

JANUARY 1976

FAA WORLD

Service to Man in Flight



YEAR IN REVIEW 1975



FAA WORLD



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FAA WORLD is published monthly for the employees of the Department of Transportation/Federal Aviation Administration and is the official FAA employee publication. It is prepared by the Public & Employee Communications Division, Office of Information Services, FAA, 800 Independence Ave. SW, Washington, D.C. 20591. Articles and photos for FAA WORLD should be submitted directly to regional FAA public affairs officers:

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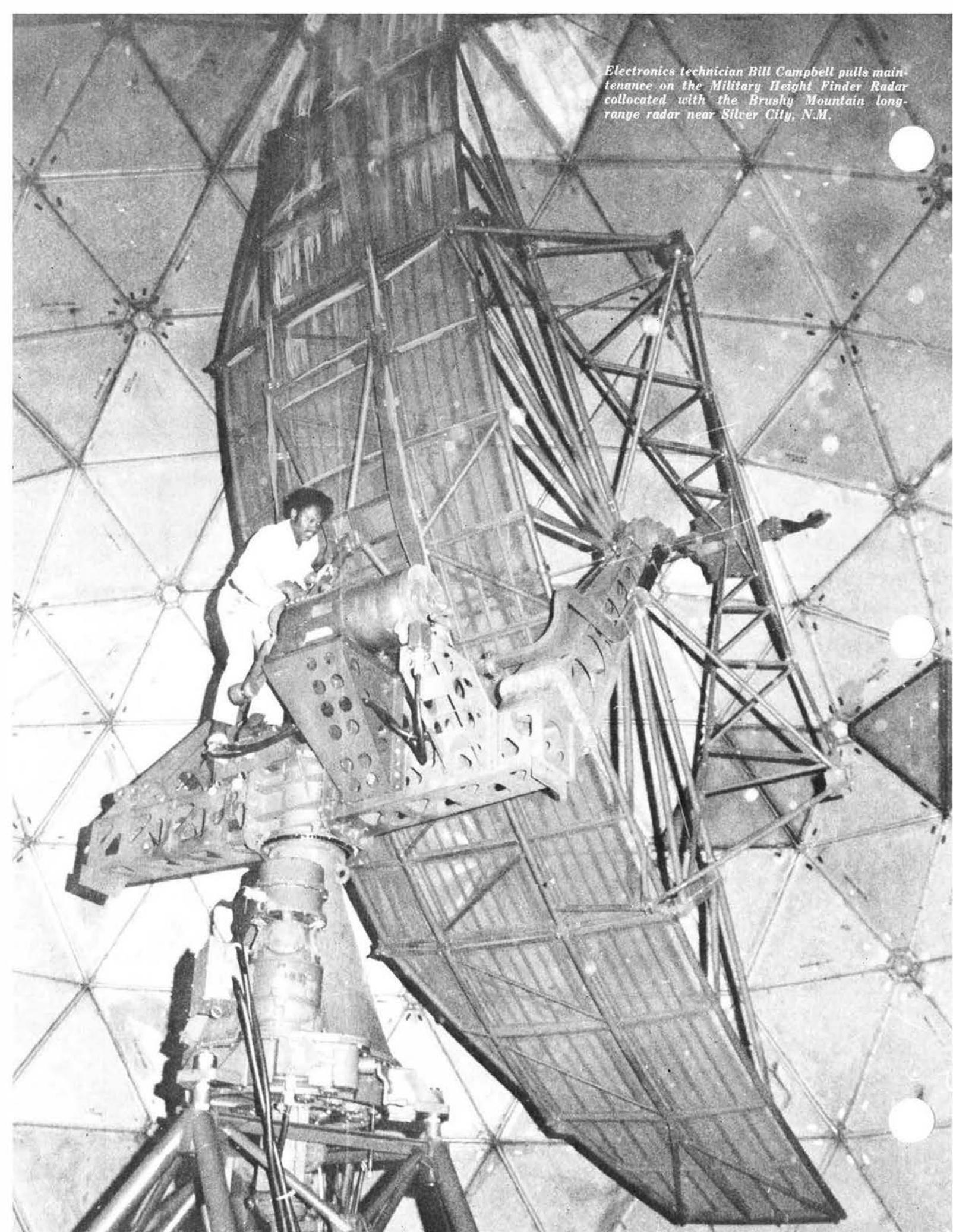
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Electronics technician Bill Campbell pulls maintenance on the Military Height Finder Radar collocated with the Brushy Mountain long-range radar near Silver City, N.M.



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NATIONAL AIRSPACE SYSTEM

When the Automated Radar Terminal System (ARTS III) went operational at the Dallas/Fort Worth Airport last August, it marked the end of the beginning as far as terminal air traffic control automation was concerned. A total of 64 systems had been ordered from UNIVAC in February 1969, and the Texas system was the 64th to go operational.

But this does not mean that the ARTS program is finished. At least one more ARTS III is scheduled to be commissioned. In fact, the new equipment is already being installed in the new Atlanta, Ga., Tower and is expected to go on line next June.

While three ARTS III are being used for training and testing, the test at airport traffic control towers give controllers vital flight information such as a target's identification, altitude and ground speed, written on a data tag on the radar display.

Also, new programs to help the controller even more are being added to the system's capability. For instance, a Minimum Safe Altitude Warning (MSAW) system was tested at Denver's Stapleton Airport and at NAFEC last year. This add-on program is being installed at ARTS III sites beginning this month and will be operational at all sites by November 1976.

The program alerts the controller when an aircraft is below or about to descend below a minimum designated altitude. It also alerts them when an appropriately equipped plane sinks below the instrument landing system (ILS) glide slope while on approach for a landing. In both cases, a blinking "LOW ALT" appears on the radar scope and an aural signal is triggered.

Other enhancements being de-

The End of the Beginning for ARTS



Concurrent with the commissioning of the last ARTS III of the originally programmed 64, Dallas-Fort Worth commissioned the Terminal Communications Switching System (TCSS), an automated network providing almost instant flexibility in position configuration. Controller Bill Ackley works the horizontal ARTS display, with TCSS lighted displays overhead and to the left.

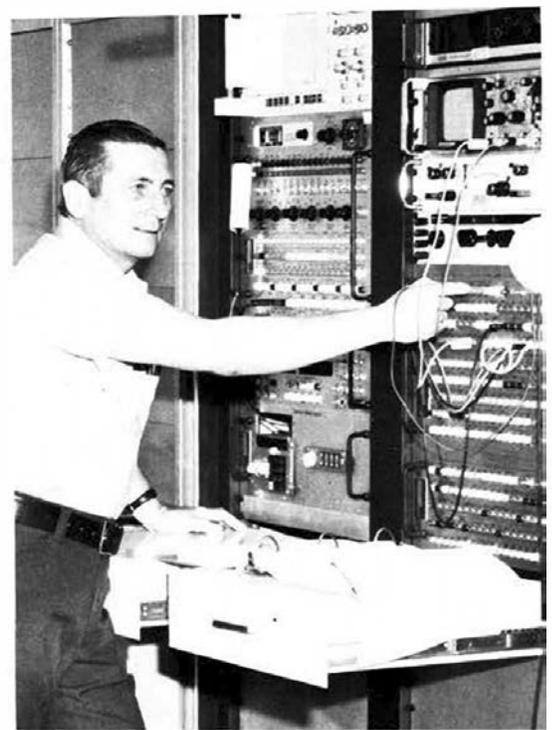
veloped are: a conflict-prediction warning program, which will warn controllers when targets are getting uncomfortably close to one another; a program to provide controllers with metering and spac-

ing control information; standby equipment for failsafe operations; and ways to put identification tags on radar scopes to identify planes not carrying transponders.

So, that's how it's going; but



The Civil Aeromedical Institute continued its protection and survival studies in 1975, including tests of the emergency evacuation of the handicapped via slide from the evacuation simulator. Actual handicapped persons weren't used in this test.



Avionics technician Nathan Parsons checks the alignment features of the Aircraft Services Base inertial navigation system maintenance equipment. The base's INS-RNAV repair station is the only one of its kind in aviation.



Mrs. Patricia Melton of the Data Conversion Unit of the Aeromedical Certification Branch was the first deaf person hired by the Aeronautical Center some years ago. She was named the Outstanding Handicapped Employee for 1975 at the center, as well as the Handicapped Citizen of the Year by the Oklahoma City mayor and city council.

AERONAUTICAL CENTER



The first Sabreliner 75A joined the flight inspection fleet at FINFO last year, dwarfed at right by the larger, slower DC-3 being phased out of flight inspection. This is one of 15 Sabreliners being added along with five jet Commanders.

Craig Burson, Ron Ivey and Pete Kochis (left to right) use PLATO display terminals in the FAA Academy's computer-based teaching system for non-radar control courses and the digital-logic principles course, while project supervisor Bill Cannon (standing) helps with the programming sequence.



James E. Richardson, chief of the FAA Depot at the Aeronautical Center, admires a Presidential citation presented to the depot for excellence in improvement of operations, one of only 64 similar awards given throughout the Federal government.





Atlanta International Airport's new tower under construction is getting the installation of enhanced ARTS III.

that's not all there is to the ARTS story. The first ARTS II arrived at the FAA Academy in Oklahoma City in early November. It is being used for testing and for training of maintenance people. The "Two"—designed for light-to-medium-

activity airports—does most of the things done by the "Three," except that it will not track or display an aircraft's ground speed. The first of a scheduled 71 field installations is to take place at Edwards AFB, California, next June.

