

Brrrr!



FAA WORLD

MARCH 1975

VOL. 5, NO. 3

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FAA WORLD is published monthly for the employees of the Department of Transportation/Federal Aviation Administration and is the official FAA employee publication. It is prepared by the Public & Employee Communications Div., Office of Information Services, FAA, 800 Independence Ave., Washington, D.C. 20591. Articles and photos for FAA WORLD should be submitted directly to regional FAA public affairs officers:

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THE COVER: Electronics technician Vic Kellner sweeps across International Falls, Minn., Airport in an FAA snowmobile to check out navaids. The story on the Lower 48's coldest facility is on page 16.

Photo by Ett Shalin



Playing A Good Game

In times of economic distress, government gets more skeptical attention from the citizens than during other, less complicated forms of crisis. Inflations, recessions or any combination thereof cause people to question their leaders and speak out vigorously about what's wrong and what to do about it, often starting with the size of government.

FAA can expect close attention in these difficult days, and this is as it should be, since we are an expensive part of the Federal operation. We shouldn't be surprised, nor defensive, nor dumb. We should appreciate having their views and offer to share in return.

As for the size of government, it is interesting to note that our population increased 40% in the last 25 years, while Federal employees increased 32%. In fact, from 1970 to 1973, the total Federal employment decreased by 95,000 while state and local government employees increased by 205,000.

As for FAA itself, we've grown, but basically because we are providing service to an industry that has grown phenomenally. In the last 10 years, operations have increased 66% but FAA employees only 14%. And aviation continues to grow. We manufacture more than 1,000 airplanes every month and more than a half million people fly every day. Aircraft operations and airline passengers are still expected to double in 10 years. Our winged volcano isn't cooling off much no matter what's going on in Detroit.

Of very specific economic interest, U.S. aerospace products are second only to agricultural products in producing a net gain in international trade, partly because they are good products, but also because they are associated with FAA regulations, procedures and know-how. Further, FAA people are increasingly active, and effective, in paving the way in foreign countries for U.S. products.

But more important than talking a good game is playing a good game, being smart, tough-minded and responsive in the way we tackle the day's work. We need to give anybody troubled about government in these difficult times the strikingly clear impression that our part of the government is working hard and well and making progress in the common cause.

PHILIP M. SWATEK
Director, Southern Region

GOOD NEIGHBORS ADOPT AN AIRPORT



While some airports may have good neighbors, Washington's Dulles International Airport has foster parents.

Lawrence and Betty Armel live on farmland about a mile from the Dulles Tower and couldn't be happier about it. Pointing from her kitchen window to the graceful lines of the terminal and tower across the meadows, Betty Armel said, "With something that beautiful so close, how could we not like it?"

So pleased were the Armels with the arrival of Dulles, they embarked on a series of friendly visits to the tower right after the airport opened in November 1962. Before long, they knew every controller on the staff by name and face.

"I don't think I've ever seen anybody so interested in planes and airports as Larry and Betty," data systems specialist David Bobbitt said. "They're just the most likeable people I've ever met."

"We were both aviation enthusiasts even before the airport was here," explained Lawrence Armel. "Long before Dulles was built, these fields were used as a landing strip for small planes. I remember how excited I was when I saw this fellow land an old biplane out there years ago," recalled Lawrence, who was born and raised on this land.

For years, Lawrence has been building models of all kinds of airplanes based only on scale drawings and his own superb woodworking craftsmanship. "When the FAA DC-3 flight inspects the airport's landing aids, it flies over our land and it seems like I can almost reach up and touch it," he mused. He decided to build a model of the plane, complete with FAA markings. The finished model, with a wingspan of about three feet, was so good that Dulles Tower put it on display. He also fabricates parts for antique

airplane restorations, including some for the airplane Lindbergh first owned.

The Armels used to visit the tower about once a month on Sunday mornings, stopping in the radar room and tower cab. On anniversaries of the airport's opening and on Christmas and other occasions, Betty still sends over homemade candy and an original poem to the controllers. Visits are less frequent now, but warm feelings remain between the tower and the Armels.

Betty discovered that she could overhear tower radio communications on an ordinary FM radio and got into the habit of tuning several radios into tower frequencies, leaving the radios on most of the day. She can recognize nearly every controller by voice and knows the full name behind each controller's sign-on initials.

Occasionally, late in the evening, a controller will come on duty and offer a quick radio greeting: "Hi, Betty." From across the runway and fields comes the response—a flash of light, as Betty Armel flicks on a lamp kept near the window. Some airline pilots have learned the lore of the Armels and offer their own "Hi, Betty" greeting as they land—and get a flash of light in return. Last August, 50 flights said hello.

"Since I can see the tower so easily from here, I give them a call whenever I notice one of the lights on top of it has burned out," Betty said, referring to the tower's obstruction lights.

"It gives us a special kind of feeling to know the Armels are out there thinking of us and caring the way they do," said assistant tower chief Lyle Hartman.

Returning the tower's hospitality, the Armels have

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invited controllers to their home, and during TRANSPO in 1972, they had several guests who watched the exposition's exciting airshows from their backyard.

After 11 years of friendship with the Armels, the Dulles tower staff found an opportunity to repay the couple's kindnesses in a way that only FAA can do. The Herndon VORTAC was being relocated to the airport and plans were afoot to rename the navigation aid "Dulles." Somebody—the tower isn't sure exactly who-made a suggestion: Call it the "Armel" VORTAC, he said. And so-with the appropriate memoranda and justifications-it came to pass, with Lawrence and Betty Armel present for both the groundbreaking and commissioning ceremonies in 1973 and 1974.

