FAA HORIZONS

OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY DECEMBER 1965

COVER

Along Anchorage, Alaska's Lake Hood, a float-equipped Waco biplane circa 1933 is safely tied down as the winter holiday season setting takes on a coat of white snow and glassy frost. Photo by George T. Fay.

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EVACUATION DRILL.. THE EMPHASIS IS ON SPEED

Stewardess Linda Peck rescues two dolls (simulating infants) during the ditching evacuation drill. Right: FAA Maintenance Inspector James R. Barnes uses a stop watch to time drill, as airline employees David Hines and Calvin H. Weimer assist.

With a splash, a giant airliner touched down in the cold sea. It aquaplaned forward for a hundred yards casting a V-shaped spray behind it. As it came to a stop, the nose pitched forward and submerged for a moment. Then it lifted, and the four-engined transport came to rest, bobbing with the sea swells like a great whale that had surfaced.

Outside all was quiet. The only sounds came from within the cabin where the flight crew went through the litany of commands to evacuate the 75 passengers into the life rafts. Minutes later, four huge rafts were paddled away from the aircraft which in a short time would find a final resting place on the bottom of the sea.

There was no report filed on this "accident" because it really didn't happen. It was a simulated ditching drill, a test conducted by Reeve Aleutian Airways in compliance with the FAA's new rules requiring operators of large passenger airplanes to demonstrate their ability to evacuate passengers speedily in the event of landing or take-off accidents or emergencies.

"It is extremely remote that Reeve—or any other air carrier—would have to ditch an aircraft in the sea," said Joseph E. Ohrbeck, FAA air carrier operations inspector. "Today's airliners are safe pieces of equipment. Company maintenance personnel and FAA Flight Standards inspectors work together closely to assure that all equipment is in perfect working condition. We conduct these drills to add just a little more to the measure of safety," he continued.

Reeve chief pilot William R. Borland, said, "For us the test was the moment of truth. With a maximum passenger load —75 plus six crew members—we simulated a ditching drill. All of the rafts were inflated and the raft commanders, flight crew personnel, demonstrated the use of the survival equipment in each raft. It may have been a test, but with FAA inspectors checking everything like hawks, it was probably as tough as the real thing."

Crash landing and aborted take-off drills were included in the tests. The Reeve flight crew had just two minutes to evacuate all of the passengers, using not more than half the emergency exits in the crash landing demonstration. The same time limit was set for the aborted take-off with the landing gear extended. This was done in total darkness. The passengers used the emergency chutes to reach the ground from the cabin. Again, only half the exits could be used. "We really scrambled on this one, but we made it in just under two minutes," said Captain Randal P. Baker. "We were not advised by the inspectors which exits we could use until the very last second."

The test ended with the FAA inspectors' stamp of approval. The crew passed every drill. The survival equipment worked properly and the crew carried out their evacuation assignments like a professional football backfield.

"Reeve crews have to be sharp," said Ohrbeck. "They fly in some of the world's toughest weather, over some of the world's toughest terrain."

Constant attention is given to safety by Bob Reeves, famed Alaskan "bush pilot," now president of Reeve Aleutian. "When you've been in the drink twice, as I have in my early days of flying in Alaska, you give a lot of thought to being ready if you have to ditch," he said. #

Wichita/the airplane capital of the World

Once a brawling cowtown on the dusty plain, Wichita, Kan., now refers to itself as "The Airplane Capital of the World."

Four major aircraft companies, Beechcraft, Boeing, Cessna and Lear, have plants located in the city, and two others, Alon Manufacturing Co. of McPherson, Kan., and Helio Aircraft Co. of Pittsburg, Kan., are located within 100 miles of this bustling aircraft capital.

FAA's Wichita Engineering and Manufacturing District Office, under the direction of James R. Smith, is directly involved with the city's gigantic aviation industry. And each of the 95 FAA employees in Wichita also get into the act during various stages of aircraft production and utilization. Supervisor Smith and two manufacturing inspectors, Keith I. Blythe, now in the Kansas City Regional Office, and Albert C. Ross, in a sense are the midwives of Wichita's aircraft industry, insuring that each "newborn" plane is airworthy and safe when delivered.

When a company proposes to build a new airplane, it makes application to the FAA for a type certificate and sends along drawings of the new plane, Smith said. Then as work on the prototype progresses, manufacturing inspectors check its conformity to the drawings. FAA aerospace engineers also evaluate the drawings and witness static tests to determine compliance with airworthiness standards. In the meantime, the company conducts its own experimental flight tests on a prototype model. Then the FAA issues a Type Inspection Authorization to the company which outlines the ground inspection and flight tests the Agency will conduct. If tests indicate that the airplane meets FAA requirements, a type certificate is granted to the company.

When the company's manufacturing processes and quality controls meet FAA standards, a Production Certificate is granted and one or more Designated Manufacturing Inspection Representatives (DMIR) may be appointed. The DMIR, who works for the company but has to be approved by the Engineering and Manufacturing Branch, may then issue airworthiness certificates for new airplanes. Once a Production Certificate has been issued, the FAA conducts routine surveillance of the manufacturing process and convenes a tri-annual production certification board at each company to re-evaluate the entire operation.

Once the sparkling new airplanes leave the production line, they and their pilots meet the other members of the Wichita FAA community, including the control tower, flight service station, radar approach control and general aviation district office. Wichita Municipal Airport, home of these FAA facilities, was 12th in the nation last year in the number of itinerant general aviation operations.

The control tower and flight service station provide endless service to pilots of ferry flights and to pilots who come to Wichita on training programs operated by the plants. Once the pilots are checked out on the new airplanes, they take oral, written and flight examinations from operations inspectors at the general aviation district office.

Aviation fever runs high in the "Airplane Capital of the World" and the FAA people there have caught it. As Wichita-Area Coordinator and Tower chief Paul Messner says, "You can't live and work around all this aviation without getting the bug yourself." #

One of Wichita's busy airplane production lines is located at Cessna Aircraft Company.

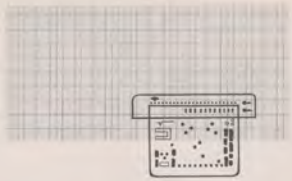
Lear Jets on the company's ramp in Wichita.

Albert C. Ross of FAA's Wichita Engineering and Manufacturing District Office inspects a Twin Beech *engine.*

Wichita Tower chief Paul Messner (seated) describes airport activity to (standing from left) Central Region Director Edward C. Marsh, James R. Smith and Wichita FSS chief W. P. Hurst.

Workmen put the final touches on Beechcraft's King Air, *twin turbo-prop at the Beech Aircraft Corp. plant in Wichita.*

The Cessna Aircraft Company's sprawling commercial division plant is one of two Cessna plants located in Wichita.



BALANCE SHEETS ARE THE TOOLS OF THEIR PROFESSION

Agency audits have resulted in potential savings of more than $8 million in several programs.

Webster defines an auditor as a hearer or listener, but that definition doesn't come close insofar as FAA's auditors are concerned. Not only do these businessmen listen, they also examine, evaluate, analyze and recommend "when to spend and when to spare." In short, they make sure the Agency and the public get a full dollar value for each dollar spent.

These men are members of an FAA staff known as the Office of Audit. Headed by Seymour E. (Sy) Blum, auditors examine each Agency operation with the careful attention of a medical team watching a group of astronauts. Instead of stethoscopes and electrocardiograph, they use various accounting systems which are as effective in measuring the health of an organization as medical instruments are in measuring the health of an individual. The basic tool is the balance sheet. Here, costs and benefits are balanced to insure that taxpayers get a dollar's service for each dollar spent.

Public assets under FAA's responsibility total more than two billion dollars and annual operating expenditures exceed 700 million. No one is more concerned with their effective use than the Administrator. To insure that they are managed properly and that appropriate records are kept to substantiate proper use, auditors systematically examine all accounting systems, record programs and management practices.

"Business," an auditor commented, "measures efficiency by the profit and loss figures its management develops, but cost-versus-benefit is the public's measure of the efficiency of Government management. The auditor's function is to apply the common denominator of the dollar to both the cost and the benefits of each Agency function."

In doing his job, the auditor seeks the answers to questions which all managers are constantly asking themselves: Are we getting a full dollar value for each dollar we spend? Are we getting accurate and timely cost information for sound decision-making? Are the job methods attaining the objectives and also safeguarding public funds?

FAA auditors are ideally equipped to find the answers. Eugene Slyman, as an example, a Navy veteran, has a degree in business administration and worked in the Department of Defense audit before joining the Agency. All of the 24 men who make up the audit staff are college graduates, many have master's degrees, eight are certified public accountants, and two are pilots.

A growing FAA awareness of the benefits of FAA's audit function has caused it to be elevated recently from a division in Management Services to an Office which reports directly to the Administrator through the Associate Administrator for Administration. Behind the move was a long history of growth for audit services throughout the Federal Government.

Congressional attitude toward internal audit was stated clearly by Congressman Jack Brooks, chairman of the Government Activities Subcommittee, who said, "Internal audits give the agency head a means of controlling the management of his own organization so that trouble can be spotted at its inception and waste and inefficiency avoided. Effective internal audits in the larger agencies would mean that the Bureau of the Budget and the General Accounting Office and the Congress could in effect audit the internal auditors rather than search through the broad spectrum of the agencies' operations for areas of waste and inefficiency," he continued. "If the internal auditors were doing a good job, this would lessen the need for specific investigations of a very limited nature by the Bureau, the Comptroller General, and the Congress."

To do the job demanded by Brooks and other congressmen, Sy Blum has organized his audit staff in three divisions; Standards, Operational and Advisory Services.

Liaison with GAO is handled in FAA by the Standards Division headed by George A. Rudigier. The basic goal of this division is to insure that "the internal audit program will be accomplished with sufficient frequency, depth and thoroughness to provide a reliable basis for protecting Agency resources and for evaluating the effectiveness of the use of resources."

Rudigier's staff insures that the Administrator's replies to GAO reports are responsive, and his men follow up actions promised in response to GAO recommendations. This has improved relationships between GAO and FAA, according to Rudigier.

The normal auditing operations in FAA falls under Gordon T. Hey. His Operational Audit Division must complete 59 audits, with the help of field auditors, over the four year period covered by the present program.

Typical of these was an audit of the Agency's use of motor vehicles which brought about sweeping changes in their use and management. The Office of Compliance and Security then stepped in to follow up on several cases where audit disclosed some unauthorized use of the vehicles.

The Advisory Services Division headed by George N. Terris gives the Agency's other staff functions the benefit of the trained auditor's ability to analyze costs and to detect weaknesses in accounting systems. The mobile lounge procurement is a good example. Because no similar purchase had ever been made, development costs of the manufacturer had to be carefully audited by Terris and his staff to insure that the Agency paid no more than a fair price.

Recently another function, the SST contract audit, was transferred to the Office of the Audit by the Administrator. Personnel formerly assigned to those duties in the Office of Supersonic Transport Development have been reassigned to Blum's staff.

Director Blum estimates that Agency audits during 1965 resulted in potential savings of $4.5 million in the FAAP program and $4.3 million in procurement. This was in addition to auditors working with Flight Standards in its air safety program. The financial fitness of air carriers and the accuracy and reliability of their operation and maintenance records were examined carefully. Consequently, Flight Standards could develop the degree of surveillance required to minimize the chance that an operator's weakened financial position might cause neglect of necessary maintenance.

