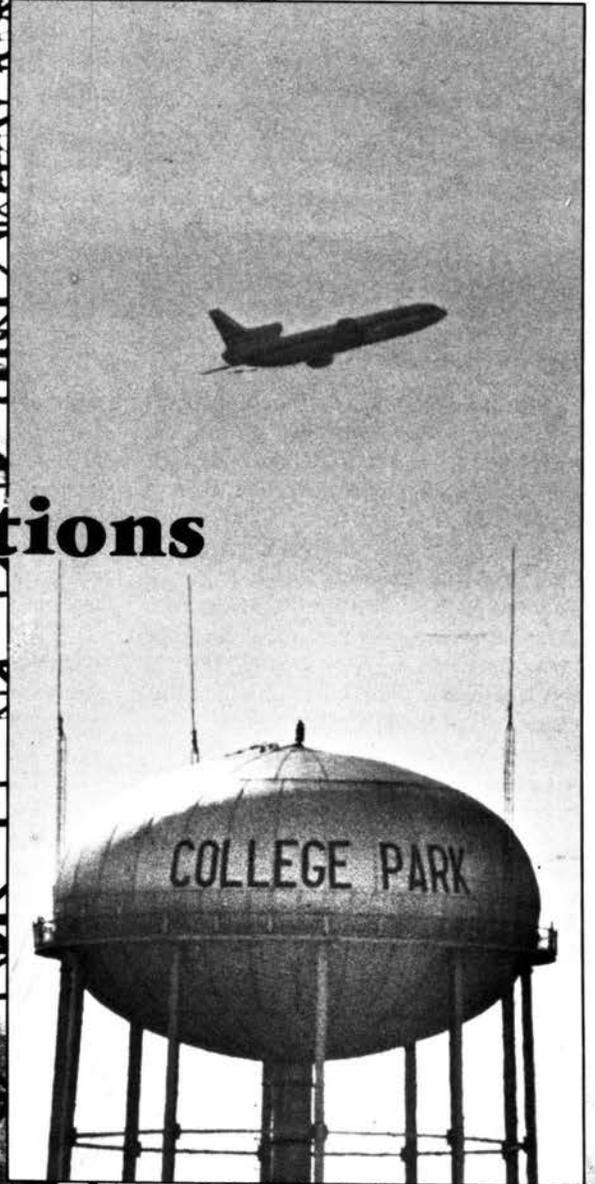


World

January 1985
Volume 15 Number 1

Obstructions




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



Photo by Dominick J. Rebeck, Jr.

Her Career Stays on Course

Nannette Gordner has had her eyes on the sky since she began gliding as a teenager, but she's got both feet on the ground in planning for an aviation career.

In fact, she already has a proverbial "foot in the door" of the Federal Aviation Administration. An aviation management student at Wilmington College, New Castle, Del., she is a participant in the Air Traffic Control Specialist Cooperative Education Program, the first to be assigned to the Millville, N.J., Flight Service Station.

"I hope to get a full-time job with the FAA and eventually move into management," the 23-year-old says. Now, she's earning as she's learning as a GS-4.

The Co-op program serves as a staffing vehicle to recruit and select individuals to enter the air traffic

control occupation, explains Philip Russo, Millville FSS manager. It provides qualified students with periods of FAA training and work experience as federal employees interspersed with periods of college or university study in approved baccalaureate degree programs.

"I am very pleased that the Millville Flight Service Station was selected to participate in the co-op program and particularly pleased Nannette was chosen for Millville," says Russo. "I believe she has an outstanding background and has excellent potential to achieve full-performance status. I would certainly be willing to accept additional co-op students with Nannette's potential.

"She's one of the first in the

(Continued on page 20)

Correction: The use of hyperbole is an invitation to disaster. The tower at Terrebone Airport in Houma, La., commissioned June 12, 1983, claims the distinction of having the nation's first Type I Integrated Communications Switching System (ICSS), instead of the Republic Tower, Bethpage, N.Y., as reported in the November 1984 issue of *FAA World*.

Front cover: *Water towers, like this one near Atlanta's international airport, broadcast antennas and tall buildings are among the potential obstructions to safe aerial navigation that FAA must evaluate. See story on page 4.*

Photo by Chuck Bell
The Atlanta Constitution

"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



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FAA's obstruction evaluation specialists have to be good negotiators to keep the airspace free of hazards to navigation and all the parties happy.

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By Jo Ann Sloane

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The Airspace Diplomats

FAA Specialists Evaluate Thousands of Hazards to Navigation



This College Park, Ga., water tank was deemed a hazard to traffic at Hartsfield International Airport, the major terminal for Atlanta. It was torn down as soon as a new one was built elsewhere.

*Photo by Chuck Bell
The Atlanta Constitution*

Unicycles, giant kites and construction cranes aren't objects that one generally associates with the FAA. For a cadre of some 40 FAAers, however, they are a part of the day's work.

These men and women with the impressive title of obstruction evaluation and airport/airspace analysis specialists—usually just called obstruction evaluation specialists—are unique in that their

jobs cut across all of the agency's disciplines.

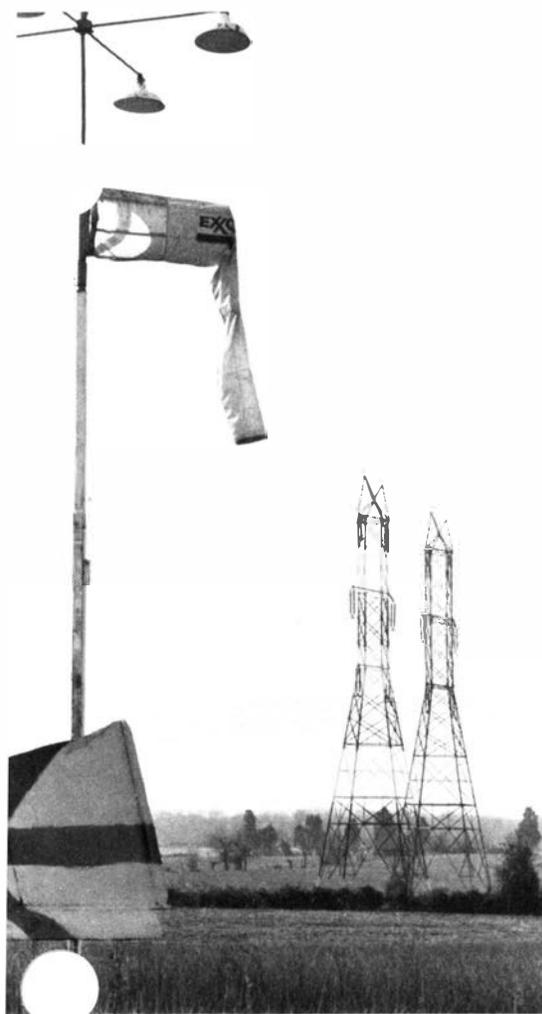
The Flight Information and Obstructions Branch of the Air Traffic Service, headed by Sid Wugalter, has administrative responsibility for policy for deciding whether a structure is a hazard to navigation.

