FAA HORIZONS

Vol. 2, No. 6 | Published biweekly for the people of the Department of Transportation/Federal Aviation Administration | March 18, 1968

The 'Bright Ones' Are Coming! Page 4

STOL Flight Tests Started At NAFEC

ATLANTIC CITY—Flight tests of short take-off and landing (STOL) aircraft have started at the National Aviation Facilities Experimental Center to develop new criteria for STOL operations.

First airplane to fly in the test was the Fairchild-Hiller "Heli-Porter," a single-engine turbo-prop which will make about 190 approaches in three weeks of flying. Tests also will begin shortly with the de Havilland "Twin Otter." A third airplane may be used at a later date.

For the landings, a simulated STOL port, 100 feet wide and 1500 feet long, is painted on a runway here. Each plane will make ILS approaches down to 200 feet altitude at angles of 6, 7½ and 9 degrees. Approach speeds will be varied.

Clay Staples, of Aircraft Development Service, is both program and project manager and also will do some of the test flying. Coordinator at NAFEC is Roman M. Spangler.

Besides Staples, five other pilots are flying. They are Irving Budoff of NAFEC, Henry Kahler and Paul Baker of the New York regional office, and Paul D. Wilburn and Alder Betti of flight standards service in Washington.

The tests will develop information as to how long STOL runways should be, what glide angles can be used, what height is required over the runway threshold and what clearance angles are necessary.

Standing Room Only

More than 1,000 pilots and interested persons crowded into two sessions of Minneapolis' Flight Forum '68, a program presented by FAA and sponsored by the Local Chamber of Commerce to acquaint pilots with FAA services.

Flight Forum '68 Is Hit With Pilots

By Dave Myers

MINNEAPOLIS—"Flight Forum '68" is a joint effort of the FAA area office here and the local Chamber of Commerce to establish better communication and understanding between local pilots and the agency.

More than 1,000 Twin City area pilots turned out for two sessions held recently. Pilots came from towns in Wisconsin and Minnesota as far as 150 miles away.

Putting over the successful program was no small job. Coordination between the area office and the Chamber of Commerce began early last year with a series of FAA programs presented to the aviation committee of the Chamber.

The enthusiasm over these meetings led to specific plans for holding Flight Forum '68.

A trial run of the program was then conducted at the annual meeting of the Minnesota Aviation Trades Association several months ago, and the response encouraged the Chamber of Commerce to proceed with an extensive promotion and advertising campaign. The success of this effort is aptly reflected by the attendance figures.

The program was moderated by Sherman Booen, publisher of *The Minnesota Flyer*. At each session, a panel composed of FAA employees from the Area office and local facilities presented information on each of their specialties. Participating in the programs were Kenneth Hollinger, Minneapolis Center chief; Mark Wilson, proficiency development officer, Minneapolis Center, Cliff Walterman, operations and training officer, Minneapolis Tower; Leay Sorenson, Flying Cloud Tower chief; Vernon Cummings, Crystal Tower chief; Steve Wilkerson, assistant chief, Minneapolis FSS; Walter

(Continued on page 7)

The Snow Plow

As off-duty ski instructor of Denver Area youngsters, James H. Platz, Jr., Denver Center controller, demonstrates a skier's maneuver to beginners at Hidden Valley Ski School.

A Good Neighbor

Oakland Controller Is Part-time Diplomat

FREMONT, Calif.—Daniel Tellez, Oakland ARTCC air traffic controller, has an interesting avocation—helping his neighbors and community.

When not standing watch, most of his free time is spent working on community and Mexican-American problems. Tellez is vice chairman of the Board of Directors of Jobs for Progress, Inc., Bay Area Region; trustee, Board of Directors, Foundation and Research for Community Development, Inc., and executive secretary, American G.I. Forum, State of California.

Because of his outstanding service in community affairs, he was invited to participate in the recent United States Cabinet Committee Hearing on Mexican-American affairs. The Inter-Agency Committee on Mexican-American Affairs is made up of the Commissioner of the Equal Employment Oppportunity Committee, Secretary of Agriculture, Secretary of Labor, Secretary of Health, Education and Welfare, Secretary of Housing and Urban Development, and the Director of the Office of Economic Opportunity.

President Johnson said his purpose in establishing the committee was ". . . to assure that Federal programs are reaching Mexican-Americans and providing the assistance they need, and to seek out new programs that may be necessary to handle problems unique to a Mexican-American community."

Those invited to participate in the two-day meet included State governors, U.S. Senators, Congressmen, educators, labor leaders, businessmen, representatives of Federal, state, and local governments, and Mexican-American community leaders.

Tellez said, "The primary purpose of the hearings was to establish dialogue between the principals in the meetings and to suggest and recommend possible solutions to some problems, new directions to follow and present some new ideas."

During the meeting, conferees were addressed by President Johnson and Vice President Humphrey.

Carl A. Olson, San Francisco Area executive officer said, "The FAA is proud of Dan Tellez, not only for his excellence as an air traffic controller, but for his many activities in the areas of social welfare."

Dan has been with FAA eight years, and was employed at Albuquerque ARTCC before moving to the Oakland Center. He is married and the father of three children.

Community Leader

Daniel Tellez, Oakland air route traffic controller, was recently named to participate in hearings of the Inter-Agency Committee on Mexican-American Affairs.

Crash Locator Beacon Rule Being Considered by FAA

By Irving Ripps

WASHINGTON—FAA has informed general aviation pilots it is considering rules that would require them to carry crash locator beacons on some flights.

At the present time there is no Federal requirement for such a device.

"Advance" notice of a proposed rule making says such equipment could be of great value in speeding up search and rescue operations, as well as helping accident investigation following a plane crash in remote or mountainous regions or on large bodies of water. The beacon would function as a radio transmitter signaling a distress call. When the signal is picked up by search planes, chances of quickly locating the wreckage and saving survivors are infinitely greater.

Statistics on 1965 search and rescue activities by the U.S. Air Force, U.S. Coast Guard and the Civil Air Patrol show that out of 299 fatal accidents to civil aircraft while en route, 92 of the crashed planes were found with all occupants dead and 27 planes have not been found to date. These 119 cases, which make up almost 40 per cent of the total number of en route fatal accidents to civil planes, involved about 2,000 flight hours of search out of a total of 5,000 hours expended during 1965.