Blum has been chief of the Agency's audit function since it was a branch in the Accounting Division of the Office of Management Services. Associate Administrator Alan L. Dean credits Blum's leadership with the growing effectiveness of Audit and the respect it has enjoyed among all elements of the Agency. #

The Audit staff, from left: Seymour E. Blum, George N. Terris, Hollis Stevens, Charles H. McKeon, George A. Rudigier and Gordon T. Hey. Above: Blum gets a preview of a report to be filed by Bernard Sacks, resident auditor for the General Accounting Office. Friendly relations between Sacks' and Blum's staffs accomplish audit philosophy of Congressman Brooks.

Preliminary balance sheet developed for the Administrator is explained by audit program manager Kenneth V. Doolin to auditors, from left, Eugene D. Slyman, Edwin Baker and Carl F. Young. Right: Three auditors of the Operational Audit Division confer on a study, from left, Robert E. Wilhelm, Robert B. Frey Jr. and Elizabeth L. Moore.

PURSUING WILD GAME BY AIR... Alaskan Style

THE persistent engine whine of a light aircraft closing in on the pounding hoofs of a galloping moose signals to man and beast alike that a low-altitude sportsman is hunting game by air in Alaska.

Recently at a flight safety meeting of the Alaskan Airmen's Association, which included FAA guests, hunting by air was discussed and turned the gathering into one of the most valuable and entertaining meetings ever held in the Alaskan Region.

In sparsely populated areas of the state it is legal to hunt game from the air, although shooting animals from aircraft in flight is not always permitted. The one exception is killing predatory beasts from the air during prescribed seasons.

"Keeping the odds in favor of the pilots, instead of the creatures scurrying across the innocent appearing terrain, is the primary subject of this meeting," said guest speaker Alfred K. Young, general aviation operations specialist in the region's Flight Standards Division. "I'm referring to hunters who fly in search of their prizes, and, in their eagerness to bring home the bacon or fill up their freezers with venison, take unnecessary chances and end up increasing the already rising accident statistics."

The business of piloting small aircraft at low altitudes and decreased airspeeds in canyons and valleys, while looking for something to bag, is one of the most dangerous kinds of flying. Landing in unprepared clearings on rocky shelves or tiny lakes requires expert piloting technique and constant practice, coupled with a completely professional attitude toward flying.

"No matter how anxious the airborne sportsman is to get his moose, caribou, mountain goat or giant bear, flight safety should be his primary concern," said Charles L. Miller, president of the local chapter of the Airmen's Association. "I talked it over," continued Miller, "with Eldon S. Gubler, general operations inspector at Merrill Field, and suggested that FAA give our members some refresher training on the technique of flying in and out of short clearings, survival techniques if we get in trouble, and what to watch out for while flying low at reduced airspeeds."

The meeting was co-hosted by the State of Alaska Department of Fish and Game and FAA. Two State officials, Donald M. Roberts, senior protection officer, and Arthur Bratlie, game biologist, reviewed game regulations and gave hunting tips. They also instructed in the use of survival equipment and how to live off the land if a pilot should be forced down.

"The very least," Bratlie emphasized, "a pilot should have with him are some matches and a knife. From there he can start adding items. But the most important thing is to know what he has in his kit—and how to use it."

Young stressed the importance of thinking ahead of the aircraft, especially when circling their quarry. "Pilots may become excited and forget about their airspeed, altitude and attitude and auger straight into the ground," said Young. His advice: *Know your capabilities and respect your aircraft.*

Even if a pilot can slip his aircraft into a short clearing doesn't mean he'll have a successful take-off—especially if the surface is rough and the plane's loaded with moose meat and antlers hung on the struts.

The tally of sportsmen versus game isn't in yet, but the hunters should come out far ahead if they have followed the pointers given at the meeting.

"We're grateful to Al Young and Eldon Gubler of the Flight Standards Division for the help they've given us on this and other occasions," said Miller for the Alaskan Airmen. "Safety is their business—and ours, too." #

IF DISASTER STRIKES...

and there is no doctor

SITUATED as it is, near one of the world's hot-spots, the Pacific Region was fertile ground for introducing the U. S. Public Health Service's newest program—"Medical Self-Help Training."

Twenty-two enthusiastic FAAers rallied 'round the bandages, splints and filmstrips to get the program off to a flying start at Honolulu headquarters. To avoid the excessive cost of sending numerous personnel to a central training point, the 22 employees were selected from throughout the Region and sent to headquarters to attend a 16-hour instructor's course. After completion and with their Medical Self-Help Certificates in hand, these "self-help-specialists" passed on their newly gained knowledge to fellow employees in other courses set up at their home stations.

The program was supervised by Pacific Region's flight surgeon, Dr. Casimer Jasinski, with the help of Honolulu Red Cross instructors and Hawaii State Civil Defense personnel.

Just as its name implies, the self-help instruction was designed to furnish information and training that help prepare people for survival in a time of a natural or national disaster when the services of a physician or other health personnel are not available.

Endorsed by the American Medical Association and the Office of Civil Defense, the training gives a person a greater capacity to survive and might well mean the difference between life and death. Consisting of 11 illustrated lectures, followed by practice sessions, it teaches how to deal with these emergency situations:

- Radioactive Fallout and Shelter
- Healthful Living in Emergencies
- Artificial Respiration
- Bleeding and Bandaging
- Fractures and Splinting
- Transportation of the Injured
- Burns
- Shock
- Nursing Care of the Sick and Injured
- Infant and Child Care
- Emergency Childbirth

Realistic training aids included a new type of manikin made of inflatable plastic which "breathes" during mouth-to-mouth resuscitation only when the proper technique is applied, and a silhouette of the human head and neck, with movable parts, to demonstrate the proper method of tilting the head for various revival purposes.

Regional personnel who received the intensive training and became qualified Medical Self-Help instructors are: Earl Harris and George M. Leong, Wake Island; Homer Willess and Roy N. Pickett, Guam; Jon Ryberg, Samoa; Thomas Chun, Hawaii; Edward Keiber, Maui; John C. Enlow, Kauai; Philip H. Okada, Molokai; Emil C. Treskon, Dick Mausushima, LeRoy Watts, Hugh Roof, Alvin Delong, Oahu; Kam Wing Yap, Kenneth Hatton, Harold Forester, Flight Standards; James A. McBride, Air Traffic; William S. Cotterell and David Mezurashi, Airway Facilities, and Joseph Kealoha and James Forsyth, Personnel and Training.

Satellite classes already have been held on Guam, Wake, Samoa, Hawaii, Maui and Molokai. Because of the importance of the program, adult dependents of Agency employees, other Government agencies and private industry also were invited to receive the training. #

Left: During an emergency such as an explosion, a passerby trained in Medical Self-Help can render aid, using available debris to make a splint. Below: Practicing the art of self-help is Joe Kealoha, who uses Dorothy Hubbard as his "victim."

Above: Dorothy Hubbard tries mouth-to-mouth resuscitation on a life-like manikin as Elsie Perkins studies her technique. Below: Regional Flight Surgeon Dr. Casimer Jasinski explains the importance of proper head positioning in first aid to allow freedom of breathing and swallowing to Peggy Mark.

TRACTORS ON WINGS WAGE AERIAL WAR ON INSECTS

Buzzing Is Legal for 'Ag' Pilots Who Spray Millions of Acres Annually

Cars stopped along a California farm road, their occupants staring out across a bean field. A small "ag" airplane skimmed along only a few feet above the growing crops, spraying a billowing smoke-like trail of insecticide. Such scenes are common in California's agricultural areas and in many other "breadbasket" areas of the country.

The plane was one of the thousands in the United States which spray insecticides over crops by methodically flying back and forth over long rows of plants. The "ag" planes are aptly called "Tractors with Wings" because of the heavy-duty agricultural work they can accomplish.

In 1962, there were 5,075 aircraft and 4,375 pilots engaged in aerial application work in the United States. These pilots spray more than 30 million acres of cropland and log more than a million hours each year as they help the farmer wage the never-ending fight to keep insects from devouring the crops.

Because of the nature of their work, pilots engaged in various types of crop dusting are more prone to accidents than those in other kinds of flying. Crop dusters must maneuver their planes with a high degree of accuracy at extremely low altitudes and in complex patterns. Hazards such as powerlines, irrigation standpipes and the toxic nature of some of the chemicals used make their existence a precarious one.

Wherever aerial crop dusting work is being carried out across the country, FAA inspectors keep up a never-ceasing effort to hold accidents to a minimum. The work these inspectors do in the agricultural field is only a small part of their total responsibility as General Aviation Operations and Maintenance inspectors.

In the Western Region alone, 16 General Aviation District Offices are concerned with crop dusters and aerial spraying. GADO inspectors working out of these offices visit crop dusting firms to find out: Are pilots fully qualified and properly licensed? Are planes properly maintained? Are required waivers for low flying being obtained?

Effective Jan. 1, 1966, Federal Aviation Regulations governing agricultural aircraft operations are being tightened. Under the new FAR Part 137, an applicant for an agricultural aircraft operator certificate must pass comprehensive tests of his knowledge of agricultural materials and their application. He also must pass tests on his agricultural aircraft flying skill. Each pilot in command must pass a test of his understanding of safe aircraft operation and proper handling and dispensing of chemicals used in crop dusting.

Biplanes used by barnstormers in the 1930's are popular today in another spectacular industry. Below, crop-duster starts pull-up to avoid trees and make low-altitude turn with no margin for error. FAA inspectors like Channing C. Sargent (left) work closely with crop-dusters. With Sargent is duster-pilot Theodore Venegas.

Pilots holding currently effective waivers are exempted from the knowledge tests and flight tests providing their flying records are clean. The new FAR will go a long way to reduce the accident rate in agricultural flying.

Some GADO inspectors have already noted significant improvements. Channing C. Sargent, inspector at Van Nuys, Calif., office, which oversees crop dusting in the Oxnard-Ventura area, says the proficiency of pilots engaged in this work is generally excellent.

"Modern operators are fussy; they hire good pilots and turnover is low. I know one highly-qualified flight instructor who tried for more than a year to get work as a crop duster—and at that he had to start out as an apprentice," Sargent said. "Flying gypsies and rolling stones no longer are a significant part of the crop dusting picture in California. In some cases, the fatality rate is lower than in the general run of general aviation accidents. Hard helmets and shoulder harnesses have saved a lot of pilots," he stated.

Actually, few accidents occur as a result of low flying during swath runs. Tight turns cause most "ag" accidents. Careless pilots sometimes attempt to save scant seconds by hurrying through turns that will put them in line for the next sweep of the field. Sometimes, the turn is too tight a maneuver and the aircraft stalls close to the ground.

Frank A. Allen, chief of the Western Region's General Aviation Branch, had these comments concerning the work GADOs do in keeping down the toll of "ag" accidents: "The Western Region is fortunate to have one of the few recognized approved flight schools which train agricultural pilots. The officials of this school, located in Minden, Nev., have improved and refined their flight and ground school curriculum over the years and are recognized as specialists in their field of training. This type of training and education has enabled agricultural aircraft operators to reach over-all acceptance throughout the country."

