

FAA WORLD

Service to Man in Flight

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*Women in
FAA*

FAA WORLD

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The cover: Within the profile of the FAA woman, we depict FAAers doing their diverse jobs. From the top: Mable Cozart, RM Civil Rights assistant; De Loris V. "Pete" Palmer, writer-editor, CE Public Affairs Office; (at right) Rose I. Mower, AL management analyst, and Sylvia A. Burkey, ATCS, Boise, Ida., tower.



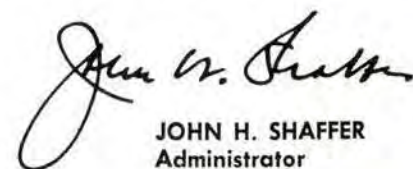
Opportunity to Advance

FAA's pace in Equal Employment Opportunity is accelerating, and the Federal Women's Program has moved ahead impressively in recognition of the basic logic that upgrading qualified women to more responsibility, consistent with ability, is in our collective best interests. Despite recent hiring restrictions, we have actually been able to beat our rather ambitious minority hiring goals: For the last six months of 1971, we achieved 25 percent overall minority hires—five points over the goal—and 34 percent female hires—more than double the 16 percent goal. In terms of numbers, we are already making strides toward a better blending of our work force.

Now, we want to make definite and measurable progress in improving the utilization of our human resources—in putting minority and female skills and talents to fullest use—in providing every opportunity for training, promotion and awards.

While we are obliged to cut the average FAA grade level, the minority and female grade levels are visibly below the agency average. To improve this situation, we are concentrating on career development and upward mobility—identifying and nominating qualified female and minority candidates for supervisory, managerial and executive positions. To this end, personnel offices and civil rights staffs have been asked to maintain and use a skills bank as a referral source. As detailed in the draft EEO Handbook, now being circulated for comment, we are reviewing promotion and career patterns as to the necessity of certain requirements in qualifying women for advancement to higher level jobs, as well as studying selection criteria. FAA is also surveying the assignment of work facilities, personnel and duties to insure adequate, sanitary and healthy working conditions. The Office of Civil Rights, in concert with the Federal Women's Program Subcommittee, has been looking into the feasibility of working with community groups to establish and support child day-care centers to help women get and keep jobs.

The commitment is clear. The responsibility should be equally clear. The FAA EEO Action Plan delineates the activities necessary for minority career enhancement as the responsibility of every supervisor. But we must further recognize that it is the responsibility of each of us to push aside the ingrained biases and prejudices that impede the progress of each of us and result in the underutilization of an important national resource.


 JOHN H. SHAFFER
 Administrator

Women in FAA



One of the few female general-aviation-operations inspectors in the agency and the only one in Alaska is Ruth O'Buck of the Anchorage GADO. She was also the first woman in Alaska to receive an air-transport rating. She serves on FAA's Women's Advisory Committee on Aviation and was named Alaskan Woman in Aviation for 1971 by the Zonta Club of Anchorage.

If you think the only things changing for women these days are the fashions, you had better take a longer look. In our work-a-day world today, women are breaking into career fields where they previously "feared to tread," stepping into some new professional shoes and finding they can wear them well.

Some of the more unusual "first lady" stories make the news—like the first lady jockey. More recently, the first lady umpire was sized-up for uniform.

FAA has not gone untouched by this "revolution," or, if you prefer, "evolution." In fact, the agency is doing all it can to give its women an open field in training and careers.

Early last year, Administrator Shaffer voiced his feelings on the Federal Women's Program. In his memo to all employees, he said that although the responsibility for administering the Federal Women's Program belongs to the Office of Civil Rights, it "is an inherent responsibility of every federal executive, manager, supervisor and rank-and-file employee." FAA's standing goal for women hires is set at 16 percent of all employment.

In April 1971, President Nixon sent a memorandum to heads of departments and agencies mapping

out some definite plans of action for getting more qualified women into top as well as mid-level government positions.

Specific employment goals for women in higher-graded positions were determined for each department and agency. FAA's objective was to increase by 65 the number of women in grades 13 to 15 plus two supergrades by 31 December 1971.

