

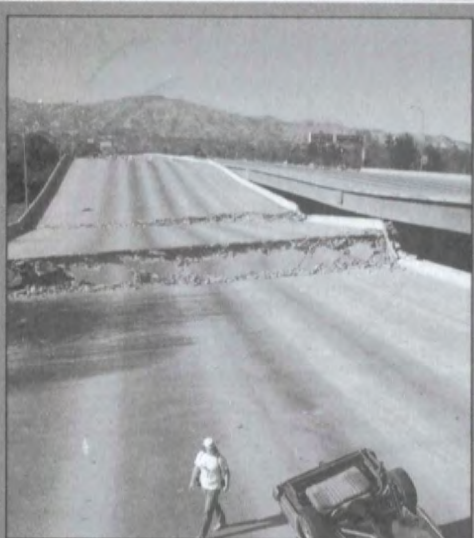
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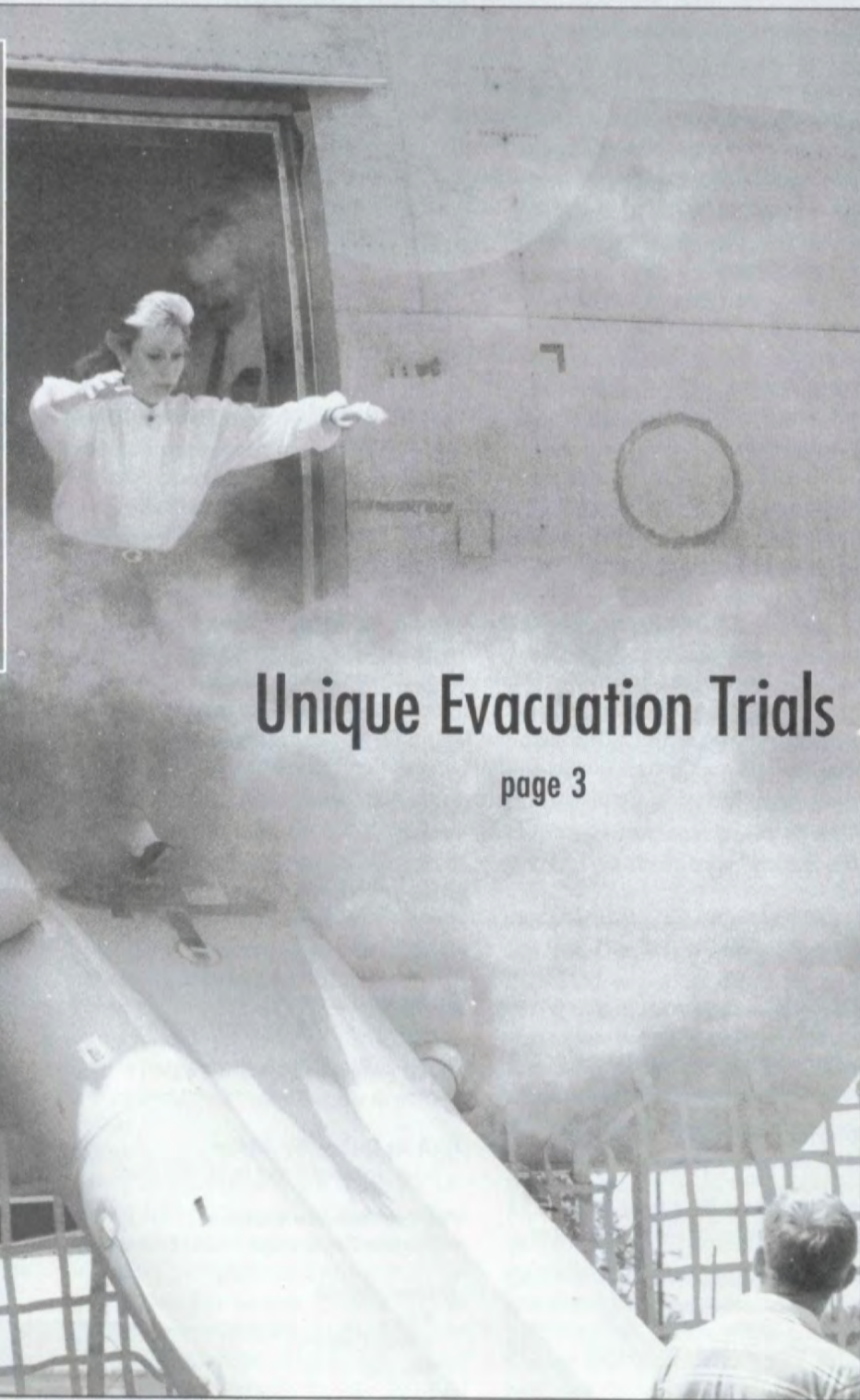
U.S. Department
of Transportation
**Federal Aviation
Administration**

FAAWorld

February 1994



Help with Disaster Relief
page 20



Unique Evacuation Trials
page 3

For Your Information . . .

New federal regulations requiring the dyeing of certain diesel and kerosene fuels are posing a **potential hazard** to aviation safety. Recent Environmental Protection Agency (EPA) and Internal Revenue Service regulations require that high-sulfur diesel products and fuels that are not subject to federal highway taxes be dyed. These rules do not specify the final color of the fuel, but require the addition of blue or red dye. When combined with the natural color in diesel and kerosene fuel, a range of shades similar to any of the colors used in aviation fuels is produced. Fuels subject to these regulations include home heating oils and fuel for off-road (industry) use, both of which can be found at airports. Therefore, pilots, air carriers, fuel vendors, and others are cautioned continually to check that aircraft receive the appropriate fuel when serviced.

The situation "may be most critical" in areas where fuels are dispensed into nonstandard or unmarked containers, or where different fuels are stored close to each other in similar containers, according to acting Associate Administrator for Aviation Safety Charles Huettnet.

FAA and EPA officials are working together to resolve the conflict in color standardization.

Several top executives have announced their retirement from the agency: **Arnold Aquilano**, Associate Administrator for Airway Facilities, has held such positions as Eastern Region's Airway Facilities Division manager, Deputy Director for Eastern Region, Systems Maintenance Service director, and Associate Administrator for NAS Development. He began his FAA career in 1956 as an electronics maintenance technician at the Kennedy Airway Facilities Sector Office.

Currently Executive Director for Strategic Initiatives, **Joe Del Balzo** will soon be departing the agency. He began his FAA career in 1958 as an electrical engineer and has since served as acting Administrator, acting Deputy Administrator, Executive Director for System Operations, Executive Director for System Development, director of the FAA Technical Center in Atlantic City, New Jersey, and Eastern Regional Administrator.

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Significant for Survival

U.S.-British Evacuation Trials Will Study 'Competitive Behavior'

By John G. Leyden

Normally, aircraft emergency evacuation demonstrations are something like the fire drill in your workplace: Good manners and good order prevail and everyone gets out in fine shape.

But what happens when people actually come face to face with a real disaster that imperils their lives? Do they keep their cool, or does panic take over? Are they still concerned with helping others, or does it become a case of "no more Mr. Nice Guy" and "Devil take the hindmost?"

Answers needed

To find the answers, the FAA is joining with the British Civil Aviation Authority (CAA) in a unique program to study the effects of "competitive behavior" in the aircraft emergency evacuation process. The two agencies want to know what happens to good fellowship when people are highly motivated to beat the other passengers out the exits, as they are in real-life, crash-and-burn scenarios.

A matter of cabin safety

It's research with a point, and that point is increased cabin safety. The two agencies want to identify any changes that need to be made in aircraft designs, cabin configurations, and evacuation procedures so that everyone in a survivable accident can get out alive given the competitive nature of human beings. Specific emphasis during the joint trials will be placed on the role of flight attendants in directing and expediting the evacuation process.

Data from the study also will be used in building computer models that eventually could alter the require-



An element of real-life competition was introduced in evacuation tests conducted in England.

ments for aircraft manufacturers to conduct emergency evacuation demonstrations as part of the FAA certification process. The current 90-second evacuation rule has been roundly criticized as being unrealistic and often hazardous to the participants. A properly designed computer simulation, which reflects the way passengers actually behave in an emergency, would be more effective and certainly safer than using real people.

Internationally important

Emily Trapnell, FAA's London Representative, played a major role in pushing through the FAA-CAA agreement. She describes the joint effort as a significant step forward in cabin safety.

"It's an excellent example of international cooperation," she said. "It's going to move us both a lot further along than we could have gotten acting separately—a lot further along toward serious cabin safety enhancements."

The study will expand on emergency evacuation work done by Dr. Helen Muir, Director of the Applied Psychology Unit at the Cranfield Institute of Technology in England, using a Hawker-Sidley Trident Three aircraft permanently located at the Cranfield Airport. Her involvement was sparked initially by the August

1985 accident at Manchester, England, in which 54 of the 137 persons on board a Boeing 737 died, primarily due to emergency evacuation problems.