Also directly involved are Flight Operations personnel, who oversee whether a proposal will adversely affect aeronautical operations; Airports people, who evaluate proposals for construction affecting public-use airports, monitor the application of airport design standards to the obstruction review process and occasionally assist in determining the effect a proposal might have on an airport's capacity; and Airway Facilities people, whose responsibility it is

to protect navigational and communications aids from electromagnetic or signal interference.

According to Wugalter, some 15,000 obstruction-evaluation cases are submitted to the regional offices annually. "Many require negotiation," he says, "and most are concluded to everyone's satisfaction. There have been difficulties on occasion, and there have been times when a particularly stubborn case has wound up in court."

One such instance involved a midwestern broadcasting company that insisted on building a 1,200-foot transmission tower 17 miles from an airport. The FAA determined the tower would be a hazard to navigation.



Pre-existing conditions that FAA would recommend against abound at old general aviation airports. Powerlines parallel the runway at Freeway Airport, Bowie, Md.

Photo by Len Samuels

FAA does not have the authority to stop any construction; it can only state that the proposed structure is or is not considered to be a hazard. Generally, this is enough. According to Wugalter, there hasn't been a structure actually built in the last four years that received a hazard determination.

In this case, however, the broadcasting company persisted, and the FAA had to send a copy of its evaluation report to the Federal Communications Commission, which grants or denies construction permits for broadcasting towers. The FCC denied the permit, and the company went to court.

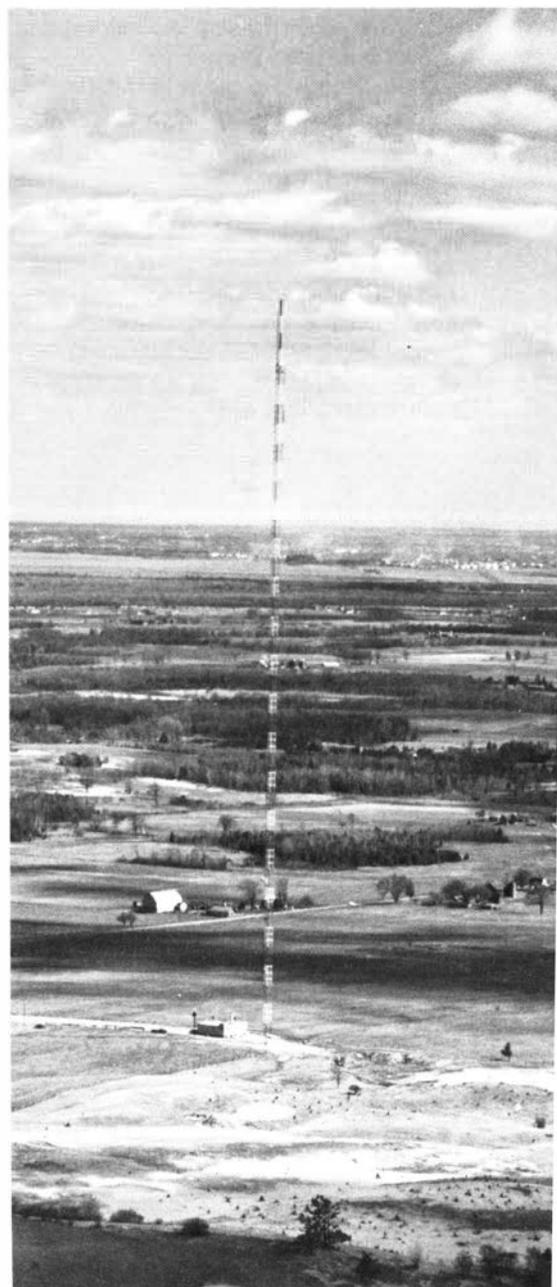
The U.S. Court of Appeals denied the company's appeal on the basis of the FAA determination, which found that "in view of the heavy air traffic in the area, extensive student pilot

training, the complexity of modifying instrument landing procedures and the tower's siting in an otherwise unobstructed area, the structure would be a hazard for both visual and instrument flight procedures."

Most cases are more easily resolved, and some even have their comic aspects. One of the latter lightened Ellie Stanson's day in the Western-Pacific Region. An airspace technician, she received a "Notice of Proposed Construction" from a man who said he wanted to ride a red and white striped 200-foot-high unicycle at a fair being held about a mile from an airport. He said that he would be wearing a helmet with a flashing red beacon. It didn't take her long to decide that his performance would not be a hazard to aviation.

Specialist Bob Brown in the Northwest Mountain Region didn't have quite such an easy time of it when he began to work with a community college near Seattle that is big on kites. The students were trying for their third Guinness record—this one for altitude. In 1982, they made the book for the longest tail, and in 1983, for the largest kite.

Last summer, they were to try for the altitude record. "The first two were easy," says Brown. "All I had to do was grant them a waiver from the regulations. The 1984 try was a lot of work. I went through the whole process, including making arrangements with the Seattle ARTCC, and was working on the necessary



High broadcast antennas could be a problem near airport approaches.

NOTAMs when I got a call saying the project had been cancelled.”

Other filings are more mundane, generally involving broadcast towers or tall buildings.

The way the process works is that the builder or construction sponsor must file a notice with the FAA regional office at least 30 days before construction if the construction is more than 200 feet in height above ground level or if the construction or alteration is higher than an imaginary surface extending outward and

upward at certain slopes from airport runways.

When the notice is received and these considerations are involved, the FAA must perform an aeronautical study to determine whether or not the structure would be a hazard to air navigation. If aeronautical objections are found, FAA meets with all interested parties and negotiations begin.