The responsibility for getting the President's plans into action in FAA fell to the capable hands of Ray Jackson, civil rights specialist and acting coordinator for the Federal Women's Program (FWP) in the Office of Civil Rights. Although the FWP is only part of his job, Jackson is very sincere about this aspect of the EEO Program. "My seven years experience in the area of equal employment opportunity has convinced me that ingrained biases and prejudices against the ability of women to be gainfully employed and to attain top management positions deserves no less attention than has been given to the overall EEO program. The White House goals generated some optimism that the female employment picture would at last receive the degree of attention rightfully due it. However, the Economy in Government program seems to have dealt a blow



Dorothy B. St. Jernquist, NE Administrative Officer.

Ruth C. Hubbard, RM Compensation Chief.

Ethel P. Cohen, Deputy Director of Personnel.



Above left, Georgette West and Ruth Parvin, CAMI psychology technicians at the Aeronautical Center.



Doris M. Snow, Rocky Mountain Administrative Medical Officer.



Mary E. Healy, Manager of Office of Headquarters Operations.



Margo Tuller, placement specialist at the Aeronautical Center.

Jane Miller, HQ NAS analyst, briefs the Administrator.

to optimum efforts in that area," Jackson said.

The mechanics for dividing the overall goal among the agency's headquarters, regions and two centers were worked out by the EEO Staff in the Office of Personnel in concert with the Office of Civil Rights. In spite of the restrictions on hiring, the agency had accomplished over 50 percent of its goal by the 31 December deadline, and a six-month extension was granted in view of the economic program.

So, we think the FWP is good, it's working, it's gaining momentum, and the agency's people are showing concern. What do we have for proof of this in the FAA? Plenty! During the past year, the FAA has had a few of its own "firsts" in the category of women and their jobs.

In March 1971, Dorothy Gene Sims became the agency's first woman facility chief. She took over as chief of the Cuyahoga County Tower near Cleveland in the new Great Lakes Region. Miss Sims is a "keep busy" person. She holds a private-pilot rating and is studying toward a law degree. This spring she plans to take a skydive—"I'll do it once," she says. She feels that knowledge of all of these things will help her do her job better.

Mary Wallace "Wally" Funk became the agency's

Washington headquarters claims the first and second lady engineers hired by FAA's predecessor—the CAA. Katharine Stinson (left), the first, is now technical assistant (aircraft engineering) in the Engineering and Manufacturing Division, FS. Joan Barriage followed her into the CAA and is now assistant chief, Aircraft Division, RD.



Linda Cameron, Wenatchee, Wash., FSS specialist trainee, practices radio technique with two college interns.

first full-fledged woman GADO inspector in the Western Region's Santa Monica, Calif., GADO. Wally's current ambition is to be the first woman on the moon—and for her, it's not an impossible dream. She's part of the U.S. Women in Space Team and has completed the three phases of astronaut testing. One of the first women to successfully complete the rigid GA Operations Indoctrination Course at the FAA Academy, this lady flier, instructor, astronaut and now inspector looks to her job as an opportunity to fly more sophisticated aircraft and to preview and learn new systems as they come along.

After 27 years in flight-service work, Ruth M. Dennis was named chief of the San Diego FSS in April 1971, the first woman FSS chief in the country. She directs a staff of 26 specialists at a station that provided over 400,000 flight services last year and ranks in the top 10 percent in activity in the U.S. Miss Dennis had a few earlier "first woman" positions, including first woman watch supervisor at the Los Angeles FSS in 1960.

Another FAA first was the appointment of Dolores W. Lee as full-time coordinator for the Federal Women's Program in the Southern Region.

Enough for the "firsts." What about some others

He's surrounded by women, but Norm Wills, chief of the Anchorage ARTCC, doesn't seem to mind. The center has 12 women controllers, all told. The nine shown here are (left to right) Helen Faulkner, Sue Smith, Lee Cooper, Judy Pastusek, Jean Collins, Beverly Harris, Eleanor Williams, Beverly Thomas and Cheryl Chipman.



who make up FAA's 11.9 percent womanpower that have climbed the ladder?

From clerk-steno to management analyst—the beginning of a personal success story for Rose I. Mower, a native Alaskan. She started out in the Management Analysis Division in the Alaskan Region in 1967. Observing the work of the division from her clerk-steno post, Rose decided that the challenge of a management-analyst position was for her. She worked her way into that title and a GS-7, then signed up for a year of training. She is now a management analyst, GS-9.

In Washington headquarters, there's a similar story of success: Jane Miller, NAS analyst, GS-11, on the Administrator's NASCOM Staff. Jane came



Now chief of NAFEC's Simulation Operations Section and supervisor of 200 simulator operators, Doris Canada started out as a GS-2 in 1959. Home-study and agency supervisory/management courses were rungs on her career ladder.