Closing the Circle on Enroute Automation

It's like night and day . . . or, better yet, it's like comparing a World War I biplane and a modern jet." This was the way one controller described the difference between the old broad-band radar system and the new computerized, semi-automatic system that went into operation at the last five of the 20 domestic enroute centers this past year. The final commissioning was in Miami at the end of August.

NAS Enroute Stage A eliminates many of the controllers' clerical chores and gives them additional help with their main task of separating traffic. It can handle automatically such tasks as print out and transfer of flight plans and eliminates most of the interphone conversation formerly required to hand off a flight to another sector or facility. Last year's improvements provided tracking of aircraft and radar display of valuable flight information, such as aircraft identity and altitude. Formerly, controllers had to get that information by radio from the pilot and mark it on plastic markers, which they then had to push along on the radar



National and local news media recorded the moment that then Acting Administrator James Dow sent the teletype-written NOTAM informing all domestic ARTCCs that NAS Stage A was commissioned at the Miami Center.

scope next to the target return.

Since reliability is critical, the system has built-in monitoring devices that automatically flash a signal when trouble occurs. In most

cases, all a technician has to do is remove the defective module and replace it right on the spot. There is also a battery power-conditioning system that serves as an additional backup power source in the event of a failure. If the primary source goes out, the battery package automatically takes over for the few seconds required for the generators of the first backup system to start working.

Since NAS Enroute Stage A is intended to handle enroute air traffic for years to come, it is designed to accept refinements or new technological developments as they come along. For example, a conflict-alert system was added to all 20 domestic centers last year. This is a computer program that projects what the flight paths of aircraft flying above 18,000 feet will be in the next two minutes. When aircraft flights are projected to get closer than the required horizontal and vertical minimums, the program starts the data tags blinking on the radar scope, alerting the controller to the possibility of a conflict.



William A. Diehl, president of Arctic Aircraft Co., with his wife, Jan, received the first FAA type certificate ever awarded in Alaska for a new aircraft. With them are (from the left) Bob Judd, acting chief, Flight Standards Div.; Regional Director Lyle K. Brown; and FAA test pilot Robert R. Durych. The new plane is the two-seat 150-hp Arctic Tern.



Merrill D. Hughes of Livingston Copters won the Alaskan Aviation Mechanic Safety Award in the general-aviation category, and Bernard L. Sherwood, who works for Wien Air Alaska, copped the mechanics' award for air-carriers.



Mid-1975 saw the awarding of a contract for a new Anchorage International Airport Tower, with the cab sitting atop a 150-foot shaft. The FAA project engineer for the construction is Ken Hill.



In June, Richard L. Faylor checked in as the Alaskan Region's new Deputy Director.



David M. Tucker (center) of Fairbanks was selected as the region's Flight Instructor of the Year in 1975. With him are Region Director Lyle K. Brown (right), who presented the certificate, and Eugene Morris, Fairbanks accident-prevention specialist.



Two Alaskan Region facilities garnered Facility of the Year awards last May. Representing them were Al Crook (left), chief of the Anchorage GADO, and John R. Bassler, chief of the Anchorage FSS.

FSS Automation

Off the Drawing Board And Into the Station

FSS automation, although it hasn't yet caught up with ATC automation, took big strides during the year. At Atlanta and a "satellite" site in Macon, Ga., AWANS was turned on in July for a year-long test. The Aviation Weather and NOTAM System instantly provides pre-flight and in-flight briefers with the latest weather and aeronautical information on cathode-ray-tube (CRT) viewing screens.

The specialists found the system gave them peace, quiet, orderliness and better information, compared to the old days of noisy teletypewriter machines and constant moving about the FSS to rummage through sheaves of teletypewriter paper for the information. The system's mini-computer sometimes failed to work, but the technicians and engineers were confident of a solution.

Meanwhile, an "instant" and inexpensive automation project got underway in the Chicago FSS. This system also uses CRT displays of weather and NOTAM information. The display screens are linked directly to the agency's computerized Weather Message Switching Center in Kansas City, Mo., the same place from which the Atlanta AWANS gets its information. The Chicago system, however, does not have all the capabilities of AWANS.

In the Phoenix, Ariz., FSS, specialists began using a closed-circuit TV system for fast access to

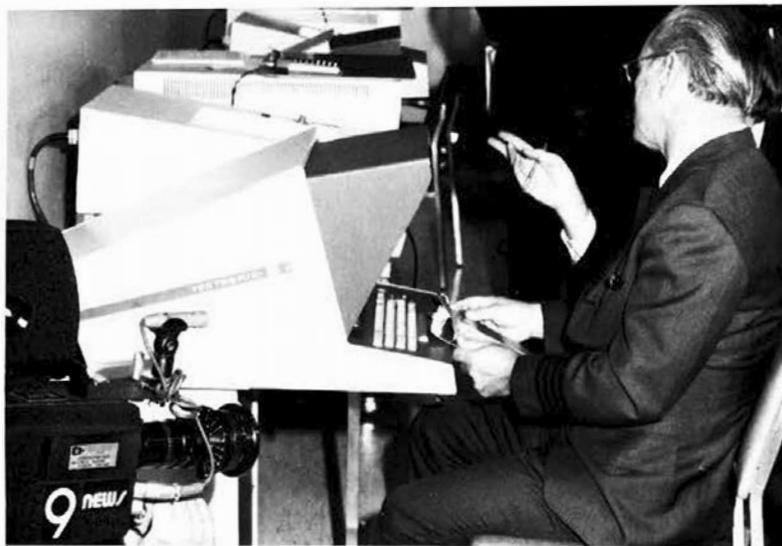
weather information. Lacking a computer to sort out the data, the system depends on a specialist to tear off teletypewriter sheets and arrange them under a battery of TV cameras which send the pictures to small TV monitors at the various briefing positions.

Back in Washington, plans moved ahead rapidly to transplant the Washington FSS from its aging quarters at National Airport to a new automated home at the Washington ARTCC in Leesburg, Va. In November, a contract was signed for a small computer and a batch

of CRTs. This system also will get its data from Kansas City. Known as MAPS, for Meteorological and Aeronautical Presentation System, it is slated to begin operation at Leesburg next month.

The development of a pilot self-briefing device continued, but no plans have yet been made to install such devices at airports.

In a move to reduce FSS workload, the agency proposed elimination of most VFR flight plan service. FAA was still considering comments on this proposal at year's end.



Pilot self-briefing terminals continued user testing and evaluation at Denver's Stapleton International Airport.

Teletypewriter operator John Rupp arranges weather reports and weather maps under a battery of closed-circuit TV cameras at the Phoenix, Ariz., FSS, saving the specialists time, effort and money in providing briefings via CRT at each position.





The cab of this new modular tower at the Johnson County, Kan., Airport was set in place in 25 minutes—in record time—last August.

Kansas City was the site of the first national meeting of FAA Federal Women's Program coordinators and chairpersons of Women's Program Committees last year. Here, Civil Rights chief William Massey addresses the national conclave.

Harold G. Owens of the National Communications Center in Kansas City was named Suggestor of the Year in 1975 for his idea of using salvage surplus FAA equipment in a digital logic circuit design that permits the Service "B" Data Interchange System to be used with the ICAO message format.



C. R. "Tex" Melugin reported aboard as Director of the Central Region in March. Here, he meets with regional Flight Standards personnel for a briefing.



Glowing at the award the Kansas City ARTCC received as National Air Traffic Facility of the Year for its work in RDP were (left to right) Arthur Baldwin, Jr., the center's assistant chief; and radar controllers Sharon Haynes, Arthur Gordon and Lester Cooke, Jr.

The Lincoln, Neb., Municipal Airport got a new tower, dedicated by Regional Director C. R. Melugin last August. Faye Webb is the tower chief.



U.S. Enters MLS Sweepstakes

In February last year, an inter-agency group put the stamp of approval on the type of Microwave Landing System the U.S. is entering in an international sweepstakes for selection of a new, standard landing system for worldwide use. The system chosen as the U.S. candidate was the "time-reference scanning beam" design, which was selected over a Doppler system.

MLS provides multiple approach paths, in contrast to the instrument

landing system's single narrow path, and is much less affected than ILS by bad weather and signal interference from buildings and hills.

FAA gave the Bendix Corp. and Texas Instruments the go-ahead to build prototypes that will serve as stepping stones to production-line systems to be used at airports. Full-scale production, however, depends on the selection of the U.S. design by the International Civil Aviation

Organization, which is considering designs submitted by Britain, Germany and Australia, as well. France and the U.S.S.R. are also expected to submit designs. Managers and staff members in the MLS Division of the Systems Research and Development Service spent many months assembling detailed MLS descriptions and test results, which were submitted to ICAO in December.

In September this year, an ICAO panel is scheduled to recommend an MLS design to the full ICAO membership, which will make a final decision in the first half of 1977. The first systems are expected to go into operation in 1978.

Improving the administrative and operating procedures of the agency's major airport programs was the goal of a special airports task force last year, which was chaired by Henry Newman, Southwest Regional Director. It reviewed the Airport Development Aid Program (ADAP), the Planning Grant Program (PGP) and the National Airports System Plan (NASP).

