



U.S. Department  
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**Federal Aviation  
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# FAA World

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**"F**AA research and operations concerning security are successful. Period." That's how Chris Seher of the FAA Technical Center's Aviation Security Branch began his comments to Congressional staffers and members of the American Association of Airport Executives and the Air Transport Association at a recent meeting.

The Technical Center is making innovative strides in anticipating terrorists and beating them to the punch—or to the blast—in the science of explosives-detection technology, Seher said.

A series of bombing incidents led to the Center's emphasis on explosives detection beginning in the late 1970s: The bombing at New York's LaGuardia Airport terminal that killed 11 and injured 70 in 1975 was the first.

Terrorist-based explosive attacks against civil aviation intensified with the bombing of an Air-India flight from Montreal to London that killed all 329 passengers in June 1985, the explosion aboard a Trans World Airlines flight from Rome to Athens that killed four in April 1986 and the KAL bombing in November 1987 that killed 115.

The Tech Center's Aviation Security Branch has been working to protect the 415 million passengers who fly aboard commercial airliners in the U.S. each year from would-be terrorists. FAA has funded about \$10 million a year in this



## A Dangerous Matching of Wits

By Holly Baker

effort, focusing on research and development for equipment that can detect explosives or weapons that might be secreted aboard an aircraft.

However, the job calls for the FAA to do more than just rely on sophisticated equipment. It involves the application of psychology by FAA and airport personnel—the understanding of how terrorists think, their methods and movements, their demeanor and person-

*A public information specialist at the FAA Technical Center, Ms. Baker's media background includes experience with newspapers, radio and television.*

ality profiles—and learning how to spot terrorists and anticipate what they will do next. It means being one step ahead in a dangerous contest of wits.

"FAA's program is designed to anticipate and neutralize the criminal or terrorist threat by imposing multiple independent obstacles to their use of weapons and explosives," explains Dr. Lyle Malotky, program manager for security research and development in Washington's Office of Civil Aviation Security. "The technology developed coupled with motivated people and appropriate enforcement policies is giving the U.S. a security system second to none."

The Technical Center's security pro-

gram focuses on four areas: bulk-explosives detection, vapor-explosives detection, concourse security and security systems integration.

Developments in bulk-explosives detection have been well publicized. The Aviation Security Branch, for example, is directing the development of a thermal neutron device that scans checked baggage and cargo to detect the compounds common to explosives. The device bombards objects with neutrons, which react with the substance. The gamma rays produced by this reaction are analyzed by a computer, which shows the presence of any explosives. This is an important advance because plastic and other explosives can be molded into innocuous-looking shapes. Two thermal neutron devices have been successfully tested at San Francisco and Los Angeles international airports.

In the past, dogs have worked well in detecting explosives, since every material gives off a distinctive odor. The average dog has 200-220 million olfactory cells (for sense of smell), compared to 500,000 for the average human.

Explosives-vapor technology devices, more popularly known as "mechanical sniffers," are even better than the mam-

*(Continued on page 2)*

### Feeling Fit

#### Buckle Up To Stay Healthy

If you're one of those who still thinks the jury isn't in on the value and importance of automobile seat belts, and you sit on them instead of in them, think again!

The National Transportation Safety Board (NTSB) has found that lap/shoulder seat belts provide substantial protection to front seat occupants in a wide variety of car crashes, reducing serious injuries or the chance of death.

The National Highway Transportation Safety Administration (NHTSA) has reported a preliminary 1987 fatality rate of 2.4 deaths per 100 million miles, down from 2.5 in 1986 and from 3.3 in 1980, which it attributes, despite increased miles driven, to "growing safety belt use and the national resolve to prevent drunk driving."

The 2½-year NTSB investigation was of 167 selected accidents in which the crash was survivable for belted occupants, at least one occupant was wearing a seat belt, the crash was

severe enough to require the car to be towed away and the vehicle was a 1974 or later car, light truck or van.

Eighty percent of the 214 front seat occupants wearing "properly routed" belts sustained only minor or moderate injuries or none at all. In rollovers, the injury-reducing effectiveness of the lap/shoulder belts was particularly striking.

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## Matching Wits continued from page 1



Jennelle Derrickson, a chemist in the Tech Center's Security Branch, works with an explosives vapor-technology device being tested. This mechanical sniffer can sense minute traces of vapor emitted by plastic compounds and explosives.

malian noses, sensing minute traces of vapor emitted by explosive compounds. The devices are capable of detecting a vapor of one part per trillion parts of air. A vapor-detection system developed under FAA-funded research is being tested at the Technical Center.

Because plastic explosives can be molded into different forms and even fabricated into clothing, making them very difficult to detect, and because these sniffers are non-irradiating, a vapor-detection system will be tested this year in a walk-through screening portal for use on passengers and carry-on bags.

The systems that Center specialists are investigating go far beyond the large door-frame-type metal detectors familiar to most airline passengers before boarding an aircraft, although the agency is continuing to seek improvements in design and signal processing in metal-detector technology. Since 1973, screening of passengers and luggage with

metal detectors and conventional X-ray imaging units have proven highly effective in detecting handguns, knives and the Glock 17, the misnamed "plastic" handgun, which contains a considerable amount of steel.

"This technology," says Raymond Salazar, director of the Office of Civil Aviation Security, "permits the thorough, rapid and courteous screening of all these people. It preserves the passengers' human dignity while it helps prevent criminal acts."

The FAA is investigating methods of upgrading existing concourse detection systems by enhancing the discrimination capability of present metal detectors and by adding automated pattern recognition modules to X-ray imaging machines. This will be needed for when handguns are developed that are primarily plastic or ceramic.

The Center is focusing its concourse research on an infrared detection system that would scan an individual with harmless rays below the visible light spectrum. The rays would detect anything abnormal or different from the "normal" body image. Yet the system might look like current walk-through metal detectors.

Checked and carry-on luggage and cargo present a different set of circumstances in weapons detection. With current X-ray machines that scan baggage passing on a conveyor belt, operators can recognize obvious patterns, such as guns, grenades or timing and detonation devices. Since people monitor the X-ray screens, human error is a factor.

Scientists and engineers are looking at ways not only to improve X-ray machines but to enhance operator ability to interface with the machines. Along with training programs to stress operator alertness, the Aviation Security Branch is looking at computer software that could be programmed to warn the operator to take a closer look.

