World

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Volume 14 Number 7

U.S. Department of Transportation
Federal Aviation Administration

FSS Does Navy Stint

It took the edge off the thrill of being part of a television film. The Honolulu Flight Service Station was to become a set for *Magnum P.I.*, but Tom Selleck was nowhere to be found.

The star was not to be part of the scene, which involved converting the FSS into the gunnery control room of a Navy ship (photo above) that was firing at a target island in the Pacific Ocean.

Not only was the station transformed but also some of the FSS personnel, who became naval persons, like Ed Ishisaka, shown wearing Navy dungarees.

While the Magnum crew was quite pleased with the results of the filming, the FAA "stars" can only hope they won't end up on the cutting room floor.

"People fly because they believe it is safe to fly. And they believe that because decades ago the airline industry and the government convinced them of that fact by the way they set tough safety standards. In effect, safety became the industry's 'strong heart.'

"Nothing has changed that philosophy—we simply are not going to permit a degradation of air safety. We have not in the past, and we won't today or tomorrow.

"We—the government and the industry—must do what we have always done. We must stay alert to safety threats . . . we must search for the dangerous trends . . . we must educate our flight crews . . . and in doing so we will keep what we have now: the safest aviation system in the world."

—Donald D. Engen

Back cover: *Controllers Ray DeMatteo and Kathy O'Connell monitor J. F. Kennedy International Airport departures at the New York TRACON in Garden City, N.Y.* Photo by Harvey Shoenfeld

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One Small Crash for Science

Crashworthines

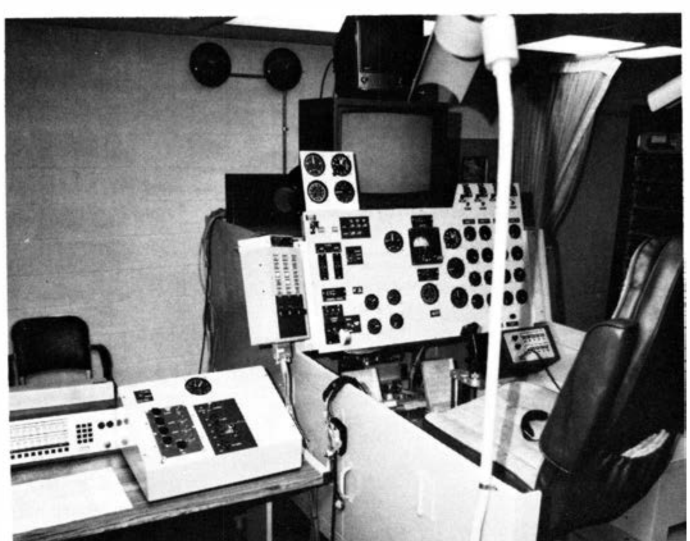
In preparation for its big day, the Boeing 720 test vehicle was dressed with an FAA-NASA logo and engineering markings to help analysts assess the damage after the controlled-impact crash.

The intent of the program is only hinted at by its name—the Controlled Impact Demonstration (CID).

And the FAA and NASA engineers involved in this joint undertaking prefer things that way. The CID designation downplays the drama of the event and highlights its serious scientific purpose, which is to advance the state of the art of crashworthiness design and validate the effectiveness of antimisting kerosene in suppressing post-crash fuel-fed fires.

But the CID also has a spectacular side as well, one that is guaranteed to focus worldwide attention on the event when it takes place this summer at Edwards AFB in California. After all, no one has ever intentionally flown a four-engine jet transport into the ground before, for scientific or any other reasons.

The "star" of the event is a Boeing 720, a close cousin of the 707, that FAA purchased new in October 1960 to provide flight training for the agency's operations inspectors. It was turned over to NASA in June 1981 so the space agency could begin preparing it for the CID.



The "ghost" pilot for the Boeing 720's last flight is a NASA pilot who mans this analog cockpit at Edwards AFB. It's telemetrically linked to the 720, including the TV monitors, which show the pilot's view through the aircraft's windscreen.

nd Fuel Fires Subject of Unique Experiment

By John G. Leyden
Manager of the Public & Employee Communications Division, Office of Public Affairs, and a former reporter for the *Washington Star*.

Looking like a normal planeload of alert and dozing passengers these anthropomorphic dummies will help researchers learn about the effects of crash forces on humans via cameras and instrumentation.

Despite the transfer of ownership, the aircraft still sports the distinctive red stripe along the side of the fuselage that characterized its FAA days. However, the FAA seal has been replaced by the new FAA-NASA logo designed specifically for the CID program. Also, the familiar N-23 registration number has been supplanted by NASA 833.

But the biggest change in the outward appearance of the airplane is the series of black stripes that ring the fuselage. These are engineering marks that will help researchers measure the effect of crash forces on the airframe and also track the dispersal of anti-misting fuel following impact.

The inside is configured much like any narrow-body jet in airline service with six abreast seating through most of the cabin. However, most of the 75 seats are occupied by non-revenue "passengers and crew" wearing neatly pressed brown army uniforms and staring straight ahead with blank faces.

These human-like dummies have important roles to play in the CID scenario. Ten high-speed cameras, strategically placed throughout the cabin, will record their every movement when the airplane hits the ground so researchers can learn more about the human body's responses to crash forces. In addition, 13 of the dummies (including the one in the

pilot position) are fully instrumented, along with the seats they occupy, to provide precise measurements of the impact forces.

Researchers will use this data to evaluate the effectiveness of various seat/restraint system modifications designed to improve passenger survivability. These modifications include improved methods of anchoring seats so they don't rip loose in a crash and better shock-absorbing characteristics to lessen the impact forces on passengers and crews.

Also evaluated will be the effects of crash loads on galleys and overhead storage compartments, because the investigation of past accidents has shown that passengers have been injured or have had difficulty evacuating the aircraft due to improperly or inadequately restrained galley equipment and passenger carry-on items. Measurements will be obtained from the instrumented galley and overhead compartments to help determine how the storage of equipment might be improved.

The entire aircraft, in fact, is a flying test bed with more than 350 sensors—primarily accelerometers for measuring the "G" or gravity force applied to aircraft parts and components during the crash. These sensors provide information directly to the main ground control facility as well as to on-board recording equipment.

Approximately half the sensors are in the seats and dummies. The rest are in the wings, fuselage, floor, ceiling, galleys and storage areas to measure how the aircraft structure performs during the crash impact.

One of the principal uses of the data will be to validate computer models of the crash impact demonstration. By comparing the actual results with the predicted results, computer experts will be able to refine and improve their models and apply the results to the design of future aircraft.

But perhaps the most interesting CID experiment is the use of antimisting kerosene (AMK) to fuel the 720 on its final flight. Previous research indicates that AMK can suppress or control external fuel fires that are the major cause of fatalities in survivable accidents, such as those that occur on landing or takeoff.

What frequently happens in these accidents is that the fuel spilling from the ruptured tanks into the airstream is dispersed into a fine mist, which can be easily ignited by any crash-

Much experimentation went on at the Technical Center's wing spillage facility to judge the potential of the antimisting kerosene fuel additive. These photos show the effects of igniting conventional fuel (top) and treated fuel (above) in an induced wind over the wing surface.

Closer to the reality of the current controlled-impact demonstration were the tests conducted at the Lakehurst, N.J., Naval Air Engineering Center in which whole aircraft were rocket driven along the ground into obstructions to rupture the fuel tanks. The fireball (left) resulted from untreated fuel; virtually no fire resulted from treated fuel (above).

induced ignition source. The resulting fireball attaches itself to the still-moving aircraft. As the airplane comes to rest, the fireball will readily ignite the pooling fuel, trapping the passengers and crew inside.

AMK is a combination of regular Jet A fuel and a polymer additive called FM-9—the initials stand for "fuel modifier"—which is delivered as a slurry that looks something like white latex paint and is blended with the Jet A at the time the airplane is fueled. The additive constitutes three-tenths of one percent by weight in the carrier fluid.

Developed by British scientists, FM-9 is a long-chain polymer, which means the molcules are linked together in microscopic strings or chains. These chains create a lattice network in the fuel that holds the droplets together and prevents them from misting when released into the airstream.

