FAA HORIZONS

Read: 'Alone, Unarmed and Unafraid' Page 8

Vol. 3, No. 9 | Published biweekly for employees of the Department of Transportation/Federal Aviation Administration | April 28, 1969

Bakke Honored

Oscar Bakke (right), Associate Administrator, receives the agency's Decoration for Exceptional Service from Acting Administrator D. D. Thomas in a recent ceremony, with Mrs. Bakke as a proud onlooker. Bakke was cited for outstanding service as Director of the Eastern Region, Associate Administrator for Plans, and Acting Deputy Administrator.

Taylor Named Director Of Equal Opportunity

WASHINGTON—To strengthen the agency's equal opportunity policies and practices Administrator John H. Shaffer has created the post of Director of the Equal Opportunity Staff. Named to fill the position was 33-year old Howard University graduate Quentin S. Taylor, whose most recent assignment was as Special Assistant to the Associate Administrator for Administration.

Taylor, who reports directly to the Administrator, will look at hiring practices at all FAA installations and will carefully examine promotion policies.

The new post was created in response to the Secretary of Transportation's directive of March 19 to all of the Department's operating agencies calling for submission of plans to implement the Department's equal opportunity policy.

"We are just as interested in an employee's upward mobility, his ability to move forward as fast as his ability enables him to, as we are in getting him employed," Secretary Volpe said.

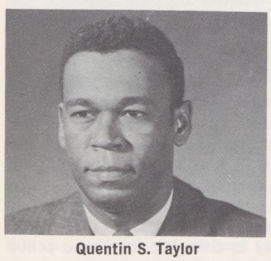
Besides his "in-house" responsibilities, Taylor will monitor compliance by FAA contractors and organizations receiving FAA funds.

In accepting the post, Taylor said that his staff, "with Mr. Shaffer's energy and guidance, will provide assistance to all levels of FAA management pursuant to achieving a larger measure of success in minority employment."

Taylor pointed out that the FAA, as the largest component of the DOT, "has an enormous job to do in the area of assuring equality of opportunity for minority group persons.

"Frankly speaking, we do not look uniformly very good at this stage in FAA development," Taylor said.

A native of Front Royal, Va., who received a B.S. degree in Electronic Engineering from Howard University and an M.A. from Syracuse University, Taylor has been employed by the FAA since February 1959. He is married to the former Barbara Smith.



Quentin S. Taylor

Traffic Growing At FAA Airports

WASHINGTON—Both VFR and IFR traffic at all three domestic FAA-operated airports continues to increase. The busiest of the three agency airports, Washington National, handled 346,417 operations during 1968, compared to 334,622 takeoffs and landings in 1967.

While traffic at Washington's Dulles International increased from 212,153 to 213,610, the largest percentage gain was recorded at Atlantic City, home of NAFEC, where the total operations jumped from 126,414 to 134,951.

Total instrument operations at the three airports also were up, with Atlantic City again registering the largest percentage gain. Washington National increased from 325,480 to 331,690, Dulles from 85,603 to 94,933 and Atlantic City from 39,905 to 55,858.

The figures, from the "FAA Air Activity Report for 1968," were compiled from the 322 airports in the country having control towers.

Top Air Traffic Facilities Named

By Don Byers

WASHINGTON—The Los Angeles ARTC Center, the Minneapolis Flying Cloud Airport Tower, and the Kenai (Alas.) FSS have been selected to receive the FAA "Air Traffic Facility of the Year Awards." They were chosen for exhibiting the "highest degree of operational efficiency in rendering professional air traffic services" during 1968.

William Flener, Air Traffic Service Director, noted that the winning facilities have made more than routine contributions to operational efficiency, community relations, and training of personnel, as well as meeting the agency's high standards of air safety. He is expected to present the awards personally.

Recipients, on behalf of their staffs, will be: Ben L. Freiman, Chief, L. A. Center; Leay C. Sorensen, Jr., Chief, the Minneapolis Flying Cloud Tower; and John J. Hummel, Chief, the Kenai FSS.

The three national winners were selected from 19 facilities chosen by the regional offices as most outstanding in their local jurisdictions.

The air route traffic control centers handle aircraft operating under IFR (Instrument Flight Rules) between terminals; the towers handle both IFR and VFR (Visual Flight Rules) traffic arriving and departing airports, and the flight service stations provide flight information services primarily to VFR pilots, both pre-flight and in-flight. These services include briefings on weather routing, facilities and airports and assistance to lost pilots.

L.A. Center Remodeled

The Los Angeles Center, located at Palmdale, Calif., was selected for handling an exceptional traffic increase while undergoing extensive remodeling to accommodate installation of automation equipment. The Center also provided outstanding air traffic services while the airspace under their control was being reorganized to meet requirements of the automated system. Los Angeles Center handled 912,000 operations in 1968, compared with 737,359 in 1967.

The Flying Cloud Airport Tower, located at Eden Prairie outside Minneapolis, was cited for maintaining an unusually close and productive relationship with the flying public and the community it serves, and for handling a sizeable increase in air traffic. The 1968 total of 446,198 operations (takeoffs and landings) was up 20 per cent over the 1967 total. Personnel of the tower also participate regularly in pilot forums and meet quarterly with operators and flight instructors located at the airfield.

The Kenai FSS workload increased 22 per cent over 1967, while maintaining a level of service to pilots characterized as "top professional quality" by agency evaluation pilots. The Kenai air traffic specialists also have maintained an active and productive community and pilot relations program.

To be eligible for national and regional awards, facilities must have outstanding ratings in eight separate categories: operational efficiency, error-free operations, personal and facility appearance, training, employee morale, community relations, security practices and suggestions for improvement.

Honor Helicopter Pilots For Oil Fire Rescue of 35

NEW ORLEANS—Eleven helicopter pilots from private industry are to be honored here May 6 by the FAA for their heroism in rescuing 35 victims of the "Little Bob" oil rig explosion in the Gulf of Mexico last August.

FAA's highest honor, the "Award for Extraordinary Service," will go to Ronald L. Diggins, a pilot for Petroleum Helicopters, Inc. Diggins, disregarding his personal safety, maneuvered his Bell 47 G-4 helicopter in tight orbit around the upper portion of the flaming rig and then flew into the fire itself to rescue a badly burned man stranded on a machinery shed directly above the flames. The pilot ran the risk of striking the oil rig structure with his rotor blades, which probably would have been fatal. However, he was able to keep his helicopter steady in the unstable air above the flames and maneuver within the victim's reach.

FAA's second highest honor, the "Award for Distinguished Service," will go to John C. Redfield and Clair T. Merryweather, employed by the same firm. Both pilots landed their helicopters downwind less than 200 feet from the burning oil rig to pick up several victims from the water.

Eight other helicopter pilots who participated in the rescue operations either hovered above the victims and advised Diggins, Redfield, and Merryweather of their precise positions and rotor clearance with respect to the victims or transported the injured to nearby hospitals. The five pilots employed by Petroleum Helicopters who will be receiving Certificates of Appreciation are: David L. Durling, Rupert E. Phillips, Gary R. Carter, Barton L. Small, and Ronald L. Palmer. Three pilots employed by the Chevron Oil Company's office in this city to be honored similarly are: Francis Marion Bruce, Jamison John Leitz and Daniel M. Haston.

This is not the first time that an employee of Petroleum Helicopters, Inc., has been honored by the FAA. A year ago, Petroleum's Joe E. Savage received the agency's Award for Distinguished Service for his helicopter rescue of three men following a tragically similar oil tank explosion in the Gulf of Mexico.

