



This Westerner's Radar Panel Idea Brings 'Bonanza'

PALMDALE, Calif. — There's "gold in them thar suggestions." Just ask Raymond Schatz of the Airway Facilities Sector here.

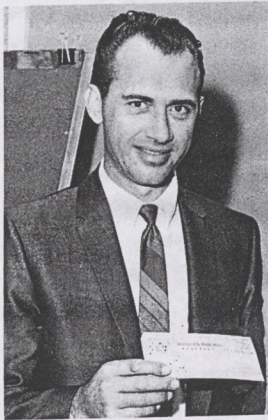
Schatz is \$1,620 richer because he found a way to do it better.

He came up with an idea for inter-connecting a group of radar displays used in air traffic control. The "patch panel" he developed permits linking scan converters into more than one radar system, thus releasing several spare scan converters for operational use.

Already being utilized at 11 ARTCC locations, including the Los Angeles Center here, the development is credited with saving the FAA \$266,400 because it cuts down on the number of RBDE-5 units required at FAA centers.

Schatz' first assignment with the FAA was at Anchorage. He transferred to the Western Region in 1957 and served at various locations prior to reporting to the Los Angeles Center in 1964.

Recently, he completed the Academy NAS computer course and now is Assistant Systems Engineer at the Palmdale Sector, assigned to the computer program. In virtually all of his many Academy courses, Schatz chalked up a



'King-Size'

One of the agency's largest suggestion awards—\$1,620—went recently to Raymond Schatz, employed at the Palmdale Airway Facilities Sector. His suggestion, now in use at 11 centers throughout the nation, will save the government an estimated \$266,400.

consistent record of being either first or second in his class.

Presentation of the "king-size" suggestion check was made by John Hilton, Los Angeles Area Manager, in a special ceremony at the center conference room.

'68 Aviation Mechanic Award Program Begins

WASHINGTON—The sixth annual FAA Aviation Mechanic Safety Award Program has been launched by the agency as part of the continuing government-industry-labor effort to recognize the nation's most outstanding aviation mechanics.

Aviation mechanics who have developed new safety ideas in 1968 may enter nominations, or have entries submitted on their behalf,

regional and 50 state awards presented to winners throughout the country.

Entries will be judged in three categories. The first includes improvements to airframes, engines, or components which lead to increased reliability. The second category covers maintenance or inspection procedures which increase air safety. The third category, introduced last year, applies to the aviation mechanic who has consistently demonstrated an unusually high level of professionalism.

The program was initiated in 1963 to give official recognition to the critical role aviation mechanics play in assuring flight safety. This year's contributing sponsors are the Air Transport Association of America, American Aviation Publications, the National Aviation Trades Association, and the Champion Spark Plug Company. Support from labor is provided by the International Association of Machinists and Aerospace Workers, the Transport Workers Union and the Aircraft Mechanics Fraternal Association. The program is administered by FAA, with the cooperation of the Flight Safety Foundation.

FAA's Advisory Circular No. AC 60-2E, available at all field facilities, outlines the scope of the program and provides details of eligibility and selection of entries. Inquiries may also be addressed to Special Projects Division, IS-30, Office of Information Services, 800 Independence Ave., S.W., Washington, D.C. 20590.



through Dec. 31. Entry forms are available at all field facilities.

Cash prizes, donated by industry and handsome plaques and citations will be awarded at the national, regional and state levels. Mechanics will be competing for the grand prize of \$500 and an all-expense trip for himself and his family to Washington, D. C., for the award ceremonies. Two national grand prize winners will be selected—one from an air carrier and the other from general aviation. In addition, there will be 18

26 Earn Medals for Vietnam Duty

WASHINGTON—Twenty-six present and former FAA employees are eligible for the Department of State's new Service in Vietnam Award after having completed at least one year in that Southeast Asia nation since Jan. 1, 1962. Approximately 50 other FAA employees now serving in Vietnam under various technical assistance programs will become eligible for the new award upon completion of their year's service.



Served in Vietnam

James Given (left) and Carl Peterson discuss their former service in Vietnam with Howard Helfert (right), Office of International Aviation Affairs following recent presentation of the new Department of State's Service in Vietnam Awards to the two headquarters employees.

Those who have already received or are scheduled to receive the award are:

Alaskan Region: W. Paul Wilson; Central Region: Kenneth Cooper, Donald Powell and Lloyd Yepsen; Eastern Region: Paul Mitchell and William O'Connor; NAPEC: Pierre Collins, William Hallenbeck and George Weimar, Jr.; Pacific Region: Albert Barker, Edward Jensen, Jr. and Charles Morris; Southern Region: Donald Givens, Henry Ibbetson and Kenneth Wood; Southwest Region: Robert Phillips; Western Region: Raymon Walthers; and Washington Headquarters: Carl Peterson and James Given.

FAA employees now serving with the Civil Aviation Assistance Group in Thailand eligible for the Vietnam Award are Paul Garrigan, George Kupp, Robert Powell and Wesley Holland.

Former FAA employees who earned the Award while with the (Continued on page 7)

Vital Political Do's, Don'ts Listed for U.S. Employees

WASHINGTON—What are the restrictions on Federal employees' political activity as embodied in the Hatch Act of 1939 and other Civil Service regulations?

The following will serve as a guide in this pre-election period.

Federal employees MAY: vote as they choose, express opinions on political subjects and candidates, make voluntary campaign contributions, display campaign stickers on cars, wear political badges or buttons and attend political rallies and join political clubs providing they do not take an active part in the conduct of the rally or the operation of the club.

They MAY NOT: take an active part in political management

or in political campaigns, be a candidate for election to a national or state office, solicit others to become candidates for nomination or election to partisan offices, campaign for or against a political party or candidate, distribute campaign material, march in a political parade, sell tickets for or otherwise actively promote such activities or political dinners, write for publication or publish any article or letter soliciting votes for or against any political party or candidate, solicit or receive any assessment or contribution for any political purpose, make a political contribution in a federal building or to some other employee.

In addition, they MAY NOT use their automobiles to transport voters, except members of immediate families to the polls. Riders in regularly scheduled car pools can stop at the polls on the way to or from work, however.

FAA, CG Plan Meet on Rescue

SAN FRANCISCO — Alan S. Boyd, Secretary of Transportation, will keynote the first annual Pacific Air Safety-Search and Rescue Symposium here Oct. 29-31. The meeting, dedicated to making air travel over water even safer, will be held at the Sheraton Palace Hotel under the joint sponsorship of FAA and the Coast Guard.

Both sponsoring agencies are joining industry to examine new and improved methods of meeting air safety, search and rescue needs. Some 300-400 persons are expected.

Topics for discussion include: A panel on new rescue and survival techniques, new communications equipment and new navigational equipment and systems; individual workshops on survival, search and rescue developments, ship and aircraft assistance coordination and new equipment. Roles of sponsoring agencies in safety, search and rescue, post-ditching problems and other matters will be taken up.

Special Service Awards Go to 16

HONOLULU — Special Service Awards were approved for sixteen FAA employees on the basis of their service in Vietnam. The group worked on installation of communications consoles and equipment.

They are: Robert Bolden, Tommy Bracken, Warren Crawford, William Hoppes, Byron Mabee, Jr., Edgar Magney, Robert McKinney, Ralph Miller, Jr., William Neal, Charles Price, James Raftery, Max Veit, Thomas Wallace, James Weaver, Paul Welch and Joseph Zarembo. Mabee is from the Western Region, McKinney from the Southwest and Raftery from the Central—all the rest are from the Pacific Region.



Five-Gallon Donor

For his donation of 41 pints of blood, Robert F. Irwin (right), computer analyst at NAPEC, receives the congratulations of Jack G. Webb, NAPEC Director and a Red Cross certificate honoring him for the contributions.

Right Action in Crisis Saves Employee's Life

MEDFORD, Ore.—In an emergency, doing the right thing at the right time can save a man's life.

This was amply demonstrated here recently when Charles Olsen, an electronics technician, was confronted with just such a situation.

