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AAS: Tomorrow's ATC On Its Way

By John G. Leyden

The announcement of the Advanced Automation System (AAS) contract winner didn't have quite the drama of, say, the annual Academy Award ceremonies. Deputy Secretary of Transportation Mimi Dawson didn't even deliver the now famous line: "May I have the envelope, please."

In fact, the reporters who showed up for the July 26 news conference in the DOT Washington headquarters already knew that IBM had taken home the $3.6 billion prize. DOT had issued a cryptic one-sentence announcement of the winning contractor the previous evening, following the close of the stock market, and promised that complete details would be provided at the next day's press conference. The morning newspapers carried almost equally cryptic articles.

As the Source Selection Official for the contract—that is, the person who made the final decision—Dawson presided at the news conference with back-up support from FAA Administrator Allan McArtor and the director of the Automation Service, Lee Page. Also on hand was IBM Vice President Gerry Ebker, looking understandably pleased.

Dawson called AAS "an entirely new generation of equipment for air traffic control that will enhance safety and capacity." She noted that it will replace all

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An IBM engineer works with a new advanced automation workstation, which can process radar-tracking information, detect potential conflicts and warn controllers of off-course aircraft.

How FAA Gets Its Money

It's September and the end of Fiscal Year 1988. Right now, there should be a new appropriation of something over $6.75 billion to keep FAA humming in 1989. Where that money comes from is a story that few understand.

The budget process should be simple, you would think. At home, you can list your fixed expenses, like rent or mortgage, utility bills, insurance premiums and loan payments. You can then subtract that from your revenues—salary, interest and dividends, for example. As an oversimplification, the remainder could be divided up for food, savings and entertainment. If that doesn't add up, because, say, you overspent on credit, you have to make some adjustments in your lifestyle to produce a balanced budget.

It ought to be similar in the Federal Government. FAA figures out its needs, sends its proposal to the Office of the Secretary (OST) to be combined with the budget for the rest of the Department of Transportation. OST routes it to

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AAS

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The Advanced Automation System Acquisition Phase Team meets to review the IBM contract Award. From the left are Brian Andrews, manager, Contract Technical Representative Branch; Michael Perie, deputy director of the Automation Service; Donald Mallikin (standing), assistant manager, Advanced Automation System Division; Deborah Wilson, AAS contracting officer; and in the System Advanced Automation Division: Richard Marek (standing), manager, Implementation Branch; Gary Rowland, manager, TAA/ACCC Branch; G. Michael Bateman, manager, TCCC Program Branch; and Michael Rymond, ISSS Branch engineer. Photo by Lanci Strozier

current computer hardware and software in the ATC system, as well as provide controllers with new common consoles, or "sector suites."

The Deputy Secretary said the new system will enable controllers "to spend less time managing individual flights and more time managing the airspace." And McArtor added that AAS will enable controllers "to work smarter not harder."

The Advanced Automation Program is the centerpiece of FAA's 10-year, $12.2 billion plan for upgrading the nation's air traffic control and air navigation system. Other key National Airspace System (NAS) Plan elements include new traffic control and weather radars, replacement of vacuum-tube navigation aids with solid-state equipment, overhaul of the communications network and automation and consolidation of the flight service station system.

FAA Administrator Allan McArtor listens as Deputy Secretary of Transportation Mimi Dawson announces the $3.6 billion Advanced Automation System contract award on July 26.

McArtor called AAS a "total automation system" and said it is designed to have a life span of 20 to 30 years. It will tie together all of FAA's primary enroute and terminal air traffic control facilities into an integrated, automated system that will permit consolidation of all radar services into approximately 23 strategically located facilities.

The 23 "Area Control Facilities" (ACFs) will provide radar guidance for all airport approaches and departures, as well as handle aircraft flying under instrument flight rules between airport terminal areas. The 23 locations include the 20 existing air route traffic control centers in the 48 states, the Anchorage and Honolulu enroute centers and the New York terminal radar approach control.

Conceding that it might not be practical or cost effective to consolidate radar operations at all major terminals, McArtor said the agency has included options in the AAS contract to acquire terminal automation equipment for up to 18 additional locations. Among the terminal sites being reviewed are places like Los Angeles and Dallas-Ft. Worth.

McArtor stressed the complexity of the transition from the current system to the full AAS, noting that FAA must continue to provide full air traffic control services 24 hours a day, seven days a week, without any degradation of safety. For this reason, he added, the agency is following a multi-step approach in implementing AAS, with appropriate stabilization periods between them to limit the degree of change experienced by controllers and airspace users at any one time.

FAA already has set the stage for the transition to the AAS by commissioning new mainframe computer systems in all 20 domestic enroute control centers. The Host systems will provide the additional capacity and reliability needed to handle projected traffic increases into the mid-1990s. They also will interface with the new controller work stations when this equipment is initially introduced into the enroute centers.

The Sector Suites

The work stations, or sector suites, will be the first AAS components to go on line, providing early gains in controller productivity. The futuristic consoles will feature large, multiple color displays that will provide controllers with traffic, weather and flight data as well as a "look ahead" planning capability. Although each console also will have its own embedded microprocessors to drive the displays and perform related tasks, most of the data processing required for controlling traffic will be performed by the Host computers.

These Initial Sector Suite Systems (ISSSs), as this phase of the program is called, will be installed in new control wings added to each of the domestic centers. This will facilitate controller training by providing them with a realistic operating environment prior to the cutover to the new system.

First delivery of the ISSSs will be to the FAA Technical Center in Atlantic City in September 1990, where it will undergo extensive test and evaluation. First site delivery to the Seattle Center is scheduled for April 1992. The equipment is expected to be operational at all sites by June 1995.

(Continued)

Contract Challenged

Hughes Aircraft Company has filed a protest with the General Services Administration's Contract Board of Appeals on the awarding of the Advanced Automation System contract to IBM Corporation's Systems Integration Division.

The board has ordered FAA to suspend the contract work until it rules on the protest. A ruling is expected by Oct. 6. Awarded on July 25, the $3.6 billion contract is the largest in FAA and DOT history.

A 25-year FAA veteran, Mr. Leyden is manager of the Public & Employee Communications Division, Office of Public Affairs.

Gathered just a year ago for the signing of the Requests for Proposals for the advanced automation system are Preston Martin, computer systems analyst; James Cain, then deputy director of the Automation Service; Frank Bassett, assistant manager, Program Management Staff; Michael Perie, then manager, System Advanced Automation Div.; contracting officer Deborah Wilson; and Leland Page, director of the Automation Service. Photo by Robert Lassiter

Questions We Weren't Afraid To Ask

Q. What was the process used to select the winning AAS contractor?

A. Both Hughes and IBM submitted detailed technical, cost and business management proposals, along with their implementation, support and management plans for the acquisition phase. These proposals were evaluated by teams of government and support contract experts (e.g., MITRE, Martin Marietta). Negotiations were held with both companies. The evaluation results plus the negotiated contracts and the prices bid by Hughes and IBM were all presented to the Deputy Secretary of Transportation, who made the final selection.