The group produced 30 recommendations for simplifying procedures for airport operators and planning organizations, for eliminating delays and for creating

A New Approach to Airport Programs

more program flexibility. Among the recommendations now being implemented are delegation of in-

creased authority to regional directors for approval of ADAP programming and for full authority for regional PGP programming. Others include issuance of guidelines for determining proposed airport development conformity with NASP policy; reduction in the number of revisions to NASP; exemptions for certain projects from the detailed-analysis requirement of the National Environmental Policy Act; and issuance of an advisory circular for satisfying the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970.

New Eyes in the Sky

Last summer, FAA moved ahead with antenna modernization. A \$30 million contract was awarded to Westinghouse Electric for 16 advanced long-range radars for enroute traffic control. The ARSR-3s will provide less clutter and clearer radar pictures of weather and aircraft. The first of the new radars will go to the Aeronautical Center for maintenance

training when delivered in 1977. The first three field deliveries are scheduled for the New York, Chicago and Washington, D.C., areas. Two of the 16 will be mobile models for emergency use.

The first advanced airport surveillance radar (ASR-8) was delivered to the Aeronautical Center for technician training. Thirty-six more will be installed at high- and



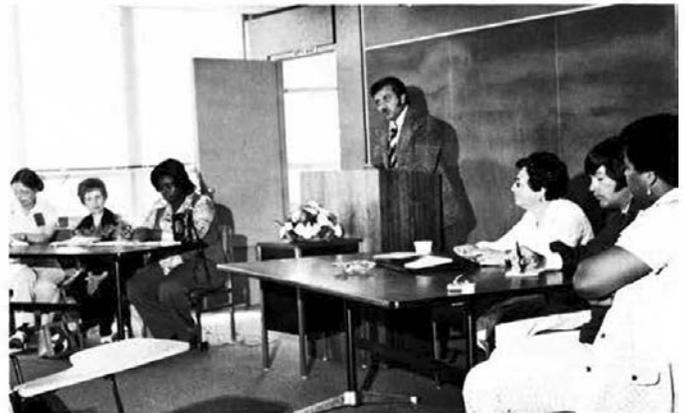
DOT Secretary William Coleman (left) chatted with Eastern Regional Director Duane Freer (center) and Civil Rights officer Don Williams at a Regional Equal Employment Opportunity meeting convened at Governor's Island during October.



Jerome Wood (center) of Ransome Airlines and Lee Webb of Corning Glass Works' Aviation Operations Div. were presented regional Aviation Mechanic Safety Awards in the air-carrier and general-aviation categories, respectively, by then Acting Eastern Regional Director James Bispo (left).



Champion Savings Bonds buyers Otis Turney (left) and David Faulk (not shown), each of whom bought \$20,000 worth of Series E bonds, accepted their purchases from then Acting Regional Director James Bispo. At right is Airway Facilities Div. chief Paul Bohr.



Washington ARTCC chief Angelo Viselli welcomed participants at the Federal Women's Program Conference last year. Panelists were (from left) Louisa Stimpert, Thelma Cantrell, Etolia White, Ethel Cohen, Doug French and Diane Tyler.

Then Acting Eastern Regional Director James Bispo (left) presented a suggestion award of \$1,500 to Islip, N.Y., Sector Field Office chief Joseph Palmieri (right) and \$1,000 to ATCS Milton Moskowitz of the New York FSS/IFSS. Palmieri developed a DF simulator; Moskowitz suggested its use in training.



Wielding scissors at the dedication of the new Philadelphia FSS were Jeff Cochran (left), Associate Administrator of Engineering and Development, and Rep. Joshua Eilbe (Pa.). Helping out were (left to right) FSS chief Norma Hopkins, State Director of Transportation Alfred Childs and Eastern Regional Director Duane Freer.

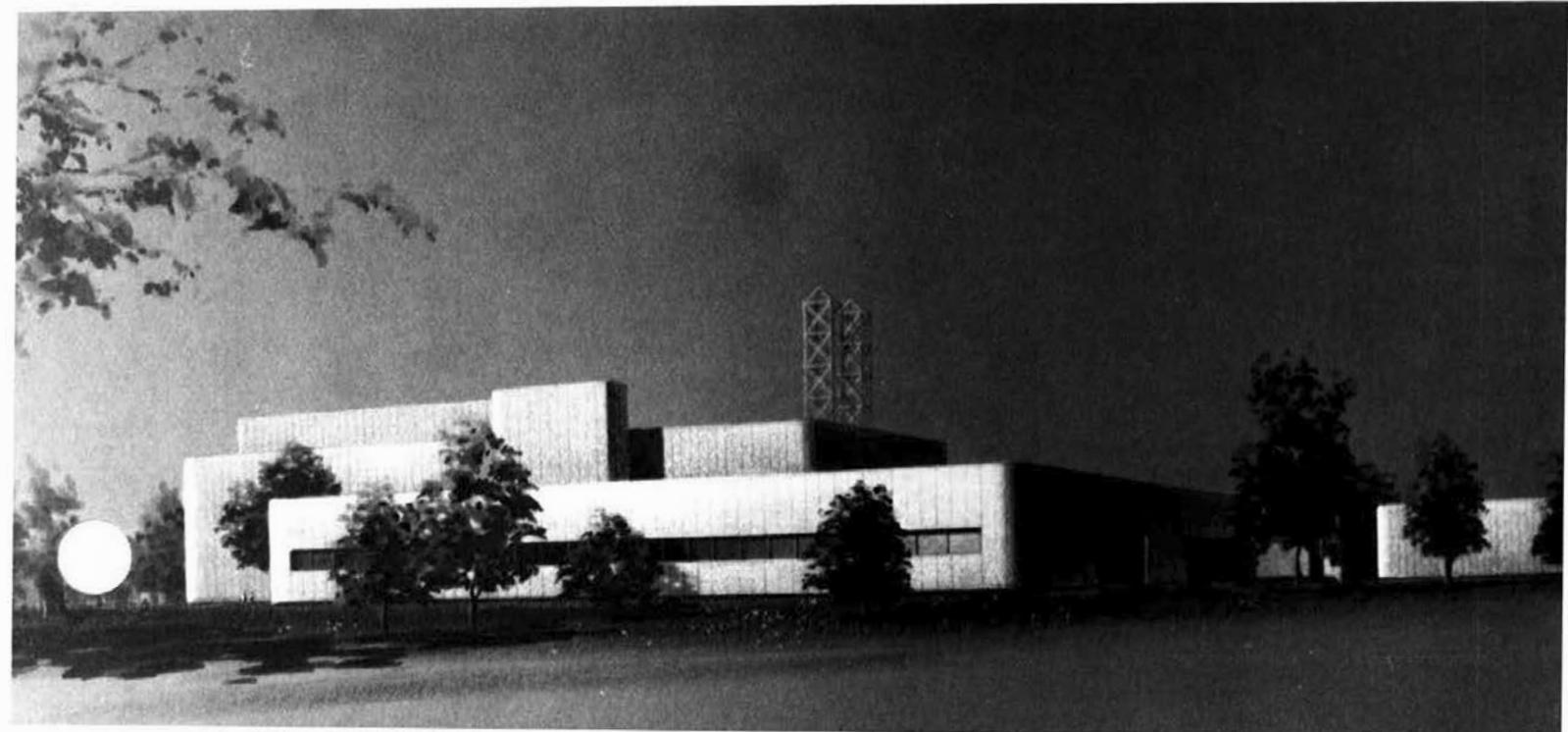


medium-density airports by September of this year, and NAFEC will get one for research and development. The Texas Instruments radars, supplied under a \$17 million-plus contract, feature expanded low-angle coverage to improve the detection of small aircraft and reduced ground clutter.

Jim Eaves (left), of the Aeronautical Center's Airway Facilities Branch, accepts the keys to the new ASR-8 radar in the rear from Bob Horn of Texas Instruments. Looking on are FAA Academy Superintendent Leon Daugherty and W. M. Quitter (right), Airway Facilities Branch chief.

New York TRACON Design Underway

FAA awarded a contract last year for the design of a new New York TRACON in Garden City, Long Island. Construction by two firms—one a minority concern—is expected to begin in September of this year, with FAA occupation in 1979. The facility serves Kennedy, LaGuardia, Newark and 16 satellite airports in the metropolitan area.





Carefully maintained aircraft make for safe flight. Quality inspection specialist Isaac Ebbs goes over an FAA Jetstar at Hanger 6 at Washington National.

FAA Acts on Task Force Recommendations

A special nine-member group to study FAA's stewardship of aviation safety was appointed by former DOT Secretary Claude Brinegar last January. Composed of both government and non-government experts, the Task Force on the FAA Safety Mission was formed in response to criticism of FAA's methods leveled by a Congressional report. Also prompting the Task Force study was a fatal airliner crash on an approach to Dulles International Airport in December 1974.

On April 30, the Task Force submitted a report containing 19 recommendations. FAA immediately began implementation of the recommendations.

Highlights of FAA's accomplishments so far are:

The Aviation Safety Reporting Program, with NASA assist-

ance, to promote a free flow of information on safety problems and incidents from pilots, controllers and others, while permitting immunity from disciplinary action in cases other than accidents and criminal offenses;

Requiring controllers to give pilots low-altitude alerts when aircraft are observed to be dangerously close to the ground or obstructions;

Issuance of a Pilot/Controller Glossary of Terms to foster mutual understanding in air/ground communications;

Formation of a standing group of airline, general aviation, military, controller and pilot representatives for continuing review of air traffic control procedures;

A series of actions and reviews to speed up the customarily lengthy rulemaking process;

Establishment of "Critical Design Reviews" to augment routine type certification of aircraft;

Formation of a working group with the National Aeronautics and Space Administration for thorough study of better cockpit design to reduce the probability of human error and to detect and warn of human error and mechanical failure;

Issuance by an industry group, in cooperation with FAA, of specific guidelines for pilots' biennial flight reviews;

Improved monitoring of manufacturers' quality control;

Plans to make airline-crew flight checks more realistic.