In the agency's view, there is little doubt that more expeditious location of downed aircraft would save the lives of many of those who survive a crash impact but die either of starvation, exposure or injuries before they are found.

The question of requiring general aviation pilots to have crash locator beacons has been an issue in the aviation community for a number of years. Many pilots do not file any type of flight plan so that in the event of an accident, search and rescue become exceedingly difficult because their route of flight or destination is unknown.

A means of communicating from the site of the crash would obviously be of great assistance to

(Continued on page 7)

Joe Zaremba

FAA Man Wounded By Enemy Mortar

By George Burlage

ALBUQUERQUE — As Joseph Zaremba worked through the confusion and debris in Saigon's Tan Son Nhut airfield terminal building one morning last month helping to rescue wounded and dying men, someone looked at him and said, "You got hit!"

That was the first realization that Zaremba, an electronics technician assigned to U.S. Army NAT 376, had that he had become a statistic. Shrapnel wounds in his back made him the FAA's first Vietnam war casualty.

"I was waiting in the terminal on a standby basis about 8 a.m. when a rocket hit the roof," the 35-year-old Zaremba said in an interview from Albuquerque where he was on leave. "I had just been bumped off a passenger list, and was waiting to get my passport

(Continued on page 7)

Freddie Lott Does Outstanding Work Despite Serious Handicap

FORT WORTH—Freddie Lott not only makes name plates for the employees in the Southwest Region headquarters building, he also is making quite a name for himself.

The 18-year-old Texan has been on the job for a little more than six months. Already he has received a Sustained Superior Performance award and a check for $100. That is a mark of success for any new employee. But it's especially noteworthy for Freddie, who is mentally retarded.

Freddie is proof of the successful agency-wide program to use the abilities of the handicapped in jobs for which they are well qualified. In the Southwest Region's administrative services division, Freddie operates what is called a "pano-graph" machine—a mechanism for producing name plates. He had been trained for this job under the Texas Education Agency's vocational rehabilitation program.

On the job, Freddie has performed so well that he has exceeded the work goals expected of him—so much so, in fact, that he has become equally proficient with the paper drill, collator, and other printing equipment.

To a great extent, Freddie's success has resulted from the confidence placed in him by his boss, Dave Dick, the shop foreman. Dick and Marvin Warren, chief of administrative services, long have been proponents of the agency's various programs to employ the handicapped. Both were the personal boosters in giving Freddie his original chance with FAA.

Another helping hand came from James Jackson, Ft. Worth's counsel for the Texas Education Agency. Jackson has cited the agency's efforts to make its job opportunities for the retarded not only available, but realistic and practical.

Before joining the Southwest staff, Freddie had taken special classes in Ft. Worth public schools, mostly vocational. Upon graduation, work was found for him, but it was both temporary and menial. Most tragically, it lacked purpose and direction.

Then, under the Texas rehabilitation program, Freddie was directed to FAA, one of the participating Federal agencies, and long regarded as a national pioneer in opening jobs to the mentally retarded.

FAA has found that those mentally retarded can help solve the agency's pressing personnel problems: how to recruit and *keep* people in monotonous, mechanical-type jobs.

For FAA, hiring people such as Freddie Lott transcends its humanitarian implications. It simply has proved to be good business.

Freddie has more than returned the investment. His SSP award was achieved through the same criteria that apply for all FAA employees.

Beyond this, Freddie (along with the 50 or so other mental retardates throughout the agency) has realized his simple dreams through a responsible and meaningful job.

Above all, Freddie Lott has been restored to social usefulness and economic independence.

Knows His Work

Freddie Lott shows his ability on a Xerox printer as his foreman, Dave Dick (right) and James Jackson of the Texas Education Agency look on. Lott, mentally retarded, has won a Sustained Superior Performance award.

NAFEC Police Help Catch Jewel Thieves

ATLANTIC CITY—An alert guard on duty at NAFEC recently was a key figure in helping apprehend five men who had robbed a jewelry store and were making a getaway in a car.

Corporal John Kelly, who was on duty at the center's main gate, heard an alert over the community police radio network describing an auto in which some men were fleeing after robbing a jewelry store in Egg Harbor City, 10 miles distant. No sooner had the broadcast ended, than Kelly spotted the wanted car driving by the center.

Kelly quickly phoned center Police Capt. Sam Leonetti who broadcast the route of the fleeing bandits, which was the first alert as to where the men were heading. At the same time, two center policemen, Patrolman James McLaughlin and Sgt. Ted F. Woodo, each took off in pursuit in center patrol cars.

Meanwhile, police from another nearby community heard the radio alert sounded by the center, drove to the location and pulled the fleeing car over. The two center officers chasing the bandits arrived on the scene to help disarm the five men, who after binding a store employee, had taken cash and jewelry valued at $5,200.

FAA police are deputized in three townships adjoining NAFEC and are on the local police network. The incident was the third time this year that they have aided community police.

Cpl. John Kelly

Two weeks earlier, Corp. Kelly nabbed five juveniles in a stolen car near the center with an assist from Sgt. Woodo, and four months previous, he pulled over a hit-and-run driver.

Cpl. Kelly was commended two years ago for his alertness when he noticed a family marooned in a disabled car during a snow storm and brought them to safety.

Less than a month before the most recent incident, Woodo and McLaughlin, on their way home from the center, picked up two youthful lawbreakers.

R&D Recommends Ways to Reduce Airport Delays

WASHINGTON—A report investigating alternative approaches—regulatory and technical—for reducing aircraft delays at airport terminal areas has just been published by the agency's Systems Research and Development Service.

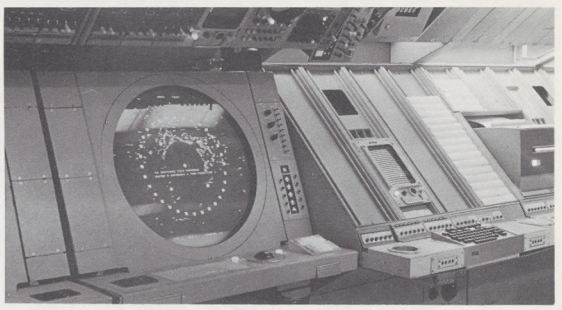
Among the principal recommendations for reducing delays are an acccelerated program to automate final approach and sequencing functions, methods of promoting schedule changes to flatten congestion peaks, incentives to add new runways and other facilities and exploitation of V/STOL aircraft flexibility.