Firemen Honored

For his leadership in utilizing helicopters as effective municipal emergency equipment and his department's record of emergency rescues, Chicago Fire Commissioner Robert J. Quinn (left), was presented a Certificate of Appreciation by FAA Area Manager Paul E. Cannom. Chicago was the first U.S. city to institute a full-time heliport air evacuation program.

Bond Drive Support Urged

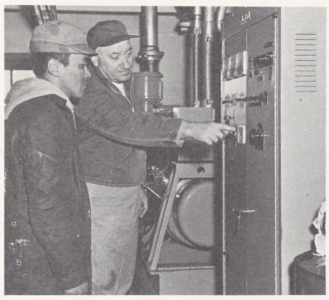
WASHINGTON—Full employee support of the 1969 "Share in America" Savings Bond and Freedom Shares program just launched is urged by Secretary of Transportation John A. Volpe and Administrator John H. Shaffer.

"We are confident that FAA employees will take full advantage of the opportunities for saving and, at the same time, do something for their country by taking part in the 1969 campaign," Shaffer said.

The Administrator is the agency's overall drive chairman. Directors of the regions and centers are Area Campaign Chairmen for their jurisdictions. Area campaign chairman for Washington headquarters is Cliff W. Walker, Deputy Associate Administrator for Operations. Vice-chairman for the Washington drive is Earl J. Anderson, Acting Associate Administrator for Personnel and Training.

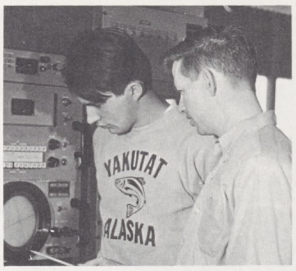
Savings bonds now have a new high interest rate of 4¼ per cent. Buying gives employees the privilege of also getting the even higher interest 5 per cent Freedom Shares, in combination.

In last year's drive, the agency achieved 85 per cent participation. in the Bond and Shares program.



Hersche Clark (right), chief mechanic, points out controls on engine generator to Wassie Nickoli, trades learner, at the Iliamna FSS.

Air Traffic Control procedures are being taught to Oscar Koutchak (seated), AT trainee at the Nome Flight Service Station. Facility Chief Robert J. Kossieck demonstrates how flight strips are used.

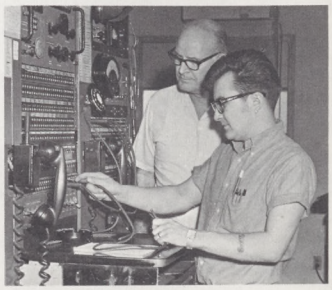


Lloyd O. Howard (left), electronics technician trainee at Yakutat, receives instruction on direction finding receiver from Truman Middleton, the facility's senior technician.

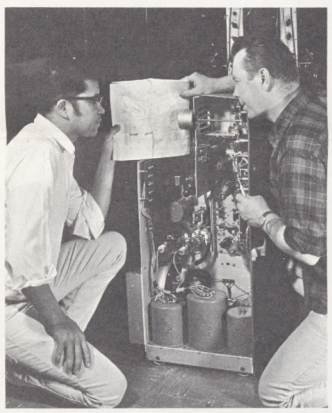
Learning the use of the direction finder is Moody Baker (right), air traffic trainee at Bethel. His supervisor is Tom Grantham.

Kiatcha (Kia) Davis, clerk trainee, files maps in the engineering drafting reference room.

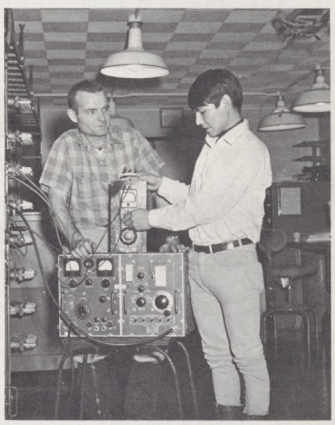
Darell Bricker, manpower planning specialist in the Personnel and Training Division, administers the BIA-FAA training program for the Alaskan Region. Bricker (left), explains the program to native leaders in Alaska. Here he discusses an agreement with Miss Karen Lamitie and Adam John. John is an officer of the Anchorage Welcome Center, a home away from home for Eskimos and Indians; Miss Lamitie is a Center volunteer.



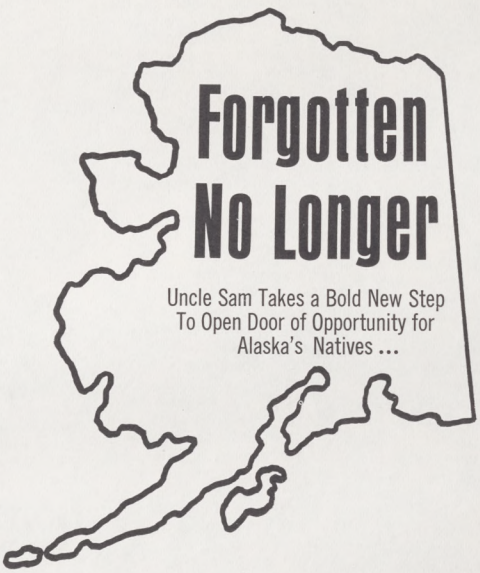
Paul Williams (right), receives training under the watchful eye of Paul Smith, teletype repairman, in the equipment room at Fairbanks International Airport.



Franklin Littlefield (left), electronics technician trainee at Annette, studies wiring diagram of communications equipment with supervisor Donald L. McCall.



Edmond Harvey (right), an ET trainee at Kotzebue, receives training on use of test equipment. His supervisor is Jack L. Wilkins, senior technician in charge at Kotzebue.



Forgotten No Longer

Uncle Sam Takes a Bold New Step To Open Door of Opportunity for Alaska's Natives ...

Giving natives a stake in Alaska's expanding economy is the objective of a new federal program in which the FAA has a key role. Under the program, 16 eager, talented Eskimos and Indians have joined the Alaskan Region work force as trainees for positions as controllers, technicians and trades helpers.

Alaska's Bureau of Indian Affairs, which comes under the Department of the Interior, is paying for subsistence, transportation and other costs during the training period. After that, it is hoped, the youths will be able to go on their own as full-time agency employees.

The FAA is only one of a number of federal agencies in Alaska cooperating in the program to open up more federal job opportunities to Alaska's natives.

"Our initial goal is to train these Alaskans to the point where they can become qualified as journeymen in the air traffic and electronic technician specialties," said Lyle K. Brown, Alaskan Region Director.

Brown and others who helped launch the program a year ago believe that the government's investment will be recouped through decreases in financial assistance to unemployed Alaskans, as well as in ultimate reduction in personnel costs to all agencies participating.

"In time, there should be a substantial diminution in the need for bringing employees to Alaska from 'the lower 48'," Brown said. "Aside from the economics involved, it is rightful that Eskimos, Indians and Aleuts—the original inhabitants of Alaska—should be given a chance to share in the growth of this last frontier."

Under the program, each government agency provides facilities, instructors and support for training of the natives. Upon completion of the training, qualified trainees are given priority consideration in filling vacancies.

Although only 16 men are being trained at present, the number is expected to increase to 30 shortly, according to Darrell Bricker, Manpower Planning Specialist in the Personnel and Training Division, who oversees the FAA's portion of the Alaskawide program.