Q. Why did the AAS design phase take a year more than originally planned?

A. The AAS is a technically complex system, and this complexity was underestimated at the start of the program. Display technology had advanced, and the government changed its requirements for color displays after the contract was awarded. Also, as the requirements for AERA I became firm, they were added to the design competition phase. Additionally, risk-reduction activities in the areas of "Ada" programming language use, man-machine interface, local communications network and fault-tolerant designs were undertaken during the extra year, all of which contributed to an improved product.

Q. Because of the stretch out in the design and implementation phases, is there any concern that the Host computer system may begin to run out of capacity before the new system is in place?

A. The Host system was designed and tested to handle air traffic through 1995 at less than 50 percent of its computational capacity. We are very confident in the capability of the Host computer system to carry us through the full implementation of AAS.

Q. How much money is in the FY 1988 and FY 1989 budgets for the AAS program?

A. The FY 1988 Approved Program includes $6.2M for R&D and $170M for F&E, making a total of $176.2 million. Requested funding for FY 1989 is $7.6M for R&D and $212M for F&E, a total of $219.6 million.

Q. How many sector suites is FAA buying under the contract?

A. The basic contract is for 5,000 sector suites. An additional 2,000 sector suites are included as options.

Q. The contractor is planning to use complex, high-level "Ada" as the AAS programming language, although it has never been used in a system of this size before. Why?

A. Our decision to use Ada for AAS software is well founded. Because it represents a language standardization, the FAA has favored the use of Ada since the start of the program, and both Hughes and IBM recommended its use during the design competition phase. An independent group of software experts led by Dr. Vic Basilli of the University of Maryland studied AAS and concluded that Ada was the best software language to use.

Q. What impact will AAS have on the size of the controller workforce? Do you have any projections that show how many controllers will be needed over the next 10 to 20 years?

A. A recent study by the MITRE Corporation for the Office of Aviation Policy and Plans projected that the controller workforce would grow by 36 percent in the next 20 years if the present automation system were kept in service. With the Advanced Automation System, however, the growth in the controller workforce will be held to six percent, which represents a savings of over $4.5 billion (in constant 1988 dollars) over the life of the system.

Q. What role, if any, will satellite technology play in the AAS? Why isn't there more emphasis on the use of satellites?

A. AAS is a ground-based automation and display system, not a surveillance or communications system, which might use satellite technology. AAS will interface with satellite systems, however. Among these will be the satellite-based Automatic Dependent Surveillance System for tracking aircraft over the oceans and satellite communications systems that will transfer data between AAS installations. ■

AAS *continued*

Terminal AAS

Following the transition to ISSS for enroute control, the old control rooms will be refurbished to accommodate the additional sector suites necessary to provide approach and departure services at the approximately 200 airports that now have their own terminal radar control rooms. Deliveries of new computer hardware and software—termed the Terminal Advanced Automation System (a subset of the Area Control Computer Complex)—to support terminal operations will begin in March 1994, clearing the way for consolidation of terminal radar facilities into the renamed Area Control Facilities.

The Tower Cab Computer Complex

Local airport control operations—takeoff and landing clearances and ground control—will not be affected by consolidation. In fact, beginning in March 1994, the contractor will begin delivering Tower Cab Computer Complexes (TCCC) to upgrade the 150 airport towers included in the basic contract. The last site would go operational in February 1998. Moreover, if FAA chooses to exercise contract options, the number of TCCC installations could go as high as 258.

The TCCC will include new controller position consoles with supporting computer hardware and software and new electronic displays for flight data and radar information. Controllers will use the radar data as an aid in tracking aircraft in the terminal area, but they will not provide approach and departure services.

Area Control Computers and AERA

In the fall of 1994, installation of the remaining computer software of the Area Control Computer Complex (ACCC) required for the enroute control functions will begin. Once this is completed, the Host computers at each location can be removed along with the current back-up system in the enroute centers known as the Direct Access Radar Channel (DARC). The completion date for the last of the 23 Area Control Facilities is February 1998.

Included in this phase would be the addition of the Automated Enroute Air Traffic Control (AERA) software into the system to aid controllers in effective route planning. Known as AERA-1, it will probe requested flight routes to detect potential conflicts with other aircraft, violations of protected airspace and conformity with air traffic flow restrictions. With this information, controllers then can select the safest and most fuel-efficient route available.

Future AAS upgrades not covered by the contract will include AERA-2 and, possibly, AERA-3. AERA-2 would present controllers with solutions to the conflicts detected by AERA-1 and, then, pass along their decisions to pilots by digital data link. AERA-3, which still is in the concept stage, would include a degree of autonomy for the AAS computers to detect and resolve problems, make decisions and provide clearances to pilots under human direction but without human intervention.

Award of the AAS contract followed a four-year design competition between IBM and Hughes Aircraft Co., a subsidiary of GM Hughes Electronics. Each contractor was charged with developing a total AAS design and with building and testing sector suite systems. ■

AAS Delivery Schedule

Initial Sector Suite System
- Delivery to FAA Technical Center—September 1990
- Deliver to first ARTCC—April 1992
- First site operational—October 1993
- Last site operational—June 1995

Tower Cab Computer Complex
- Delivery to FAA Technical Center—April 1992
- Delivery to first airport tower—March 1994
- First site operational—February 1995
- Last site (150th) operational—March 1999

Terminal Advanced Automation System
- Delivery to FAA Technical Center—December 1992
- Delivery to first ARTCC—March 1994
- First site operational—February 1995
- Last site operational—February 1998

Area Control Computer Complex
- Delivery to FAA Technical Center—January 1993
- Delivery to first ARTCC—September 1994
- First site operational—March 1996
- Last site operational—February 1998

All main displays in ARTCCs will have full-color alphanumeric and graphic presentations, where red will indicate a need for immediate attention, yellow an impending need for controller action (two blips left of center) and blue for weather (patch at lower right).

Can You Top This Lie?

Lee Hunt, manager of the Lakefront Tower in New Orleans, believes that "The 30 Greatest Aviation Lies" (FAA World, July 1988) came up one short.

The best of the bunch to him and one he actually heard from a controller was, "I don't care what the tape says, I didn't say that."

The Impact of AAS

The Advanced Automation System is tomorrow's air traffic control system. Its sophisticated equipment and programs will improve upon present air traffic control by:

- Enhancing flight safety with new automatic separation-assurance techniques.
- Increasing flight efficiency through more direct, conflict-free routing.
- Reducing congestion and delays through better traffic-metering techniques.
- Increasing controller productivity through new controller work stations.
- Handling projected air traffic growth without corresponding increases in personnel.
- Providing a system life of 20-30 years; new hardware and software can be added to the basic design.
- Tying together all of the FAA's primary enroute and terminal air traffic control facilities into an integrated, automated system.
- Permitting the consolidation of all radar services into approximately 23 strategically located Area Control Facilities (ACF).
- Providing greater system reliability through a requirement that the AAS be available 99.9995 percent of the time (maximum down time of about 2½ minutes per year). When the system is down, controllers will switch to an independent back-up system.