"It's too bad they put it over there behind the trees where we can't see it," Betty said, "but I'm sure that was the best place for it."

"We're really very highly honored to have the VORTAC named after us," Lawrence admitted.

John Curran, chief of the Airway Facilities Sector Field Office at Dulles, even plans to ask Betty to record the voice identification-"Armel VOR"which is broadcast periodically from the navaid.

The only slight hang-up is that when Dulles Air-

A proud day for the Armels—the dedication of the Armel VORTAC (identifier: AML) on July 18, 1974. Next to Betty and Lawrence is John Curran, chief of the Dulles AF Sector Field Office; at right is tower chief Robert Logan.





On a clear day, all Dulles Tower controller Richard J. King has to do to see the Armels' house and fields is look out the

way Facilities technicians talk about a radar microwave link, they refer to the "RML," and if you say those letters fast, they sound a lot like "Armel" and someone could get confused.

The Armels live on what used to be their dairy farm. They gave up farming not because of the airport, but because of economics. Sixty-three acres of their land were corralled by the airport when it opened, forming part of the buffer zone between the runways and the rest of Virginia.

The Armels have grown used to looking at huge jetliners gliding down and disappearing below the treetops and big planes taking off for parts of the world far away from their tranquil Virginia

"But I'll tell you the truth," Lawrence said, "I'd like to see some fighter planes from Andrews Air Force Base sent up here for training. I'd sure like to see some of them flying around," he said with a model-builder's relish. As it is, some big planes from Andrews do train at Dulles, including Presidential 707 jets.

So what about noise so close to the airport? "Actually," Lawrence said, "it isn't bad at all, because we live to the side of the runway, not in line with it. It would be a different story if we lived under the approach path."-Story and photos by Don Braun

Federal Notebook

WHO'S WHO

With the organizing of the 94th Congress, here's a rundown on the makeup of the committees most directly concerned with Federal employees. The new chairman of the House Post Office and Civil Service Committee is David Henderson (NC). The 19 Democrats and 9 Republicans are William Brodhead (Mich), William Clay (Mo), Dominick Daniels (NJ), William Ford (Mich), James Hanley (NY), Herbert Harris (Va), John Jenrette (SC), William Lehman (Fla), Norman Mineta (Calif), Stephen Neal (NC), Robert Nix (Pa), Patricia Schroeder (Colo), Paul Simon (III), Stephen Solarz (NY), Gladys Spellman (Md), Morris Udall (Ariz), Richard White (Tex), Charles Wilson (Calif) and Robin Beard (Tenn), James Collins (Tex), Edward Derwinski (111), Benjamin Gilman (NY), Andrew Hinshaw (Calif), Albert Johnson (Pa), Trent Lott (Miss), John Rousselot (Calif) and Gene Taylor (Mo).
Gale McGee continues to chair the Senate Post Office and Civil Service Committee. Majority members are Quentin Burdick (ND), Ernest Hollings (SC), Frank Moss (Utah) and Jennings Randolph (W-Va). Minority members are Henry Bellmon (Okla), Hiram Fong (Haw), Robert Griffin (Mich) and Ted Stevens (Alas). Rep. Richard White has been named to chair the House Retirement and Benefits Subcommittee, formerly held by Jerome Waldie.

HAPPY NEW YEAR

Under the Budget Control and Impoundment Act of 1974, the government's Fiscal Year will begin on October 1 in 1976. The delay will give a Congress more time to act on money bills. This is expected to eliminate agency operations under continuing resolutions and

the consequent cutbacks in programs and personnel because of brief austerity periods.

TIME TO PAY UP

It's now the law (PL 93-647) that Federal employee salaries can be garnisheed for non-payment of alimony or child support. The same holds for retirees' annuities. Regulations have to be issued before the act can be implemented. but there's no information as to when the regs will be issued.

HERE'S LOOKING AT YOU The Civil Service Commission is initiating action on two fronts of employees' activities. One is a study of sick leave practices that could result in tightened administrative practices to eliminate unnecessary use of such leave. . The other is a proposal to increase work productivity by experimenting with flexible work hours, job redesign, organization development and revised incentive systems.

THE PHOENIX

Rep. Jack Brooks (Tex) has resurrected the per-diem-and-mileageincrease legislation vetoed in January. This bill, with the same basic provisions as last session's (see Federal Notebook, February), has Presidential support and would likely be enacted. The earlier bill was vetoed because of an amendment that extended allowances to disabled veterans traveling for medical treatment.

CITY WITHHOLDING TAX Under a 1974 law, the Treasury Department has an agreement with about 50 cities to withhold city income or employment taxes from Federal pay this year, providing the employee is a resident of the state in which the city is located