FAA has been pursuing a workable anti-misting fuel since the mid-1970s in concert with researchers from the United Kingdom. In late 1978, a unique wing-spillage facility was built at the agency's Technical Center in Atlantic City to evaluate and simulate the conditions that exist when fuel tanks are ruptured in a landing or takeoff accident. Tests with straight Jet A have produced fireballs larger than a two-story building, whereas those with the AMK produced only a momentary self-extinguishing fire.

Additional tests were run at the U.S. Naval Air Engineering Center in Lakehurst, N.J., with ground runs of obsolete Navy patrol planes. The results corroborated the Technical Center's findings. There was only a mild propagation of fire with AMK, compared to immense fireballs and explosions with untreated fuels.

However, jet engines will not burn straight AMK so an additional piece of equipment is required to restore the Jet A to its natural state just before it's introduced into the combustion chamber. This equipment is called a "degrader" and its function is to break down the FM-9 lattices so normal combustion can occur. The Boeing 720 test airplane has four degraders—one in each engine nacelle.

The use of AMK in the demonstration is expected to suppress the fireball that might otherwise engulf the test aircraft, penetrate the fuselage and ignite interior materials like seats and wall panelings. However, in the event such a fire should occur, researchers have incorporated several experiments aimed at demonstrating the potential improvements available for preventing or retarding the spread of flames into and within the cabin.

One is the use of burn-through-resistant epoxy innerpane windows, developed by NASA. Their purpose is to delay flames from an external fuel fire from penetrating the cabin. They have been installed in every other passenger window in the rear half of the airplane.

In another experiment, fireblocking layers were installed on approximately 50 percent of the passenger seats. Extensive laboratory experiments already have shown that these fire-blocking layers are effective in retarding the spread of flames, and FAA is considering final action of a Notice

Still showing signs of its FAA heritage, the Boeing 720 to be used in the controlled-impact demonstration was test flown from Edwards Air Force Base, California, earlier this year.

of Proposed Rulemaking to require them on all airliners.

The CID also provides a unique opportunity to evaluate the performance of current and advanced-technology flight data recorders (FDRs) and cockpit voice recorders (CVRs), since the information obtained from this equipment can be compared with data from the various flight-monitoring systems. The results

General Electric mechanics adjust the degraders in the aircraft's engines, which restore the fuel to a burnable state.

will increase understanding of the adequacy and usefulness of FDRs and CFRs in post-crash accident investigations, particularly in the impact-conditions and human-factors (survivability) area.

FAA also has a post-crash experiment planned, which includes a full-scale accident investigation and analysis. The purpose of this experiment is to assess the adequacy of the current accident forms and investigative procedures, particularly as they relate to current research needs. The findings, including an analysis of comparative data, will be made available for use in refining accident investigation techniques and procedures.

The staging of the controlled-impact demonstration will follow an extensive ground and flight test program designed to check out the systems, equipment and instrumentation on the aircraft. Project engineers also will be evaluating the operational use of AMK first in one engine, building up to its use in all four engines for the final, unmanned flight.

The 720 will have a full flight crew throughout the test series, but at least part of each mission will be flown from a special ground cockpit that duplicates the airplane's vital instruments and controls. Two-way telemetry systems will link the ground and airborne cockpits, and television cameras in the nose will provide a view of the sky and ground ahead.

On the day of the CID, the 720 flight crew will make one last run, using AMK in three engines, in what will amount to a dress rehearsal. The CID profile will be flown several times by the remote pilot to verify that all systems and equipment are functioning properly.

If successful, the 720 will land and be reconfigured for remote-controlled flight. But first, a 170-pound anthropomorphic dummy will be strapped into the pilot's seat to give researchers one more data source for their crashworthiness experiments.

After all the fuel tanks are filled to capacity with AMK—approximately 12,000 gallons—the flight crew will start the engines and leave the ship. The mission will then begin.

The final flight will last approximately 12 minutes. After takeoff, the aircraft will climb to 2,000 feet and circle the dry lake bed to intercept a simulated instrument landing system beam. At the intercept, the remote pilots on the ground will set up a speed of 150 knots (170 miles per hour) and begin the descent.

The aircraft will descend along a 3.3-4-degree glideslope at a controlled sink rate of 17 feet per second (1,000 feet per minute). It will strike the prepared impact area on the eastern edge of Roger's Dry Lake in a nose-up attitude of +1 degree with the wheels retracted. Almost immediately, the wings will strike rows of obstructions embedded in the ground for the purpose of rupturing the fuel tanks and creating a typical scenario for a post-crash fire.

The aircraft then will continue along a prepared gravel surface, striking three sets of frangible landing light towers similar to those installed at commercial airports. The aircraft is expected to come to a stop approximately 1,000-1,200 feet from the initial impact point.

That's the scenario if all goes well. There's also a "termination" scenario that assumes the ground pilot loses the capability to control the aircraft because of a failure of the main uplink/downlink telemetry systems or loss of aircraft flight control. In this event, an independent command link will be used to terminate the flight. The 720's throttles will be retarded to idle and the aircraft will be turned into a steep right-hand spiraling descent to the ground at a predetermined point that is well away from the work facilities and operational areas at Edwards AFB.

But FAA and NASA are optimistic that this termination maneuver will not be necessary. By the time the 720 makes its final flight, it will be perhaps the most thoroughly checked-out airplane in aviation history. Project engineers are keenly aware that the controlled-impact demonstration is a unique experiment that has never been done before and may never be done again. That means it has to be done right the first time. ■

CID Team Members Ran Hard

For the Technical Center's John Reed, the conclusion of the Controlled Impact Demonstration (CID) this summer means he can begin living a normal life again—get reacquainted with the family, cut the grass, watch a ball game, maybe read something besides a technical manual for a change.

All of this is by way of saying that the 16-year FAA veteran has been living life in the fast lane for the past two years as the CID program manager. And in recent months, the pace has picked up even more with frequent long trips to NASA's Dryden Flight Research Facility at Edwards AFB in California, where the demonstration will be held on a dry lake bed.

Other members of the CID team have found themselves running just as hard on the same treadmill, as the prospective date of the demonstration grows nearer. They include Bruce Fenton, the anti-misting fuel specialist; Dick Johnson, the structures man; and Peter Versage, the fire safety expert.

All, including Reed, work for Jim Woodall in the Technical Center's Aircraft and Airport Systems Technology Division (ACT-300). Woodall, whose own commitment to the program is illustrated by the fact that he has delayed his retirement until its completion, serves on the Test Management Council with representatives from NASA's Langley Research Facility and the Dryden Flight Research Facility. Their job is to assure implementation of the various program elements and work out any problems that might develop along the way.

To carry the FAA chain of command a step further, FAA's Office of the Associate Administrator for Development and Logistics has the overall responsibility for the agency's participation in the program, with Deputy Neal Blake (ADL-2A) serving as the principal contact point. Others in the Washington organization who are deeply involved are Don Schroeder and Dick Kirsch.

In addition, the CID team has a consultant working on the program who has a unique perspective on the Boeing 720 test airplane. He is Jim Matthiesen, a former Boeing test pilot who flew the airplane on its first flights after it rolled off the assembly line. Now he is involved in planning its final flight.

Working hand-in-glove with FAA on the program is the National Aeronautics and Space Administration. The principal NASA contributors are the Langley Research Center, which developed the instrumentation/data-acquisition system for the CID, and the Dryden facility, which handled the integration of all the experiment and system hardware and also has responsibility for the remotely piloted vehicle/flight control and guidance system and the overall flight operations.

FAA's John Reed has high praise for the NASA team members, noting the "phenomenal professional approach" of the Dryden flight research operation. "We don't have a similar capability at FAA, and working with these guys has been a real educational experience," he adds.

Reed was equally complimentary about the Langley contributions but said he is so deeply involved in the CID program that he really doesn't distinguish between FAA and NASA anymore.

"We're all on the same team, and we have worked very well together once we got on the same wavelength," he added. "We have the same goals and the same commitment to achieving those goals. We believe the CID program can have far-reaching implications for future transport aircraft safety." ■

on the job

Who Mak

In the Aircraft Manufacturing Division, Office of Airworthiness, Jim Zahringer (left) writes rules for sail planes and dirigibles, Linda Walker drafts airworthiness directives and Harvey Van Wyen oversees the engineering side of noise and emissions rules.