Flight-data work was only the beginning for Linda Crowder. She became a controller-trainee in 1967 and is now a radar controller, GS-13, at the Fort Worth ARTCC.



to the agency about 11 years ago as a clerk-steno, GS-4, in the Air Traffic Service. She progressed through the ranks of secretary to the ATS Director and administrative assistant under the Associate Administrator for operations. These positions gave her a solid background in air-traffic operations—just what she needed for her present assignment. Jane is on the job at 6:00 a.m. every morning to prepare the daily NASCOM report on FAA facility problems and outages and on weather across the nation for the Administrator's 8:30 a.m. meeting. She sometimes takes the podium and delivers this briefing for a "top" audience—the Administrator and the Deputy and Associate Administrators.

This is just a small sampling of the 6,300-plus women on FAA's workforce. There are plenty of "firsts" yet to be accomplished by women, many success stories yet to be made and told. As a result of the Federal Women's Program, the job opportunities and training available to women, and the everyday proof that they "can do" the jobs, discrimination and myths aimed at the working woman are on the wane.

—By Carol Lencki

Evaluating facility controller personnel and the air-traffic services they perform are among the duties of Dorothy Royal, evaluation-proficiency-development specialist who works at the Miami Center, Southern Region.



Nominated for the 1970 Federal Woman's Award by the old Boston Area Office was supervisory ATCS Marion E. Lambert, watch supervisor and assistant chief at Windsor Locks, Conn., FSS, New England Region. During her career, she has served in a number of stations.



Elizabeth (Betty) Lecorchick is an MPIS Systems Manager in Alaska's Manpower Div. She began as a GS-2 clerk-typist.

Katherine (Kitty) Holloway was a clerk-typist in a procurement division at the beginning of her career. She is now chief of the Procurement Section in the Pacific Region.

The first and only FSS chief in the Southwest Region is Earla D. Martin at the Roswell, N.M., FSS. She has spent 27 years with the agency, all in the flight service option.



DIRECT LINE



Q. A recent meeting of supervisors revealed a distinct difference of opinion regarding completion of Part II of the Employee Appraisal Record, FAA Form 3430-1. One group felt a rating in the "meets requirements" column recognized the employee as fulfilling expected results described in his performance standards. The other group interpreted a rating in this column as minimal—just barely performing at an acceptable level, with the thought that a person performing as his standards describe should be rated for the most part in the "exceeds requirements" column.

A. It is well known that supervisors rate their employees differently. Some supervisors gain the reputation of being "easy" or liberal raters, while others are reputed to be hard raters. Because the subjective element in the rating process is difficult to overcome, the differences in opinions expressed on this subject are understandable. However, the guidance provided supervisors clearly indicates that an employee's performance is satisfactory when it meets or exceeds the overall requirements of his position. And the "meets requirements" rating on the key-result areas of the job concerned covers performance ranging from that which is barely sufficient to warrant retention of the employee up to that which is just short of outstanding performance. The important criterion to be applied is how well does the employee meet the overall requirements of the job. Remember that persons with satisfactory ("meets requirements" or above) ratings are eligible for performance awards if they otherwise meet all the criteria for the specific award. Chapters 5 and 8 of Handbook 3430.3 provide more detail on the question concerned.

Q. What rate of interest is being accumulated by the funds which are withheld from Federal pay checks and fed into the U.S. Civil Service Retirement Funds?

A. Civil Service retirement funds are invested by the Secretary of the Treasury in Government securities yielding interest equal to the "average market yield" at the end of each calendar month. The "average market

yield" is determined through the use of a formula prescribed by law and may vary from month to month. The interest paid on retirement funds during March 1971 was 5% percent; for April 1971, 5¼ percent.

Q. Periodically, vacancies are advertised for GS-12 Regional Duty Officers, and in each instance, the requirements stipulate one year at GS-11. I frankly do not feel that management is sincerely interested in getting some of the better qualified applicants by automatically ruling out some well experienced GS-10s.

A. Civil Service qualifications standards require one year of specialized experience at the GS-11 level for this particular type of position.