Early reports on the program have been optimistic. Allen L. Golat, Station Administrator at Galena commented: "Our electronics trainee, Elmer Marshall, is one of our greatest assets; I predict a fine future for him with the agency."

James R. Large, FAA supervisor at Annette on the southernmost tip of Alaska, had this to say about Frank Littlefield, the electronics trainee assigned to his station: "Frank had a good basic background in electronics before he started training with us. He applies himself diligently and is doing very well."

The station administrator at Cold Bay, Thomas H. O'Malia, is enthusiastic about trainee Marvin Mack. "Marv" has completed several written examinations with an overall average of 98.5 per cent. He now operates the teletypewriter, makes scheduled weather reports and, under direct supervision, works ground-air communications. He's a willing worker and will be a valuable employee some day."

For Alaska's natives, centuries of depending on a hostile environment for a livelihood seem to be nearing an end. A new day is dawning for these proud Americans and the FAA is helping to hasten it.

Tie Tack King

More than 250 aerospace tie tacks, tie bars and lapel pins—ranging from a P-38 to an F-111 with movable wings—are in the prized collection of Dr. Harry L. Gibbons, Chief of the Aeromedical Research Branch of CAMI.

Unique Tie Tacks Abound In Physician's Collection

OKLAHOMA CITY—"Stop drooling over my tie!" This urgent plea is often directed at Dr. Harry L. Gibbons, Chief of the Aeromedical Research Branch, CAMI, by potential, albeit unknowing, donors to the good doctor's collection of tie clasps with an aviation motif.

Dr. Gibbons' unusual aerospace tie tack collection now numbers more than 250. He always is hopeful that someone may remember an old pin discarded in a dresser drawer and contribute it to his collection, which includes tie bars and lapel pins.

Among his prized pins are a replica of the C-5A given to him by FAA Deputy Administrator D. D. Thomas, and a rollout model of the Boeing 747 given to him by Federal Air Surgeon Dr. Pete Siegel.

The oldest pin in Gibbons' collection is a 24-year-old replica of the P-38, presented to him by an Air Force colonel. He also has a "Chipmunk," given to him by Art Scholl, prominent aerobatic pilot, and an F-111 with movable wings.

Eight of the clasps are models of jet engines. There are two tacks from the Japanese Rocket Society, two from Russia and one from West Germany.

Seven airlines are represented, including two foreign carriers—Ethiopian Air Lines and SAS. There also are three space capsules—Apollo, Gemini and Mercury.

In a somewhat lighter vein is a tack looking like an ordinary coat button, a gift to pilots from a fixed base operator who feels all new pilots should have a "panic button" to push.

A tack from the Red Baron Society is inscribed with the official motto: "Get Snoopy," and there is also one of "Snoopy" himself.

In addition to his activities as a "tie inspector" at gatherings of aerospace men, Dr. Gibbons is known as a brewer of root beer. He recently measured out the 500th gallon of this "home brew."

The doctor has designed a somewhat unique "thank you" card for anyone who cares to make a donation to his collection.

Beautification Commended

In recognition of action the city is taking in the National Airport Beautification Program, Kansas City Area Manager Robert Gale (center), presents a Certificate of Commendation to Jim Boyd, Russell, Kan., city manager. Looking on are: (from left), John Faltermeier, Grand Island, Nebr., FSS Chief and formerly Chief of the Russell FSS; Robert Kaps, Russell FSS Chief; and Ray Arvin, director of aviation for the State of Kansas.

NASCOM Impresses Congressman

ATLANTA—The effectiveness of the FAA's NASCOM (National Airspace Communications Conference) was vividly demonstrated to New Mexico Congressman Manuel Lujan during his recent one-day visit to Southern Region headquarters.

In Atlanta for a personal look at aviation activities in this busy southeastern aviation hub, the Congressman was accompanied by Robert Whittington, DOT's Congressional Liaison Officer (formerly with FAA's Air Traffic Service), and two congressional aids, Stephen Morgan and John Mayer.

While here, Lujan's party first toured Lockheed-Georgia's Marietta plant which is building the world's largest fanjet airfreighter, the C-5A "Galaxy."

Lujan's second stop was Atlanta Tower's TRACON where he received a comprehensive briefing and observed the agency's prototype terminal Advanced Radar Traffic Control System (ARTS) being used to control air traffic at busy Atlanta Airport.

Participating in the ARTS briefing were Area Manager Chet Wells, AT Branch Chief Richard Robinson, Tower Chief Lester Shipp, ARTS Project Officer George Allgood and SATCS Howard Burch.

Hosting the Congressman's party was Deputy Director Gordon Williams who also arranged for Lujan to sit in on the daily NASCOM at the Regional Office.

During Williams' NASCOM briefing, he called on the Public Affairs Office for a copy of *FAA Horizons* dated April 29, 1968. That particular issue had carried a two-page feature on the NASCOM, "Management Has a Finger on The Pulse." Williams used this story as a part of his explanation on the way FAA's top management utilizes the NASCOM to keep its "finger on the pulse" of aviation—nationwide. At Lujan's request, he was given several copies of the *FAA Horizons*' NASCOM feature for his files.

Following the NASCOM, Congressman Lujan expressed his admiration for the agency's effective two-way exchange of vital information.

(In February, NASCOM marked its first anniversary of operation.)

How it Works

Gordon (Porky) Williams (right), Southern Region's Deputy Director, explains to visiting Congressman Manuel Lujan of New Mexico how NASCOM enables top FAA management to keep in daily touch with all phases of the National Airspace System.

Commended for a Defense 'First'

For the success of Operation SANDALX, the first emergency defense ready exercise ever conducted by an area office, a Certificate of Commendation was recently awarded to the Cleveland Area Office. Presented by Eastern Region Director George M. Gary, Area Manager Clay Hedges accepted the certificate for his office. The exercise title—"SANDALX"—("Horizons," Sept. 2, 1968) was coined to show the test's relationship to the previous year's national exercise, "High Heels."

Agency To Install 21 Radar Display Mapping Systems

DALLAS—A contract amounting to $855,105 has been awarded by the FAA to Texas Instruments, Inc., for 21 video mapping systems and associated spares and expansion modules.

The video mapping systems will be used with airport surveillance radars (ASR-7), ordered recently by FAA to expand radar coverage at radar-equipped airports and to provide coverage at additional airport locations.

The video mapping system ordered is an improved electronic device with no moving parts which electronically displays maps and other air traffic control information on radarscopes used by air traffic controllers to direct air traffic in terminal areas.

The air traffic data generally displayed includes: holding patterns, departure and arrival areas, airports, air route intersection and other data required by controllers. All data is drawn to scale and used in conjunction with radar blips designating aircraft targets in the area.

Locations of new equipment will be announced later.

Crash Avoidance Bibliography Out

ATLANTIC CITY—A new bibliography on collision avoidance has been published at NAFEC.

Prepared by Dorothy Bulford, reference librarian, the publication contains 1,013 references to technical reports, books and articles in periodicals published on the topic since 1955. The work was issued as technical report NA 68-54.

A bibliography on clear air turbulence and reading lists on such topics as computers and management have also been prepared by Miss Bulford.