Harold Becker (right), manager of the Airspace and Air Traffic Rules Branch, takes to the skies to see first-hand the compliance with ultralight regulations.

Ann Boylan, who manages the docket for the Office of the Chief Counsel, finds a submission for John Cassady, Assistant Chief Counsel for Regulations and Enforcement.

Discussing a proposed airport x-ray rule are (from the left) Walter Greiner, Theo Tsacoumis and Fred Rapp of the Office of Aviation Security.

he Regulations?

)rs. Andy Horne, Jon Jordon and Bill Hark (left to ight), Office of Aviation Medicine, inspect a prototype medical kit that may be used on commercial air arriers in the future.

Part 91 is the main meat of these regulators from the General Aviation and Commercial Div. of the Office of Flight Operations (from the left): Ed Hammonds, Certification Branch; James Kelln and Mike Sacrey, Project Development; and Dale Ruoff, Operations Branch.

Everyone knows that one of the mainstays of the FAA is the 'ederal Aviation Regulations (FARs). 'hey were not preordained in 1958, owever. They are mutable to changng conditions. But if regulations are eing written or rewritten today, /ho's doing it?

It's not one office. The "regulaors" themselves are always changing, or the causes or sources of regulaions are varied: an accident, service xperience, responses to regulatory eviews in which industry and the ublic are encouraged to participate, reviously issued airworthiness direcives, inspectors' reports or simply ndustry needs or public demand, mong others.

Regulatory teams are assembled 'rom the lead regulatory offices of Airworthiness, Flight Operations, Aviation Security and Environment ind Energy, or they are established in one of the four certification direcorates in the field—Boston for r and propellers, Fort Worth c copters, Kansas City for light iircraft and Seattle for transports.

The team also has representatives 'rom the offices of Aviation Safety to manage the progress of the process and to provide writer-editor services for the draft regulatory action, the Chief Counsel to review the legal soundness of the regulation, Aviation Policy and Plans to ensure its cost-benefits effect on the public and Environment and Energy to consider noise impact, as well as from the Air Traffic Service to check out the operational aspects of the regulation.

Generally, when the Office of Airport Standards and the Air Traffic Service write their own rules, they draft the rules themselves, rather than use the team approach, and then turn them over to the Office of the Chief Counsel for legal editing and the docket.

The proposed regulatory action begins with a public request for rulemaking or service difficulty, which results in a plan: an outline, a list of recommended team members and a schedule. If the plan is approved, it becomes a regulatory project, which is tracked through the agency by means of a program resume. Out of the team's work, a draft Notice of Proposed Rulemaking (NPRM) is prepared and issued for public comment.

Office of Aviation Policy and Plans regulation team members check work on a computer operated by secretary Charlene Brown. Others from left: Len Oberlander, Joe Hawkins and Julius Ganoza.

Then a public docket is opened in the Office of the General Counsel to receive comments from interested individuals and organizations. In preparing the final rule, the comments are carefully weighed and then summarized along with the rule in the *Federal Register*, at which point it becomes a part of the FARs.

Often, the regulatory process reflects a busy mosaic of the concerns

Rules can originate from lead regions. These are members of the Regulations Branch, Aircraft Certification Div., Transport Airplane Directorate in Seattle: writer/editor Pat Siegrist (left), branch manager Gary Killion, and aerospace engineer Bill Boxwell (right).

that go into rulemaking. Joe Gwiazdowski of the Aircraft Manufacturing Division, Office of Airworthiness, recalls that a proposal to enlarge the size of "N" numbers on aircraft for better identification was launched by complaints from private citizens, controllers and law-enforcement officials and involved the Department of Transportation, Interior's Fish and Wildlife Service, U.S. Customs, the Pentagon, a Vice Presidential task force on drug interdiction, 300 Congressional inquiries and more than 2,000 comments from citizens, municipal governments, labor organizations and aircraft organizations.

Rulemaking is a complex balancing act, but, says Gwiazdowski, "We don't make rules for the sake of making them. We do it to best serve the aviation community and the general public without imposing an undue burden in the process. This means we need to look at many sides of the same story. In any case, safety and the public interest are always the bottom line." ■

Often the catalyst for rulemaking comes from field inspectors. Here, Al Pereira, manager of the Windsor Locks, Conn., MIDO, and Pratt & Whitney's Ken Benson (left) discuss certificate operating limitations of a Fairey Ganett.

FAA conducts hearings to explain rules and get reactions, as with this recent one on the high-density rule. Panel members were (from left) Jack Ryan, manager of Air Traffic's Operations Div.; Ed Faberman, Deputy Chief Counsel; and Harvey Safeer, director of the Office of Aviation Policy and Plans.

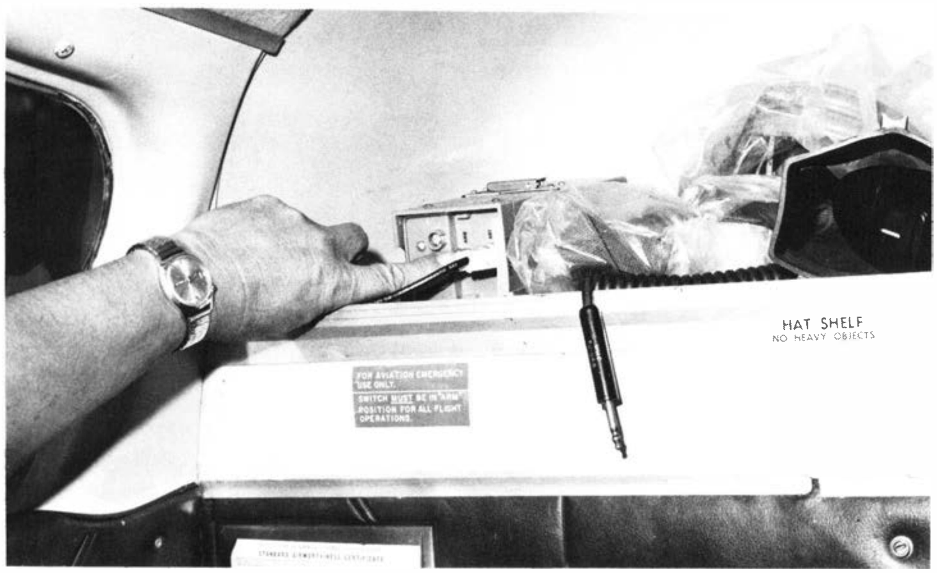
This regulatory team, headed by Steve Stieneker (standing), Office of Flight Operations, is working on a rule for advanced simulation requirements. Others (from the left) are Joe Asin, Office of Aviation Policy and Plans; Dick Elwell, Chief Counsel; and Fred Laird and Sharan Sharp, Office of Aviation Safety.

A regulatory team meets to draft a rule. From the left are Richard Bietel, Office of the Chief Counsel; project manager Joe Gwiazdowski, Office of Airworthiness; Jean Casciano, Office of Aviation Safety; and Mike Evans, Office of Aviation Policy and Plans.

By Frank Clifford
A former writer for FAA and DOT Offices of Public Affairs, now retired, he has also been published in military aviation magazines.

Making ELTs Behave

Educational Program, New ELT May Abate Flood of False Alarms



Pilot insurance: An ELT should be installed on a rigid portion of the plane and checked to ensure that it is only armed or off, except during the appropriate emergency.

"Don't cry wolf!" is FAA's message to pilots. Together with seven other Federal agencies, FAA is trying to curb the growing numbers of emergency locator transmitter (ELT) false alarms that delay bonafide rescue missions and waste valuable resources.

In general use for a decade, the ELT can be called a "yes, but. . . . " device. In most cases, it does what it is supposed to do: broadcast a distinctive radio signal on 121.5 MHz or 243.0 MHz when switched on by a crew member of a downed aircraft or automatically activated by a "G" switch when an aircraft crashes or makes a hard landing.

The *but* is that most of the time its "whupping" is in error, due to mishandling, negligence or malfunction.