Olsen was working with his supervisor, Russell Roseborough, when Roseborough was struck down by a high voltage shock. Without delay, Olsen administered mouth-to-mouth resuscitation.

Olsen's quick, cool, action is credited with saving Roseborough's life and preventing possible brain damage which can result when

oxygen is cut off for any prolonged period.

In recognition of Olsen's life-saving response to an emergency situation, he was recently awarded FAA's third highest employee award, the Certificate of Achievement.

The presentation was made in a special ceremony at the council chambers of Medford's city hall. Olsen received the certificate from Lee Warren, Deputy Director of the Western Region.

Robert Blanchard, Seattle Area Manager, also was present to congratulate Olsen for having earned the award.



Cool in Emergency

Charles Olsen (center), acted coolly and quickly when a high-voltage shock threatened the life of his supervisor. For his life-saving action, he recently received the agency's Certificate of Achievement from Lee Warren (right), Western Region Deputy Director. Robert Blanchard, Seattle Area Manager, also took part in the presentation ceremony at Medford, Ore.

FAA 'Store' Offers Quick Self-Service

OKLAHOMA CITY—The FAA Depot has opened its own self-service store, complete with baskets and credit cards. The store is designed to cut cost and time in the handling of office supplies.

Previously, supplies had to be ordered from a catalog. This led to a loss of time and tempers by clerks and secretaries on occasion who found it time-consuming to write down each needed item by

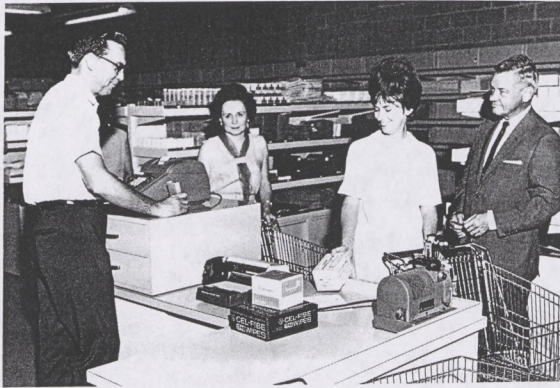
catalog number on another government form.

All that's changed now. The boss's secretary can decide what the office needs, walk over to the Depot's self-service store, take a shopping basket and pick out her supplies, just as she does at the neighborhood supermarket.

Supplies are displayed on white shelves for easy selection. Prices are plainly marked on the items

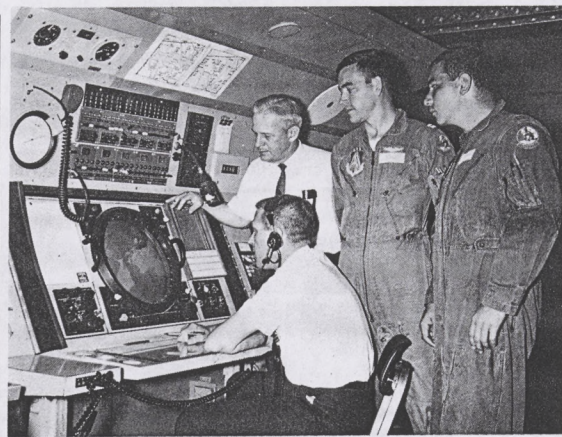
and the stock number is easily identified over each bin. Price tags make the shopper cost-conscious and also provide cost data for management purposes.

Items are checked out by one of the three storekeepers, Tommy Yeakly, Leonard Roberts or Bob Ray, through use of a plastic credit card. This assures proper "billing" to each division receiving supplies from the self-service store.



Like Supermarket

Mrs. Polly Woolsey (left), shipment clerk in the Shipping and Traffic Section at the FAA Aeronautical Center, selects ruler for her office in "shopping" at the Depot's new Self Service Supply Store. In photo at right, Supply Clerk Tommy Yeakly checks out office supplies for Aeronautical Center Director W. Lloyd Lane and Mrs. Sue Higgins, secretary in the Director's office. Next in line is Mrs. Beatrice Padgett, freight rate clerk.



Radar Controlled

At the Valdosta, Ga. RAPCON, Moody AFB, Bill Wilson, Chief of the air traffic facility (standing left), explains radar control operation to the USAF instructor-student team which made the 9,000th operation of the month, Capt. Frank Hale and Lt. Robert Mann. Before the month was over, the Regional Air Traffic Terminal Facility of the Year handled more than 10,000 operations. At scope is Hank Mead, ATC specialist.

President Names Boyle New ICAO Representative

WASHINGTON — Robert P. Boyle, Deputy Assistant Administrator, Office of International Aviation Affairs, has been named by President Johnson as U.S. Representative to the International Civil Aviation Organization (ICAO) in Montreal.

Boyle has had extensive experience in the field of international law and has been involved in ICAO activities for several years. He has served as Chief of the U.S. Delegation to meetings of the ICAO Legal Committee and to other international conferences sponsored by ICAO.

He also has been active in the

affairs of the Interagency Group on International Aviation (IGIA).

He began his government career in 1938 as a legislative counsel with CAA. He became Assistant General Counsel in 1946, Deputy General Counsel in 1950, and General Counsel in 1953. When the FAA was created in 1959, he was designated Associate General Counsel of the new agency.

Anthony Spezio Elected 'Mayor' At Campground

ROCKFORD, Ill.—During the annual one-week convention of the Experimental Aircraft Association here, an engineering technician from NAFEC was elected "mayor" of Selfridge Park, a camp ground located adjacent to the airport.

Anthony Spezio, president of the Atlantic City area chapter of EAA, was elected to represent 11,000 campers at the site in an effort to make camp life more enjoyable during the convention.

He has stayed at the airport camp for every EAA convention since 1959, when only seven families camped there. The area is the site of Camp Grant, an active Army post until after World War II.

Spezio has his own home-built two-place plane with folding wings which he keeps in his garage and flies to EAA meetings. He has been at NAFEC for two years, where he works primarily on airplane fire tests. Previously, he spent 10 years at the Aeronautical Center in Oklahoma City as an aircraft mechanic.

Rules for Clubs Set by Agency

WASHINGTON—A new regulation requiring air travel clubs using large planes to meet certification and operation rules similar to those governing commercial airline operations has been adopted by the agency. The new rules form a new "part" to the Federal Aviation Regulations, Part 123 and are based on a notice published July 13.



Oath Administered

Samuel K. King, Deputy Chief of Protocol, Department of State, administers the oath of office to Robert P. Boyle. Boyle was recently appointed as the United States representative to ICAO.

'Stretched' Air Freighter Receives Type Certificate

ATLANTA—The new stretched version of the Lockheed L-100-20 Hercules has been type-certificated by the FAA Southern Region.

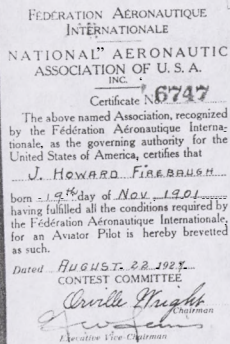
Director James Rogers made the announcement following a final joint inspection and board meeting of FAA Flight Standards Division personnel and Lockheed-Georgia's engineering staff.

Modification of the aircraft and airworthiness certification were accomplished under the direction of Southern Region Engineering and Manufacturing Branch and District Office personnel.

Following Rogers' announcement, Lockheed-Georgia reported

that the new stretched aircraft had already been sold to a large banking firm in Illinois for long-term lease to an Alaska airline which will charter the new plane to oil explorers.

The new Lockheed-100-20 is 8.3 feet longer than the standard Hercules (L-100) and is equipped with more powerful, economical Allison 501-D22A propjet engines. Its larger cargo section can be configured to airlift six 8 by 8 by 10-foot freight containers, plus a ramp container. The larger engines and cargo sections will increase the Hercules' productivity by an estimated 30 per cent.



Historic Certificate

Pilot certificate issued to J. Howard Firebaugh, air traffic representative at Mountain Home AFB, appears at left. This certificate, issued in 1927, carries the signature of Orville Wright. Firebaugh has been with the CAA/FAA 31 years.



