HORIZONS

Read About The Federal RR Administration Pages 4-5

Vol. 3, No. 17 | Published biweekly for employees of the Department of Transportation/Federal Aviation Administration | August 18, 1969

Downed Jet Pilot Receives Special Service from FAAer

By Thom Hook

ZUNI, N.M.—Two FAA maintenance technicians, William Thorn and Walter Nance, travelled overland more than four hours through 32 miles of New Mexico's most desolate country to locate a Marine Corps reserve pilot who ejected from his aircraft Saturday, August 2. Zuni FSS Chief John Davis, FSS specialist J. E. Wright and Davis' 17-year-old son, John, Jr. also participated in the successful search effort.

The pilot of the F-8 Crusader, Maj. Ronald Farola of Washington, D.C., was en route to Yuma, Ariz. Naval Air Station from the Olathe, Kans. NAS in formation with pilots of two other jets. Building thunderstorms necessitated leaving their assigned FL 310 (31,000 feet) and being cleared to 48,000 feet. As they penetrated clouds, Major Farola suddenly had a flameout. Losing altitude rapidly, he ejected at 18,000 feet, but not before notifying the Zuni FSS at Black Rock of the emergency.

He parachuted through the turbulent clouds and down into remote, desolate country 32 miles from the FSS, suffering bruises in the descent. Two Navy aircraft sent

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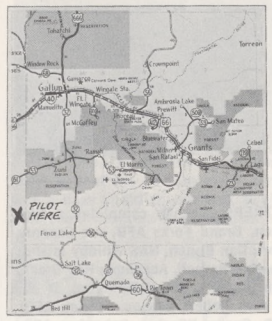


Zuni, N.M. Area

Terrain elevation around the rugged area where FSS men rescued a downed jet pilot is between 6-7,000 feet above sea level.

$2.7 Million Allocated For ATC Modernization

By Don Byers

WASHINGTON—A $2,756,528 contract has been awarded by the FAA to the Raytheon Company for the purchase of additional automation equipment to modernize the nation's en route air traffic control system. The contract, part of a continuing series of purchases of automation equipment for the NAS (National Airspace System) En route Stage A system that will be fully operational by the end of 1973, calls for five more Computer Update Equipment (CUE) systems in addition to the 17 already on order from Raytheon.

The CUE system is the communication link between the FAA air traffic controller and the computer. It automatically provides controllers with flight plan information and permits them to make changes in this information as flights progress through their areas of responsibility.

Each CUE system, a part of the larger computer display channel, consists of a cathode ray tube display (computer readout device), an alphanumeric (letters-numbers) keyboard for entry of data (computer entry device), and a quick action keyboard, which indicates to the computer what kind of a message is coming on the alphanumeric keyboard—flight plan amendment, new flight plan, correction and the like.

One CUE system will be provided for each of the 20 FAA Air Route Traffic Control Centers in the U.S. which will be automated. The number of information entry and readout devices used will vary from center to center, with a maximum of 120 now planned, enough to service as many as 60 sector control positions.

CUE systems have already been delivered to NAFEC near Atlantic City, N.J., and the training academy at Oklahoma City. The first en route center CUE system was to be delivered this month with subsequent field deliveries scheduled at a rate of one a month.

25,000 Received ATC Orientation At FAA Academy

OKLAHOMA CITY—A former Texas deputy sheriff, Joseph Yates, recently became the 25,000th controller trainee at the FAA Academy since inception of training programs here in 1946.

The 25,000 figure includes all who took part in air traffic training courses offered at the Academy. Courses consisted of initial training, training of international students, short courses offered to industry and to supervisory personnel, courses given military personnel and the advanced data systems air traffic courses.

Yates, who completed en route traffic control training, has been assigned to the Houston Center. He will continue training there while he handles some of the less intricate controller duties. In something under two years, he will become a full-fledged journeyman en route controller.

Before joining the agency, Yates spent nine years as a ground controlled intercept (GCI) operator with the Air Force.

In the past year, all phases of ATC training—en route, terminal and FSS— have been accelerated. The Academy now has more than 1,400 students in daily attendance in all areas of training including ATC, maintenancse and Flight Standards. The daily training total is expected to increase to a total of approximately 1,600 by September of this year.

Dulles Chalks Up Continued Gains In Carrier Flights

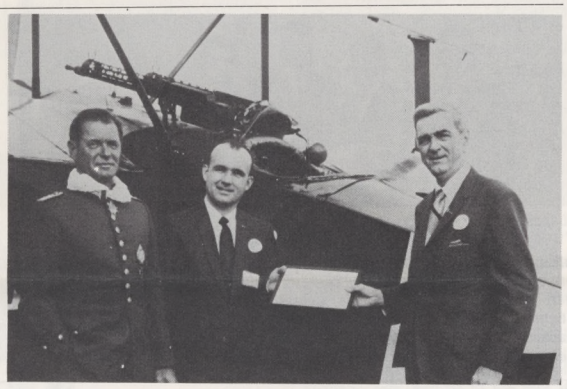
WASHINGTON— During fiscal 1969, air carrier operations at Dulles International Airport increased 11.7 per cent over the previous year, from 55.098 to 61,535. Passengers using Dulles also increased, rising 21.3 per cent, from 1.6 million to more than 2 million.

The steady growth in air traffic operating out of the agency-owned and operated airport reflects the growing scope of air service being offered. For example, during the late afternoon rush hour, between 4 and 7 p.m., six flights to New York City are available, one every half hour.

Although the airport is about 25 miles from downtown Washington, more than half of this distance is via uncrowded expressway. "On time" takeoffs are the rule at Dulles where planes do not have to queue up for takeoff.

Service provided from Dulles includes 21 daily flights to New York and 21 return flights, round trip service direct to Oklahoma City, service to all parts of the country through 58 cities in the continental U.S. and Alaska and service to 23 cities in Europe, Asia, South America and the Caribbean.

Dulles has shown steady gains in air traffic since it was dedicated almost seven years ago.



A Way With Words

Standing by the cockpit of a Fokker triplane replica, Memphis Tower controller and award-winning writer Roger Myers (center), receives honorable membership in the "Snoopy's Spotters Club" from William Killebrew (right), a baking company official. Appropriately uniformed as the "Red Baron" for the occasion is James Apleby, of Talmantz Aviation. Myers has been asked by the Smithsonian to write for its "Annals of Flight" series.

Smithsonian Assignment Given to ATC Specialist

MEMPHIS—Outstanding leisure-time work as an aviation historian and feature writer has won a commission from the National Air and Space Museum of the Smithsonian Institution for Roger Myers, Air Traffic Control specialist in the Memphis Tower.

Myers, named the "Writer of the Year" by the Air Traffic Control Association in 1967, has been tapped by the Smithsonian to develop an official history of the endurance flight of the Curtis Robin "Old Miss." That plane, now on display at the museum, broke all endurance records in 1935 when it was kept aloft for 27 days and five hours by Algene and Fred Key of Meridian, Miss.