Sorting out the false alarms from the genuine emergency costs a great deal of time and money and diminishes the vital block of time available to search for real victims. The Air Force Rescue Coordination Center at Scott Air Force Base, Illinois, estimates that more than 50 percent of injured crash victims who are rescued within 48 hours will live. After the first two days, however, the survival probablity drops to less than 10 percent. And those figures hold only in benign weather.

While the ELT signal increases the number of downed aircraft found in that initial period, the abundance of false alarms works to delay the search for victims. In addition to the cost of rescue missions in resources, every year there are one or more deaths of rescuers, which may be on spurious missions.

The percentage of false alarms hasn't changed over the years, but the volume of aircraft has, as has the volume of signals detected, now that space satellites are monitoring them.

The FAA is doing something about making ELTs more trustworthy. It is working with the Coast Guard, Air Force, National Aeronautics and Space Administration, Federal Communications Commission, Federal Emergency Management Administration, National Oceanic and Atmospheric Administration and National Transportation Safety Board in attacking the problem on two fronts. One is the technical—making improvements in ELT design, construction and installation. The other is the educational—making pilots aware of the necessity for proper ELT handling and enlisting the aid of the aviation press, flight instructors, mechanics and airport personnel.

The group that FAA is a part of is the Interagency Committee on Search and Rescue—ICSAR, for short. The chairman is Rear Adm. Norman C. Venzke, Coast Guard Chief of Operations, and FAA's representative is Bernard A. Geier, the manager of the General Aviation and Commercial Division of the Office of Flight Operations.

Geier, whose flying dates from the Civilian Pilot Training Program during World War II, was in on the early discussion of ELTs for civil aviation in the early 1960s. By that time, they had been in use for years by the military, where they were called CLBs—crash locator beacons. Old-timers still call them that in off-guard conversation.

Since the emergency beacons came into widespread use in 1974, 97-98 percent of all distress signals passed on to the Air Force Rescue Coordination Center have turned out to be false.

The space age has added to the problem by giving us, so far, three satellites capable of receiving and relaying even more ELT signals, both valid and false.

The Russians started it in June 1982 when they launched Cosmos 1383, which, in addition to monitoring marine navigation, contained equipment called COSPAS to handle ELT transmissions. On March 14, 1983, they put up a second, similarly equipped satellite. The U.S. entered the game on March 28, 1983, with the first of two satellites—the TIROS N, carrying SARSAT, which stands for Search and Rescue Satellite-Aided Tracking. TIROS N's primary mission is weather monitoring. Another SARSAT will be lofted later this year.

The three satellites are in polar orbit about 600 miles up, providing coverage of every point on the globe every four to six hours.

The coverage is awesome. On Sept. 9, 1982, a Cessna 172 crashed in desolate terrain in British Columbia, Canada. The Russian COSPAS, launched just over two months earlier, pinpointed the crash location within hours. Because of the prompt detection and the ensuing rescue, the three downed airmen survived, despite severe injuries.

Without SARSAT/COSPAS, ELT signals can be described only as coming from a broad area. With the satellites, doppler-shift characteristics of the signals are interpreted with precision so the source can be defined by geographic coordinates.

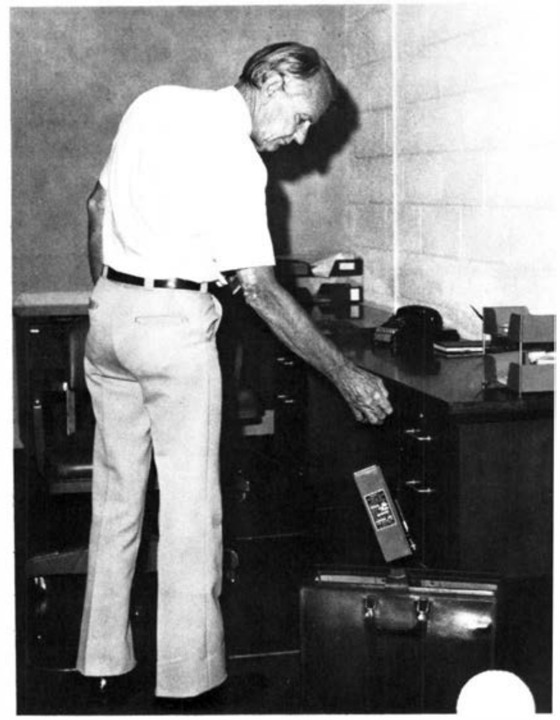
But the problem had not changed. The Rescue Coordinating Center in the first half of 1983—with only one satellite aloft—had received and investigated 4,224 ELT signals, which launched 517 search missions involving 794 flights and 1,482 flying hours. But only 18 of these missions found signals from persons in distress. That's less than one-half of one percent. The vast number of spurious alarms were proving expensive, time consuming and hazardous.

Complicating the problem is the diversity of causes for false alarms and the number of ELTs in service—some 200,000, plus the growing number of marine devices called Emergency Position Indicating Radio Beacons (EPIRBs).

The False Alarm Working Group, an ICSAR subcommittee, broke down the causes into (pilot) mishandling of the ELT (28%), hard landings (21%), other gravity-switch activation (16%) and unknown (35%), which may include such things as improper shipping or servicing with new batteries without the unit's switch being reset.

Then, too, there's misuse of ELTs by campers, hikers and boaters, who aren't supposed to have them.

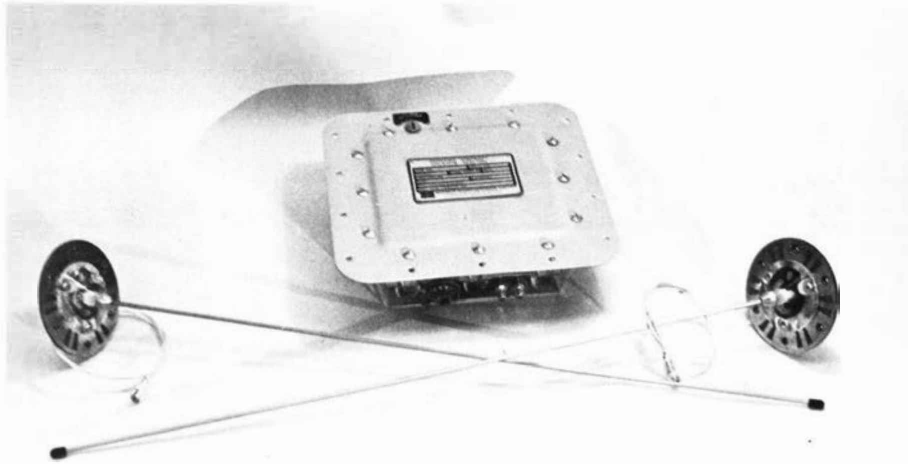
On top of the false alarms to be reckoned with is the misuse of emergency radio channels. A NASA-sponsored workshop on false alarms brought out the fact that some military pilots are a garrulous group. The military occupied the 243.0 MHz channel 25 percent of the time with chitchat, compared to about half that for civilian non-emergency use of 121.5 MHz.



A no-no: A portable ELT should not be treated so roughly. A throw like this could bring search and rescue parties converging on this pilot's office.

Otherwise prudent people casually abuse ELTs without a second thought. Investigators tracking signals have found them originating from units stashed in flight bags, tossed into car trunks, trash cans or onto electronic workbenches or used as children's toys, among others.

Even less prudent was the case of an ELT found deep within a haystack after a long and frustrating search. It was aboard a helicopter laden with illegal drugs awaiting ground transportation.



This ELT unit is designed for permanent installation, making it less likely to be subject to careless abuse.

With the causes and adverse effects of spurious ELT alarms abundantly clear, the FAA is now on the threshold of doing something about them. Following recommendations by ICSAR liaison Bernie Geier, a two-part test program is planned. Commencing in late summer, the first half will be conducted in the Seattle, Wash., area. It will evaluate the effectiveness of new ELT monitors placed aboard aircraft to alert pilots to malfunctioning ELTs. The second phase—without a projected starting date—will evaluate new, second-generation ELTs in the Miami, Fla., area.