Still under review in the agency at year's end were the Task Force recommendations dealing with FAA organization and management.

A \$527,000 contract for experimental models of a type of collision-avoidance system that utilizes signals from existing aircraft equipment was awarded late in the year to Litchford Electronics, Inc., of Northport, N.Y.

The system listens in on the signals emitted from altitude-reporting transponders on other aircraft to warn of possible collisions. A similar system is now being put together at NAFEC and both will be tested there.

The new equipment is one of sev-

eral types of collision-avoidance systems being evaluated by the agency to develop a standard for the safest and most practical means of preventing mid-air collisions. These include airborne systems as well as ground-based systems, such as the DABS/IPC (Discrete Address Beacon System/Intermittent

Positive Control), in which a computer predicts potential collisions and relays evasive commands to the aircraft involved through the DABS digital data link.

Also late in the year, the agency authorized extension of the deadline for air carriers to install the Ground Proximity Warning System. The original deadline had been Dec. 1, 1975, but it was extended for six months after it became apparent that the manufacturers of the system could not meet the deadline.

Collision Avoidance Takes Off



Airway Facilities technicians raise a portion of a glide-slope antenna at O'Hare International Airport. Solid-state glide slopes were among the new instrument landing system components installed at airports in the Great Lakes Region this past summer.



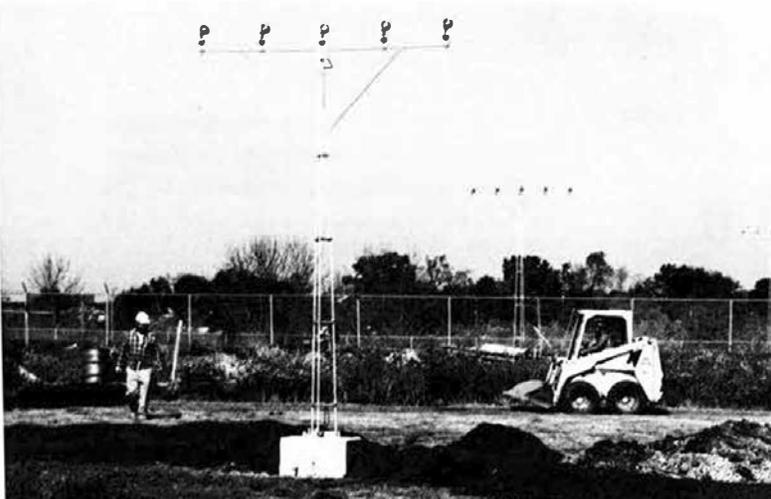
Operations Branch chief Joe Bosslet (right) congratulates Rockford, Ill., Tower chief Hugh Doyle for the facility's selection as the Regional Air Traffic Facility of the Year for 1974. Receiving similar kudos last year were the Cleveland Center and the Cincinnati, Ohio, FSS.

Runway repairs and construction continued throughout the region during the summer, but runway closures produced few delays in the system in the six-state region.



Bloomington, Ind., Tower chief Jim Dickerson took his turn manning the regional FAA display at an airport open house held in September that hosted 1,700 visitors.

The 25-ton tower cab at the University of Illinois-Willard Airport was removed to make way for a one-story addition, then replaced and operated while the floor below was being completed.



New frangible approach light systems were installed at O'Hare last year. If accidentally struck by aircraft, the lights will break away with minimal aircraft damage.



Getting the Drift of Wind Shear

Development work on a device to detect wind shear so that pilots can be warned of its presence continued during the year and is expected to be operationally tested during the first half of 1976 at

Washington's Dulles International Airport.

The device has been tested at Denver's Stapleton International Airport, where it reportedly detected wind shear up to 2,000 feet. Modifications that the test showed to be desirable are now being made. The system uses the Acoustic Doppler technique, in which changes in wind speed and direction are measured by changes in the frequencies of soundwaves bounced off them.

Similar equipment is now in use at New York's John F. Kennedy International Airport and Boston's Logan International Airport. Also being tested is a Laser Doppler sys-

tem, which makes use of changes in laser-beam frequencies to measure wind shear. An airborne wind-shear detector is also currently under study.

A Wake Vortex Advisory System is now being installed at Chicago's O'Hare International Airport. It will measure prevailing winds and tell air traffic controllers when the winds are of the speed and direction needed dissipate the vortices. Theoretically, this will permit them to cut separation distances between aircraft under the right conditions. An operational test of the WVAS system is scheduled to start in April.

Hijacks Gone, But Threat Lingers On

There are times when no news isn't necessarily good news. This is the case with aircraft hijackings. There hasn't been a successful one of an airliner in the United States for the last three years, and, consequently, you haven't been reading or hearing about them. While it's gratifying, it doesn't mean the threat has gone away.

The fact is that there were five attempts to hijack an airliner in the first half of the year, and the number of firearms and other dangerous articles—60,000—detected at airport screening stations doubled in the first six months of 1975 over the preceding six months. These resulted in 637 arrests.

These figures, as well as the FAA's estimate that at least 20 potential hijackings were thwarted by the screening program, add up to the conclusion that the threat remains.

In the same period covered by the FAA's Second Semi-Annual Report to Congress on the Effectiveness of Passenger Screening Procedures, the agency stated that

there were seven hijacking attempts against foreign airliners, two of which were successful.

Last October, a new agency rule went into effect that required all foreign air carriers operating into the United States to have security programs that use weapon-detect-

tion procedures for screening passengers and carry-on baggage. The rule also requires measures to prevent unauthorized access to aircraft and to prevent cargo or checked baggage from being loaded unless handled in accordance with security procedures.

More Backbone for Wide Bodies

About 275 B-747s, L-1011s, and DC-10s now in airline service became subject to major modification requirements as a result of an FAA Airworthiness Directive (AD) issued in mid-year 1975. The AD called for additional venting or strengthening of the cabin floor in these wide-body jets to improve their ability to withstand sudden in-flight depressurization.

Actually, these planes have compiled an outstanding overall safety record since the first B-747 was introduced into commercial service

almost six years ago. Together, they've logged about 250 billion passenger miles and carried almost 200 million passengers.

The required modifications are intended to further enhance their airworthiness by minimizing the effects of a sudden large opening in the lower fuselage wall, which can cause rapid depressurization, structural damage to the cabin floor and possible loss of control. The deadline for completing the modifications has been set for December 31, 1977.



Technicians aim a horn antenna at a plane's beacon antenna in a test using a system housed in the van to check out transponder performance. It was demonstrated for the first time at the Reading Air Show in 1975.



Three controllers in the oceanic ATC lab talk to an airplane thousands of miles away, using line-of-sight communications relayed through a satellite. The position of the plane—out of radar range—is relayed via data link and displayed.

Moving day at NAFEC: The fuselage of a surplus C-133 Air Force cargo plane was moved from one part of the center to another for use in testing burning cabin materials because of its similarity to a wide-body jet.



Robert L. Faith took over the reins of the center early last year from the retiring C.A. Commander. Faith had been Deputy Director for the past two years.



Inside a NAFEC test plane visiting Anchorage, NAFEC engineer Robert Moore (left) shows Norm Arlin of the Alaskan Region the Omega receiver being flight tested.

Computer operator Sterling Foxworth was selected as the Outstanding Handicapped Employee of the Year for 1974 and was presented a plaque at NAFEC last year by the then Administrator, Alexander P. Butterfield.



More Quiet, Please



The environment continues to be a major concern of the FAA, particularly around airport communities, where most people are affected by aircraft noise.

As a result, the agency took on one of the biggest tasks involving public participation in its history. Public hearings to obtain comments for input into the development of a national airport noise policy were held in 25 cities across the nation during the last four months of 1975.

A proposed rule that would require even more stringent noise standards than those for wide-body jets was issued in November. If

adopted, this rule would cut noise limits in FAR Part 36 for two-three- and four-engine aircraft, affecting all transport-category planes with a gross weight of more than 12,500 pounds and all turbojets, regardless of weight, that apply for certification after the effective date of the rule change.

The FAA has also issued an NPRM that would require aircraft type-certificated before the implementation of Part 36 to be retrofitted with sound-absorbing materials to bring them into compliance. This proposal is in the stage of being reviewed by DOT for cost and benefits, environmental and en-

ergy impacts, possible inflationary consequences and alternative methods of financing.

Although not the single most important project related to noise, the request by the British and French for scheduled service into the U.S. by the supersonic transport Concorde received the most visible public attention. Following release of the Draft Environmental Impact Statement in March, the FAA held public hearings in Washington, New York and Virginia. The comments from these meetings were incorporated into the final EIS, along with measurement test results and analysis of the proposal. The final EIS was released for additional comments this past November.

The only Federal program specifically directed to the concerns on stratospheric pollution by aircraft—the High Altitude Pollution Program (HAPP)—was established by FAA to prevent rather than correct a problem. The agency has initiated studies to determine quantitatively the need for reduced cruise-altitude emissions to prevent harmful increases in ultraviolet radiation.