They are working on automated enhancement of the system for checking carry-on baggage so computers can highlight anything unusually dense and reduce the element of human error. And a new "dual-energy" X-ray would scan baggage and cargo with twin beams,



Dogs have been used to sniff out explosives in baggage and aircraft stowage areas, but technology is supplanting them.

each with a different energy level, to give the operator a much clearer picture of an object's composition and density.

Also being looked at for baggage inspection are sonic and microwave technologies.

Airports use television cameras for overall surveillance to reduce the possibility of outsiders with weapons and explosives gaining access to aircraft. In this area, the Technical Center also is investigating advanced heat, pressure and motion sensors to enhance existing systems.

A major overall thrust of research is in security systems integration. When new systems are developed for the air-



Electronics engineer Chris Seher of the Tech Center explains the thermal neutron-radiation device to Administrator McArrior (right) during demonstrations at San Francisco Airport.

port terminal, where should they be installed for most efficient utilization? How should they be integrated?

An example of security systems integration is the baggage-reconciliation system implemented by air carriers in December for all international flights.

The purpose of this system is to establish and maintain a link between a passenger and his baggage from initial boarding to final arrival. The branch is working on a more efficient computer-



X-raying carry-on baggage remains an effective method of weapon and explosives detection, but image enhancements are planned, which include dual-energy x-ray and automated pattern-recognition.

ized method of reconciliation to speed up the process.

There are simpler methods that work, too, at times. But although tedious hand-inspection is effective, it is hardly practical for managing the huge and growing aviation industry.

"FAA is continuing the search for new concepts and technologies," says Dr. Malotky. "The answers will result in explosives- and weapons-detection systems that are more effective, less complex and less costly than those we have now." ■

## FAA World

May 1988

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## Be a Sport!

Now that the exertions on the ski slopes under the aegis of the Denver ARTCC are over, the Seattle Center wants to keep you fit and happy during the warmer weather: It's launching the FAA National Golf and Tennis Championships.

If you are a full-time FAA employee and want to participate in the tournaments June 5-9, you'll get a chance to look over the new Center for Management Development as well, for the tournaments will be held in Palm Coast, Florida, near Daytona Beach.

The facilities for the events will



include the Palm Coast Players Club, Matanzas Woods Golf Course, Pine Lakes Golf Course, Palm Harbor Golf Course, Sunspot Beach Club and tournament headquarters at the Sheraton Palm Coast Resort Hotel.

There will be a three-round golf tournament with men's and women's divisions with low-net, low-gross and

Calloway handicap. The tennis tournament will be in a round-robin format with men's and women's open singles and doubles and men's and women's 45-and-over singles and doubles. In addition, there will be a beach party/clambake, a banquet and various events for non-playing spouses.

You have to act fast, for the golf tournament will be limited to 144 players and the tennis to 100 players.

The golf tournament fee will be \$95, which includes the three 18-hole rounds' greens fees and carts, a tournament visor for each participant and prizes and other tournament costs.

The tennis fee is \$60 and includes all court fees, prizes, trophies, balls, a tournament T-shirt and other tournament costs.

The Sheraton Palm Coast Resort is \$60 a night single or double occupancy and includes a welcoming cocktail party; the beach party is \$28 a person and includes food, beverages, tax, tip, games and prizes; the awards banquet is \$25 a person including tax and tip.

Reservations and inquiries should be directed to:

Jim Vidamour, Tournament Director  
Sunspot Recreation  
1 Corporate  
Palm Coast, FL 32051

1-800-874-1828 ■

The first joint labor-management Employee Involvement (E-I) Program in FAA history has been agreed to by FAA management and the Professional Airway Systems Specialists (PASS), the union representing Airway Facilities maintenance engineers and technicians.

The new national program follows a successful 18-month pilot effort launched in June of 1985 in the FAA's seven-state Eastern Region. FAA and the union will implement the program in the FAA's other eight geographical regions over the next five years.

FAA Airway Facilities employees are responsible for keeping the national airway system's complex radars, navigation aids and guidance systems working. Their jobs are becoming more demanding as 1950s vacuum-tube equipment is replaced by solid-state digital electronics. As a result, technicians are often responsible for an array of different vintages of equipment at a single facility.

The pilot program involved Airway Facilities Sector Field Offices (SFOs) at Baltimore and the New York Terminal Radar Control (TRACON). Baltimore represented a small SFO (20 employees) and the TRACON a large one (57 employees).

As it is being put into practice in the FAA, Employee Involvement depends on third-party intervention and can only take place in a plant or organization where labor unions are an established fact of life. It is usually sought where adversarial relations between labor and management have brought about a serious breakdown in communications that deteriorates joint problem-solving.

Trying out the E-I idea grew in the aftermath of the air traffic controllers' strike. PASS was in the process of being certified at the time of the strike by the Professional Air Traffic Controllers Organization (PATCO). Although it shared many of the PATCO views, it was procedurally unable to honor the controllers' strike. This enabled non-striking controllers and air traffic control supervisors, with help from military controllers, to keep the national airway system operating. Striking controllers were fired and their union disbanded.

Said Del Balzo: "We were cautious not to expect too much because we knew it would not be easy. Both sides knew they would have to learn new ways of thinking about each other and working with each other."

National PASS President Howard Johannessen said, "We were sufficiently



The Eastern Region Joint Steering Committee at the beginning of the year included (left to right) Eli Greenblatt, Mike Rock, Al Lee, Al Sciscione, Arnold Aquilano (now at Headquarters), Gary Herline (Dolan Associates), Charles Hoch (Aquilano's replacement), Theron Purdie, Herb Ross, Mike Fanfalone, Larry Henry and (seated) Abby Moserowitz and Kathy Wiseman (Dolan Associates). Its composition changed as additional Eastern Region sector offices joined the Employee Involvement Program.

## The New Wave: Employee Involvement

By Duncan B. Pardue

Studies after the strike recommended that the agency change its labor-management practices. FAA regions were encouraged to try out new concepts and programs. Eastern Region Director Joseph Del Balzo learned of successful E-I efforts at Ford Motor Company that had been facilitated by W.P. Dolan & Associates, a consulting firm. At one plant, strife-ridden labor-management problems resulted in defective automobiles. After an E-I program was put in place, the plant became touted as having the best quality control in the auto industry.