Frank Jones, Technical Center programmer, turns over the ARTS II automation software program to Al Reale (left), manager of the Erie, Pa., Tower, as Dick Finley, Erie automation specialist, and Andy Guilmet (right), Technical Center ARTS II supervisor, look on.

Technical Center programmers Anita Battersby, Frank Jones and Joyce Robertson (left to right) take a break from their shakedown duties on the Erie Tower's ARTS II software.

An Era Passes in Erie

This summer, the Erie, Pa., tower became the first of 33 facilities to yield up the old military-type TPX-42 limited radar automation system in favor of ARTS IIA. As an interim step, the current generation ARTS II software will be used.

The low-to-medium-activity facilities like Erie will have the replacement equipment by the end of 1989. Erie's went operational the end of last month.

The Unisys ARTS II software processes signals from both broadband airport surveillance radars and air traffic control beacon interrogators to provide altitude reporting and beacon code data from transponders for aircraft identification. This generates a two-line alphanumeric data tag on controller displays.

The ARTS IIA enhanced software that will be added to these 33 sites and to upgrade existing ARTS II sites will add ground speed, aircraft tracking capability, minimum safe altitude warning (MSAW) and conflict alert. It will also offer a training target generator to provide air traffic simulation for controller training right in the facilities. The ARTS IIA will be linked to enroute Host computers—in Erie's case, to the Host at the Cleveland ARTCC—enabling them to send and receive flight plans and exchange messages.

The towers will have 22-inch displays in the TRACONS and 16-inch television-type high-resolution monitors for BRITE displays in the cabs. For the first time, the systems in the TPX-replaced sites will include data-entry devices—an alphanumeric keyboard and a joystick control.

Although Erie's traffic count is growing, tower Manager Al Reale looks forward to the new automation for reducing controller workload at the same time as increasing productivity. ■

Jack and the Comet

By Marjorie Kriz

Jack Dusak, airworthiness inspector at the Chicago Air Carrier District Office, apparently doesn't get enough of airplanes while at work. He left Trans World Airlines as director of maintenance at Chicago-O'Hare International Airport early last year. After 44 years with the airline, he came to FAA for more work with aircraft.

If the job weren't more than enough, now, he spends Thursday evenings and most of his Saturdays helping a group of aircraft enthusiasts dismantle a DeHavilland Comet Model C, a later model of the world's first commercial airline jet.

Dusak has been leading a power plant team, which includes an aviation-minded dentist, in taking the Comet apart so it can be shipped for display to the Smithsonian Institution's National Air and Space Museum in Washington.

Removing an engine is nothing new to Dusak, who has done this on a variety of engines from props to jets. But the Comet's Rolls Royce Avon engines are "something entirely different," he says. "Everything is metric, for one thing, and these engines, imbedded in the wings, are designed differently than those of newer jets.

"We've had to use lots of penetrating oil, as the plane was sitting for so long without attention," he added. "There is much corrosion in the bolts, so preparation is essential."

Dusak and his other volunteers had to disconnect the tail pipe, fuel lines, ducting and electrical cables, all presoaked to make sure they could break loose without breaking.

With all four engines removed and awaiting cleaning with high-pressure steam spray equipment, Dusak and the others made plans for removing the wings, tail and landing gear for shipment.

While the group was fortunate to obtain a generator and lights, four trailers for offices and equipment storage, as well as a heavy crane, their work is all out-of-doors on a ramp at the O'Hare Air Reserve Forces Facility at the north end of the airport.

Dusak found himself meeting many old friends on this labor of love from his days as a member of the Airport Maintenance Managers Association while at TWA, who then volunteered to work on the Comet.

Dusak smiles as he says, "This is an important project because of the significance of this aircraft." It's obvious that he's been having fun, as well. ■

Recently retired, Mrs. Kriz was the assistant public affairs officer of the Great Lakes Region and a former reporter.

Jack Dusak works at removing the deHavilland Comet's Ghost engine at Chicago-O'Hare Airport. Photo by Marjorie Kriz

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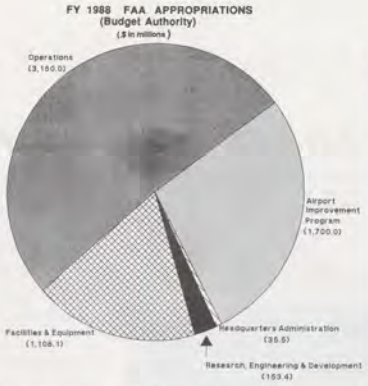

the Office of Management and Budget (OMB) for review, where it becomes part of the President's budget package.

Transmitted to Congress, the budget goes through a series of hearings and adjustments, following which Congress makes appropriations available by October 1—the beginning of the fiscal year.

It ought to be that straightforward, but it isn't. Actually, the process takes about 21 months from the initial requests to the field for estimates until the appropriation is passed. Then, after the appropriation becomes law, FAA requests apportionment of funds from OMB periodically through the fiscal year. FAA puts the money in envelopes, in a manner of speaking, distributing it to programs according to their operating plans. So, the process really could be said to be nearly three years long.

The reality of the process is a much more tortuous journey than the uninitiated would imagine. There are changes and adjustments, and the budget has to be nurtured throughout the process. As budget program analyst Paulette Lutjens says, "The budget is not a static thing; it appears as a living, breathing entity."

The budget cycle is broken into three major phases—formulation, presentation and execution. During a single fiscal year, the Office of Budget is working on all three phases at once, except that each pertains to a different fiscal year. Right now, the fiscal 1988 budget is in the final throes of its execution phase. If all went well (which it hasn't in several years), Congress should have ended the presentation phase for the 1989 budget and voted an appropriation bill for DOT. The 1990 budget estimates have moved from the Office of the Secretary to the Office of Management and Budget to close out its formulation phase.

Photos by Robert Laughlin

Reviewing some points of his program requirements with John Turner (standing), Associate Administrator for Advanced Design and Management Control, are (left to right) secretary to the director Mary Ann Hall; Ruth Leverenz, deputy director, Office of Budget; Luis Castro, manager, Execution Branch, Operations Div.; Nicholas Stoer, director, Office of Budget; Barbara Cook, administrative officer; and James Kemp, acting manager, Capital Div.

The Formulation

It all starts in January when FAA's Office of Budget sends out a call for budget requests, or estimates, from the regions, centers and headquarters offices. (That call this coming January will be for the fiscal 1991 budget.) By February or March, the requests are received at headquarters for combining into an agency budget.

Robert Whittington, Executive Director for Policy, Plans and Human Resource Management, addresses a work group on straighline budgeting, which consists of budget and program office representatives from Headquarters and field offices.

Photo by Lance Stewart

Mark Lash and Lorraine Berry of Budget's Systems Division discuss some of the capabilities of a graphics program to illustrate tables of budget statistics.

Once the requests are received, they are reviewed in meetings with the program officers to resolve any problems or questions and then with the Associate Administrators and the Administrator.