Hazardous Materials Act Gets Some Teeth

FAA lost little time in implementing the provisions of the Hazardous Materials Transportation Act of 1974. The law was signed Jan. 3, 1975. On February 4, the agency issued a Notice of Proposed Rule Making (NPRM) to limit shipments of radioactive materials on passenger flights to those intended for research or medical use. This was followed by a public hearing to gather additional information and then by a final rule that took effect May 3.

In a separate action, the agency prescribed new inspection procedures for radioactive and other hazardous-materials shipments to

guard against leakage or spillage of materials in flight. On July 1, requirements for scanning radioactive materials with sensitive monitors prior to loading for shipment and again when the packages were off-loaded were put in force.

Training and inspection activities increased over past years. By

mid-September, 430 FAA field inspectors had completed the 56-hour FAA Academy course on air transportation of hazardous materials. Also, over 5,000 industry representatives had attended the more than 40 seminars conducted on that subject by FAA/DOT throughout the country.

At year's end, FAA was working closely with DOT's new Materials Transportation Bureau to implement the 1974 law. The agency was furnishing technical information and developing proposed rules and procedures to insure continued safety in the transportation of hazardous materials by air.



Boston ARTCC electronics technician Plato "Pat" Patsos gets a buss from wife Josephine on his selection as "Fellow Employee of the Year," the first such award in the region, chosen by 89 AF co-workers.



Air New England became the nation's 29th certificated scheduled domestic airline last year. The firm's president, Joseph C. Whitney, received the operating certificate and a handshake from Flight Standards Div. chief Jack Sain. Others from left are Deputy Director William Crosby; Verne Brown, General Aviation and Air Carrier Branch chief; and John Roach, Boston ACDO chief.

NEW ENGLAND



Carl Gray (right), first tower chief at the Lebanon, N.H., Regional Airport, was interviewed by a radio reporter following the tower dedication last April.



The region's Civil Rights Officer, Herman "Stretch" Wells, addresses a reorganization meeting of the Civil Rights Committee, which now includes 13 members from field facilities throughout the region. Others from the left are Janice Quandt, Women's Program coordinator; Howard McGlauffin, chairman; and David Caldwell, vice chairman.



Last February, the new tower at the T.F. Green Airport in Warwick, R.I., had a somewhat unusual commissioning. State aviation official Albert Tavani couldn't cut the ribbon with the ceremonial scissors, so he obliged by biting it.

Photo by Vet Payne



During a flight-instructor research clinic in Windsor Locks, Conn., Ruth C. Zimmerman was named regional Flight Instructor of the Year for 1974. Shown with her are Regional Director Quentin Taylor (left) and Carl Borchers, New England accident prevention coordinator.

Photo by Mike Ciccarelli

A Fuelish Answer

Color Me Red & White or Black & White

It can and does happen—fueling an aircraft requiring aviation gas with jet fuel, resulting in high operating temperatures, severe detonation and extensive sustained power loss.

To prevent this, the FAA proposed a rule at the end of last May that would require that the exter-

ior surface around all fuel-tank filler openings on an aircraft to be color-coded to identify the appropriate type of fuel. The color code for engines using avgas would be a solid red circle, 12 inches in diameter, bordered with a two-inch white band. For engines using jet fuel, the color code would be a 12-

inch solid black square, bordered with a two-inch white band.

Operation of the aircraft would be prohibited under the proposal, unless the operator determined that his plane had been fueled through a color-coded nozzle that matched the coding on the aircraft. If the fuel nozzle was not appropriately color coded, the pilot would have to make sure in some other way that his aircraft has been fueled properly. The prohibition against operating aircraft not having the right fuel color coding would take effect six months after the effective date of the adopted rule.

Research on Where the Rubber Meets the Road

Last year saw substantial basic research and studies in the airport-pavement research program, which is aimed at revising and updating pavement criteria needed to accommodate the greater weight of modern jet aircraft and the increased traffic at most airports.

One noteworthy product of the program has been the development of a new method of evaluating airport-pavement load-carrying capa-

city. The new method—called non-destructive testing—allows very rapid in-place tests of the entire pavement structure and minimizes the need for digging costly and objectionable holes in the structure. It also reduces delays to air traffic from runway shutdowns.

More than 40 airports were involved in the new method, which was developed jointly with the U.S. Army Corps of Engineers. An ad-

visory circular describing the method will be issued this year.

The results of the completed research and studies for the airport pavement program have been published in more than 13 reports that are available to the public. One advisory circular—"Methods for the Design, Construction and Maintenance of Skid Resistant Airport Pavement Surfaces"—was issued in July.

The Burning Question on Aircraft Cabins

The agency is pursuing a top-priority program to enhance passenger safety in survivable airplane accidents. The most critical problems relate to burning airplane cabin materials, which produce fire,

smoke and toxic gas emission. Practically all materials, both natural and synthetic, emit gases during burning and chemical decomposition, which, if present in sufficient amounts, can be lethal to humans. Fire-retardant additives also can cause materials to emit smoke and toxic gas.

Public comments to an advance NPRM issued in December 1974 on toxic gas emission are still under evaluation. Comments also are being evaluated on an FAA notice issued in mid-February 1975 that

proposes new smoke-emission standards for cabin materials.

In conducting a survey of the smoke-emission characteristics of numerous cabin materials, FAA has found that materials are now available that emit appreciably less smoke than those currently in use. It appears these materials will be available in sufficient quantity and variety to meet reasonable design goals. Still to be determined, however, are the toxic qualities of these materials. That work is going forward.



FAA test pilot Earl Chester (left) and Flight Standards Div. chief Bud Parker discuss the certification of the new Boeing 747SP on the ramp behind them at Seattle's Boeing Field. Chester is the project test pilot for the new aircraft, which is 47 feet shorter than the standard 747.



Tom Tyler, principal operations inspector at the Portland, Ore., GADO, toasts Russian pilots Igor Chkalov (left) and George Baidukov (right) on their retracing the historic 1937 non-stop, single-engine transpolar flight from Moscow to Vancouver, Wash. Chkalov's father, Valery, was pilot on that flight and Baidukov was co-pilot. The Russians made the flight last spring for the dedication of a monument to the original feat.



To learn the complexities of briefing pilots for flights to Alaska, Northwest Region FSS specialists paid a training visit to Darryl Logan (standing), chief of the Yakutat, Alaska, FSS. Seated from left are Bob Hogan, Portland FSS; Don Shogren, Seattle FSS; Jim Hirning, Portland FSS; and Dave Ipsen and Nat Natividad, Seattle FSS.



Dick Henderson, chief of the Portland GADO, watches as pilot Lucy Larfeld finds a nut missing from a flap hinge during a preflight-inspection contest at the region's Third Annual Density Altitude Roundup. Held at the high and hot Sunriver, Ore., airport in August, the three-day flying-safety event drew 225 pilots.



Biennial Reviews Move Along

The agency's formal consultative procedures moved right along in 1975.

The results of FAA's first Biennial Airworthiness Review Conference in 1974 were in evidence last year. From more than 750 regulatory proposals discussed at the conference, nearly 500 were included in eight Notices of Proposed Rule Making (NPRM) aimed at upgrading airworthiness standards. Final rule-making action will be completed within the next few months, ending the first two-year review cycle.

Proposals included in the NPRMs

cover powerplants, equipment deviation lists, aircraft equipment and systems, aircraft flight characteristics and performance, airframes and crashworthiness and certification procedures for aircraft, engines and propellers.

Twelve months later, in December 1975, FAA held its first Biennial Operations Review Conference for updating regulations concerning civil aircraft operations.

More than 900 proposals together with comments were assembled into a series of workbooks for discussions. A series of NPRMs will be issued this year resulting



Central Region division chiefs participate in a Kansas City "listening session" to improve the agency's responsiveness to the needs of the aviation community. From left to right are William Jack Sasser, asst. chief, Airports; Browning Adams, Flight Standards chief; John Hargrave, Airway Facilities chief; Robert I. Gale, Air Traffic chief; and George R. LaCaille, Deputy Director.

from the conference deliberations. Final rule-making is scheduled for early 1977.

Attending to Flight Attendant Needs

During the year, FAA worked to improve the safety and effectiveness of flight attendants with two rulemaking projects and the hiring of a former stewardess to serve as an airline cabin safety specialist.

An advance Notice of Proposed Rule Making (NPRM) was issued to develop flammability standards for flight-attendant uniforms. The second—an NPRM—was aimed at removing hazards posed by their seats to the safety of the flight attendant or passengers.

Flammability tests have shown that these uniforms can readily catch fire and fail to provide protection from heat and flame. Uniforms made of polyester-cotton blends, vinyl and other synthetics were particularly susceptible to small fires and would continue to burn independently. In its advance notice, FAA sought comments from informed fabrics research and manufacturing sources.

Under the second proposal, the intent would be to issue an Airworthiness Directive making the removal of potentially hazardous

seats mandatory, replacing them with seats offering better proximity to emergency exits, communications access, improved view of cabin area and better protection from dislodged galley equipment.