Orville Wright Signed FAAer's Pilot License

By Bob Huber

BOISE, Ida.—A pilot certificate signed by Orville Wright is the prized possession of J. Howard Firebaugh, air traffic representative at nearby Mountain Home Air Force Base.

The certificate, issued jointly by the Federation Aeronautique Internationale and the National Aeronautic Association of U.S.A., was among the last of its kind. Shortly afterward, licensing of U.S. pilots was taken over by the Aeronautics Branch of the Department of Commerce.

Wright's signature appears on Firebaugh's pilot certificate because at the time of issuance Wright was chairman of the Contest Committee of the National Aeronautic Association, and it was this group that issued licenses on proof of fitness.

Firebaugh's historic license was his first step toward a lifelong aviation career. In 1929, after obtaining a commercial pilot's license—this time from the Department of Commerce—he left his position as a high school coach at Santa Cruz, Calif. His next five years were taken up by barnstorming, aerial photography and flight instruction.

He was then hired by the Bureau of Air Commerce and assigned to Montana State Airport at Helena.

In 1937, Firebaugh transferred to air traffic control duties and for the past 31 years has been working in this field. During this period he served as chief controller at the Cincinnati and Great Falls ARTC Centers. He served a six-year stint in Seattle and also as Liaison Officer at Malmstrom and Richards-Gebauer Air Force Bases.

First Alaskan Earns Valor Award

ANCHORAGE, Alas.—Bertrand Smith, an air traffic control specialist, is the first Alaska employee to receive the agency's Valor Award. He earned it for saving the life of a 10-year-old girl.

Smith was summoned by a neighbor's child to come to the aid of Koreen Knox, who had fallen into a water-swollen drainage ditch. On a dare, Koreen had tried to swim across the ditch, which was running deep with near-freezing, silt-laden water. Two 12-year-old boys heard her screams and saw her sink beneath the surface several times. They were able to pull her to the bank, but were unable to get her completely out of the water.

When Smith first sighted the child, she was about 25 feet away on the far side of the ditch, half-submerged in brackish water. Without taking time to remove shoes or clothing, he jumped into the deep water, and swam to the child's side.

Unable to climb the sheer bank, he anchored his feet in the mud and immediately began mouth-to-mouth resuscitation.

Koreen's first coughs rewarded Smith's efforts. With this promising sign, Smith, his wife Lorraine and the two boys were able to carry the limp little girl from the ditch. Smith resumed mouth-to-mouth resuscitation when safely out of the water. The emergency rescue crew arrived a short time later and pronounced the child out of danger. As a precaution, however, she was taken to a hospital for observation and the necessary inoculations. Two hours later, the much-wiser little girl was released from the hospital.

Lyle K. Brown, Director of the Alaskan Region, presented the award to Smith, who works at the Anchorage ARTC Center, in a recent Regional Office ceremony.



For Valor

Bertrand Smith (left) proudly shows his Valor Award certificate to Gerald Brumley, Assistant Anchorage Area Manager, Smith's mother, Mrs. Lillie Smith and his wife, Lorraine.

Special guests attending included his wife, Lorraine; Gerald Brumley, assistant to the Anchorage Area Manager; Smith's supervisors and members of the Director's Staff. Smith's mother, Mrs. Lillie Smith, of Buffalo, N.Y., happened to be visiting her son and witnessed the ceremony.

The newly designed Valor Award received by Smith is presented to FAA employees who perform acts of heroism, either on or off the job. It is a gold medal with a red and gold ribbon, a rosette and a citation signed by the Administrator.

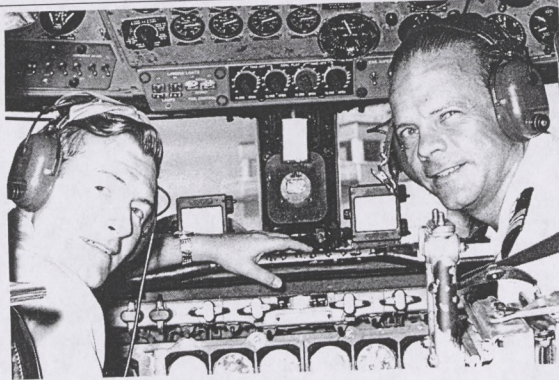
Altitude Alerting Devices Needed By Feb. 28, 1971

WASHINGTON—The agency has ruled that all U.S. civil turbojet aircraft must have an approved altitude alerting system or device in order to operate after Feb. 28, 1971.

The equipment must be capable of alerting a pilot ascending or descending to a preselected altitude in sufficient time for him to establish level flight at that altitude. Alerting must be done by both aural and visual signals. The device must be capable of signaling at all altitudes and preselected altitude increments from sea level to the highest operating altitude approved for the aircraft in which it is installed. For operations below 3,000 feet, however, the equipment need provide only one signal, either visual or aural.

It also must be capable of responding to tests without the use of special equipment to determine whether the alerting signals are operating properly. If it operates on barometric pressure, it must be able to accept necessary barometric pressure settings.

In the event the warning system malfunctions, the rule permits the pilot to continue flight to a place where repairs or replacement can be made. The device may be turned off in the course of an airworthiness flight test being conducted to test the device, or when testing an altimeter or other equipment.



Da Nang Run

Fort Worth regional office employees James Price (left) and Dr. Clyde Lynn are at home in the cockpit of a Navy C-118 transport which they flew to Vietnam during reserve training. Price is an attorney in the regional counsel's office. Dr. Lynn is the Southwest Region's flight surgeon.

Disoriented Pilot Is 'Saved'

GREENVILLE, S.C.—"Any station . . . any station," the PA-28 pilot called on the emergency frequency.

Amos Jarmon, local controller at the Greenville-Spartanburg Tower, quickly replied.

The pilot told Jarmon he was under a heavy cloud layer in the mountains, unsure of his position and unable to proceed visually out of a valley he was traversing.

Direction finding equipment at Greer FSS established that the pilot was over the mountainous Waynesville-Canton, N.C. area. Another

pilot flying over that area called the Greenville FSS and advised that he was observing a small aircraft circling a lake in the vicinity. The pilot, D. R. Whissenhunt of Asheville, was told about the emergency by Jarmon. Whissenhunt pointed out that the Interstate Highway was in the vicinity and suggested that the "boxed-in" pilot be vectored to it.

The lost pilot was advised to follow the highway eastward to an industrial center and from that point was directed to Asheville Airport where he landed safely.

Aviation Clinic 'Swamped'

GALESBURG, Ill.—An enrollment of about 50 was expected at the recent three-day General Aviation Educational Clinic sponsored by the Springfield GADO. More than three times as many showed up, swamping the facilities and requiring additional space and seats.

Lee Ruebush, Jr., accident prevention specialist who arranged the clinic, said he felt having a well-planned and well-publicized program contributed to the excellent response.

The clinic included three afternoon flying sessions with segments for courtesy flight checks, Blue Seal certification, flight instructor

renewals and other certifications. At evening sessions, pilots got a look at FAA films and heard discussions on flying techniques, common pilot errors and standardization of flight maneuvers.

A talk on psychology and human behavior as they relate to flying was given by Gene Utz, Flight Safety Coordinator for the Illinois Department of Aeronautics.

Questionnaires completed by pilots at the conclusion of the program revealed that all felt they were better informed as a result of the clinic and 98 per cent felt they were safer pilots than before they attended the clinic.

Stork 'Loses' Air Race

BIRMINGHAM, Ala. — John Reese, specialist at the local FSS, recently answered what he thought would be another routine radio contact. It wasn't.

The pilot, "Handy" Ellis of nearby Pell City, advised he was en route from south Alabama with his wife in their Cessna "Cardinal." Their problem? They were at that moment running a very close race with the stork.

Ellis asked the FSS to help by arranging a quick landing and transportation to a local hospital. He also asked that their physician be alerted.

Reese arranged with Birmingham Tower for a quick landing clearance and Ken Thornal called

the couple's doctor. Roland Gorman called for ground transportation. The plane carrying the prospective parents was quickly cleared for landing. There was no delay at the airport and the couple reached the hospital in a minimum of time.