The history Myers is now writing will become part of the Smithsonian's "Annals of Flight" which document aircraft on display.

Besides his other writing, which included a Sunday Magazine series in the Birmingham *News*, Myers recently finished an article on the German World War I ace, Baron Manfred von Richtofen, known as "The Red Baron."

The article was written for a local baking company in connection with a promotion campaign featuring "Snoopy and the Red Baron" and the Talmantz specialty and stunt flyers of Hollywood, Calif.

Employee Doubles for Star

PHILADELPHIA — Everybody is getting into the act!

FAA Controller Tony Catalano, of Long Island's MacArthur Tower, recently worked in a motion picture with film star Walter Matthau (see *Horizons*, July 7.) Now Pete Pellegrino, Chief of the North Philadelphia Tower, has pinch-hit for film star Tony Randall.

It was part of a TV commercial "shot" recently in a meadow behind Pellegrino's house in Newton, Pa. Various sequences were filmed using a colorful 19,000 cubic foot balloon. Close-up, or "tight" shots, were made with Tony Randall in the basket and the balloon firmly anchored to the ground. High shots, with the balloon in free flight, were made with a stunt girl substituting for the commercial's gorgeous blonde and Pellegrino taking Tony Randall's place. When the film is spliced together, the whole sequence will appear as though the balloon were in free flight with Tony Randall aboard.

The tower chief turned TV performer reports that the nice part of this commercial was the "payoff." The gray flannel suit he wore in the film was right off the rack of a Fifth Avenue men's store. The studio filming the "mini-spectacular" allowed Pellegrino to keep the suit.

The balloon is owned by the Balloon Club of America, of which Pellegrino is president, and it was used in the film, "Around the World in 80 Days."

'CHANGE' Card Issued

WASHINGTON—A "tent-type" desk card to be distributed throughout the agency soon will begin reminding employees of the benefits to be derived from applying new approaches to old problems.

The card contains a message on this theme from the Administrator on one panel and the single word "CHANGE" in large letters on the other.

The text of Administrator Shaffer's message is: "President Nixon said recently, 'As we look over the history of this nation, we find that what has brought us where we are has been continuity with change . . .'

"In the light of U. S. aviation's astounding advances over the years, it is clear that we must anticipate and plan for that change—or be overwhelmed by it. I therefore urge and expect all FAAers to purposefully seek fresh solutions to old

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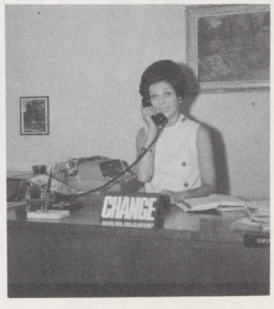


Innovation

Among the first to receive a new "tent-card" bearing the Administrator's message stressing "CHANGE"—the value of a fresh outlook or new approach—was Dorothy S. Haywood, Mr. Shaffer's secretary. The card will be distributed throughout the FAA.

Photo by Thom Hook

Refresher for ATREPs

To remain current in air traffic procedures, these Air Traffic Representatives (ATREPs) recently completed a two-week course at Oklahoma City. They are (left to right), front row: Wayne Peterson, Grand Forks AFB; Art Cazares, Castle AFB; Robert Proett, Hamilton AFB; Karl Brende, Yuma International Airport; Dan Bunch, NAS Whidby Island; Zolton Adam, NAS Patuxent River. Second row: Dick Marks, Chief, Air Traffic Training Branch, Academy; Ray Brock, Selfridge AFB; Frank Haigler, Travis AFB; William Acton, Laughlin AFB; Robert Behal, OIAA, Washington, D. C.; Francis Fink, Klamath Falls CS-T; Carl Goodridge, NAS Brunswick, Maine. Third row: Robert Deason, Patrick AFB; Bob Wright, instructor; LeRoy Taylor, Scott AFB; Luther Clements, Blytheville AFB; George Winship, Columbus AFB, Miss.; Bob Bowers, instructor; and Warren Smith, Assistant Superintendent, FAA Academy.

New Refresher Course Is Started for ATREPs

OKLAHOMA CITY—The agency's 60 Air Traffic Representatives (ATREPs), who represent the FAA on military air bases and fields, are kept up-to-date on FAA policies and air traffic control procedures even though most of them are remotely located so that frequent visits to Area or Regional Offices are not feasible.

To solve the problem, a two-week refresher and standardization course was inaugurated recently at the Aeronautical Center by Fred M. (Dick) Marks, Chief, AT Training Branch. Instrumental in planning for the course was Henry Van Sant, now in the Manpower Systems Branch at Headquarters, who was on hand to welcome the first group of 16 veteran ATREPs to the classroom at the Aeronautical Center.

The refresher course, the first of its kind, provides ATREPs with concentrated exposure to the latest in air traffic control procedures, policies and interpretations. Follow-up training for each class will be provided every two years.

ATREPs are presently assigned to 60 military installations throughout the U.S. where a military air traffic control facility is in operation. ATREPs average more than 20 years of active air traffic control experience in both terminal and en route facilities. Many have had staff experience as facility officers or in area and regional office positions.

ATREPS are responsible for a wider area of knowledge than most air traffic control specialists. In many cases, they are the sole FAA contact on a military installation, frequently referred to as "Mr. FAA" by the aviation community in the surrounding area. The ATREP's primary responsibility is to act as liaison officer between the military approach control facility and the FAA, and between military and civil users of the air traffic control system.

Other duties and responsibilities include resolving local problems between user groups, determining the adequacy of ATC services rendered, serving as technical advisors in all phases of air traffic control, continuously reviewing existing control and communications procedures and participating in intra-military meetings, lectures and training programs to recommend changes that will improve the effectiveness and efficiency of the air traffic service provided by the military where they are in charge of air traffic control.

Agency Maintenance Center Inspires New Paris Version

OKLAHOMA CITY — Because Pierre Altmeyerhenziem, France's director of air transport, became interested in the work of the FAA Maintenance Analysis Center when exposed to it briefly at an aviation maintenance symposium two years ago, the French are going to establish a center of their own in Paris.

To discuss the program for their country, Patrick Lapasset and Daniel Desormiere, both civil aviation engineers, and Jean Guivarc'h, design engineer, recently visited the center. All three represent the Ministry of Transport's Secretary General of Civil Aviation.

The French visitors were particularly interested in the center's automatic data processing printouts which record aircraft malfunction information. When analysis shows a pattern of difficulty, the manufacturer is contacted and informed that a succession of failures has occurred and re-design may be indicated to give the component longer, safer life. The analysis center's program unites reports from airlines, military and general aviation pilots with action by the manufacturer, who takes remedial action as soon as the difficulty is made known by the center.

Working with the French trio were Joseph J. Manning, Chief of the Maintenance branch of the Flight Standards Technical Division, and Earl H. Edwards, Chief of the Maintenance Analysis Center, who gave the visitors a thorough orientation in storing and retrieval of aircraft service information on malfunctions and failures.