The report analyzes, in depth, operations at eight major terminal areas, examining delays and benefits versus cost for runway, taxiway, and instrument landing system improvements; new airports; air traffic control procedural changes; automation of the final approach control function; and reduction of schedule peaks.

"Alternative Approaches for Reducing Delays in Terminal Areas," (No. RD-67-70) prepared by Milton Meisner, Edward Vay Duyne, and Walter Faison, is available from HQ-438.

Before . . .

During . . .



. . . After

Progress is seen pictorially on installation of new National Airspace System En Route Stage A radar consoles at the Jacksonville ARTC Center. Named national "Air Traffic Facility of the Year" in its category, JAX Center has had nearly $20 million worth of new equipment installed, and will be the first en route facility in the nation to provide semi-automated control service.

Manager-For-A-Day

As part of the annual Boy Scout Week festivities in Puerto Rico, Raul Perez-Muniz, Life Scout, Guaynabo Troop 50, served the FAA as "Area Manager-For-A-Day" recently. Briefing him are Bolivar Perez-Rios (left), executive assistant, and Mack Wood, FAA area manager.

Alaska FSS Chief Rescues Downed Pilot

McGRATH, Alaska—"Farewell," had a foreboding sound to it as the student pilot radioed that he would try to land at the tiny airport with that odd name. He was on his first cross-country flight recently, from McGrath to Anchorage, when he started to lose oil pressure.

"I think I can make the Farewell Airport," he advised the McGrath FSS.

Richard Forsgren, FSS chief at McGrath, knew that if the student made a forced landing, he'd have difficulty keeping warm and alive in the minus 50 degrees temperature — especially if he suffered injuries.

Forsgren warmed up his PA-18. A C-46 flying in the area was alerted by FSS to look for the student's Cessna on the ground.

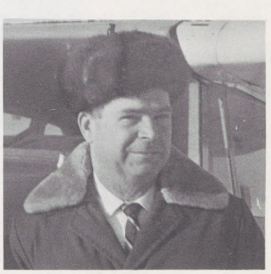
Both actions were timely, because the student pilot never reached Farewell. He landed 25 miles west of the tiny airport and injured his nose while landing on the rough terrain.

The pilot of the C-46 watched the landing, and circled the spot until Forsgren arrived on the scene.

Forsgren, who has worked for the agency since 1956 in Alaska, landed and bundled his passenger on board, then flew him back to McGrath.

"At minus fifty, with the wind kicking up, he wouldn't have lasted long," said Forsgren after the rescue. "Somebody had to go get him."

Alaskan FAAers take this business of "service to the public" pretty seriously in the bush country.



Rescuer

Richard E. Forsgren, McGrath FSS chief, stands beside his ski-equipped PA-18 at the McGrath FSS. He watched a student make a forced landing and then flew him to safety in minus 50 degrees temperature.

Indianapolis Tower Adopts Little Girl

INDIANAPOLIS — Marisol Rodriguez, a six year old who lives in Guayaquil, Ecuador, her five-year old brother and mother were left in desperate straits when the father died following an accident recently. The father, a shoemaker, had no union affiliation nor social security benefits to help his family.

Fortunately for Marisol, someone cared—a group of FAA employees at the Indianapolis Tower with a long history of caring about others. For years these FAAers have helped needy families by providing groceries, toys and clothing at Christmas time.

Recently, they decided to make it a year-round project by adopting a child through the Foster Parents' Plan, which is how they found Marisol.

To aid in her care, the employees contribute each month toward Marisol's new clothes, school supplies, medical and dental care, and a cash grant for the mother to use as needed. Letters are exchanged monthly in which Marisol describes the items she has received. In return, the tower crew forwards her information about some of their activities in their letters to her.

Duane L. Jennings, tower chief, reports that the adoption project has worked out extremely well and has been a rewarding experience for the facility and its personnel. In fact, says Jennings, facility and daughter are both doing just fine. Marisol and her family add a generous "thank you" to her foster parents, the group of FAAers that care.

Someone Cares

Six-year old Marisol Rodriguez of Guayaquil, Ecuador and brother was left without support following the recent death of her father. Benevolent FAAers of the Indianapolis Tower now contribute a specified amount monthly to help provide clothing, school supplies, and medical and dental care for Marisol.

East Meets West

Jiro Yoshida (left), a controller at the Fukuoka Area Control Center in Japan, pays a visit to Oakland Tower in connection with his orientation visit to FAA air traffic facilities in the U.S. Ted Holmes (right), assistant chief at the tower briefs Yoshida, who was accompanied on his visit by Glenn Plymate, Metropolitan Oakland International Airport manager.

High In Denver

FAAer Teaches Wife to Fly Light Aircraft

DENVER—It took Floyd Fahey quite a few years to get his wife Pat up in a light plane. Now that she has started flying, he may never get her down.

The enthusiastic mother of five took off on her first solo flight at Stapleton International Airport at Denver recently.

Awaiting her safe return was her husband and instructor—Floyd J. Fahey, Denver Tower chief. He has held a commercial license and instructor rating since 1941. Floyd brushed up before he started to teach his wife flying.

Pat expects to take her written Private Pilot exam in the near future. Both Faheys belong to a flying club located at Stapleton Airport.

Word of Advice

Dr. Dora Dougherty briefs the Southwest Region staff on the activities of the FAA's Woman's Advisory Committee on Aviation which she heads. The recent meeting at the Fort Worth regional office resulted in an exchange of information on a variety of subjects to be discussed at the March meeting of the WACA in Oklahoma City. With her are (left to right): A. L. Coulter, deputy director, Henry L. Newman, director, Southwest Region.

Coordinator

Mrs. Gene Nora Jessen of Boise, Idaho takes an active part in meetings of the FAA's Local Coordinator Group at Boise. Here, she chats with Salt Lake City Area Manager Vaughn M. Clayton after a recent meeting.

Women's Advisory Committee Lady Active in Idaho

BOISE—Mrs. Gene Nora Jessen, of the presidential Women's Advisory Committee on Aviation, has become an active member of the FAA's Local Coordinator group here.

At her first meeting with the group, which was also attended by Salt Lake City Area Manager Vaughn M. Clayton, Mrs. Jessen outlined the activities of the advisory committee and answered questions.

Mrs. Jessen participated actively in the discussions of the Local Coordinator group, made up of FAA supervisors in the north-central and nothern sections of Idaho.