"We have tried to work as a budget team in FAA," says Nicholas S. Stoer, director of the Office of Budget. "We work closely with program office budget contacts on a daily basis, along with their counterparts in regional budget offices, so all issues are well staffed out."

FAA's budget is divided into five separate appropriations. The largest is Operations, which covers primarily salaries, benefits and a few other expenses. This is followed by the grants under the Airport Improvement Program, then by Facilities & Equipment, by Research, Engineering & Development and finally by Headquarters Administration. Funds are available for obligation in these appropriations on either multi-year, annual or no-year bases, the last of which provides funds for obligation until they are used up.

Tradeoffs on budget constraints are made by the Administrator's Review Committee—the ARC—which meets about every eight weeks to look at a variety of budget issues in all three fiscal years in the pipeline.

Under "straightlining" and the new organizational structure, there will still be, in effect, an ARC, Stoer says. Whether it's still called the ARC or it becomes an Executive Committee composed of the Executive Directors is still being worked out.

The consolidated agency budget is submitted to OST for review and then to OMB by September.

Presentation

The President's Budget, a consolidation of all federal agencies' budgets, is sent to Congress in January of the second year after OMB evaluates it for meeting the Administration's goals and the constraints of the Gramm-Rudman-Hollings Balanced Budget and Emergency Deficit Control Act of 1985.

This law requires OMB to subtract the combined federal budget from estimated revenues to determine the potential deficit. If it's higher than allowed for that fiscal year, the difference must be prorated as a cut of all agencies' budgets, except those specifically excluded, such as Social Security and veterans' benefits.

Congressional budget review formally marks the start of the presentation phase of the process. Delivering a big-city telephone-book-size budget is not in itself "presentation," nor does it mean that most of the Office of Budget's job is done. This phase involves answering endless questions and preparing for hearings.

Barbara Edwards checks some figures with Jonathan Dorfman, as other Formulation Branch personnel of the Operations Div. (rear from left) Fran Hyatt, Larry Craig and Betty Davis go about their business in helping to prepare the big book.

The budget has a lot of detail about all of the agency's programs. Although the agency tries to anticipate many questions about the prospective budget, Congressmen will pose questions through their staffs and at hearings on specific items or perhaps on the current or previous fiscal year or on recent related events not dealt with in the budget. One such this past spring was on the Extended East Coast Plan, which did not have a significant budgetary impact.

FAA faces hearings with the House and Senate Subcommittees on Transportation, three days in the House and two days in the Senate. In the House alone, the Office of Budget was hit with about 1,100 written questions this year. Many were handled on the spot at the hearings; others were for later insertion in the hearing transcript. Either way, in a couple of weeks' time, Budget or program offices must compose the answers to all of these. The answers are typically reviewed by an office director, service director or associate administrator and then by the Office of Budget. After Congress prints the transcript, Budget has about 24 hours to recheck and proofread the responses.

"Most budget offices in the government, including FAA's," Stoer points out, "are usually criticized for making impossible demands on program offices for quick turn-arounds, and that's especially true on appeals of budget actions. All we can do is pass along the problem handed us.

Everett Brown (seated) of the Operations Division's Execution Branch explains the development of FY 1989 allowances for FAA program offices to other staffers (from the left) Michael Dundon, Karen Lusk and Mary Carol Mehrens.

"If OMB reduces the budget, for example, the appeal process has to be completed in 48-72 hours, but that time may very nearly have passed by the time we get the revision. We have to make our best arguments in a prescribed format and get it back to OMB in perhaps as little as 24 hours."

Other tight schedules, Stoer adds, include getting the Administrator or the Secretary ready for hearings when Budget first receives perhaps two or three dozen questions from Congress only the day before. The questions have to be distributed to the offices of primary interest and the responses written and checked for consistency with previous testimony.

Following the hearings, the subcommittee prepares a report with recommendations to the full Appropriations Committee, which, in turn, reports a bill to the floor. After voting the bill, the House, which usually starts the process, sends its bill to the Senate. If the House has reduced programs or resources, FAA and OST may appeal to the Senate for restoration. After the Senate concludes its hearings and vote, differences between the two houses' versions are resolved in a joint conference. The resulting compromise appropriations bill is voted in each house and presented to the President for signature.

Recently, however, Congress has been unable to resolve its differences by the start of the fiscal year, resulting in the passage of an omnibus Continuing Resolution, which permits the continuation of agency operations at existing levels or at a level specifically designated.

For the last two years, FAA has been the beneficiary of some of the largest year-to-year increases of any agency in the government. For 1989, for example, FAA's Operations budget is in for a 9.3 percent increase over 1988 levels because the President and Congress recognize the need for increased controller, inspector and technician staffing.

Sometimes, Continuing Resolutions cover operations for only a couple of weeks or months, and Congress must pass another one or an appropriations bill somewhere down the line. In addition to causing uncertainty as to when or if there will be legislation in time to forestall the agency's running out of money, such brinksmanship forces Budget to restrict spending to levels lower than those requested, makes planning more difficult and adds to the workload in revising financial plans

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Money *continued*

again and again. It sometimes also causes spending freezes.

It used to be that an agency's shortfall could be made up via a supplemental appropriation that Congress would consider on its own merit. Under Gramm-Rudman constraints, however, supplemental appropriations are virtually a thing of the past, except for zero sum supplementals, which merely transfer funds from one appropriation to another.

Execution

Budget execution is a year-long phase during which appropriated funds are made available to FAA programs. FAA requests funds for obligation from OMB for a specific time period, primarily quarterly. Allotments of funds to programs and activities are based on the final level of appropriations and the program office's operating plans.

Grant programs often require the allotment of funds right at the beginning of the year. And FAA has worked with OMB this year to arrange for a semi-annual Facilities & Equipment apportionment, which cuts FAA's paperwork substantially and gives it more managerial latitude in scheduling work. Budget would like to move toward an annual F&E apportionment for next year.

In the main, explains Nick Stoer: "Any well-run organization tries to budget on a quarterly basis so that it has benchmarks by which to measure its progress during the fiscal year. If your benchmarks are well understood and under control and your performance against them is within limits, then you're in good shape for the entire year.

"But if your quarterly targets are a little loose and you don't track your performance, it doesn't take long to get into trouble. You can see how easy it is to step off the edge if you realize that in the Operations budget alone, we spend $8.5 million every 24 hours every calendar day of the year."

In 1986, FAA—like many agencies—failed to take Gramm-Rudman seriously. As a result, FAA got caught very short with having overspent in the first quarter. With a $116 million cut as the second quarter began in January, FAA had to set in place plans for furloughs and a hiring freeze and cut way back on contracts, permanent change of stations and overtime.

Discussing the preparation of material for overhead slides for a budget briefing are (left to right) Margaret Baker, Karen Graves, Theresa Corbett and Juergen Tooren of the Capital Division of the Office of Budget.

"During the course of the year," Stoer noted, "regional managers wound up with eight different financial plans, each one successively smaller than the one before. That is a terrible way to manage, and it hurt morale and productivity."