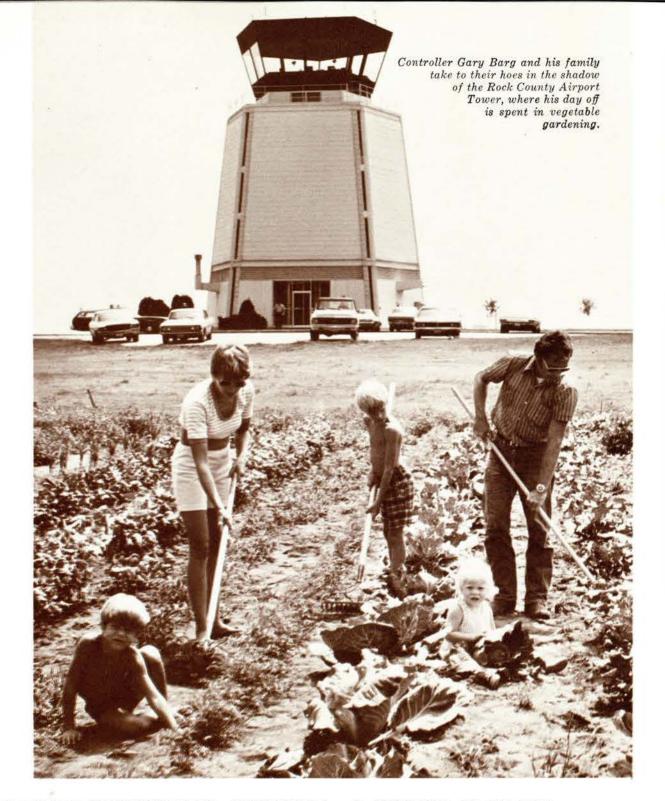


- Q. What is the FAA policy concerning the assignment of double-double-back watches for convenience, as opposed to a rare bona fide emergency situation. This is when an employee is assigned an evening 4-12 watch, returns the following morning for an 8-4 watch (after a maximum of six hours rest) and returns that same night for a 12-8 mid-watch (lucky to get two hours sleep before this one)—a total of 24 hours of work performed in the space of 40 hours. Such a schedule can only harm one's health and welfare, but it is a normal occurrence in my facility when one watch supervisor is on extended leave. The watch should be filled with experienced journey-
- A. Sorry for the delay in answering, but we had no record of your earlier queries. We'd like to point out that if a name and address is supplied (which is not forwarded with the question), we notify you of receipt with a postcard. There is no FAA policy concerning double-back shifts, per se. Assuming you are in an Air Traffic facility, FAA directives (Facility Management Handbook 7210.3B-67) require only that center and tower controllers working operational positions have an off-duty period of at least eight hours between watches. Order 1100.126B and Southern Region supplements require synchronous scheduling. Neither of these encourage or discourage doubleback shifts. Basic watch schedules are developed between the facility chief and the union representative. We find that normally this procedure has resulted in the most satisfaction to the most people.
- Q. What scholarships are available for the children of FAA employees? I remember reading about some a while back.
- A. There are no scholarship programs currently being administered by the FAA for FAA employees and their families. After three years of operation, a scholarship program established in 1970 in honor of retiring Deputy Administrator David D. Thomas was terminated due to lack of funds. The program was national in scope and its purpose was to make cash awards to FAA employees or their dependents on the basis of scholastic merit and

- achievement. A total of 18 individuals received awards under the program before it ended.
- Q. I was recently assigned to my own tower as chief.
 There are a few old-time controllers that I would
 like to transfer. Can I do this; if so, how do I go
 about it? I consider them trouble-makers and want
 a new bunch.
- A. You cannot arbitrarily transfer those employees. If they are trouble-makers, as you say, transferring them wouldn't solve the problem anyway. Such action would only shift the responsibility to another supervisor. The proper course of action for you to take as their supervisor is to determine the reason for their dissatisfaction and take the necessary steps to resolve their problems. The staff of the Labor Relations Branch in your Manpower Division will be glad to help you.
- Q. We are FAA contract employees in Virgin Islands facilities. According to the job announcements, a five percent cost-of-living allowance was provided for all FAA employees here. Last year, this allowance was increased to 10 percent, but employees living in government housing were cut out of any COLA. While the announcements stated that it was subject to Civil Service regulations and changes, there was no indication that it might disappear. While acknowledging that the Virgin Islands merit a 10 percent allowance, CSC has denied the allowance to employees in government housing, based solely on housing costs. There is also a road tax on a private car and an import duty if it's made other than in the U.S., not fully reimbursable; costs above allowance for temporary quarters: costs above allowance for children's education (an allowance that is rumored to be ending); higher auto insurance and higher utilities. We feel that we were not made aware of the actual conditions until after arriving at the duty station and that since this COLA situation was not in effect when we arrived, we should not be penalized for the lack of communications between FAA and CSC.
- A. The unforeseen expenses you encountered after entering upon duty are regrettable. While we are powerless to change them, as you noted, an explanation of the allowances may be useful. Under law, the CSC has the responsibility for setting cost-of-living allowances and for reviewing them annually for adjustments. Determinations are based on the comparison of living expenses at a duty station outside the continental U.S. with similar expenses in the Washington, D.C., area. CSC's survey of the Virgin Islands showed that employees buying or renting housing in the private sector experienced total living costs about 10 percent higher than in the Washington area, and that employees with government-furnished housing had total living costs at about 95 percent of those in the Washington area. This indicated that employees in V.I. in government housing had been receiving a five percent COLA that was not justified and that the cost figures for this group affected overall cost figures in a way which deprived the other employees of the higher