She and her husband operate an aircraft distributorship in Boise. She is also a flight instructor, does some charter work and manages the office.

"We are delighted to have such active participation in our Local Coordinator group by a member of the Women's Advisory Committee," Clayton said.

Western Reports 29 Aircraft Lost In Past Ten Years

LOS ANGELES—A routine year-end report issued by the Communications Control Center embodies in its cold statistics both mystery and tragedy.

The report, "Western Region Missing Aircraft, 1957 through 1967," states that since 1967, 29 aircraft have vanished in the vast reaches of the West with 54 persons aboard.

Because of the West's great distances and stretches of wilderness, locating an aircraft can be a difficult undertaking. Use of various types of crash locator transmitters is being considered as one approach to the problem of finding lost aircraft in what is now essentially a "needle-in-a-haystack" situation.

Two Alaska Employees Named Region's Finest

ANCHORAGE—Two employees have won special recognition for their outstanding performance during 1967 in an awards competition conducted by the Alaskan Region.

Winning "Supervisor of the Year" honors was David C. Simpson, chief of the air traffic branch, Anchorage Area. "Employee of the Year" honors went to Dean C. Brennan, an illustrator in the administrative division of the Regional Office in Anchorage.

Simpson supervises a significant portion of the entire air traffic manpower resources and functions in Alaska. This includes the Anchorage Center, three flight service stations, an IFSS, the RAPCON facility at Elmendorf AFB, three local control towers, and delegated responsibility for the control of Shemya FSS. To handle such a workload "he very effectively delegates responsibility to his facility chiefs. He gets work done through people by exemplifying the finest concepts of leadership and effective supervision."

Brennan, a creative artist, prepares exhibits and illustrations to project a favorable image of FAA and its programs. He is also the focal point in the region for esthetic and artistic ideas on improving the working and living environment of employees and their families who serve aviation in Alaska.

He has received numerous awards and citations for his paintings and teaching in the creative arts for the past 20 years.

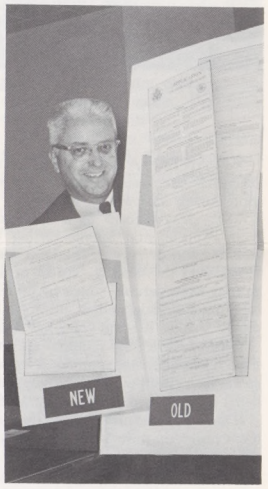
Alaska's Best

Alaskan Region award winners, Dean Brennan (left), and David Simpson worked closely on the design of the new Anchorage ARTC Center now under construction on the Elmendorf AFB reservation. Brennan, an illustrator in administrative services, won "Employee of the Year" honors for his work. Simpson, chief of air traffic in the Anchorage Area, was named "Supervisor of the Year."

Vermont Flight Instructors Receive Course

BURLINGTON, Vt.—A three-day flight instructor refresher course held at the airport here and co-sponsored by the FAA's Eastern Region was hailed by the state's aviation-minded governor as another forward step in fostering safety in the skies.

Governor Philip Hoff attended the seminar on its last day and congratulated the FAA, the Vermont Aeronautics Board and Northern Airways, Inc. for their joint efforts in organizing and conducting the three-day get-together. Twenty-eight flight instructors from Vermont and adjoining states participated. The FAA effort was spearheaded by Al Nogard, chief of the Albany, N.Y., GADO. In addition to his key planning role, Nogard conducted flight checks for those flight instructors needing recertification. A three-man instructor team from the FAA Academy at Oklahoma City handled the classroom phase of the course.



Shorty

Civil Service Commission Chairman John W. Macy, Jr., compares the length of Standard Form 57 with the new Form 170 which becomes effective July 1. The new card type form is designed to make initial application for Federal jobs simpler, and internal processing faster.

FAA HORIZONS

FAA HORIZONS, the official employee publication of the U.S. Department of Transportation, Federal Aviation Administration, is published biweekly by the Employee Information Division, Office of Information Services, FAA, 800 Independence Ave., Washington, D.C. 20590. Telephone: WO 2-5575. Articles of general interest to employees should be submitted directly to Regional FAA Public Affairs Officers: George Fay, Alaskan Region; Robert Fulton, Eastern Region; Jack Barker, Southern Region; Joseph Frets, Central Region; K. K. Jones, Southwest Region; Eugene Kropf, Western Region; George Miyachi, Pacific Region; Edwin Shoop Jr., NAFEC, and Mark Weaver, Aeronautical Center.

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'GRAY GHOST' Tests Airport Runways

Walter Dooley, engineering technician, tests runway paving work done by contractors in this new mobile testing laboratory van.

By Gerrie Cook

ATLANTA—A gray, unpretentious-looking van truck often has been seen at many airports in the Southern Region during the past six months.

The "Gray Ghost," as it is known to airport engineers, is an experimental mobile testing laboratory (MTL) that was developed by the Southern Region airports division. It has won the healthy respect of airport engineers and is gaining considerable status in the eyes of airport contractors. Several independent testing laboratories are taking a closer look at it—and for good reason.

During these past months, the "Gray Ghost" has been used effectively to spot-check contractors' work. It also serves as a check on the accuracy and completeness of work being done by independent testing firms.

Because of the urgency of the nation's airport development program, more scientific methods are needed by FAA engineers to help them quickly and accurately evaluate the current weight bearing capacity of existing runways. Older runways, in some cases, are failing because of the pounding and stresses imposed by today's huge jet aircraft. Thus, many runways need strengthening and lengthening to accommodate the new generation of jet aircraft. New runways are having to be built strong enough to withstand the stresses caused by the high capacity jets.

The urgency of these airport problems prompted Herbert Spencer, chief of airports engineering, and Frank Wilkinson, airports paving engineer, to take tangible steps to ease the situation. Thus, the idea of a "testing laboratory on wheels" was born.

GSA Truck Transferred to FAA

Spencer and Wilkinson presented their idea to management and received the official nod to proceed. Their first step was to contact Marguerite Bannon, regional motor fleet manager, who located a surplus GSA 1-½ ton van in Mobile, Ala. Arrangements were made to have the truck overhauled and transferred to FAA.