For 1987, FAA had learned to start out the fiscal year on a go-slow basis to keep spending under control. Then, each succeeding change in financial plans became a release of more funds. "That worked well," Stoer says. "We completely reversed the timing of our spending, letting it build up. That's a much smoother way to manage."

FAA did the same thing in fiscal 1988. With Congressional cuts to the budget FAA had requested, plus a requirement to absorb a $34 million pay raise, the agency had to reprogram or cut $110 million from Operations. But the slow spending start permitted FAA to get through the whole fiscal year fully staffed and able to meet its hiring goals for controllers, aviation inspectors, technicians and support staff. Taking cuts in a planned manner, FAA had avoided the chaos of 1986.

Straightline management is going to put a greater premium on good planning at the beginning of the fiscal year, says Stoer. "It's going to make people in headquarters and the regions accountable for resources when they haven't been in the past. As we transition from regional directors having the responsibility for adjusting local programs to program division managers having to understand and track the numbers, there'll be a greater need for good planning and good reporting."

The budget process is a planning tool, but for the process to work properly, there has to be good teamwork and good planning—a year-round job for the Office of Budget. ■

Aeronautical Center Honored

David Carmichael (center), deputy director of the Mike Monroney Aeronautical Center receives a flag and plaque as a national Team Spirit Award from Maj. Gen. Don Ferrell (left), adjutant general of the State of Oklahoma, and Brig. Gen. Revere Young, commander of the 137th Tactical Airlift Wing, Air National Guard. The center was honored for its support of employee participation in national defense programs. More than 360 guardsmen and reservists are employees of the Aeronautical Center.

People

Aeronautical Center

■ **Thomas M. Abbott,** section supervisor, Atlanta, Ga., Flight Inspection Field Office (FIFO).

■ **Stanley R. Adams,** supervisor, Communications and Office Automation Section, Systems and Technology Branch, Data Services Division, promotion made permanent.

■ **John E. Burleson,** unit supervisor, Aircraft & Aviation Maintenance Branch, Aircraft Maintenance & Engineering Division, promotion made permanent.

■ **Elizabeth M. Claypool,** unit supervisor, Aeromedical Certification Branch, Civil Aeromedical Institute, promotion made permanent.

■ **Sherman L. Cravens,** manager, Systems and Technology Branch, Data Services Div.

■ **Ruble G. Garner,** manager, Aviation Systems Branch, Data Services Division.

■ **Derald R. Lee,** unit supervisor, Sacramento, Calif., FIFO, from the Tokyo, Japan, FIFO.

■ **Tona K. Mann,** supervisor, Certification Section B, Airmen Certification Branch, Airmen and Aircraft Registry, promotion made permanent.

■ **Eloise I. Rose,** group supervisor, Aeromedical Certification Branch, Civil Aeromedical Institute, promotion made permanent.

■ **Donald M. Stokes,** group supervisor, Atlanta FIFO.

■ **Harold W. Walls,** unit supervisor, Battle Creek, Mich., FIFO.

■ **Mike J. Zink,** supervisor, Information Systems Section, Logistics & Inventory System Program Staff, FAA Depot, promotion made permanent.

Alaskan Region

■ **Jimmy D. Boyd,** manager, Bethel Airway Facilities Sector Field Office (AFSFO), North Alaska AF Sector, Fairbanks.

■ **Joseph J. Buckley,** systems engineer, Anchorage ARTCC AF Sector.

■ **Charles W. Goldsberry,** unit supervisor, Juneau AFSFO, South Alaska AF Sector, Anchorage, promotion made permanent.

■ **Don L. Huitt,** systems engineer, Anchorage ARTCC AF Sector.

■ **Roland A. Jones,** systems engineer, Anchorage ARTCC AF sector.

■ **William F. Price, Jr.,** manager, Anchorage ARTCC, promotion made permanent.

■ **Gary W. Stadig,** systems engineer, Anchorage ARTCC AF Sector.

■ **Ronald D. Tener,** area supervisor, Kenai Automated Flight Service Station (AFSS), from the Red Bluff, Calif., FSS.

■ **Charles E. Weinum,** area manager, Anchorage International Airport Tower, from the Reno, Nev., Tower.

■ **Richard A. Wirth,** unit supervisor, Juneau AFSFO, South Alaska AF Sector.

■ **Frank R. Zschiegner,** systems engineer, Anchorage ARTCC AF Sector.

■ **Darrel L. Zuke,** manager, Fairbanks AFSFO, North Alaska AF Sector.

Central Region

■ **Michael L. Andrews,** area supervisor, Columbia, Mo., Automated Flight Service Station (AFSS).

■ **Terry E. Bolerjack,** assistant manager, traffic management, Kansas City ARTCC, from the Memphis, Tenn., ARTCC.

■ **James D. Bracken,** supervisor, Traffic Management Unit, Kansas City ARTCC.

■ **James K. Greenlee,** manager, Field Service Branch, Atlanta, Ga., Aircraft Certification Office, promotion made permanent.

■ **Andrew J. Holcomb,** unit supervisor, Construction Section, Establishment Engineering Branch, Airway Facilities (AF) Div.

■ **Richard N. Holloway,** supervisor, Communications/Automation Section, Establishment Engineering Branch, AF Division.

■ **Donald G. Hughes,** area supervisor, Cedar Rapids, Iowa, Tower, from the FAA Academy.

■ **David A. Lister,** area supervisor, Lambert Field Tower, St. Louis, Mo.

■ **Ronald M. Oldham,** aviation safety inspector, Aeronautical Quality Assurance Field Office, Flight Standards Division, promotion made permanent.

Eastern Region

■ **Glenn A. Bales,** manager, Airspace & Procedures Branch, Air Traffic Division.

■ **Bruce S. Barrett,** area supervisor, New York ARTCC, promotion made permanent.

■ **John W. Clarke,** area supervisor, New York ARTCC, promotion made permanent.

■ **Frederick L. Gibbs,** manager, Systems Planning Branch, Air Traffic Division.

■ **Jimmie L. Jefferson,** manager, Newport News, Va., Flight Service Station (FSS).

■ **John P. Kail,** area supervisor, Erie, Pa., Tower.

■ **John S. Kozicki,** area supervisor, Altoona, Pa., Automated Flight Service Station (AFSS), from the Pittsburgh FSS.

■ **Henry J. Lengel,** manager, Teterboro, N.J., Tower, from the Air Traffic Div.

■ **Robert S. Papasodero,** area supervisor, New York ARTCC, promotion made permanent.

■ **John T. Rountree, Jr.,** manager, Lynchburg, Va., Tower, from the Norfolk, Va., Tower.

■ **Joyce A. Sexton,** manager, Washington ARTCC.

■ **Clifford E. Sharp, Jr.,** area supervisor, New York ARTCC, promotion made permanent.

■ **David R. Sprague,** chief, Quality Assurance Staff, Air Traffic Division.

■ **William J. Stehling,** manager, Traffic Management Branch, Air Traffic Division.

■ **John S. Walker,** manager, Operations Branch, Air Traffic Division.