The nation's economy is highly dependent on agricultural pilots and their planes. GADO inspectors across the country are rendering distinguished, invaluable service to the nation in helping keep agricultural pilots alive and their planes flying. #

HANGAR NO. 6:

WHERE HQ KEEPS ITS WINGS

1

Back in 1941 when Donald Douglas, airplane maker *par excellence*, put DC-3 No. 4146 together and sent it winging off to join the Army Air Corps, he did his usual good job.

With its hitch completed, No. 4146 was transferred to the Civil Aeronautics Administration in February 1946, becoming the first airline transport type to join the CAA/FAA Washington-based fleet. Now designated N6, and with 8,953 hours, she is in mint condition and the *grande dame* of the Headquarter's fleet stabled in Hangar 6 on the southwest rim of Washington National Airport.

She roosts among such sleek birds as the Agency's Lockheed *JetStar*, Grumman *Gulfstream*, two Beechcraft *Queen Airs*, two Beechcraft *Barons* and one rented Mooney *Super 21*, eight planes in all.

The Hangar 6 operation is run by tall, dark, affable Clarence R (Tex) Melugin, whose plump log book records 9,000-plus hours behind stick and wheel. As chief of the Headquarters Aircraft Management Branch of Flight Standards Service he directs 62 employees, including seven professional pilots who have an aggregate of about 66,000 hours in all manner of craft. The chief pilot is Kenneth W. Hazlett. The aircraft maintenance section which has an aggregate of 745 years of experence is headed by George W. Bodkin. His 41 man crew averages approximately 18 years experience per man.

Other Hangar 6 personnel are engaged in almost the whole spectrum of aviation trades and specialties, ranging from operations through line maintenance (including engine change and similar levels of work). An avionics shop, for example, is completely staffed and equipped to disassemble and restore to "like new" condition the sophisticated electronic gear and navaids carried aboard the planes. A supply room, stocking nearly 10,000 line items valued at $700,000, backs up the maintenance crews.

The Agency's Headquarters fleet—more familiarly known as "Hangar 6"—was organized more than 20 years ago to provide swift, 'round-the-clock, seven-day-a-week flight service to FAA personnel and to Civil Aeronautics Board members hurrying to the scene of an accident. The planes also are available to Members of Congress and other Government agency officials on official business. The CAB has its own Aero *Commander* and flight crews, but maintenance is performed by Hangar 6 technicians.

Hangar 6 planes are all working planes, flying some 5,000 hours yearly, plus an additional 1,000 in pilot retraining and proficiency flights. Regional Flight Standards operations inspectors, for example, receive their initial and recurrent *JetStar* and *Gulfstream* pilot training at Hangar 6, following a curriculum established by the FAA Academy.

With some 190 Headquarters-based Agency pilots on the board, including Deputy Administrator David D. Thomas, the planes are seldom idle. All Agency pilots authorized to use Hangar 6 planes are in jobs directly related to flying and all are qualified in one or more of the planes in the fleet. In order to get on the board, a candidate must be a certificated pilot *and* be in a job related to flying.

While Hangar 6 planes fly the length and breadth of the United States, they are not stay-at-homes by any means. In December 1963 the *JetStar* with Tex Melugin in the left seat and George E. Orenge as copilot, and Issac N. (Newt) Ebbs, flight technician, flew to Moscow. Aboard were former Administrator Najeeb E. Halaby, Raymond B. Maloy, then Assistant Administrator for International Aviation Affairs and now Assistant Administrator of the Europe, Africa, Middle East and George C. Prill, former Assistant Administrator for EU.

In July 1964, the *JetStar* made a two-week swing through Latin America with Orenge as chief pilot and Paul D. Floyd as copilot. In the party were Halaby, Maloy and Congressman Oren Harris, Chairman, Interstate and Foreign Commerce Committee. The purpose of both trips was to discuss civil aviation. #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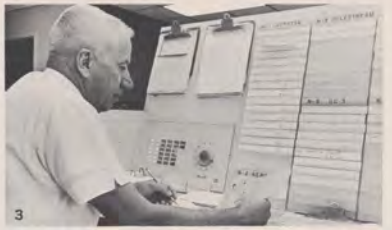
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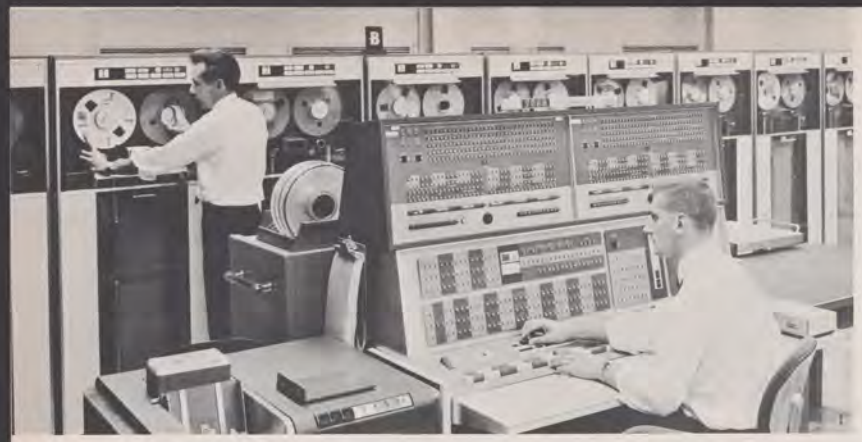
1 *Clarence R. (Tex) Melugin with part of Hangar #6 fleet.*
2 *Stock manager Vernon M. Mays almost submerged by part of the 10,000 line items stocked for Hangar #6 planes.* **3** *They called retired USAF Colonel Clyde N. Parthree the "Grey Fox" when he was in the "President's Flight."*
With 19,000-plus hours, operations specialist Parthree expects to resume flying. **4** *A fuel tank probe occupies the attention of unit chief Ernest Ryals and procurement agent Arline E. Williams.*
5 *Flight mechanic Isaac (Newt) Ebbs probes* JetStar *engine.*
6 JetStar *in Moscow. From left: Russian guard; FAA pilot George E. Orenge; Newt Ebbs; USAF Air Attache Maj. Smith and airport manager.*
7 *Electronic technician Donald L. Shearer tunes ADF receiver in copper-shielded room.*
8 *Batteries stay healthy under care of James J. Hackett.*
9 *Tex Melugin. (Editor's Note: At press time, it was announced that Melugin has been named special assistant to Deputy Administrator Thomas.)*



1 Frank R. Yakita (right) operates the controls of an IBM computer consule while Elmer C. Ripley sets the tape. 2 Chief of NAFEC's Computation Branch, Harry M. Haugan is interviewed by 3 Frank T. McHugh of NAFEC's Office of Information. 4 Dominick P. Messina loads cards into the IBM 1401. 5 The newest computer system now being installed at NAFEC is the IBM 1920. Information is entered into its console by George T. Kraft. 6 Joseph Burley, supervisor of the unit which operates and maintains NAFEC's computers, checks over tapes on file in the Branch's library.

LIGHTNING FEED BACK COMPUTERS

Q&A of NAFEC's Electronic World

Most people have never had occasion to hear the strange buzzing, clicking and whirring of computers at work. Nor have they seen the spellbinding display of their flashing multicolored lights on a panel chock-full of silent needle-wavering dials. But whether they have or haven't seen them, the fact remains that these electronic brains play a great part in their daily lives.

Be they analogues or digital analyzers, the computers are responsible for many rapid advances in modern society. They have become basic tools in research and development work and are certain to influence important parts of the Agency's mission.

To learn more about these amazing mechanical masterminds, how the FAA uses them, and their importance, a HORIZONS reporter visited the Agency's largest computer complex, the National Aviation Facilities Experimental Center, Atlantic City, and interviewed Harry M. Haugan, chief, Computation Branch, which operates the automatic data processing facilities there.

What follows is a layman's question and answer report:

Q. Harry, I guess there's no better way to start this interview than by asking you what is a computer?
A. It is simply a machine into which we feed information. The machine reads the data, stores or files it, works mathematical problems or does various other functions and finally presents results.

Q. You say "feed information into the computer." Just how do you go about this?
A. We receive information in many different forms: printed, written, photographic or recorded, and then convert it into a language that the computer can understand. This so-called language may be punched cards or magnetic tape.

Q. Are those the only ways a computer will accept information?
A. Oh, no. In certain cases, a computer can read directly . . . that's what we call "on line" . . . without using cards or tape. This is done by using a converter, as an additional part of the computer, that can read radar video data directly into the machine.

Q. Assuming you've fed the computer a problem, could you explain how it presents the answer?
A. Well, there are several ways. Some print it out on paper, others draw it on a graph, while another may indicate it on a cathode ray tube which is very similar to a radar scope.

Q. How are computers used at NAFEC?
A. We use them in three ways: First, a computer handles personnel records, property accounting and payrolls. Every pay day, it produces pay check data for more than 1,700 Agency employees at the Center and to do this it takes about four or five hours. In man-hours it would take about 20 times that amount. The second way we use them is for calculating. The computers solve complex engineering problems if they lend themselves to mathematical solution—in equations and formulas. The computer calculates higher mathematics almost instantaneously. Naturally, this saves a tremendous number of man-hours. Thirdly, the computer is invaluable in solving simulated air traffic problems. We have programs which can be run through a computer with the results displayed on simulated radar scopes. In this way we can duplicate an air traffic situation as it might be seen on radar at a particular ATC facility. Many air traffic problems are solved in this manner.

Q. What are the special training requirements needed by employees to operate a computer?
A. Our people are classified into four different groups according to the type of work they do. The **analyst** looks over the job and determines if and how it should be run. He must know the purpose of the problem, in what form the data is, how to process data going into the computer and what results are expected. Then there's the **programmer** who decides what process the computer will use. He must know exactly what happens to the material in the different parts of the computer system. Also, he puts the information to be processed in a code that the computer will understand. **Data preparation** is handled by another technician who takes the coding sheet from the programmer and punches out the program on cards with a typewriter-like machine. I'm sure that most everyone recognizes computer cards, with each punched hole representing a specific bit of information. And finally there's the **operator**—he's located right at the computer and adjusts its controls to set up the process, feeds in the cards or tape and then reviews the results.

Q. How many people work in the NAFEC Computation Branch?
A. We have about 80 employees.

Q. Will you tell us a little about the various computers used here?
A. Well, we have three systems and they are the: IBM 1401, IBM 7090 and the IBM 9020. It may be of interest to know that we own these computers and don't rent them as is common practice.

Q. What is the primary use of these computers individually?
A. The 1401 is a small scale digital computer with a high-speed printer attached so that it can print out its answers, when desirable. It is used in business applications—preparing accounting reports, the payroll and so forth. Also it will take information from cards and put it on a tape which can be run on the large scale, high-speed 7090 or 9020. The 7090 devours volumes of data at a tremendous rate; so fast, in fact, that in order for it to operate economically it must be fed by the smaller computer. It scans data collected in experimental tests and processes it, coming up with the answers by doing mathematical operations. Results can either be fed back into the smaller 1401, which has a printer, to a plotter that traces answers on graph paper, or to a cathode ray tube for display.

Our third computer, the 9020, is called the heart of the National Airspace. It is a modified IBM 360 and will be used for air traffic control purposes. For example: When a control tower has, say, a dozen inbound aircraft approaching at various speeds, altitudes and directions, in what optimum order should they land? This is one of the basic problems that the 9020 will help solve. Also it will help relieve the controller of many routine, tedious calculations, will process flight plans and will determine conflicts of traffic.