In many respects, Dr. Muir's work parallels that being done at FAA's Civil Aeromedical Institute (CAMI) in Oklahoma City with one important difference. Dr. Muir has introduced an element of real-life competition in her evacuation tests by giving a financial bonus to the first 50 percent of the people to escape from the airplane.

Realistic trials

Jeff Marcus, manager of CAMI's Protection & Survival Laboratory, says Muir's approach has been advanced as a good research tool for studying the effects of panic in a survivable aircraft accident. He agrees that the results of these tests often are quite different from the noncompetitive demonstrations conducted at CAMI.

"People behave much differently in competitive situations than they do when there is no competition," he noted. "When you see videos of her tests, you see things like pileups at the overwing exits as people try to beat each other out of the airplane."

"Now, obviously, nobody in these trials thought that his or her life was in danger, but it was surprising to me to see some of the things people were willing to do just for a little extra money," he added. "People would go climbing over seat backs in order to get out of the plane, things of that sort."

If all this sounds like fun and games, it's not. Dr. Muir's experiments are intended to increase our knowledge of the evacuation process by creating a more realistic accident scenario. One test series, for example, evaluated different aisle configurations and seat-row spacings on evacuation times in order to determine the optimum configurations.

A result was that researchers found that the requirements for competitive evacuations were significantly different than those for baseline, noncompetitive tests because the rush to get out of the aircraft created gridlock near the exits. In fact, several of the

competitive tests had to be stopped for safety reasons because of pileups near the overwing exit or because a volunteer fell in the aisle and was in danger of being trampled.

Not surprisingly, researchers also found that panic, even simulated panic, actually slows the evacuation process in most cases. Evacuation times in the competitive tests were generally longer than for those in the noncompetitive trials even though some participants did try to take short cuts to the exits by doing things like crawling over seat backs.

Issue is survivability

Ironically, the issue of survivability has become increasingly important as aviation safety has continued to improve. Although the total number of fatal accidents has declined dramatically in recent years, the chances of passengers surviving the accidents that do occur is greater than ever before.

FAA has played a major role in achieving this improved safety record. Over the past half-dozen years, the agency has taken nearly 50 separate actions designed specifically to upgrade cabin safety and improve the emergency evacuation process.

Recent safety enhancements

These actions have included requirements for:

- Fire-blocking layers on passenger seats.
- New emergency lighting systems along evacuation routes.
- Upgraded flammability standards for cabin interior materials.
- More fire-resistant liners in air-liner cargo compartments.
- Additional smoke detectors and fire extinguishers.
- An independent power source for the public address system.
- Protective breathing equipment for crewmembers to use in fighting fires and directing evacuations.

The new generation of wide-body, or twin-aisle, aircraft also have proved more crashworthy than their predecessors, so a passenger's chances of getting out of an accident alive are significantly greater than they were just a few years ago. An independent

1992 study, for example, showed that the survival rate in fatal accidents on U.S. carriers between 1981 and 1990 was 66 percent (two out of three) as compared to 57 percent during the previous decade.

Evacuation process key

Still, the key to getting out alive is the evacuation process. When fire follows a crash, passengers have only a limited time to make it out an exit before they're overcome by smoke, toxic gases, or caught in the "flash-over." Accordingly, the FAA requires aircraft manufacturers to demonstrate that all new aircraft types can be evacuated within 90 seconds using only half the exits.

But the FAA recognizes that emergency evacuation demonstrations under controlled conditions are not real life. CAMI's Jeff Marcus noted that "the 90-second rule is not really supposed to simulate an accident; it's supposed to be sort of a standardized test so we can compare different aircraft designs."

An example of what can go wrong in the real world was the runway collision between a Boeing 737 and a Fairchild Metroliner that killed 34 people at Los Angeles International Airport in February 1991. The National Transportation Safety Board's report noted that 20 of the 22 fatalities on the Boeing jet resulted from "asphyxia due to smoke inhalation" before the victims could make it to the exits.

The report also pointed out that the evacuation did not go smoothly. The passenger seated next to the right overwing exit later said she "froze" and was unable to move from her seat to open the exit. The passenger behind her then crawled over the adjacent seat back and opened the exit, but in doing so broke the seat back, which partially obstructed access to the exit. To make matters worse, the report said, two male passengers using this escape route "had an altercation at the open exit that lasted several seconds."

Vital work to be done

This worst-case scenario underscores the importance of the work to

be accomplished under the FAA-CAA agreement. It calls for the two agencies to join with Dr. Muir in conducting a series of evacuation trials at Cranfield, England, using an "incendive method to induce competitive behavior among passengers." A joint U.S.-British team then will analyze the data and convert it to a format "suitable for use with any computer evacuation model." The trials are scheduled to begin this spring with the data package ready by the end of summer.

William J. "Joe" Sullivan, FAA's assistant director for aircraft certification, said previous emergency evacuation work has focused primarily on "how fast you can get people through a hole in the aircraft and down a slide." But that's not the whole story, he added. "We need to know more about the factors that influence the evacuation process inside the airplane before passengers get to the exits, particularly the role played by flight attendants in this process."

Closing a 'scientific gap'

Sullivan expects that data from the tests will lead to the development of an effective computer evacuation model that, for the first time, will give the agency a "scientific base" for making regulatory decisions on emergency evacuation matters. Up to now, he noted, the agency has had to rely on its best engineering judgment in deciding key issues like the distance between exits on airliners. "We used common sense, but there really was no hard science to back up that common sense."

Closing this "scientific gap" is what the joint FAA-CAA program is all about, Sullivan emphasized. "Once we get the model together and we're satisfied that it really does work, then we will be in a better position to make rational decisions on emergency evacuation demonstrations and other matters that affect cabin safety." *

John Leyden is a retired FAA'er. He has written articles for such publications as the *Washington Post*, *New York Times*, and *USA Today*.

Aviation in '93

JANUARY

Jan 4: NEW FUEL SAVING ROUTES - FAA began allowing aircraft operators of flights in the United States of at least 1,500 nautical miles, flown at or above 39,000 feet, to select and use the most efficient direct route in place of a published Instrument Flight Rule route. Approval of these fuel savings routes was to be based upon controller workload and system capacity.

Jan 8: ICHAN RESIGNS - Carl Ichan resigned from TWA, ending a tenure which began in 1986. NEW MITRE CONTRACT-FAA awarded MITRE Corp. a three-year, \$222 million contract, to continue operating the Center for Advanced Aviation System Development.

Jan 11: KLM/NORTHWEST MERGER - DOT gave Northwest and KLM Royal Dutch Airlines immunity from antitrust laws allowing them to combine their services and operate as one airline. On Jan 20, the airlines announced the first major steps toward integrating operations. Those measures included additional joint flights and code-sharing to cities in Europe and the United States, as well as coordination of free travel plans, airport ground handling, flight dispatch operations, and catering services. The two airlines also announced creation of what they termed a "Seal of Partnership," featuring their logos, encircled by the words "Worldwide Reliability."

Jan 13: DELTA/SWISSAIR AGREEMENT - Delta Air Lines and Swissair's Swissair further expanded their existing business alliance by announcing a code-sharing agreement and plans to share facilities in the United States and Switzerland. Under the new agreement, Delta will begin the first daily nonstop service between Cincinnati and Zurich.

Jan 17: NEW AIRLINE - UltraAir began service, flying routes from Houston to Newark and Houston to Los Angeles. Six months later, on July 25, the airline officially stopped flying scheduled service. Chairman Barney Kogen blamed his airline's failure on the ongoing airline fare wars.*

Jan 19: FSS CLOSURES - FAA announced plans to close six flight service stations in its Southern Region as part of a national plan to consolidate the facilities into automated stations. The announced closing dates of those facilities were: Atlanta, GA, Jan 21; Crossville and Knoxville, TN, and Paducah, KY, Jan 28; and Pensacola and Tallahassee, FL, Feb 4.

Jan 21: NEW DOT SECRETARY - Federico F. Peña, former mayor of Denver, was sworn in as Secretary of Transportation. Joseph Del Balzo became acting FAA Administrator. Secretary Card and Administrator Richards had left

office Jan 20 with the inauguration of William J. Clinton as President. BA/USAIR DEAL - British Airways and USAir announced that British Airways had agreed to invest \$300 million to buy a 19.9 percent stake in USAir, with the option of buying \$450 million more in preferred stock over



*On Jan 11, UltraAir began service between JFK and Miami, Ft. Lauderdale, and West Palm Beach offering unrestricted \$99 fares.

the next five years. Under the pact, BA would become USAir's partner on flights linking USAir cities in the continental United States with key transatlantic routes served by British Airways.