Results of the race: The Cardinal outflew the Stork by less than an hour.

Some time later, the greatly relieved father returned to thank the three FSS specialists and to report that mother and son were fine.

He passed around cigars and before leaving commented, "Whatever the request, Birmingham FSS always responds quickly and efficiently."



HORIZONS

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Cited

Riley Harris (left), of the Airway Facilities Division in Western Region, and Mrs. Harris hold Harris' citation from the Administrator for his work in developing a low-cost tower communications system. Arvin Basnight, Director of the Western Region, made the presentation.

Riley Harris Honored For New Tower Concept

LOS ANGELES—Contributions toward development of a low-cost, transistorized airport traffic control tower recently earned the Administrator's "Certificate of Achievement" for Riley Harris, electronics engineer in the Western Region's Airway Facilities Division.

The system Harris helped perfect is designed for use primarily in low-activity towers. However, achievement of the transistorized tower "package" undoubtedly will influence design of busier towers.

Development of the transistorized system was made possible through combined efforts of electronics engineering personnel of the Systems Research and Development Service, Washington, D.C., and the Aeronautical Center, Oklahoma City. Major engineering contributions were made by Harris and other personnel at Western

Region Headquarters and by personnel of the San Francisco Area Office.

Harris' concept of using transistorized receiving, transmitting and control equipment eliminates the need for large electronic equipment rooms required in conventional towers.

Through Harris' continuing efforts, FAA was able to build and commission the first solid-state equipped tower at Reid-Hillview Airport, San Jose, Calif. Using transistorized components, a high equipment reliability is maintained and more efficient emergency communications are provided to the aviation community during periods of commercial power failure. The "tower package" is easy to install and maintain.

Tangible savings resulting from this effort are estimated at \$170,000 per tower.

Bird Collision Menace Cited in Agency Report

WASHINGTON—The agency has published a new report alerting pilots to the collision hazard posed by ducks, geese, swans and other large waterfowl during the fall and spring migrating seasons.

Entitled "Establishing Certain Parameters of Hazards to Aircraft by Migrating Birds in the Mississippi Flyway," the report notes that some 10 million ducks will be on the move in the Mississippi Flyway this fall. Some 7.8 million will be heading south and another 2.2 million east on the way to wintering grounds.

In addition to the ducks, about 500,000 Canada geese and 450,000 blue and snow geese migrate within the Mississippi Flyway, and about 50,000 whistling swans pass across the northern part of the flyway en route to Chesapeake Bay.

Most of the migrating ducks pass through the flyway between Oct. 15 and Nov. 15. Canada geese and blue and snow geese depart from staging areas in the James and Hudson Bay areas starting in late September, with peak movements in mid-October. Swans mi-

grate between Oct. 20 and Nov. 20, flying largely non-stop from staging areas in Canada east through Central Wisconsin, across Southern Michigan to Lake Erie and then southeast to Chesapeake Bay.

The Mississippi Flyway extends from the Dakotas to Pennsylvania and south to the Gulf of Mexico from Texas to Florida.

Fortunately, the study notes, most birds migrate at night when traffic is at a minimum. Radar and visual observations indicate that 80 per cent of the ducks and from 60 to 70 per cent of the geese migrate at night during the fall.

Another favorable factor for pilots is that migrating birds fly at relatively low altitudes. For example, a radar at Havana, Ill., spotted 40 per cent of the duck targets below 3,500 feet mean sea level (MSL). Only a few flocks were observed on radar flying as high as 9,500 feet MSL. Pilot reports showed only 25 per cent of migrating geese above 5,000 feet MSL. The bulk were between 2,850 and 5,000 feet.

The report is No. RD 67-67.

CG Honored for Emergency Help

ANCHORAGE—Quick response to an emergency by personnel of the 17th Coast Guard District recently helped save the life of a badly injured youth, the son of an FAA employee.

The Coast Guard action in flying the critically injured youth to Seattle and plasma provided by Seattle Area Office employees are credited with saving the accident victim's life.

In an official ceremony held during a recent DOT coordination meet here, the Coast Guard's 17th District was honored for its part in saving Douglas Keil's life after he was severely burned in an accident involving high voltage. Keil's father, Don Keil, is Chief of the Management Analysis Division in the Alaska Region.

The Certificate of Appreciation presented by Director Lyle Brown to Coast Guard Admiral Robert Hammond, praises the Coast Guard for "extraordinary concern for human life demonstrated through instantaneous response to the needs of Douglas Keil for emergency evacuation."

In a letter to Brown, the injured youth's parents expressed heartfelt appreciation for the help given their son.

They reported slow but steady improvement in Douglas' condition.

"Within God's design, recovery is certain and a purposeful life for our son is assured," they wrote. "Our friends have been a source of strength for Doug and ourselves."

Seminar Meets After Emergency

NEW YORK—The intricacies of obtaining support for field facilities in the critical period following a national emergency was the topic of a two-day Emergency Resources Management Seminar attended here recently by 40 Eastern Region and area personnel.

Capt. Robert Sweatt, USN, and Gerald Almy, of the agency's Defense Coordination Staff, arranged for the FAA headquarters briefing team and called upon OST and the Office of Emergency Planning for additional assistance.

Presentations were made by John McGruder, Office of Emergency Transportation, DOT; and Robert Carmody and Joseph Mastroianni of the OEP.

Vincent Guccione, Eastern Region Defense Readiness Officer, was host for the seminar.



For Duty in Vietnam

Virginia Jones, Flight Data Aide at the Honolulu Center, receives the special Air Force Medal for Civilian Service in Vietnam from Pacific Region Director Phillip Swatek. Miss Jones, who transferred to FAA from the Air Force in June, served with the military for more than a year.



Help When Needed

Coast Guard Admiral Robert Hammond receives FAA "Certificate of Appreciation" commending Coast Guard personnel for their part in saving the life of a youth badly burned in a contact with a high voltage line in Juneau. Lyle Brown, Alaskan Region Director, makes the presentation to Admiral Hammond.

Air Hop in Old 'Moonbeam' Recalls 1929 Design Stint

LEXINGTON, Ky.—As Harold Hoekstra climbed into the cockpit of the 1929 Crosley "Moonbeam" during a recent visit here, it was like "the old days."

Though the biplane is owned by David M. Trapp of Lexington, it actually is one of Hoekstra's "babies." Hoekstra, Chief of the Engineering and Safety Division, Aircraft Development Service, designed the "Moonbeam" as one of his first projects while employed by the Crosley Aircraft Company in Cincinnati in the late '20s. It is in top condition and has been displayed at the annual show of the Antique Aircraft Association.

Trapp offered to take Hoekstra for a flight in the "Moonbeam" and Hoekstra eagerly accepted.

"That was a real kick—an open cockpit airplane again — and maneuverability — wow!" Hoekstra said.

Because the depression set in shortly after the "Moonbeam" came off the drawing boards, only two were ever produced. The whereabouts of the other one, which was set up for some time in the aero lab at the University of Cincinnati, is not known.

Hoekstra is proud of designing the "Moonbeam," which its owner has termed "one of the most beautiful light planes ever built."

Hoekstra's work as a pioneer aircraft designer took him to other



Harold Hoekstra

Chief, Engineering and Safety Div. Aircraft Development Service

major aircraft firms after leaving Crosley in 1931. He also worked for Ford Motor Co., Curtiss Aeroplane and Motor Co. and Stinson Aircraft Corp.

He is a member of Tau Beta Pi, national honorary engineering society, the Society of Automotive Engineers, Associate Editor of the Journal of Aircraft published by the American Institute of Aeronautics and Astronautics (AIAA) and a Fellow of both AIAA and the British Royal Aeronautical Society. He is still an active pilot with a commercial rating.

He is a veteran of nearly 31 years of continuous service as an aeronautical engineer with FAA.



'Moonbeam' Still Flies

This 1929 Crosley "Moonbeam" is rare because only two were ever produced. It has been kept in top shape by its owner, David Trapp (above), who recently provided a ride in it to the designer, Harold Hoekstra of the FAA.