Q. When are we going to get enough help in the FSSs to satisfy the demand for our services? Aren't we getting any more people? Even if we do get automated, how long would this take? We have had a modernization program since 1967 and many studies made on FSS, but nothing has been approved as yet. What makes you think automation for FSS will be approved and if we are automated, could it be handled by our present complement? Apparently, the control facilities could not handle their automation equipment with the people they had because they got more people. We need people now and can't get any because few, if any, have been approved for the FSSs. The only personnel approved are for control facilities and FSSs get the rejects—then only if someone quits, retires or dies.

A. The agency is acutely aware that over the past several years aviation-activity increases have placed a heavy burden on FSS specialists and that some relief must be forthcoming. We cannot predict additional staffing will be available. In the meantime, automation holds the greatest promise to meet the ever growing demand for services and to improve the efficiency of the system. We expect the time required to automate the FSS system to be substantially less than for automating the ATC system. Off-the-shelf hardware is available, and the programming would be less complex. We cannot predict whether funding will be available for automation, but both the Executive and Legislative Branches have in the past encouraged agencies to automate functions which lend themselves to ADP. Automation would not decrease our complement, but it should permit us to handle a larger proportion of the demand.

Change of Address

FAA employees should send their changes of mailing address for FAA WORLD to the control point in the region or center where they are employed: NE-14; EA-20; SO-67; GL-13; CE-20; SW-67; RM-5; WE-13; NW-14; AL-42.3; PC-42; NA-11; AC-44.3. You should not send change-of-address information to Washington. If you move from one region or center to another, you should submit your change of address to the region or center to which you move.



DRESSING FOR THE JOB—Engineering technicians Harry J. Hogg (left) and Gerald F. Walter install instrumentation in anthropomorphic dummies at NAFEC. The dummies, used in safety testing of seat belts, are strapped into a cockpit that is catapulted down a track and stopped abruptly.



HAPPY DAYS—Two six-year-olds grin with delight at receiving airplane toys from Santa, in mufti James F. Zahring, aerospace engineer in the E&M Division. Darryl Covington (left) and James Coates were among seven children from the District of Columbia Action for Children in Trouble—from poor or broken homes—who were feted by the E&M Division. Each child received an outfit of clothing, toys and candy at the Christmas party.



SIMPLE BUT EFFECTIVE—A winning employee suggestion was that of Robert E. Dunckhorst (right), NAS coordinator at the Longmont, Colo., ARTCC: He shows sector manager Harold Eggers the plastic cover he designed to prevent accidental deactivation of the Center's high-speed computer printer.

ILLUSIONS FOR SAFETY—The New England Regional Office held an accident-prevention clinic, with FAAers invited. Here, Demi Copadis of the Portland, Me., GADO gives Brenda O'Brien of Flight Standards a whirl in the Barany Chair for a demonstration of sensory illusions encountered by pilots.



FACES AND PLACES

TOP ASSISTS—Honored with National Outstanding Flight Assists Awards for their roles in three assists were (from left, holding certificates) Walter Harris and Norris Jacobson of the Anchorage ARTCC; Edgar C. Evans and Richard F. Fagan, Cleveland FSS; Keith Alves, Cleveland Hopkins tower, and Richard B. Cox, Parkersburg, W. Va., FSS. DOT Under Secretary James M. Beggs (left) made the presentations.



ABLE AIDS—Three high school graduates, all in the upper third of their class, were hired at the St. Louis FSS as summer aids and returned to the FSS in connection with the Stay-in-School program. Happy to be back were (from left) Kathy Stewart and Robin Lewis, attending out-of-state colleges and working during the Christmas holidays, and Kathy Buckner, who works part time at the St. Louis facility while attending a local school of cosmetology.



BEST CHRISTMAS PRESENT—A little love. James Schave, Minneapolis data systems specialist, and his wife Geraldine, adopted Thomas, a 20-month-old homeless South Vietnamese boy, who arrived in the U.S. just in time for Christmas. The Schaves' three other children like the idea of a new brother.

TIDY IDEA—Vincent Gabica, specialist at the Boise, Ida., FSS, suggested replacing the loose-leaf binders for Airmen's Information Manuals with metal catalog racks mounted on lazy susans. This keeps the AIMs neater and readily accessible to both sides of the counter. The idea was adopted regionally, then nationally.





ATSS graduate Dean Cooper, Deputy Chief of the San Francisco tower, explains features of the terminal layout. Cooper counsels on regional airport planning and assists contractors who use San Francisco Airport for data collection.