The agreement would treat the flights of both airlines as if they were operated as one for purposes of bookings and reservations. On March 15, Secretary of Transportation Federico Peña announced approval of British Airways' investment in USAir, and authorized for one year certain code-sharing and leasing arrangements requested by the carriers. On the same day, Peña stated his intention of pursuing a new aviation pact with the British, saying the existing U.S.-U.K. aviation pact allowed U.S. airlines insufficient access to the British market. On May 5, U.S. and British aviation officials began talks to liberalize the "Bermuda II" bilateral aviation accord.

Jan 27: BOEING PRODUCTION CUTS - Boeing announced plans to cut production for next year by 25 percent, a step that will lead to job cuts of approximately 10,000-20,000. On Feb 18, Boeing announced that it planned to cut an additional 27,000 jobs by mid-1994 because of slumping production.

Jan 28: VSCS DELIVERED - The Harris Corp. announced delivery of the first voice switching and control system (VSCS) to FAA's Technical Center in Atlantic City. Operational testing began on May 6.



FEBRUARY

Feb 9: DEATH OF QUESADA - Lt. Gen. Elwood R. "Pete" Quesada (USAF Ret.), the first Administrator of FAA, died at the age of 88.

Feb 11: PROPOSED AC ON ELECTRONIC DEVICES - FAA published a request for comments on a proposed advisory circular regarding the use of portable electronic devices aboard aircraft. The document advised operators that if they permitted the use of such devices, procedures should be clearly established to control their use during passenger-carrying operations.

HIJACKING TO NEW YORK - An Ethiopian living in Morocco hijacked a Lufthansa twin-engine Airbus 310 shortly after it departed Frankfurt, Germany. Displaying a loaded handgun, the hijacker demanded that the Cairo-bound plane be routed to New York and that he be granted political asylum after landing. Upon landing at John F. Kennedy International Airport, the hijacker handed his weapon to the plane's pilot and surrendered to authorities.

Feb 13: MD-90 ROLLOUT - McDonnell Douglas rolled out its newest commercial jet, the MD-90. Similar to the MD-80, the aircraft was designed to carry a maximum of 153 to 172 passengers, and fly a maximum of 2,610 miles in its standard version or 3,480 in a version with greater fuel capacity. The plane made its maiden flight on Feb 22, taking off from Long Beach, CA, and flying four hours and 56 minutes before landing at Mojave Airport.

Feb 17: NTSB REPORT ON LAGUARDIA CRASH - The National Transportation Safety Board adopted the final report of

the March 22, 1992, USAir accident at LaGuardia in which 72 persons were killed. In its determination of probable cause, the board pointed to the "failure of the airline industry and the Federal Aviation Administration to provide flight crews with procedures, requirements, and criteria compatible with departure delays in conditions conducive to airframe icing and the decision by the flight crew to take off without positive assurance that the airplane's wings were free of ice accumulation after 35 minutes exposure to precipitation following deicing."

Feb 18: HIJACKING TO MIAMI - A Haitian gunman took control of a Missionary Flight International plane carrying 10 passengers and two crew members in Haiti and ordered it to Miami. The DC-3 landed safely at Miami, where the hijacker surrendered.

MARCH

March 2: VERTICAL FLIGHT CONTRACT - FAA awarded a \$35 million contract to Systems Control Technology of Palo Alto, CA, to develop ways



MORE AAS DELAYS - IBM announced that it was another 14 months behind schedule on the already delayed \$4.7 billion air traffic control system. (See Dec 13.)

March 10: BA/QANTAS DEAL - British Airways secured a 25 percent stake in Australia's state-owned, international carrier, QANTAS.

March 13: EAST COAST BLIZZARD - A blizzard swept over the East Coast, halting or delaying almost all airline travel from Georgia to Maine. At one point during the two-day storm, all major airports north of Charlotte, NC, were closed. It took several days for the airspace system to recover. The blizzard, which took over 100 lives, spawned approximately 50 tornadoes in Florida and had wind gusts of hurricane force in New York.

March 15: GE CONTRACT - FAA announced it had awarded a three-year, \$121.6 million contract to General Electric Company's Aerospace Division, to plan, engineer, and provide support for the installation of navigation, communications, automation, surveillance, and other equipment at air traffic control facilities. The installations are part of the modernization of FAA's national airspace system.

March 17: AMERICAN GROUNDS 24 JETS - American Airlines announced plans to ground 24 McDonnell Douglas DC-10 jets, 15 percent of its widebody jets, as part of its strategy to cut costs and stop serving unprofitable markets. On April 1, the airline said it intended to furlough 500 pilots, 400 maintenance workers, and an undetermined number of flight attendants. On Sept 14, airline officials announced that an additional 19 jets

would be retired and approximately 5,000 more employees would be laid off over the next year in an attempt to cut operating costs. TCAS IMPROVEMENTS - FAA announced that software improvements were available that would reduce unneeded and unnecessary commands from the traffic alert and collision avoidance systems (TCAS) on aircraft. The improvements would make TCAS more compatible with the air traffic control system by reducing premature or unnecessary alerts.

March 22: PROPOSED RULE ON PILOTS - FAA proposed a new regulation designed to prevent the pairing of a pilot and copilot in a type of aircraft in which both have only limited experience. The proposed rule came in the wake of several accidents in which the combined inexperience of the pilots was a contributing factor.

March 29: PROPOSED RULE ON FLIGHT ATTENDANTS - FAA announced a proposal for the first federal limits on the length of time that airline flight attendants may be kept on duty. Under the proposed rule, attendants could remain on duty for as many as 14 hours within a 24-hour period, but would get a rest period of at least 9 hours after that duty period. Longer duty periods would be permitted, but in such cases rest periods and the size of the flight attendant crew must also be increased. The proposal was published on March 31.

March 29: DELTA DOWNSIZING - Delta Airlines announced plans to furlough 600 pilots and eliminate 28 planes, in an effort to stem losses that have totaled approximately \$2 billion in two years.

APRIL

April 7: AIRLINE COMMISSION - President Clinton signed into law legislation creating a National Commission to Ensure a Competitive Airline Industry to study the problems facing the aviation industry. The commission consisted of 11 nonvoting and 15 voting members. Clinton selected the members of the group, including former Virginia Governor Gerald L. Baliles to head the panel, on April 29. The commission met for the first time on May 24, and delivered its final report to the President on Aug 19. Among the recommendations were: the creation of a special committee to monitor the financial health of airlines; the establishment of an independent entity within DOT to manage all FAA air traffic control activities; the release of oil from the U.S. Strategic Petroleum Reserve to keep jet fuel prices from rising too sharply; and tax breaks for airlines.

April 8: AGE 60 STUDY - FAA released a study on the "Age 60" rule. Focusing on the validity of the agency's regulation that bars pilots who passed their 60th birthday from flying airline aircraft with more than 30 passenger seats, the study concluded that, on the basis of accident data, there was "no support for the hypothesis that the pilots of scheduled air carriers have increased accidents as they near the age of 60." Not discussed were medical problems or the potential for pilots near age 60 to suffer incapacitating illnesses such as strokes and heart attacks.

April 14: PRATT AND WHITNEY DOWNSIZING - United Technologies Corp. announced that by the end of 1994 it planned to close two Pratt and Whitney aircraft engine manufacturing plants. The company stated it wanted to reduce the Pratt and Whitney work force to 30,000 by the end of 1994, a reduction of

11,000 jobs from 1992 levels.

April 19: CRASH KILLS GOVERNOR - South Dakota Governor George S. Mickelson (R) and seven others died when their Mitsubishi twin-engine turboprop crashed about 15 miles from Dubuque airport, where the pilot had reportedly planned to make an emergency landing after experiencing engine trouble. On April 28, FAA issued an emergency airworthiness directive requiring immediate inspection of Hartzell propellers on Mitsubishi MU-2B-60 aircraft. The AD affected approximately 116 aircraft and required an inspection within the next 10 hours of operation.

April 22: GPS TASK FORCE - The Departments of Defense and Transportation met to form a joint task force to examine the transition from military to civilian control of the global positioning satellite (GPS) system. The task force issued its report in Dec, concluding that DOT should have a more substantive role in the management of the DOD system, and that technical steps should be taken to improve the integrity and availability of GPS for all transportation modes. In addition, the task force recommended a study of all differential GPS systems currently being developed by agencies such as the Coast Guard, U.S. Geodetic Survey, and Army Corps of Engineers, and suggested that any civilian enhancements by such agencies should be financed by those agencies through appropriations and user fees.

April 26: NEW TOWER FOR O'HARE - Secretary Peña announced that a \$14.5 million contract had been awarded to the Schwendener/Riteway firm for the construction of a new, 260-foot-tall airport traffic control tower at Chicago's O'Hare International Airport.