■ **Mary L. Wolf,** area supervisor, Salisbury, Md., Flight Service Station, promotion made permanent.

Great Lakes Region

■ **Clifford D. Auxier,** area supervisor, Cleveland (Ohio) Hopkins Airport Tower.

■ **John M. Bogusch, Jr.,** area supervisor, Kankakee, Ill., Automated Flight Service Station (AFSS), promotion made permanent.

■ **Richard A. Broderick,** watch supervisor, Minneapolis, Minn., Airway Facilities (AF) Sector, promotion made permanent.

■ **Daniel J. Callahan,** area supervisor, Minneapolis ARTCC, promotion made permanent.

■ **Constance L. Claseman,** area supervisor, Minneapolis ARTCC, promotion made permanent.

■ **James H. Cooper,** area supervisor, Minneapolis ARTCC, promotion made permanent.

■ **M. Sue Dailey,** assistant manager, Grand Forks, N.D., AFSS.

■ **George Farler,** area supervisor, Dayton, Ohio, AFSS, promotion made permanent.

■ **Ricardo P. Gutierrez,** maintenance mechanic foreman, Chicago AF Sector, promotion made permanent.

■ **Merle J. Hickey,** manager, Marquette, Mich., FSS, from Terre Haute, Ind., FSS.

■ **William D. Maddox,** area supervisor, Lansing, Mich., AFSS, from the South Bend, Ind., FSS.

■ **Charles W. Mahoski,** area supervisor, West Lafayette, Ind., Tower, from the Minneapolis-St. Paul Intl. Airport Tower.

■ **Robert S. Monell,** area supervisor, Chicago O'Hare Tower, promotion made permanent.

■ **Gary L. Sanchez,** unit supervisor, Minnesota AF Sector, Minneapolis, promotion made permanent.

■ **Robert S. Shepler,** area supervisor, Pontiac, Mich., Tower, from the Green Bay, Wis., Tower.

New England Region

■ **Keith A. Allbright,** supervisor, Telecommunications Management and Operation Section, NAS Planning & Program Management Branch, Airway Facilities Division.

■ **Paul Bagley,** assistant manager, Airway Facilities Division, from Southwest Region.

■ **William R. Chouinard,** area supervisor, Bangor, Maine, Automated Flight Service Station (AFSS), promotion made permanent.

■ **Ronald E. Driscoll,** manager, Groton, Conn., Tower, from Quonset Point, R.I.

■ **Sheri A. Edgett,** supervisor, Teletype Section, Boston ARTCC, promotion made permanent.

■ **Douglas W. Ewing,** manager, Civil Rights Staff, promotion made permanent.

■ **Rosa M. Jackson,** area supervisor, Bangor AFSS, from the Washington AFSS.

■ **Deborah L. James,** area supervisor, Bedford, Mass., Tower, promotion made permanent.

■ **Benny Martin,** area supervisor, Bangor AFSS, from the Burlington, Vt., AFSS.

■ **Ronald C. Montagne,** area supervisor, Boston ARTCC, from the Bradley Airport Tower, Windsor Locks, Conn.

■ **Kenneth D. Roach,** manager, Windsor Locks Flight Standards District Office (FSDO), from Western-Pacific Region.

■ **Kent D. Stephens,** manager, Bedford FSDO, from the Washington FSDO.

■ **Richard J. Tombari,** unit supervisor, Windsor Locks Airway Facilities Sector.

Northwest Mountain Region

■ **Donald Armstrong,** manager, Flight Test Branch, Los Angeles Aircraft Certification Office.

■ **Maurice Caldwell,** manager, Employee Development Branch, Human Resources Division.

■ **Matthew J. Cavanaugh,** section supervisor, Seattle, Wash., Airports District Office.

■ **Joseph G. Conner,** assistant manager, military operations/plans & programs, Seattle ARTCC.

■ **Robert E. Follensbee,** manager, Propulsion Branch, Los Angeles Aircraft Certification Office.

■ **Christine M. George,** manager, Employee Benefits Branch, Human Resources Division.

■ **David E. Hegy,** unit supervisor, Salt Lake City Flight Standards District Office (FSDO), promotion made permanent.

■ **Frank Helander,** section supervisor, Denver FSDO.

■ **James M. Kastner,** assistant manager, Salt Lake City Tower.

■ **Wayne E. Roderick,** unit supervisor, Salt Lake City Airway Facilities Sector, promotion made permanent.

Southern Region

■ **Wayne G. Boggs,** area supervisor, Tampa, Fla., Tower, promotion made permanent.

■ **Rodney L. Carlson,** section supervisor, Carolina Flight Standards District Office (FSDO), Winston-Salem, N.C.

■ **Edward J. Clore,** area supervisor, Miami, Fla., ARTCC, promotion made permanent.

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

■ **Marvin A. Dalton,** unit supervisor, Orlando, Fla., Airway Facilities Sector Field Office (AFSFO), Tampa AF Sector, promotion made permanent.

■ **Stephen C. Harless,** assistant manager for training, Atlanta, Ga., ARTCC.

■ **Billy C. Joyce,** area supervisor, Atlanta ARTCC, promotion made permanent.

■ **Joseph A. Mastro,** section supervisor, Ft. Lauderdale, Fla., FSDO, promotion made permanent.

■ **Harvey S. McClain,** assistant manager for automation, Miami ARTCC.

■ **Richard Nelson,** group supervisor, Atlanta ARTCC.

■ **Michael W. O'Shea,** area supervisor, St. Petersburg, Fla., Automated Flight Service Station (AFSS), from the Orlando FSS.

■ **Maxwell C. Peck, Jr.,** manager, Gulfport, Miss., Tower, from Shaw AFB, S.C.

■ **Nicholas R. Scott,** chief, Investigations Branch, Civil Aviation Security Division, promotion made permanent.

■ **Ray F. Terry,** manager, Safety Analysis & Resource Management Branch, Flight Standards Division, from the Lubbock, Texas, FSDO.

■ **Byron J. Vest,** manager, Dothan, Ala., FSS, from the Fort Myers, Fla., FSS.

Southwest Region

■ **Barbara G. Allgood,** area supervisor, Moisant Airport Tower, New Orleans, La.

■ **Glen R. Allgood,** assistant manager, programs, Moisant Tower.

■ **Donald K. Blanchard,** assistant manager, programs, Moisant Tower, from the Lake Charles, La., Tower.

■ **Deborah H. Bonacki,** chief, Program Analysis and Evaluation Staff, Flight Standards Division.

■ **Donald F. Bourgeois,** manager, Fayetteville, Ark., Airway Facilities Sector Field Office (AFSFO), Little Rock, Ark., AFS.

■ **James W. Butler,** manager, Oklahoma City Flight Standards District Office (FSDO).

■ **Steve M. Gallegos,** assistant manager for technical support, Albuquerque, N.M., ARTCC AF Sector, from the AF Division.

■ **Michael C. Hartz,** unit supervisor, Amarillo, Texas, AFSFO, Albuquerque AF Sector, from the El Paso, Texas, AFS.