- COLA to which they were entitled. The commission decided that unless substantial increases in rents for government-furnished housing were made, the only equity was to eliminate that COLA and increase the COLA to 10 percent for employees housed privately. The various agencies took different courses of action. Some increased rents over 100 percent with COLA retention. Although rents for FAA housing increased, CSC believed they were still far below those paid for non-government housingso much so that a COLA for FAA employees in government housing was considered unjustified. The road tax, auto insurance and utilities are included in CSC's data for cost comparison. Since temporary quarters and miscellaneous expenses depend on how quickly one gets settled in a new location, there are variables that cannot be controlled. The agency position on the education allowance was for its continuation, but again, we do not have the final authority in such matters, and we were overruled. FAA is concerned for the economic welfare of all employees, and special consideration is given to those who must work in unusual locations. Our policy is to pursue goals that are to their advantage; however, our influence is limited. We are forwarding a copy of your letter and this reply to the Southern Region Manpower Division so they may be alerted to issues that employees assigned to the Virgin Islands believe should be stressed.
- Q. The staffing for my FSS in Fiscal 1974 had called for seven GS-10 journeymen, no assistant chief and one GS-12 chief. The actual staffing was six GS-10 journeymen, one GS-11 assistant chief and one GS-12 chief. Why was the assistant chief retained in conflict with the authorized staffing? He could have been transferred or demoted to fill the vacant journeyman position, which was needed but never filled. Other FSSs in this region lost their assistant chiefs at that time.
- A. The supervisory ratio portion of the National Staffing Standard, Order 1380.33, was used to determine the number of supervisors a facility would be authorized. This limited use of the standards resulted in a number of supervisory positions becoming surplus. It was decided in the regional office at that time to convert those surplus positions that were unoccupied to nonsupervisory positions. After this action, there remained 11 positions that were surplus but occupied. In view of the relatively low number of positions and, more importantly, the people involved, a reasonable length of time was allowed for attrition or other nonadverse action to take care of the imbalances. The region has continued to monitor this situation in an effort to meet its objectives with a minimum of hardship to those involved. No employee has been involuntarily demoted, relocated or forced to retire. The decision to establish or abolish supervisory positions in this case was a management prerogative and not in violation or conflict with any Civil Service Commission regulation.
- Q. This past fall, I heard from the regional office that the Office of Budget had rendered a decision, based on a study, that would result in a general across-

- the-board downgrading of facility chiefs through assistant chiefs at most Level III Radar Approach Control Terminals. In addition, I was told a team of regional office specialists would come to review our operation before rendering the necessary classification action that would occur at the end of March. Since such an action will have a far-reaching, detrimental affect on the careers and livelihood of many loyal, hard-working, dedicated personnel, as well as on the career development of controllers, what is the basis and purpose for this drastic action? What recourse do potential downgraded personnel have? Why wasn't advance information supplied the field about the study before the decision? What criteria and from whom determines which Level III facilities will be affected? Can such action be appealed to the Civil Service Commission and, if so, when? Finally, are similar actions contemplated for other than Air Traffic field personnel or regional or Washington headquarters personnel?
- A. The Office of Budget was in no way involved in this study. FAA has to assure that all positions are graded in accordance with classification standards published by the Civil Service Commission. In this case, however, the immediate cause for the study was verdicts rendered by CSC in employee appeals. In one, assistant chiefs at a RATCF were one grade above the controllers and appealed for a higher grade. They cited other facilities where assistant chiefs were two grades above the working level. CSC denied the appeal and said the jobs were properly classified. In another case, that of assistant chiefs at a RAPCON, some positions were under a temporary freeze. The assistant chiefs were one grade up and appealed for a higher grade. Then the freeze was lifted, the assistant chiefs withdrew their appeal, and they were promoted another grade. CSC had apparently intended to deny their appeal, stating that their positions were properly classified. CSC then asked the FAA for the evaluation statement used to support the higher grade to which it had classified the jobs, after which it told FAA that the evaluation statement was not valid and the jobs not properly classified. CSC also stated that FAA was not to use similar evaluation statements for other facilities. At this time, we do not know what actions will have to be taken in any specific facility or position. Each location has to be reviewed individually. Job descriptions will probably not be changed, since the jobs, as described, were properly allocable to the lower grade. The criteria to be used are those of CSC's Supervisory Grade Evaluation Guide. An employee can appeal his classification to CSC at any time; if there is an adverse action taken against him, he may appeal that to CSC. The current study relates only to supervisory positions in AT field facilities where the assistant chief positions are two grades above the working-level controllers. We deeply regret the necessity for the study and any consequent downgradinas, but they are attributable to an error in our original classification judgment. We'd like to add, too, that we are particularly concerned because the echelons involved are FAA's first levels of management and the group from which future higher level managers will be drawn.



HARVESTING THE AIRPORT

I t often used to be said that it was American ingenuity that won the Second World War. Now, that ingenuity and initiative is being put to use by FAAers in beating inflation and the high cost of food. The victory garden is returning.

Many people are spading their back yards, getting owners' permission to cultivate vacant lots or public officials' sanction to plant and tend otherwise neglected city park areas. Employees in the Great Lakes Region have their own cornucopia at their airports.

At the Rock County Airport in Janesville, Wis., it's vegetable farming. Air traffic controllers have their own two-acre vegetable garden across the access road from the tower, adjacent to some of the 493 acres of field corn grown on the airport.

Across the state at French Island is the LaCrosse Municipal Airport, where employees at two of the three FAA facilities harvest bass and pike from the Mississippi River at the edge of the airport, as well as till home plots and rented farm areas to feed their families. Right at the airport, corn, soybeans and Christmas trees are grown.

Controller Gary Barg brings his wife, Gretchen, and their three children to help till the sandy loam around his plants at Rock County Airport. You name it, he's got it. Barg rattles off: broccoli, cauliflower, cabbage, kohlrabi, carrots, peas, beans, beets, onions, sweet corn, sugar melons, watermelon, squash, cantaloupe, cucumber, dill, potatoes, radishes and peppers—then stops to think of what he may have omitted.

"It's like gold in the pocket," says tower chief Fay Harder, pointing to a bag of potatoes that cost a few cents to grow. Harder and another controller are working on what he calls a two-year food plan. The first year, all produce not eaten goes into the freezer. The second year, all excess is canned. This way, there is a constant supply of homegrown vegetables for the table, as well as a hedge against inflation and the possibility of drought in future growing seasons. Since freezer space is finite, vegetable gardening generally leads one to canning.