Robert Brayton, air traffic control supervisor from Boise Tower, provides temporary tower services at McCall Airport, Ida., during the Chamberlain Basin fire. In the background is a "Privateer" borate bomber.



A B-25 borate bomber starts run on a fire touched off by a lightning strike 35 miles north of the Arctic Circle in Alaska and several miles east of the remote FAA airstrip at Bettles. Boise nerve-center is used by the Bureau of Land Management in waging the battle against fires in Alaska.

Two World War II B-17s and three TBMs based at Boise provide air tanker service to the Bureau of Land Management and Forest Service. Cooperative agreements provide air tankers that back up either agency when needed.

FAA Know-How Helps . . .

BATTLE THE BLAZES

BOISE, Ida.—Smokey the Bear has a formidable ally in his campaign to keep America's forests green: the FAA.

The agency has a key role in a modern "command post" set up here to coordinate the battle against fires which each year devastate large areas of the West's forests, wiping out wildlife and destroying prime economic and recreation resources.

Located on a 73-acre site at Boise Municipal Airport, the Boise Interagency Fire Center (BIFC) was set up nine years ago to centralize the activities of Federal agencies directly concerned with fighting forest fires. The move had the advantages of economy and efficiency for the Forest Service and the Bureau of Land Management, the two agencies primarily involved. Both work closely at the BIFC with other Federal entities, including the Bureau of Indian Affairs, Bureau of Sport Fisheries and Wildlife and the Weather Bureau.

From this modern, well-equipped communication center, the Forest Service is able to keep a close watch on Idaho's 20,341,530 acres of National Forest—the largest single chunk of forest acreage under Federal supervision in the United States. From the BIFC, the Bureau of Land Management coordinates fire fighting activity for all of its acreage in the 11 Western states and in Alaska.

How does the FAA fit into this picture? Though not officially a part of the BIFC structure, the agency plays a major supporting role.

In countless cases, the first word of a fire is flashed to the BIFC via the FAA communication network, because pilots are often the first to spot the smoke.

Since modern fire fighting calls into play both helicopters and fixed wing aircraft, the Boise GADO, headed by G. J. Schwab, exercises normal surveillance over pilots, mechanics and aircraft used in fire fighting operations.

The Boise Flight Service Station, under Supervisor C. E. Abshire, provides flight plan data, weather briefings and airman's advisory information to pilots operating into and out of Boise Municipal Airport.

Boise Tower controllers, under the direction of Supervisor Melvin Couch, extend airport traffic control service to pilots of borate "bombers," aerial tankers and other aircraft used in the fire battle. Boise Tower also supplies personnel to man temporary towers at outlying airports where operations zoom for short periods to meet the need for fighting fires in specific areas.

The Boise Airways Facility Sector, under R. F. Johnson, gives support in maintaining navigational and electronic equipment associated with the operation.

How does the BIFC work? Manpower, equipment and supplies are concentrated at Boise for quick dispatch wherever needed. Groups of fire fighters are rushed to fire scenes both from Boise and from their home stations. Veteran crews are the spearheads of these efforts. They include the rugged Shoshone Indians of Idaho and members of the Blackfoot

Tribe in Montana—all experienced fire fighters.

"Smoke-jumpers"—parachutists who are dropped into forest areas to control fires before they get out of hand—are dispatched from the BIFC. A B-17 is held in readiness to swoop over blazing areas and help stifle fires by dropping borate and other fire retardants.

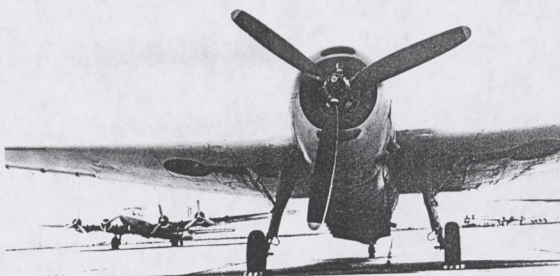
Four other fire-fighting aircraft also are based here, of each are advanced and the public benefits.

A staff of Weather Bureau specialists is on hand to provide forecasts, warnings and consulting services.

To meet the needs for speed and mobility in setting up air traffic control operations at small airports near fire areas, the FAA at Boise has worked with officials of the BIFC in development of a "fly-away" kit—a mobile tower which can be packed in a suitcase type container for quick dispatch to the temporary site. Personnel of the BIFC are currently working on a small, compact collapsible temporary tower platform incorporating weather protection for personnel. They hope this will be ready by next fire season.

These refinements in fire fighting and communication techniques give assurance that Smokey the Bear's crusade against fires will continue to proceed with efficiency.

When Federal agencies work together as closely and enthusiastically as they do in the BIFC, the goals of each are advanced and the public benefits.

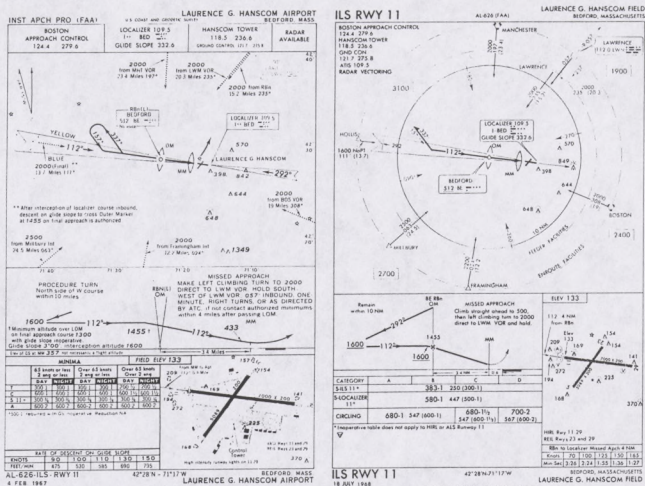
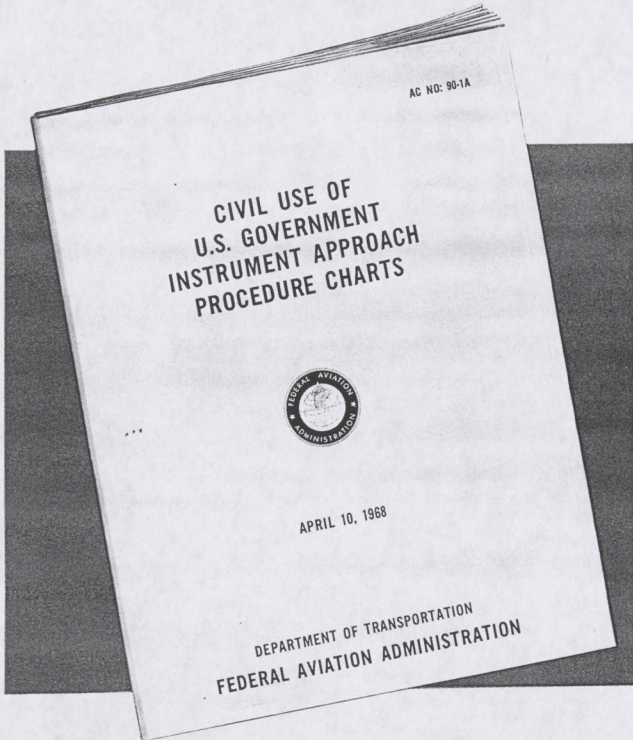


Temporary quarters of Interagency Fire Center dispatch and operations, with pilots waiting in the briefing room in foreground. Windows look through to the Fire Dispatch Center.

Charles Syverson (right) one of the ESSA fire weather meteorologists at Boise, briefs a U.S. Forest Service fire behavior officer on the Charter Mountain fire at Garden Valley, Ida.

The Boise Interagency Fire Center provides parachute loft facilities, housing and training facilities and serves as operations base for a 50-man smokejumper unit.





Even non-fliers can compare the previous Instrument Approach Chart for an airport with its revised one and see the simpler, less cluttered format that IFR pilots are praising. For example, radio frequencies (at top) and approach minimums (in boxes, lower left) as well as missed approach instructions are cut in half. Concentric circles on the new chart (right), give direction from key points, minimum altitude and miles in simpler fashion.