April 27: MLS FUTURE - Acting FAA Administrator Joe Del Balzo, testifying before a House appropriations committee, stated that FAA would not commit to production of the microwave landing system (MLS) until the agency determined whether the GPS could provide coverage for Category II/III approaches. Del Balzo said FAA expected to make a determination on GPS capabilities by 1995.

April 28: CONTINENTAL SOLVENT - Continental Airlines emerged from Chapter 11 bankruptcy 29 months after seeking protection from its creditors.

MAY

May 4: U.S./FRENCH AGREEMENT EXPIRES - The U.S.-French bilateral aviation agreement expired without a date set to begin new negotiations. Without an accord, diplomats must negotiate flight schedules for each air travel season.

May 9: MODE 5 COMMISSIONING - The first of 133 Paramax/Westinghouse Mode 5 ground interrogator systems was commissioned at the Orlando International Airport in Florida.

May 25: U.S./RUSSIA AGREEMENT - DOT announced that Russia and the United States had reached a new aviation agreement, updating and expanding an accord signed in May 1990. Under the pact, the United States obtained new rights to fly over parts of Russia to points in Asia, and Russia received rights to serve 11 new U.S. cities. The two countries also agreed to expand the number of charter flights that may be operated across the North Atlantic. On July 8, the Anchorage Air Route

Traffic Control Center handled the first scheduled flight from the United States to the Orient to overfly the Russian Far East under the terms of the treaty.

May 27: NEW TERMINAL AT O'HARE - Chicago O'Hare's new 1.2 million-square-foot terminal opened. The terminal is capable of accommodating up to 4.5 million passengers per year, boosting the airport's capacity to handle international passengers three-fold. The \$618 million building is the largest international terminal in the United States and contains 48 check-in counters, 68 immigration inspection units, 205 security cameras, and nine international baggage-claim carousels. AIRBUS 340 CERTIFICATED - FAA certificated the Airbus 340, a long-range, four-engine aircraft designed to carry 295 passengers.

On June 17, an Airbus 340 set a round-the-world record for a commercial jetliner, when it landed 48 hours and 23 minutes after it left Paris. The aircraft also set a record for the longest nonstop flight for a commercial plane with the 11,868-mile Auckland to Paris leg of the trip.



JUNE

June 1: SMGCS IN ATLANTA - Hartsfield-Atlanta International Airport became the second airport in the United States to begin using the Surface Movement Guidance and Control System (SMGCS) plan, commonly known as the "stop bar system." SMGCS contains procedures for landing and taxiing operations when visibility is below 1,200 feet down to as low as 300 feet. Special enhanced marking and lighting of taxi routes enable such operations. Seattle-Tacoma International Airport, which served as the test site for the plan, became the first airport to put SMGCS into effect on Dec 10, 1992.

June 3: DOWNEY DOT DEPUTY SECRETARY - Mortimer L. Downey became DOT's Deputy Secretary. He was nominated for the position on March 18 and confirmed by the Senate on May 28.

June 9: GPS APPROVED - FAA approved the use of the Global Positioning Satellite (GPS) System, enabling pilots of private and airline aircraft equipped with GPS receivers to choose direct routes without having to rely on ground-based navigation aids. Aircraft with certified GPS receivers will be able to fly approaches at approximately 2,500 airports. (See Sept 14.)

June 10: ATCSCC MOVE - FAA leased space in Herndon, VA, from Electronic Data Systems and subsequently began moving its Air Traffic Control System Command Center (ATCSCC) from the FAA Headquarters building to that site.

June 14: KAL 007 REPORT - The United Nations released its report on the Korean Airlines Flight 007 shot down in 1983. The report concluded that Russian officials mistook the airliner for a U.S. reconnaissance plane, although at least two Russian officers had suggested approximately 10 minutes before the attack that the aircraft might be a passenger plane. The study

also determined that the Korean Airlines Boeing 747 had flown off course into Russian airspace because the crew improperly operated navigation controls. TILTROTOR COMMITTEE -



FAA established the Civil Tiltrotor Development Advisory Committee, as mandated by the Airport and Airway Safety, Capacity, Noise Improvement, and Intermodal Transportation Act of 1992.

June 18: ARROW AIR APPROVAL - FAA and DOT gave Arrow Air verbal approval to begin flying passengers again. Arrow had not flown passengers since the crash of a military charter flight in Gander, Newfoundland, on Dec 12, 1985.

JULY

July 1: MARTIN MARIETTA CONTRACT - FAA awarded a three-year, \$56 million contract to Martin Marietta Corp. to provide system engineering and technical support for the modernization of the air traffic control system.

July 2: FLOODING DISRUPTS AIRPORTS - Water from the Mississippi River began to disrupt air traffic control operations. During the flood, a total of 36 general aviation airports were closed due to high water or heavy rains. The flood forced temporary closure of FAA's towers at the Spirit of St. Louis and St. Joseph airports, and the heavily damaged Spirit of St. Louis Automated Flight Service Station (AFSS) remained closed after the flood. To assist

operations by general aviation aircraft whose normal bases had been flooded, FAA activated a temporary air traffic control tower in the St. Louis area. Adjacent flight service stations provided required services



pending activation of a temporary AFSS. Most of the affected navigation aids were returned to service, but a few awaited completion of levee construction to eliminate the possibility of future damage. A preliminary estimate of the cost of FAA flood restoration work was \$7.9 million. Airport damage estimates totaled \$13.6 million, of which approximately \$4.8 million was eligible for FAA Airport Improvement Program assistance.

July 4: BLIMP CRASH - A recently built, \$4 million blimp leased by Pizza Hut crashed onto a Manhattan apartment building, injuring the pilot and copilot. Approximately six weeks earlier, the same craft had made an emergency landing in California because of a rudder problem.

July 6: ANN BEECH DIES - Ann Beech, who co-founded Beech Aircraft Company with her husband, died at the age of 89. July 7-8: AFSS FAILURE - All automated flight service

stations, except those with the old teletype equipment, lost their weather capability and their ability to file flight plans for approximately 15 hours because of software problems. The stations used back-up leased service A & B (LABS) equipment until FAA solved the problem.

July 12: VITRO CONTRACT - FAA announced that it had awarded a three-year, \$27 million technical assistance contract to Vitro Corp., to help plan, engineer, and deploy a wide range of radar surveillance systems used to monitor aircraft and weather at major U.S. airports. The company will assist in the deployment of systems such as the airport surveillance radar (ASR-9), airport surface detection equipment (ASDE 3), Mode Select (Mode S) Beacon System, and the precision runway monitor (PRM).

July 13: TAMiami ATCT OPERATIONAL - The Tamiami Air Traffic Control Tower, badly damaged by last year's Hurricane Andrew, was restored to full operation.

July 14: TDWR/ITWS TESTS - The test terminal Doppler weather radar/integrated terminal weather system (TDWR/ITWS), developed by MIT Lincoln Laboratory under FAA sponsorship, delivered the first ground-based weather message to an aircraft via data link in a demonstration at Orlando McCoy Airport. MIT has been operating the TDWR/ITWS test bed since 1990. FAA plans to deploy TDWR to 45 airports by the end of 1995.

July 15: NEW CARGO TERMINAL AT DULLES - Deputy Secretary of Transportation Mortimer Downey dedicated a new cargo terminal, Cargo Five, at Dulles International Airport. When completed, at a cost of approximately \$26 million, the terminal will triple the airport's cargo handling space.

July 20: PRM COMMISSIONED - FAA commissioned the first parallel runway monitor (PRM) in the United States at Raleigh/Durham Airport. The PRM allows controllers to monitor aircraft making parallel approaches during low-visibility weather conditions, resulting in increased capacity, reduced delays, and fuel savings.

July 21: NEW CHIEF COUNSEL - Secretary of Transportation Federico Peña announced the appointment of Mark L. Gerchick as chief counsel for FAA. On June 23, the White House had announced that President Clinton intended to nominate Gerchick, a partner with the law firm of Paul, Hastings, Janofsky, and Walker.

July 23: O'HARE SLOT RULE REVISION - FAA published a final rule permitting air carriers to use larger aircraft (up to 110 passenger seats and a maximum certificated takeoff weight of less than 126,000 pounds) in up to 50 percent of their commuter slot holdings at Chicago's O'Hare International Airport. The rules also expanded the category of aircraft that may use those slots, removed the restriction on the maximum number of larger aircraft operations in commuter slots per half hour, and made permanent the use of the larger aircraft by eliminating the provision that limited the use of the larger aircraft to a two-year trial period. The rule became effective Aug 26, 1993.