The Dolan firm facilitated a visit to the FORD plant by FAA and PASS representatives. Both sides studied the program carefully and visited other private sector E-I sites over the next several months. They agreed that the E-I program might possibly work in the FAA.

encouraged to agree to try it experimentally at a few locations with the understanding that the trials would not alter our overall position on employee participation."

Although the pilot program was an Eastern Region initiative and the test sites were in the region, it had the endorsement and involvement at the national level of both FAA and PASS. A National Joint Steering Committee made up of equal numbers of FAA and PASS people was formed. The Dolan firm was contracted to implement the program at the two sites.

Dolan explained that the primary objective of E-I is to help participants solve problems better. It is based on four specific assumptions about human nature and behavior:

- Everybody knows his or her own job best.

Said Del Balzo: "We were cautious not to expect too much because we knew it would not be easy. Both sides knew they would have to learn new ways of thinking about each other and working with each other."

National PASS President Howard Johannessen said, "We were sufficiently

- For solving problems, two heads are better than one.

- When people feel controlled, excluded or ignored, they resist.

- When people feel influential, included and credible, they cooperate, join in and initiate activities.

The start-up process at the Baltimore and New York TRACON SFOs involved several fundamental steps. Step one was management-union agreement at the sites to "try" an E-I program. The next step was joint management-



Discussing and flow-charting the steps in Employee Involvement implementation are Eli Greenblatt (left) and Michael Fanfalone.

union steering committees with an equal number of members from each side. The committees had to agree on the sites' actual problems, the desired results of the program and their next steps.

The critical subsequent step was an analysis by the third-party consultants. This was based on research, interviews and surveys to get both objective information and management and union subjective points of view on all past occurrences that had led up to the present situation. This often involved, as one participant observed, "discussing the undiscussable."



Getting down to specifics are members of one of the New York TRACON's three problem-solving work groups (clockwise from the foreground): Henry Vasquez, Tom Savage, Charles Bradley, Ferdinand Allen, Tom Marcinek, Leon Goehrer, Ray LeVelle, Rudy Perez, and (partially hidden) Gary Herline of Dolan Associates.

Each facility's steering committee was then trained in how to function as a committee, how to go about problem-solving and how to improve communications.

The steering committees then presented the E-I program to the work force. Employees were asked to volunteer to participate. Problem-solving work groups, including both supervisors and line employees, were then formed and trained in how to find solutions to agreed-upon workplace problems.

Although union and management now strongly support E-I, both sides acknowledge having had doubts at the beginning that the program was going to work.

"I felt initially it was not something we needed at the TRACON, since our

facility had just won national SFO of the year," said New York TRACON SFO Manager Al Lee. "But after I visited the Ford Plant and had discussions with the Dolan people, I realized we had serious communication problems: supervisors with each other and supervisors with employees. Like the Ford employees on the assembly line who weren't allowed to give input on the product they were making, our technicians weren't being allowed to give us the value of their expertise."

Eli Greenblatt, the New York TRACON PASS representative, also was skeptical. "I felt the Ford situation

timore believe E-I is an excellent idea. Said SFO Manager Calvin Fischer, "It is a unique process. In the past, we have trained managers and supervisors separately but never before considered giving employees similar training in how to work together."

Baltimore PASS representative Julian Vinck said, "When Baltimore was given the opportunity to volunteer for E-I, we had so many problems that anything would have been an improvement. E-I can teach us to listen to the other person. If it does nothing more than improve communications, knowing that we can talk makes things better than they were before. It takes a third party to change the way people deal with each other when they may have had animosity toward each other for years."

Both union and FAA upper management participants in the pilot program are equally pleased and see E-I as turning often adversarial contract negotiations into cooperative efforts.

"Although we may not be able to eliminate totally the adversarial atmosphere," said former Eastern Region Deputy Director Arnold Aquilano. "I foresee E-I generating in the long run an atmosphere of trust where we can sit down together and come up with solutions. Both parties would rec-

ognize each other's shortcomings and work in an open collaborative way."

Aquilano, a member of the initial National Steering Committee, was recently promoted to director of the Systems Maintenance Service at FAA Headquarters. One of his major responsibilities will be helping get E-I started throughout FAA's Airway Facilities organizations.

PASS Region One Vice President Warren Zentz, also a member of the National Steering Committee, said of the pilot program: "Both sides learned to respect and trust each other through various crises. If E-I has made any advances, it is because of the crisis level of the issues handled. In fact, the program thrives on crises."

"E-I will need strong but flexible union representatives. They have to be true leaders—willing to take some risks and to trust others. They will not fit the stereotype of the 1950s union leaders," he added.

Both sides apparently recognize that a joint focus on their problems is the wave of the future. ■

### Involvement Program Leaders

The leadership of the expanding Employee Involvement Program now includes:

#### National Joint Steering Committee

Union: Howard Johannessen, president, PASS; Mark Schneider, executive president, PASS; Larry Sump, regional vice president, PASS; Warren Zentz, regional vice president, PASS; Henry Mullins, regional vice president, PASS.

Management: Arnold Aquilano, director, Systems Maintenance Service; Hugh McLure, Associate Administrator for Human Resource Management; Joseph Noonan, director, Office of Labor and Employee Relations; Edwin S. Harris, Jr., Associate Administrator for Development and Logistics; and Paul K. Bohr, director, Central Region.

Coordinators: Michael Fanfalone, for the union; and Albert Sciscione, for FAA management.

#### Eastern Region Joint Steering Committee

Union: Warren Zentz, Gordon L. Henry, electronics technician, Norfolk, Va.; Airway Facilities Sector Field Office (AFSFO); Eli Greenblatt, electronics technician, New York TRACON AFSFO; Dennis Shannon, electronics technician, Washington ARTCC AFSFO; and Theron Purdie, electronics technician, New York ARTCC AFSFO.

Management: Charles J. Hoch, manager, Airway Facilities Division; Dan Petersen, Deputy Region Director; Sheldon J. Gross, manager, Human Resources Division; Al Lee, manager, New York TRACON AFSFO; James Ricketts, unit supervisor, AFSFO, Greater Pittsburgh International Airport tower; and Abby Moserowitz, acting program manager, Employee Involvement Staff.