FAA's AC 90-1A:

'Most Popular Paperback'

By Thom Hook

WASHINGTON—When a general aviation or corporate pilot is making an instrument approach "on the gauges" flying IFR—monitoring his instruments, talking to the tower and flying the aircraft—a little five-by-eight inch chart guides his every turn.

At such busy times, the pilot best appreciates the simpler, less cluttered format of the new Coast and Geodetic Survey charts. This improved chart was developed by the FAA, Coast and Geodetic Survey, industry and military representatives.

The approach chart format is being changed as Flight Standards applies the new "U.S. Standard for Terminal Procedures (TERPS)" to individual approach procedures.

To date, 557 instrument approach charts have been re-issued, and within the next one and a half years all charts (more than 2,800) will be revised. The 18 months are needed so that local considerations—such as airport obstructions, terrain features and navigational facilities peculiar to certain localities—can be evaluated when new criteria are introduced.

Developed by Flight Standards

Recently-published Advisory Circular No. 90-1A, "Civil Use of U.S. Government Instrument Approach Procedure Charts" developed by a FAA Flight Standards staff led by Howard Flohra, Chief, Airspace and Procedures Branch, is the FAA way of telling students as well as experienced pilots how to interpret the new charts. Judging by the intense demand that followed publication of its availability in early summer, AC No. 90-1A is presented palatably and with excellent graphic illustrations.

First printing of the 24-page circular, which clarifies landing minimums as well as introduces the revised charts, amounted to 100,000 copies. Initial distribution included 20,000 to Coast & Geodetic Survey subscribers; 48,000 to FAAers in Air Traffic, Airports and various Flight Standards offices and 3,800 which went out as a result of releases to news media June 5. After that mailing, Francis Gerardi, Chief, Production Section, TAD-484, Office of the Secretary, awaited the pulling power of the printed word. On June 27, his office had some 28,000 copies of AC 90-1A.

Then came an avalanche of requests and two months later less than half the supply remained. As of Aug. 27, the inventory was 13,500 copies and at this writing the possibility of a new printing of per-

haps another 40,000-50,000 is being considered.

"I feel the circular is very popular and we could have printed more," says Gerardi. "We've had more than 100 actions a week requesting copies, in quantities ranging from one to 1,000."

Letters poured in from flight schools, pilots, colleges, industry organizations and foreign governments, many having seen a sample copy and expressing favorable comments about the clear, concise way the circular explains approach charts.

Even a non-flier can compare a new chart with the old one and see certain obvious improvements. Radio frequencies, which formerly were strung along the chart top in boxes, now are simply listed in the upper left-hand corner to conserve space. When the instructions for a missed approach apply to a holding pattern, the information is charted graphically rather than by a narrative description. Zeroing in on the approach facility like a machine gun sight are concentric circles, which show feeder and en route facilities. The en route and feeder facilities if shown to scale otherwise could not be presented.

Alternate Minimums Separated

The minimums box now includes only straight-in and circling data. Take-off and alternate minimums that do not pertain to an approach are now contained on a separate listing.

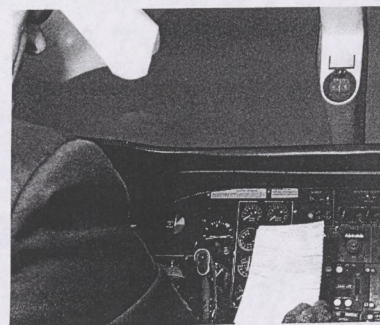
The new Advisory Circular, aimed at helping pilots understand the Administration's revised instrument approach procedures, is apparently doing an excellent job, judging by random comments from letters received: "It is requested you provide or sell us at least 20 of these excellent booklets. There does not appear to be a price listed . . . however, we will remit upon advice from you. More publications with the information, presentation and quality on other relatively complicated subjects would certainly be welcomed and appreciated. Thank you."—Flight Development, Inc., Fargo, N. Dak.

"We hesitate to impose on your supply, but we could put 50 of them to work immediately."—Eagle Air & Ground School, Bedford, Mass.

"This circular is a much needed one, as . . . it consolidates much information into one easy-to-read publication . . . will be a big aid in instructing students."—Army Aviation School, Enterprise, Ala.

"I have recently received your circular . . . and am

When an IFR rated pilot gets in time "under the hood," the Instrument Approach Chart gives him the procedures to follow. Here Henri Keyzer-Andre, an IFR pilot and a maintenance specialist at FAA Headquarters, shows use of chart in a Lear Jet.



very impressed with the clear, concise way it explains approach charts . . . please send me 50 copies for our Instrument and ATR students."—Skyways Flight Services, Inc., Troutdale, Ore.

"We have a requirement for 15 copies for the engineers in our Flight Test Group."—Cessna Aircraft Co., Wichita, Kans.

"Please forward five copies . . ."—Department of Transport, Civil Aviation Branch, Ottawa, Ont., Canada.

" . . . No use repeating the phrase, 'Just what I've been waiting for,' but with expanding Veteran Flight Training in progress, the need for this publication is in quite a demand. Please send 25 copies immediately via Air Parcel Post . . ."—Rose Aviation, Inc., Hawthorne, Calif.

Requests from Many Sources

Requests also came from large industry manufacturers (Lockheed-Georgia, Boeing, Narco Avionics, etc.) and well-known universities (Indiana, Brigham Young, etc.).


User occupations varied from individual architects, contractors, dairy men, college professors to at least one head of his own gold refining company with offices in New York and in Canada.

Perhaps the request from farthest away came from a pilot at remote Kwajalein Test Site, Marshall Is., Pacific. Most persistent effort shown to obtain circulars came from an aeronautics academy in California which heard that one letter could elicit only two copies, so went to the trouble of sending half-a-dozen individual letters from six different executives to get the dozen they wished. They were right, but due to the many requests received for quantities from certificated flight schools, the limit of two copies was rescinded early and bona fide users get what they want—or permission to reproduce them themselves, if the quantity is too great.


According to William Shreve, Jr., Chief of the Aircraft Programs Division in Flight Standards (under whose direction the Airspace & Procedures Branch published Advisory Circular 90-1A), any FAAer associated with operational flying should be thoroughly familiar with the new publication.

A copy of this advisory circular is available free of charge, while they last, from the DOT Distribution Unit, TAD-484.3, Washington, D. C. 20590.

DIRECT LINE



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



Question: What are the requirements to become an FAA Law Enforcement Officer (Sky Marshal) and what is the grade structure and where should one apply?

Answer: FAA Law Enforcement Officers are regular FAA flight standards inspectors who volunteer and are specially trained for this particular duty. This is an additional duty collateral to inspectors' duties. The basic requirements are in the announced examination for Aviation Safety Officer and Airplane Pilot. FAA uses both agency promotion registers and examination registers furnished by the Civil Service Commission to obtain qualified candidates to fill vacancies. In most cases, entry level for these FAA inspector positions is at GS-9, \$8,462 per annum and journeyman level, GS-13, \$14,409 per annum. Interested persons should apply through the local FAA personnel office which will be able to advise you whether positions are available in that area.

Question: Do you believe it is fair for a wage board employee to "cross-train" communication GS-9 and GS-11's in teletype maintenance and repair?

Answer: Yes, it is customary to assign training duties to those most qualified to perform the training required.

Question: Do you believe in equal opportunity, rights, etc., for wage board employees?

Answer: Agency policy (PT P 3300.7, par. 400) provides for equality of employment opportunity to all qualified persons and wage board employees are certainly included within the scope of this program.

Question: Is it possible for an Electronics Technician to be promoted to GS-11, specializing in communications only?

Answer: Yes, there are GS-11 technician positions for those specializing only in communications but these are usually located in ARTC Centers and certain high activity ATC Tower and CS/T locations.

At many terminal facilities, the communications equipment is combined with either the radar or nav aids equipment to form the section workload. In such cases, the technician is required to have certification credentials for either the radar or nav aids as well as communications equipment in order to stand watch alone.