Their discussions included organization, implementation, and operation of the center; the method of collecting, analyzing and distributing maintenance information; and use of computers and microfilm equipment in the operation of the maintenance analysis center.

At the conclusion of their visit, the French civil affairs officials expressed interest in developing a maintenance reporting system that will include mutual interchange of aircraft service difficulty information between the United States and France.

Visit Maintenance Center

Discussing aircraft malfunction information retrieval from data processing printouts in the Aeronautical Center's Maintenance Analysis Center are (left to right): Earl H. Edwards, Center Chief; Joseph J. Manning, Chief, Flight Standards Technical Division Maintenance Branch; and Patrick Lapasset, Daniel Desormiere and Jean Guivarc'h, French civil aviation engineers. The French are setting up a similar center.

35 Years of Service

Raymond Richardson of the Office of Headquarters Operations, Office Services Division, cuts a cake to mark his 35 years with the Federal government during a recent office get-together at Headquarters. Richardson is a facilities scheduler at Headquarters. He schedules routine work performed by FAA and GSA personnel, such as construction, painting, parking and office machine repair.

SRDS Goals, Trends Are Summarized

By Alex Garvis

WASHINGTON — The goals, achievements and trends of research and development programs conducted by the FAA are outlined in a new publication now available.

Titled, "SRDS Program: Goals, Achievements, Trends," the 133-page report uses a new format that is easier to read than previous reports. It summarizes more than 50 selected SRDS programs, complete with diagrams and illustrations. Programs discussed are those now in progress in each of the FAA Systems Research and Development Service (SRDS) technical divisions: air traffic control, communications, navigation, environmental, frequency management, and systems analysis divisions.

SRDS programs listed in the publication include:

Air Traffic Control—An automated radar tracking system (called ARTS III) for giant, large and medium terminal radar control facilities is discussed.

Communications—Radar in-service improvements devices designed to reduce weather clutter (precipitation) on airport surveillance radar scopes are among the communications programs discussed. Other programs include collision avoidance systems, and improvement of radar beacon systems and equipment.

Navigation—The report gives the status of programs such as all-weather landing, radio navigation aid improvements, area navigation, the Omega very low frequency (VLF) navigation system and approach and landing systems for V/STOL aircraft.

Environmental — Environmental programs such as aircraft arresting systems, snow removal techniques, airport surface materials, bird control around airports and airport firefighting equipment and techniques are reviewed briefly.

Frequency Management — Programs to assure efficient utilization of the frequency spectrum and development of standards to assure system compatability, computerization of frequency selection and the conduct of interference studies are covered.

Systems Analysis—This program includes the study of off-shore airport construction methods, measurement of over-ocean navigation, performance and development of lateral spacing criteria for aircraft, analysis of aircraft wake turbulence and design of all-weather airport guidance and control systems.

Planners Honored

In recognition of exceptional contributions to international aviation, Robert F. Huard (right), Chief, North Atlantic Systems Planning Staff, receives the Meritorious Service Award from Administrator John H. Shaffer. The presentation was made during a recent joint FAA-Coast Guard ceremony at which members of both DOT agencies were cited for contributions to the program.

Delicate Hoisting Feat Crowns120-FootTower

LONG BEACH, Calif.—Raising a 25-ton tower cab 120 feet into the air and setting it down atop 80 bolts for fastening is a formidable engineering task. But the precision wedding of a new prefabricated control tower cab to its shaft—like adding a large pentagonal "dot" to a gigantic concrete "I"—was accomplished recently for the new FAA tower at Long Beach in only three hours.

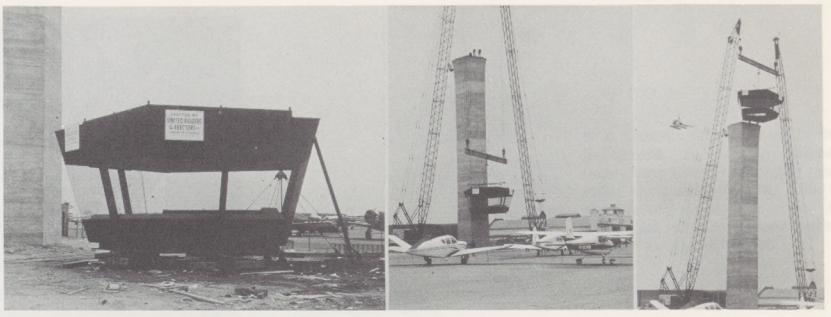
Planning and building for the tower project began a year ago in mid-July. The tower is expected to be in full operation this September.

Two giant cranes, one of 75-ton capacity and the other able to hoist as much as 115 tons, helps do the job. Using a 180-foot boom from which the cab structure was hung, the cranes were able to do their task without incident.

The control tower cab, fabricated in Montreal and shipped to Long Beach in knocked-down form, was assembled on the ground adjacent to the shaft. The cab is made of factory-finished metal and glass, with roof, ceiling and consoles fabricated of steel. Wall panels and window washing cage are of structural aluminum. The ¾-inch plate glass windows rest in neoprene gaskets.

The 120-foot five-sided tower shaft is of architecturally reinforced concrete. The tower structure includes a 60 by 57-foot masonry-base building containing offices and equipment rooms.

In charge of the engineering feat was Parke Potter, project engineer for Western Region construction. Working closely with Potter was Chauncey Gerard, site adaption engineer, and Nelson Gnirke, FAA resident engineer on the Long Beach project, along with his assistant, Sal Claramunt. Engineer Jim Newhall helped with the mechanical engineering phases of the project.



Up . . . Up . . . and on Top

Prefabricated in Montreal, the new Long Beach, Calif. Tower cab awaits being hoisted atop a 120-foot concrete shaft so that the modern tower can begin controlling traffic. At left, the 25 ton cab, more than 15 feet high and with a base of 400 square feet, awaits two giant cranes (center) which lift the 180-foot beam carrying the cab to its permanent concrete shaft location at the right.

Who'll Fly It?

Scientists who unintentionally "spooked" Oklahoma City recently by putting a dozen strobe lights on this Cessna Skymaster are (from left): Kit Marsden, representative of the strobe light makers; Dr. Carl Melton, Dr. Mark Lewis, Howard Hasbrook and Dr. Harry Gibbons, all of the CAMI Aeromedical Research Branch.

Strange Lights in Sky Were Part of New Test

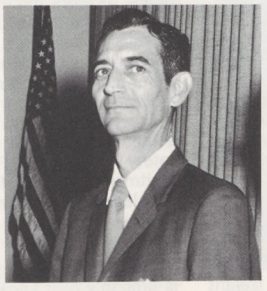
OKLAHOMA CITY—One recent evening, telephone switchboards at the Aeronautical Center, Tinker AFB and area police stations were swamped with calls about strange winking lights seen circling over the city.

First reported about 10:30 p.m., the unidentified flying object became the subject of speculation until long past midnight. By then, the aircraft had been identified and the pilot was ready to land.