Coordinators: Michael Fanfalone, for the union; and Albert Sciscione, for FAA management.

# Top Airway Facilities Are Neighbors

## Dakota Airway Facilities Sector

For the first time since 1979, the two winners of the national Airway Facilities Sector of the Year awards for 1987 were from the same region. Taking top honors were the Dakota AF Sector and the Indianapolis ARTCC AF Sector.

"The Indianapolis sector has done an outstanding job of reducing costs this past fiscal year," the Great Lakes Region's nomination stated. "Their sector programs reflect a total realized or potential savings of \$1,037,960."

The center's achievements also included all new equipment modifications made within six months, all critical test equipment calibrated on schedule and nearly 99 percent of required preventive maintenance completed on schedule. This is accomplished despite having to work in scheduled downtime while 12 major overnight freight companies ply the area's skies around the clock.

The ARTCC sector's staff is comprised of 99 employees responsible for 96 facilities in seven states.



Recording an outage call is Aimee Miller, secretary at the Bismarck Sector Field Area Office of the Dakota AFS.

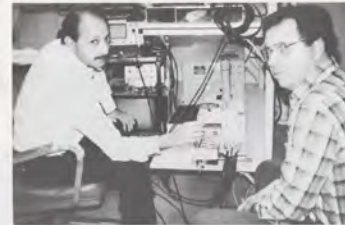
Although tight fiscal programs have been in place for several years, the Dakota sector, winner in the General NAS Sector category, was "far and away the most fiscally efficient sector in the Great Lakes Region." Savings were mainly in the areas of training, F&E projects accomplished by local personnel and careful monitoring and use of building and utility contracts.



Electronics technician Larry Withler checks equipment at the Watford City, N.D., SFO.



Electronics technician Robert Umsted checks long-range radar equipment at the Gettysburg, S.D., Sector Field Office.



Proficiency development specialist Ron Tucker (right) from the sector office checks relief electronics technician Rick Damian on BRITE TV at the Sioux Falls, S.D., SFO.



Discussing an equipment cabinet at the Tyler, Minn., SFO are (from the left) electronics technician Dan Schmidt, SFO manager Gudmund Broin, electronics technicians Jon Bloom and Gary Hager and developmental electronics technician Gary Wozniak.



Bob White (left), Bismarck NavRad/Comm Unit and Forrest Phelps of the Environmental Support Unit discuss their schedules.



Pausing in his work on ICSS equipment at the Rapid City, S.D., Sector Field Office is electronics technician Larry Burkhead.



Surrounded by patch cords as they check equipment at the Finlay, N.D., Sector Field Office are (from the left) electronics technicians Sven Mickels; Curt Wisson, field office manager; and Paul Beland.



Electronics technician Steve Wegener, Pierre, S.D., Detached Staff, checks VORTAC data at a remote monitor control facility.



Vicki Flagg, administrative officer, is one of the women employees at sector headquarters. Others include Lupe Wertz, sector secretary; Patricia Bertsch, program support secretary; Linda Schuh, technical support secretary; Lois Flick, logistics management specialist; Margaret DeCoteau, supply technician; and student aid Dawn Doll.

The regional nomination said, "The Dakota Sector continues to rank among the top sectors in overall reliability percentage in spite of the vast and varying geographical area, severe environmental conditions and rapidly changing weather systems."

Headquartered in Bismarck, N.D., the Dakota sector is the second largest general NAS sector in the contiguous U.S., covering 156,000 square miles. Its 107 staffers service 649 facilities, traveling well over a quarter of a million miles by car because of a lack of air service among sector locations. Regional winners in the General NAS category were Bangor, Maine; Dallas/Fort Worth; Des Moines, Iowa; Memphis, Tenn.; North Alaska in Fairbanks; Pittsburgh, Pa.; Sacramento, Calif.; and Salt Lake City, Utah.

Regional winners in the ARTCC category were Albuquerque, N.M.; Jacksonville, Fla.; Los Angeles; New York; and Seattle, Wash. ■



Checking voltages on his equipment at the Fargo, N.D., Sector Field Office is maintenance mechanic Robert Davis.



Donald Marlette, maintenance mechanic foreman at the Haron, S.D., SFO's Environmental Support Unit, works on the MALSR flasher (approach lighting) at the Aberdeen, S.D., Airport.



At the Grand Forks, N.D., Sector Field Office are maintenance mechanic Raymond Neuhallen (left) and electronics technicians Mary Wright & Joseph Pedeliski.



Performing maintenance at the Minot, N.D., Sector Field Office are electronics technicians Harley Trautman (left) and Dave Dunsmoor.

This article was prepared with the assistance of Arthur Hendrickson, manager, Performance Analysis Program, Maintenance Engineering Division, Systems Maintenance Service.



Shane Hagerott is an electronics engineer in sector headquarters' technical support office.

(Continued)

## Indianapolis ARTCC AF Sector



National Airspace System (NAS) managers Eston Shipley (standing, center) and Billy Stephens (right) coordinate facilities shutdowns at the Indianapolis ARTCC with the help of NAS specialists Richard Sitzman (left) and Joseph Kramer.



ARTCC sector administrative officer Marilyn Gray (left) and program support secretary Sheliah Kinnaman check travel procedures.



Environmental Support Unit (ESU) supervisor Harold Akers (center) and ESU technicians Ralph Godhigh (left) and John Dingman discuss a printout from the Indianapolis ARTCC's Centrally Controlled Monitoring Station environmental monitoring computer.



System performance specialist Arlene Chmielewski instructs assistant manager for system performance Mike Shannon (left) and system performance specialists Robert Ferguson (right) and Ronald Mitscher on the center's Host Computer operating procedures.



Inter-Facility Data Unit technician Richard Garmay coordinates trouble calls concerning communications equipment.



Sector manager Rob Strong (right) presents a Superior Achievement Award for Maintenance Goal Accomplishment to Flight Data Processing (FDP) Unit supervisor James Graves (second from left) and FDP technicians Lee Catt (left) and William Hall.



Inter-Facility Data Unit technician Joel Terwin (center) inspects new Back-Up Emergency Communications positions that were installed by Facilities & Equipment (F&E) technician Dean Bradford (left) and F&E supervisor Mel Maxey.



RADAR Data Processing Unit technicians Robert Harpe (left) and Antonio Cazares repair a computer display channel PVD.