■ **Douglas L. Keeffe,** unit supervisor, Austin, Texas, AF Sector, from the Oklahoma City AF Sector.

■ **Delano D. Little,** unit supervisor, El Paso AF Sector, from Albuquerque AFS.

■ **Robert S. Parker,** area supervisor, Houston, Texas, ARTCC.

■ **Patti A. Pickhard,** area supervisor, Monroe, La., Tower, from the San Antonio, Texas, Tower.

■ **Sandra G. Rathbun,** area supervisor, Little Rock Flight Service Station, from the Lufkin, Texas, FSS.

■ **John M. Welby,** supervisor, Environmental Support Unit, Albuquerque ARTCC AF Sector.

■ **Sonia C. Williams,** supervisor, Materiel & Property Section, Logistics Services Branch, Logistics Division, promotion made permanent.

■ **Philip M. Zaglood,** security officer, Dallas-Fort Worth, Texas, Civil Aviation Security Field Office, promotion made permanent.

Washington Headquarters

■ **Rodman D. Bourne,** manager, National Flight Data Center, Airspace-Rules & Aeronautical Information Division, Air Traffic Requirements Service.

■ **James Burns, Jr.,** manager, Terminal Procedures Branch, Procedures Division, Air Traffic Operations Service.

■ **Eugene R. Helfer,** manager, UPS Data Systems, Payroll & Administrative Systems Division, Office of Accounting.

■ **Kerry F. Klegman,** manager, Employee Relations & Career Development Branch, Human Resource Management Div., Associate Administrator for Human Resource Management.

■ **Ronald M. Peters,** manager, VSCS Implementation Branch, Voice Switching & Control System Div., Automation Service.

■ **Shirley Y. Purnell-Rice,** unit supervisor, Employment Branch, Human Resource Management Div., Office of Associate Administrator for Human Resource Management.

■ **Glenda J. Whiting,** unit supervisor, Employment Branch, Human Resource Management Div., Office of Associate Administrator for Human Resource Management.

Western-Pacific Region

■ **Linda M. Birk,** administrative officer, Oakland, Calif., TRACON, from the Financial & Management Resources Division.

■ **Robert G. Brekke,** supervisor, Procedures Section, Airspace & Procedures Branch, Air Traffic Div., from the El Toro MCAS TRACON.

■ **Theodore H. Davies,** assistant manager, Los Angeles Tower, from Windsor Locks, Conn.

■ **James L. Gerard,** area supervisor, Honolulu, Hawaii, ARTCC, from Molokai Tower.

■ **Floyd O. Goodyear,** unit supervisor, Las Vegas, Nev., Flight Standards District Office (FSDO), from Headquarters' Office of Flight Standards.

■ **Albert S. Greenberg,** unit supervisor, San Francisco FSDO, from Flight Standards Division.

■ **Charles D. Halterman,** area supervisor, Burbank, Calif., Tower, from the Los Angeles TRACON.

■ **Jimmie L. Haralson,** section supervisor, Air Traffic Operations Branch, Air Traffic Division, from the Hawthorne, Calif., Automated Flight Service Station (AFSS).

■ **Henry A. Harris,** supervisor, Navigation/Landing Program Section, Establishment Engineering Branch, Airway Facilities Division, from the San Diego AF Sector.

■ **Clifford K. Ho,** assistant manager—Operation, Honolulu, Hawaii, ARTCC.

■ **Fred R. Kelly,** manager, Hawthorne AFSS, from the Air Traffic Division.

■ **Kathryn E. Kuhlmann,** Special Projects Officer, Airspace & Procedures Branch, Air Traffic Div., from Long Beach Tower.

■ **John Mayrhofer,** manager, Resource Management Branch, Air Traffic Division, from the Los Angeles Tower.

■ **Cherlynn M. Miller,** area supervisor, San Francisco Tower, from the McClellan AFB TRACON.

■ **Richard E. Morrison,** supervisor, Airspace Section, Airspace & Procedures Branch, Air Traffic Division, from the Van Nuys, Calif., Tower.

■ **Gerald W. Pennington,** assistant manager, programs, Phoenix, Ariz., TRACON.

■ **Joseph O. Pitts,** assistant manager, San Francisco Tower, from the Air Traffic Div.

■ **William V. Reavely,** assistant manager, traffic management, Los Angeles ARTCC.

■ **Timothy B. Savage,** assistant manager, traffic management, Los Angeles ARTCC.

■ **Eugene J. Stahl,** assistant manager, programs, Las Vegas Tower.

■ **George H. Sullivan,** manager, Phoenix TRACON, from the Los Angeles TRACON.

■ **Walter R.C. White,** area supervisor, Santa Barbara, Calif., Tower, from Los Angeles TRACON.

Retirees

AERONAUTICAL CENTER
Robert S. Barrigan
Ronald F. Cote
Alva B. Cossey
Harrell R. Cralley, Jr.
Doyle Curtis
Pauline F. Ferguson
Donald W. Folks
John O. Franklin
Ada M. Geyer
Lillian I. Goins
Walter S. Graham
Robert C. Haulin
Stanley E. Henry
Sumito Ikeda
Trinnael C. Jones
Walter B. Koelsch
William R. Landers
Elmo J. Manning
Maxine N. McDonald
Richard F. Millan
Rulon F. Pearce, Jr.
Richard L. Peterson
Keith R. Pitts
Le Moyne Pray
Joseph W. Reddin, Jr.
David E. Reid
Donald L. Rowe
Paul L. Shattuck
Durrell T. Treadway
Kathryn W. Vincent

ALASKAN REGION
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Dale L. Hanson
O. Clark Horton
Tommie Jean Shannon

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Harold W. Ferris
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Robert A. Gambrill
Edmond T. Goulding
William C. Holderman
Jane A. Jacobson
Fred G. Jones
Joseph W. Kaiser
Wallace L. Kohl
Jack L. Langston
Newton I. Lippitt
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Nathaniel Mosby
James R. Mullins
Richard E. Reeves
Neal J. Schroeder
Anthony D. Siegienski
Dean L. Spencer

EASTERN REGION
Donald S. Brinkley
John R. Carusso
Harold G. Crawley
Rudolph A. Dietz
Robert A. Dimicola
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James R. Durham
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Larry Margid
John W. Morgan
Harvey A. Powell
Louis D. Roberts
John Robinson, Jr.
Walter J. Schuldt
Odell C. Shaw
Richard D. Shupe
Adele R. Stahley
Walter A. Stickley
Jacob L. Swisher
Robert W. Titus
Richard B. Vogt
George F. Wells

GREAT LAKES REGION
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Hubert Auxier
Frank Babiak, Jr.
James D. Bartel
Isabelle B. Boyd
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Roger H. Clinton
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Donald R. Engel
Ronald L. Galka
John A. Gonce
John Guidotti
Rosemarie P. Guyer
Hilda Jones
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Dean T. Martin
Ronald V. McHenry
Robert E. Myhre
Henry C. Norton
James M. O'Brien
Charles E. Scudder
Louis A. Sobolewski
Roy S. Stanek
Margaret A. Stalzell
Stanford E. Warrenburg
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NEW ENGLAND REGION
Frederick D. Carroll
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Robert B. Perry

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Dale C. Jepsen
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James H. Murdock
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Victor L. Smiley
Elsie J. Spencer
Emmet L. Thompson
Jean E. Wendling
James W. Wrey

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Ralph G. Downer
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John R. Wood
Wyman W. Wyers

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Bernard Sulsky
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Bailey Brooks
June K. Burton
Martin A. Gallagher
Glen R. Gourley
Warner M. Hussong
Melva J. Inman
Douglas J. Knight, Jr.
John L. Noster
Henry C.C. Park
Larry R. Phillips
Richard D. Resendez
Lawrence D. Thompson
Harry H. Yamashiroya
Clarence N. Yaroslaski

Carl Steinhauer, who retired from FAA this year, originated the annual conference.