Like Barg, controllers Carter Zon and Tom Kuhlman bring their wives to help farm, while Jerry Carrels usually works solo, since he lives further away. Controllers Karen Binnenboese and Joan Mahr are not too partial to farming, but with conditions the way they are and their liking for homegrown peppers and tomatoes, they, too, have a plot to cultivate.

All eight controllers at the LaCrosse Tower, including chief Lyle Ostrander, freeze some of the fish they catch. The extent of their fishing for food, however, is governed by the freezer space they have, particularly because some of them also have vegetable gardens and like to hunt as well. The latter is abetted by the fact that LaCrosse is in the middle of

Worktime, not playtime. LaCrosse technician Harry Kebbe and chief Herb Rugen skim over the fish in Lake Onalaska to check light standards on the lake.





While the FAAers were tending to their skies, a visitor took a string of panfish at the end of a LaCrosse Municipal Airport runway. In envious admiration are (left to right) tower chief Lyle Ostrander, AT secretary Deanna Kruser, technician Bob Davidson and AF chief Herb Rugen.

the Mississippi flyway, along which thousands of waterfowl migrate each year.

Fishing is so good there that ATCS Bill Stuart claims, "You can use a cane pole and 10 feet of line with a jig and catch almost anything." Ostrander has a favorite spot across the Black River from the end of Runway 31, as well as one just below the Dresbach Dam, a mile away on the Minnesota side of the Mississippi. To emphasize the point, Stuart relates that at any given time, he has in his freezer about 20 half-gallon milk cartons filled with fillets.

Not everyone concerns himself with the high cost of food; one is a gourmet dabbler. LaCrosse FSS assistant chief Joe Killileu claims he hasn't time for fishing and gardening with his buddies knowing all the best golf courses and eating places in the area. Nevertheless, he keeps an eye out for the seasonal snapping-turtle migration across the runways, which puts that delicacy in his wife's pot.

The crew at the Airway Facilities Sector Field Office are more gardeners than fishermen. The unit's chief, Herbert Rugen, not only plows up his backyard, but rents a farm acre to help feed his nine children and two dogs. Last year, he harvested nearly 3,000 pounds of potatoes, along with a dozen other vegetables, some of which he cans, pickles or freezes. He also helps his wife, Joyce, bake bread.

Electronics technician Harry Kebbe finds time to grind wheat into flour for his wife, Leona, but he's more partial to fishing with his daughter, hunting, sailing, acting in community plays and talking to local groups about FAA activities. But Kebbe sums it up well, "Everyone here puts something in the freezer."

One thing pains him and some of the other SFO people. When the big fish are jumping and the great Blue Herons swoop down for dinner on Lake Onalaska, near the confluence of the Black and Mississippi Rivers, all too often, he has to set out in the jon boat without rod and reel—to check the middle marker and ILS light bars that extend across the lake.

—Story and photos by Marjorie Kriz

FACES and PLACES



TOURING BUT NOT TRAVEL-ING—Civil Aviation Security Service personnel (left to right) Debbie Burgess, Lamar Trammell, Judy Koller, Vicky Bassford and Barbara Gray were among several CAS groups to visit Washington National Airport for orientation to the real world of airport and aircarrier activities, from tower to cockpit.



THEY'RE NO. 1—Sector chief William Williams (left) accepts the National Airway Facilities Sector of the Year Award for his DuBois, Pa., Sector 818 from Warren Sharp, then Deputy, now Director of the Airway Facilities Service. Looking on are Eastern Region Deputy Director James Bispo and Airway Facilities Division chief Paul Bohr.



THEY ARE, TOO—For the second time, Frank Johnson (second from right) heads up a Sector of the Year. Johnson's Fort Worth ARTCC Sector took top honors, presented by (left to right) J. W. Cochran, then Director of Airway Facilities, now Associate Administrator for Engineering and Development; Richard Stryker, chief of Southwest Region AF Division; and Henry L. Newman, Southwest Region Director. Last year, Johnson headed the winning Fort Worth hub AFS.



SAFETY PAYS OFF—Chuck Heasley, accident prevention specialist at the Eugene, Ore., GADO, suggested an improvement in a seat-belt attachment following an accident investigation, which was adopted by a major aircraft manufacturer. The public got better safety, Heasley, \$500.



SELLING THE FAA—Holding forth at a Southern Region exhibit for a Federal Programs Minority Business Opportunity Workshop, which stressed projects that are procured at the regional level, are (left to right) Lanny Frye, Southern Region; Malcolm Johnson, Logistics Service; and Kay Wheeler, Southern Region. Donald Webster, regional Office of Civil Rights, participated in panel discussions.



SLOW BUT SURE—Guam electronics technician Spencer Miller III shows Resident Manager Ed Kaneko his Bachelor's degree that took him 23 years since his first college enrollment. Miller, who is FAA's first University of Guam graduate under FAACOP, plans to go for a Master's.



SELLING THE U.S.—
Secretary Kathy Canham and Hal Eggers, sector manager of the Denver ARTCC Airway Facilities Sector, display the Minuteman Flag won for the center for three years of 90 percent savings bonds participation in an organization larger than 100 persons.



RESEARCH COORDINATION—Dr. Mark F. Lewis (right), chief of Visual Processes Research in the Civil Aeromedical Institute's Aviation Psychology Laboratory, explains performance measures he plans to obtain using computer-generated visual displays with simulators. Listening are Dr. William Benson (left) and Dr. Conrad Mueller of the National Academy of Sciences.