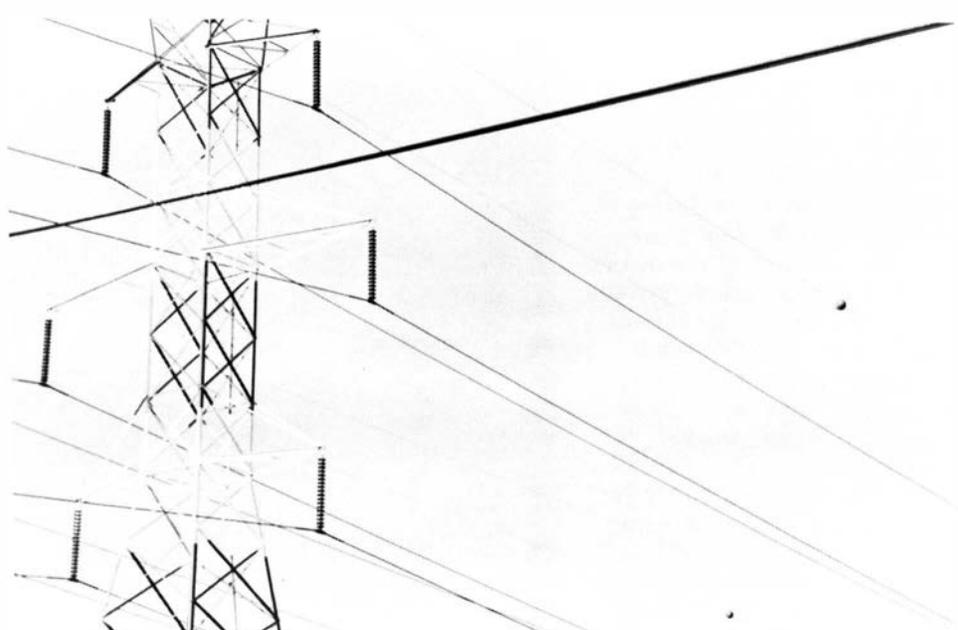
This sometimes can be tricky, because it can have serious economic consequences for the owner if the agency attempts to restrict the height

of a building. Satisfying the safety standards and an applicant also can affect the airlines. When procedures are changed to accommodate obstructions, there may be increased fuel and crew costs to reckon with. And, of course, the specialist has to evaluate that elusive, intangible and frequently unmeasurable element called “safety.”

All of these elements must be taken into consideration before the FAA issues that hazard notice. “The only way we can get the job done is through cooperation and negotiation,” says Clair Billington, evaluation specialist in the Southwest Region. “The whole process is important and the diplomatic skills of the specialist are particularly important. Most people are very cooperative,” he notes, “and some go beyond cooperation to really bend over backwards to avoid a potentially hazardous situation.”

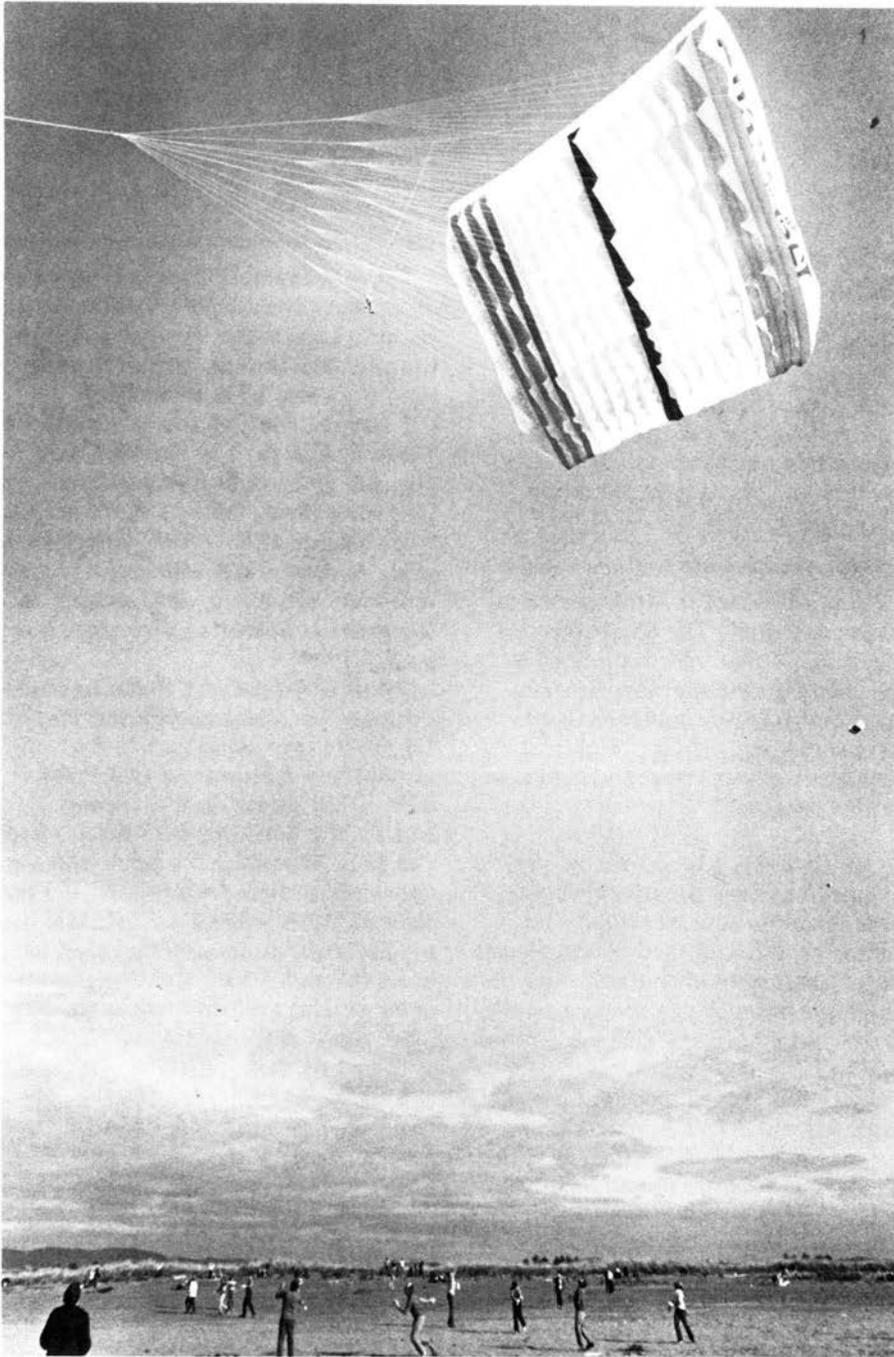
One of Billington’s more-than-cooperative clients is building a brand new airport for a community in New Mexico as a result of the negotiating process. “A well-known company wanted to build a 450-foot broadcast tower on a 60-foot peak right off the edge of the runway of the municipal airport,” he explained. “It would have been right in the traffic pattern, and we were ready to issue a hazard notice. We negotiated with the company, and as a result, a site on the other side of town was picked out for a new airport.”

In another instance, an oil drilling company in Oklahoma wanted to put



Orange globe markers are used to call pilots' attention to otherwise invisible high utility powerlines in the path of takeoffs and landings.

Photo by Len Samuels



up a temporary structure off the end of an airport runway so they could drill. The rig would force the closing of the runway. Negotiations resulted in the oil company agreeing to repave the runway so the airport would not lose additional time later for needed resurfacing.