FAA HORIZONS

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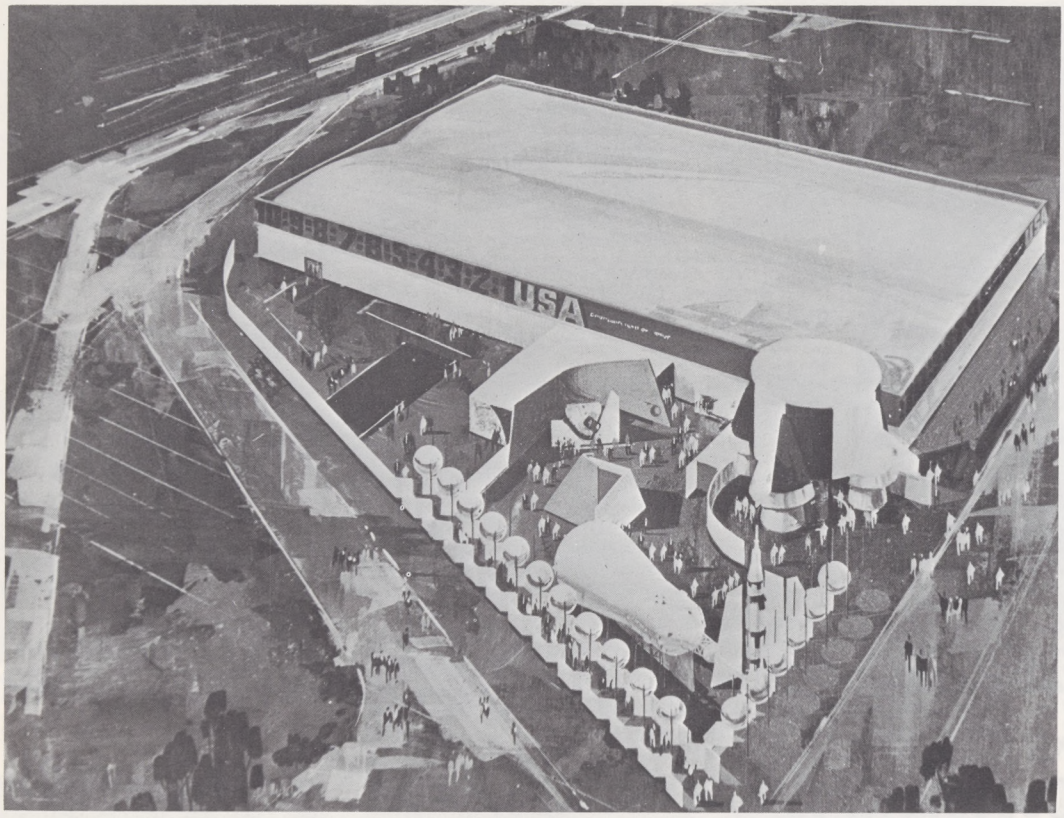


Artist's conception of the United States Pavillion at the Paris Air Show.

USA EXHIBIT

For FAA Air Show Exhibit . . .

ALL SYSTEMS GO

All systems are go for the 28th International Aeronautical and Space Show to be held in Paris May 29 to June 8.

The FAA will have its own exhibit at the show, considered the most important trade event in the aerospace industry.

The Paris Air Show carries a potential of billions of dollars in sales of aircraft, aerospace wares and supporting equipment.

Currently, the U. S. supplies about 85 per cent of the free world's aerospace needs and coordinated government-industry participation in the show is expected to help assure the continued American preeminence in the world aerospace market.

The FAA exhibit, comprising more than 1,000 square feet of animated and static displays, got the go-ahead last September. Sue Silverman, Chief of the Information Services' Special Projects Division, and Wayne Lovell, Chief of the Headquarters' Printing and Publishing Division, were given full charge of mounting the exhibit. Acting as a team, they oversaw each stage of design and fabrication. Probably because of the short deadline, FAA became the only government agency to enter the Pavillion with its own display and therefore received a number of special considerations.

Agency Has Prime Space

For one thing, FAA's exhibit was given the most unusual booth space in the Pavillion. It will stand at the forefront of the aviation section, surrounded by walls extending 13 feet high. Other exhibitors are limited to walls of 6½ feet; thus, in sheer size alone, FAA's display will tower over the others.

FAA used this fact to advantage. The entrance to the FAA exhibit area will be signalled by a 15-foot-high revolving pylon, suggestive of an airport control tower. In place of a tower cab, however, huge, brightly-colored cubes bearing the letters "F-A-A" will be visible from almost any point inside the Pavillion as they revolve in the bright glow of animated lights.

FAA's exhibit will be, understandably, a departure from the Pavillion space theme, "Countdown Apollo." With most other exhibitors providing a dazzling display of space hardware, the agency will use, instead, a series of specially-produced movies, an avant-garde slide presentation with a jazz background, an unusual optical map and an imaginative portrayal of flight in the 1970s.

The FAA exhibit area is up-beat. Colors are bright, heightened by red wall-to-wall carpeting. Sound effects are lively. The English text is in blue; French in black. Walls are covered with green felt.

Giant Movie Screens

The piece de resistance of the FAA exhibit consists of three identical free-standing curved modules, with huge motion picture screens. Each module will feature an original film, only one of which has an accompanying narration. The other two will use either inventive music and sound effects or vibrant art cards providing "subtitles" in English and French. At the base of one module is an unusual "fiberoptics" display—a banana-peel shaped map of the globe, across which a series of different lights illustrate the manner in which the airplane has progressively "shrunk" the world. At the bases of the other two modules, a montage of colored photographs and transparencies will keynote the films being shown.

To highlight FAA's own Paris Air Show theme: "International Skyways—Corridors of Cooperation," FAA's exhibit will underscore three principal thematic concepts:

- The airplane has made the world a neighborhood by enabling man to conquer barriers of terrain and distance and by affording him greater freedom in his movements around the earth.
- The FAA's own technological progress in navigation, communications and control has assured the international aviation community of aeronautical dependability, equality and durability.
- The FAA is sharing its knowledge with the rest of the world to make it a better place in which to live.

The exhibit area is designed to bring out each concept. Each section is self-contained, with a logical transition between areas. Each component of a given section is autonomous, but related to the whole. This flexibility will permit FAA to use various segments of the display as separate exhibits following the Air Show.

Ideas for the display were culled from a number of agency sources. Each office and service was invited to submit suggestions and various imaginative employees were asked to help put the story together.

Many Employees Contributed

Larry Strayer, an air traffic controller in Honolulu, put his thoughts on a two-hour tape. Frank Brandl, SRDS engineer by profession and an artist by avocation, spent Sundays in front of an easel sketching out ideas. Don Byers and Frank Clifford of Information Services contributed their ideas. A series of suggestions were contributed by the agency's speechwriter, John Demeter. Bud Snyder and Frank Sharpnack of Headquarters Operations were among those contributing to visual aspects of the design. Jerry Ward and "Koni" Konigmacher of the motion picture branch put their talented minds to work on the original films.

Based on FAA's prospectus of what the exhibit should include, the display was professionally designed and produced by Display Sales, Inc., of Cincinnati.

More than two million persons are expected to see the FAA's exhibit and others at the air show.