"We picked these locations after consultation with the Air Force people at the Rescue Coordination Center," Geier said. "We identified two 'pockets' in these states that have a high percentage of false alarms and have a manageable number of domiciled general aviation aircraft."

Geier said the plan calls for the procurement and distribution of 4,000 monitors with a range of about 25 feet that are about the size of a pack of cigarettes. Still to be decided is whether the monitors will give an audible signal, a winking light or both.

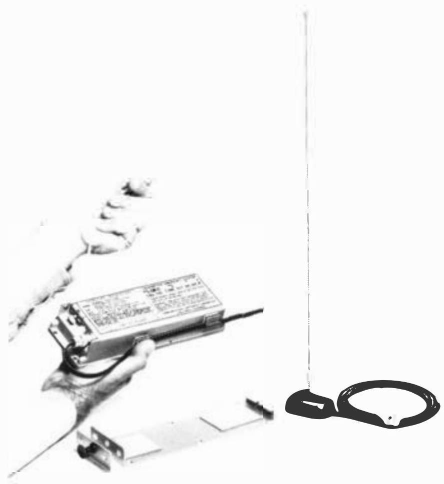
The monitors will be distributed to airplane owners under the supervision of the Washington State Aeronautics Commission, which will enlist the aid of the Civil Air Patrol and other aviation organizations to educate the owners on the use of the monitors and the need to reduce false alarms.

The test is expected to last six to 12 months, during which time the Air Force will monitor the number of false alarms from the area. The Civil Air Patrol and other organizations will determine if the false alarms are from aircraft with or without the monitors.

"The test results should provide us with the justification to require a monitor or proof that the monitor would not be effective," Geier said.

Not part of the test but a recommended step is the purchase by airport operators and fixed-base operators of ground monitors with a 2,000- to 3,000-foot range. These would permit detecting errant ELTs that are sitting on the airport or in repair shops.

One of the problems associated with the false alarms is that neither the FAA nor airport personnel have the right to break into aircraft to silence signaling ELTs. At one point, Geier notes, it was thought that the signal could be cut off by grounding the plane's ELT antenna. That didn't work—all it did was create a longer antenna for the signals to go out on. Nevertheless, airport monitors could abort rescue missions and get pilots to reset their switches faster.



This transmitter requires installation but can easily be removed from the plane for safekeeping or maintenance.

Turning to the new ELTs, Geier explained: "The Radio Technical Commission for Aeronautics developed a new specification for an ELT, but we don't know if it would be any better than the old one without field testing. So, I suggested we go to Miami to try out 1,000 'second-generation ELTs.' "

Since the new devices are expected to cost about $300 to $500 each, FAA will be loaning them to participants. The ELT is expected to have improved batteries, better specifications for gravity-switch activation, a cockpit activation monitor and remote controls for the pilot and immunity from stray radio frequency radiations.

On the all-important education front, in March of this year, FAA distributed 100,000 posters to flight service stations, general aviation district offices, flight schools and airports to call attention to the false alarm problem and its remedies.

One important way in which pilots can assure that a hard landing, inflight vibration or turbulence didn't trigger the G-switch is to make a check of 121.5 MHz part of their before-starting and after-shutdown checklist. Another is to handle this piece of equipment that they paid for with a little care.

Through monitoring, new equipment and educating for a new awareness, the interagency committee hopes to see a 65 percent reduction in ELT false alarms within two years. ■

Another Road Into Air Traffic

FAA Reactivates Predevelopmental Program for the Unititiated

Once upon a time, if you wanted to become a controller, it seemed as if you had to be born one—or at least baptized one in the military.

That pretty much circumscribed most blacks, women and a lot of white males as well. In fact, only 2.6 percent of the controller work force was comprised of minorities and only 1.1 percent of women . . . that is, until 15 years ago.

In 1969, FAA began a National Predevelopmental Training Program designed to offer "outsiders" a chance to catch up to conventional air traffic candidates. Or, as current trainee Sue Cole of the Albuquerque, N.M., ARTCC puts it, "It gives the participants a preview as to what might be encountered and expected of them if pursuing a career in air traffic control."

Now, after a three-year hiatus, the program has been reactivated with some changes. And the comparable figures today are 8.1 percent minorities and 8.6 percent women.

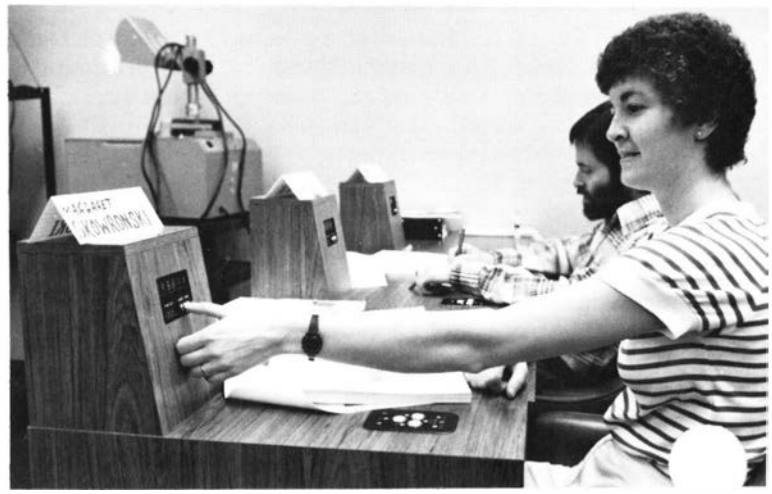
Originally, participants entered the program at the GS-4 level, spent six months at the FAA Academy and the remainder of a year at various field facilities.

Over the years, the entry level was raised to GS-5 and the agency contracted with the University of Oklahoma in Norman, Okla., to conduct 17 weeks of classroom and laboratory training and to provide dormitory space.

Early in 1981, the program was suspended due to a government-wide hiring freeze. This was followed by the controller strike, which required the university's resources to be committed to training developmental controllers. In January 1984, 19 trainees reinaugurated the program. Plans call for entering 106 students in 1984.

Modifications were made to standardize the field training and administration and to update the curricula. A significant change in the program was the designation of centralized training facilities, or "hubs," in the regions from which the field portion of the training is administered. One aspect of this approach is that the regions feel a stronger commitment to the predevelopmentals, who, in turn, have a "home base" to relate to, thereby fostering a more personal relationship between them. Another part of the approach provides a better way of selecting trainees for the three air traffic options.

Predevelopmentals, who enter at the GS-5 level, are subject to the same screening and selection process as developmentals, who enter as GS-7s. They must pass the same written examination, physical and security clearance.



Students Margaret Skowronski, Northwest Region, and Peter Sabatini, Western-Pacific Region, study at their work stations.

Instructor Don Arnoldy describes airport approach procedures to the first class of predevelopmental ATC students.

Tom Ross, director of FAA Programs for the University of Oklahoma speaks to the first graduating class in FAA's reactivated ATC predevelopmental program in May. Others on the "dais" are (left to right) Joseph Kislicki, manager, Academy AT Branch; Morris Friloux, acting superintendent; and Charlesan Neugebauer, assistant manager of the Air Traffic Branch. Photo by Ellis Young

Donna Walker, Jaci Simpson and Terry Jackson (left to right) were Southern Region DOT employees who entered the predevelopmental program as part of the Secretary's initiative for women.

The first phase is two weeks of orientation and indoctrination at the hub facility. The students learn about Federal employment, personnel policies, FAA and the Air Traffic Service.

In the 17-week second phase in Norman, the students receive classroom and workshop practice in a broad range of technical aviation and air traffic skills and knowledge, as well as attitudes needed to become effective individuals and team workers in ATC. Subjects covered include Basic Principles of Flight, Aircraft Identification, Aviation Weather, Navigation, Federal Aviation Regulations and Human Relations.

The third phase of 11 weeks is at the hub in the region and is for familiarization with the en route, terminal and flight service station options. An option determination panel is convened to decide which option a student will enter, based on the needs of the agency, the predevelopmental's preferences, a review of end-of-phase tests and the recommendation of the facility manager.

The student receives training and experience as an air traffic assistant (flight data processor) and, depending on the option, as a dynamic simulation operator or enhanced target generation operator in the 11-week fourth phase at the hub.