Dwaine Hiland also has had his share of generous clients in the Central Region. An electric utility in Iowa wanted to put up a 600-foot smokestack for a power plant at a location that would have been between a VORTAC and the local airport. An accommodation was reached, and the company paid over \$100,000 to buy and install a VOR and DME on the airport and took care of the flight check as well. The utility also agreed to maintain the equipment for five years, after which the FAA would take it over.

Construction cranes have become almost a daily problem for the specialists in large metropolitan areas of the country. Many of the cranes are mounted on four huge crawlers and can get up to 400 feet high. In these cases, the specialists agree, "We just try to get the contractor to do what he has to without affecting the system for long."

They also agree that negotiation is a critical element of the job. In some ways, FAA's "diplomatic corps" is as vital as the State Department's as it helps to keep the skies safe. ■

Although obstructions to navigation are usually thought of as fixed, temporary ones have to be evaluated, too, like balloons and this "world's largest kite"—115 by 124 feet—from which its maker fell to his death after becoming tangled in its lines.

Photo by Bill Wagner
Daily Astorian (Ore.)

Paragraph 680d of Handbook 7110.65C states, “Vector aircraft in airspace for which you have control jurisdiction, unless otherwise coordinated.” Some interpret this to mean that before an aircraft is vectored into another controller’s airspace, one must coordinate or receive approval from the succeeding controller for the vector. Others interpret this differently.

The handbook states that we are to use automated procedures over manual when we can. Some construe this to mean that a computer-entered reroute suffices for coordination. It seems, then, that wrong altitudes for direction of flight could be “coordinated” the same way. What is the official interpretation?

Under no circumstances can a controller permit an aircraft under his or her control to enter another’s airspace without proper coordination. FAA Handbook 7110.65C, Paragraph 34, speaks specifically to this subject. In addition, Paragraph 750a sets forth procedures to be applied when appropriate coordination has not been effected.

Coordination may be accomplished by several means—verbal, radar handoff or point out, as prescribed in Paragraphs 700–703, or by prearranged coordination procedures as set forth in Order 7110.74, “Prearranged Coordination Procedures for Radar Facilities.”

Paragraph 23 states, “Use automation procedures in preference to nonautomation procedures when workload, communication and equip-

ment capabilities permit.” This paragraph was never intended to totally eliminate the need for manual coordination.

Further, Paragraph 231, “Exceptions,” specifically requires prior approval for the assignment of altitudes when not in compliance with Paragraph 230, “Flight Direction.”

I was scheduled to work overtime on the day shift. The day before, at 1:20 p.m., I was told that my overtime for the next morning was canceled by the tower manager. Isn’t there some requirement to protect the employee against last-minute cancellation of overtime?

Overtime work is ordinarily assigned to cover situations where there is an unusual workload that cannot be accomplished by employees during their normal tours of duty or where the absence or expected absence of employees create a temporary staffing shortage.

When it is determined that the situation for which overtime has been assigned will not materialize, it is the manager’s obligation to cancel the assignment to avoid unnecessary expenses. Unfortunately, this may inconvenience an employee who has made plans; however, there is no law or regulation restricting managers in carrying out this responsibility.

When a control tower is in operation, does the Airport Traffic Area cease to exist when weather conditions at that tower’s airport are less than the basic VFR minima?

I find no clarification in Handbook 7110.65. Call several facilities, and you will get several interpretations. One tower said, “ATAs don’t exist when you go IFR.” Another tower said, “I think FAA sent out a letter a few years ago saying that as long as the tower is operating you never lose your ATA.”

Pilots often call my tower to cross through our area at 2,500 feet above fog layers that cause us to report the airport IFR with one or two miles visibility. The pilots do not request SVFR. If I don’t have an ATA when I’m IFR, shouldn’t the pilots call the approach control facility? Or, if I do have an ATA when I’m IFR, is it in my authority to issue permission to cross through VFR? Can the pilots enter an IFR control zone in the first place under VFR rules?

First we have to separate the requirements applicable to Airport Traffic Areas and control zones. The answer to the first question is that whenever a control tower is operating, an associated ATA exists regardless of weather conditions. FAR 91.85 and 91.87 contain the requirements for operating in an ATA. Note that these are operating requirements with no relationship to weather conditions.

Where a control zone exists, however, weather conditions are a factor for VFR operations as specified in FAR 91.105 and 91.107. At locations

You've tried the normal channels—your supervisor, the personnel management specialist, the regional office—and can't resolve a problem or understand the answers you've gotten. Then ask FAA WORLD's Q&A column. We don't want your name unless you want to give it or it's needed for a personal problem, but we do need to know your region. All will be answered here and/or by mail if you provide a name and address, which will be kept confidential.

where an ATA and a control zone coexist, pilots must comply with the rules applicable to both.

An aircraft can be VFR in a control zone in the situation described, and the pilot is complying with FAR 91.85 by requesting authorization to transit the ATA. The determining factors here are (1) the aircraft is not being flown beneath a ceiling that is less than 1,000 feet and (2) the aircraft is being operated in basic VFR conditions. If the aircraft were to be flown above the ATA, the pilot would not need authorization to operate in the control zone.

For further information, consult the Airman's Information Manual—Basic Information and ATC Procedures, Chapter 3.

According to FAA Handbook 7210.3, "Facility Management," Paragraph 240, "Basic Watch Schedules," air traffic control specialists shall not work more than a 10-hour day and shall have an off-duty period of at least eight hours between watches.

Our facility manager says that an ATCS could be held 18 hours beyond the normal eight-hour watch in cases of emergency, such as an oncoming specialist not being able to work his shift and no other specialists being available.

I have not been able to find any information to confirm this 18-hour

holdover period in any FAA handbooks or in talking to other supervisory personnel.

What is the maximum holdover time? What constitutes an emergency for this? The answers are of special interest to employees at small facilities where there often is only one person on duty per shift.

The intent of the handbook reference is to prohibit a specialist from performing "operational duties" after being on duty for 10 consecutive hours. This paragraph is not intended, however, to apply to emergency situations. Events may occur that in the judgment of the facility manager constitute an emergency, which may include, but are not limited to, power failures, fire, flood, storm damage and similar acts of God, civil disturbances, personnel absenteeism due to epidemics, transportation stoppages, etc.

Under emergency circumstances, the facility manager has the authority to take whatever action he believes necessary to provide for continuity of air traffic service, including the holdover of facility personnel.

Although there is nothing in FAA handbooks pertaining to maximum holdover during emergency situations, the length of time would be up to the discretion of the facility manager.