In May, Jeanne Marie Koreltz joined the Flight Standards Service in Washington to fill the newly created job of Air Carrier Cabin Safety Specialist. A recipient of an Annual Air Safety Award from the Stewards and Stewardesses Division of the Air Line Pilots Asso-

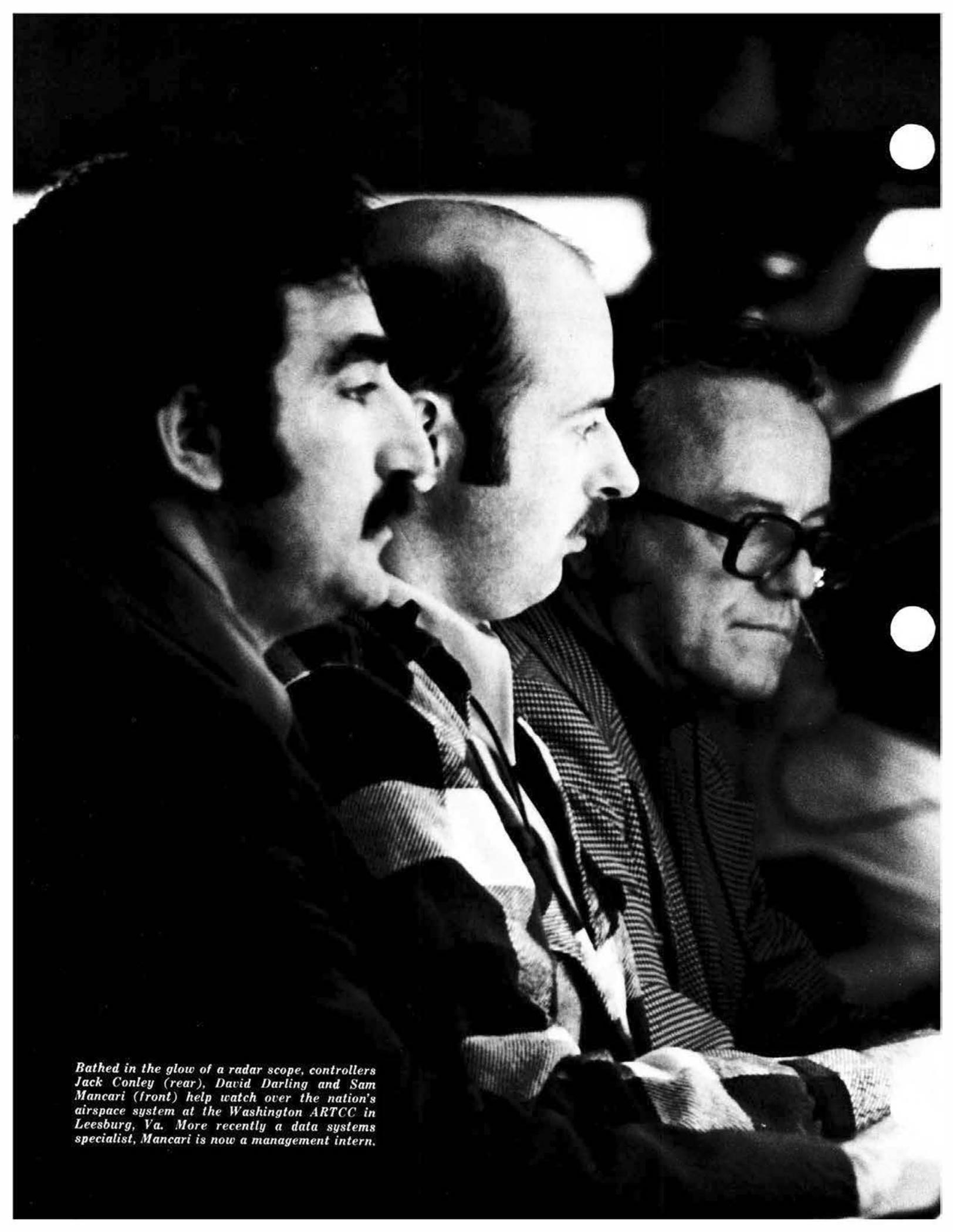
ciation, Koreltz will be responsible for developing closer liaison between FAA and the airline industry to enhance the safety role of flight attendants, particularly in the areas of crashworthiness, survivability and emergency evacuation. She will be concerned with regulations on cabin safety and will assist in the analysis of accidents in which the safety of cabin equipment is involved. Koreltz, a former employee of Hughes Airwest, is a native of Virginia, Minn.

Advisory Group Changes Form

In September, the 10-year-old Women's Advisory Committee on Aviation (WACO) was absorbed and replaced by the Citizen's Advisory Committee on Aviation (CACOA). The purpose of the committee, comprised of private citizens, is to make specific recommendations to the Administrator on improvements needed in

the aviation system, from the viewpoint of users of the system and of individuals who are otherwise affected by it.

Twenty members from WACO with seven new appointees make up CACOA. The members are selected for their outstanding contributions to aviation, business and communities.



Bathed in the glow of a radar scope, controllers Jack Conley (rear), David Darling and Sam Mancari (front) help watch over the nation's airspace system at the Washington ARTCC in Leesburg, Va. More recently a data systems specialist, Mancari is now a management intern.

New Man in the Left Seat



Dr. John L. McLucas took over the helm of FAA in November, succeeding Alexander P. Butterfield, who resigned in March.

Prior to his appointment as FAA Administrator, Dr. McLucas was Secretary of the Air Force from July 1973 and Under Secretary from 1969. Before that, he was president of the MITRE Corp. for three years and was Assistant Secretary General for Scientific Affairs for the North Atlantic Treaty Organization for two years.

During his years at the Pentagon, he established a reputation as

an effective and cost-conscious administrator with expertise in research and development. In addition, he was a force in increasing the number of women in uniform and in opening up improved career opportunities for minorities.

A native of Fayetteville, N.C., Dr. McLucas lives in Falls Church, Va., with his wife Patricia. They have four children. He holds a B.S. from Davidson College in North Carolina, an M.S. in physics from Tulane University and a doctorate in physics with a minor in electrical engineering from Penn State.

FAAers Were Their Co-Pilots

A mob, a crowd, a throng, a horde—how do you describe 4,646 people? Well, regardless of what they are called, that's a lot of human beings—the number who were saved by FAA specialists in 2,877 flight assists during Fiscal Year 1975. To represent the thousands of controllers and FSS personnel involved, four were selected to receive the year's Outstanding Flight Assist Awards.

For their lifesaving feats, Robert A. Hutchings of the Anchorage ARTCC; Toby Cooper, Tri-City Airport Tower, Bristol, Tenn.; Master B. Massey, Phoenix, Ariz., Tower; and John L. Louthan, London, Ky., FSS received their

awards from Administrator John L. McLucas on December 9 in Washington.

Not only did Hutchings guide a disoriented pilot to the landing field but also explained to him how to backfire his engine and maintain power while the plane flew over treacherous Alaskan mountains.

Cooper also had to help a pilot fly his plane while he guided him to safety. The pilot, who had blundered into heavy cloud cover, was not instrument rated, but Cooper was. His precise, knowledgeable instructions reassured the pilot, who ultimately landed the aircraft safely with his wife and

children at a nearby airport.

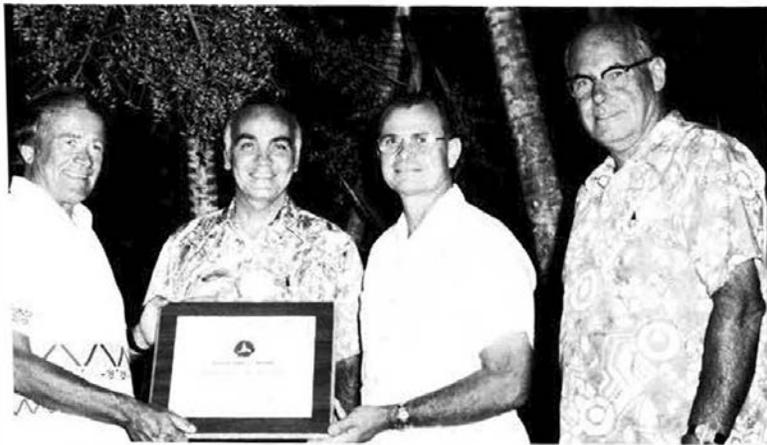
Massey had a different challenge. The pilot he talked to was intent on committing suicide. Massey's job: first dissuade him, then help the distraught pilot fly safely home in the dark. By keeping up a stream of soothing and sympathetic conversation while providing flight assistance, Massey accomplished both.

Visibility was deteriorating and light snow was falling; the plane in the airport landing pattern was being controlled by the enroute center when specialist Louthan suggested he bring the plane in with direction-finding equipment available at the FSS. He took over and gave the pilot exact headings and descent instructions, until the aircraft was less than 400 feet above the ground. From there, the pilot spotted the ground and landed . . . with empty tanks.

PACIFIC- ASIA



The Hawaii Chamber of Commerce's Aeronautical Affairs Committee—a cross-section of the aviation and business communities—held its November meeting at the Honolulu Airport Terminal and got its first look at ARTS III.



In recognition of the Hickam-Wheeler AFB Aero Club's 1974 accident-free flying record, Don Frost (left), chief of the General Aviation Unit in the Honolulu FSDO, presented a Flight Safety Award to two of the club's members. At right is APS Chuck Miller.



Early this summer, the region conducted a clothing drive for Vietnamese refugees on Guam, many of whom had fled with only the clothing on their backs. Here, a bonus item in the form of a stuffed animal from FAA wife Carol Hill evokes a shy smile from an already well-acquainted Vietnamese refugee child living on the island.



Ann Simpson, 1975 Savings Bond Drive chairperson, presented a Treasury Award to Regional Director Jack Webb, regional savings bond chairman, who retired last year, and to Larry Bec (right), regional savings bond coordinator, for the region's 94.6 percent participation. Looking on is Bill Hanifin (left), Hawaii state director of the Savings Bond program.