TOOLS OF THE NORTH—Horicon, Wis., AF Sector Field Office chief Donald Muchlbach keeps snowshoes and a snow-blower in repair and at the ready to insure the accessibility of the facility's parking lot and remote transmitter.

HOW WE READ NOISE

F ew offices are islands unto themselves, and getting a job done often means a joint effort. A prime example of effective cooperation was in noise certification tests that involved NAFEC, Southern Region Flight Standards and the Grumman American Aviation Corp. last fall.

The subject of the tests was the Gulfstream II, which is in a category of aircraft (over 75,000 pounds) that had to meet Federal Aviation Regulations noise standards by the end of 1974 before the jet's airworthiness certificate could be issued. Southern Region was involved because the plane is manufactured in Savannah, Ga., and NAFEC was in the act because of the specialized test environment it could provide.

To establish the test range, noise measuring and recording equipment was installed a quarter of a mile on each side of the test runway's centerline and on extensions of that line $3\frac{1}{2}$ miles from the takeoff end and one mile from the landing end. This permitted measurements during the noise critical periods of takeoff, climbout and landing approach.

FAA flight test engineer Robert Howe, Grumman test pilot Morgan Cobb and FAA test pilot Edgar Wilson plan another noise-measurement flight next to a Gulfstream II.





Operators of one of NAFEC's four phototheodolites move the turret to keep it focused on an aircraft being tracked, providing accurate azimuth and elevation information.

Flight test engineer Robert Howe, who headed up the regional certification team with propulsion engineer William Lawrence, pointed out that noise certification usually takes about a week, although it can take much longer because of the need to meet stringent weather conditions. The "go" decision requires that the wind velocity doesn't exceed 10 knots, there isn't more than a five knot crosswind, the temperature is between 41° and 86°F., the relative humidity is between 30 and 90 percent, the weather is generally fair, there is no temperature inversion and there is no perceptible turbulence.

The noise limits for aircraft in the Gulfstream's category are expressed as not exceeding 93 effective perceived noise decibels (EPNDB) over the climbout point or 102 EPNDB during takeoff run or approach.

Even without turbulence, it's virtually impossible to keep the airplane exactly where it's supposed to be, according to Southern Region test pilot Edgar Wilson and Grumman test pilot Morgan Cobb. But NAFEC has an answer for that in the electronic phototheodolites of its space-positioning range. This system tracks the test aircraft and accurately determines its position throughout the flight. This time-position data is correlated with the noise levels recorded. If the noise level on a particular approach seems unusually high, for example, a cross-check with the phototheodolite information might show that the airplane was 30 feet lower than it should have been.

—By E. L. Shoop, Jr.

S G N S of his times



R oy Pickett has documented his career in steel. With mobility the name of the game, the Las Vegas Airway Facilities Sector manager has tacked up in his garage the license plates of each place he has been assigned.

Pickett's travels began earlier. He was born in Artesia, N.M., and raised in Los Angeles. Then he spent two years in Japan and Korea with the Army. He began his FAA career with its precursor, the Civil Aeronautics Administration, in 1953 as an electronics technician in Fairbanks, Alaska.

His next assignment was in Salt Lake City in 1956, followed by a stint as a radar instructor at the FAA Academy in 1957. In 1962, he transferred to North Hollywood, Calif., as a resident electronics engineer at the Telecomputing Corp., and the following year went to Washington Headquarters as the senior engineer for radar beacon systems, taking up residence in Virginia. 1964 saw him heading for Guam as AF Branch assistant chief. Since 1972, Pickett has been in Las Vegas, Nev.



TELLING IT LIKE IT IS . . . Normally, after a grade school class visits one of FAA's air traffic control facilities, the teacher makes the kids sit down and turn out a "thank you" letter and may even suggest a few laudatory phrases for inclusion. But now and then, you find a kid who marches to a different drummer . . . like the second grader out in North Bend, Ore. Following a tour of the North Bend Flight Service Station, he sent the staff there a note that was different from the ones they usually receive. "Actually," the kid wrote, "I thought it was boring."

TELLING IT LIKE IT ISN'T . . . A good reason for reading "Small World" regularly is that you get the news before it happens. Last April, for example, we ran an item entitled "Moving Mountains" in which we noted that FAA had leveled the terrain around Puget Sound by adopting a rule removing the "mountainous area" designation for that part of the state of Washington. Well, now the agency has caught up with us and actually issued a rule to this effect. So you might say we had a "scoop," to use an old newspaper term, or you might say something else.

HAIRY SITUATION . . . Mustachioed FAA pilots should be aware that using mustache wax not only is passé in this era of the "natural look" but also may present a hazard when flying on oxygen. United Air Lines currently is testing various types of mustache wax to determine their spontaneous flammability in an oxygen atmosphere and has instructed its pilots not to Simonize their hairy upper lips until the test results are in.

TRIVIAL MATTERS . . . Last month in this space we ventured into the realm of formal trivia by reporting the number of controllers on duty at any given moment and the number of hot dogs sold at Chicago O'Hare in a one-year period. Now we find that FAA has a recognized trivia expert working in the Oakland Center. He's a journeyman controller named Fred Worth, and he recently wrote "The Trivia Encyclopedia," containing some 4,000 items of fascinating and almost completely useless information. Included are such aeronautical gems as the identity of the person who holds pilot license No. 1, the registration number of Lindbergh's "Spirit of St. Louis" and the name of "Wrong Way" Corrigan's airplane. The holder of pilot license No. 1, incidentally, was Glenn Curtiss. To get the other answers, you'll have to buy the book, which is published by Brooke House.