TRAINING FOR AN OVERVIEW

While most FAAers are concerned with the day-to-day guarding of the nation's airways and supporting that operation, a small but growing group of highly trained individuals are working on the broader aspects of air transportation. The Air Transportation System Specialist Development Program, now in its seventh year, provides specialists who understand the agency's technical program and are well trained in the skills and techniques of sophisticated economic and systematic analysis and strongly oriented to the total national transportation system.

The graduates land key planning or policy assignments throughout the agency. One of the first of the

41 to participate in the program was Jesse Tanner, who was an electronic technician in Alaska and an Academy instructor and gained electronic-engineering experience in Headquarters. He met his Bachelor's requirement with a degree in mathematics. Following his graduation from the ATSS program with a Master's degree, Tanner's career ranged from

Checking a chart he prepared to display progress of aviation-medicine research projects is ATSS graduate Leonard Ryan, a research-program analyst in the Aeromedical Applications Division at Headquarters. He coordinates research efforts among the Civil Air Medical Institute, contractors and Hq.



Going over a projection chart developed by the Northwest Region Airports Division for possible use in the region's Management by Objective System is Ramon Belshe (left), Special Assistant to the Director. Listening is Northwest's Deputy Director, Jesse Tanner. Both are ATSS graduates.



The current crew in the ATSS program are (left to right) Marvin L. Olson, AL; Melvin M. Yoshikami, WE; Alexander R. Hammond, AFS; Robert J. Roche, GL; Prof. Robert Horonjeff, University of California, and Charles J. Hoch, EA.

senior analyst on the Systems Maintenance Plans and Coordination Staff to chief of the Programs Division and to deputy regional director of the Northwest.

Tom Messier was also an electronic technician in Alaska before entering the program. Now the Special Assistant to the Associate Administrator for Engineering and Development, Messier served in SM's Operations Analysis, DOT's Office of Systems Analysis and as branch chief in the Office of Plans.

Arthur Webster came into the program from the system design team of SRDS and now is the deputy director of the Office of Systems Analysis in the Office of the Secretary of Transportation.

Edwin Kaneko was an airways engineer in Pacific Region's Airway Facilities Division. He is now the chief of the Operations Analysis Branch of Systems Maintenance, renamed the Airway Facilities Service.

Five candidates are currently attending the course at the University of California at Berkeley. They are Alexander R. Hammond, civil engineer in AFS, working as engineering project manager on towers and other structures; Charles J. Hoch, civil engineer in the Eastern Region's AF Division, working on ARTCC construction; Marvin L. Olson, general engineer in the Alaskan Region's AF Division, super-

vising regional maintenance projects; Robert J. Roche, assistant branch chief in the Airports Division, Great Lakes, and Melvin M. Yoshikami, electronic technician in the Los Angeles tower sector.

While contributing to the career progression of its graduates, the program has been especially successful in providing a much-needed analytical capability for the agency, according to John J. Cunningham, executive secretary of the ATSS Steering Committee.

The graduate-level program in transportation engineering, now conducted at the Institute of Transportation and Traffic Engineering at the University of California, has a curriculum that includes courses on probability theory, air-transport engineering, analysis of transportation systems, feasibility analysis, computers in modern organization, linear programming, city and metropolitan planning, air-transport economics, queuing theory and theory and models of economic forecasting.

Walt Barbo (center), deputy chief of Rocky Mountain Airports Division, took the ATSS course a while back. Here he confers with Jim Houghton, planning specialist in the RM Airports Planning Branch, over a relief map for short-haul landing sites, as secretary Kathy Fisher takes notes.



Edwin Kaneko (left), Chief of the AFS Operations Analysis Branch, and Tom Messier, Special Assistant to the Associate Administrator for Engineering and Development, confer at a chart of electrical-power distribution in the United States. Both are alumni of the ATSS program.



WHY ALL THOSE TOWER MOCKUPS?



This mock-up is the exact size and shape of the tower cab to be placed atop the 180-foot-high shaft at the Dallas/Fort Worth Regional Airport. The tower with the 11-sided cab is scheduled to be completed next year.

"Mock-up Tower, Mock-up Tower. This is aircraft Foxtrot Alpha. Could I have landing instructions please?"

"Foxtrot Alpha, this is Mock-up Tower. Landing on runway 34. Wind is north at 10; visibility is three miles with haze, and the altimeter is 29.92."

This is the kind of conversation that has been taking place at NAFEC as controllers evaluate tower cab designs in life-size mock-ups.