Q. Why are such large amounts of magnetic tape stored here?
A. The tape represents stored data for use when we need it. It is information collected from our various projects which is catalogued and placed in our library. When a programmer wants to set up a particular project, he asks that a certain tape be mounted on the computer when he is ready to run the program.

Q. Is it possible that some problems could be solved by man more economically and more rapidly than by a computer?
A. Yes, that is possible. An analyst checks the problem first to determine whether it is suitable for a computer. He weighs the time to prepare the material for the computer against the man-hours it may save, and he also checks to see if there might be a better way to handle the work other than by the computer.

Q. What work might be done better by a computer?
A. I can mention some of the key things to look for that might indicate use of a computer: repetitive paper work, where the same thing is done over and over; filing, the information retrieval type, and updating records where files are constantly being changed. An analyst would have to study each of these situations —and I have only mentioned a few examples—to see if it would be more economical to use a computer.

Q. We hear that computers may one day replace humans at work. What is the probability of this?
A. In some cases, yes. But only in special cases. We just mentioned the type of work for which a computer is most suited. Behind all this is the planner, the analyzer and the thinker, which are the roles that man will play. No, I expect to see people around for quite some time. #

SAFETY IS THEIR TRADEMARK

. . . air carrier maintenance inspectors on the job

"I don't see how it ever gets off the ground!"

This remark is heard frequently from laymen as they peer into the inner workings of a modern jet airliner, opened up in a hangar for inspection and repair.

The maze of hydraulic lines, electrical wires and fittings is amazing, and it's good to know that this intricate machine can fly so high and swiftly—solid evidence of the United States' world leadership in air travel and air safety.

Last year, more than 75 million Americans rode the Nation's airlines, whose safety record is unparalled in aviation history—a record proving that air transportation is dependable, mature and responsible.

Working quietly and confidently in the background with these efficient airlines are the FAA air carrier maintenance inspectors—usually unheralded, seldom recognized and never glamourized.

But to airline officials, concerned with keeping their flock of "birds" performing at peak serviceability, FAA's maintenance inspectors are authoritative, positive sources of direction.

These men, well-informed in modern air technology, are responsible for hundreds of detailed activities to assure that air carrier aircraft are airworthy at all times, that they meet the strict legal requirements governing "for hire" operations and, equally important, that the airline mechanics themselves are well-trained and knowledgeable in their work.

Air carriers, equally aware of the importance of superior maintenance, know that the very heart of airline dependability and "on-time" reliability rests with top-flight aircraft maintenance at overhaul times and daily "on-the-line."

It is the partnership between air carriers and FAA aircraft maintenance inspectors that assures the United States' enviable air safety record. To the average airline operating official, the FAA is the Flight Standards air carrier maintenance inspector: He seldom meets the air traffic controller, the systems maintenance man, the accountant, or the others who make up the FAA team.

By following one of these maintenance experts through a day filled with tight schedules, important decisions, and many minor details, it is easy to see why he is so well-known and respected.

As you walk with him through a big overhaul base, you hear him say, "Hi, Jim," "Hello, Harry," "What's new, Smitty?"—he knows many by their first names. Then, as the inspector climbs a scaffold to check a detail, you might see a young mechanic come up to him with a question about a difficult problem in an FAA examination thats been bothering him . . . and he gets a quick and accurate answer, the stock-in-trade of an FAA air carrier maintenance inspector. #

Above: FAA air carrier inspector Champlan H. Bossert (left), raised more than four stories high on a "cherry picker" by Delta head mechanic Edward Trimble, examines rudder skin surface of a DC-8 jet airliner. Right: A critical area in the pylon section of a Convair 880 jet is checked by inspector John F. Johnson and principal maintenance inspector Robert H. King.

A jet engine is inspected by a team of air carrier maintenance inspectors. From top: Champlan H. Bossert, Robert H. King and John F. Johnson Jr.

Right: maintenance inspector John F. Johnson (left) and Delta radiograph foreman check X-ray of wing structure.

While on an en route inspection of air carrier line stations, inspector Bossert checks a jet ignition exciter unit at Dallas.

Center right: Robert H. (Bill) King, principal maintenance inspector, checks performance data of a turbo-jet engine. Delta test cell operator John Gunn takes readings. Right: Micro-organisms, discovered growing in fuel tanks of jet aircraft, are put through chemical analysis by maintenance inspector John F. Johnson (left) and Sherman Davis, Delta laboratory technician.

NAFEC AIRCRAFT AIDS POLICE AND FIRE DEPARTMENTS

A fire was put out and an automobile thief was caught recently near Atlantic City with the help of aircraft based at the National Aviation Facilities Experimental Center.

On the first occasion, DC-7 pilots Kenneth B. Johnson and Robert H. Grace were flight testing aircraft instruments and happened to look down and saw a house on fire.

They immediately radioed the news to the Atlantic City Airport Tower where controllers John A. McDermott, Robert K. Piperata and Robert McGuckin alerted local fire departments. Through this fast cooperation, firemen were able to keep the blaze from spreading to nearby homes.

Ten days later, Thomas S. Chopin, chief of NAFEC's Evaluation Division, was called by local police to assist in tracking down a car thief known to be hiding in a swampy area. Chopin contacted Jack E. Jensen, chief of Aircraft Services, who diverted a helicopter to the scene. Aboard the chopper was Captain William R. Russel, chief of the NAFEC Guard Force, who quickly helped flush out the dampened auto rustler.

McGRATH, ALASKA FSS COMMISSIONED BY FAA-WB

A new flight service station was unveiled at McGrath, Alaska in October, when the Agency and the Weather Bureau jointly commissioned a gleaming new $342,000 facility.

Marion J. Figley, McGrath area manager, was host to over 100 residents of the McGrath area who turned out for the ceremony and for a guided tour of the new FSS.

Alaskan Region Directors George M. Gary of the FAA and Mac Emerson of the Weather Bureau participated in the joint dedication. Also attending were: Hugh Gallagher, legislative assistant to Senator E. L. Bartlett of Alaska, and Lars Johnson, Director of the Division of Aviation for Alaska.

FAA Director Gary told visitors: "For the Weather Bureau and FAA this new flight service station is a big stride forward in providing services for the flying public. Partnership with the Weather Bureau in public service is not something one finds only in Alaska. It exists throughout the nation. In Alaska, this teamwork and cooperation between agencies is perhaps more important than anywhere else. We serve pilots in the flyingest state in the nation—where for many the airplane is the only means of transportation."

Marion J. Figley (right), McGrath area manager, addresses crowd during the dedication of the new $342,000 flight service station. Among those attending the ceremonies included, from left: Hugh Gallagher (in wheelchair), FAA Regional Director George M. Gary and U.S. Weather Bureau Regional Director Mac Emerson.

Heavy Air Traffic to PGA Gets An Assist from Temporary Tower

Controllers directed private and executive aircraft from this temporary tower at Westmoreland County Airport at Latrobe, Pa., during the PGA Annual Tournament.

A hastily built frame structure erected alongside the taxiway of the Westmoreland County Airport in Latrobe, Pa., served as the temporary air traffic control tower equipped and staffed by FAA personnel during the Professional Golfers Association tournament.

Airport authorities had anticipated heavy air traffic, so a "Mayday" went out to the FAA. Eastern Region's Cleveland air traffic and systems maintenance chiefs responded promptly. Shortly after the last nail was hammered into plywood and 2 by 4's, the Region had it staffed by a quartet from the Greater Pittsburgh Airport Tower—Chief Ken McMechen, watch supervisor William Aber, and two air traffic control specialists, Frank Graham and William West. Equipment maintenance was handled by electronic maintenance technician Joseph Lechman of Greater Pittsburgh's SMS.

The FAAers handled the heavy air traffic without incident during the four-day period in August. And despite all the golf talk, not once did any of the controllers forget themselves and issue a clearance by yelling "Fore!" into the mike.

Pilot Uses Hanksville Ceiling Light Beam to Find His Way Down to Safety

A light aircraft was saved at Hanksville, Utah, by literally making a descent on a light beam.

Leo E. Peirce, chief of the Hanksville Flight Service Station, credits Thomas F. Janik with saving the pilot's life.

Janik, a flight service specialist, was studying sky conditions with a ceiling light on a murky night when he heard a light aircraft above the overcast. He attempted, unsuccessfully, to establish radio contact, realizing that a light plane which was airborne at this time of night was probably in trouble. Hanksville is 50 miles from the next inhabited area.

What Janik didn't know was that the plane had been on top of the overcast for three hours, flying at altitudes up to 16,000 feet. It had taken off from Ely, Nev., en route to Grand Junction, Colo., but shortly after take-off the weather closed in below. Unable to complete the flight or to return to Ely, the pilot flew with little hope until he saw the Hanksville ceiling light and began to circle.

On a hunch, Janik reset the timing on the ceiling light so it would continue to burn. Just as he expected, the aircraft spiraled down around the light and within a few minutes landed safely.

FAA/AIR FORCE AGREE ON NOTAM CONSOLIDATION

An agreement calling for the immediate collocation and ultimate consolidation of U. S. Air Force and Federal Aviation Agency NOTAM (Notice to Airmen) facilities and systems has been signed as the first step toward a single system.

Under the terms of this agreement, the Air Force-operated USAF/USN Central NOTAM Facility (CNF) will move from Tinker AFB, Oklahoma City, to the FAA Headquarters, Washington, D. C. The facility will be collocated with the existing National Flight Data Center, which is the central source for NOTAMs and other flight information issued by FAA.

The CNF will remain in operation for a brief period of time to assure continuity of service to its customers.

Both the FAA and the USAF/USN NOTAM systems will continue to function as separate units pending consolidation of the two into a single National NOTAM System. The CNF will be staffed by Air Force personnel and will use existing USAF communications circuits for collecting and disseminating flight information.

Final consolidation will depend largely on the availability of adequate telecommunications and computer services to handle the combined workload of the two systems. In the interim, both FAA and the Air Force will work towards increasing the exchange of NOTAM information between the two and developing common NOTAM standards and procedures.

The National NOTAM System envisioned in the agreement would be managed by FAA, which would provide the required domestic communications network and computer capability. FAA also would operate and monitor the civilian input to the consolidated system.

The Air Force, on the other hand, would provide for connections to the FAA domestic communications system at USAF/USN locations. It also would provide the military input of the system.

NOTAMs are issued by FAA concerning various changes in components of the National Airspace System. These include inoperative navigation aids, unscheduled airport or runway closings, and new or rescheduled instrument flight and landing procedures. This information is intended for both civil and military users of the common National Airspace System. NOTAMs issued by CNF primarily concern military users.

FAA Gooney Bird Leads Private Pilot to Safety

A private pilot, low on fuel and unable to find an opening in a thick overcast, radioed the FAA for help while flying near Atlanta in October. Within minutes an FAA flight inspection DC-3 was radar vectored to his aid and escorted him, wingtip to wingtip, through the 3,000 foot layer of clouds to safety.

The private pilot, George McKeever of Clearwater, Fla., was flying at 6,100 feet above an overcast in which he could find no clearings in the cloud layer to drop through to refuel at Albany, Ga., as he had planned. Instead, he continued to Atlanta.