Kudos for Top Facilities



Western Region Director Robert Stanton (left) shares a grip on the regional award with Max Kelch, Los Angeles ARTCC Sector manager, while Airway Facilities Deputy Director James Bispo holds the national Facility of the Year Award garnered by the Los Angeles ARTCC Sector.

They are Number One in FAA! The agency's top facilities were singled out for their outstanding work during 1974-1975 for Facility of the Year Awards.

The Air Traffic Service made presentations to the Anchorage FSS, the Kansas City ARTCC and the Houston Intercontinental Airport Tower, and a special award to FAA's National Communications Center in Kansas City.

In The Great Land, the Anchorage FSS was cited for its 34 percent increase in flight services in 1974. The Kansas City Center was honored for its leadership role in the implementation of the NAS Radar Data Processing Program. The Houston Tower won its award for outstanding team effort in handling unusually heavy demands for ATC services under less-than-ideal circumstances. The National Communications Center earned its laurels for its efficiency in handling the starting up, maintaining and improving of its automated communications system.

The Airway Facilities Service named two Sectors of the Year for their outstanding performance in Fiscal Year 1975. The Wichita, Kan., AF Sector won the top spot in the general NAS sector category, while the Los Angeles AF Sector was selected in the ARTCC sector category.



Above: Coleman Archer (left), chief of the Southwest Region Systems and Equipment Field Project Group, accepts the national Flight Standards field office Facility of the Year Award from Joseph Ferrarese, Deputy Director of Flight Standards Service, and Henry Newman (right), region director.

Left: The Wichita, Kan., AF Sector won the top award in the general NAS category. Sector manager Roland N. Warden accepts the Facility of the Year Award from Central Region Director C. R. Melugin (right).



Top tower award went to Houston Intercontinental in the Facility of the Year competition. Standing with Air Traffic Service Director Ray Belanger (left) and Southwest Region Director Henry Newman (left to right) Bill Morgan, AT Division chief; Earl Wolfe, tower chief; and Verlin Hemphill, representing the controller workforce.

Four Flight Standards offices that made sizable contributions to the agency's safety mission were picked as the 1974 Flight Standards Field Office Award winners. They were: the Anchorage GADO, the Minneapolis FIFO, the Fort Worth ACDO and the Southwest Region Systems and Equipment Field Project Group (SEFPG). In addition to helping reduce accidents, the Anchorage unit was cited for its active overseeing of the booming aviation activity along the Alaskan pipeline now under construction.



Chief of the Fort Worth ACDO Jack Hudson (left) received his unit's national Flight Standards field office award from Messrs. Ferrarese and Newman.



Film crews worked at the Arapahoe County Airport, Colo., last year, shooting FAA films on the subjects of "Development of an Airport" and "Mountain Flying."



Edward A. Huss (center) of Frontier Airlines received the regional Mechanic of the Year Award from Rocky Mountain Region Director Mervyn M. Martin (right) for his method of detecting fuel tank cracks at an early stage. At left is Frontier Airlines president A. L. Feldman.



Members of the region's "Golden Sentinel Team" continued to present seminars on flying safety and mountain flying all year. Their attendance now after three years totals 11,000. They are (left to right) GADO general operations inspector Bill Williams; Lyndell Gillam, Denver FSS assistant chief; and GADO airworthiness inspector Jim Crouse.



The region's Local Coordinator of the Year was Ken Godsell (center), Billings, Mont., GADO chief, who asked that the honor be shared with Billings Tower chief Robert Grasser (left) and Billings FSS chief Jon Ellsworth.

Denver's Stapleton International Airport was the scene of 15 crash exercises last year. This one had true-to-life acting for more effective simulation. Only weeks later, a real crash tested the skills gained during the exercises.



Single Controller Handbook Debuts

Enroute and terminal controllers will be working out of the same handbook this month. The new Air Traffic Control Handbook, 7110.65, includes information for both the terminal and enroute controllers and eliminates about 300 paragraphs describing identical procedures.

The new book improves controller communication in replacing the terminal handbook, 7110.8, and

the enroute handbook, 7110.9, each of which had its own numbering system. While the consolidated handbook will be slightly larger than either of the older versions, the savings in paper and printing will be considerable: Paper consumption is expected to be reduced by about 10 million sheets in two years, and printing costs for the single volume will be slashed by more than 40 percent.



PMIS Provides a Choice

Aeronautical Center personnel (left to right) Betty Corbin, Parry Friedemann and Marie Willis operate the Personnel Management Information System terminals, handling inquiries from regions on personnel availability.

How Many Technicians To Do the Job?

A new staffing standard that affects more than 10,000 FAAers debuted in 1975.

The new standard provides a better base for determining sector requirements and employs a computerized printout to display required staffing of technicians and sector support personnel in Airway Facilities. It automates the Airway Facilities maintenance budgetary process, eliminating much of

the old handposting requirements.

The joint Airway Facilities/Management Systems project began in 1972. Final work on the standard and publication of an implementing directive is scheduled for this April.

Key personnel involved in the study are Walt Zittle, chief of the Manpower and Training Branch; and team members Bob Carson,

now manager of the Akron, Ohio, Sector, and Don Isaacs—all of Airway Facilities; and Larry Hale, chief of the Management Studies Branch; Milt Etters, project leader; Don Bader, in charge of data collection; and team members Pete Fuller and Bill Miller—all of the Office of Management Systems. Many regional and sector personnel also lent their advice and assistance to the project team.



In cross-familiarization training between Air Traffic and Flight Standards, FS Division chief Gordon Becker (seated) asks questions about the flow control position at the Atlanta Center of Air Traffic Division chief Lonnie Parrish (top) and ARTCC chief Dan Carr, standing behind him.



Balboa, Canal Zone, Area Manager Mel Larsen (left) took over his post last year. Here, he presents a Distinguished Career Service Award to retiring Area Manager Jim Whitmore for a long and outstanding career in aviation and international affairs.



Then Acting Administrator Dow transmitted the NOTAM that commissioned the AWANS facility at the Atlanta FSS in July; then he provided the first comprehensive weather briefing to the first pilot using the new system.



Hugh Sherrill, Southern Region International Aviation Affairs officer, holds consultation with business analyst Mary Jones (left) and visiting Mabel Bartolomé, FAA's international aviation specialist in Buenos Aires and its sole employee there.



The Miami ARTCC's radar data processing system was commissioned in August by then Acting Administrator James Dow for the final link for the 20 domestic ARTCCs. Center chief Grady Carter looks on.



At the construction site of the new Atlanta International Airport Tower last summer, resident engineer Wade Kemper (second from left) briefed contracting officer Steve Wright (center) and contract assistants Susanne Edge (left) and Fran Babb, hardhatted for the occasion.

How Well Are Controllers Performing?

One thing that is needed—both unions and management seem to agree—is a better system to evaluate the on-the-job performance of air traffic control specialists in the agency's towers and centers.

So, a new system has been de-

vised. New procedures for supervisors to measure a controller's performance have been developed by contractors and tested by FAA in the field. The new standardized system, which was to go into effect the first of this year, will be more objective than the old system.

Controllers will be measured on a scale of one to seven in 73 specific areas, all of which are relevant to the safe and efficient flow of air traffic.

The areas in which supervisors must give marks fall into four broad categories: traffic management, operational procedures, communication phraseology and equipment dexterity. A profile sheet, produced for each controller, will indicate if the individual needs additional training in any of these broad fields.

Bootstrapping Careers

Southern Region employees Gary Lisbon, James Alsobrooks, Myra High, Marsha Wheeler, Jennifer Rawsaw, Minnie Rhodes, Patricia Rhodes, Fannie Rhodes, Keven O'Melia, Philip "Dave" Duda and Vera and Robert O'Bryant prepare for final exams last year in the After Hours Higher Education Program, conducted the regional office by DeKalb Community College instructors.



Unions Make News in Three Places

After long negotiations, FAA and the Professional Air Traffic Controllers Organization (ATCO) signed a new two-year labor agreement, replacing the original agreement that was signed

in April 1973. The new pact, which became effective last July, covers more than 15,000 tower and center controllers and includes an improved grievance procedure, more liberal temporary-promotion procedures, expanded employee rights and numerous other articles related to personnel policies and working conditions.

On the FSS side of the house, an October vote by eligible flight service station specialists reaffirmed the National Association of Air Traffic Specialists (NAATS) as the exclusive national representative of some 3,550 FSS special-

ists. During the year, in the midst of negotiations on a new contract with FAA, NAATS was challenged by another union (FASTA/NAGE) for national representation of the specialists.

As the year ended, the Department of Labor was about to decide whether an election should be held for national union representation of Airway Facilities employees, many of whom are represented under local agreements. The National Association of Government Employees (NAGE) petitioned during the year for exclusive national representation.



Last May, Southwest Region Flight Standards with Petroleum Helicopters worked out IFR routes between the Louisiana mainland and off-shore drilling sites by the use of VLF navigation equipment.



A breakthrough in helicopter utility was realized last year when the Southwest Region certificated the Vought Gazelle for IFR flight with a single pilot aboard.



The newly formed House Aviation Subcommittee got a close-up look at FAA when members toured a number of facilities last March, including subcommittee chairman Rep. Glenn Anderson (Calif.), who got the lowdown at a Fort Worth ARTCC position.