Phase five is still at the hub. This specific-option training involves classroom review and nonradar laboratory training.

All trainees must maintain an average score of 70 to complete the program, at which point they are promoted to GS-7 and enter developmental training at the FAA Academy.

As student Linda Potter of the Jacksonville, Fla., ARTCC says, "It's a wonderful opportunity for anyone willing to learn." ■

Cross Center, on the University of Oklahoma campus, is one of two buildings used to house and train Air Traffic predevelopmental students.

People

Aeronautical Center

■ **Louis Ablaca,** unit supervisor in the Line Maintenance Section of the Sacramento, Calif., Flight Inspection Field Office at McClellan Air Force Base, from the Los Angeles FIFO.

■ **Raymond L. Bradford,** unit supervisor in the Electronic Production Section, Engineering and Production Branch, FAA Depot, promotion made permanent.

■ **Jackie W. Coley,** supervisor of the Product Section, Quality Control Branch, FAA Depot.

■ **James T. Dills,** manager of the Procurement and Systems Branch, Procurement Div.

■ **Mary J. Dobson,** unit supervisor in the General Materiel Section, Supply Management Branch, FAA Depot.

■ **Jimmy D. King,** unit supervisor in the Technical Support/Production Control Section, Line Maintenance Branch, Aircraft Maintenance & Engineering Div., Aviation Standards National Field Office.

■ **Billie P. Langford,** unit supervisor in the Electro-Mechanical Production Section, Engineering and Production Branch, FAA Depot, promotion made permanent.

■ **Donald P. Pate,** supervisor of the Navigation Systems Section, Standards Development Branch, Flight Programs Div., Aviation Standards National Field Office, promotion made permanent.

■ **Charles J. Rusling III,** manager of the Information Center Branch, Data Services Division.

■ **Vina L. Showers,** manager of the Supply Management Branch, FAA Depot.

■ **Durrell T. Treadway,** manager of the Systems and Technology Branch, Data Services Division.

Alaskan Region

■ **Maurice W. Batt,** area manager at the Kotzebue Flight Service Station.

■ **William E. Nelson,** manager of the Gulkana FSS.

Central Region

■ **Sydney F. Alleyne,** area supervisor at the Kansas City ARTCC.

■ **Angela Bolyard,** supervisor of the Scheduling and Production Section, Automated Information Resource Branch, Resource Management Division.

■ **Ivan F. Hunt,** manager of the Plans and Programs Branch, Air Traffic Division.

■ **Larry R. Miffleton,** area supervisor at the Kansas City ARTCC.

■ **Gene T. Schumacher,** supervisor of the Technical Support Unit in the Grand Island, Neb., Airway Facilities Sector.

Eastern Region

■ **Paul A. Alexander,** unit supervisor in the Atlantic City, N.J., Airway Facilities Sector Field Office, Newark, N. J., AF Sector, promotion made permanent.

■ **Rosario Barilla,** group supervisor in the Electronics Installation Section/ATC Facilities Unit, Electronics Engineering Branch, AF Division.

■ **Louis M. Berghom,** systems engineer in the New York ARTCC AF Sector, promotion made permanent.

■ **Edwin C. Bland, Jr.,** assistant manager of the Washington National Airport Tower.

■ **Raymond Cardona,** manager of the Trenton, N.J., AF Sector Field Office, Tri-State AF Sector.

■ **Robert R. Decker,** systems engineer in the Washington ARTCC AF Sector.

■ **William T. Dixon,** group supervisor in the Electronics Installation Section/Navaids Weather Unit, Electronic Engineering Branch.

■ **Raymond P. Gillich,** systems engineer in the Washington ARTCC AF Sector.

■ **Richard V. Kahn,** unit supervisor in the Trenton AFSFO, Tri-State AF Sector.

■ **Henry L. Lewis,** manager of the Charleston, W.Va., AF Sector Field Office in the Charleston AF Sector.

■ **Raye Liverpool,** supervisory accountant in the Contracts & Payables Section, Examination, Classification and Disbursement Branch, Accounting Division.

■ **Anthony J. Lucernoni,** systems engineer in the Washington ARTCC AF Sector.

■ **Donald D. Martin,** manager of the Philadelphia, Pa., AF Sector Field Office in the Philadelphia AF Sector.

■ **Charles R. Reavis,** assistant manager of the Washington ARTCC.

■ **Martin E. Rosenberg,** area supervisor at the LaGuardia Tower, New York.

■ **John F. Ryan,** airport certification Safety officer in the Safety Section, Safety & Standards Branch, Airports Division.

■ **Joseph M. Sammon,** unit supervisor in the Trenton AFSFO, Tri-State AF Sector.

■ **Richard Schroeder,** systems engineer at the New York ARTCC.

■ **Rodney K. Smith,** assistant manager for technical support in the Washington ARTCC AF Sector.

■ **Anthony P. Spera,** section supervisor in the Planning and Programming Branch, Airports Division.

■ **Vincent D. Walp,** manager of the

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 branch managers in offices are published. Other changes cannot be accommodated because there are thousands each month.

Harrisburg, Pa., AFSFO, Harrisburg AF Sector.

■ **Leon W. Zukosky,** manager of the Hagerstown, Md., Tower.

Great Lakes Region

■ **Daniel N. Alspach,** area supervisor at the Cleveland, Ohio, ARTCC.

■ **Richard D. Ames,** area supervisor at the Champaign, Ill., Tower.

■ **William L. Calhoun,** assistant manager for systems performance in the Minneapolis, Minn., ARTCC Airway Facilities Sector.

■ **Alberto R. Ferran,** area supervisor at the Janesville, Wis., Tower, promotion made permanent.

■ **Edward R. Glowacky,** area supervisor at the Youngstown, Ohio, Tower.

■ **Roger V. Gordon, Jr.,** manager of the Maintenance Branch, Flight Standards Div.

■ **Vernon Hopson,** area supervisor at the St. Paul, Minn., Tower.

■ **Darwin D. Hormann,** area supervisor at the Muskegon, Mich., Tower.

■ **Howard B. Kehlenbeck,** facility coordination officer in the Minneapolis ARTCC AF Sector.

■ **Annette Kochan,** area supervisor at the Chicago Midway Tower.

■ **Joseph H. Kramer,** assistant systems engineer in the Indianapolis, Ind., ARTCC AF Sector.

■ **Leon T. Lauer,** manager of the Grand Forks, N.D., AF Sector Field Office in the Dakota AF Sector.

■ **John M. Loftus,** manager of the Muncie, Ind., Tower.

■ **Linda D. Nelson,** area supervisor at the Timmerman Airport Tower, Milwaukee, Wis.

■ **Robert L. Nothelfer,** supervisor of the F&E Navaids Engineering Section, Establishment Engineering Branch, AF Div.

■ **David E. Patterson,** area supervisor at the Aurora, Ill., Tower.

■ **David P. Peterson,** area supervisor at the Minneapolis ARTCC.

■ **Richard K. Peterson,** area supervisor at the Wold Chamberlain Airport Tower, Minneapolis.

■ **Donald H. Polston,** area supervisor at the Indianapolis Tower.

■ **Roy D. Smith,** area officer at the Cleveland ARTCC.

■ **Paul A. Stendahl,** assistant manager for program support in the Minneapolis ARTCC AF Sector.

■ **Wayne R. Traaseth,** area supervisor at the Minneapolis FSS, promotion made permanent.

■ **Andrew S. Webb,** manager of the Alton, Ill., Tower.