July 27: CONTINENTAL/AIR FRANCE AGREEMENT - Continental Airlines and Air France announced an agreement under which the two airlines will coordinate schedules on flights between the United States and Europe. The carriers will

feed each other passengers and share baggage handling and other ground facilities at airports in Houston, Newark, and Paris. The agreement does not need U.S. government approval since the two airlines will not be code sharing.

AUGUST

Aug 1: NATCA AGREEMENT - A new collective bargaining agreement between FAA and the National Air Traffic Controllers Association (NATCA) went into effect. The four-year agreement covered all operational air traffic control specialists in terminals and centers.

Aug 2: NEW AIRLINE - Jet U.S., a small Detroit-based airline, began service, flying three-round trips per day between Detroit and Newark.

Aug 10: HINSON BECOMES ADMINISTRATOR - David R. Hinson became the 13th FAA Administrator in a private ceremony. A public ceremony was held on Aug 24. On May 13, President Clinton had announced his intention to nominate Hinson to be FAA's new Administrator. Hinson was formally nominated on June 30, and confirmed by the full Senate on Aug 6. Before accepting the FAA post, Hinson



was the executive vice president for marketing and business development of the Douglas Aircraft Company. He previously served as a naval aviator, a pilot for Northwest Airlines, and chairman of Midway Airlines.

Aug 12: BAN LIFTED - The Clinton Administration announced that air traffic controllers fired after the 1981 PATCO

strike could apply for reemployment. FAA established a toll-free number to answer questions from former controllers interested in applying for controller and other FAA jobs.

Aug 31: ARTCC OUTAGE - A computer glitch in telephone company equipment disrupted radar, radio, and telephone service for approximately 90 minutes at the Jacksonville air route traffic control center. The outage created delays and forced surrounding facilities to take over control of the high-altitude traffic in the southeast United States.

Aug: REPORT ON PILOTS AND TECHNICIANS - The Pilot and Aviation Maintenance Technician Blue Ribbon Panel released its study, concluding that if positive steps are not taken, there will be a national shortage of fully qualified pilots and technicians for the period of 1995 through 2010.

SEPTEMBER

Sept 2: ARTCC EVACUATED - FAA evacuated part of the Indianapolis air route traffic control center when it was thought that dust from a recently repaired air conditioner might contain asbestos. Flights were delayed during a 3-1/2-hour period. Tests subsequently showed that there were no harmful materials in the dust.

Sept 6: BOEING IN MOSCOW - Boeing opened a technical research center in Moscow, which will initially work on: developing mathematical models for computational fluid dynamics; conducting metallurgical research into strong, lightweight alloys of aluminum and titanium; and studying the impact of sub-

zero weather on airplane fuel systems.

Sept 7: REINVENTING GOVERNMENT - Vice President Albert Gore released the final report of the National Performance Review, a six-month study of the operations of the federal government. The commission's recommendations to streamline and make government more cost beneficial included proposals for: terminating federal grant funding for FAA higher education programs; cutting essential air service subsidies; establishing a corporation to provide air traffic control services; increasing FAA fees for inspection of foreign repair facilities; and contracting for Level I air traffic control facilities.

Sept 8: HELP FOR DISABLED PASSENGERS - DOT announced a notice of proposed rulemaking which would require that airlines and airports work together to make lifts or other boarding devices available to disabled air passengers flying on small commuter aircraft.

Sept 10: NEW SECURITY CRITERIA - FAA published new criteria for certification of explosives detection systems to screen checked baggage for international flights. The new requirements established the types of explosives and minimum amounts that must be detected, as well as maximum false alarm rates.

Sept 14: GPS DEMONSTRATION - In the first demonstration flight on a civilian aircraft, FAA tested the Global Positioning Satellite (GPS) System, a new satellite-based navigation system, at Washington National Airport. FAA Administrator David Hinson, remarked that "this is probably one of the most important advances in the history of aviation navigation." (See June 9.)

Sept 15: SOUTHWEST SERVICE AT BWI - Southwest Airlines began service at Baltimore-Washington International Airport, its first East Coast city.

Sept 24: U.S./GERMAN ACCORD - The United States and Germany agreed on an updated four-year, bilateral civil aviation pact that will give German airlines access to all U.S. airports for the first time and permit a gradual rise in U.S. passenger flights to Germany.

Sept 27: DOOLITTLE DIES - Lt. Gen. James H. Doolittle died at the age of 96. Doolittle, who made the first recorded successful instrument landing, set a string of aviation records in the late 1920s and 1930s as an Army pilot and then as an employee of Shell Oil Co. He is probably best known, however, for leading the first U.S. bombing raid on the Japanese mainland during World War II.

Sept 28: SMOKERS' AIRLINE - Freedom Air began service, flying between Los Angeles and Chicago. The airline, which offers service to smokers, operates as a charter because federal regulations forbid smoking on regularly scheduled flights.

OCTOBER

Oct 2: U.S./SAUDI AGREEMENT - The United States and Saudi Arabia signed their first bilateral aviation agreement, allowing the airlines of both countries to operate weekly passenger and cargo flights between the two nations.

Oct 6: DULLES EXPANSION - The Metropolitan Washington Airports Authority (MWAA) held a ground breaking ceremony to mark the beginning of the expansion of the Dulles main terminal. The MWAA chair also announced planned replacement of the mobile lounges at Dulles with trains.



Oct 14: MEA PEN-ALTY-DOT announced that it had reached a settlement with Middle East Airlines (MEA) over violations of U.S. restrictions on air transportation to Lebanon. Under the settlement, the department will assess a civil penalty of \$500,000, the largest penalty ever given for aviation economic violations, and issue a consent order directing the airline to cease carrying passengers to, from, or through Lebanon. MEA will pay \$225,000 of the fine over a two-year period, and DOT will forgive the balance if the airline commits no further violations.

Oct 26: NEW AIRLINE - ValuJet Airlines began service with DC-9 jets, offering daily service from Atlanta to Orlando, Tampa, and Jacksonville. FATAL FAA CRASH - Three FAA employees died when their agency-owned aircraft crashed near High Knob, VA. Pilot Donald Robbins, copilot Daniel Jameson, and electronics technician Edwin Dowling, based at the Tech Center, had just completed an inspection of a radio beacon at the Winchester airport.

Oct 27: DENVER OPENING DELAYED - Denver Mayor Wellington Webb announced that the opening of the new Denver airport would be delayed for a second time. The airport is now scheduled to open on March 9, 1994. Despite the delay



in opening, the officials dedicated the airport on Nov 19.

NOVEMBER

Nov 2: LINCSDEDICATED - FAA dedicated the new Leased Interfacility Na-

tional Airspace Communications (LINCSC) telecommunications system that connects all 20 air route traffic control centers. LINCSC replaced the existing network consisting of more than 10,000 individual circuits. NATCA DELAY ADVISORY - The National Air Traffic Controllers Association (NATCA) issued a "delay advisory" warning air travelers to expect departure delays when thunderstorms are in the area of an airport. NATCA's action came in the wake of a July 10 suspension of a controller at Chicago O'Hare for directing an aircraft to return to the airport when other traffic in his sector prevented him from approving a course deviation to avoid a storm.

Nov 3: TWA SOLVENT - TWA emerged from bankruptcy reorganization. The airline, which entered Chapter 11 almost two years ago, shed \$1 billion of its \$2.5 billion debt and is currently owned by its employees and creditors.

Nov 15: MIDWAY FLIES AGAIN - A new Midway Airlines began service, linking Chicago Midway and New York LaGuardia with six daily nonstop flights. The original Midway

was founded in 1979 and went out of business in 1991.

Nov 17: NEW TERMINAL - The Metropolitan Washington Airports Authority officially broke ground on a new terminal for Washington National Airport.

Nov 18: STRIKE AT AMERICAN - American Airlines flight attendants went on strike, forcing the airline to cancel or delay flights. The major disputed contract issues centered on scheduling, pay, and health benefits. On Nov 22, President Clinton interceded in the five-day-old strike, persuading the flight attendant's union and the airline to agree to binding arbitration.

Nov 23: DASCHLE BECOMES DEPUTY - Linda H. Daschle became the Deputy Administrator of FAA. On Oct 25, President Clinton had announced his intention to nominate Daschle, and the Senate had confirmed her appointment on Nov 20.

Nov 24: LAX FEES - The Air Transport Authority, International Air Transport Association, and approximately 40 airlines serving Los Angeles International Airport formally asked DOT or FAA to prohibit Los Angeles officials from implementing plans to deny airlines access to LAX because of the airlines' refusal to pay higher landing fees. Airport officials had said they would close the airport on Dec 4 to carriers who refused to pay the new fees. On Nov 30 and Dec 1, FAA Administrator David Hinson and DOT Secretary Federico Peña met with airlines representatives and Los Angeles city officials to mediate the dispute. As a result of those efforts, the airlines agreed to pay the higher fees retroactive to July 1 but planned to fight the fees through litigation.