At this point, Atlanta Area airway facilities people stepped in to help. The interior of the truck's body was refurbished and outfitted with a multitude of equipment and specialized tools. Interior specifications were developed by Walter Dooley, the airport testing technician selected to operate the new MTL. Dooley, too, is a professional in construction quality control, having served for more than six years as a soil and pavement testing technician with the Tennessee Valley Authority as well as for an independent laboratory. His knowledge of the basic requirements for this kind of laboratory were applied in the interior design and incorporated in the finished product.

Credit for an outstanding job goes to Theron Woodruff, Atlanta Area field maintenance party supervisor, and to Repairman S. W. Gilbreth, whose skills turned an empty truck hull into a compact, expertly-fabricated rolling laboratory. Together, they installed wiring, workbenches, cabinets, sinks, a butane gas range, a 2500-watt engine generator, a centrifuge extractor, and other specialized equipment. It was then stocked with the necessary small specialized tools and supplies, and it was ready for operation.

Make Tests At Regional Airports

Airports personnel began operating this first-of-its-kind MTL in the spring in 1967. During the next six-months trial period, the MTL performed a variety of pavement and soil tests at 14 airports in the region.

Among its many accomplishments, sub-standard construction materials came to light at two new airports and the work was rejected, saving more than $80,000 in reconstruction costs.

Test For Quality Control

MTL tests quickly showed that the contractor's sampling and testing program for quality construction control in some instances varies from "good" to "poor." When new runways are built, record sampling is performed on such projects during the course of construction and prior to final payment to determine if the quality of work meets all Federal-aid Airport Program standards, or if corrective measures are required before they are approved by FAA.

Use of the MTL also has a definite psychological effect on both contractor and consulting engineer with resultant improvement in quality work on other projects.

Because of the MTL's mobility, communications have been greatly improved between contractor, engineers, and the agency.

Initial, intermediate and final tests are more easily scheduled. And, because of these more efficient methods, future work by those engineers, contractors, and laboratories whose work was found to be sub-standard, will be more closely observed by FAA.

MTL Tests for Less

Close comparison of testing costs by the MTL and the commercial laboratories was made. The study revealed the average cost for MTL testing per airport was $311. Comparable tests by independent firms would cost an average of $550—a saving of about 43 per cent.

MTL tests have provided more accurate information on existing airport facilities to prevent unnecessary duplication or indicate where strengthening is needed. This, in turn, will help minimize pavement deterioration, eventual failure and costly remedial work.

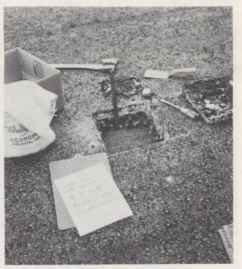
The "Gray Ghost's" versatility is again indicated as an effective training medium. Though no formal training program has yet been developed, Technician Dooley and the MTL have demonstrated their new tool on many job sites and at area and district office locations. A number of airport engineers have already received this training and benefitted from it. Present plans call for all area airport engineers in the region to be given this training to familiarize them with each type of test.

Prototype Exceeds Its Goals

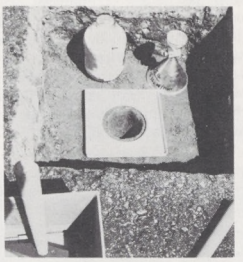
According to Bill McGill, airports division chief, this prototype has exceeded its basic goals. Testing costs are far less than those of commercial firms. Testing and construction problems have been uncovered and remedied, and it is a valuable aid in the airports training program.

In his words, "The detection of one serious construction deficiency at one small airport and the subsequent correction of the deficiency can save the Government the entire yearly operating cost of the MTL, and the airport sponsor an equal savings. At larger airports, savings would be even greater. Indeterminate savings in maintenance costs to an airport sponsor, of course, are not a direct saving to the Government, but this certainly is a valuable service to the public."

To obtain samples of soil at airports at lower depths of subgrade, Technician Dooley uses a hand auger.



Testing procedures at Millen Airport, Millen, Ga. starts by taking a sample of bituminous (asphalt) surface.



Density of the sand or fine aggregate sub-base is next made by a technician. He removes soil and weighs it, then replaces it with a known volume of sand and determines density.

A density sand cone measures the volume of soil removed from the test hole. Other tests done in a mobile laboratory determine asphalt content, gradation, maximum density, soil plasticity, etc. of an airport.

Airport Access Roads Are Important, Newman Says

AUSTIN, Tex.—When a Dallas-Fort Worth delegation met with state officials here recently to boost a $52 million road building project in North Texas, a principal spokesman was Henry L. Newman, director of the Southwest Region.

Newman urged speedy approval of a network of roads and highways to serve the 20,000-acre North Texas Regional Airport. The first stages of airport construction are planned for this spring, with completion of the project in 1972.

"A network of highways and freeways to serve airport traffic is as essential to an airport's success as the runways themselves," Newman told the state officials. He further emphasized, "Without this ground transportation system, the airport will be a waste of money."

Newman and his staff assist airport planners and the North Central Texas Council of Governments in an advisory capacity. This is in line with President Johnson's "creative federalism" formula and the outline for comprehensive area planning for airplanes and autos.

The various Dallas-Fort Worth airport committees and sub-committees include leading civic and business leaders, as well as some of the nation's top municipal planners.

Secretary of Transportation Alan S. Boyd has made it official policy to stress the need of comprehensive planning in development of new transportation facilities. In a recent letter to Dallas Mayor Erik Johnson—who is prominent in regional and city planning—Secretary Boyd wrote:

"We can no longer plan airports or highway systems as independent entities. The value of an airport is greatly lessened if adequate ground transportation facilities are not envisioned in the total master plan."

In becoming the world's largest airport, the North Texas Regional Airport may also set another record—that of ground transportation. Surveys indicate the Dallas-Fort Worth has the highest ratio of private automobile usage in the United States. Automobiles and aviation grow together in the progressive Southwest.

Happiness

A well-decorated cast brings a smile to Linda Cobb, secretary in administrative services in the Kansas City regional office. Linda was sad to learn she would have to wear a cast for several weeks after chipping a leg bone in an automobile accident. Thanks to the talents of co-worker "artists" Joyce Wilson and Leonard Fletcher, Linda now wears her decorated cast happily.

Texas DF Fix Saves Tree-Damaged Plane

TEXARKANA, Tex.—New direction finding (DF) equipment at the FSS here passed its first major tests recently under conditions that even a simulated problem couldn't duplicate.

The pilot of a twin-engine aircraft radioed that his plane with three passengers had struck a tree top near Mena, Ark. He had a badly damaged right wing. The tree also had knocked out the windshield and ice was forming on the wings and propellers.