The "Pilot/Controller Glossary" defines visual separation as "A means employed by ATC to separate aircraft in terminal areas . . . (2) A pilot sees the other aircraft involved and upon instructions from the controller pro-

vides his own separation by maneuvering his aircraft as necessary to avoid it. This may involve following another aircraft or keeping it in sight until it is no longer a factor." Agency Handbook 7110.65C, Paragraph 490b says, ". . . you may use visual separation in conjunction with visual approach procedures."

I contend the use of visual separation in the following situation is valid, although my facility quality assurance officer says no:

Aircraft A is holding at 11,000 feet at an NDB seven miles west of the airport. Aircraft B is departing the airport westbound, climbing to 10,000 feet. Aircraft A reports the airport in sight and requests a visual approach. The weather is VFR 120 SCT 30. Aircraft A is number one in the approach sequence. However, Aircraft A is told "unable" on the visual approach because of the departing Aircraft B. Aircraft A reports the departing Aircraft B in sight and is then cleared for the visual approach and instructed to maintain visual separation from the departing plane.

The use of visual separation in conjunction with visual approach procedures, as specified in Handbook 7110.65C, Paragraph 490b, "En Route," is to be applied only between successive arriving aircraft, not between arrivals and departures. Visual separation cannot be applied under the circumstances described.

A Positive Learning Experience

Air Traffic Evaluators Focus on Improvement, Not Fault

For many air traffic control specialists, the prospect of a performance evaluation doesn't exactly "make their day." But, according to Gene Monahan, manager of the Northwest Mountain Air Traffic Division's Evaluation Staff, the current program is designed to take the pain out of performance evaluation and replace it with an emphasis on learning.

In April 1982 when the Northwest Mountain Region was formed, the approach to Air Traffic evaluations changed with the creation of a newly organized staff. It includes a manager, five evaluation specialists and a secretary. Of the five specialists positions, three are permanent and two

are designated for 120-day details by field personnel.

The "Eval Team" works to foster "esprit de corps" both within the staff and in the field. Monahan highlights the potential resources that staff personnel have to offer in sharing their experience, particularly the information that they pick up as they travel to different facilities and see the alternatives that exist for improving the system.

The individuals working on the Evaluation Staff each bring to the team a varied background with a significant depth of experience. All have worked as controllers, and many have experience in more than one air traffic option. The majority also have

functioned as both first- and second-level supervisors. Several have been instructors at the FAA Academy.

For the pilots on the staff, the list of ratings range from private pilot and commercial rating in single-engine land aircraft and sea-planes to airline transport in multi-engine aircraft. Dale Jepsen and Danny Boyle, who has since left for a field position, hold ratings for a Cessna Citation as well.

Several of the policies that the staff has adopted are helping to integrate field personnel into the evaluation process. Whenever possible, controllers from field facilities are included in evaluation flights to give them the pilots' and evaluators' point of view. When undertaking a facility evaluation, supervisors and staff from a similar size facility also will be asked to participate as a part of the evaluation team.

After working under the direction of John Alex of the evaluation staff in this capacity, James Erkens, supervisor at the Billings, Mont., Tower, said the experience was ". . . the high point of my 25-year FAA career."

For those who have the opportunity to work a four-month detail



Before an inflight evaluation (right) Ed Henderson, John specialist Ron Crase (right,



Chuck Davis, on detail to the staff, preflights his aircraft.

By Katherine A. Burks

A journeyman air traffic control specialist at the Seattle Flight Service Station, she entered the FAA as a co-op student.



Members of Northwest Mountain's Air Traffic Evaluation Staff (left to right) receive a preflight briefing from air traffic control at the Seattle Flight Service Station.



Permanent evaluator John Alex (right) discusses pilot concerns with Cliff Howard, a fixed-base operator at Boeing Field.



Staff manager Gene Monahan (left) reviews an evaluation flight with Danny Boyle, at the time, on a detail.

with the staff, a number of benefits come from the experience. Lin Gillam, manager of the Sheridan, Wyo., Flight Service Station, says, "It increased my understanding of the inter-workings of the region and gave me a new appreciation of the volume and scope of what the staff deals with on a daily basis."

Upon completing his detail and returning to the field, Bob Greene, assistant manager of traffic management at the Denver ARTCC, has seen a change in his approach to the job. He explains, "I can look at areas that might benefit from change and contribute knowledge of other ways of doing things."

Rotating people through the staff on detail affects staff secretary Nancy Lewin the most. Playing an integral role as a resource person, Lewin says, "There are a number of details that each individual needs to know to do the paperwork side of the job, and I get involved with showing them the ropes."

The Eval Staff wants to be viewed as contributing more in a training capacity. Says Dale Jepsen, "We're there to give the specialist an objective look at his or her own performance, as an outside observer, looking for pluses, not minuses. We focus on what's done right and has potential use by other specialists."

As an awareness of this attitude spreads, the result is a more positive feeling about the process of being evaluated. ■

By Walter Luffsey

Formerly Associate Administrator for Aviation Standards, he is now Acting Associate Administrator for Air Traffic.



Keeping Up with the Times

Changing Technology Sets New FAA Oversight Requirements



Computer technology is aiding design and manufacturing. Here, a McDonnell Douglas engineer uses a light pen as an entry device to modify the specifications of a part.

McDonnell Douglas photo

There is no issue more sensitive or important in the 1980s than the issue of changing technology and its impact on industry. We are being bombarded by the media on the importance of quality of product,

quality of service and the quality of life.

Who hasn't heard or seen the slogans "quality is job one" or "nobody sweats the details like—"? It is as true in the aviation industry as it is in the auto and other industries.

We must keep up with advances in technology to remain ahead of our competition in world markets. The 70s was a decade in which we all learned that "good enough" or "made in the U.S.A." were no longer adequate to keep our almost total leadership in the civil aviation arena.

Somewhere along the line, we

either became complacent or mistakenly felt that there was no international competition. We found out, though, that there were challenges to our leadership role. The 80s must be the decade in which we reassert our leadership.

And changing technology is already presenting questions, if not challenges, to our current regulations and procedures.

With the advent of computer-aided design and manufacture

(CAD/CAM), designs are created on video screens and transferred to magnetic tape. With CAD/CAM we no longer have a need for blueprints. The complete type design for an aircraft may soon be on a roll of computer tape.

If CAD/CAM is universally adopted, and it is sure to happen eventually, there are a number of questions that need to be resolved when the new technology is viewed against past and current "traditional methods."

For example: How would type design changes be controlled or approved? Would storage on tape be considered equivalent to hard copy storage? With computer-aided manufacture, what changes are needed in traditional quality control methods and practices?

These are only a few of the questions. We are already reviewing the impact of CAD/CAM as related to our current regulations and procedures. As yet, we haven't the answers.