ARTCC photos by Tom Burks

## A New Family in the Fleet



One of the agency's 19 new Beech Super King Airs to be added to the flight inspection fleet.

Last month, the first Beech Super King Air 300 FAA flight inspection aircraft was rolled off the assembly line in Wichita, Kan., in ceremonies attended by Administrator Allan McArtor.

It is one of 19 such aircraft being purchased by the agency under a \$59 million contract that will augment the FAA's diverse flight inspection fleet used to check airway facilities. The aircraft will be based at Oklahoma City; Sacramento, Calif.; Battle Creek, Mich.; Atlanta, Ga.; and Atlantic City, N.J.

Equipped with an onboard Automatic Flight Inspection System, an auxiliary power unit and supplemental air conditioning to ensure a constant environment for the instrumentation, the Super King Air 300 will accommodate a fleet inspection technician, one passenger or observer and a crew of two.

The fastest of the King Air family of turboprops, the Super King Air 300 is powered by twin Pratt and Whitney PT6A-60A turbine engines. It has a top speed of 365 m.p.h., a ceiling of 35,000 feet and a maximum range of 2,255 statute miles. ■



Demonstrating the flight inspection console aboard a new agency Beech Super King Air is Joe Brown, flight test and maintenance support system supervisor in the Quality Control Branch of the Aviation Standards National Field Office. Photo by Joan Hunter

Feeling Fit *continued from page 1*

resulting in only minor injuries even in 360-degree overturns.

Correctly worn lap/shoulder belts also provide good protection to both a pregnant woman and her unborn child.

Unfortunately, as much as 25 percent of seat belts are misused, NTSB noted from its study and those of NHTSA and the Insurance Institute for Highway Safety. The most-common misuse is excessive slack in the shoulder belt, followed by misrouting of the shoulder belt under the arm or around the back, frequently with children, or having the seat reclined. The board noted that, contrary to popular opinion, excess slack is not taken up during the progress of a crash, allowing the body to move that much farther.

NTSBA estimates that the use of seat belts has resulted in 8,035 lives saved and 95,500 injuries prevented in the last five years. It says that about 1,350 lives were saved in 1987 alone by state mandatory seat belt laws, and we all know how much those laws are honored in the breach.

Use the seat belts; insist that your friends and family use them; and don't allow children to stand up or roam around the rear of the car to become projectiles during a crash. Be smart: stay fit in an accident by buckling up. ■

## FAA's Eye to the Future



Gene Mercer, manager of the Forecast Branch, Planning Analysis Division, Office of Aviation Policy and Plans, didn't foresee that he would receive the Administrator's Medal and Award for Superior Achievement at the 13th Annual Aviation Forecast Conference, which he had organized. He was recognized for his "extraordinary professional expertise and tireless efforts in organizing and conducting" all 13 conferences. Mercer has been predicting aviation's future at FAA for 17 years and before that with the airlines.

# People

## Aeronautical Center

- **Nelda M. Conway**, supervisor, Electronic Cataloging Section, Cataloging Branch, FAA Depot.
- **Dorothy J. Flesman**, unit supervisor, Operations Section, Supply Management Branch, FAA Depot.
- **William T. Keenan**, supervisor, Quality Assurance Staff, Air Traffic Branch, FAA Academy.
- **Charles E. Robinson**, unit supervisor, Electro-Mechanical Production Section, Engineering and Production Branch, FAA Depot, promotion made permanent.
- **Debra L. Turner**, supervisor, Coast Guard Payroll Section, Payroll Branch, Accounting Div., promotion made permanent.

## Alaskan Region

- **Larry H. Bevil**, manager, Maintenance Branch, Airway Facilities Division, from headquarters' Systems Maintenance Service.
- **Ludell Hatchings**, unit supervisor, South Alaska Airway Facilities Section, in Cold Bay, from the Billings, Mont., AFS.
- **David R. Palmer**, assistant manager, military operations/plans & programs, Anchorage ARTCC.
- **Michael P. Pumphrey**, area manager, Anchorage ARTCC.
- **Joseph Rollins II**, assistant manager, air-space and procedures, Anchorage ARTCC.

## Central Region

- **Robert G. Aguilar**, supervisor, Radar/Navigation Electronics Engineering Section, Establishment Engineering Branch, Airway Facilities Division.
- **Robert C. Baird**, assistant manager, Columbus, Neb., Automated Flight Service Station, from the Fort Dodge, Iowa, AFSS.
- **James D. Bracken**, assistant manager, traffic management, Kansas City ARTCC.
- **Michael J. Brown**, assistant manager, Kansas City ARTCC.
- **Claudia M. Brumbaugh**, manager, Lincoln, Neb., Tower, from St. Paul, Minn.
- **Larry D. Gray**, assistant manager, St. Louis, Mo., Tower.
- **Miles L. Homelvig**, assistant manager, St. Louis AFSS, from Columbus, Neb., AFSS.
- **Teddy S. McAnally**, aviation safety inspector, Kansas City, Mo., Flight Standards District Office.
- **Edward S. Prime**, area supervisor, Columbus AFSS, from Cedar Rapids, Iowa.
- **Terrill L. Schumburg**, manager, Waterloo, Iowa, Tower, from Dulles Tower.
- **Joseph H. Salkoff**, supervisor, Regulations Section, Standards Office, Aircraft Certification Division.

## Eastern Region

- **James S. Cook**, manager, Utica, N.Y., Tower, from the Syracuse, N.Y., Tower.
- **Patrick T. Corkery**, manager, Morristown, N.J., Airway Facilities Sector Field Office, Tri-State AF Sector.
- **George W. Dabrowski**, area supervisor, Washington ARTCC, from the Office of Air Traffic Evaluations & Analysis.
- **Alan L. Gershon**, manager, Evaluation Staff, AF Div., promotion made permanent.
- **Floyd F. Jackson, Jr.**, manager, Oceana AF Sector Field Office, Virginia Beach, Va., Norfolk AF Sector, promotion made permanent.
- **Gary M. Kavanagh**, assistant manager, Buffalo, N.Y., Tower, from the Teterboro, N.J., Tower.
- **Rolf A. Kettenberg**, assistant manager, traffic management, Washington ARTCC.
- **Kevin R. Larkin**, manager, Elmira, N.Y., Flight Service Station, from the Williamsport, Pa., Automated FSS.
- **Frank E. Legdon**, area supervisor, Altoona, Pa., AFSS, promotion made permanent.
- **James R. Morgan**, area supervisor, Atlantic City, N.J., Tower, promotion made permanent.
- **Charles H. Moyer**, area supervisor, Washington Dulles International Airport Tower, promotion made permanent.
- **Charles H. Moyer**, area supervisor, Washington Dulles International Airport Tower, promotion made permanent.
- **Bruce E. Sarnoff**, supervisor, Operations Section, Program and Planning Branch, AF Div., from the Empire AF Sector.