Nov 30: NEW EXECUTIVE DIRECTOR - FAA Administrator Hinson announced that Joseph Del Balzo had been named Executive Director for Strategic Initiatives. WEATHER FORUM - FAA opened its first National Aviation Weather Users Forum. Representatives from the FAA, National Weather Service, and industry discussed specific weather service needs, service priorities, federal versus private sector responsibilities, and system deficiencies at the three-day conference.

DECEMBER

Dec 2: DFW RUNWAY PROJECT - Groundbreaking ceremonies were held for a new Runway 16/34 East at Dallas/Fort Worth International Airport. The 8,500-foot parallel runway will be an all-weather air carrier runway that will expand total Instrument Flight Rules capacity by 42 operations per hour. It is expected that construction will be complete in June 1996. PAN AM LOGO - Eclipse Holdings of Rockville, MD, won the rights to Pan Am's logo for \$1.325 million in U.S. bankruptcy court. However, when the company could not get the appropriate financing by the end of the month, a Miami businessman matched Eclipse's bid and purchased the Pan Am trademark.

Dec 3: ASDE-3 COMMISSIONED - FAA commissioned the first ASDE-3, a new ground surveillance radar that penetrates

precipitation, fog, and darkness, at the Seattle-Tacoma airport.

Dec 13: SALE OF IBM UNIT - Loral Corp. announced that it was buying IBM's Federal Systems Company for \$1.6 billion. Federal Systems, a key contractor of FAA, is in charge of the Advanced Automation System. AAS CONTRACT REVIEW - FAA Administrator David Hinson ordered an extensive review of the Advanced Automation System (AAS), a multibillion dollar program designed to help modernize the nation's air traffic control system. The contractor, IBM, already is years behind schedule and has major cost overruns. Hinson's recommended review includes: hiring an independent organization to assess the contractor; conducting a 45-day review of the program's financial and schedule status; and conferring with IBM to determine what impact the company's plan to sell its Federal Systems Company will have on the AAS program.

Dec 17: A GPS FIRST - Continental Express began the first FAA-approved use of the satellite-based Global Positioning System for nonprecision airport approaches at Aspen and Steamboat Springs, CO.

Dec 20: PAN AM 103 MEMORIAL - President Clinton declared this day the "Fifth Anniversary Day of Remembrance for the Victims of the Bombing of Pan Am Flight 103." At a ceremony at Arlington National Cemetery, the



five for 1988-92. *

St. Louis AFSS Personnel Thank FAA Friends

The great flood of '93 destroyed many homes and businesses throughout the Midwest; among them was the St. Louis Automated Flight Service Station (STL AFSS). On July 30, 1993, after a levee break in Chesterfield, Missouri, the AFSS was covered with up to eight feet of mud and water; facility equipment and data were devastated. During the past five months, personnel from the St. Louis facility, the region, and facilities throughout the FAA have been working together to sustain services and recover whatever was remaining after the flood. Through their efforts, services have been maintained and much of the lost data have been restored. St. Louis AFSS employees are now working at the recently established Temporary FSS (TFSS), located in St. Peters, Missouri. This prodigious project required extensive planning, close coordination, and hard work in establishing procedures and pulling together equipment to provide a functional environment. Although part of the original AFSS flight plan area is still being serviced by Columbia AFSS and Kankakee AFSS, St. Louis is gradually regaining more and more of its preflood traffic area. The temporary facility will be in use until the permanent re-establishment of the STL AFSS at the Spirit of St. Louis Airport.

The words of Rosalyn Asbury, air traffic manager at the AFSS, express the feelings of the personnel who have endured this hardship: "All facility personnel are happy to be back together once again and doing the job they like so well. The specialists, supervisors, management, administrative personnel, and staff of the STL AFSS would like to thank all FAA personnel who assisted in our recovery efforts.

Whether it was a copy of a handbook, forms, or documents, technical assistance, or just a wish of good will, please know that we appreciate your help. Without all our FAA friends we would not be where we are now." *



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Translating Commitment into Action

A Look at the Early Days of FAA's Civil Rights Office

By Quentin S. Taylor

Black Americans have been in the United States in one plight or another for six lifetimes—16 generations—and still it seems so difficult to focus upon us in history. It seems our contributions are so plowed under that it is vital to assemble during Black History Month once a year and display with zeal our achievements.

An important achievement that has touched many lives at the FAA has been the work of the Office of Civil Rights to translate the equal employment opportunity commitment of the '60s into the action of the 70s, as well as fostering that activity into the present day.

In "pre-office" 1968, the Department of Transportation ranked next to last among government agencies in employing women and minorities. Only the National Aeronautics and Space Administration had a worse record.

Because the FAA employed 80 percent of the department's civilian personnel, then Transportation Secretary John Volpe had no trouble fixing the blame. So, in April 1969, when Volpe directed each of his administrators to establish an office of civil rights, a large share of the work fell to the FAA.

Most earlier equal employment matters—usually involving investigations of discrimination complaints—had been handled by the FAA's Office of Compliance and Security, then headed by Richard Lally, later to become the Director of Civil Rights at the department. Shortly after Volpe created the Civil Rights organization in 1969, FAA Administrator John Shaffer named me to head it. I'd like to say that the new organization galloped after its task like a racehorse, but looking back, a turtle seems more accurate. The early slow-

ness did not result from any lack of enthusiasm; we simply lacked resources. My meager staff of six people had been asked to take on a big job—to help change the attitudes of FAA employees, as well as those of numerous aviation-related private-sector employers. This was, and remains, a task of monumental proportions, as Leon Watkins, now Assistant Administrator for Civil Rights, will surely attest.

Our mission in those early years was clear. First we had to establish an effective organization able to parlay limited resources into significant civil rights programs for FAA Headquarters and regional offices. That took about seven months. At the same time, we needed to assess the current minority and female employment situation. That didn't take long at all. In fact, not much more time than it is taking you to read this.

The equal employment record that confronted us was decidedly bleak. In 1969 only 6.5 percent of all agency employees were members of minority groups. In contrast, figures for 1991-92 show that somewhat more than 16 percent of agency personnel are minorities, and more than 23 percent are women. Also in the late '60s, the FAA employed no minority regional directors, deputies, or executive officers. In fact, there were no division chiefs from minority groups—male or female—and very few other supervisory positions were held by minorities anywhere in the agency. In FAA's Washington Headquarters, only two African Americans occupied "supergrade" positions. I was one. The other was Ben Darden, the first black GS-17 ever appointed in the FAA. The circumstances of women in the agency were similarly depressing.

So we had our work cut out for us. The good news was: we had no way to go but up. The bad news: up looked like a very long way.

From the beginning we had trouble overcoming the belief of some people that we were bringing unqualified men and women into the agency. The refrain at the time went: "The agency is determined to lower its professional employment standards." That was not true then, and it is not true now. All potential FAA employees—recruited or not—have always been required to pass appropriate examinations and other tests designed to show professional aptitude.

Today, a few diehard misconceptions remain, but the outstanding performance of most of the minorities and women recruited by the FAA since 1969 persuasively refutes any charges of lowered standards.

Perhaps the agency's biggest problem throughout most of the '70s was the Civil Service Commission itself. Until 1978, the commission could not find a way to modify its rules so as to boost affirmative action in employment. Yet at the same time, the commission properly ordered the FAA and other agencies to accelerate efforts to employ minorities and women. Only when the Civil Service Reform Act became law in 1978 did the commission begin to assist us in our affirmative-action program.

Before that time, we carried out a very energetic recruitment program. On our own, we advertised heavily in the various minority media. We arranged numerous seminars with minority organizations to enlist their support in recruiting. Occasionally, we requested such organizations as the National Urban League to counsel minorities on the general background and nature of federal testing—not

about the contents of any examination because that would have been improper—but on the nature of federal examinations. And finally, of course, we hired recruiters, 20 of them based at regional offices, whose sole responsibility was to recruit minorities and females for the FAA.

During the '70s, we also began to take advantage of the Cooperative Education Program under which a work/study agreement was signed with a university or other learning center allowing FAA recruits to go to school and work for the agency simultaneously—partly at FAA expense.

Yet another recruitment and applicant placement tool used effectively was the Veteran's Readjustment Act. Because the law gave veterans priority in getting government jobs, the Office of Civil Rights successfully placed many minority veterans in FAA positions via that legislation.

During the decade, we also began to contact other government agencies in the hope of reaching minorities who felt stymied in dead-end jobs

elsewhere in the government. When one of these agencies discovered minorities interested in a transfer, we promptly screened them for aptitude and potential. Our recruiters then took over and told likely candidates how to apply for an FAA assignment.