■ **Leo E. Wonderly,** manager of the

Retirees

Anderson, Howard A.—AC
Chandler, Margie M.—AC
Jessie, Leon L.—AC
Major, Robert E.—AC
Porter, Nancy A.—AC

Birckett, Horace D.—AL
Costello, Richard J.—AL
Golden, Leo F.—AL
Schofield, William E.—AL

Boe, Ronald N.—CE
Box, Norval L.—CE
Christensen, Ila N.—CE
Christensen, Merle R.—CE
Convy, David M.—CE
Delong, Patricia E.—CE
Gordon, Donald B.—CE
Hooper, Clyde B.—CE
Jones, Jack R.—CE
Moore, Claude L.—CE
Sittenauer, Kenneth P.—CE
Thomas, Arthur J.—CE
Way, Robert W.—CE

Hilton, Pearl E.—CT

Bryant, Madison L., Jr.—EA
Cissel, William D.—EA
Graham, Howard W.—EA
Jackson, Thurman H.—EA
Johnson, Freida B.—EA
Mann, Francis O.—EA
Seufert, Fred R.—EA

Buffum, Robert R.—GL
Donhaiser, J. William—GL
Green, Lloyd H.—GL
Head, Eldon W.—GL
Lewis, James, Jr.—GL
Maier, Charles K.—GL
Mefford, Donald—GL
Shimmin, Rodney W.—GL
Skurka, Joseph F.—GL

Bailey, John E.—MA
Tayman, Seabrook C.—MA

Cargill, William, Jr.—NE
Halfond, Arnold J.—NE
Peters, Ronald J.—NE
Pittman, Eugene R.—NE

Eggers, Harold H.—NM
McChesney, Richard A.—NM
Prindle, Robert N.—NM
Redmond, Clarence J.—NM

Allgood, William C., Jr.—SO
Baez, Awilda—SO
Beasley, John K.—SO
Blanks, Henry E.—SO
Davis, Robert K.—SO
Deignan, Harry C.—SO
Gay, Curtis L.—SO
Hadley, Roy, Jr.—SO
Jones, Bobby G.—SO
Jones, Willis L.—SO
Kearley, Challie H.—SO
McElman, Florence M.—SO
Millo, Frank S.—SO
Miner, Howard D.—SO
Mize, Floyd E.—SO
Newbold, Clarence J.—SO
Prattis, James G.—SO
Rice, Connally C.—SO
Strader, Jerry B.—SO
Thurston, John L.—SO

Crawford, Robert D.—SW
Fournier, William G.—SW
Guerrero, George R.—SW
Head, Edwin C.—SW
Helbling, Henry H.—SW
Maier, Francis H.—SW
McIntire, Bobby L.—SW
Parlett, Lakin L.—SW
Parrish, Hershel O.—SW
Robbins, Richard F.—SW
Roe, Donald L.—SW
Rogers, Loren D.—SW

Burgess, William, Jr.—WA
Craddock, Nicholas M.—WA
Eng, Mee Har Y.—WA
Kistler, Dorothie Marie G.—WA
Trivigno, Carmine F.—WA
Turney, Cline E.—WA

Abergas, Manuel—WP
Baker, Edwin R.—WP
Cooter, Orin D.—WP
Ellinger, Fred W.—WP
Newark, Robert A.—WP
Pettit, Edward M.—WP
Tamborello, Jacob J.—WP
Tarantino, Richard V.—WP
Violi, James P.—WP
Wells, Marvin E.—WP
Yokoyama, David S.—WP

Operations Branch, Flight Standards Division.

■ **Milton E. Woodcock,** area supervisor at the Terre Haute FSS.

Metro Washington Airports

■ **Russell E. Powell,** electrician foreman in the Electrical Branch, Engineering and Maintenance Division.

New England Region

■ **James A. Caudle,** manager of the Boston ARTCC, from the Los Angeles, Calif., ARTCC.

■ **Paul R. Kelleher,** area supervisor at the Otis Air Force Base, Mass., Tower.

■ **Roger M. Long,** area manager at the Bridgeport, Conn., Flight Service Station.

■ **Gordon M. Olsen, Jr.,** assistant manager, traffic management, at the Boston ARTCC.

■ **Reed S. Peterson,** manager of the Norwood, Mass., Tower.

■ **Robert L. Pierce,** area supervisor at the Bradley Field Tower, Windsor Locks, Conn.

■ **John F. Silveira,** assistant manager, military operations/plans & programs, at the Boston ARTCC.

Northwest Mountain Region

■ **Malcolm L. Bell,** maintenance mechanic foreman in the Salt Lake City, Utah, Airway Facilities Sector, promotion made permanent.

■ **Robert J. Berkley,** manager of the Seattle, Wash., Civil Aviation Security Field Office, promotion made permanent.

■ **Larry A. Brennis,** manager of the Renton, Wash., Tower.

■ **Mary J. Carter,** manager of the Baker, Ore., Flight Service Station.

■ **William E. Drew,** assistant manager, plans and procedures, at the Denver, Colo., Tower.

■ **Raymond A. Massie,** manager of the Eugene, Ore., Tower.

■ **George A. McConnachie,** assistant manager, airspace and procedures, at the Seattle ARTCC.

Southern Region

■ **Paul H. Burks,** manager of the Greenville, Miss., Tower.

■ **Wade T. Carpenter, Jr.,** manager of the Macon, Ga., Flight Service Station.

■ **Amado Colberg-Ortiz,** area supervisor at the San Juan, Puerto Rico, Center/RAPCON, promotion made permanent.

■ **Ricardo O. Cowan,** assistant manager for automation at the Atlanta, Ga., FSS.

■ **Thomas S. Denny,** area supervisor at the West Columbia, S.C., Tower.

■ **Harlan J. Drewry,** area manager at the Memphis, Tenn., ARTCC.

■ **Harold W. Franck,** systems engineer in the Memphis ARTCC Airway Facilities Sector.

■ **Edgar C. Gomez,** area supervisor at the Atlanta ARTCC.

■ **Ronald J. Helmke,** manager of the Florence, S.C., FSS.

■ **Turner T. Hinkle,** unit supervisor in the London, Ky., AF Sector Field Office, Covington, Ky., AF Sector, promotion made permanent.

■ **James M. Honeycutt, Jr.,** unit supervisor in the Wilmington, N.C., AF Sector Field Office, Raleigh, N.C., AF Sector.

■ **Billy F. Janca,** unit supervisor in the Mid-South Flight Standards District Office, Atlanta.

■ **Albert R. Outen,** assistant manager for program support in the Raleigh AF Sector.

■ **Eugene L. Parker,** assistant manager, plans and procedures, at the San Juan CERAP.

■ **Charles A. Snow,** supervisor of the FSS/Weather Unit in the ARTCC/FSS Section, Environmental Establishment Engineering Branch, AF Div., promotion made permanent.

■ **Donald H. Sorensen,** unit supervisor in the Wilmington AFSFO, Raleigh AF Sector.

■ **John H. Williams,** unit supervisor in the Communications Section, Electronic Establishment Engineering Branch, promotion made permanent.

Southwest Region

■ **Rowland R. Ballard,** area supervisor at the Forth Worth, Tex., ARTCC.

■ **Cloyd J. Combs,** manager of the El Paso, Tex., Airway Facilities Sector Field Office, El Paso AF Sector.

■ **William A. Daniel,** manager of the Oklahoma City Manufacturing Inspection District Office, promotion made permanent.

■ **James A. Durda,** unit supervisor in the ATC Terminal Systems Engineering/Installation Section, Electronics Engineering Branch, AF Div.

■ **Peter B. Fredrikson,** area supervisor at the Albuquerque, N.M., ARTCC.

■ **Loren W. Fuhrman,** area supervisor at the Houston, Tex., ARTCC.

■ **Humberto Garcia,** operations officer at the San Antonio, Tex., Flight Service Station.

■ **Robert J. Gobel,** manager of the San Angelo, Tex., Tower.

■ **George T. Graves,** supervisor of the Standards Section, Safety & Standards Branch, Airports Division.

■ **Lawrence A. Greiner,** assistant manager, military operations, at the Albuquerque ARTCC.

■ **Thomas G. Hammans,** manager of the Information Resource Management Branch, Resource Management Division.

■ **Ronald E. Kennedy,** manager of the Real Estate and Utilities Branch, Logistics Division.

■ **Jefferson D. Lee, Jr.,** assistant manager, plans and programs, at the Albuquerque ARTCC.

■ **George H. Lewis,** manager of the Civil Aviation Security Division.

■ **Leonard J. Mitchener,** assistant

For guiding a fellow controller into a deadstick landing at an airport in the Shenandoah Mountains of Virginia, Ronald Haggerty, plans and programs specialist at the Washington ARTCC, received the en route Outstanding Flight Assist Award for 1983 from Administrator Donald Engen (second from left) and a Superior Achievement Award from Eastern Region Air Traffic Division manager Norbert Owens (right) as Mrs. Haggerty beams with pride.

manager, airspace and procedures, at the Albuquerque ARTCC.