## Great Lakes Region

- **Timothy J. Bailey**, area manager, Lansing, Mich., Automated Flight Service Station.
- **David A. Beam**, area supervisor, Cleveland, Ohio, ARTCC.
- **Harold N. Beeler**, area manager, Cleveland ARTCC.
- **Thomas H. Couch**, environmental support engineering technician, Chicago Airway Facilities Sector.
- **Harold G. Hale**, manager, Airspace Branch, Air Traffic Division, from the Indianapolis, Ind., ARTCC.
- **James J. Heinen**, supervisor, Technical Standards Section, Maintenance Operations Branch, AF Division, from headquarters' Program Engineering Service.
- **Wayne F. Holland**, area supervisor, Chicago ARTCC.
- **Harold J. Holtznagel**, unit supervisor, Dakota AF Sector, Bismarck, N.D., promotion made permanent.
- **Mary A. Jackson**, area supervisor, Lansing AFSS.

## Northwest Mountain Region

- **Chester F. Lament**, assistant manager, Cleveland ARTCC AFS, from Ohio AFS.
- **Ramon H. Luedtke**, area supervisor, Green Bay, Wis., AFSS, promotion made permanent.
- **David P. Machala**, assistant manager for technical support, Ohio AF Sector, Cleveland.
- **Richard P. May**, unit supervisor, DuPage County Airport AF Sector Field Office, Chicago AF Sector, from AF Div.
- **John W. Metcalf, Jr.**, area supervisor, Lansing AFSS.
- **Joe M. Monroe**, unit supervisor, Mansfield, Ohio, AF Sector Field Office, Ohio AF Sector, Cleveland.
- **John P. Onken**, area supervisor, Springfield, Ill., Tower.
- **Ronald L. Pearson**, watch supervisor, Minnesota AF Sector, Minneapolis, promotion made permanent.
- **David A. Senechal**, area supervisor, Bismarck Tower.
- **Edward W. Symons**, area supervisor, Kankakee, Ill., AFSS, promotion made permanent.
- **Chester B. Vile**, area supervisor, Detroit (Mich.) Metro Tower, promotion made permanent.
- **Jimmie H. Ware**, manager, Akron-Canton, Ohio, Tower, from Indianapolis.
- **Barbara A. Williams**, area manager, Cleveland ARTCC.

## New England Region

- **Steven L. Anderson**, area supervisor, Hyannis, Mass., Tower, from Boston.
- **Walter Claxton**, manager, Portland, Maine, Tower.
- **Alan J. Costa**, manager, Nantucket, Mass., Tower.
- **James W. Frascione**, supervisor, Technical Standards Section, Maintenance Operations Branch, Airway Facilities Division, promotion made permanent.
- **Raymond W. German**, manager, Manchester, N.H., Tower, from AT Division.
- **Charles E. Keegan**, area supervisor, Boston ARTCC, promotion made permanent.
- **George W. Langdon**, manager, Westfield, Mass., Tower, from Windsor Locks, Conn.
- **Matthew J. Shwa**, supervisor, Operations Standards Section, Maintenance Operations Branch, AF Div., from Boston AFS.
- **Beth A. Soverino**, area supervisor, Norwood, Mass., Tower, promotion made permanent.
- **Charles M. Taylor**, assistant manager, Manchester Tower.
- **Kermit L. Wieselquist**, manager, Windsor Locks AF Sector, from AF Division.

## Northwest Mountain Region

- **Richard L. Adams**, group supervisor, Radar/Automation Installation Engineering Section, Establishment Branch, Airway Facilities Div., promotion made permanent.
- **Charles B. Basson**, unit supervisor, Denver, Colo., AF Sector.
- **Timothy W. Berrow**, manager, Helena, Mont., Tower, from the Air Traffic Div.
- **Lionie K. Boone**, area supervisor, Denver Tower, promotion made permanent.
- **David W. Cain**, manager, Seattle, Wash., AF Sector, from the AF Division.
- **Donald G. Connes**, manager, Portland, Ore., AF Sector, from Seattle AF Sector.
- **Frank A. Cristoforo**, area supervisor, Seattle ARTCC.
- **Garland R. Davis**, unit supervisor, Denver AF Sector.
- **James M. Feehey**, area supervisor, Portland Tower, from Foshtello, Idaho.
- **William J. Levisay**, manager, Colorado Springs, Colo., Tower, from the Austin, Texas, Tower.
- **James L. Mondt**, area supervisor, Seattle ARTCC, promotion made permanent.
- **Harvey D. Myers**, manager, Program and Planning Branch, AF Div., from Portland.
- **Buell C. Shaffer**, manager, Pueblo, Colo., Tower, from Colorado Springs.
- **Bobby G. Stone**, area supervisor, McMinnville, Ore., Automated Flight Service Station, from Akron, Colo., FSS.

## Southern Region

- **Drexley C. Barksdale**, assistant manager, traffic management, Atlanta, Ga., ARTCC.
- **Robert A. Barry**, area supervisor, Orlando, Fla., Tower, from Fort Lauderdale.
- **Oscar E. Branch**, area supervisor, Mobile, Ala., Tower, from Atlanta Tower.
- **John J. Byrnes**, assistant manager, air-space and procedures, Atlanta ARTCC.
- **Steven H. Conklin**, unit supervisor, Fort Lauderdale Airway Facilities Sector Field Office, Miami, Fla., Hub AF Sector, promotion made permanent.
- **John K. Corpening**, supervisor, Radar/Automation Section, Maintenance Program Branch, AF Division.
- **Billie B. Cox**, assistant manager for training, Atlanta International Airport Tower.
- **Daniel R. Cunningham**, area supervisor, Meridian, Miss., Tower.
- **Calvin A. Green III**, area supervisor, Memphis, Tenn., Tower, promotion made permanent.