Not long after our recruitment efforts began, we established the "150 Program," later called the "Pre-development Program." It allowed would-be air traffic controllers and electronics technicians to be brought into the FAA at a grade lower than the customary entrance grade. Once onboard, the trainees were sent to Oklahoma City or the campus of the University of Oklahoma in Norman for 12 to 18 weeks of training and instruction in their chosen specialty. Those who met requirements at the end of the training were placed in FAA jobs at the regular entry grade; subsequently, their career performance has been almost uniformly excellent.

All of these improvements at the FAA were related, of course, to a larger social transformation, so the timing was

right for the Office of Civil Rights to carry out such programs successfully.

An increased sensitivity has resulted from those early successes. Today, FAA managers are increasingly aware of the plight of minorities and women who seek professional career assignments. Many are now very vocal and active in their support of equal employment opportunity. Step-by-step, we have heightened our sensitivity level, as well as boosted FAA's employment of minorities and women. We've always employed the best at all levels, and with your continued support, more gains are ahead. *

FAA's acting Assistant Administrator for Airports Quentin Taylor has served in many positions at the agency, including Director of Civil Rights, Deputy Director of the Alaskan Region, Director of the New England Region, Director of International Aviation, and Deputy Administrator. Taylor has also been a member of the agency's Operational Planning Management Team, composed of top agency executives.

Remember when?



Quentin Taylor
Director
Office of Civil Rights



Howard King
Deputy Director
Office of Civil Rights



Robert Birdsong
Deputy Director
Office of Civil Rights



Leon Watkins
Assistant Administrator
for Civil Rights



Large Seals Dress Up FAA Headquarters Entrances

Recent additions to the Headquarters building lobby are two large FAA seals installed just above each entrance door. Each seal—54 inches in diameter—was cut into sections of .3 millimeter-thick frosted vinyl sheets. The sections of this permanent material were then applied against the inside window surface to project the elegant look of etched glass.

The seals, which capture and reflect back light, were conceptualized by the Office of Public Affairs, which contracted with Rogay, Inc., of Rockville, Maryland, to produce and install them. Pictured during a 4-hour installation process is Rogay's fore-

man Marty Newton, assisted by Carlos Figueroa.

To produce the right effect, the seals were cut from a computer PostScript(r) file. The original FAA seal was scanned in, and then traced to a single file by Public Affairs staff. The digitized file was then transferred to the contractor for production.

Official FAA seals—in color and black-and-white PostScript(r) files—Macintosh or PC formats—are available from APA-303, Exhibit Services, Attn: Mario Toscano. Please provide formatted diskette and specify PC or Mac formats. *

Master Plan Released for 'Distance Learning'

By Meryl K. Evans

The aim is to provide training that is cost-effective and flexible, and progress is being made, say employees of the Office of Training and Higher Education. To illustrate, they point to the release of the Distance Learning Program Master Plan. This plan outlines the way the organizations that make up the FAA communicate their training needs. It also describes how the Distance Learning Program will be implemented in the FAA during fiscal years 1994 through 1997.

According to the plan, the agency's Distance Learning Program depends on two major activities. The first is establishment of an infrastructure—things like collecting customer requirements, setting policy, conversion and development of courses, scheduling and administration, and training of instructors and support personnel. Sec-

ondly, technology must be selected that will effectively and efficiently support the established infrastructure.

The master plan integrates related major activities in several ways. As a first step, it defines program goals by fiscal year—listing them for each of the four years covered—and thereby provides an administrative "road map" of the agency's conversion to distance learning. Funding and resource requirements are then consolidated into the goal-oriented framework to come up with a top-level schedule. At this point, the FAA will be ready to implement its Distance Learning Program, monitor progress, validate results, and factor in lessons learned. Also provided for are the development of an evaluation plan and tools to assist in tracking the quality and cost of training delivered through distance learning.

It's easy to see that a key to the success of training improvement is the master plan through which the FAA can phase in distance learning. During each phase, provisions have been built in to provide for data collection, address additional issues, and do some fine-tuning as the conversion of FAA's resident-based training program to distance learning continues over the next four years.

Developers say the plan will help the FAA meet its training goals because it guides the way to decreased training costs, increased training opportunities, and improved quality. In the long run, however, success of the Distance Learning Program depends on how well it meets the needs of its customers. *

This is the first of three articles covering recent developments in the agency's Distance Learning Program. Upcoming topics relate to market survey results and the operational requirements document.

Meryl K. Evans works in the Regulations and Standards Training Program Division, AHT-200, of FAA's Office of Training and Higher Education.

Tops at CAMI

By Mike Wayda

Pat O'Brien is like famed Oklahoman Will Rogers in one respect: She hardly ever meets a person she doesn't like. She always tries to find something good in everyone. She also likes to see the funny side of things. When you're the youngest of five children, she says, you need a good sense of humor.

The Civil Aeromedical Institute's Employee of the Year, O'Brien is the division secretary in the Human Resources Research Division. O'Brien's people skills have served her well many times in difficult situations—such as, "When your boss needs an overdue report from someone, and you must tactfully remind the person that it's time to get it in," she says.

As a secretary, probably the most important skill to have, says O'Brien, is the ability to get along with people. Not just "get along," but to make harmony the central theme of all your working relationships. "I really don't see why anyone would want to be a secretary," she added, "if you don't like people."

O'Brien's career at CAMI has been on "fast-forward" since she became branch secretary two years ago. Less than a year ago, the division secretary's position became vacant, and she accepted the promotion. She is one of only three secretaries assigned to maintain order in a seemingly

chaotic whirl of human factors research, voluminous technical reports, complicated computerized data, frequent travel, mountains of paperwork—all amid budget and staffing constraints. However, the word "failure" is not in the "O'Brien Dictionary of Life." Quickly, she mastered all aspects of the job. Her coworkers say she is "efficient, energetic, competent, and professional." She also never misses an opportunity to acknowledge and promote their achievements.

The energy and competence O'Brien practices at CAMI carries through in her private life, where she keeps busy with her husband and two young boys. She volunteers with the Boy Scouts and at school with the PTA and as home room chair. She also attends night school classes in her quest to some day become a school teacher. *



Mike Wayda edits the Civil Aeromedical Institute's *Federal Air Surgeon's Medical Bulletin*.

Dubai Air Show, a Major International Event

U.S. industry expects the Dubai Air Show, which took place late last year in eastern Arabia, to spur U.S. aviation sales in the Middle East. The region is anticipated to generate several billion dollars of civil aircraft sales during the 1990s.

In support of industry, the FAA was represented at Dubai with a delegation that included Pat Poe, director of the Office of Europe, Africa, and Middle East; Norman Solat, international technical program manager for GPS; and Beth Keck, Middle East program manager for the Office of International Aviation.

Solat generated much interest from participants and the press with his presentation on the FAA's Global Positioning System initiatives at the air show conference. Solat was interviewed by the *Gulf News* and other regional publications about its implementation. The FAA

information booth attracted regional officials seeking information about FAA equipment and safety regulations.

The Dubai Air Show, held every two years, is the major aviation industry event in the Middle East. It is open only to the industry, and thus is an excellent forum for the FAA to develop and maintain relations with senior aviation officials in the region and support the sales of U.S. products and services.

The Office of International Aviation organizes FAA participation in international air shows. During 1993, the FAA also exhibited at the Paris Air Show and Aviation Expo China '93. In 1994, the FAA will be represented at air shows in Singapore, Berlin, and Chili. *



The last Boeing 707 to roll off the line was on display at the Dubai Air Show. FAAer Beth Keck received a tour from Patrick De Young of Comtran International, San Antonio, Texas. Comtran was seeking a head-of-state buyer for the aircraft.

Sights at September's three-day Great Reno Balloon Race included this "ahh-some" face and many other novelty balloons. A stork, an ice cream cone, a hamburger, bottles, a moving van, a pack of cigarettes, and more all flew above "The Biggest Little City in the World." A crowd-pleasing polar bear was the height of an eight-story building.

Just prior to each day's launch, FAAers from the Reno Automated Flight Service Station and National Weather Service employees briefed pilots on weather and notices-to-airmen. During flight, FAA specialists at the site were in constant communication with Reno Tower.



Additionally, Reno Flight Standards District Office inspectors were on hand to check on the balloons' maintenance and operation.

Thanks to Western-Pacific Intercom for this look at Reno's balloon fest.

FYI continued from page 2

Brooks Goldman, Deputy Associate Administrator for Aviation Standards, served the agency for many years as Associate Administrator for Administration. He also held such positions as director of the Office of Management Systems and headed the Technical Center's Engineering Management Staff. Goldman started his FAA career in 1958.

Operations end this month at Los Angeles Terminal Radar Approach Control facility at Los Angeles International Airport—LAX TRACON. Responsibilities have been relocated to the new Southern California TRACON in San Diego.