FAA flight inspection pilots Paul E. Dennis (left) and Odys Palmer smile from the cockpit of the DC-3 that successfully guided a private pilot safely through the overcast to a safe landing at Atlanta Airport.

At Atlanta and still above the heavy overcast, McKeever, with only 25 minutes' fuel on board, radioed the FAA tower at Atlanta to report his problem.

FAA radar controller Howard B. Cobb in the Atlanta Radar Airport Approach Control, vectored FAA Southern Region pilot Paul E. Dennis and his co-pilot, Odys P. Palmer, in a DC-3 flight inspection aircraft, to a rendezvous with McKeever's single-engine plane at a point five miles northwest of Atlanta Airport.

Flying close enough to the light plane so McKeever, a non-instrument rated pilot, could keep the FAA aircraft in view through the clouds, Dennis and Palmer, with controller Cobb guiding them through other air traffic, led the pilot down through the overcast into clear weather, five miles southwest of the airport.

With the ground in view, McKeever then flew on to a safe landing at the municipal airport, where he refueled and later continued his flight to Gary, Ind.

Vierling Named Deputy Director In Office of SST DeVelopment

Bernard J. Vierling

Bernard J. Vierling, Director of the Systems Maintenance Service since mid-1962, was named Deputy Director of the Office of Supersonic Transport Development last month.

The Office of SST Development, headed by its director, Brig. Gen. Jewell C. Maxwell, is concerned with the managing of the development by private industry of a commercial aircraft that can carry up to 250 passengers at speeds in excess of 1,700 mph.

Vierling's aviation career, which was highlighted by the presentation last December of a Presidential commendation for saving the government $8 million, spans three decades. It began in 1936 after he graduated from Stanford University with a B.S. degree in mechanical engineering. Since then he has worked at Douglas Aircraft Co., Pennsylvania Central Airlines and has headed several companies including his own prior to joining the FAA.

ANG Pilot Thanks Controllers

Captain Dwight M. Spearman (right), Mississippi Air National Guard, thanks Charles Johnson (left) and James Stovall, air traffic control specialists, Muscle Shoals Flight Service Station, for their flight assistance during a night mission when Spearman's airspeed indicator went out.

JACK G. WEBB IS NAMED AS DIRECTOR OF NAFEC

Jack G. Webb

Jack G. Webb, a veteran pilot and career Government employee, was named Director of the National Aviation Facilities Experimental Center near Atlantic City. The Center is the headquarters for FAA's research and development activities in such areas as air traffic simulation, airport lighting, automatic landing systems, radar improvement and aircraft safety.

The appointment of Webb reflects a realignment of NAFEC responsibilities whereby its operations now fall directly under the jurisdiction of the Director, who reports to William F. McKee, FAA Administrator.

Previously, NAFEC's operations were under the jurisdiction of a number of FAA offices and services in Washington. "This new, more efficient, decentralized arrangement," the Administrator said, "will produce more effective results in our research and development by providing more direct control of funds and manpower."

Webb was previously Deputy Director of FAA's Southern Region. He entered Government service in 1942 and has held a number of positions of increasing responsibility with the Agency in Los Angeles, Oklahoma City and Washington.

Before joining the FAA, Webb was the chief pilot for the Nelson Flying Service in Los Angeles.

A graduate of San Diego State College and a native of Pasadena, Calif., Webb is a pilot with nearly 13,000 hours flight time. He holds an airline transport pilot's certificate with multi-engine and turbo-prop ratings, as well as a flight instructor's certificate and an airframe and powerplant license.

Webb is married and has two children and six grandchildren.

Oklahoma City Women Honor Mrs. Dorothy Morgan

An Aeronautical Center employee who has been a well-known Oklahoma pilot since the 30s was honored recently for her contributions to aviation.

Tribute was paid to Mrs. Dorothy Pressler Morgan, who works in the FAA Installations and Material Depot, by the Oklahoma City Soon-Airs, a group of professional women and housewives interested in aviation.

In the early thirties, Dorothy Morgan's flying togs consisted of whipcord riding breeches, a leather jacket and a beige beret when she flew aerobatics.

The Soon-Airs "Dorothy Morgan Night" honored its organizer and first president, Dorothy Morgan. It was arranged by sister employees, June Grayson, program chairman, who was assisted by Mildred Brooking, Daisy Dovell and Doris Nichols.

Thirty-four years ago Mrs. Morgan soloed an OX-5 powered American *Eagle* and she has been active in aviation ever since.

As an associate of such aviation notables as Wiley Post, Burl Tibbs and Amelia Earhart, she has thrilled thousands who have seen her perform aerobatics.

Prior to her employment with the FAA, she worked as manager of the Oklahoma City Airport. She was one of the first women pilots in the nation to earn an air transport rating.

HEADS EL CAJON 99s.

Miss Leah S. Liersch, a specialist at the San Diego Flight Service Station, has been appointed chairman of the El Cajon Chapter of the 99's.

'Pat' Spearheads Successful Alaskan Hospital Book Drive

Pat Strickland (left), who headed the book drive, received the thanks of Dr. Martha R. Wilson, Native hospital medical director, and William Choquette, president of the Patients' Council at the hospital.

Reading material for Alaskan hospital patients was gathered in an all-out FAA drive spearheaded by Mrs. H. Elmo (Pat) Strickland, administrative clerk in the Alaskan Region's Employee Development Office.

Dr. Martha R. Wilson, Medical Director of the Native Hospital, for whom the drive was made, described Mrs. "Pat" Strickland as "barely five-feet tall wearing high heels and with her hair fixed bouffant style, but she stands ten feet tall in the eyes of the hospital staff."

Pat, whose husband works for the Public Health Service, took up the drive for the hospital after Dr. Wilson asked PHS wives to collect books for the patient library.

Pat is also vice president of the PHS Wives Club in Anchorage.

Dulles Police Win Close Match To Take 1st Director's Trophy

A trophy on the police desk at Dulles International Airport testifies that Dulles policemen are the sharpshooters of the Bureau of National Capital Airports.

A four-man team from the Dulles police force outshot a team from Washington National Airport during a closely contested match at Dulles.

The Dulles team fired an aggregate score of 2,084 against a score of 2,036 for the Washington National team.

Top individual score was fired by Paul Farnham of Dulles with a 570 out of a possible 600.

G. Ward Hobbs, Director of the Bureau of National Capital Airports, presented a trophy to Dulles Police Chief Michael D. Benarick. The trophy, known as the Director's Trophy, will be retained at Dulles until the annual match next year.

NAFEC's Testing Program Includes a Variety of Aviation Safety Projects

Experimentation and test projects continue at the National Aviation Facilities Experimental Center near Atlantic City. Some of the projects underway include:

- Two new flight data recorders are being subjected to punishing tests, both impact and fire, to see if they meet FAA criteria to withstand an accident so they can be of value to accident investigators.
- Loran C, a long-range navigation receiver, underwent tests in the Caribbean area to show the operation of a new electronic device which converts Loran readings into latitude and longitude.
- Monitor antennas of VORs and TACANs were placed in the Center's special icebox-like environmental laboratory to learn how they freeze up and what can be done about it.
- Radio antennas, both VHF and UHF, were placed next to an experimental VORTAC to see if their physical presence might affect course information transmitted from the VORTAC.
- The Frankfurt, Germany, area was duplicated on radar in the Center's simulation lab to develop control procedures to speed up the flow of traffic in that area. The project is run with the cooperation of the West German government and the USAF.
- The problem of false beacon targets and how to prevent them was investigated by bouncing signals off a reflecting screen, as they came to and from an airborne target.
- Antennas of many different types, VHF and UHF, including some shaped like swastikas, were tested to determine performance characteristics. They are being sent to several regions for further tests.

Administrator Visits West Coast

Administrator William F. McKee is met at Lockheed Air Terminal by D. J. Haughton (left), Lockheed Aircraft Corp. president, and Western Regional Director Joseph H. Tippets, during an inspection tour of FAA's western area.

FIELD CONDITIONS 'STORMY' FOR TWO EMPLOYEES

Dodging stones and sleeping in foxholes are not routine for FAA employees, but the Civil Aviation Assistance Group (CAAG) in Kabul, Afghanistan, had reports of both from two of its employees.

Edward A. Daniel Jr., an equipment specialist with CAAG, met resistance that called for a combat helmet when he was troubleshooting a power cable near Kabul Airport. The underground cable lies unnoticed beneath farmland most of the time, but when Daniel found it necessary to dig it up in the midst of a wheat field which was ready for harvest women and children from a nearby village chased him away with rocks.

An electronics engineer from the same group, William C. Williams, landed at Peshawar, Pakistan, to help install new communications equipment on the very night the Indian Air Force picked Peshawar Airport as a target. His billet that night was a foxhole.

Denver ARTCCers Send Medicine To Navajos; Forego Xmas Cards

Christmas, the season for giving and remembering, has taken on added meaning at the Denver ARTCC in Longmont, Colo., where Center employees are using their Christmas card money for a humanitarian cause.

This yuletide, as in years past, employees' Christmas card money will go to purchase medical supplies and drugs used in the treatment of Navajo Indian children at Sage Memorial Hospital in Ganado, Ariz. Before the Center moved to Longmont three years ago, both the Denver Tower and Denver Flight Service Station also participated.

The Colorado Air National Guard has also cooperated in the program by furnishing a C-47 to transport the supplies. Center controller Ralph S. Harp, also an ANG pilot, has flown the contributed medical supplies to Gallup, N. M., the closest landing strip, then transferred the supplies to a truck to complete the delivery to the hospital.

Since 1958, the Denver Center Christmas card project has contributed more than $14,000 worth of drugs and medical supplies to Sage Memorial Hospital.

Thomas J. Florea, Denver Center coordinator, who learned of the hospital's need for supplies through his doctor, initiated the project.

Florea discussed the program with his Center colleagues, who decided to help the Navajos.

Doctors W. D. Spining and J. A. Poncel (left) receive a box of medicine from Ralph S. Harp and Tom Florea.

IT'S 'ALOHA' TO THE PACIFIC/ALASKAN COMMUNICATIONS CIRCUIT 325T

In Alaska, Morris L. Lee, supervisory electronic maintenance technician, helped close down the 325T circuit

And in Hawaii, Alvin O. Delong, another EMT, cuts the switches at Pacific units of the 325T at Fort Weaver.

"Aloha," in Hawaiian, may be used as a joyous greeting or a sad farewell. In either case, it expressed the sentiments of Alaskan and Pacific Region communicators and maintenance personnel who silenced the huge transmitters and receivers of the FAA Circuit 325T in Anchorage and Honolulu in late September.

A radio-teletype point-to-point radio frequency communications circuit, the 325T has been replaced by an all-cable connection between Hawaii, San Francisco, Seattle and Alaska.

It began operation on Aug. 5, 1952, and its circuit tied the 49th and 50th states together. For more than 13 years it relayed vital weather and flight-following information between the two points separated by 3,000 miles of Pacific Ocean. It boasted an average circuit efficiency of 98.2 per cent, an accomplishment considering the problems on the Alaskan end with sun spots and electrical interference experienced in the northern latitudes.

Those who worked old 325T in Alaska and Hawaii have adjusted to the change which newer technology has brought. They'll probably never forget the period following the Alaskan earthquake of March 27, 1964, when it served as the only radio communications link between Alaska and the mainland, sending messages to Honolulu, which were then relayed to San Francisco and other points.