## Southwest Region

- **Roger T. Hamit**, supervisor, South Operations Section, Operations Branch, Air Traffic Division.
- **James E. Howell**, assistant manager for program support, San Juan, Puerto Rico, AF Sector, from the AF Division.
- **Randy D. O'Neal**, manager, Macon, Ga., AFS Field Office, Columbia, S.C., AFS.
- **Robert J. Owen**, assistant manager, plans and programs, Atlanta ARTCC.
- **Roy C. Pace**, assistant manager for training, Macon Automated Flight Service Station, from the Albany, Ga., FSS.
- **Robert C. Rauen**, area supervisor, Jackson, Miss., Tower, from Louisville, Ky.
- **Danny L. Robertson**, area supervisor, Birmingham, Ala., Tower, promotion made permanent.
- **Virgil B. Scalf**, area manager, Orlando Tower.
- **Bobby C. Skyrme**, unit supervisor, Atlanta Hub AF Sector, promotion made permanent.
- **John W. Stewart, Jr.**, area supervisor, Atlanta International Airport Tower, promotion made permanent.
- **Charles W. Stovall**, area supervisor, Macon Tower, promotion made permanent.
- **Gary Thinsgetad**, area supervisor, Anniston, Ala., AFSS, from San Juan IFS.
- **Joseph C. Urevick**, area manager, Orlando Tower.
- **Bernard Mullins**, manager, Airworthiness Branch, Flight Standards Division, from the San Antonio FSDO.
- **Leroy Powell**, manager, Albuquerque AF Sector Field Office, Albuquerque AF Sector, from the Albuquerque ARTCC AFS.
- **Thomas J. Powers**, area supervisor, Fort Worth ARTCC.
- **Ralph H. Rodriguez**, team supervisor, San Antonio FSDO, from Baton Rouge, La.
- **Jay B. Salzer**, assistant manager, Little Rock, Ark., FSS, from Columbia, Mo.
- **Johnny M. Stahl**, area supervisor, Sheppard, La., Tower.

## Retirees

AERONAUTICAL CENTER  
Dan Amos  
Mildred E. Brown  
George V. Cone, Jr.  
Wally G. Kerr  
Leroy Richardson

ALASKAN REGION  
Solveig W. Lapsley  
Dwight D. Merks

SOUTHERN REGION  
Donald E. James

CENTRAL REGION  
Edmund J. Bighouse  
Shirley L. Crosshorm  
Charles Manganello

James A. Means  
Stephen A. Sniogelski  
David Reid

GREAT LAKES REGION  
Richard C. Bolton  
Calvin L. Iselhardt  
Don E. Lynch  
Alice R. Marquardt  
Ronald L. Pollard  
Eugene R. Post  
Arlin G. Schmidt  
Gerald S. Skorski

NEW ENGLAND REGION  
John M. Clarke

WESTERN-PACIFIC REGION  
Herbert W. Finn  
John R. McCae  
David Reid

NORTHWEST MOUNTAIN REGION  
Juanita F. Butler  
Gerald S. Day  
Frederick E. Dyba, Jr.  
George H. Hickish

SOUTHWEST REGION  
Leo C. Arsenault  
Francis L. Bendall  
Thomas H. Davenport, Jr.  
Bobbie G. Fildes  
Norman R. Hallford  
Douglas B. Moore

## Technical Center

- **Robert E. Wainless**, systems engineer, Houston ARTCC AF Sector, from AF Div.
- **Richard R. Corderman**, unit supervisor, San Antonio, Texas, AF Sector.
- **Robert E. Deering**, area supervisor, Fort Worth ARTCC.
- **Ronald L. Dube**, area supervisor, De Ridder, La., Automated Flight Service Station, from the Conroe, Texas, AFSS.
- **Maurine N. Gordon**, unit supervisor, Fort Worth ARTCC.
- **Terry J. Jacob**, manager, Dallas-Fort Worth Regional Airport AF Sector, from the New Orleans AF Sector.
- **Harold R. Johnson**, manager, Austin, Texas, FSS, from the San Angelo AFSS.
- **Alvin G. Keeree**, area supervisor, McAlester, Okla., AFSS, from Conroe AFSS.
- **Kyle R. Keifer**, unit supervisor, Dallas AF Sector Field Office, Dallas-Fort Worth Regional Airport AFS.
- **James C. Keltner**, assistant manager, Albuquerque AF Sector.
- **John B. Martinez**, area supervisor, Midland, Texas, FSS, from San Angelo AFSS.
- **Glen E. McGee**, area supervisor, Fort Worth ARTCC.
- **Ray J. Mitchell, Jr.**, unit supervisor, Fort Worth ARTCC AF Sector.
- **Arturo Ronald Montoya**, chief, Civil Rights Staff.
- **Arthur E. Hansen**, manager, Weather Radar Staff, Radar Engineering Division, Program Engineering Service.

## Washington Headquarters

- **Robert Allen**, group supervisor, Aircraft Engineering Division, Office of Airworthiness.
- **William O. Byberg**, assistant manager, Traffic Flow Management Branch, Operations Div., Air Traffic Operations Service, from the New England Air Traffic Div.
- **Kenneth E. Drews**, chief, Field Evaluation Staff, Systems Maintenance Service.
- **Joseph C. Foster**, manager, System Performance Branch, Operations Division, Air Traffic Operations Service, from the Northwest Mountain Air Traffic Division.
- **Anthony J. Froehlich, Jr.**, technical program manager, Facilities Engineering Program, Maintenance Engineering Division, Systems Maintenance Service.
- **Nancy A. Greenfelder**, team leader, Communications/Navids Branch, Contracts Div., Acquisition and Materiel Service.
- **Arthur E. Hansen**, manager, Weather Radar Staff, Radar Engineering Division, Program Engineering Service.
- **Ronald E. Morgan**, manager, ACF Implementation Branch, System Plans & Programs Division, Air Traffic Plans & Requirements Service.