The mysterious lights were part of an anti-collision test project being conducted by the Aeromedical Research Branch at FAA's Civil Aeromedical Institute. A specially-equipped Cessna Skymaster loaned by the makers of anti-collision lighting systems was used in the study.

The test aircraft contained a dozen stroboscopic lights in addition to the customary rotating beacon and running lights. Purpose of the test was to evaluate preliminary studies relating to human factors in the perception of anti-collision lighting systems. Strobe lights were mounted on the top and bottom of the fuselage and on the wingtips and tail. The aircraft's high-intensity lights helped create the short-lived mystery.

Heading the project was Dr. Harry L. Gibbons, Chief of the Aeromedical Research Branch. Other members of the study team included Dr. S. J. Gerathewohl, of the Office of Aviation Medicine in Washington; CAMI Doctors W. E. Collins, C. E. Melton, M. F. Lewis, D. F. Campbell and A. Howard Hasbrook, Chief of Research Flight Operations.



D. R. Cravens

Alaska Orientation Stint Ends S. Korean's Tour

ANCHORAGE—Ju Young Seoung, an electronics engineer from Seoul, South Korea, wound up a six-month training tour of agency facilities with a two-week stint in Anchorage.

His tour of agency facilities included a ten-day orientation course at Washington Headquarters, resident training at the FAA Academy, where he completed the FC-100 communications course and on-the-job training in air-ground communications equipment at Miami International Airport.

In Anchorage, he was checked out on the Western Electric "301" telephone switching system installed at the Elmendorf Air Force Base radar approach control facility.

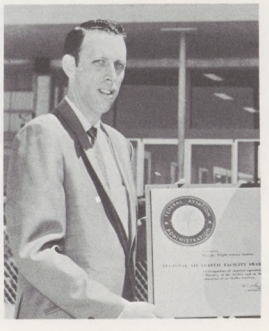
The South Korean government is purchasing similar equipment for use at Kimpo Airport and one of Seoung's jobs will be to see that it keeps working.

Alaska is the only place where the "301" telephone switching system is owned, operated and maintained by the agency. In other regions, this service is provided commercially.

Seoung is employed by the South Korean government as a specialist in air navigation aids and air-ground communications. His U.S. trip was sponsored by the Agency for International Development of the Department of State.

While staying here, he was hosted by the family of Laurel L. Thompson, senior electronics technician of the communications section at the Elmendorf RAPCON. His training was conducted by Electronics Technician Brock L. Laffoon.

These two men and Anchorage Area Manager James Vrooman spent many off-duty hours with the Korean visitor, showing him Alaskan points of interest from a private plane. He was also treated to a raft trip down the Gulkana River.



Facility Award

Receiving the Western Region's top FSS award for 1968 is Douglas, Ariz., Station Chief Robert Kingery. The Douglas FSS was declared "tops" in the region.

Korean Visitor

Receiving on-the-job training on the WECO "301" switching equipment at Elmendorf RAPCON in Anchorage is Ju Young Seoung (center), an electronics engineer from Seoul. Here he trouble shoots with the assistance of Laurel Thompson (left), supervisory electronics technician, and Brock L. Laffoon, electronics technician.

Cravens Honored By Houston FBA

HOUSTON—D. R. Cravens of FAA was named Federal Career Employee of the Year in the professional and scientific category by the Federal Business Association here.

An aircraft maintenance specialist in the Houston Area, Flight Standards Branch, Cravens was cited for his "well-established reputation for excellent performance" and his "remarkable consistency of accomplishing superior work."

Since 1959, Cravens has received an outstanding performance rating with quality step increase, two sustained superior performance awards, a commendation for special service and two commendation letters. Seven of his suggestions, submitted in the Beneficial Suggestion program, have been adopted.

The citation as "Federal Career Employee" further commended Craven for his effective coordinating of the Savings Bond drive and for working with the Pearland Chamber of Commerce.

FAA HORIZONS

FAA HORIZONS, the official employee publication of the U.S. Department of Transportation, Federal Aviation Administration, is published biweekly by the Employee Information Division, Office of Public Affairs, FAA, 800 Independence Ave., Washington, D.C., 20590. Telephone: WO. 2-5575. Articles of general interest to employees should be submitted directly to Regional FAA Public Affairs Officers: George Fay, Alaskan Region; Robert Fulton, Eastern Region; Jack Barker, Southern Region; Joseph Frets, Central Region; K. K. Jones, Southwest Region; Eugene Kropf, Western Region; George Miyachi, Pacific Region; Edwin Shoop Jr., NAFEC; and Mark Weaver, Aeronautical Center.

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On a special test track the TurboTrain made by United Aircraft achieved a speed of 170.8 m.p.h. two years ago, with 100 newsmen aboard. A pair of these high-speed trains, sponsored by the DOT, are in service between Boston and New York on the New Haven Railroad.

Reginald N. Whitman
Federal Railroad Administrator
Department of Transportation

In the Nation's Service . . .

THE FEDERAL RAILROAD ADM

By Edwin E. Edel,
FRA Director of Public Affairs

EDITOR'S NOTE: The following is the final article in a series intended to acquaint FAA personnel with the other administrations of the DOT.

One of six operating agencies within the Department of Transportation, the FRA has three major components: the Bureau of Railroad Safety, which also is responsible for liquid pipeline safety; the Federally-owned Alaska Railroad; and the Office of High Speed Ground Transportation.

The Department of Transportation has charged the FRA with supporting national interests as affected by railroad transportation and assuring adequate safety standards. FRA also is responsible for promoting the economic efficiency of the railroad industry and supporting industry progress.

The FRA serves as the main communications link between the railroad industry and the government, and exerts leadership by coordinating industry activities. The FRA also acts as industry's advocate within the Department of Transportation in consonance with the public interest. Through economic and technological research, FRA encourages, sponsors, stimulates and at times, funds activities essential to a better product and more secure industry.

Some idea of the directions FRA is taking can be seen by studying the following recent actions.

- Contractors have been asked to come up with research proposals for developing methods of assessing the economic impact of railroad freight car shortages and forecasting freight car demand.
- A series of tests was begun to provide information about a major cause of freight damage—vibrations transmitted from railroad tracks to freight-car interiors.
- A joint DOT-rail industry study group has been established to explore new ways to boost safety and efficiency of coupling and uncoupling the industry's 1.8 million freight cars.

Using the Department's four fully-instrumented research cars, FRA has a continuing program of perfecting track measuring equipment and techniques, testing improved track designs, and investigating active suspension for roll control and banking.

Alaska Railroad

The Alaska Railroad operates 482 miles of main line from the ports of Seward and Whittier to Fairbanks. It operates year-round and is mainly a freight railroad. Regular passenger service is confined to Anchorage-Whittier and Anchorage-Fairbanks. The railroad's motive power is diesel. Its shops, buildings, and equipment compare well with those of private railroads. In 1968, the railroad carried 1.5 million tons of freight, contributing in large measure to Alaska's economy.