The Los Angeles TRACON is the first of five TRACONs to be consolidated "to increase efficiency, reduce cost, and enhance safety for all aviation users in Southern California airspace," says Carl Schellenberg, Western-Pacific Regional Administrator. Current plans call for the decommissioning and consolidation of Coast TRACON into the new facility in May 1994, followed by TRACONs at Burbank, October 1994; Ontario, May 1995; and San Diego, September 1995.

Details for a public ceremony officially dedicating the new Southern California TRACON will soon be announced. For additional information, contact the facility's manager, Charles Aalfs, at (619) 537-5800.

The Air Traffic Control Association awards scholarships to students studying aviation-related courses at recognized post-secondary schools. Recipients may be full-time students or full-time aviation career employees taking courses to enhance their skills.

Among the winners of last year's awards were Michael Fox of Salina, Kansas. An air traffic control specialist, Fox is completing his bachelor's degree at Embry-Riddle Aeronautical University. Also awarded was Carla Freeman of Wichita, Kansas, who received the Richard L. Faylor Memorial Scholarship. An air traffic assistant, Freeman, too, is studying at Embry-Riddle.



helicopters, and enjoyed looking at aircraft fly-bys.

Among the guests at the ceremony were Associate Administrator for Air Traffic Bill Pollard and New England Regional Administrator Arlene Feldman.

Here, ceremony organizer and center controller Ken Kula shakes hands with Michael Demonte, dressed as the aviation education Air Bear.

People

Information in the "People" section is extracted from the Consolidated Personnel Management Information System.

Space permitting, actions of a change of position and/or facility are published.

The time lag before personnel actions appear is due to data compilation, format, and publication times.

ton ARTCC, Leesburg, VA.

Great Lakes Region

Charles E. Allaman, manager, Youngstown, OH, ATCT, Vienna, from Janesville, WI, ATCT ... Ralph W. Davis, asst. manager, traffic management, Chicago O'Hare ATCT, IL, Employment & Staffing Branch, Air Traffic Div. ... Daniel D. King, environmental support unit supervisor, Indianapolis, IN, AFS ... Robert E. Liska, medical officer (aviation medicine—admin.), Medical Div. ... Phillip T. Mullis, area supervisor, Chicago O'Hare ATCT ... Kenneth A. Petersen, area supervisor, Indianapolis, IN, ATCT.

New England Region

Phillips H. Bradley, unit supervisor, Manchester, NH, Bangor, ME, AFS ... John R. Foster, area supervisor, Boston ARTCC, Nashua, NH ... Thomas Lafen, asst. manager, plans & procedures, Providence, RI, ATCT, Warwick ... Martin Rools, unit supervisor, Burlington, VT, Windsor Locks, CT, AFS, promotion made permanent ... Arthur J. Wooley, manager, Danbury, CT, ATCT ... George H. Zarella, asst. manager, Providence, RI, ATCT, Warwick, from Cape TRACON, Otis Air Force Base, Falmouth, MA.

Northwest Mountain Region

Barbara L. Bergano, section supervisor, Employee Development Branch, Human Resources Div. ... Arno C. Bosley, asst. manager, plans & programs, Salt Lake City ARTCC ... George M. Hof, manager, Pueblo, CO, from Broomfield, CO, ATCT ... Richard F. Martin, asst. manager, quality assurance, Salt Lake City ARTCC ... Sylvia Meyer, manager, Colorado AFSFO, Denver Hub AFS, promotion made permanent ... David L. Pyle, area supervisor, Denver ARTCC, Longmont, CO ... Steven D. Stycynske, manager, Colorado Springs ATCT, from Manchester, NH, ATCT.

Southern Region

Van E. Estes, unit supervisor, Asheville, NC, AFSFO, Raleigh AFS ... Fay K. Hodge, unit supervisor, Hamp-

ton, GA, AFSFO, Atlanta AFS, promotion made permanent ... Lynn M. Pacetti, area supervisor, Jacksonville, FL, ATCT, from Charlotte, NC, ATCT ... Richard F. Phillips, manager, Resource & Planning Branch, Airway Facilities Div.

Southwest Region

Billy C. Clark, asst. manager, De Ridder, LA, AFS, from Montgomery County AFS, Conroe, TX ... Sharon W. Welch, asst. manager for program support, Austin AFS ... David B. Wingert, asst. manager, airspace & procedures, Albuquerque, NM, ARTCC ... George D. Wright, unit supervisor, Houston AFS.

Technical Center

Frank Arcidiacono, manager, Systems Analysis & Support Branch, National Enroute Systems Engineering Div. ... James R. Clinton, manager, Flight Service Branch, National Data Communication Systems Engineering Div. ... Stephen M. Coulombe, manager, ARTS IIIIE/EARTS Branch, National Terminal Systems Engineering Div. ... Patrick L. Lewis, manager, AAS Branch, National Enroute Systems Engineering Div. ... Warren A. Mills, manager, Operational Support Staff ... James Thomas, manager, ARTS IIA/DBRITE Branch, National Terminal Systems Engineering Div.

Washington Headquarters (Includes names omitted from January World)

Frederick L. Gibbs, branch manager, Airspace Obstruction & Evaluations Branch, Airspace-Rules & Aero Information Div., Air Traffic Rules and Procedures Service ... Katherine M. Hakala, manager, Commuter & Air Taxi Branch, Air Transportation Div., Flight Standards Service, promotion made permanent ... Allen J. Hill, staff chief, Administrative Systems Branch, Contracting & Quality Assurance ... Mark K. Hoover, manager, Auto Surveillance R&D NAILS Implementation Branch, NAILS Program Div., NAS Transition & Implementation Service, promotion made permanent ... Thomas Ryan, manager, Internal Security

Branch, Investigations & Security Div., Civil Aviation Security Operations, promotion made permanent ... **Norma Saafir**, chief, Appraisal Staff, Executive Director for Acquisition & Safety Oversight ... **Steven A. Springmann**, management & program analyst, Programs & Plans Staff, Associate Administrator for Aviation Standards ... **John S. White**, asst. manager for training, Administration Branch, ATC Systems Command Center, Office of Air Traffic System Management, from Honolulu ARTCC ... **Richard J. Wu**, support services supervisor, Airway Facilities.

Western-Pacific Region

(Includes names omitted from January World)

Robert Annecone, unit supervisor, San Francisco CASFO, promotion made per-

manent ... **Gene M. Barnett**, section supervisor, Facility Operations Branch, Air Traffic Div., from Orlando ATCT ... **John R. Caldeira**, manager, Hilo, HI, ATCT ... **John S. DeHart**, area manager, Las Vegas ATCT ... **Stanley J. Dyer**, area supervisor, Lindbergh International ATCT, San Diego, from Palomar ATCT, Carlsbad, CA ... **James T. Elder**, unit supervisor, Los Angeles ARTCC AFS, promotion made permanent ... **Gary F. Fay**, asst. manager, Southern California TRACON, from Chicago ARTCC ... **Ralph A. Hiller**, asst. manager-operation, Ontario, CA, TRACON ... **Lucius W. Hope**, manager, Palmdale, CA, ATCT, from regional office ... **Jay F. Jacobsen**, area manager, Sierra Nevada, CA, AFS, McClellan Air Force Base, from Sacramento ... **Theodore D. Johnson**, systems engineer, Southern California

TRACON AFS, from Ohio AFS, Cleveland ... **Edward Jones**, manager, Civil Aviation Security Div., from Rome, Italy, CASIFO ... **Richard K. Kagehiro**, asst. manager, airspace & procedures, Honolulu, HI, ARTCC ... **Ronaldo C. Mata**, asst. manager for training, Honolulu ARTCC ... **Richard D. Mauck**, area supervisor, Prescott, AZ, AFSS, from Bethel, AK, FSS ... **Cecil T. McReynolds**, asst. manager for program support, LAX AFS ... **Betty J. Roque**, manager, Reid-Hillview ATCT, San Jose, CA, from Salinas, CA, ATCT ... **Deborah T. Saito**, asst. manager, Honolulu ATCT ... **Jim C. Swain**, area supervisor, Santa Barbara, CA, ATCT, from Burbank, CA, TRACON ... **Kempley S. Taylor**, unit supervisor, Oakland, AC, ARTCC AFS, Fremont ... **James F. Weismann**, unit supervisor, Los Angeles CASFO.

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Disaster Relief



Richard White, FEMA

FAA's Western-Pacific Region has established a disaster relief fund to assist FAAers who were affected by the January 17 Los Angeles earthquake. Contributions will be distributed to fellow workers who are without housing, food, and other basic necessities.

To contribute, a check or money order can be sent to:

FAA Western Federal Credit Union

5400 Beethoven Street

Los Angeles, CA 90066-7070

Checks should be made payable to the "Western-Pacific Disaster Fund," account number 59519.



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