Albuquerque, N.M., hosted its third World Hot Air Balloon Championships last October, attracting some 200 balloons worldwide.



As a result of a startlingly realistic airport emergency disaster exercise last year, Dallas-Fort Worth International Airport worked out the kinks in its disaster plan.



Thanks to dozens of impromptu pilot briefings like this one by New Orleans accident prevention specialist Lou Maduell (dark suit) and Houston area coordinator Ansel Winham (with glasses), the New Orleans TCA implementation resulted in only a few unauthorized penetrations in the first three months.



New Faces in EEO Places

On the equal employment opportunity scene, there were several new faces at headquarters. In the Office of Civil Rights, Luis Gonzales became the Spanish-Speaking Coordinator and Louisa

Stimpert took over the job of Federal Women's Program Coordinator. Jan Marshall became chief of the Equal Employment Opportunity Staff in the Office of Personnel and Training.

On the Hill and Elsewhere

The year 1975 began as did this year: health insurance premiums went up. To block their going up still further for both employees and the government, a plan to include dental care was nixed. The Civil Service Commission issued new rules on appeals of health insurance claims. March paychecks reflected an increase in life insurance premiums, and later in the year, Congress refused to boost the government's share of these premiums. Toward year end, there was a bill in Congress' hopper to cut back sick-leave tax exclusions.

A law that took effect as the year got underway permitted the garnisheeing of Federal salaries and annuities for non-payment of alimony and child support, but later in the year, a Federal court made it clear that it did not apply to the collection of other debts.

This past year, the Treasury Department agreed with about 50 cities to withhold city income taxes from Federal paychecks under a 1974 law. The National Treasury

Employees Union went down to defeat twice on its challenge to the constitutionality of taxing retirement contributions at the hands of the U.S. Court of Appeals and the Supreme Court, which refused to hear the case.

The Civil Service Commission began looking into the total pay-comparability picture, while a Presidential panel studied the overall Federal compensation program and reported back on December 1. Both are thinking about including fringe benefits in pay-comparability computations.

Flexible working hours got another push forward with a CSC-backed bill to permit experimentation with flexitime and compressed work schedules, including the four-day week.

Congress changed Veterans Day back to November 11, eliminating the three-day October holiday after 1977.

At this writing, a number of employee bills are awaiting action in Congress. One would permit employees the right to counsel during questioning that could lead to adverse actions. Hatch Act reform to permit partisan political activity by Federal employees was moving well through both houses of Congress. These are bills to provide for Social Security coverage for Fed-

eral employees, to revise annuity cost-of-living raises and to protect incumbents' salaries and grades in downgradings. Considered as having good chances of passage were a bill to reduce service requirements for retaining insurances into retirement after 1980, a bill to restore full annuity to a single retiree when the survivor designee dies first and a bill to restore annual leave to employees wrongfully fired.



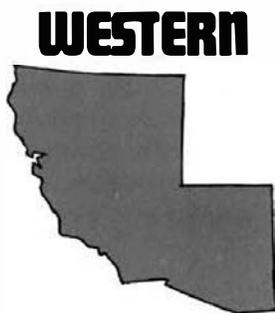


K.O. Eckland began his bicentennial flight at Van Nuys, Calif., in a 28-year-old J-3 Cub that took him 17,000 miles around the country last year over a span of 25 weeks.

For International Women's Year, Western Region headquarters mounted a week-long exhibit in its lobby, including regional women's success stories, photos and interviews.



Prior to its delivery to Oklahoma City, the agency's first Rockwell Sabreliner 75A, built in El Segundo, Calif., was rolled out with ceremony on the ramp of the FAA hangar at Los Angeles Airport.



More than 300 aviation enthusiasts turned out to greet new Western Regional Director Robert Stanton at a dinner last year. Joyce Failing of the Southern California 99s presented him with a framed scroll of a specially composed "Ballad of Robert Stanton."



Director Robert Stanton presented the regional Flight Instructor of the Year award to Colene Giglio, who went on to win the national award last year.

The region's EEO Recruitment Task Force commemorated Afro-American History Week with an exhibit and book display, a TV interview and a choir performance. Some of the participants were (left to right), Ollie Gardner, Shirley James, Elizabeth Dearn, June Harrison, Bob Gray, Helen Hudson, Pricilla Alexander, Gora Compton, Ethel Lawson.

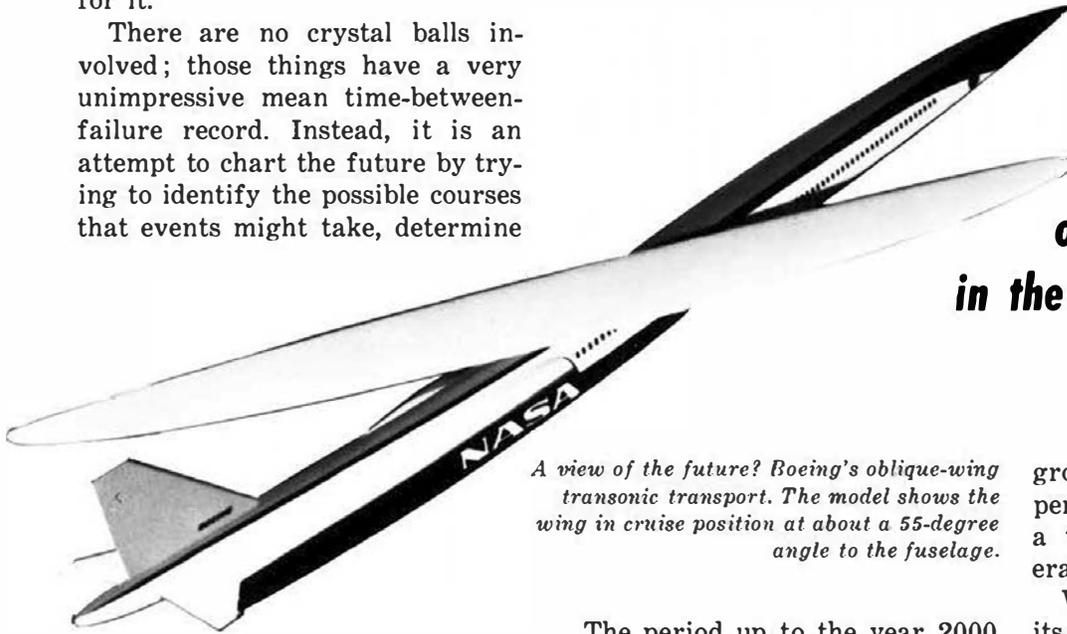


MANY FUTURES

The idea is to insulate the FAA against future shock—to look ahead to what the world might be like as far off as the year 2000, so that the agency can be prepared for it.

There are no crystal balls involved; those things have a very unimpressive mean time-between-failure record. Instead, it is an attempt to chart the future by trying to identify the possible courses that events might take, determine

**We've seen the past;
now FAA examines
our alternative futures
in the next quarter century.**



A view of the future? Boeing's oblique-wing transonic transport. The model shows the wing in cruise position at about a 55-degree angle to the fuselage.

how each would affect aviation and the agency and recommend steps that could be taken in response.

The effort is being directed by Frederick A. Meister, Acting Associate Administrator for Policy Development and Review, who describes it as a three-part process.

"The first is to look ahead to what is going to happen that will affect aviation. The second is to look ahead to where today's policies are going to take us. The third is to try to fit the two together and be able to say, this is where we are going.

"If we can do that, we can be prepared for what happens and not have to react after the fact."

The basic tool in the process is the scenario—a very highly educated guess as to what might happen in the years ahead. But because the guess might not be right, several other scenarios are prepared, with each one setting forth an alternative course of events. A representative scenario that Meister and his staff have developed is the following:

The period up to the year 2000 will be one of expansive growth in which technological achievements will be made through the free-enterprise system. This will result in diminished government controls, as the private sector grows in vitality. It will be a period of high growth in both population and gross national product.

With this will come an increase in aviation activity and an increase in the number and size of airports, plus the establishment of a great number of STOL (Short Takeoff and Landing) airports in urban centers.

And there will be new types of aircraft on the scene—150-passenger STOL jets, twin-engine wide-body jets and a new generation of business jets and turbo-prop general-aviation aircraft.

In turn, all this will call for some way to control wake vortices, a reduction of runway separations and the automation of passenger processing and baggage handling. At the same time, major improvements will be needed in the air traffic control system.

Another scenario envisions a future that is marked by limited

growth. Another deals with a period of medium growth; another, a time of hardship; another, an era of great individual affluence.

Whatever the scenario, each has its own set of implications for aviation and the FAA, and these implications are what Meister and his staff are attempting to identify and define.

The scenarios, however, will not be set in concrete. They will be reviewed continually to make sure that they reflect the reality of what has happened and what is happening.

Then the agency can say: This is the way things are going and can be expected to continue to go. These are the implications for aviation that the FAA will have to deal with, and these are the steps that we should be taking now so we can be prepared.

How soon will the agency be able to do this? Meister said that work on the project began 18 months ago, "and we should be able to begin getting some benefits within six months or a year."

He warned, however, against expecting "a panacea—a wonder machine that will do all our work and worrying for us. It won't make decisions. We still have to do that; but it will, I am convinced, help us to make more timely and more intelligent decisions."

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Specialist Florence Parker takes notes from a pilot at the Chicago FSS, prior to entering questions on a CRT computer terminal to provide a quick briefing. (See story on page 9.)