Bureau of Railroad Safety

The Bureau has safety jurisdiction over locomotives, signal installations, safety appliances and transportation of explosives and other dangerous articles. Its work force consists of a Headquarters unit and regional offices in Boston, Philadelphia, Atlanta, Chicago, Fort Worth, Portland and San Francisco.

Of major concern to the FRA and the Bureau are train accidents and derailments involving hazardous materials.

One of Secretary Volpe's first major actions was establishment of a special task force on railroad safety chaired by FRA Administrator Reginald N. Whitman. The task force is now readying proposed legislation to be submitted to the Secretary.

High Speed Ground Transportation

FRA's Office of High Speed Ground Transportation is probably best known for its two rail demonstration projects between Washington and New York and New York and Boston. The Metroliners have been operated

With majestic Mt. McKinley in the background, an Alaskan Railroad train moves through the snowy landscape along part of the 482 miles of track linking major cities within the state. Last year, the railroad carried 1.5 million tons of freight.

This luxurious interior, similar to that found in the first-class section of a jetliner, is featured in TurboTrains which are operating between Boston and New York.

In service between Washington, D.C. and New York City, the Metroliner trains make the trip in two-and-a-half hours at speeds topping 110 m.p.h. Top speed capability is 160 m.p.h.

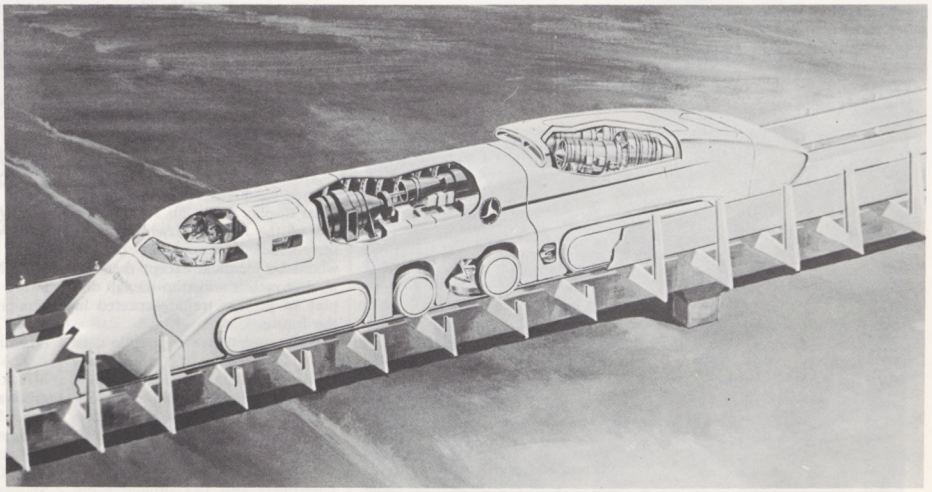
DMINISTRATION

in limited service by the Penn Central railroad since Jan. 16; TurboTrains have been operating since April 8. OHSGT's primary concern in the high speed program is assuring mobility in densely populated regions of the nation where projected population growth threatens to overtax transportation facilities.

Initial efforts are being concentrated on analysis of requirements and evaluation of alternative inter-city transportation systems for the nation's Northeast Corridor. Within this 40,000 square-mile area, comprising about 1½ per cent of the land area of the United States, 20 per cent of our total population lives.

The high speed program is also concerned with advanced systems of transportation to determine whether improved existing or unconventional new systems can better meet future needs. Research in unconventional systems is concentrated in high speed tracked air cushion vehicle systems and tube vehicle systems. Both offer promise for operation well above 250 miles per hour.

The agency is also conducting experimental work with a deep-tube transport concept, new systems of communications and control, evaluations of magnetic suspension, construction of a linear electric motor for speeds above 150 m.p.h., advancements in tunneling technology and studies of present and future safety needs.



Train locomotive of the future? This tracked air cushion research vehicle evolved from a six-months design study by General Electric for the Federal Railroad Administration. Turbofans would propel it, with provision to switch to a linear induction motor.

A Blend of Old and New

Near the FAA tower at Santa Barbara, Calif., spectators study with interest the unique wedding of jet-age turbo-prop power plants to the Douglas DC-3, familiarly known as the World War II "Gooney Bird." Currently being flight tested, the DC-3 modification was evaluated by the Western Region Aircraft Engineering Division at a meeting convened in a Viscount aircraft parked at the Conroy Aircraft Corp. facility at Santa Barbara. (See "Chairborne Meeting," *FAA Horizons*, July 7.)

Visit to Pierre FSS Part of School Course

PIERRE, S.D.—Students enrolled in the aeronautics course at Riggs Senior High School here spent one full day in a unique "laboratory"—the Pierre Flight Service Station.

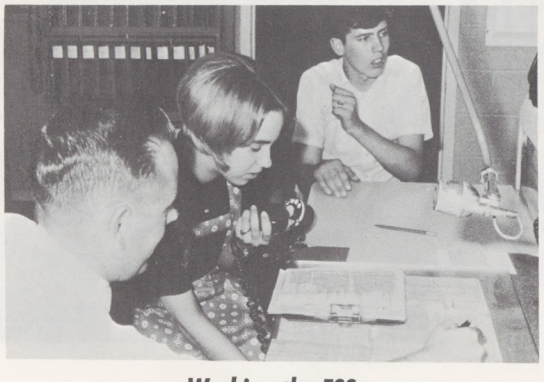
Since the course became part of the school's curriculum 15 years ago, Pierre Municipal Airport facilities have been used by the instructor in providing practical orientation in such subjects as radio navigation and meteorology. The FSS visit traditionally is made at the end of the school year.

FSS Chief Keith Anderson and Specialist Homer Bennett suggested recently that a full day spent at the FSS would be valuable for students. The instructor, Jack Robinson, agreed.

Robinson, who served as an 8th Air Force navigator in England during World War II, divided the aeronautics class into two sections so that each member of the two smaller groups might derive maximum benefit from the FSS visit.

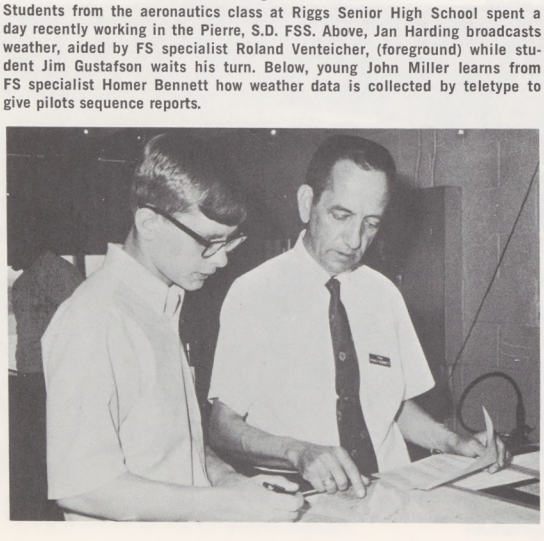
Students spent the day "working" various positions, taping reports for teletype transmission, collecting weather data for sequence reports, taking part in Direction Finding (DF) practice situations and receiving briefings in communications. Besides Anderson and Bennett, personnel who assisted students were Specialists Harold Bolyard and Roland Venteicher.