The 80s and 90s will see the increased use of robots in the aviation industry, as has already happened in the manufacture of automobiles and many large home appliances, some of which are literally "untouched by human hands" from the time the first pieces of metal are assembled through the final coat of paint and packaging.

An aircraft, of course, is a lot more complex than an automobile or a home appliance, but robots are already being used in aircraft sub-assembly operations. And I am sure the innovative abilities of the aircraft manufacturers will be well put to use in finding more production processes that can be adapted to robot technology.



A Boeing Company engineer uses a computer imaging system to assist in aircraft design, an approach that could lower engineering design costs as much as 30 percent.

Boeing Co. photo

Will the day come when a complete aircraft, like the home appliance, will be "untouched by human hands?" I am not going to say it won't. So, in anticipation of this eventuality, or some degree of it, we must again begin asking questions.

What would be the role of "quality assurance" and "inspection" when a computerized and robotized assembly line monitors all production parameters and automatically rejects components that don't conform?

Do we need regulatory and/or procedural changes to keep up with these technological advances or do we have regulations and procedures that are general enough to cover such situations? We will need to address these issues.

Perhaps one of the greatest challenges is to recognize the tendency to avoid change because "that's the way we've always done it." This will be particularly important in the development of new, space-age materials that are either already incorporated in many aircraft today or are undergoing developmental testing leading toward incorporation into new design concepts.

Composite materials using many different forms of fabrication, such as filament-wound structures, compressed materials or sheet-material lay-up are being used or proposed.

Most of these materials must be cured under rigidly controlled time-and-temperature conditions, and the basic material must be mixed from raw chemical "recipes" that don't allow for variations in order to assure that the structural integrity of the finished component is assured.

The complexity of composite components may range from minor brackets, to helicopter rotor heads and blades and to complete aircraft fuselages. Quality control procedures for such components must be rigidly maintained and especially so for components that are critical to the safe operation of the aircraft on which they are used.

In some types of composite components or structures, there are no non-destructive inspection techniques as yet developed that can assure compliance with the specifications for the finished part. The tight control of such a composite component would be of little use if the basic chemicals were mixed in the wrong proportions, if the chemicals themselves had not been produced according to the pre-



The company that designed the Seattle ARTCC expansion to accommodate the host computer, Leo A. Daly, finds computer-aided design is yielding better efficiency, productivity and cost control.

Leo A. Daly photo

scribed specifications and methods, if they had become contaminated from improper handling or if they had deteriorated from improper storage.

It is patently evident that the assurance of integrity of composite structures must literally go all the way back to the mines that produce the raw materials, or to the laboratories that turned these raw materials into the basic chemicals and fibers.

Therein lies the challenge that will grow in the future as more and more composite structures are used in aircraft.

As the volume grows, so grow the chances for making errors. How can compliance with the specifications be positively assured through the production cycle from start to finish?

Can human error be eliminated from the process? Would currently used quality-control systems ensure product integrity?

Another part of the aviation industry that is being caught up in new technology is testing, and I am not referring to nondestructive test technology. It is the functional testing of components, aircraft, engines and systems in which a computerized "black box" is simply plugged into the unit to be tested and all its systems can be checked without actually being operated.

This concept has been used for years with the condition monitoring of missiles that can't, of necessity, be operated for testing but must be ready to go at a moment's notice.

An example of the application of this concept in the cockpit is in the

annunciators that indicate malfunctions in critical systems during flight.

But this covers only a relatively small number of systems in the aircraft. How far away is the day when a complete aircraft can be plugged into a computer module and be taken through a production test flight without ever leaving the ground? Or given a major maintenance check of all systems while parked in a hangar?

The day may well come when the mechanic's flashlight and mirror will be museum pieces. Does this sound far out? It wouldn't if you consider that with ever more-sophisticated automated flight-guidance systems, and automatic landing to roll out already a reality, we are only a step away from total block-to-block computerization of air carrier operations.

I am sure the aviation industry will be well able to cope with these new technological challenges.

But what will the FAA have to do to keep up in fulfilling our legislative mandate to assure aviation safety? What changes will we have to make in our regulations and procedures? I would be the first to admit that at this time I do not know.

But this I do know. Where we will have to change, we will change. Where we will have to grow, we will grow. We will meet the challenge and not only keep up with, but ahead of, the times. ■

(Adapted from an address to the Conference on Quality in Commercial Aviation held in Forth Worth, Tex., on Sept. 24, 1984.)

AT Managers Gain Direct Channel

Associate Administrator Seeks Better Information Flow

A new communications channel has opened in Air Traffic to expand the exchange of ideas between the associate administrator for air traffic and all supervisory levels in the service. The Air Traffic Managers' Committee (ATMAC) as joined the existing programs of division managers' meetings and the Supervisors' Committee (SUPCOM).

ATMAC's first meeting in Washington on November 14-16 was an organizational one at which the group made recommendations to improve the direct, two-way flow of information between field managers and the associate administrator. In the past, managers have had only limited access to the top, with the usual channel having been through the regional air traffic divisions.

The committee is composed of nine air traffic managers, including two members representing three levels of en route centers, three representing three levels of flight service stations and four representing five levels of terminals. Each regional division



Prior to the development of an ATMAC consensus, chairperson Mary Carter described the options available in the committee selection process. Among those listening were John McLaughlin (left) from Alaska and Howard Losey, Kansas.

manager nominates one manager from each option and level. From these candidates, the associate administrator for air traffic selects one manager from each region to serve on the committee.

Nobby Owens, deputy associate administrator for air traffic, and Lane Speck, acting director of the Plans and Requirements Service, briefed ATMAC on the new air traffic organization structure and on major programs and plans.

Mary Carter, manager of the Hoquiam, Wash., Flight Service Station, was selected as the first chairperson.

Al Weishaar of the Detroit (Mich.)

Metro Tower and Howard Losey of the Wichita, Kan., Flight Service Station discussed the establishment of regional ATMACs, echoed by Roddy Coker, Birmingham, Ala., Tower, as the basis for an effective communications network. It was pointed out that the Southern Region has a parallel program and that the Great Lakes Region is in the process of implementing one.

Vince Mellone, Oakland, Calif., ARTCC, and Jim Claude, Boston ARTCC, identified the need to establish a charter to communicate expectations to the field and provide an operational focus. Agreement followed a discussion by Ken Friar, New Orleans, La., Tower; John McLaughlin, McGrath, Alaska, FSS; and John Pallante, North Philadelphia Tower, on extending members terms to two years and holding quarterly meetings.

ATMAC members felt they had a productive start on the new initiative. ■

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.

Aeronautical Center

- **David F. Grogan**, group supervisor in the Storage and Distribution Section, Storage and Transportation Branch of the FAA Depot, from the Warehouse Automation Staff.
- **John W. Roberts**, manager of the Uniform Accounting System Operations Branch, Accounting Division.