Jerald Rasberry, Alfred Blackard and John Hartshorn, air traffic specialists, were on duty; so Rasberry and Blackard turned exclusively to helping the pilot. The Fort Worth Center could not make radar contact, but the DF kept constant contact as the specialists kept up radio conversation with the pilot.

Bearings verified the plane's posion initially as five miles west northwest of Mena. As the plane was oriented toward Texarkana Airport, the area was cleared to avoid the risk of collision with another low-flying aircraft.

Rain cut visibility greatly as the specialists worked the aircraft to the airport approach. The pilot was able to spot a beacon as he was being lined up with the runway, and was able to make a normal landing.

Forty minutes after the plane struck the tree 90 miles distant, the damaged aircraft and frightened occupants were safely on the ground.

There was mutual praise from pilot and specialists. However, the Texarkana specialists were in a "fishbowl" during the 40 minutes to get the plane to a safe landing. The station lobby was filled with pilots stranded by bad weather who witnessed the flight assist step-by-step as the drama developed.

Beauty and the Blips

Valerie Argent, Australian beauty queen, visited Oakland ATC Center at Fremont recently. From left are Frank Happy, center chief; Miss Argent, Bob Anolin, ATS, and Hervey E. Aldridge, San Francisco Area manager.

RETIREMENTS

★★★★★★★★★★★★★★★★★★★★

Aeronautical Center

Alfred Whitacre, Administrative officer, 37 years; **Anna V. Lee,** Clerk-Typist, 15 years; **William D. Jones,** Supervisory Simulated Instrument & Operations Instructor, 30 years; **Derwin W. Worster,** Air Traffic Control Specialist (Tower), 23 years; **R. Myrrel Reed,** Chief Personnel & Training Division, 29 years.

Central Region

Clifford N. Drummond, Chief, Indianapolis ARTC Center, Indianapolis, Ind., 22 years; **Wayne E. Grindeland,** Air Traffic Control Specialist, Fargo, N.D., 16 years; **Harry M. Bolsinger,** Electronic Technician, Wichita, Kans., 21 years; **Vinton G. Johnson,** Electronic Technician, Farmington, Mo., 26 years; **Robert B. McKown,** Air Traffic Control Specialist, Olathe, Kans., 27 years; **Joseph A. McKenzie,** Air Traffic Control Specialist, Hutchinson, Kans., 29 years.

Southern Region

Joaquin M. Gandia, Electronics Technician, San Juan, P. R., 32 years; **Marvin R. Guyton,** Supervisory Air Traffic Control Specialist, Valdosta, Ga., 24 years; **Orlando J. Bradley,** Chief, Charlotte Tower, Charlotte, N. C., 26 years; **Edmond L. Turner,** Air Carrier Operations Inspector, Atlanta, Ga., 20 years; **Eugene E. Thines,** Electronic Technician, Balboa, C. Z., 30 years.

Washington Headquarters

Ralph E. Jordan, Electronics Engineer, Research & Development, 25 years; **Paul J. Burnette,** Supervisory Librarian, Headquarters Operations, 22 years.

Western Region

Donald R. Conrey, Electronics Engineer, Denver, Colo., 30 years; **Dorothy Rossman,** Clerk-Steno, Los Angeles, Calif., 21 years; **Jeanette Lanphear,** Secretary, Los Angeles, Calif., 25 years; **Karl E. Warren,** Program Planning Specialist, Los Angeles, Calif., 30 years; **William H. Pfaff,** Painter, Burlingame, Calif., 20 years; **Wesley A. Hagedorn,** ATC Specialist (Contr.), Longmont, Colo., 8 years, (Dis); **Alex Pope, Jr.,** ATC Specialist (Contr.), Longmont, Colo., 10 years, (Dis); **James C. McNamee,** Electronics Technician, Longmont, Colo., 33 years; **Harold J. Reinbold,** ATC Specialist (Contr.), Fremont, Calif., 19 years, (Dis); **Marie L. Deatherage,** ATC Specialist CS/T, Yakima, Wash., 30 years; **James B. Robinson,** ATC Specialist, Fairchild AFB, Wash., 25 years, (Dis); **Frank M. Sabourin,** Electronics Technician, Salt Lake City, Utah, 27 years; **King C. Francis,** Chief, FSS, Elko, Nevada, 21 years; **James H. Ashley,** Air Carrier Maintenance Inspector, Seattle, Wash., 21 years; **Roy F. McDonnel,** General Mech. Leader, AFS Portland, Oregon, 20 years; **Clark N. Stohl,** Personnel Officer, Salt Lake City, Utah, 36 years; **Benjamin P. Bergen,** ATC Specialist (Gen.), Ontario, Calif., 29 years; **Louise J. Walters,** Realty & Prop. Clerk, Los Angeles, Calif., 22 years.

Southwest Region

Jack Hover, Chief, Flight Service Station, Lafayette, Ark., 30 years; **Norman W. King,** Plants and Structure Engineer, El Paso, Tex., 21 years.

Sign-Off

Stanley Knight, crew chief—coordinator at Oakland Center, initials the duty roster before his recent retirement. He is the first center employee to retire under the 30 years of service—55th birthday (30-55) ruling. Knight is typical of the career federal employees whose "sign-off" helps "Horizons" launch the new "Retirements" column seen above that is beginning with this issue.

Word of Thanks Cements Goodwill For 'Frisco Area

SAN FRANCISCO—A word of "thanks" can do a lot to cement FAA public relations contacts with communications media, the Area Office has discovered.

After television station KRON, Channel 4, aired FAA's employment openings for air traffic controllers on public service (free) time, the office wrote the station extending thanks for the help and advising that the announcements resulted in a large number of inquiries.

KRON Station Manager Jack Philips responded with this letter to Area Manager Hervey E. Aldridge:

"KRON-TV is most gratified to learn that public service time devoted to publicizing FAA's need for additional air traffic controllers proved productive.

"It always helps a great deal for us to know when our efforts to serve a community need are successful. KRON-TV was happy to be of service, and I assure you it is our continuing policy to make our facilities available for dissemination of interest to the public."

Aldridge pointed out that many users of public service time on TV and radio neglect to thank the stations or to indicate results.

"A letter of thanks pays off in goodwill for the agency and an increased willingness of the stations to donate public service time to FAA in the future," he said.