"The students' enthusiasm was remarkable," Anderson said. "Several of them expressed an interest in working for the agency some day."



Working the FSS

Students from the aeronautics class at Riggs Senior High School spent a day recently working in the Pierre, S.D. FSS. Above, Jan Harding broadcasts weather, aided by FS specialist Roland Venteicher, (foreground) while student Jim Gustafson waits his turn. Below, young John Miller learns from FS specialist Homer Bennett how weather data is collected by teletype to give pilots sequence reports.



New EEO Staff Members Briefed

LOS ANGELES—Regional Equal Employment Opportunity guidelines, a six month schedule of EEO activities and a plan of action were all outlined at a program conference held here recently to brief four new EEO staff members.

Kicked off by Regional Director Arvin O. Basnight, the conference reviewed objectives, policies, procedures and other related aspects of the program.

Participants in the one-week conference included Quentin Taylor, Director of Civil Rights, and Don Higgins, Chief, Special Employment Programs. The conference was chaired by Frank J. Dailey, Chief, Employment Branch.

Workshop sessions in basic personnel functions were conducted by Glyndon M. Riley, Chief, Personnel and Training Division; George R. Budke, Chief, Classification Branch; W. Ross Burnett, Chief, Employee-Management Relations Branch; Chester V. Stalker, Chief, Training Branch; and Dailey.

As a result of the conference, a regional order outlining responsibilities for employees, supervisors, local coordinators, area managers and EEO specialists will be released in the near future.

The Western Region EEO Staff includes Mrs. Deweylene Fields, Chief, EEO Section, Employment Branch, Personnel & Training Division; Alonza Bean, EEO Specialist, San Francisco Area (Northern California, Northern Nevada, Oregon and Washington); Lloyd Yorker, EEO Specialist, Denver Area (Colorado, Wyoming, Utah, and Idaho); and Jerome Hutton, EEO Specialist, Los Angeles Area (Southern California, Arizona and Southern Nevada).

EEO Program Discussed

Attending a recent Equal Employment Opportunity specialist indoctrination conference in Los Angeles are the four new Western Region EEO staff members shown with Frank J. Dailey (center), conference chairman and Chief, Employment Branch. They are (from left): Lloyd Yorker and Alonza Bean, EEO specialists; Dailey; Deweylene Fields, Chief, EEO Section; and Jerome Hutton, EEO specialist.

The Sky's No Limit

Recent graduates of East New York Vocational High School, Brooklyn, were briefed on career opportunities in aviation by Harry Bernard, Chief of the Eastern Region's Flight Standards Division.

Aircraft Outraces Stork With Assistance from FSS

GLENS FALLS, N.Y.—Shortly after takeoff from Lake George recently, the pilot of an amphibian contacted the Glens Falls FSS to advise that his expectant wife was aboard and they were "racing the stork to the hospital."

He reported that the arrival of a small passenger aboard the aircraft seemed to be imminent and it was all that he could do to fly the plane. Then, a malfunction of the plane's landing gear developed, ruling out a landing on the runway at Teterboro Airport as the pilot had planned. To top it off, high terrain in the vicinity was hampering communications between the pilot and the FSS. Fortunately, another pilot overflying the area acted as a relay for the conversation.

FSS Specialist Arthur Schehr advised the distressed pilot to "do a 180" and return to Lake George. Schehr assured the pilot an ambulance would be waiting there to rush his wife to the hospital.

Schehr next cleared all boat traffic from the Lake George landing area. Then, because it was dusk, he arranged for special lighting: headlight beams of hastily-assembled police cars illuminated the landing area as the amphibian splashed down. The pilot quickly taxied up to the pier and his wife was immediately bundled into a waiting ambulance for the trip to the local hospital.

Some two hours later, Schehr received a call from the pilot thanking him for his assistance and announcing that his wife had given birth to a baby girl. Mother and baby, he said, were doing fine. The new father added that a fine cigar was being reserved for Arthur Schehr.

Simulation Laboratory Used In Selection of Airport Site

ATLANTIC CITY—Two sites proposed by Chicago city officials for a new airport are being compared in the air traffic simulation laboratory at NAFEC to determine which would be more suitable in terms of traffic flow patterns, control procedures, airspace use and airways structure.

The simulation is being performed by duplicating the Chicago radar display in the lab. A comparison of the lab scope with that in the Chicago approach control would be identical except that annual growth is added to the lab display to present traffic expected in the future.

The simulation will provide data on which to base the economical placement of navaids and plan efficient traffic flows and procedures, according to Howard F. Slattery, who is in charge of the study.

Some 200 persons are engaged in the simulation study, including 40 controllers and 135 simulator operators. Sidney B. Rossiter is project manager.

Monitoring the project are four air traffic experts from Central Region Headquarters in Kansas City: Roger W. Alwood, Ralph L. Frick, Edward G. Basel and James O. Dixon.

Agency Award Honors Mechanic School Grad

TETERBORO, N. J.—The first award in a new FAA program to give recognition to mechanic school honor graduates was presented here recently.

The award went to Kenneth Minck, 19, the top student in the graduating class of the Teterboro School of Aeronautics. The award was presented by John Mears, general aviation maintenance specialist with the Eastern Region Flight Standards Division. (Mears has since transferred to Cleveland).

Speaking at the award ceremony, Mears said the program was established to encourage youths to become mechanics in an industry desperately in need of trained men on the ground. Mears noted it is the unsung mechanic who has helped make safe and swift jet travel possible.

Minck's "thank you" words were made more significant by his announcement that he would soon become a mechanic for United Air Lines. He now holds his FAA license as an airframe and powerplant (A&P) mechanic.

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?

The new Merit Promotion Program which became effective July 1 states that an employee who is demoted for reasons other than misconduct or inefficiency, and not at his own request, shall be given priority consideration for repromotion to his former grade or at an intermediate level. A few years ago I requested and was granted a downgrade transfer to another facility in order to remain in the local area. Within a year, the position I transferred from was abolished. In light of this policy, I have three questions.

Question: Does this special consideration have a time limit?

Answer: No. The downgrade may have occurred at any time in the employee's career.

Question: Is the possibility of repromotion void if an employee bids on a vacancy but is not accepted?

Answer: No.

Question: Am I eligible for priority consideration for repromotion?

Answer: No. The voluntary request for change to lower grade must have occurred *after* you were officially notified of the abolition of your position. See the recent Notice to all employees, 3330.26, "The New Merit Promotion Program," for more details.

I have three questions:

Question: What rules and regulations are to be followed when recommending an employee for an Outstanding rating and cash award?