"Aloha" properly captures their sentiments: "Hello" to a newer service that is faster and more efficient, and "Farewell" to a service that served them so well.

READING AND LANCASTER TOWERS ARE DEDICATED

Oscar Bakke (left) and airport official C. E. Burnett assist Stephanie Jo Fauber at Lancaster ribbon cutting.

FAA's Eastern Region served up a "Pennsylvania Dutch" treat not long ago for several thousand Keystone Staters who flocked to Reading and Lancaster Airports to witness dual tower dedication ceremonies.

Eastern Region Director Oscar Bakke, principal speaker at both events, hailed the new Reading and Lancaster facilities as another step forward for aviation, both in the nation and in the two communities.

After his Reading talk, Bakke cut the ribbon stretched across the tower entrance to signal its official opening. Later at Lancaster Airport, the reigning beauty queen, Miss Lancaster County, Stephanie Jo Fauber, formally opened the tower with the help of Director Bakke and the Lancaster Airport Authority Secretary C. E. (Tex) Burnett.

Tours of the control towers and the "penny-a-pound" airplane rides attracted the largest crowds. Hundreds climbed the spiral stairways to the tower cabs. The bargain-priced rides at Lancaster weighed in 73,858 "pounds of people."

The Reading and Lancaster towers were constructed at a cost of $305,000 each. The aluminum sided, pentagon shaped, five-story steel frame structures rise 60 feet above ground level. Ultra-modern air traffic control equipment, housed at various levels within each tower, is valued in excess of $50,000.

FAA Participates in Inglewood Salute to Aviation

Los Angeles Area Manager John H. Hilton worked with Inglewood, Calif., civic leaders in a salute to aviation during the Inglewood Aviation Week, held from October 14 to October 21.

FAA participation included the showing of the film "A Traveler Meets Air Traffic Control," tours of FAA hangars at Los Angeles International and inspection of FAA flight check aircraft.

Alaskans Cited for Earthquake Relief Work by State Director

An FAA air traffic control operations representative who doubles as commander of the Alaskan Civil Air Patrol received recognition recently for his unit's work during the Alaskan earthquake.

Col. James E. Carter, assigned to the Anchorage FSS, received a certificate of commendation from Don Lowell, director of the State Disaster Office.

Lowell, in making presentation, noted that the CAP wing commanded by Carter had worked around the clock for 57 days following the Good Friday earthquake, flying more than 120,000 miles.

He added, "The State of Alaska and the citizens of the several stricken communities will long remember the men and women of the Civil Air Patrol for their outstanding assistance in alleviating suffering and hardship and for their participation in the earthquake recovery effort."

Colonel James Carter (left) receives plaque in behalf of the Alaskan CAP Wing from Don Lowell, State Director.

ALASKA'S 10 VERDINS TRANSFER TO WASHINGTON

It takes a handful of airline tickets to move the Peter Verdin family. Here, John J. Kostolansky, Northwest Airlines service manager, checks their tickets before they board an airliner for their flight to the 48s and a new assignment in Washington. The boys in the front row are, from left, John, Gregory, Jim (the taller one) and Thomas. The girls in the second row are Rene, Stephanie and Andrea who is held by Mrs. Florence Verdin. The oldest son, Peter, stands next to his father. Verdin has been assigned to the Field Service Branch, Washington.

An Agency employee who went to Alaska as a bachelor with little more than a GI uniform has returned to the 48s with a family of ten and a new FAA assignment in Washington.

Peter J. Verdin, his wife and eight children arrived in Washington in October after Verdin had completed 20 years in Alaska with FAA. All eight children were born in Alaska. The Verdins were married in 1950 after his fiance, Florence, a schoolteacher, arrived from Los Angeles.

Alaskan Region friends of the Verdins credit them with dispelling many false impressions of life in Alaska. Not only did the large family enjoy a happy home life in Anchorage, but the Verdins were quite active in community affairs. Verdin was chief of the Accounting Division in the Alaskan Region, and, according to his associates, a one-man chamber of commerce. His home was a five-time winner of the annual garden show, and he served as treasurer of the Credit Union, worked with the Crippled Children Association, served on the Park and Recreation Board and was prominent in local sports. In Washington Headquarters, Verdin will be an accountant in the Field Services Branch of the Accounting Programs Division. His service with the FAA started in Alaska following his discharge from the Army in 1945.

'A BOOSTER OF FAA' FOREVERMORE PILOT SAYS

B. D. Feldkamp, president of Umpqua Dairy Products Co., was flying high over one of the most rugged sections of the Cascade Mountains in Oregon on a direct route from Eugene to Redmond when he got into trouble.

"Apparently carburetor icing developed," he said. "I lost power and managed to glide through a hole in the cloud layer.

"On the first sign of trouble I contacted Eugene radio and received very calm and reassuring instructions in attempting to locate my exact position. After dropping too low to receive good reception from Eugene, I was directed to switch over to the Redmond frequency. Here I received the same courteous, calm instructions.

"After losing about 3,000 feet in altitude, I was able to restart my engine. The Redmond FSS directed me to the Redmond area for a landing.

"There is no question that all the FAA operators I contacted in this emergency were well-trained in properly handling such situations. Moreover, their knowledge and calmness were tremendous aids to me in my situation. I always will be a booster for the FAA and the FSS as a result of this experience."

Feldkamp directed a letter to Joseph H. Tippets, Western Region Director, commending the Agency for its helpfulness and efficiency in the handling of his emergency.

Research Projects in Aircraft Turbulence and Wake Explained

Two air traffic experts from the National Aviation Facilities Experimental Center, Atlantic City, addressed the 10th annual convention of the Air Traffic Controllers Association held at Los Angeles.

Walter S. Luffsey told of research into aircraft turbulence and wake (similar to waves caused by speedboats). Both pilots and controllers are concerned about this invisible hazard, since it affects aircraft intervals on landing approach or take-off time.

Donald S. Schlots discussed some of the supersonic transport flights which were run in the Center's simulation laboratory. He explained that some traffic problems the SST might cause were already being solved before they could happen.

A Royal Visitor

Aero Center Director W. Lloyd Lane welcomes Sultan Mahmud Ghazi, Royal Afghan Airlines president, on a recent visit to the Aeronautical Center.

A Firefighting Lesson

FAA aircraft mechanic Erwin R. Ebert of Frankfurt, Germany, extinguishes a gasoline fire during Fire Prevention Week in October as Air Force and FAA personnel study the proper technique of putting out a fire.

your health

STAY GUARDED FROM TETANUS. Are you and your family immunized against tetanus? If not, you are running the risk of serious illness, perhaps even death, from this dreaded disease.

Tetanus spores thrive in the most ordinary places where people live, work and play. They can easily get into your system whenever there is an opening—when you cut your hand, prick your finger on a thorn, step on a jagged stone or burn yourself.

Once tetanus has gained hold in your body, no antibiotic or other drug can stop its progress. About 60 per cent of those afflicted die.

Yet with immunization, tetanus is almost completely preventable, according to the American Medical Association. To get protection, have your doctor give you the initial series of three shots and get a booster shot every 10 years.

-and safety

BE CAREFUL WITH CONTACTS. You may be able to save someone from blindness with this contact lens information. Contact lenses can seriously damage the eyes of a wearer who faints or becomes unconscious in an accident.

When a person becomes unconscious the tears stop circulating and their vital lubricating action ceases. This makes the lenses stick to the cornea instead of floating on tears over the colored part of the eye. The delicate surface of the cornea "dies rapidly" and serious injury can result.

If you find lenses in a victim's eyes, don't try to remove them completely since they might tear off large areas of the cornea. Instead, slide the lens off the cornea and into the watery areas under the upper or lower lids. Place two fingers on the outside of the upper lid directly over the lens, then, with firm pressure, push the lens into the safe area.

BE WARY OF KNOBLESS TV. Metal parts on the front of your television may carry dangerous amounts of electricity. If the tuning knobs of your TV become lost or damaged, replace them immediately to reduce the chance of shock from the exposed metal shafts. You can get new knobs from TV repair shops and easily put them on yourself.

NAAIS STAFF RECEIVES AWARDS

The National Aircraft Accident Investigation School, operated jointly by the CAB and FAA at Oklahoma City, was cited recently for its "continuous dedication toward aviation safety." Its permanent staff, from left, Clifford G. Sheker, Assistant Dean Jim G. Maupin, Jay W. Hickenlooper, Ralph E. Stokes, William T. Zendler and Alfred A. Dessert were presented certificates of award by Dean Rudolph A. Doering for work performed under his predecessor Marion F. Roscoe.

MYSTERIOUS RADIO SIGNAL TRACED TO PARACHUTE

The source of an emergency distress signal heard on Wake Island a few months ago was traced to an unopened parachute pack aboard a B-47. The electronic sleuthing that led to the emergency transmitter may well become a standard procedure in FAA.

It was 1:00 p.m. on September 9 when Wake Tower first heard a transmission on the 243 megacycle receiver. Such signals usually mean an all-out search for survivors of the downed aircraft.

A quick check with direction finding equipment fixed the bearing of the signal at 360 degrees from the tower. Another check with airborne aircraft revealed that the signal was not being picked up 20 miles from Wake.

At this point, the chief of the Wake Center/Tower, Robert S. Bailey, called on Michael Tougher of electronic maintenance for help in pin-pointing the signal.

Using a borrowed transceiver from a C-124, they employed the aural null procedure, a common procedure used in airborne navigation, to pin-point the signal on the ramp.

Once the right aircraft was located, Bailey called on the pilot to help isolate the equipment responsible for the signal. Everyone pitched in to locate the emergency equipment. Finally, when the seventh pack was removed from the plane and brought near the receiver the signal volume increased substantially. The pilot opened the parachute and found the switch on a small transmitter attached to the harness was in the ON position. Such locator transmitters are attached to all parachutes for Air Force combat crews.

Bailey sent a complete report of the incident to Phillip M. Swatek, Director of the Pacific Region, giving detailed step-by-step procedures used to trace the offending transmitter.

In passing the report on to Air Traffic Service in Washington, Swatek commented, "(The report) . . . points up the value of one of the Agency's training aids, as well as the resourcefulness, perseverence and cooperation that we like to see in our people."

The only theory advanced as to why the transmitter suddenly became activated, even though the aircraft had not been occupied for 20 hours prior to the signal incident, was the possible effects of heat expansion during 85°F. weather on Wake.

JACKSONVILLE ARTCC WINS PRAISE OF AF PILOT

FAA controllers and a 707 pilot earned the praise of a veteran Air Force jet pilot for changing what could have been a hairy situation to a smooth and uneventful flight.

Lt. Col. Thomas Garvin, in a letter to the Jacksonville Air Route Traffic Control Center, detailed the help he received in circumventing unexpected severe weather on a flight from Robins AFB, Ga., to Andrews AFB, Md., in a T-33 jet trainer.

When Garvin saw a line of lightning-filled thunderstorms directly in his flight path, he called Jacksonville ARTCC for help in dodging them. Atlanta ARTCC gave him headings around the heavy storms. Later, Atlanta advised that they were giving the T-33 the same flight path flown a few minutes earlier by a 707 with radar. The 707, which was reporting smooth flying "in the snow," gave detailed reports to Atlanta, and Garvin was guided along the same path. Garvin wrote that he had lightning on both sides but he met only smooth weather on his flight path through the clouds, a route he could not have followed without benefit of the 707's radar.