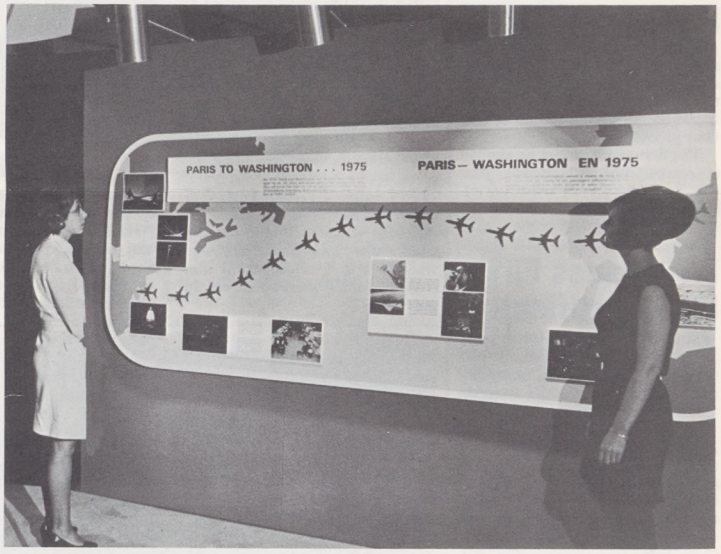
IBITION COUNTDOWN APOLLO

24

PARIS 1969

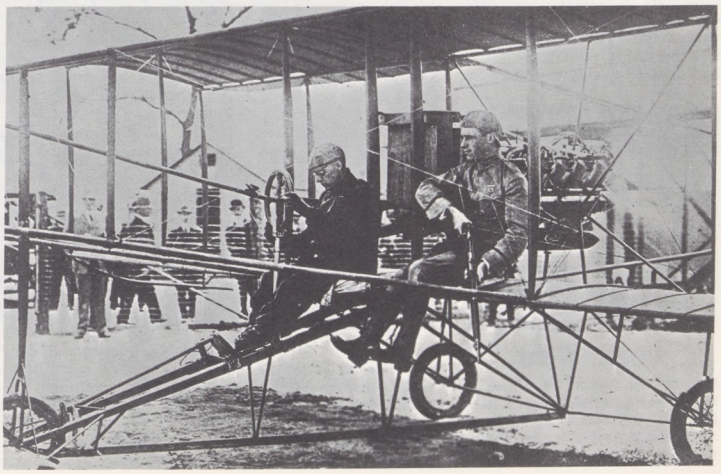
When the designers started to transform FAA's ideas into reality, Sue Silverman and Wayne Lovell and their respective staffs made numerous trips to the plant in Cincinnati to see that the actual fabrication was in concert with approved plans. Here, Miss Silverman goes over drawings with Mario Pitocco of Display Sales, Inc.

Wayne Lovell considers a layout of an illustrated montage of FAA employees to be displayed at the exhibit area entrance.



Along one wall of the exhibit is a graphic rendering of what transoceanic flight will be in the mid-1970s. Below: In 1910, the aviation pioneers truly rode shotgun. One of the original movies to be featured in the exhibit will humorously contrast early days of flight with modern advanced technology. "From Kites to Capsules," has no narration; sound effects with nickelodeon-type music and electronic jazz are used instead.

Three free-standing, 13-foot-high motion picture modules with overhanging canopies to trap the light are devoted to the three principal themes of the FAA exhibit. Robert M. Beasley, of the IS Special Projects Division, checks the montage depicting the agency's international aviation activities.



Pilot Training Systems Evaluated

By John Leyden

WASHINGTON—A study program to speed progression of new pilots to full instrument qualification has produced recommendations for increased emphasis on solo cross-country training and related experience as a means of developing the self-reliance and judgment required for IFR flight.

The recommendations were contained in a report prepared for FAA's Aircraft Development Service by the Department of Aviation of Ohio State University, under a contract awarded July 1967. The contract called for OSU to develop a combined VFR-IFR (visual flight rules-instrument flight rules) training program which would better equip private pilots to deal with adverse weather conditions.

The report noted that the 75-hour experimental flight training curriculum devised by OSU had succeeded in producing a "superior private pilot," but had failed to develop the "complex skills, judgment and command ability necessary for an instrument rating." It concluded that the lack of command ability "could be correlated with insufficient exposure of student pilots to command situations and decisions, whether artificially created by the flight instructor or actually encountered on solo cross-country flights."

To correct these deficiencies, the report advocated that the 75-hour course be improved and expanded to 120 hours. The expanded course would be divided into three 40-hour phases:

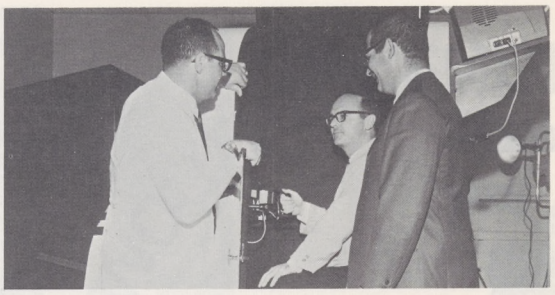
The first phase would be similar to current standard private pilot training, but with basic instrument training increased to a minimum of 10 hours. The second phase would place strong emphasis on carefully supervised solo cross-country flights, with 20-30 hours of such training interspersed with 10-20 hours of dual instruction in emergency and unique situations. The final phase would be essentially the same as current standard instrument training, but toward the end of this phase pilot trainees would be permitted to file and fly solo instrument flights under very restricted instrument conditions.

The expanded program also would continue the use of the so-called "block" training concept, which requires students to execute new maneuvers first by instrument reference and then by visual reference. Increased use of modern ground trainers would be emphasized as well.

The university study was conducted using an experimental group of 15 "zero time" students and comparing their progress with that of two control groups—one composed of 15 students applying for a private pilot certificate and the other composed of 15 applicants for an instrument rating. Each control group followed the appropriate FAA approved training curriculum, while the experimental group used the OSU-devised curriculum.

Under present regulations, applicants for a private pilot certificate must have at least 40 hours flight time and applicants for an instrument rating at least 200 hours.

The report, "Experimental Training Program Utilizing an Integrated VFR-IFR Curriculum," (AD 682-481), is available for $3.00 from CFSTI, Springfield, Va. 22151.



Dizziness-Producer

First production model of the specialized Vertigon simulator is now at the FAA Civil Aeromedical Center in Oklahoma City for research and pilot training. Principals in study of spatial disorientation at CAMI are Dr. William Collins (center), Chief of the Psychology Laboratory, and Dr. Harry Gibbons (left), head of CAMI research. Delivery was made by Louis Ziegler, representing the manufacturers.

Oregon Parolees Take Tower Tour

MULTNOMAH COUNTY, Ore.,—Touring the FAA towers at Troutdale, Hillsboro and Portland airports recently were a group of juvenile parolees from the local Donald E. Long Home. The young men and women are enrolled in an experimental and somewhat speculative general aviation education course being given with the help of area agency employees.

Cooperating with Juvenile Court counsellors are R. O. Blanchard, Seattle Area Manager, and Bill Owen, of the Troutdale Tower, as well as others from the three airports.

The course, prepared and directed by Ray Montee, Flight Director of Portland Flight Training Center was "kicked off" by Owen, who showed a color, sound filmstrip describing aviation career opportunities.

Good Sign

Fine sentiment more than makes up for poor spelling on this sign at Byrd Field, Richmond, Va., displayed when the popular Hamilton B. "Ham" Gowin, Chief of the Richmond GADO, transferred to Ft. Worth Texas after 21 years at Richmond.

Simulators Loom Big in Training Rules Change

By Irv Ripps

WASHINGTON — Significant changes in rules governing airline training programs in preparation for larger, more complex aircraft now are being developed by the FAA.

The rule changes would involve pilot proficiency and type rating flight tests as well as crewmember and dispatcher training.

One of the more important changes considered would provide for greater use of approved flight simulators for over-all crewmember training, airline pilot certification, and for flight testing pilots and conducting the periodic pilot proficiency checks.