So far a six-sided and an 11-sided facility have been examined. The next structure to undergo a grueling "white glove" inspection and evaluation is a big, high-activity, eight-sided affair now under construction in NAFEC's building #207. But we're getting ahead of our story.

The evaluation of mock-ups got into high gear last summer when controllers were asked to take a close look at the six-sided cab designed for intermediate-activity airports.

According to Bill Keepers, assistant project manager from Air Traffic Service, "The field controllers were tremendously impressed by the fact that they were asked to take part in the evaluation. These people came from all 11 operating regions—from as far away as Hilo, Haw., King Salmon, Alas., and San Juan. They are the people who will be using

this equipment in the future on a day-to-day basis.

Actually, the first FAA tower cab mock-up evaluated at NAFEC was the 11-sided (undecagon) cab slated to be built at the Dallas/Fort Worth Regional Airport. In this case, evaluation was by controllers from the Southwest Region, since only one copy of this design was scheduled to be built.

But why, apparently all of a sudden, did the agency start building these mock-ups for evaluation?

Essentially because planners wanted to see exactly what they were getting before going ahead with the costly stages of construction. The one way to be sure they were on the right track was to build the life-size mock-ups and have controllers go to work in the three-dimensional environment—actually try it on for size.

In the case of the six-sided cab, planners wanted to get all of the bugs out of the design before making this the standard layout for a large number of intermediate airport towers.

This cab, currently scheduled to be used for at least 54 airports, will be prefabricated and built at a fraction of what custom designing and construction would cost.

The 11-sided cab, the world's largest, was mocked up because controllers working in Dallas will be



Trying out positions in the 11-sided cab to be built at the new Dallas/Fort Worth Regional Airport are controllers from the Southwest Region. Standing is Arthur Koon, chief of the Dallas/Fort Worth TRACON/Tower.

"This is mock-up tower," calls project manager J. Roy Bradley of NAFEC's ATC Systems Branch as he tries out the mike in the six-sided tower cab mock-up. At another position in the life-size copy are Hugh Milligan (standing) and Lt. Col. Ward McCombs, both of the ATC Systems Branch.



Rocky Mountain controllers hold a work-in in the intermediate-activity tower-cab mock-up at NAFEC. They are from left: Phillip E. Owen, Missoula, Mont.; Ralph P. Vetter, Rapid City, S. Dak., and Frederick C. Hooper, Aspen, Colo.

Looking over a scale model of a six-sided, intermediate-activity-level tower cab and the junction room beneath it are (from left) J. Roy Bradley, project manager from NAFEC; Donald Winger, controller from Idaho Falls Tower, and Jerald Bogan, Planning Branch, AT Division, Western Region.



dealing with unique problems. Since the airport is split by a multi-lane highway, they will be overseeing two separate operations, a situation that had no precedent. So, the mock-up was built to evaluate and "debug" the design before the real tower was built and costly alterations became necessary.

A six-sided tower cab was designed by Golemon & Rolfe of Houston. Then, under the supervision of project manager J. Roy Bradley of NAFEC, the mock-up was constructed and controllers asked to come in and give it a going over.

Generally they liked what they saw. They liked the carpeting installed on the floor and walls of the cab. Not only did this improve the decor but it also contributed significantly toward sound-proofing. While they approved of the way the consoles were arranged, they felt there should be a drawer installed at each position. Just a little thing, they said, but you have to live with it day after day. Receiving a thumbs-up salute from the controllers was a range, refrigerator, sink and storage-closet combination.

But they pointed out that the cab-lighting sometimes created reflections in the glass-covered instrument dials. They also cautioned that the corner posts and window mullions were excessively large and constituted an undue obstruction to vision. The

controllers agreed that readouts from altimeter and wind instruments should be standardized and digitized and that personal lockers were a must.

Next up for evaluation at NAFEC is the eight-sided facility. More than twice the size of the six-sided cab, and a different shape to accommodate more controllers more conveniently, this design is envisioned as the standard for high-activity airports like Atlanta, JFK and Pittsburgh.

R&D Program Manager Robert Conway of Headquarters stressed that in furnishing the cab they try to use as much real equipment as possible. "For instance," he said, "the consoles are finished furniture, covered with formica, as they will be out in the field. They will look real and they will feel real."

At NAFEC, Bradley explained that the consoles are the most important item to be evaluated. He said that a prototype console would be given a true-life examination by controllers beginning this month, and that an operating console—or possibly two operating versions—would be ready for evaluation by a controller work force by the end of April.