Once an employee has received certification authority for a specific system, the credentials remain valid if he has been engaged in appropriate maintenance or technical activity on the system for not less than six months during the preceding two year period. Also, he must maintain an acceptable level

of competence during that period. If there is a reasonable doubt regarding the currency or competency of an employee on a system, that employee is required to be recertified.

Question: (1) Is it true that "Outstanding" awards are given in lieu of promotions if, because of the organizational structure, a higher grade is not called for in a particular classification or office? (2) Does the budgetary structure for a particular office affect the distribution of awards, i.e., the type of awards and number that can be distributed? (3) Where two people are doing similar jobs, (same classification), with one office having twice as many personnel, why would the person in the office with the lesser amount of personnel who has less work to do be given an award and not the other person?

Answer: The answer to your first two questions is "no." The only basis for performance awards is the performance of the individual as related to the standards for his position. Neither the organization structure nor the budgetary structure should influence the granting of monetary awards, although it is, of course, possible to delay or deny a cash award if funds are not available. As to your third question, this involves a specific case which cannot be answered by Direct Line, except to clarify the point that "quality of work" as well as "quantity of work" form the basis for a performance award. Such matters should be discussed with your immediate supervisor. If you wish further review, you may discuss the matter and your questions relating to it with a higher level supervisor.

Question: (1) What is the definition of a watchstander; and (2) Can a person be assigned to a "tour of duty" that does not involve watchstanding if he is designated as a watchstander in his position description?

Answer: (1) The agency has not published a definition of the term "watchstander." The term "watch" implies a period of work or responsibility but does not necessarily mean eight consecutive hours. Therefore, "watchstander" has come to mean a person who is required to be on hand at a certain duty location for a scheduled period of time. The common usage of "watchstander" in the field means someone who works a rotating shift schedule where 16 or 24 hours on site coverage is required; and (2) Yes, as long as no regulations are violated and reasonable notice is given, an employee may be taken off this schedule and put on a different schedule for training, special projects, peak load coverage, or for other reasons deemed appropriate and advisable by the employee's supervisor.

Leesburg Flying Club Receives Fourth Plane

LEESBURG, Va.—The Washington Center flying club, known as Leesburg Flyers Inc., has added another aircraft to its fleet in which its 65 members can go up, up and away—four at a time.

This brings to four the number of aircraft owned and operated by pilot-controllers. The new bird, a Cessna "Skyhawk", joins a Cessna 150, a Cessna 172 and a Cessna "Skylane". All four planes are based at Godfrey Field here.

The "Skyhawk" cruises at 130 m.p.h. and has a cruising range of more than 500 miles.

Leesburg Flyers Inc., starts its fifth year of operations on Nov. 1, 1968. Members have flown more than 6,000 hours since the club was organized. There were 40 members at the beginning, with one plane, an Aerona "Champion," to fly in.

Club aircraft have flown to all parts of the United States, Canada and the Bahamas. Cross-country flying is the club's primary objective. This type of flying will increase, notes club president James Truxel, with the expected addition of another cross-country plane.



Bird in Hand

A kid couldn't be happier with a new toy than the officers of Leesburg Flyers Inc. are with their new Cessna "Skyhawk" at Godfrey Field, Leesburg, Va. Left to right are: Wayne Reynolds, vice president; James Truxel, president; Gary Pase, secretary; and William Grupe, treasurer.

Four Persons, One Cat Saved; FAA Is Credited

SAN JUAN, P.R.—Four persons and one very wet cat were plucked from the Atlantic Ocean six miles east of Puerto Rico International Airport by a Coast Guard helicopter recently.

Only 34 tense minutes elapsed between the time the single-engine plane carrying the group was forced to ditch off San Juan and the time the party was rescued.

Later, Mrs. Thomas Crenshaw, wife of the pilot, called Isla Verde Tower here and credited the FAA with "saving us all from a watery grave."

She expressed the gratitude of the entire group for the speedy assistance provided by controllers Roger Massey and Thomas Weisner.

Mr. and Mrs. Crenshaw, two friends, and the Crenshaw's cat were traveling from St. Thomas,

V.I. to San Juan when Crenshaw's plane developed engine trouble and started losing altitude.

"I don't think I can make it to the airport," Crenshaw advised Isla Verde Tower. No further communication was received.

Massey immediately notified the local Coast Guard through the San Juan IFSS. At the same time, Weisner called on all inbound pilots to keep an eye out for the plane, advising them he believed it had ditched.

Within 25 minutes, a local air taxi operator spotted the aircraft in the water. And only nine minutes after that, a Coast Guard helicopter, vectored to the scene by Weisner, arrived to pick up the four jubilant survivors and one drenched feline. The latter seemed quite happy with eight lives yet to go.



New Deputy

Col. William P. Comstock, USAF, who recently reported for duty as FAA Deputy Director of the Alaskan Region, has logged more than 5,600 hours of military flying in addition to 2,800 as a civilian pilot. A former Director of Flying at West Point, he was rated an "Expert" jet interceptor pilot as a Fighter Group Commander. He is married and his three sons are in the service.

Vietnam

(Continued from page 1)

FAA are: William H. Cottles, now with the Technical Materiel Corp. in Alexandria, Va.; Francis Femiano, now with the Army Communication System Agency at Fort Monmouth, N.J., and James Miller with ESSA.

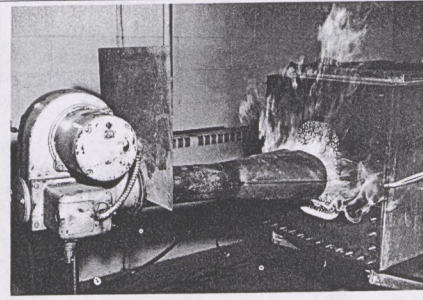
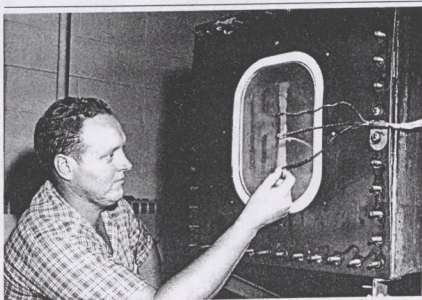
The new Award was adopted to give recognition to civilian employees who volunteered to serve in Vietnam despite hazardous and extraordinary conditions prevailing there. Each person eligible receives a Medal, lapel emblem and citation certificate.

The FAA's technical assistance program in Vietnam dates back to 1956 when the Civil Aviation Assistance Group (CAAG) was established under sponsorship of the Agency for International Development. Today's CAAG staff includes 52 FAA employees.

In addition to the CAAG support of Vietnamese civil agencies, FAA was called on to assist the U.S. Air Force and Army in Vietnam and Thailand. Projects involved procurement and installation supervision of four complete modern air traffic control towers, 15 completely equipped mobile ATC towers, 20 communications and tower control systems, and 15 ATC tower control consoles.

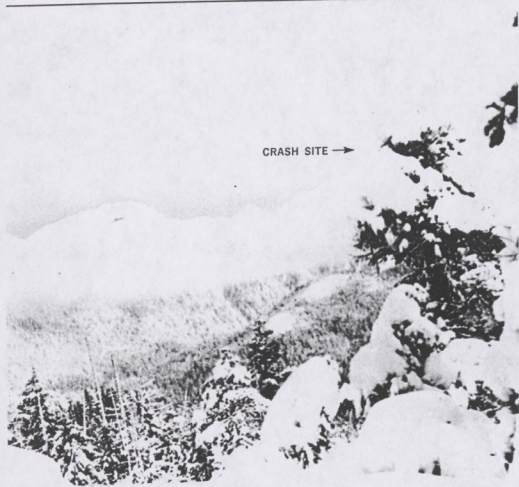
FAA employees worked largely under combat conditions and endured field duty as hazardous and primitive as that faced by tactical forces. Many lived in trenches and in off-duty time helped restore bombed out facilities.

In a letter to the FAA Administrator on July 19, Maj. Gen. Robert R. Williams, Aviation Officer for the U.S. Army in Vietnam, commended FAA personnel for their "can do" spirit.