After extensive study, the FAA has concluded that a pilot trained through the combined use of approved simulators and airplanes is a better trained pilot than one trained on airplanes alone. Also, the agency noted, simulators, in many respects, especially visual simulators, provide advantages airplanes lack, such as allowing the pilot to see and correct his mistakes without creating a possible flight hazard in already congested airspace.

The agency now believes that approved simulators can help meet today's more complex training objectives and the greater cockpit demands that can be expected in the future.

Approval of an air carrier's training program would be a two-step process, under the proposed rule. In contrast to the current practice of approving a carrier's program prior to its initiation, the agency would give initial approval to the airline for an interim period and defer final approval until it had observed and made a complete evaluation of the actual training conducted.

Airline check pilots and flight instructors would be required to complete certain specified ground and flight training according to standards specifically based on the types of functions they perform.

Expanded use of airplane simulators would be approved, under the FAA approval, on an individual basis—for a particular airplane, an air carrier, a specific maneuver, procedure or function. Also, the extent to which the use of simulators would be approved would depend in large part on whether the equipment had adequate visual capability.

Pilots applying for an airline transport (ATR) pilot certificate or a type rating would be allowed to perform certain flight maneuvers in an approved simulator in connection with their flight test. The flight check would be conducted by an FAA inspector. Such applicants would also be required to undergo evaluation "on the line," i.e., under actual operating conditions.

The proposal would, in addition, incorporate a recent FAA rule revision requiring pilots to perform, as part of the flight check requirements, at least one non-precision approach in an airplane or a simulator with a visual system. Non-precision instrument approaches involve the use of a navigational landing aid other than an instrument landing system (ILS).

FAA Issues First DAS Certificate

KANSAS CITY—The first Designated Alteration Station Certificate ever to be issued to an aircraft manufacturer was awarded recently to the Lear Jet Corp.

The certificate, authorized by the agency in October 1965, permits the manufacturer to perform certain administrative functions related to modifying aircraft for which they hold type certificates.

John A. Carran, Chief of the Central Region's Engineering and Manufacturing Branch, presented the certificate to Lear Jet's DAS staff coordinator Glenn McCormick. Others at the ceremony included: Browning Adams, Central Region Flight Standards Division Chief; W. J. Thievon, Assistant Chief, Engineering and Manufacturing Branch; K. I. Blythe, Manufacturing Specialist, and Daryl Parks, Lear's quality control head.

Tenpin Tangler

It's only her second season in the FAA Bowling League, but Gloria McIntire, SRDS secretary, topped every distaff bowler in Washington, D.C., with her recent 288 game.

Women's 'Man of the Year'

Named "Mr. 99 of the Year" by the Fresno chapter of the women pilot's organization was Robert B. Asbury, General Operations Inspector of the Fresno GADO. He was cited for stimulating interest and sponsoring programs to develop flying skills for women during 1968. The award was presented by Mrs. Paul T. Douglas (left), local chapter chairman, and the chapter publicity chairman, Mrs. Carl Muller.

GADO Chief Helps State

KNOXVILLE, Tenn.—Governor Buford Ellington and the Tennessee Aeronautics Commission recently commended Harvey Gassaway, Supervising Inspector of the Nashville GADO, for his contributions to aviation in the state.

A state official read the commendatory wire to Gassaway during a session of the Annual Tennessee Flight Instructor Instrument Seminar which Gassaway helped organize.

The GADO Chief was lauded for "continuing support and assistance to the State of Tennessee and the Aeronautics Commission," and for "untiring efforts that go far beyond the call of official duty."

During his more than 30 years of government service, Gassaway has worked actively in aviation education and aviation safety. He was instrumental in the development of aviation curricula for a number of Tennessee high schools and assists Middle Tennessee State University in its presentation of the nationally-recognized Aerospace Education Workshops at Murfreesboro.

Father and Son

As his father looks on, Nick Molsen, Jr. (center) takes the federal employee's oath of office from Daniel M. Vucurevich (left), Chief of Chicago-O'Hare Tower. Nick Molsen, Sr., veteran of 25 years in air traffic control, is Chief of Chicago-Midway Tower. His son, 23, just completed three years of service as an Army controller, including a year in Korea and currently is in ATCS training at the FAA Academy.

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. Send your letter to Acting 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 supplant 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: By what authority may a supervisor require an employee to be available by telephone during non-duty working hours?

Answer: Order 3550.8, Standby and Telephone Availability Policy, paragraph 5, covers the authority for telephone availability. The FAA's authority to require telephone availability is derived from the Administrator's general authority to define the duties of employees—See Section 302f Federal Aviation Act, and 5 U.S.C. 301. In essence, these laws provide the Administrator with authority to employ personnel, to define their functions and duties and to prescribe methods, not specifically precluded by law, reasonably designed to accomplish the work and to carry out FAA responsibilities. A supervisor, in turn, can be delegated certain authority through the chain of command to carry out his part of these responsibilities—in this case, the telephone availability policy.

At remote facilities in our region there seems to be an inconsistency in the authorized use of Government vehicles and driving on Government time. Some facilities do not have vehicles provided and employees must drive up to 65 miles one way to work. At facilities where Government vehicles are furnished, some employees travel one way on Government time and others travel both ways on Government time. I have two questions:

Question: (1) Are there any CSC or FAA directives or guidelines on this subject?

Answer: (1) Check the following three agency directives: Order 4600.7, providing guidelines for the use of Government vehicles for local travel; FAA Handbook 1500.13, change 6, containing the level of approving authority for local travel; Agency Handbook, 1500.13, Chapter 3, Section 1, paragraphs 306 and 307, prescribing policy for travel during non-duty time and duty hours; and Chapter 8, Section 4, prescribing the rates and conditions under which a privately owned vehicle may be used for local travel. If these directives do not answer your questions, check further with your supervisor.

Question: (2) What is the level of authority (area manager, regional director, etc.) for approving this type travel on Government time?

Answer: (2) Heads of offices and services; directors of regions and centers; the Director, BNCA; and the Manager of Headquarters Operations have authority to approve travel. Subordinate officials may be delegated or redelegated this authority. Your supervisor can advise you as to the level of approval authority in your organization.

Question: (1) Was an upgrade for academy instructors (center) from GS-12 to GS-13 approved in 1962 and was it rescinded?

Answer: (1) No on both counts. In 1962, a limited number of GS-13 positions were established to function as project specialists. The coordinator course held at that time was a typical example. These positions were similar in nature to supervisory positions and no action to raise the journeyman grades was requested or approved.

Question: (2) AT facility instructors (center) are GS-13s. Are there any plans to upgrade academy instructors (center) to GS-13, and if upgraded, could this be retroactive to 1962?

Answer: (2) A study is being made of all non-facility AT positions, including academy instructors. As soon as the study is completed, the results will be reflected in agency policy. Any grade changes suggested by this study would not be retroactive.

Question: (3) The career progression program for academy instructors (center) is limited due to the grade structure and other restrictions such as area of consideration placed on vacancy notices. The only recourse is to transfer to a control position, reestablish competence for local authority and bid on vacancies when they occur. Is this considered to be career progression?

Answer: (3) Career progression in a particular area provides a ladder from the entry level to journeyman, supervisory and management levels. The purpose of the career progression program is to provide employees with an opportunity to broaden their experience, knowledge and skills to allow them to move into better positions as vacancies occur. Certainly, experience as an instructor should improve one's potential for advancement. Under existing regulations, the instructor has return rights to the region of origin at the grade he left or acquired during his stay, based on the length of his tour at the Academy. ATC operational requirements may demand that operational competence be reestablished prior to letting an employee go beyond his present grade level. Progression often requires mobility on the part of the employee.