"We flew the entire flight without so much as a ripple of turbulence," the T-33 pilot reported. "No hail, no ice, no bumps and actually not much snow, but a lot of St. Elmo's fire."

Garvin, who has been flying for the Air Force since 1944, added, "This thanks to you and to the commander and his crew of the 707."

Kotzebue FSS Aids in the Rescue of Two Teachers

Air traffic control specialist Richard C. Hinz (left) of the Kotzebue FSS and pilot Don Ferguson teamed up to help save the two teachers from the icy waters. Ferguson used his float-equipped **Super Cub** in the rescue.

Tragedy for two school teachers was averted by the alertness of air traffic control specialist Richard C. Hinz of the Kotzebue FSS, who helped coordinate their rescue from rough seas.

The teachers, Wallace Blasengame and Rodney Hunt, employed by the Bureau of Indian Affairs, were observed clinging to their overturned motor boat near Kotzebue by Dr. William Compton, who was piloting his aircraft.

The doctor called the FSS and gave the stricken boat's position in Hotham Inlet, 30 miles northeast of Kotzebue.

Hinz, who received the report, alerted aircraft flying in the local area and also telephoned Donald Ferguson, who flies a float-equipped *Super Cub* for the Shellabarger Flying Service.

Ferguson made two landings under hazardous conditions in a running sea with four-foot waves and 25-knot surface winds to rescue the pair. The teachers spent more than three hours clinging to their boat before being rescued and were thoroughly exhausted.

In a letter to Area Manager Joseph E. Walsh of Kotzebue, the local CAP Commander, John Cross, commended Hinz with these words, ". . . Without his prompt actions and the help of Donald Ferguson, who made the rescue with his float plane, it is very likely that these two persons would have perished at sea."

King County Presents 'Golden Key' to Area Manager

Robert O. Blanchard, Seattle Area Manager, was officially welcomed to King County by the county commissioners who presented him with a plaque.

The plaque, which bears a mounted golden key, was inscribed: "Be it known that the above golden key officially welcomes the Federal Aviation Agency Area Manager for the Northwest states of Washington and Oregon to his new headquarters at King County Airport, Boeing Field, Wash. This sincere welcome is extended on behalf of the people of King County and the great city of Seattle. . . ."

Seattle newspapers, radio and TV covered the presentation of the plaque and the press conference inaugurating the new area manager office.

tech talk

TV COCKPIT DISPLAYS. Ever since public television first became widely available in the mid-40s, aviation and electronics people have been considering the value of TV cockpit displays for pilots.

After World War II, RCA exhibited the feasibility of airborne television in a demonstration at Anacostia Naval Air Station on March 21, 1946. At the time, RCA President David Sarnoff said, "Television reports of terrain surrounding airports, as well as the layout and activity of the airports themselves, might be flashed to incoming pilots in time to avert landing difficulties." Under USAF sponsorship, the company developed an experimental system called TELERAN, a form of televised radar air navigation system, but it was never fully evaluated.

Suggestions have cropped up from time to time since then, proposing the use of cockpit TV displays. In March 1964 the *Journal of Air Traffic Control* published "An IFR Sight Plan" which proposed that the controller's radar scope be transmitted to small TV cockpit receivers, permitting pilots to navigate and exercise some degree of guidance in relation to other traffic.

The article produced enthusiastic support from Massachusetts Director of Aeronautics Crocker Snow. He proposed that FAA's Systems Research and Development Service establish an experimental project to transmit radar data to airborne pilots, using off-the-shelf TV equipment, via educational TV Station WGBH, in Boston.

Proponents of the cockpit display feel that any visual information on airborne traffic and/or weather data in the cockpit would provide the pilot with an additional tool for safety and ease of flight, even for aircraft carrying weather radar. It is not intended to replace any function of the ground controller—merely to supplement it.

Opponents contend the cockpit display could easily do more harm than good, that the final decision rests with the question: Is it really functionally useful?

To find out which side is right, SRDS programmed an experiment to transmit the air traffic situation display to cockpit monitors in two small aircraft. Flights began on the last weekend in October and continued throughout November. Results are expected to be available early next year, after final analysis of data.

WICHITA FSS ARTIST SKETCHES FLIGHT SAFETY CARTOONS AS PILOT AID

Varon W. Harvey

Varon W. Harvey, a flight service specialist in the Wichita, Kan., Flight Service Station, subscribes to the old Chinese proverb that declares "A picture is worth 10,000 words."

Harvey, who joined the then CAA in 1956 in Chicago, is gathering a growing band of fans with the clever flight safety cartoons he sketches in his off-duty hours. A self-trained artist, who dipped briefly into serious art while a student at Oklahoma City University but found he didn't like it, became interested in aviation and flight safety after serving in the Air Force during the Korean war.

While in the USAF, where he served as an airborne radio operator, he and his crewmates earned the Air Medal for plucking a downed fighter pilot from the water under a hail of enemy ground fire. So accurate and punishing was the enemy fire that they were forced to ditch and had to be rescued by another plane of the Air Rescue Service.

The lifesaving habit is strong in Harvey. On New Year's Eve, 1964, he and David R. Williams, also a flight service specialist in the Wichita FSS, saved the same pilot twice in a matter of minutes.

The pilot, enroute from Oklahoma to Kansas, became lost when he ran into instrument flight conditions southwest of Anthony, Kan. The two men worked the pilot out of this jam only to have him encounter another IFR situation a few minutes later, thus necessitating a second lost aircraft problem. This time they brought him to a safe landing at Anthony Municipal Airport.

In his varied career, Harvey has also been a bareback bronco rider in rodeos, quitting the horses when a fall chipped a vertebra.

"If a cartoon will help only one pilot to remember a small but important item he must perform to maintain a safe flight, I'd say cartoons and flight safety are here to stay," he says.

His supervisors agree.

Gallup Technicians Prepare for Foolhardy Travelers at Washington Pass

When the electronics maintenance technicians at the Gallup radar site in New Mexico's Chuska Mountains (9,500 feet elevation) plan for their winter needs they include a few extras for a non-FAA project—the rescue of the foolhardy who attempt to cross nearby Washington Pass.

Located four miles from Washington Pass, the radar facility draws motorists seeking emergency help when their cars get stranded in snowdrifts. In spite of the hazards of crossing the mountains during the season of heavy snows, many travelers attempt it without proper equipment.

Three rescues were recorded last winter. The first was set in motion by Richard Muckle, Albuquerque district radar engineer, who encountered a man on foot who was obviously in trouble. Snow and sleet had driven the temperature below zero and the man's car, with his partially paralyzed wife in it, was hopelessly stuck in a snowdrift.

Unable to retrace his steps up the mountain for assistance, Muckle made his way to the nearest microwave link repeater on the Denver-Gallup microwave system and alerted personnel at the crews' quarters. Using a jeep equipped with snow tires and chains, electronics maintenance technicians Robert Pieper and Prentis E. Vise were able to get the car back on a main highway.

In the hands of electronics maintenance technicians John Allison (left) and Don Anderson the shovel and the snow-cat will help them free snow bound motorists.

In another incident a man wandered into the radar facility in near-zero weather carrying a six-year-old girl. He had attempted the pass during hazardous weather and darkness overtook him. Pieper assisted the man and rescued his vehicle while Vise did the baby-sitting.

A rescue can also have an unusual twist. Electronics maintenance technician Earl J. Bangert pulled a half-ton pickup out of a spot appropriately called the "Big Snowdrift." The driver was profuse in his thanks but eager to depart. Some time later, when Bangert encountered a forest ranger, he learned the reason for the hasty departure. Christmas trees in the back of the rescued pickup had been procured illegally!

Personnel are assigned to the Gallup Radar from the Farmington, N. Mex., Systems Maintenance Sector. The six electronics technicians and two electromechanical technicians are on duty at the site on a rotating basis.

SCHOOL HEAD NAMED

Richard J. Alfultis has been named chief of the Management and General Training Schools at the National Aviation Facilities Experimental Center, Atlantic City, succeeding Hobart Douglas, who became chief of Personnel and Training for the Southern Region, Atlanta. Alfultis formerly was with the Office of Personnel and Training in Washington Headquarters. The Management and General Training Schools had previously been located in Washington.

PORTABLE X-RAY UNIT SAVES LIVES AND MONEY

Dr. John E. Hepler, Alaskan Region medical officer, loads a portable X-ray unit aboard a light plane to make medical checks at the region's isolated facilities.

A portable X-ray unit purchased recently by the Alaskan Region has turned out to be just what the doctor ordered. Its use will result in large savings for the Agency, according to Dr. Wendell C. Mathews, Medical Division chief in Alaska.

The suitcase-size Field Emission Portable X-ray unit costs $3,200 with its accessories. It will be used by medical officer John E. Hepler in his X-ray survey program to check periodically FAA-Weather Bureau employees and their families at remote Alaskan facilities.

Small enough to be carried in a light aircraft, it replaces a much larger, heavier unit which had to be transported in the Region's C-123 twin-engined logistics aircraft. Savings in transportation costs alone will be substantial. Previously it cost $277 per hour for the C-123 and crew. Now Dr. Hepler, piloting a rented plane, can make his tour alone for $45 per hour.

The X-ray survey, like the program to inoculate employees and their families against disease, is part of a continuing program to bring medical services to FAAers in the bush and tundra country of Alaska.

The Alaskan Region Medical Division is in step with another Agency program —the cost reduction program—to give the same, or better, service at less cost.

Mission 'Safety-70' Shifts to High Gear in 1966

When President Johnson set a goal to reduce the accident and injury rate by 30 per cent by 1970, the Southwest Region already had laid the basic groundwork for the task.

Occupational safety officer Vance M. Bridges sparked a successful safe driving campaign in the region with a "Stay Alive in '65" slogan. When the six-month campaign ended in June there was a noticeable decrease in vehicle accidents —but more important, it was obvious that employees had become safety conscious.

During the campaign, Bridges emphasized the use of seat belts in all vehicles. The FAA Club assisted the drive by selling belts at bargain prices. More than 100 employees bought belts from the club and many more had them installed at their local dealers.

Ball-point pens and plastic computers to measure distances between cities (disto-maps), both inscribed with safety slogans, were distributed to all employees and a film on safety was shown at 23 locations throughout the region. Score sheets were distributed to employees to encourage their participation in the National Driver's Test which was televised during the campaign.

Campaign statistics revealed that regional employees had driven Government vehicles a total of 3,242,904 miles and private vehicles countless thousands more while on official business. Twelve employees were involved in accidents in the first quarter of the safety campaign. In the second period there was only one accident. None suffered serious injury.

Plastic distance measuring computers and ballpoint pens bearing safety slogans were distributed to SW region employees as safety reminders by Mrs. Teresa Pirtle.

Bridges is now preparing the region's second round in the safety drive to reduce accidents and injuries. A January kickoff is scheduled for Mission "Safety 70," the next round in what the President has labeled a war on "an inexcusable waste of human resources, production skills and money."

Veteran Agency Employees Call It Quits After Lengthy Service

Frank P. Gaynor

Frank P. Gaynor retired from the Kansas City Flight Service Station on November 19 after 40 years service, 26 of which was with the Kansas City facility.