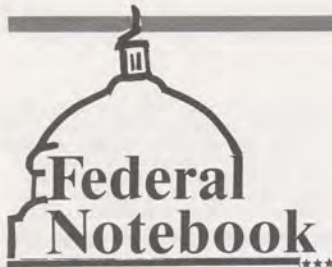
## Western-Pacific Region

- **Lloyd T. Crumrine**, operations inspector, Los Angeles Flight Standards District Office.
- **Paul O. Dautman**, assistant manager for training, Oakland, Calif., ARTCC.
- **William T. Eyre, Jr.**, principal operations inspector, Los Angeles FSDO.
- **Michael A. Gonzales**, manager, Program and Planning Branch, Airway Facilities Div.
- **Michael A. Hewitt**, assistant manager for training, Riverside, Calif., Automated Flight Service Station.
- **Jonathan C. Holman**, area supervisor, Las Vegas, Nev., Tower, promotion made permanent.
- **Charles L. Horner**, area manager, Burbank, Calif., Tower.
- **J. Henry Maag IV**, assistant manager, Oakland ARTCC, from John Wayne Tower.
- **Melinda M. Marquez**, team supervisor, Operations Branch, Human Resource Management Div., promotion made permanent.
- **Dudley Mason**, manager, Reno, Nev., FSDO, from the Flight Standards Division.
- **Leonard A. Mobley**, manager, Quality Assurance Staff, Air Traffic Division, from the Burbank Tower.
- **Joelynn A. Nakadima**, area supervisor, Honolulu ARTCC, promotion made permanent.
- **William J. Patterson**, manager, Phoenix, Ariz., TRACON, from the AT Division.
- **Donald G. Piet**, area supervisor, Las Vegas Tower.
- **Terrence M. Ralph**, supervisor, Environmental Engineering Section, Maintenance Operations Branch, AF Division.
- **Marcia L. Sessions**, area supervisor, Marysville, Calif., FSS, from Sacramento.
- **Richard K. Suzuki**, project manager, NAS Coordination Section, Program and Planning Branch, AF Div., from Honolulu.
- **Laurel L. Thompson**, assistant systems engineer, Oakland ARTCC AF Sector.
- **James Edwin Yakal**, area supervisor, Reno AFSS, from the Cold Bay, Alaska, FSS.

## Technical Center

- **William H. Rehmet**  
Bobby J. Singleton  
Kelly F. Stegany  
William B. Wilt, Sr.
- **SOUTHWEST REGION**  
Samuel H. Anderson, Jr.  
Allen R. Dahnke  
Michael D. Edwards  
J.M. Gillye  
Kenneth R. Glowka  
G.B. Hendrix  
Clinton A. Murphy  
Herbert U. Newkum  
Charles H. Wright
- **TECHNICAL CENTER**  
William J. Barkoff  
Oliver D. Carlson  
William R. Cimbring  
Henrietta Gilbert
- **WASHINGTON HEADQUARTERS**  
Robert Joseph Baker
- **WESTERN-PACIFIC REGION**  
Willis S. Cannon, Jr.  
Patricia M. Jones  
Ted Lacara  
Francis F. Murphy  
Jon R. Musser  
Harold M. Thompson  
Robert B. Watson

The information in this feature is extracted from the Personnel Management Information System (PMIS) computer. Space permitting, all actions of a change of position and/or facility at the first supervisory level and to branch manager in offices are published. Other changes usually cannot be accommodated because there are thousands each month.



# Federal Notebook

## MEDICARE BILL IN CONFERENCE

The bill to increase catastrophic health coverage under Medicare is now in conference. The House version would cost Medicare-eligible federal retirees perhaps five times as much as Social Security recipients and for coverage they already have under their federal health plans. This is because the premium would be based on taxable retirement income. Most Social Security benefits are tax-free.

Senate amendments would correct the inequity. Already seen as likely to be adopted is an amendment to eliminate the double coverage and double premium. Not yet considered is one to change the costly tax-based financing.

## LEAVE SHARING MADE WHOLE

The President has signed a technical corrections bill that repairs a major defect in the pilot leave-sharing program. Leave-sharing permits employees to donate annual leave to other employees with medical or personal emergencies who do not have annual or sick leave balances. HR 3918 exempts the program from a federal law that prohibits federal employees from giving

gifts--in this case, donations of leave --to employees of higher grade. This would have severely limited supervisors from receiving such help.

## FEDERAL DAY CARE GROWS

The General Services Administration plans to triple the number of day-care facilities available nationally in federal buildings this fiscal year. Twenty-five sites will be selected from among 42 buildings in 33 cities.

## WE'VE BEEN WAITING FOR THIS BILL!

Rep. James Saxton (R-NJ) has 80 co-sponsors for HR 3791, which would require the government to send annuity checks to new retirees within 30 days, provided that processing delays are not caused by the retirees.

## REHIRE THE FIRED

Like baseball and the tulips, the subject of rehiring the 1981 fired controllers surfaces each year, except that this year the House has actually passed a bill (HR 3396) to that effect. It would require FAA to rehire 500 of them in each of the next two years.

Sponsors say it would take only about six months to recertify them, compared to two to three years for new controllers. Pre-strike working controllers and the Administration oppose the move as disruptive.

## REBATE FOR FERS SWITCH?

If you are a federal employee with less than five years of creditable civilian service under the Civil Service Retirement System (CSRS) who switched

to the Federal Employees Retirement System (FERS) last year, you should have applied for a refund of your CSRS contributions.

Those with more than five years under CSRS have vested retirement credit for that time. With under five years, the seven percent contributed, less the 1.3 percent for FERS will be refunded, which could come to between \$3,500 and \$10,000.

## COLLECTING FROM FEDERAL DEADBEATS

A bill to permit garnishment of federal salaries for the payment of unpaid debts, HR 3565, is opposed by the Administration and a union.

Unlike with private sector salaries, federal salaries may be garnished only for debts to the Federal Government and those ordered by state courts to be paid for alimony and child support. This increases the default rate, it is argued. The bill's opponents say that it turns the government into a collection agency and at a cost.

## HIGH-OPTION HEALTH PLANS HURTING

The huge increases in many health insurance plans at the beginning of the year resulted in swarms of defectors from high-option fee-for-service plans. Among retirees, twice as many as usual switched plans--about 200,000.

Among the six largest health plans, which cover about 2.5 million employees and retirees, the non-indemnity-type plans and some standard-option plans were the only ones with increased enrollment. The biggest gainers were the health maintenance organizations.

US Department  
of Transportation  
**Federal Aviation  
Administration**

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