Answer: The regulations are contained in Chapters 5 and 9 of Handbook 3430.3, Evaluating and Improving Employee Performance, dated July 1, 1969 and Recognition and Awards Handbook 3450.7A. To be eligible for an Outstanding rating, an employee must have exceeded the performance standards in ALL aspects of his job during the rating period (normally one year) to the point where special commendation is warranted. To be eligible for a performance and/or cash award, he must have substantially exceeded the performance standards for the MAJOR duties of his job for at least six months.

Question: Who has final approval authority?

Answer: Approval authority may be delegated to the next supervisory level above the rating official, but not below the level of facility chief, sector chief or district office chief in the field. Local supplements to Handbooks 3430.3 and Recognition and Awards 3450.7A should designate approving officials.

Question: What documentation is required?

Answer: An Outstanding rating is recorded on the Employee Appraisal Record, FAA Form 3430-1, and is supported by the ratings in Part II, Performance. In addition, the supervisor must prepare a written justification showing how the employee has exceeded his performance standards in ALL aspects of his work. If a performance award is recommended simultaneously, the justification may be used for both purposes.

I have two questions:

Question: How is compensatory time justified instead of overtime.

Answer: Bear in mind that both overtime... pay... and... compensatory time off are forms of payment for overtime work. In unforeseen circumstances, such as unexpected weather or spot sick leave, additional overtime requirements may arise. This type of overtime is considered to be "irregular" or "occasional" and may be paid for in compensatory time. If the employee's salary is at or below the top step of a GS-10, he is paid in money unless he requests compensatory time. Above the top step of GS-10, the agency decides which method of payment will be used. If the employee's supervisor thinks that compensatory time can be worked off in a reasonable length of time, normally six months, he may use this method. However, if he does not think this is likely, the employee should be paid in money.

Question: May I refuse an order to report to work for compensatory time and come in only for overtime?

Answer: If you are ordered to report to work, it is advisable to do so, regardless of the method of compensation... contemplated... by your supervisor. An employee who fails to carry out an order or instruction is subject to disciplinary action.

Task Force Goal Is Noise Criteria

WASHINGTON—A 26-member government-industry task force to assist the FAA in defining noise certification criteria for STOL (short takeoff and landing) transport aircraft has been established.

Composed of 13 representatives from the aviation industry and 13 from the Federal government, the task force held its first meetings in Washington, D.C., the end of July. Dr. John O. Powers, Chief of FAA's Technical Support Staff, Office of Noise Abatement, is chairman of the task force.

Among participants in the STOL noise certification task force are NASA representatives Robert Schade and Domenic Maglieri, both of the Langley Research Center, Hampton, Va., and Harvey Quigley, Ames Research Center, Moffett Field, Calif.

FAA representatives include: Isaac H. Hoover, Director of FAA's Office of Noise Abatement; Stanley K. Oleson, William C. Sperry, Myles H. Reynolds, Alder P. Betti, George L. Buley, Paul D. Wilburn, Richard W. Danforth and Paul Baker.

Circuit Board 'Scoop'

Civil Air Patrol cadets get pointers on use of printed circuitry from Richard Manley, electronics engineer instructor at the FAA Academy during recent CAP orientation program at the Aeronautical Center.

CAP Cadets Visit Center

OKLAHOMA CITY—Fifty-five Civil Air Patrol cadets from throughout the United States recently completed a week-long orientation at the Aeronautical Center with special emphasis on training facilities.

Cadets took part in a detailed discussion of air traffic control illustrated with films and special laboratory exercises. Cadets also visited air navigational training facilities to learn about the maintenance of communications systems and the function of the agency's system of air navigation aids.

Flight standards orientation included flight inspection procedures and the duties of FAA air carrier operations inspectors, general operations inspectors and maintenance inspectors.

A flight in an FAA aircraft, and a general tour of the Civil Aeromedical Institute facilities also were provided.

Reward

A check recognizing Sustained Superior Performance in her work is presented to Barbara Saunders, Central Region Office Services secretary, by Maurice Hale, Chief of section.

Non-Federal Tower Opened At Cuyahoga County Airport

CLEVELAND—One of the few non-Federal towers commissioned to serve a public airport was dedicated at Cuyahoga County Airport here recently.

Basically, the new facility is a large trailer incorporating a control tower on one end of its roof. It is called "Port-A-Con."

Robert Reynolds, Assistant Administrator for General Aviation Affairs, and Clay Hedges, Cleveland Area Manager, certificated the ATC tower for official operation.

Hedges complimented County Commissioners Frank R. Prokorny, Hugh A. Corrigan and Frank M. Gorman for making air traffic control available at the county airport. Hedges indicated that implementation of the non-Federal tower would accelerate an FAA takeover and improve air safety in the interim period. Three licensed controllers have been employed by the county to operate the tower.

"Cuyahoga County Airport is considered one of the best general aviation airports in the U.S.," said Reynolds. He added that, as a result of the growth of traffic, Cuyahoga County Airport has become a leading candidate for an FAA-operated tower facility.

Jet Pilot

(Continued from Page 1)

out to search for the downed reservist spotted the fire Major Farola lit as darkness fell. They circled the area and told the FSS the pilot was 17 miles from the Zuni VOR on the 155 degree radial.

FSS Chief John Davis and his son set out for the pilot's estimated location in a government car equipped with a police radio. Maintenance men Thorn and Nance also headed toward the scene in a police car driven by Ed Boggio, special law enforcement officer for the Bureau of Indian Affairs at Zuni.

Heavy rain showers converted the cow trails both vehicles were traversing into a gooey mass impeding their progress. Davis' car soon was mired down, but Thorn, Nance and Boggio were able to press on, aided by communications established by FSS specialist Wright at Zuni. Davis later freed his mired car and joined Thorn and Nance.

After the Navy planes began to run out of fuel waiting for the rescue vehicles to reach the downed pilot, the Zuni FSS succeeded in getting a Cessna 210 owned by the Hugo Zimmer Co. of Kayenta, Ariz. to divert from a flight to Tuba City long enough to circle the spot and provide continued communications guidance.

Four-and-one-half hours after leaving Zuni, Nance, Davis and Boggio reached Major Farola. He did not require hospitalization and spent the night at Thorn's home. The next afternoon, after a grateful "thank you" to the FSS staff, Major Farola left Zuni for Kirtland AFB, Albuquerque to resume training. —