■ **Jack L. Nimmo, Jr.,** manager of the Austin, Tex., FSS.

■ **Julian A. Saenz,** supervisor of the Interfacility Planning & Telecommunications Section, Program and Planning Branch, AF Division.

■ **William H. Short,** assistant manager, quality assurance, at the Albuquerque ARTCC.

■ **James R. Spencer,** manager of the Tyler, Tex., Tower.

■ **Jeffrey L. Sproul,** area supervisor at the Albuquerque ARTCC.

■ **Jerry E. Todd,** area supervisor at the Albuquerque ARTCC.

Technical Center

■ **John M. Broderick,** supervisor of the Systems Testing Section, National Automation Field Support Branch, Operations Division, promotion made permanent.

■ **Lewis Hakes,** maintenance general foreman in the Supporting Services Section, Plant Operation & Maintenance Branch, Facilities Division.

Washington Headquarters

■ **Nancy A. Greenfelder,** section supervisor in the ATC Automation/Flight Information Branch, Contracts Division, Acquisition and Materiel Service, promotion made permanent.

■ **Kenneth W. Harris,** manager of the Aviation Activity Branch, Systems & Policy Analysis Division, Office of Aviation Policy & Plans.

■ **Joseph A. Hawkins,** manager of the Regulatory Analysis Branch, Systems & Policy Analysis Division, Office of Aviation Policy & Plans.

■ **Walter H. Mitchell,** assistant manager of the Procedures Division, Air Traffic Service.

■ **Marvin L. Olson,** manager of the Planning Analysis Division, Office of Aviation Policy & Plans.

■ **Robert S. Voss,** technical program manager in the Terminal Automation Program, ATC Automation Division, Program Engineering & Maintenance Service.

■ **Norman Weil,** deputy director of the Office of Aviation Policy & Plans.

Western-Pacific Region

■ **Douglas L. Booth,** unit supervisor in the Navigation/Landing Program Section, Establishment Engineering Branch, Airway Facilities Div.

■ **Lewis Z. Clark,** manager of the Mesa, Ariz., Tower, promotion made permanent.

■ **Norman E. Cyphers, Jr.,** area supervisor at the Mesa Tower.

■ **Walter H. Daigle,** acting manager of the Flight Standards Branch, Flight Standards Division.

■ **Douglass R. Eggers,** assistant manager, quality assurance, at the Los Angeles ARTCC.

■ **Jon E. Flippen,** area manager at the Ontario, Calif., TRACON.

■ **P. Nelson Gnirke, Jr.,** unit supervisor in the ATC Automation & Flight Information Program Section, Establishment Engineering Branch, AF Div.

■ **Lawrence D. Goff,** assistant manager of the Phoenix, Ariz., Tower.

■ **William R. Hadley, Jr.,** assistant manager for training at the San Diego, Calif., TRACON at the Miramar Naval Air Station.

■ **Jon D. Hancock,** area supervisor at the Oakland, Calif., ARTCC.

■ **Alan L. Hanson,** unit supervisor in the Communications, Surveillance and Interfacility Program Section, Establishment Engineering Branch.

■ **Willoughby E. Henshaw,** unit supervisor in the ATC Automation & Flight Information Program Section, Establishment Engineering Branch.

■ **Henry T. Y. Hong,** area manager at the Honolulu, Hawaii, Tower.

■ **Jack L. Howard,** assistant manager for training at the Oakland Flight Service Station.

■ **Forney A. Lundy, Jr.,** manager of the Monterey, Calif., Tower.

■ **Jose Mandawe,** area supervisor at the Stockton, Calif., FSS.

■ **Henry S. Robeson, Jr.,** unit supervisor in the Communications, Surveillance and Interfacility Program Section, Establishment Engineering Branch.

■ **Orrin L. Shackleford,** area supervisor at the San Jose, Calif., Municipal Airport Tower.

■ **R. Q. Simmons, Jr.,** area supervisor at the San Carlos, Calif., Tower.

■ **Fritz E. Sperling,** manager of the Employment Branch, Personnel Management Div.

■ **Robert E. Swanson,** area manager at the San Diego TRACON.

■ **Theodore R. Walters,** area supervisor at the Los Angeles Tower.

■ **John S. White,** area supervisor at the Los Angeles ARTCS, promotion made permanent.

■ **James D. Whittle,** area supervisor at the Oakland ARTCC.

■ **Gordon R. Yen,** manager of the Montgomery Field Tower, San Diego.

Have I Got a Candidate for You!

Special Examining Division Keeps Tabs on Potential FAAers

Fingers flit across the computer terminal keyboard. Several states away, electronic fingers extract names of persons eligible for training selection in specialized FAA jobs. It's the Special Examining Division (SED) at the Mike Monroney Aeronautical Center tapping the memory banks at the Office of Personnel Management (OPM) Service Center located in Macon, Ga.

Priscilla Cope (left) and Avis Longhorn of the Special Examining Division compare written file information with computer-stored information obtained from the OPM Service Center.

Automation is a natural for SED, which was established as the Special Examining Unit Staff in December 1980 to recruit, examine and refer to regions lists of eligible candidates for Aviation Safety Inspector and Air Traffic Control Specialist positions. It was designed to consolidate the examining processes for these two occupations from the 14 regional OPM offices into one central location.

The SED issues announcements to the public, which describe qualification requirements and provide information on how, when and where to apply. These are distributed to OPM's Federal Job Information Centers. For ATCS positions, the SED processes applications, maintains the inventory and issues certificates of eligibles.

The division was created none too soon, for within the first year it had to respond quickly to the air traffic controller strike of August 1981. It acquitted itself well, becoming the major instrumentality for finding enough air traffic candidates.

At that time, a computer system served the ATCS inventory, but the other work had to be handled manually. During the past year, however, all inventory records have been placed into computer systems, and improved data-handling capability was recently added for the ATCS inventory.

In June 1982, the Flight Data Processor inventory was established to support the air traffic system. For this position, too, OPM granted the SED all recruitment, examination and referral authority.

In October 1983, the Airway Science Program was established as a special five-year demonstration project. The program provides for hiring of graduates from colleges with recognized airway science curricula for five FAA positions—ATCS, electronics technician, computer specialist, aviation safety inspector (operations) and aviation safety inspector (airworthiness)—or non-college applicants with equivalent qualifications. This program has been added to SED's inventory.

SED secretary Darlene Law receives an information sheet on job availabilities for positions handled by the division.

Staffing assistants Betty Daugherty (left) and Sharon Morrow check through files to verify the specialized experience of applicants for a covered position.

The Special Examining Division has turned into an all-women organization, with Carolyn Hohmann its manager and Clauddia Jackson and Adri-Anne Trammell heading up its branches.

The organization has grown from 11 to 18 employees and over its first three years has processed 124,000 applications, responded to 38,000 letters and answered 69,000 telephone inquiries, in addition to other duties.

A better perspective of the work can be gained from the comments of OPM's area manager, Malthus Northcutt, following an audit of the division last year: ". . . we are reasonably certain that your operation is the largest in the nation in terms of workload. Even so, the work is performed at a cost that compares favorably with other agencies' average cost per selection [actually, it was lower]. The staff is generally well trained and demonstrates a positive attitude about their contribution to aviation safety. The Special Examining Division is doing an excellent job." ■

Update Your Mailing Address

A facility reassignment often means that you have to move your home. Have you made sure that FAA WORLD moves with you?

The home address used by the agency to mail FAA WORLD is the same one used for mailing W-2 income tax forms every December. The list normally is canvassed each November, but if you want your address corrected sooner to ensure that FAA WORLD keeps coming, you will have to initiate the change yourself.

Ask your time-and-attendance clerk for FAA Form 2730-18, "Payroll Address Information," and complete items 1 and 2 only. (Items 3 and 4 are for changing the mailing address of paychecks.) The T&A clerk will forward the form to payroll for processing.

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U.S. Department
of Transportation

**Federal Aviation
Administration**

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