Eastern Region Airports Division Manager William Handel (right), who addressed the airports conference this past spring, stops at one of its exhibits.

Keeping Airport Pro's on Their Toes

By Duncan Pardue

Each spring for more than a decade, a meeting is held that few outside the airports fraternity hear about, yet it attracts more than 500 participants from all the states east of the Mississippi River and as far away as California, Alaska, France and Hong Kong.

It's the Annual Airport Conference sponsored by the Eastern Region's Airport Division and Pennsylvania State University's College of Engineering. In many ways, the conference has become for airport professionals what the annual meeting of the American Medical Association is for physicians.

"There is no other place where you can keep up to date with both FAA regulations and new developments in airport technology," says John Bugler of the New York State Department of Transportation.

In addition to FAA Airports people, perennial participants include airport operations staffs, professional planners, construction contractors, engineering consultants, state and local transportation officials, pilots, lawyers and engineering faculty members.

Program planning, selection of speakers and conducting the sessions is handled by the Eastern Region Airports staff. Penn State plans and conducts the session on construction management.

Sessions on airport engineering, safety and field lighting had the heaviest attendance this year. Airport planning, which included presentations on Federal Aviation Regulations Part 150—Airport Noise Compatibility—was also popular. Other sessions included construction management, laboratory procedures and heliports.

A topic of concern for all participants this year was the recognition of an approaching national crisis in airport capacity. The region outlined its plans for increasing capacity at pacing airports, establishing new airports and preserving existing ones.

Among the more than 50 papers presented were ones on:

■ Controllable stop bar systems—that is, traffic lights for runways and taxiways,

■ Photography to determine the height of obstructions,

■ Infrared thermography to detect weak patches of pavement,

■ Electronic sensors on runways to detect ice and snow and to accurately determine the need for de-icing and plowing, and

■ Solar power to light obstructions economically.

The latest equipment developments in airport lighting, air traffic control, paving and snow removal were displayed by 21 exhibitors.

The conference is a part of the Penn State Continuing Education Program and was the brainchild of Carl Steinhauer, now retired from manager of Eastern Region's Airports Safety and Standards Branch. It grew out of a need for FAA airport engineers to share information with others involved in airport planning, construction and operation.

"There are no exams one can pass and no colleges where one can major in Airport design and engineering," Steinhauer says. "We found, before we developed this conference, that consultants often proposed things that were not compatible with air traffic control and flight standards."

Steinhauer said that the most important role of the conference is to stimulate creative thought, noting that the Federal Government cannot possibly solve all airport problems, since funds available in FAA's Airport Improvement Program grants can support only the most vital projects.

"This conference performs a vital service by being a source, repository and forum for the exchange of technical and other information," he added.

On that point, explains Gary Smith of the Penn State College of Engineering, "The information presented here is not limited to the participants. Each year's papers are kept in the university library for students to consult and faculty members to draw on for classroom materials. This conference represents continuing education at its best." ■

A public affairs specialist in the Eastern Region, Mr. Pardue has worked as a reporter for newspapers in the South and in industrial relations for two major corporations.

Federal Notebook

PAY RAISE A'COMING

Only if you had spent the entire summer incommunicado would you not know that a pay raise of 4.1 percent has been proposed. At this writing, a House-Senate conference has approved the raise, which will cover top pay levels and the Senior Executive Service. The President is expected to go along with it.

A BOON FOR RE-EMPLOYED ATCSs

Under a recent General Accounting Office ruling, retired controllers who came back to work part-time in air traffic control are entitled to both their entire salaries and annuities, as long as the sum doesn't exceed that of the Level V Executive Schedule.

FAA payroll offices are reviewing the records of current workers. Those formerly re-employed may file a written claim, preferably with the appropriate regional Human Resource Management Division.

'WHEN' IS THE OPERATIVE WORD

The Comptroller General has ruled (B-229103) that the time of day for a rest stop for a government traveler is more important than the length of travel endured. An employee was denied reimbursement for an overnight between nine hours of air travel and two hours of driving when the stop was made in the middle of the afternoon.

BOOST FOR WHISTLEBLOWERS

The Senate unanimously passed Sen. Carl Levin's (D-Mich) S-508, which would: * make the Office of Special Counsel (OSC) a separate agency and define its primary role as that of protector of employees from prohibited personnel practices, * require agencies to prove that they did not retaliate against a whistleblower, * permit whistleblowers to file directly with the Merit Systems Protection Board (MSPB) and to appeal adverse decisions of MSPB to any federal appellate court, * allow agencies to give job preference to whistleblowers seeking transfers out of hostile offices, * require agencies to restore whistleblowers to their jobs or pay them, pending a final MSPB decision, after they've won at the regional MSPB level and * reimburse successful whistleblowers for legal expenses.

The House, which unanimously approved such a bill in 1986, has a similar bill introduced by Rep. Pat Schroeder (D-Colo). However, a veto is threatened.

HEALTH INSURANCE FOR UNEMPLOYED

The bill by Rep. Constance Morella (R-Md) to permit employees who leave the government to continue their federal health insurance at their own expense has been approved by the Civil Service Subcommittee on Compensation and Employee Benefits. It's also supported by the Office of Personnel Management. The bill would permit worker coverage for up to 18 months and former-spouse and dependent-children coverage for up to three years.

YOU'RE STUCK

In case you were wondering what your rights are when hit with bank charges because your personal check bounced when the government failed to direct deposit your paycheck on time, the Comptroller General has ruled (B-228632) that's too bad. There's no law that permits the government to pay these charges for its own negligence.

MOVING A HENHOUSE TO EEOC

The House Government Affairs Committee is considering a bill by Rep. Tom Lantos (D-Calif) that would permit agencies to handle discrimination complaints only for 30 days, after which the case could be filed directly with the Equal Employment Opportunity Commission. Strict time limits would be set for adjudication. Under the bill, employees could win back pay for up to two years, reinstatement and attorney fees and costs. EEOC could withhold pay from uncooperative offending officials. The bill is intended to cut the current average of 630 days to settle discrimination complaints.

U.S. Department
of Transportation

**Federal Aviation
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