Question: (4) The coordinated federal wage system which went into effect in July 1968 assures that all Wage Board employees in the same geographical area receive the same pay rate for the same jobs. Is there a similar ruling for General Schedule (GS) employees?

Answer: (4) The pay of General Schedule employees is established on a nationwide basis rather than on a specific geographical basis as in the case of Wage Board employees. GS employees are covered by the Classification Act of 1949, as amended, which provides for "equal pay for substantially equal work."

Agency Initiates New Data System For U.S. Airports

WASHINGTON — An Airport Data System (ADS) to collect, process and disseminate information about the nation's airports has been initiated by the FAA.

Airports Service, Air Traffic Service, the Office of Management Systems and the Office of Headquarters Operations cooperated in development of the new system. For the first time, current information about facilities and services available at airports will be received and stored in one section of the FAA—The National Flight Data Center (NFDC).

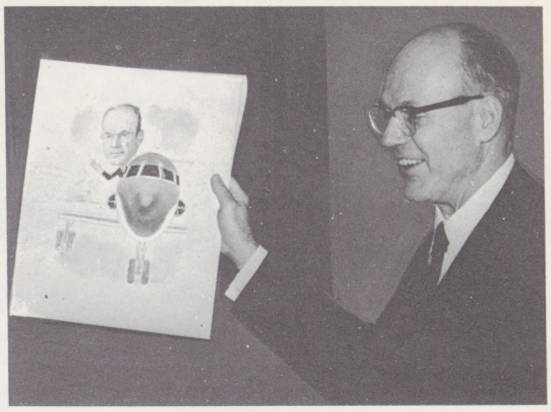
Success of the ADS will depend upon cooperation of personnel in the various services and offices involved in the overall program. Objectives are to assure timely reporting of changes in airport facilities and services, to standardize airport records throughout the agency and to make up-to-date and accurate information readily available to the public and within the agency.

Airports Program personnel will continue to prepare inspection reports on airports they visit. These reports, along with information from Flight Service Stations, FAA personnel and other agencies will be funneled into the NFDC in Washington. NFDC verifies all airport information received and prepares it for dissemination and computer storage at the Airport Data Base.

The present FAA Form 29A, "Airport Facility Record," for each airport will be replaced by new Form 5010-1, "FAA Airport Master Record," during the first inspection year the new system is in operation. The new form will be printed automatically shortly after the annual inspection report is received.

From the master record on each airport, Airports Program field offices will reproduce information for distribution to the public. Changes made at airports between annual FAA inspections will continue to be reported in the National Flight Data Digest, which is used by chart producers, FSSs and others who need up-to-date information.

When the FAA has inspected about 6,000 airports and has received information from operators of some 4,000 other airports on equivalent mail-in forms, the agency will have completed the first cycle of the Airport Data Base, which will provide data for operational, planning and management purposes.



King-Size Greeting

Members of the national aviation press recently surprised Deputy Administrator D. D. Thomas with a reception in his honor at the National Aviation Club in Washington. He was presented with this poster, signed by all present at the event. Jerry Hannifin of "Time" magazine was master of ceremonies. Others present at the tribute to Thomas included former Administrators William F. McKee and Elwood R. Quesada.

Safety Awards Program Top Winners Selected

ARLINGTON, Va.—An aircraft mechanic from TWA's overhaul base in Kansas City and the Manager of Aircraft Maintenance and Ground Operations for the Minnesota Mining and Manufacturing Company's Aviation Department are the national winners of FAA's Sixth Annual Aviation Mechanic Safety Awards program.

W. G. Rogers of Kansas City, Mo., winner in the air carrier category, and Melvin W. Longlet of St. Paul, Minn., the general aviation (non-airline) winner, were selected from a group of 15 finalists by a "blue ribbon" panel of aviation executives after nationwide competition. The national selections are administered by the Flight Safety Foundation of Arlington, Va. Fifteen regional winners and 50 state finalists were picked by FAA maintenance executives.

FAA Administrator John H. Shaffer will present Rogers and Longlet with specially-designed medallions and cash awards totaling $1,500 May 27 at the Aero Club of Washington. Winners and their families will be flown to Washington for the awards ceremonies and a two-day visit to the Nation's Capital.

Rogers was chosen for his outstanding contribution to air carrier safety, based on his thoroughness in investigating an incident of rudder system lockup on one of TWA's aircraft during a training flight. He determined the cause of the difficulty and, by reversing the configuration of a particular bolt, prevented a problem of serious proportions in other aircraft of the same type in commercial service throughout the world.

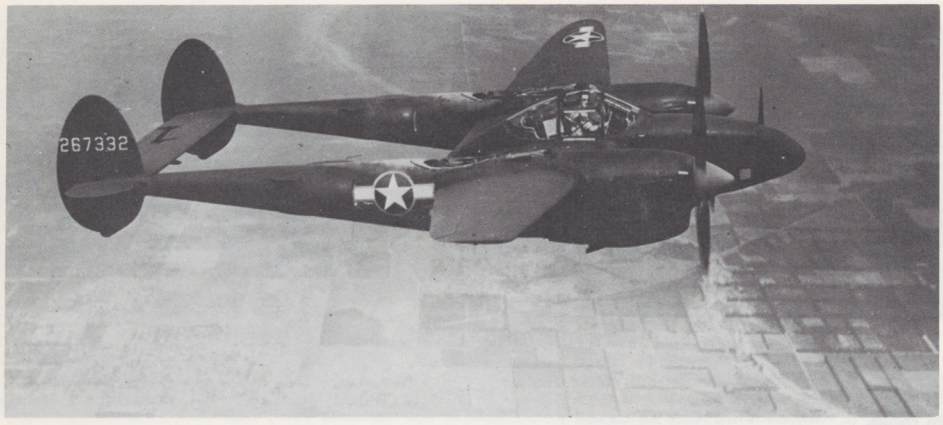
Longlet was selected for developing a system of microfilmed support data for flight crews of 3M Company planes. His innovation reduced 300 pounds of manuals, parts catalogs, repair manuals, service bulletins, wiring diagrams and other technical information into four cartridges of microfilm weighing five ounces each. The cartridge can be scanned to find needed information in less than a minute. A printout of a page can be obtained from the reader-printer in five seconds. The company is now working with the military and commercial airlines for microfilming support data for their operations.

The FAA Aviation Mechanic Safety Awards Program is a government-industry-labor effort to honor aviation mechanics for the important role they play in air safety. Winners at local, regional and national levels are selected on the basis of design improvements to airframes, engines or components; development of new or improved maintenance or inspection procedures; or demonstration of a "high level of professionalism and excellence" in the performance of the duties of an aviation mechanic.

Contributing sponsors to the 1968 program include the Air Transport Association of America, American Aviation Publications, Aviation Distributors and Manufacturers Association, the Beech Aircraft Corporation, the Cessna Aircraft Company, the Champion Spark Plug Company, NBAA, the National Aviation Trades Association, and the Professional Aviation Mechanics Association.

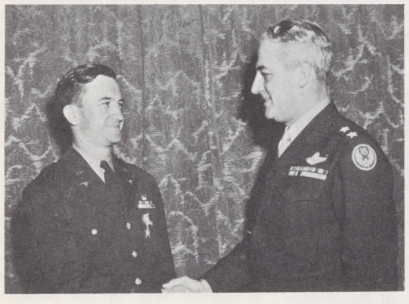
Vietnam Honor

For his work with the Civil Aviation Assistance Group (CAAG), electromechanical advisor Franklin N. Wise recently received the Medal of Public Works from Nguyen Tu Thien, Assistant Minister of Transportation and Communications, Republic of Vietnam.

