managers and staff officers to think of the Agency as a whole is being tackled in a administrative management development program which promises to set an example for university-government training.

A year-long program involving academic training, field projects and training for selected FAA managers will enroll its second class August 23.

Alan Dean, Associate Administrator for Administration, summed up the purpose of the program: ". . . to develop future general managers who have the ability to (1) see the Agency as a whole and to work for its total goals; (2) rise above one's own school technology or professional area; (3) be simultaneously stubborn and forceful while being flexible and conciliatory; and finally to have the capacity for continued growth."

Training for the first group got underway in June 1964 when 20 FAA "middle-managers," carefully selected from throughout the Agency, met with top FAA officials for the kickoff of this pioneering training effort.

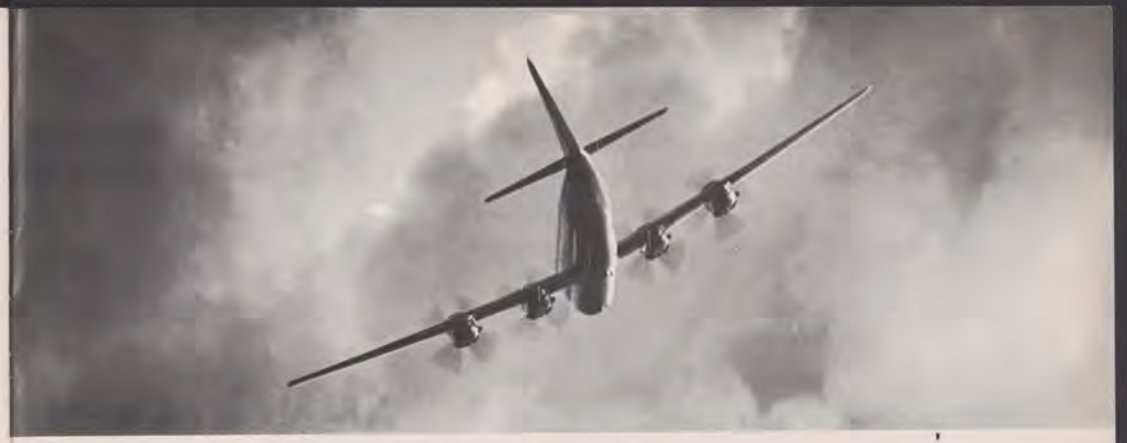
From June until mid-September, the emphasis was on getting the big picture of FAA. Trainees were briefed on the functions of each office and service in the headquarters and they made field trips to both NAFEC and the Aeronautical Center. Instruction was provided in FAA personnel administration for half the period and in fiscal and administrative service during the other half.

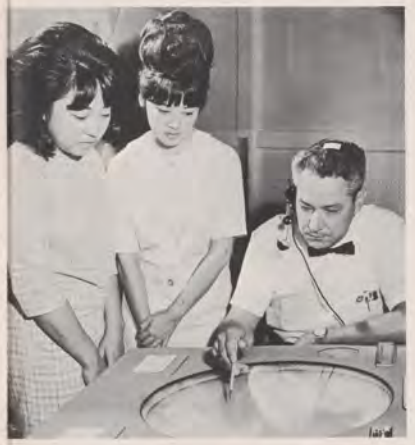
In mid-September, the group enrolled for the fall semester, in Syracuse University's famed Maxwell School of Citizenship and Public Affairs. The graduate curriculum included three core courses taken by the group as a whole, Executive Action, The Political and Social System, The Economy, Government and Business and one elective course.

Following the formal academic training, the group was sent throughout the Agency to gather information on their assigned research projects.

Operating in five teams selected so that no one returned to his home region, the trainees studied field divisions other than those from which they were chosen.

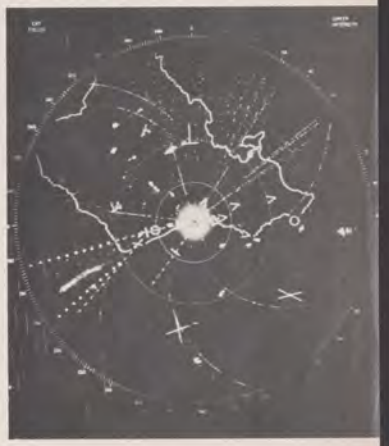
The Executive Personnel Board recommended post-program placement of participants so that each will have the opportunity for continued growth and development. See page 19.