Alaskan Region

- **Lowell A. Oliver**, assistant manager of the King Salmon Airway Facilities Sector, from the Maintenance Engineering Division of headquarters' Program Engineering & Maintenance Service.
- **Gracia L. Williams**, manager of the Real Estate and Utilities Branch of the Logistics Division, from the Acquisition and Utilities Branch.

Central Region

- **Douglas R. Murphy**, assistant manager at the Kansas City ARTCC.

Eastern Region

- **William Croghan**, area supervisor at the Washington ARTCC.
- **William E. Pack**, area supervisor at the Washington ARTCC, from the En Route Procedures Branch, Procedures Division, headquarters' Air Traffic Service.
- **Wayne J. Sandifer**, area supervisor at the Washington ARTCC, from the Philadelphia Tower.

- **Robert C. Sturgill**, area supervisor at the Washington ARTCC.

Great Lakes Region

- **Joyce A. Ashbrook**, supervisory procurement assistant, Acquisition Management Branch, Logistics Division.
- **Jimmy D. Burkett**, area supervisor at the Terre Haute, Ind., Tower, from the Chicago O'Hare Tower.
- **Norman J. Dombroski**, area supervisor at the Lunken Airport Tower in Cincinnati, Ohio, promotion made permanent.
- **Gary M. Klingler**, manager of the Jackson, Mich., Tower, from the Detroit (Mich.) Metro Tower.

- **Sterling A. Perrine**, maintenance mechanic foreman in the Ohio Airway Facilities Sector, Cleveland, promotion made permanent.
- **Albert L. Smith, Jr.**, manager of the Cleveland (Ohio) Lakefront Tower, from the Cleveland ARTCC.

Metro Washington Airports

- **Francis J. Butterworth**, section supervisor in the Washington National Airport Police Branch, Public Safety Division, from the Washington Dulles Airport Police Branch.

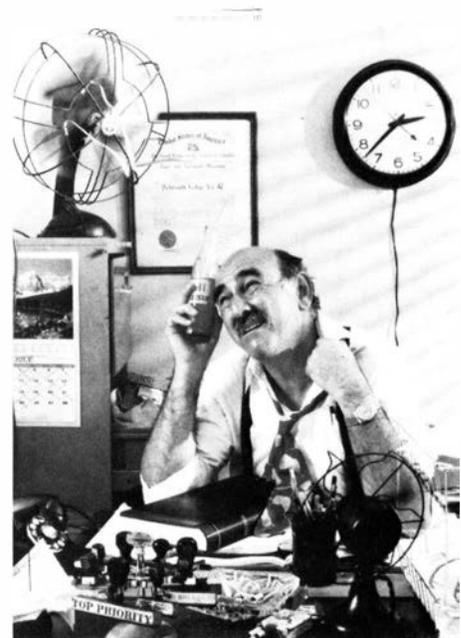
Northwest Mountain Region

- **Leo B. Jones**, maintenance mechanic general foreman of the Salt Lake City, Utah, Field Maintenance Party, Airway Facilities Division.
- **Ansel H. McAllaster**, unit supervisor in the Denver, Colo., Flight Standards District Office, from the Broomfield, Colo., General Aviation District Office.

- **Mikio J. Ogami**, area supervisor at the Walla Walla, Wash., Flight Service Station, from the Seattle, Wash., Flight Service Station.

Southern Region

- **Lewis A. Butler**, assistant manager of the West Palm Beach, Fla., Tower, from the Terminal Procedures Branch, Procedures Division, headquarters' Air Traffic Service.
- **Carlisle C. Cook, Jr.**, manager of the Atlanta, Ga., ARTCC, from the Miami, Fla., ARTCC.
- **Eugene F. Cummings**, area supervisor at the Orlando (Fla.) Executive Airport Tower, promotion made permanent.
- **David R. Garrett**, assistant manager of the Nashville, Tenn., Tower, from the Advanced Planning & Automation Section, Plans and Programs Branch, Air Traffic Division.
- **Billy R. Holdaway**, area supervisor at the St. Petersburg-Clearwater, Fla., Flight Service Station.
- **Anita Levine Jennings**, area supervisor at the Fort Lauderdale (Fla.) Executive Airport Tower.
- **Kenneth P. Wilkes**, assistant manager for technical support in the Raleigh, N.C., Airway Facilities Sector, from the Radar Automation/Frequency Management Section, Maintenance Program Branch, Airway Facilities Division.



Southwest Region

■ **Charles L. Hudlow**, area supervisor at the Albuquerque, N.M., Tower, from the Dallas-Fort Worth, Tex., Tower.

■ **Ronald F. Petersen**, unit supervisor in the Fort Worth ARTCC Airway Facilities Sector, from the Communication & Surveillance Section, Maintenance Operations Branch, Airway Facilities Division.

■ **Oscar P. Simank, Jr.**, unit supervisor in the El Paso, Tex., Airway Facilities Sector.

■ **Grandville W. Sprayberry**, unit supervisor in the El Paso Airway Facilities Sector.

Washington Headquarters

■ **Peter J. Goutiere**, group supervisor in the Amman, Jordan, Civil Aviation Assistance Group of the Europe, Africa & Middle East Office.

■ **James E. Hooker**, chief of the Civil Aviation Assistance Group in Muscat, Oman, Western Area Operations Branch, International Assistance Division, headquarters' Office of International Aviation.

Western-Pacific Region

■ **Millard E. Boren**, maintenance mechanic foreman in the Environmental

Have you seen this man? His picture hangs in post offices all across the country. He's wanted not by the police but by directors and advertisers. He's Seymour Horowitz, an economist in headquarters' Systems Engineering Service. When Horowitz isn't doing cost-benefit analyses, he's acting on the stage or modeling for the Postal Service, Washingtonian Magazine or Dutch Boy paints, in print and television. He'll soon appear on the cover of Common Cause magazine.

Support Unit of the Tonopah, Nev., Airway Facilities Sector Field Office, from the Navaid/Landing Program Section, Establishment Engineering Branch, Airway Facilities Division.

■ **Kenneth D. Doty**, supervisor of the Environmental Support Unit in the Edwards Air Force Base (Calif.) Airway Facilities Sector Field Office.

■ **Marlys A. Drees**, support services supervisor in the San Francisco Flight Standards District Office, promotion made permanent.

■ **Dennis P. Howat**, staff engineer in the Communications, Surveillance and Interfacility Program Section, Establishment Engineering Branch, Airway Facilities Division, from the ATC Automation & Flight Information Program Section.

■ **John K. Krohn**, assistant manager for training, Plans and Program Branch, Air Traffic Division, from the Air Traffic Operations Branch.