During the Delta Wing championships at Cypress Gardens, Fla., only one tow kite at a time was allowed in the air.

and landing techniques. The tow-kite flier is usually towed on water skis by a motorboat to his free-flight altitude, while the hang glider is leg-powered from a hill. The tow kite is normally expected to land in

Another significant difference is that hang gliders designed for self-launching are not normally stressed for tow operations. According to Flight Standards, before any attempt to tow a self-launched hang glider, the question of its structural integrity should be answered.

the water and is fitted with styrofoam flotation.

Since Florida's landscape is mostly flat, it's logical that more *aficionados* of tow kiting should emerge there. Frank Wignall, chief of the St. Petersburg GADO, estimates that central Florida has at least 50 kites in action.

FAA has been observing the whole hang-gliding scene, but has not issued regulations on the sport, although there is an advisory circular on the subject. FAA is planning to replace Advisory Circular 60-10 with one that will provide guidelines on safe and sane hang gliding, emphasizing the training aspects. FAR 101 was designed to cover moored balloons and tethered kites, but has been ruled to cover hang gliding. If they travel above 150 feet, the kite fliers have to notify the appropriate Air Traffic facility; above 500 feet, they have to obtain written area waivers from Air Traffic.

Electronics technician Harold Bowcock, Jr., of the St. Petersburg Sector Field Office is a water skiing and kiting enthusiast. He defines tow kiting realistically: "I consider kiting a thrill sport with considerable danger" and notes that there have been about 10 fatalities.

Wignall thinks regulations are in order. One kiter flew at 1,100 feet over the Skyline Bridge north of Tampa as a stunt for advertising real estate. Three youths who thought that was great fun copied the flight, but with one nearly crashing into the bridge and the trio landing among a crowd of spectators. On another occasion, kiters took advantage of a rule exempting them from any control within an enclosed area by flying and executing 180-degree turns in a crowded stadium.

There is the positive side, too. The two-day First International Delta Wing Kite Championships took place at Cypress Gardens last year under the St. Petersburg GADO's surveillance. Although one kiter



A tow begins, much as it would in ordinary water skiing.

was injured, according to Wignall, "The handling of the event by the officials was professional in every respect, and all contestants conducted themselves in an exemplary manner." The event was operated under a well-thought-out set of rules by the organizers, which served both for safety guidance and for giving status to the sport.

This matter of status has led equipment manufacturers to express interest in certification or licensing—in meeting construction specifications.

Although some of the hill jumpers on rigid gliders

Electronics technician and kiting enthusiast Harold Bowcock (left) reviews the array of safety equipment he uses with supervisory operations inspector Andrew Bray.



can soar above their take-off heights, it's the tow gliders that really get into the airspace and could present problems, despite their low glide ratios of 3:1 to 6:1. On a motorboat tow on the Banana River, one man regularly got up to 3,000 feet before casting off, and elsewhere another man is reported to have been towed by an airplane to 7,000 feet before free-flighting to earth.

In addition to obtaining the area waivers, the kiters must stay out of airport traffic patterns, not hard to do most of the time with their limited glide range. However, where the airport fronts on water used for tow kiting, like on Winter Haven Lake, east of St. Petersburg, the danger is there.

With his recognition of the dangers to the kiter, Bowcock has worked up his own guidelines on safe equipment and towing. Among the two dozen points he makes are these:

- Training runs are made during very calm weather, as winds above 8 mph make kite control difficult on the water.
- When training, a tow of 15 to 20 mph on the water is used.
- As in water skiing, an observer/release man in addition to the driver must be in the tow boat.
- The flier must wear a ski jacket, which in addition to keeping him afloat, provides some torso protection. He should wear a football helmet with face guard and a safety belt on the seat.
- Short, wide skis $(42 \times 95\%)$ are used. Longer ones become tangled in the kite rigging.
- Tow speed in the air should be 25 to 35 mph.

Tow-Kiters are

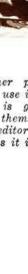
HIGHER THAN A KITE

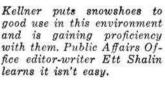
There's more than one way to skin a cat or fly a hang glider. Actually, in this version of the booming sport, they've been calling it water skiing/tow kiting—terminology that tells it all.

The main visible differences are in the launching



Passing snowplow banks, electronics technician Vic Kellner sets out across the airport and over eight or nine-foot drifts to check International Falls Airport navaids,







WORKING IN AN ICEBOX and loving it

hanks to TV weather briefers, when anyone says "cold" in the contiguous United States, International Falls, Minn., comes to mind. And cold, it is.

FAAers are living and working in this icebox environment and loving it. "I wouldn't think of living anywhere else nor would our children," says Joanne Kellner, wife of electronics technician Vic Kellner. She must be firm in her convictions, for, when she made that statement, the ground was mantled with 24 inches of fresh snow, and the windchill factor was hovering near −50°F.

What's even more fascinating is that the Airway Facilities personnel themselves are frequently out in the weather rather than sequestered in heated facilities. At work with Kellner are electronics technician Dale Kriske and their chief, LaVerne Becvar, Together, they are responsible for the maintenance of the international airport's VORTAC, RCAG, full ILS system and the teletype equipment located in the weather bureau. These three families make up the entire FAA contingent at International Falls.

Following a severe weekend blizzard, during which the winds gusted up to 47 mph and the actual temperature dipped to 26 below zero, while Kriske basked in sunny Oklahoma City at teletype school, Becvar and Kellner manned their shovels to dig out the insulated trailer office that was nearly buried in a record snowfall in a 24-hour period of 24.1 inches. City snowplows did the honors on the airport runways and main highways of the town.