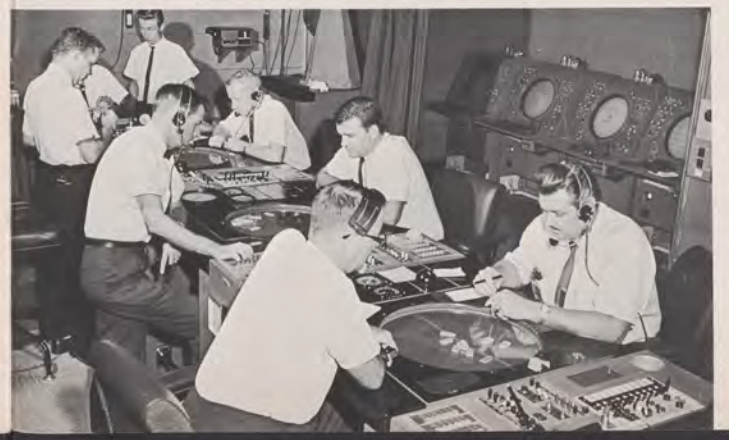


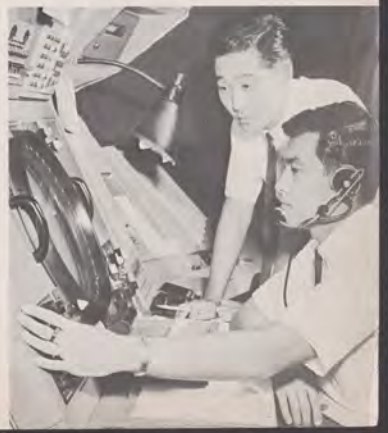


RADAR EYE ON THE SKY

At any minute of the 1,440 in the day, seven days a week, 52 weeks a year, thousands of air travelers relax in disciplined comfort, ranked row upon row in luxury airliners cruising thousands of feet above the ground. Their safety is assured by an intricate, invisible net of radio waves guiding them across oceans and deserts, mountains and plains. One of the focal points of the network is in Honolulu Tower's TRACON (terminal radar control room) shown here. From top, clockwise: a Boeing **Stratocruiser** airliner high in the sky enroute to Hawaii will soon come under control of Honolulu's TRACON. ● This is what an air traffic control specialist sees when he gazes into an ASR-4 airport surveillance radar scope. ● Honolulu controllers Henry Hong and Ed Pang follow aircraft on the last of the PPI (plan position indicator scopes) in use. ● RBDE-5 (Radar Bright Display Equipment) scopes are used by the Honolulu Tower personnel shown here in the TRACON room. ● Controller Clifford Heu, using the new RBDE, points out targets to interested secretaries-to-be, Barbara Masuda and Irene Iyamatsu when they visited the facility on an orientation tour. In 1963, Honolulu International Airport handled a total of 255,855 operations of which 83,701 were air carrier, 61,462 general aviation and 110,692 military and 2,150,122 passengers.







FAAers ON THE JOB

Alcest J. Schexnayder

Artists are opinionated people, especially about art, and Alcest J. Schexnayder, an air traffic control specialist at the New Orleans Air Route Traffic Control Center since 1956, is no exception. He says art education is necessary for the artist and does not stifle creativity. A formally trained artist who began drawing in high school, Schexnayder studied at the New Orleans Academy of Art and is a graduate of the John McCrady School of Art. His works, ranging from pencil drawings, sculpture, water color through oil on canvas, sparkle with imagination and originality. He has exhibited his works of art at the Louisiana State Capitol in Baton Rouge and in the International Trade Mart in New Orleans.

Wilbur E. McCullen

Here's a man with a plan—a whole lot of them, as a matter of fact. He's Wilbur E. McCullen, Chief, Structures and Grounds Branch, Maintenance Division at Washington National Airport. He has access to every plan, drawing and map pertaining to WNA. No nook or cranny of the airport, from its acres of grass and paved runways to its dozens of buildings, is very far from his fingertips. He's been at WNA since 1946, following his service in the Army. His boss, Edgar B. Franklin, WNA Manager, recently presented him with the Employee of the Year Award for his "untiring personal contributions to the maintenance and improvements of the airport and the welfare of those who work for him."