"By using these mock-ups," he concluded, "the controllers actually get a chance to develop as well as evaluate the places in which they'll work."

—By Ted Maher



Everything, including hot coffee, from this galley could land in North Central Airlines stewardess Lorraine Groebner's lap in a mishap or severe turbulence. Her jump-seat location is being eyed by (from left) Karen Thomas, ALPA rep for Northwest Airlines; Raymond Wells, Flight Standards Operations Division, and Frank Musgrove, FS Maintenance Division.

We usually think of the FAA as safeguarding the traveling public, but Flight Standards also looks into the safety of those who look after the comfort of the traveling public—the flight attendants.

Stewardesses and stewards have often been subject to inadvertent retracting jumpseats, submarining under safety belts and harnesses, inadequate head padding, projecting door actuating handles, dislodged liquor carts and the possibility of having food dumped in their laps from the galleys.

A team of Flight Standards specialists from Headquarters, with the assistance of regional inspectors and engineers, conducted inspections of many transport-type airplanes at Washington, Baltimore, Dallas, Houston, Los Angeles, San Francisco, Seattle and Minneapolis. They assessed more than 55 aircraft operated by 16 air carriers.

With a view to analyzing reported problems and recommending corrective measures, including regulatory changes, the inspections included discussions with stewardesses, airline operating representatives and three principal transport airframe manufacturers. The team discussed guidelines for galley-equip-

ment design with one manufacturer as well as with FAA's regional engineers.

The investigators are identifying those areas most needing correction in three ways. Where airplane design improvement is in order, the matter will be brought to the manufacturer's attention. If the problem deals with maintenance or hardware designed by an airline, it will be the carrier's responsibility to attend to it. If it is an operations matter, such as permitting excess carry-on baggage resulting in a hazard to safety, the rules will be impressed upon the operator.



Inspectors Musgrove and Wells, along with Clyde Shearer, principal operations inspector in Houston, watch ALPA safety chairman and Braniff stewardess Linda Robinson try to connect up mismatched buckle components of a seat belt. Other hazards include a too-high wall attachment that causes the strap to cross the neck of shorter stewardesses and the aisle jump seat lacking support for the upper back and head.

While the findings and recommendations of the inspection team are under study, various corrective actions are already underway, stemming directly or indirectly from the FAA investigation and from the reports of flight attendants. At least one airline is abandoning sidefacing aisle seats and galley jump seats. Another carrier has replaced an unsatisfactory type of seat belt.

Meanwhile, all principal operations and maintenance inspectors are being asked to review the safety of cabin-attendant working environments.



NCA stewardess Lorraine Groebner demonstrates a spring-loaded jump seat next to the passenger door that has caused leg injuries during bumpy rides, as inspector Musgrove points to a stairway control lever located too close to a stewardess's head position in the jump seat. Inspector Wells and Miss Thomas look on.



With jump seats in this position, many a stewardess plants her feet against not-too-secure galley storage lockers. Continental Airlines stewardess Hillary Thompson, an ALPA safety chairman, points to a bottom locker with basket too shallow to engage thumb latches when sliding out. Fred Jenkins of FAA's Los Angeles Systems and Equipment Branch tries out a thumb latch, which inadvertently could be left in the open position, as inspector Bernard Grochal takes notes and inspector Raymond Wells observes.

Inspector Grochal examines a strap with a weak link erroneously used to block the aisle for an evacuation-access at the rear door and jump seat of a DC-9. It's actually designed to hold the rear door open. The aisle strap is missing. Another hazard is in the precariously perched magazines.

A liquor cart that is unrestrained in its stowage space is shown by stewardess Lorraine Groebner to FAA inspectors visiting Minneapolis. From left are Frank Musgrove; Miss Groebner, who is also ALPA safety chairman for NCA; Raymond Wells; Karen Thomas, and (seated) Bernard Grochal, FS Engineering Division.



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Miriam M. Rouhow, New England Airports Division program officer.



Mary Wallace "Wally" Funk, operations inspector and astronaut, Santa Monica, Calif., GADO.



L-R: Katherine Morris, SO Air Transportation Security field office secretary; Cheryl Odom, Manpower intergroup-relations specialist; Delores W. Lee, first full-time Federal Women's Program coordinator for the Southern Region.

Jane Miller, NASCOM staff assistant in the Office of the Administrator.