Not many facilities have government-issued snowmobiles and four-wheel-drive vehicles, but not many are like International Falls. "We think nothing of snowmobiling across the airport to reach the glide slope or localizer after a fresh snow," Becvar said.



office-trailer. He's wearing an insulated snowmobile suit. More effective for the big jobs are the airport's snowblowers, here clearing runways and taxiways.





The bottom really drops out of the thermometer in northern Minnesota, as evidenced by Airway Facilities Unit chief LaVerne Becvar (right) and visiting Cy Neis of the Hibbing Sector Field Office in a gag.

Most of the time, however, our four-wheel drive is the only vehicle that can get both us and the equipment through the snowdrifts." He also pointed out that houses and motels in the area all have outdoor electric outlets, necessary for plugging in heaters to warm engine water for instant starting the next day.

Kellner also makes use of snowshoes, which he demonstrated by walking confidently up a steep snowbank. "The trick is to walk normally and not look down at your feet," he said. "After quite a bit of practice, I'm getting better, but I still have to work on my speed."

Of course, winter isn't all there is to International Falls. The "icebox" does thaw out, becoming a popular resort area during the summer with normal temperatures, but the range is startling: In 1923, a summer record of 103°F. was set, while in 1896, an all-time low of -49°F. was recorded.

Echoing his wife's sentiments, Kellner claims, "This is God's country and just perfect for us." An avid hunter and fisherman, he sports a mounted 16-pound Northern Pike in his living room. His children, Karla Sue and Brian, enjoy ice fishing and figure skating, while his wife enjoys community activities.

Verne and Darlene Becvar have four children, and Dale and Millie Kriske have a half dozen with another baby on the way. They also are enthusiastic outdoor types and participate in the full range of winter and summer sports.

With the nearly 220,000-acre Voyageurs National Park soon to open, International Falls will be expanding as a tourist area. As a result, aviation activities are certain to increase, and with it, Messrs. Becvar, Kellner and Kriske will have their work cut out for them. -Text and photos by Ett Shalin

3-D RADAR SPREADS THROUGH SYSTEM

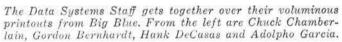
hen the last five enroute centers go operational with computer-driven radar displays this year, FAA's radar system will be fully three-dimensional. The 20 centers will be linked with the 60 ARTS III-equipped airports to provide continuous surveillance of aircraft as to range, bearing, identity and altitude by means of computer-generated alphanumeric tags.

"Big Blue," as the computer at the Los Angeles

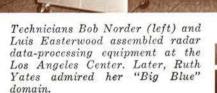
ARTCC is affectionately called, was the first to go on line with alphanumerics last year under Phase II of NAS Stage A. The equipment was installed four years ago under Phase I for automatically processing and transferring flight data. Phase I was completed across the country in 1973.

The people Big Blue serves and is served by are diverse and numerous, totaling more than 650 in two dozen different types of jobs.

—By Ted Bozonich











Data Systems specialist John Crow coordinates operations between the control room and the computers.

Peggy Wilkerson also feeds data into the system via teletype.



Supervisory A people Mildred Wilson and Bob McKenzie hold forth at the data position for correcting flight plan information in the computer.



Bill Bransford (left) and Bob Lewis man the Systems Maintenance Monitor Console for detection of component failures.

Automation systems coordinator Bill Crouch observes (left to right) controllers Bob Dotts, Chuck Topalian, George Wheeler and Don Gunner using Big Blue's sophisticated tools.



HEADS UP

CENTRAL

Miles Homelvig is the new chief of the Hill City, Kan., FSS . . . In Omaha, Neb., Glen Goodman has become the chief of the FSS . . . Gilbert Wallace has moved up to chief of the Chesterfield, Mo., Tower.

EASTERN

Robert Christopher has taken over as deputy chief of the Washington ARTCC.

NAFEC

The new chief of the Air Traffic Systems Division is John Lacy... Karl Gittelson has gotten the nod as facility manager of the Supporting Services Division.

GREAT LAKES

Merle King has been selected to be the new assistant sector manager in Indianapolis . . . the new deputy chief at the Indianapolis Center will be Bill Hirchert . . . Don Petrie has become an assistant chief of the Decatur, Ill., FSS . . . Selected as an assistant chief of the Terre Haute, Ind., FSS is Jim Freeman.

PACIFIC-ASIA

Harold Erekson and John Sachko were

named assistant chiefs of the Guam CERAP.

SOUTHWEST

Dean Haney of Houston was selected as an assistant chief of the McAlester, Okla., FSS... James Lynch is the new chief at San Antonio's Stinson Tower.

WESTERN

Larry Morton is now chief of the Santa Maria, Calif., Tower . . . Charlie Moore has taken over as chief of the Modesto, Calif., Tower . . . The new chief of the Livermore, Calif., Tower is Norman Clark . . . John Franklin was selected as Data/Communications Field Office chief in the San Francisco Sector . . . Willis Gore is the new chief of the Half Moon Bay Field Office, also in the San Francisco Sector.

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Remember the skeletal "Flying Plank II" depicted in "Those X-Rated Birds" (FAA WORLD, April 1974)? Southwest Region propulsion engineer Al Backstrom has clothed his fiberglass and steel-tube creation in a fabric skin and has run it in high-speed taxi tests. This spring, he expects to take to the air. The pusher prop is on a 40 hp, two-cylinder snowmobile engine that sips a miserly 2-3 gph while cruising at 120 mph.