Flight Inspection Methods Studied By Four Filipinos

HONOLULU—Four FAA specialists recently teamed up to train two technicians from the Philippines in order to equip them with the latest skills and knowledge in flight inspection procedures for ILS systems.

The training will enable them to commission the ILS at the Manila International Airport, which is now being installed. The islanders plan to pass on their newly acquired information to co-workers.

The Filipinos are Rodolfo Lopez and Arturo Apostol, both with the Civil Aeronautics Administration of the Republic of the Philippines. Lopez is chief and Aposol is acting chief of the radio navigation air unit.

Specialists from the Hawaii Sector of the Honolulu Flight Inspection Group (FIG) made up the FAA instruction team. They are Robert Luxton, sector supervisor; Robert Schweitzer, flight inspector, and David Willman, flight inspector technician. Coordinator of the course was Sherm Daugherty, chief of the Honolulu FIG.

Here's How

David Willman, Honolulu FIG flight inspector technician (right), gives Rodolfo Lopez (seated) and Arturo Apostol some fine pointers on the "do's and dont's" of operating a flight inspection recorder.

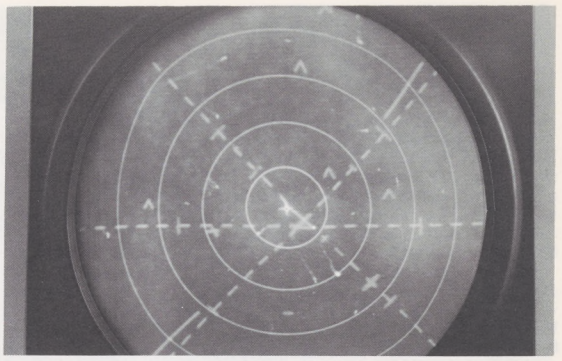
"We express the thanks of our government for the outstanding job you have done in giving us the knowledge we came to America to get," acknowledged Lopez as he and Apostol were presented certificates of training from PC Flight Standards' Roy Johnson.

Fort Worth Clerk To Leave FAA For Peace Corps

FORT WORTH—Cecilia Thompson, clerk-stenographer in training and career development here since June 1966, has joined the Peace Corps.

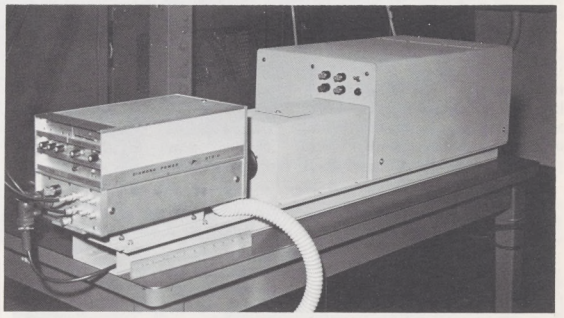
After a concentrated course in Spanish, she will leave May 20 for Montevideo, Uruguay, to be secretary to the Peace Corps director there and to teach English.

"I think this is a good opportunity for me to see and do other things," Miss Thompson said, "but I hope the natives don't wind up speaking English with a Texas accent."



This new bright display can be read in the changing bright lights of a control tower cab thanks to a new technique of epoxy bonding a filter to the front face of the glass plate TV tube. The new tube has an extremely high light-level output capability.

(Left)—Richard Prince, controller at Baer Field, Fort Wayne, Ind., uses a tower cab TV bright display during a three-weeks evaluation of the production prototype. He has no trouble with outside light.



A 12-inch ruler below the solid-state TV camera gives an idea of unit size as the vidicon views the Planned Position Indicator's (PPI) radar signals. What the camera sees is then remoted by cable up to the traffic control tower cab and is seen on the new TV bright display.

THE "BRIGHT ONES" ARE COMING!

By Francis J. Brandl

EDITOR'S NOTE: *Some time this week the first new tower cab bright display will be delivered to the FAA Academy, in Oklahoma City. Throughout the summer, 87 airports will get them at the rate of 10 units per month. Installation time is expected to vary from only 2½ hours to several days.*

In April, the new systems and displays will be delivered to the three big airports serving New York, to Dallas, Houston, Chicago O'Hare (two systems), Los Angeles and Wichita. Each unit, valued at approximately $15,000, should prove an invaluable extra pair of eyes in the tower to promote safety.

The need for tower bright display is understandable if you have ever visited a tower at a controlled airport and noticed the high light level that makes ordinary radar displays unuseable.

You also may recall there was no radar for approach control in the cab. All radar was in a dark room below the tower. Until now, the glare and change of light a display would be subjected to in a tower made it unfeasible to put radar in the cab.

WASHINGTON—Air traffic controllers in many airport tower cabs around the country soon can extend their eyesight up to 60 miles away. They may not often have to see that far, but the capability will exist, and the approach controller will have a comprehensive 360 degree picture helping him do his job.

The "eye extender" is a 12-inch bright radar display. It derives its picture from the standard airport surveillance radar (ASR), which for many years has been furnishing terminal area air traffic information to the IFR room or TRACON. Recent technological advances now have made it possible to bring a radar display out of the dark confines of the TRACON to the bright sunlit atmosphere of the tower cab. The controller will no longer have to squint into the glaring rays of the sun trying to locate that elusive blip on the scope that has asked for landing instructions.

Key members of a team whose effort brought the bright tower display program to a reality included: Ernie Storrs, Bill Conley, Ed Smith, Dave Cooke and Joe O'Brien of Systems Research and Development Service; Wesley Jones, of Air Traffic Service; Bill Dunn and Tony Myura, both of NAFEC.

Adapting a radar display to bright sunlight when it previously required almost total darkness wasn't a simple task for the team. But ingenuity and patient step-by-step problem solving are hallmarks of the competent engineering and operational talent in SRDS and at NAFEC.

Greater Intensity Needed

First there was the problem of producing enough intensity so that radar returns could be adequately seen under the bright daylight conditions that exist in towers with glass walls. Conventional radar bright equipment (RBDE), such as that used in ARTCCs, registered approximately 20 to 50 foot-candlepower, but a minimum of 500 readable foot-candlepower was needed to compete with approximately 4,000 foot-lamberts of light streaming into the tower cab. (A foot-candle is a measure of light coming from a light source; a foot-lambert is a measure of light coming from the subject itself.) This intensity could be achieved, but at the risk of literally burning holes in the phosphor coating excited by the stream of electrons in the cathode ray tube. A suitable phosphor choice had to be found—and it was.