Gaynor's long service at the one location is considered a record in FAA. He was selected chief of the Kansas City FSS on Dec. 31, 1939, and remained there for the entire period except for short special assignments.

* * *

A 35-year veteran, Wayne N. Cox, retired at New Orleans when the Center was decommissioned this year. He entered the Lighthouse Service in 1930 as a radio operator on a Mississippi river boat which tended beacons along the river for guidance to boats and aircraft. His service included tours at San Antonio Center and at New Orleans where he became facility operations officer in 1958.

* * *

Mrs. Nona Price of Phoenix, another 35-year veteran, retired recently from her position as clerk in the Phoenix General Aviation District Office.

Her long career, which was begun as Nona Eldridge in 1929, includes such "firsts" as: typing all of the first Airline Certificates (Air Carrier); being the first woman for whom a travel order was written in Government aviation; serving as the first woman chief of a section; installed the first Dewey Decimal System for filing in the newly consolidated Airways and Aeronautical Inspection offices throughout the United States; and serving as the first secretary/clerk at the Standardization Center in Houston (now the Aeronautical Center located in Oklahoma City).

names & faces along the airways

1 *Holding an original Kentucky flintlock rifle (circa 1780) is Coolidge Cundiff of Southern Region's Lexington, Ky., Combined Station/Tower. Cundiff fired high score on the Kentucky Flintlock Rifle Team tryouts.* **2** *Dempsey Goss, a truck driver-laborer at Southwest Region Headquarters, receives a Sustained Superior Performance Award from SW's new administrative services chief, Marvin R. Warren Jr. Goss has cared for some 16 acres of trees and lawn at the headquarters since 1950.*

3 *FAA students at the University of California start a one-year graduate study program under the Agency's Air Transportation Systems Specialist Development Program. From left: Jesse Tanner, SMS; Donald R. Geoffrion, DS, and Robert L. Paullin, FS.* **4** *Eight-year-old Keena Rothhammer won all of Arkansas' swimming records this year in her age division. Keena is the daughter of ATCS Grant Rothhammer Jr. of Southwest Region, Little Rock, Ark., Air Traffic Control Tower.* **5** *Donald S. Wolfe (center) and his wife Beverly hold a Joan Kickbush painting given them at their farewell party from the Alaskan Region as Director George M. Gary looks on. Wolfe, formerly chief of AL's Air Traffic Division, is being reassigned to the Aeronautical Center.* **6** *The Youth Opportunity Program was plugged on TV in Alaska recently by AL placement specialist Betty Lecorchick (left). Here Betty discusses TV techniques with Mrs. Dale Briggs, manager of the Anchorage YOP Office.* **7** *Henry N. Stewart, chief of the Budget Management Branch, Albuquerque Area Office, Southwest Region, received his bachelor's degree from TCU's Evening College after eight years of cramming. Here he prepares to study the President's "War on Waste."* **8** *Oklahoma City Mayor George H. Shirk (left) presents a Public Personnel Award Certificate to Kent W. Fendler, chief of the Aeronautical Center, Personnel and Training Division, for outstanding work in hiring of the handicapped in the Oklahoma City area.* **9** *Communications duty specialist Alwin W. Hall at Southern Region's Communications Control Center, Atlanta, receives reports on hurricane Betsy as she howled through south Florida. For a time CCC was the only link the Southern Region had with the stricken area.* **10** *Prime Minister Il Kwon Chung of the Republic of Korea (left) presents a letter of appreciation to Burton R. Stephens, chief, Civil Aviation Assistance Group, Seoul, Korea, for exemplary service while serving in Korea.* **11** *Wallace Stripling, engineering technician, Airports Division, Alaskan Region, helps wife Iris, budget analyst, from their Piper Cherokee at Merrill Field Flight Service Station, Anchorage.* **12** *Eastern Region Boston Center chief Clarence Kynock (right) accepts National Health Agencies citation from Charles Meade, awarded to Center personnel for their 1965 fund drive. Looking on is assistant chief Waldo Aldrich.*

personnel pipeline

A KEY FRINGE BENEFIT — RETIREMENT

When the first civil service retirement law became effective in August 1920, more than 5,000 civil servants retired within the first two months. Some of these retirees were more than 90 years of age when they left Government service.

Since then, retirement benefits have been steadily expanded and liberalized to make this one of the most important civil service fringe benefits. Changes are still being made at such a pace that the average employee finds it almost impossible to compute his annuity accurately without expert help. This is not a cause for concern, however, because all retirement applications are reviewed carefully by both the Agency and the Civil Service Commission to insure that every retiree gets the maximum benefits permitted by law. This article will help you to figure out your approximate annuity and acquire a general awareness of your retirement options.

Share-for-Share. The FAA shares with employees the cost of contributions into the retirement fund on a 50-50 basis. At the present time, the combined Employee/FAA total is about $49 million annually. The Agency's contribution averages out to $570 per employee per year. Although it is not direct salary, it represents an additional 6.5 per cent income for each employee.

Who Is Covered. FAA employees with career or career-conditional appointments have retirement coverage. This includes almost all Agency employees. Generally, part-time and temporary employees having no regular tour of duty are not covered. Instead, they are covered by Social Security.

The High Five Principle. The key figure in computing your retirement is to determine your average annual salary based on any five consecutive years of service (you would naturally use the highest salary). Your annuity is a percentage of this. It could range from a low of 7.5 per cent to a maximum of 80 per cent. The percentage depends on a number of variables: length of service, whether or not you have a disability, your age at retirement, and any retirement "bonus" which may be in effect at the time one chooses to retire.

Other Requirements. If you have at least five years service and you are separated from Federal service for any reason before you are eligible for immediate retirement, you may be paid an annuity when you reach 62 (if you have not drawn a refund of your retirement deductions). Longer periods of service qualify you for retirement, as follows:

- 30 years gives you full credit for all service with retirement at age 60, or you can retire at 55 with a reduction of one per cent for each year you are under age 60.
- 25 years of service makes you eligible for retirement at any age, provided the separation is involuntary and without cause. If you are under 55, the annuity is reduced 5 per cent plus 2 per cent for each year under 55.
- 20 years qualifies you for retirement at age 50, with deductions as above, provided you are separated involuntarily without cause.
- 15 years service makes the retirement of a 70-year old mandatory.
- five years service qualifies a totally disabled person to retire with a minimum of 40 per cent of his "high-five" average salary.

Basic Annuity Formula. Keeping in mind the limitations, reductions and minimums discussed above, you can compute your exact annuity, as follows:

a. Take 1½ per cent of your "high five" average salary and multiply the result by five.

b. Add 1¾ per cent of the "high five" multiplied by the years of service between 5 and 10.

c. Add 2 per cent of the "high five" multiplied by the years of service over 10. The maximum annuity is 80 percent of the "high five".

These amounts can be increased, of course, by legislation like that approved in October which gave a bonus to those retiring before a certain date, so it is always best to seek the help of a personnel expert for detailed information on retirement.

'WE WANT . . . YOUR IDEAS'

The Associate Administrator for Personnel and Training, Robert H. Willey, addressed the Air Traffic Controllers Association convention in Los Angeles last October. His speech, "FAA's Relationship with Professional Societies," was keyed to the following five specific responsibilities of such societies:

(1) They are expected to operate within the confines for which they were established, and avoid the pursuit of employee grievances and discussions with Agency management on general employee-management policy. "We want the benefit of your ideas and suggestions for the most effective means of performing our operations, services and functions," he said.

(2) They must serve an educational role by providing a system for the exchange of technical information, and encouraging members to further their education, not only in their own field of specialization but also across discipline lines to better equip them for career opportunities as they develop. Personnel must prepare for tomorrow's jobs which will require more highly trained specialists.

(3) They should encourage their members toward mobility, a definite willingness to undertake new lines of work, participate in new activities, tackle new functional areas, train for new assignments with additional responsibility, and relocate if necessary. The Agency is presently developing career progression systems for various Agency positions at all grade levels covering qualification standards, career ladders, lateral and vertical assignments for gaining experience for top-level positions, recommended training courses and assignments across lines of specialization.

(4) They should motivate their members through standards of conduct and performance to lift their sights from mere competence in the performance of assigned duties to excellence in any job that is undertaken.

(5) And lastly, they should encourage and foster proper communications. Societies and members should comment on Agency programs, suggest more efficient operations and more effective utilization of personnel and resources.

The Agency encourages managers to consult with professional societies and their members in solving technical problems and encourages employee membership in such societies.

"FAA and professional societies, working together, can meet today's challenge and enjoy tomorrow's successes," Willey said.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LOW-DOWN ON HIGH-FLYIN' FAAers

Not content with just talking flying, a group of enthusiastic Southern Region FAAers joined forces and formed a flying club. Their first aircraft was a Cessna 150 but interest soon grew to the point that they traded it for a 172. Fourteen active members fly the aircraft 65 hours a month on days off, evenings and weekends. Their activities are highlighted in this picture sequence. **1** Flying Club president Buford H. Norris enjoys explaining the aircraft's operation to prospective club member Helen S. English. **2** Student pilot Robert E. Lewis checks prop during aircraft pre-flight. **3** Walter G. Beroset, General Aviation Branch chief and volunteer ground school instructor, shows how not to get lost. From left, front row: Cyrus W. (Bud) Horton, George C. Carver, James E. Sheppard and Thomas C. Hudson. Back row: Richard B. Davis, James G. Moody, Floyd E. Shaw and John B. Sowell. **4** The club's volunteer flight instructor, assistant Flight Surgeon Dr. Clyde A. Lynn, checks James G. Moody's (left) radio procedure. **5** Cyrus W. (Bud) Horton pores over the private pilot's examination after having taken the flying club training. **6** Student pilot James E. Sheppard takes-off the runway at Fulton County Airport, Atlanta, in the club's newly acquired Cessna 172. The Agency's DC-3, N-33, is in the parking area.

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Mildred A. Hammond

Friday, March 13, 1946, was a bitter cold, snowy day in New York, Mildred A. Hammond, newly appointed staff librarian at Eastern Region Headquarters, recalls. That was the day she and a girl chum chugged north in her Kaiser en route to an Army library job in Alaska via the Alcan Highway. Two weeks later they pulled into Anchorage safe and sound, but determined to make the return trip at the end of the tour by airline. Mildred began her Federal career in 1941 as post librarian at Fort Hamilton, N. Y. This was her first Army "hitch" and she stayed in the Army Library Service until she joined the FAA last July. A whenever-she-can fisherman, she recently pulled in a 28-pound striped bass from Long Island Sound. Booklover Hammond also teaches third grade reading in Harlem.

FAAers on the job

Frank M. Sharpnack

Improving on nature is not the easiest thing to do, but Frank M. Sharpnack, visual information specialist in Headquarters, is fast developing a reputation for doing just that. He's becoming known as one of the most creative floral arrangers in the Washington area. Frank, who handles exhibits for the FAA, was chairman of the 1961 orchid show sponsored by Lansburgh's, a major department store in Washington, and chrysanthemum show chairman in 1961 at the Department of Agriculture. A past president of the Washington Chrysanthemum Society, he became interested in flowers as a high school student in California, Pa., but it wasn't until 1950 that he took a serious view of floral arrangement. His favorite medium: driftwood arrangements.