Change

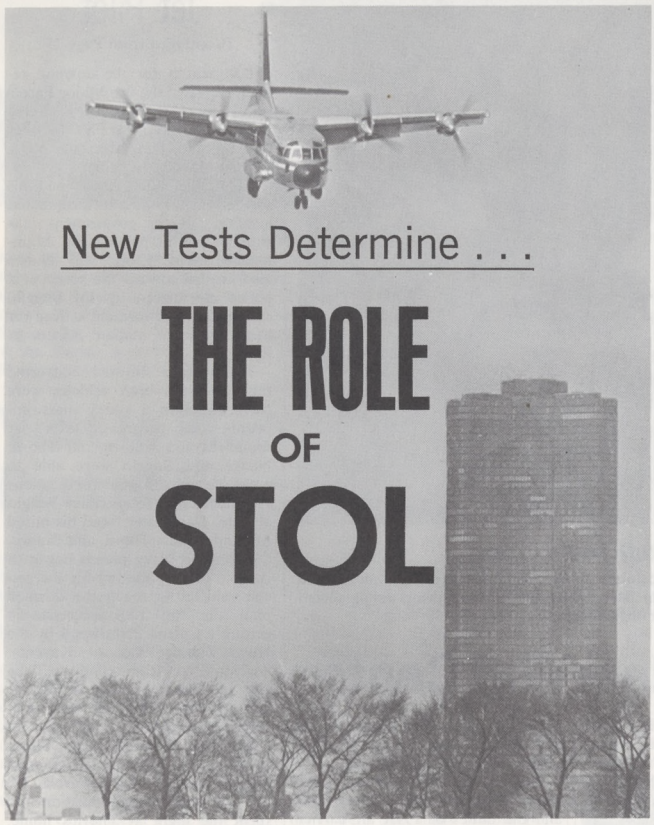
(Continued from page 1)

problems, to devise innovative methods of meeting new challenges and to find better ways of strengthening past achievements. Such an approach will insure aviation's maximum contribution to the nation's continued progress.—John H. Shaffer."

The new card is being distributed this week to all manned facilities and to offices down to the branch level in the regions and areas.

Straight Shooter

The 1969 National Girl Indoor Rifle Champion is Mary Keys, 15-year-old daughter of Carlton A. Keys, Systems Research and Development Service. Mary holds five National Record Certificates and won the Virginia State Outdoor Woman and Girl Championship for smallbore rifles before becoming the National Champion. Mary's dad is an ICAO specialist with the International Branch, Frequency Management Division.



New Tests Determine . . .

THE ROLE OF STOL

One of more than 60 approaches made in the high-density Chicago traffic area is made by the inter-metropolitan STOL whose evaluation was completed recently in the Midwest. Among those aboard on this trip were FAA's George Moore, Associate Administrator for Operations, and John F. Wubbolding, Assistant Chicago Area Manager. At right is Lake Point Towers, near Meigs Field, the city's lake front airport.

Participating in recent STOL evaluation at Chicago were (left to right): George W. Wagner, Chicago Area Flight Standards; Paul E. Cannom, Chicago Area Manager; M. L. (Jack) Koehler, Chicago Area Air Traffic Branch Chief; Norman A. Amundsen, Assistant to the Chicago Area Manager; Dan Vucurevich, O'Hare Tower Chief; Jay Sheridan, Chicago Area Flight Standards; Martin Noteboom, Chicago Area Airway Facilities; Ralph Frick, Central Region Air Traffic; Warren Jeffers, Central Region Flight Standards; Lyle Underwood, Chicago Area Air Traffic; and Eugene Stewart, Chicago ACDO.

By Neal Callahan

"Meigs . . . this is Midway. Have you got that STOL in sight?"

"Midway . . . this is Meigs . . . Yes, he's on final to 18."

"How's he doing?" the Midway controller asked. "Looks like he's standing still on radar."

"He's got a 35 m.p.h. wind on his nose," the Meigs controller replied. "He looks like a four-engine helicopter out there."

As indicated by this conversation between two controllers during recent industry-airline tests of one type of STOL (Short Takeoff and Landing) aircraft, the planes operate at speeds much slower than conventional jets, permitting them to utilize shorter runways and taxiways.

Because STOL aircraft could have great impact on the future course of short-haul aviation in the U.S. and could help solve congestion, the development of this newcomer to air transportation is being encouraged by the agency.

Its impact on air traffic control was observed during the most recent test period during which 75 flying hours were logged and more than 60 approaches and departures made at high density airports in the Chicago area and at General Mitchell Field in Milwaukee. Chicago fields used in the tests were Midway, O'Hare, Meigs and Oakbrook.

O'Hare Tower Chief Dan Vucurevich reported that not a single delay was encountered by the aircraft used in the tests while arriving or departing from the designated STOL runway at O'Hare or in utilizing "off-course" approaches and departures from the O'Hare VOR.

It should be noted, however, that this was a one plane operation, and that additional STOL aircraft in the system could cause traffic problems.

FAA established a STOL Demonstration Coordination Group to work with STOL test participants at Chicago. The group, headed by Robert B. Meyersburg, Deputy Director, Airport Development Service, was made up of the following other Washington Headquarters representatives: J. F. Woodall, Aircraft Development Service; M. H. Reynolds, Air Traffic Service; A. P. Bretti, Flight Standards Service; D. Michael Brandewie, Systems Research and Development Service and L. N. Douglass, Air Traffic Service. Central Region representatives in the group were Ralph Frick of the Air Traffic Division and Warren Jeffers of Flight Standards. Eastern Region representatives were John Furlong, Air Traffic, and Louis Bicknese, Flight Standards.

The evaluation was jointly sponsored by American Airlines and the McDonnell Douglas Corporation with support from manufacturers of advanced navigational equipment aboard.

FAA provided special ground based radar equipment to record the aircraft position in connection with evaluation of a terminal area navigation system on board. Data provided was supplementary to the operational data acquired by the FAA during recent STOL tests at NAFEC.

Basic objective of the recent tests was to investigate the potential of an integrated STOL transport system for the expanding short-haul market. Information was gathered in three general areas: the aircraft, enroute and terminal area navigation systems and operating procedures.

The aircraft used in the testing was the Model 188 transport, one of four production aircraft built for the French Air Force by Breguet Aviation of France.

This four-engine turboprop has demonstrated capability of landing over a 50-foot obstacle within approximately 1,000 feet. It has a high, straight wing with full-span, triple-slotted, trailing-edge flaps.

The wing is completely immersed in the propeller slipstream and develops propulsive lift for slow speed flight. A mechanical interconnect between propulsion units transmits power to all four propellers in the event an engine fails.

The Model 188 has chalked up more than 1,800 flight hours and 3,900 STOL operations and has been studied by the FAA, the military and NASA.

It was not built as a passenger-carrying commercial aircraft as most air travelers know them today, however it can be configured for up to 60 passengers as a commercial vehicle.

All flights were made with American Airline Captains Chuck Shaffer or Bernie Whol at the controls. Their job was to determine if a STOL aircraft of this type requires any special or unusual piloting techniques and, if so, whether these techniques could be introduced into airline service without major training or operating problems.

Through the continued joint efforts of government and industry, a clearer picture of the potential and the capability of STOL aircraft is emerging, paving the way for a new era in short haul air transportation.

Advanced navigational systems were installed aboard the Model 188 for the recent Chicago tests. These included new types of computer and display systems and a vector analog computer modified to include the vertical navigation capability required for STOL passenger aircraft.

Dignitaries deplane following a ride aboard the test STOL aircraft during inter-metropolitan STOL evaluation conducted recently in the Chicago high density area. Among the passengers was Administrator John H. Shaffer (third from right).

FLIGHT PROFILE COMPARISON – CONVENTIONAL JET vs STOL