■ **Karen D. Rodriguez**, voucher examining supervisor in the Examination & Classification Branch, Accounting Division, promotion made permanent.

■ **Francis T. Torikai**, assistant manager for training at the Honolulu, Hawaii, ARTCC.

Retirees

Brewster, Albert H., Jr.—AC
DeCordova, Clara L.—AC
Lazzaro, Joseph P.—AC
Montgomery, Betty J.—AC
Taber, Floyd—AC
Talunas, William—AC
Whitney, Bette J.—AC

gen, Dorothy A.—AL
Ward, Calvin L.—AL

Ackermann, Wilma—CE

Canada, Doris W.—CT
Garland, Brian C.—EA
Kimmel, William B.—EA
Miller, Kenneth J.—EA
Royer, George E.—EA
Thomas, Ladene D.—EA

Anthony, Billie L.—GL
Dierschow, Mary Jo—GL
Henselman, Helen L.—GL
Lawson, Roger—GL

Nordmark, William F.—GL
Pisano, Harriet E.—GL

Carroll, Sam P.—NM
Prellwitz, Bernard R.—NM

Blackwell, Willis E.—SO
Bridges, Charles W.—SO
Fipps, James T.—SO
Gentle, Helen K.—SO
Grimes, William F.—SO
Miller, William A.—SO

Thomas, Mallory—SO
Thornton, Basil R.—SO

Bradley, James L., III—SW
Haschke, Marvin M.—SW
Woolever, John E., Jr.—SW

Pour, George J.—WA
Bland, Sherill E.—WP
Harrison, Robert J.—WP
Rush, James K.—WP
Trettevick, Robert A.—WP

A Home for the Host

Seattle ARTCC Breaks Ground for Addition to House New Computer



Seattle ARTCC manager Bud Snelson points out a feature of en route radar to Sen. Slade Gorton, as developmental Sam "Sandy" Horney works traffic.

The new state-of-the-art host computers for FAA's en route centers are under development, and the agency is building new homes for them. The first center expansion to accommodate these third-generation computers got underway at the Seattle ARTCC in November.

The first of 20 such projects at centers in the contiguous 48 states, the 65x85-foot addition to the existing

building is scheduled to be completed by this October, with the new computers becoming operational a year later. The expansion of all centers is expected to be wrapped up by February 1987.

The Seattle addition is being built at a cost of \$1.55 million by the Arango Construction Company. It was designed by the Leo A. Dale firm of architects. The structure attaches to the control and automation wings at the rear of the existing building. Forty-four feet high, it will include the main floor, a penthouse level and a finished basement.

The basement level will house the host computer, while the main floor

will be left unfinished for the future advanced automation sector suites, whose specifications are not yet determined. These sector suites will incorporate new display, communications and information-processing capabilities when they become operational in 1990.

The center's electrical distribution system has been upgraded, and the host computer will have its own new power-conditioning system.

The Seattle expansion was designed as a national standard from which the remaining center projects will be site adaptations. The facilities are not all alike, so they will require detailed changes. Nevertheless, this approach



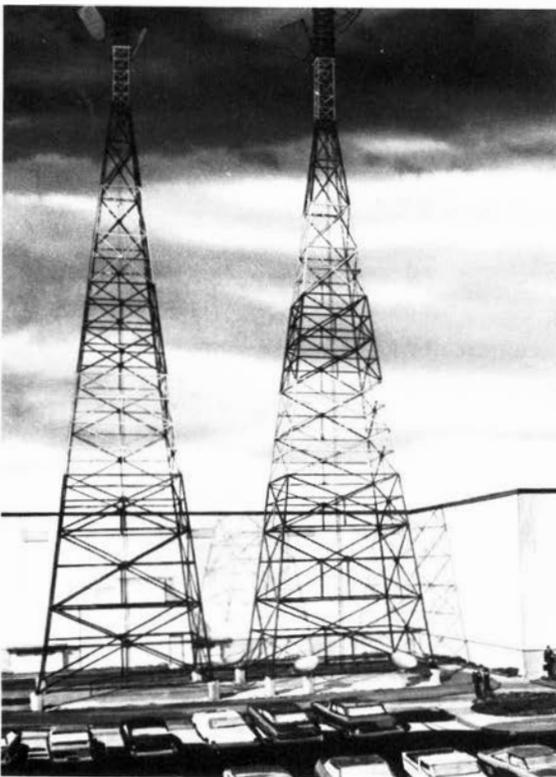
Seattle Center employees look over an FAA Public Affairs exhibit on the host computer that will occupy the building addition in 1986.



U.S. Rep. Rod Chandler (R-Wash) holds a traditional ground-breaking shovel while Northwest Mountain Region Deputy Director Wayne Barlow (left on the bulldozer) and Sen. Slade Gorton (R-Wash) (right) accompany a construction worker in the modern, productive method of ground-breaking with a bulldozer.

to design will save both time and money.

The initial design review meeting that was held in Seattle included representatives from each region, which permitted drawing upon the expertise and site-specific knowledge in all areas of the country. The meetings produced an acceptable working design that could be used in all 20 centers. The ideas from all these representatives played a vital part in the end product, which is a major step in the FAA's 10-year plan to modernize the National Airspace System. ■



The Seattle, Wash., ARTCC

This artist's conception of an earlier expansion proposal at the Houston Center reflects the approximate size of the addition each center will gain for the host computers.

Career *continued from page 2*

country to have an internship at a flight service station," he notes.

"My dad used to fly gliders when he was young and that got me interested," Gordner says. "I started gliding with him when I was 15."

Gordner enrolled in the aviation management program at Mercer County (N.J.) Community College and started flying power planes at the Trenton-Robbinsville Airport, where she also worked. She obtained her private pilot's license when she was 18.

"I learned a lot about general aviation which is what we deal with mostly here," Gordner says. After she left Mercer, Gordner worked for

18 months for Williams Air, a commuter airline located then in Mount Holly and later in North Philadelphia. It was while she worked there that she became interested in weather observation and successfully passed the test given by the National Weather Service. The certification, however, was good only for her job there. She will have to be certified again, she says.

After transferring from Mercer Community College to Wilmington, Gordner passed the test to enable her to participate in the co-op program, and she has been here since July. "I'll be here until January, then go back to Wilmington as a senior. I'll

be back again for another six months in July," Gordner says.

The first three months here entailed a lot of book work, she says, but now she has started observing and doing training on the floor.

Gordner thinks the program at Wilmington College is excellent because most of the teachers are adjunct faculty members who work in the field. "A lot of students are working in the field, too. It gives you a more realistic view of what's going on," Gordner says.

"I think this is a good field for women, and there are opportunities for advancement," she adds. ■

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