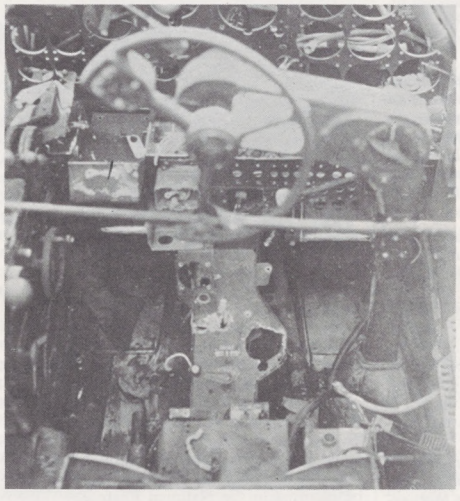


Whether from 30,000 feet or in roof-skimming dives, Lightning pilots brought back vital pictures for Intelligence use in paving the way to victory in Europe. An unarmed version of the P-38, the Lockheed Lightning F-5 carried only cameras on its dangerous photo missions over the hostile continent.

Photo courtesy Smithsonian Institution



Following his heroic World War II photo-taking mission, 23 year-old Captain Dewey E. Ballard received the Silver Star from Maj. Gen. Nathan B. Twining. (Below): Cockpit of Captain Ballard's plane, full of holes from Messerschmitt bullets. Instruments were removed for salvage before photo showing damage was taken.



Another in a series of exciting true adventures of present day FAAers . . .

'Alone, Unarmed and Unafraid'*

**Motto of the Photographic Reconnaissance Pilots*

By Dave Myers

"Hello, Charger, hello, Charger, this is Convert Leader. Request steer to the barn."

As he called in over his radio while flying high over the Italian peninsula in the spring of 1944, Captain Dewey E. Ballard's purple Lockheed Lightning F-5A photo reconnaissance ship was slowly descending, heading for home. During the return flight, he would pass over Cassino at 25,000 feet and activate his cameras for 30 seconds to record results of the morning bombing of the German Army positions there. Then, the 23-year-old pilot planned a quick dash across the mountains to Bari Airport to make a high speed buzz-job and a traditional victory roll, marking the end of a perfect mission. That day, his acrobatic finale would have special significance—"Ace" Ballard had finished his quota of missions. Soon he would be returning to the United States.

"Convert Leader, this is Charger, I have you. Steer 160 degrees. Caution, I say again, caution . . . Bogeys in the Cassino area."

Charger, the radio D/F station at the Anzio beachhead, was warning the photo plane that unidentified aircraft were over Cassino. Even Allied fighters had been known to take potshots at the Lightnings, unrecognizable in their strange high-altitude camouflage paint.

Before Convert Leader could reply, a burst of machine gun fire abruptly ripped Ballard's radio from its mounts. Unwittingly, Ballard had penetrated a flight of Messerschmitt 109s!

It all started in the 15th Air Force War Room at Bari, Italy, the evening of March 14, 1944. The Nazis, dug-in around Cassino, were holding up Allied troops on the main route to Rome. Allied Supreme Headquarters called for an all-out two-wave bombing attack on Cassino and its resupply routes. Heavy bombers, B-17s and B-24s, were to hit the target at noon, March 15. Medium bombers, B-25s and B-26s, were to come in 30 minutes later and clean up what the heavies missed. To assess bomb damage, a photo reconnaissance plane would have to dash in between the two phases of the raid.

Finishing Six-Hour Flight

A check of the reconnaissance mission board showed that Capt. Dewey E. Ballard of the 15th Photographic Reconnaissance Squadron would be inbound near Cassino at just the right time to cover the target. No one bothered to note that Captain Ballard would be returning from penetrating deep into the heart of Germany to photograph ball-bearing plants.

After six hours at 40,000 feet in an unpressurized, unheated single-place airplane, all but frozen in a primitive "space" suit, Ballard would not be at his best when making the photo run over Cassino. Nevertheless, the mission was assigned to him and, as ordered, he was on schedule with the target in view when he received the warning about the presence of unknown and probably enemy aircraft.

The "bogeys" were not in immediate view, so Ballard settled down, set his camera controls to trip the shutters at the right intervals to get his double-stereo photographs of the target area. For the first 15 seconds, all went well.

A Blast of Bullets

Then, without warning, that first blast of enemy fire ripped at him. The radio exploded on the rack behind him. A quick glance into the rear view mirror revealed big trouble. From the left quarter, three ME-109s were closing fast. Ballard shoved his throttles forward for full war emergency power. He tripped his cameras into runaway to get as many pictures as possible in the next few seconds. Then he hit his tank jettison switch. The tanks wouldn't release. The wiring had been cut when the radio was hit.

He put the Lightning into a barrel roll as the first Messerschmitt flashed past. A second burst of fire grazed his head, blasting his instrument panel. At the top of the roll, the third ME-109 scored a hit on the left rudder. The F-5A snapped back upright with two bandits directly astern. A second attempted roll got Ballard nowhere—the left engine was blasted by a direct hit. The cowling and other pieces of the plane whipped off. He quickly feathered the propeller to lessen the chance of engine fire.

As smoke from other hits filled his cockpit, Ballard rolled into level flight, preparing to bail out. While jettisoning the canopy, the leader of the Messerschmitt flight pulled up on the Lighning's right wing. Ballard patted his parachute harness and pointed toward the ground, signalling that he was going to jump. The German pilot nodded his understanding, skidded his ME-109 far out to the right, apparently to give Captain Ballard plenty of room to clear the crippled F-5A.

Final Fighter Attack

As Ballard stood up to bail out, he glanced toward the ME-109 to be sure he was clear. At that moment, the Messerschmitt came roaring back for a final attack, all guns blazing! Ballard was slammed back into his seat as bullets tore into his body. The battered Lightning rolled over, started a diving spiral towards the earth, five miles below.

Ballard managed to grasp the controls. Somehow, he stopped the dive short of the ground. Bleeding profusely, he headed the F-5A south towards Naples and any friendly airfield. In a matter of minutes that seemed like hours, he landed at an American fighter group's airstrip, rolled up to the crash-rescue vehicles and asked that the film be taken to Air Force Headquarters.

For completing his mission successfully in the face of almost insurmountable odds, Captain Ballard was awarded the Silver Star and an oak leaf cluster to his Purple Heart.

It was many months before he fully recovered from his wounds and returned to tactical flying.

Six year later, he flew a tour in Korea as an F-51 fighter-bomber pilot. Later, he returned to the reactivated 15th Photographic Reconnaissance Squadron and flew a second Korean combat tour in the Lockheed RF-80. In 1960, Ballard retired from the Air Force as a lieutenant colonel and began working for the FAA.

Today he is the Central Region's Air Carrier Compliance-Enforcement Coordinator. Prior to his present assignment, he served as an air carrier operations inspector at the Kansas City ACDO and as an aviation operations specialist in the Flight Standards Branch, Kansas City Area Office.

Today, Dewey E. Ballard is Central Region's Air Carrier Enforcement Specialist in Kansas City and reviews air carrier violations and makes recommendations for corrective action. He has been with the FAA since 1960, when he retired from the Air Force as a lieutenant colonel.