Window Sizzler

Engineering Technician Charles Cole attaches a thermocouple on a jet transport's acrylic window for a NAFEC fire test. At right, as a 2,000 degree kerosene flame burns through the window, instrumentation connected to thermocouple records temperature, time and degree of destruction.



Rugged terrain and deep snow in vicinity of Alaska air crash scene gives an indication of the harrowing struggle required to reach civilization.

Joseph H. Tippets
Associate Administrator
for Personnel and Training



They Cheated ICY DEATH

Another in our series of
exciting true adventures
of present-day FAAers . . .

(Editor's Note: One of the most incredible—and most inspiring—accounts of man's fight for survival against seemingly impossible odds is shared with us by the man who lived it—Joseph H. Tippets, now Associate Administrator for Personnel and Training. Following a plane crash on a remote Alaskan mountain on Jan. 5, 1943, Tippets and another survivor fought their way out, making possible rescue of two other survivors. The party endured 30 harrowing days virtually without food or shelter. Tippets' first-person account is adapted from the book "LDS Adventures" by Preston Nibley.)

An hour out of Ketchikan, in a violent storm, one engine quit and we began losing altitude. The pilot, Harold Gillam, did all he could to bring us through. Now it was no longer a question of whether we would crash—just where and when.

Besides Gillam and myself, aboard the plane bound from Seattle to Anchorage were Susan Batzer of Idaho Falls, Percy Cutting of Hayward, Calif., Robert Gebo of Seattle and Dewey Metzdorf of Anchorage.

For life-long minutes, we watched peaks and tree-tops skim by. Wordlessly, without panic, we braced for the crash. The plane shuddered as one wing ripped off trees.

The shattering impact sheared my safety belt, hurling me part-way through the fuselage. I don't know how long I was "out."

Shocked, scared and soaked by the snow sweeping the mountain, we huddled in the wreckage doing our best to bind up wounds and give first aid.

Susan Batzer was the most severely injured; she died two days later. Metzdorf suffered a broken collar bone and rib damage. Cutting's back was injured. Gebo had a broken arm and leg. Gillam had internal injuries. My ankles and heels were cracked and my hip was painfully twisted.

Seeks Help in Vain

Knowing we needed to get help soon, Gillam decided to try to hike out, though he must have known his chances were slim. His tragic struggle to help us ended in death a few miles down the mountainside.

Several times in the days after Gillam left, rescue planes skimmed by, but the pilots didn't see us though we signalled frantically. To see rescuers so close we could see their heads moving—and not be found—was heartbreaking. After 15 days, no further planes came and we knew the search had been abandoned.

Day after freezing day followed. Our injuries were healing but two new problems haunted us: starvation and frostbite.

Metzdorf and Gebo were in especially bad shape. Cutting and I realized we were the only ones who

stood any chance of getting help. We decided to try to reach the coast which we knew was near and to hike along it in the hope of reaching some habitation or sighting a ship.

The night before we left, I walked to a grove of trees near the wreckage, knelt in the snow and prayed. I don't believe anybody ever prayed more earnestly than I did then. I asked God for guidance. I asked Him to comfort our families and assure our wives we were still alive. I learned later that on the next day, my wife talked with work and church associates, telling them she was convinced I was still alive and trying to get help.

Cutting and I set out the next day, struggling through deep snow, plunging into holes we could not see. At night, we dug into the snow and clung together for warmth. We took turns waking each other up to make sure each was alive.

On reaching shore, instead of the hoped-for beach, we found sheer, icy bluffs. Slowly we made our way along the bay to a place where we could reach the water's edge.

Shelter Sighted

Across the bay, we saw a shelter which looked like it might offer protection. We made our way to it on a raft of wet logs. It turned out to be just a few planks—but the slight shelter it offered was welcome. Much to our joy, we found a half cup of rice which we cooked and ate with relish—it was a veritable feast.

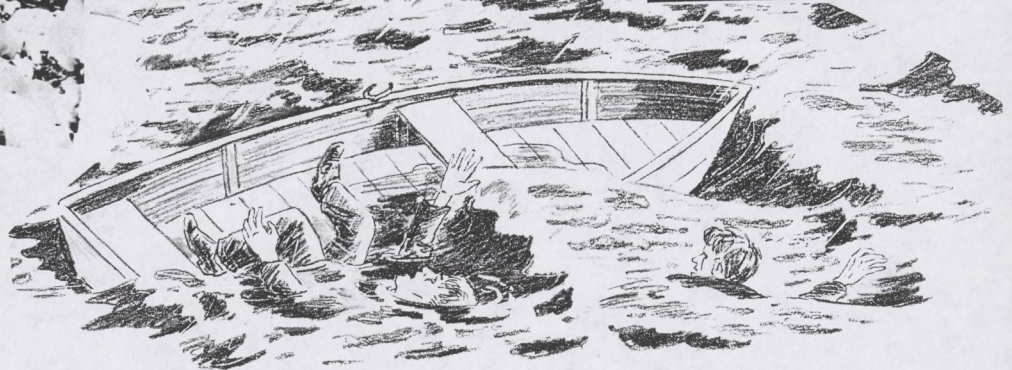
Later, two crows lighted nearby. We shot them, cooked them and devoured them promptly.

We found an abandoned, wrecked dory and tore our blankets up to repair it. We were on a point jutting into the sea and felt if we could make our way down the coast we might find help.

We set out, actually sitting in icy water. The boat leaked almost as fast as we could bail. We bailed and paddled wearily for about an hour. Then a gusty wind began. Heavy swells forced us to bail even faster to keep afloat. Then a wave swamped our boat and we were dumped into the bitterly cold sea a half mile from shore.

Keeping together, we were able to reach the rocky shore. Here the surf slammed us against the rocks, then dragged us back into the water. Our hands were so numb we couldn't grasp the slippery rocks at first. Finally, we clutched a ledge and dragged ourselves up slowly to the frozen bank. We lay there for a while, exhausted, soaked and miserable.

As we walked back toward the shelter, we saw a cutter circling the bay. Wildly, we ran toward shore, yelling, stumbling and falling in an agony of desperation to get them to see us. The boat disappeared.



Nightmare days followed. Each day we grew weaker and our spirits wavered. It had been four weeks since our last full meal. In the last five days we had eaten nothing at all.

I wrote my wife a letter, hoping it would be found should we not return. This was the only time I felt despair.

Then, unexpectedly, another boat entered the bay. As we watched anxiously, it turned back, then anchored several miles out. A storm rose, night fell, and the boat was out of sight.

A Signal Fire, Prayers

We lugged driftwood and branches and built a signal fire, praying for some responding signal from the boat. None came.

Early on the morning of Feb. 3, a blizzard swirled around us, quenching the fire. We got it going again, but as the storm continued our anxiety increased. All evidence indicated the boat had gone.

Too numb and weak to keep the fire going, we watched it flicker out and turned back into the trees for shelter from the bitter wind.

Suddenly, we found ourselves rushing frantically back to shore; we had heard a motor! A boat was nearing shore. Shouting, we splashed into the sea to meet it.

The Coast Guard crew told us they saw our fire but delayed landing because of the rough sea.

After a meal and treatment at Ketchikan, we flew to the crash site and dropped food to the survivors. The following day, we led a 20-man party to them. Though Gebo and Metzdorf suffered untold agonies from injuries, exposure and hunger during their 30 days on the mountain, both recovered. Their unquenchable courage and humble patience were as responsible for our being saved as any other factor. They had been an inspiration to all.

In Ketchikan, we were hospitalized for rest and recuperation. After our release, Cutting and I walked down Main Street. To encounter people, to be once more a part of a busy world that seemed unattainable a short time ago filled us with gratitude and happiness. Both of us found our eyes filling with tears.

We had been rescued one week to the day my wife had prayed for.

The experience made me grateful for my Boy Scout training—it had helped bring us through. I was thankful, too, for my pioneer heritage (my grandfather had crossed the plains with Brigham Young and once was captured by Indians.)

Surviving such an experience can convince one he cannot live long enough to repay his Lord, his country, his family and his friends for the many blessings they have given him.