Not Enough Contrast

Next, there was the lack of sufficient contrast between the background of the display and the symbols generated, resulting from the general washing-out effect on the face of the tube by the existing light in the rooms. So a decision was made to install a filter on the face of the tube which would keep the background dark. But this had an equally negative effect on the brightness of the target symbols, which meant doubling the requirement for symbol intensity to 1,000 foot-candles. So a way was found to do that.

Then there was the problem of reflected glare from other objects on the normally polished glass surface of the tube, a standard physical phenomenon. So the surface had to be made non-reflective, which was done through a fine grain etching technique that effectively diffused all reflected light.

Another problem was the matter of transferring the radar picture from the PPI (Plan Position Indicator), which displays the radar scanning sweep, to the tower bright display equipment. Conventional vidicon (television) camera techniques caused target symbols to "bloom" into a fuzzy blown-up blob of light, instead of giving a clear sharp return. This was caused by a difference in ratio of the light dot impinged on the PPI tube phosphor and the size of the light dot imaging in the camera. The obvious fix was to make the spot size ratios identical—and this decision was made.

Another challenge was the image persistency factor. The phosphor found to withstand the bright intensity required had no retention ability, making it impossible to create a "trail" necessary for practical air traffic control purposes.

So back to the PPI display or camera. Engineers found they could retard the rate of image decay on the little one-inch vidicon camera tube long enough to provide an image that would remain through several successive scans. By being able to hold the image in the camera, the engineers could create the trail desired and have flicker-free display on the TV equipment in the tower.

Systematic Analysis And Solution

And so it went—as each individual problem became evident, it was systematically analyzed and solved. None of the techniques used was invented; all were available. But they never before had been used collectively, all incorporated into one train of components commonly referred to as a "system."

There may be a few more gray hairs sprinkled about on some heads and the furrows on some brows may be a bit deeper, but that goes along with problem solving. And tower controllers now have another valuable tool to keep our airports the safest in the world.

Direct Line!

This is your direct line to the top! Your questions will get answers! Of course, employees are encouraged to discuss questions or problems with their supervisors or their local personnel office, but for those FAAers who do not have ready access to a personnel office, this column will give them an opportunity to have their questions answered. Write today to Joseph H. Tippets, PT-1, Federal Aviation Administration, 800 Independence Avenue, S.W., Washington, D.C. 20590. General Ground Rules: • All questions must be signed by the employees. • This column should not be used in place of the formal grievance and appeals procedures. • The questions should concern personnel or training policies, programs, and procedures and not be operational or technical in nature.

QUESTION: The current familiarization (SF-160) policy appears to be unnecessarily restrictive regarding the maximum time allowed for turn around and the requirement that the traveler get off the flight at the first landing point outside his home region. I do not think it unreasonable that travelers should desire to avail themselves of recreational or other activities while on an SF-160 trip and 24 hours can sometimes be a short time indeed. From my point of view as a terminal controller, the most beneficial parts of the trip are those conducted under terminal control, and limiting the number of stops per trip restricts these benefits sharply.

ANSWER: The headquarters policy for familiarization flights (SF-160 program) does not limit the number of stops per trip nor the distance of the final destination for domestic travel. In a very recent change in policy, domestic travel is defined as travel within and between the 50 states, U. S. territories and possessions. All regions may authorize domestic travel. The agency believes that the policy of starting back 24 hours from the time of arrival at the outbound destination is liberal and is to be considered a privilege to use if needed. However, the recent change in policy authorizes the extension of the time limit to 48 hours for domestic travel when appropriate justification is provided. These policies are subject to regional restrictions. The agency encourages the use of the SF-160 program for the purpose of more fully and adequately acquainting specialists with the problems affecting in-flight use of air traffic control and communication services. This is a privilege provided by CAB economic regulation to afford controllers the opportunity to discuss mutual problems with the users. This program cannot and is not considered to be even remotely similar to the transportation passes that the airlines provide to their employees.

QUESTION: Can supervisors of field facilities direct an early departure or late arrival and authorize premium pay for travel outside regularly established tours of duty in order to achieve improved service to the public, when the work to be performed is "normal practice" and the travel a "normal part" of the employee work assignment?

ANSWER: An answer to your question was deliberately held up because legislation on this subject was pending in Congress. Under this recently passed legislation, overtime pay is authorized for travel status when: (1) The travel involves the performance of actual work while traveling (such as an ambulance attendant taking a patient to a hospital); (2) The travel is incident to travel involving the performance of work while traveling (such as a truck driver riding in a truck to a destination to pick up another truck and drive it back to his original duty station; or an aircraft crew traveling to another point to pick up and return an aircraft); (3) The travel is carried out under such arduous and unusual conditions that the travel is inseparable from work (such as an employee traveling to a forest fire by foot, horseback, or in the back of a truck over rugged terrain); (4) The travel results from an event which could not be scheduled or controlled administratively (such as an event that requires the service of, or participation of an FAA employee, and the responsible management official has no practicable alternative but to require that the employee travel outside his regularly scheduled tour of duty). Take a look at Notice 3550.11 dated February 2, 1968, which was distributed to all field facilities. It gives specific illustrations of situations in which overtime can be paid, and asks regions and centers to send in other situations for review if they believe payments may be applicable.

QUESTION: Are air traffic control specialists required to maintain or improve skills required in their profession? Please refer me to FAA references on this subject.

ANSWER: Yes. See the Handbook entitled, "Air Traffic Training," 3120.4, dated February 15, 1967.

QUESTION: Is there any way that a supervisor can compensate an employee when he asks him to work for 15 to 25 minutes past the normal quitting time, on certain occasions, to finish a job since overtime is not paid in less than one-half hour periods?

ANSWER: Technically speaking, no. FAA regulations do not permit the payment of overtime for periods of less than one-half hour. A good supervisor will manage his operation so that the problem you mention will rarely occur. If the need for 15-25 minute periods of overtime is very frequent, the good supervisor will find a way to schedule his activities to avoid the problem, or to make sure that employees are equitably compensated for overtime work. If the need is seldom, the supervisor may wish to take this extra effort into account when he makes up the employee's performance rating.

Flight Forum '68

(Continued from page 1)

Lohmeyer, aviation operations inspector, Minneapolis GADO; Lowell Morris, Jr., air traffic branch chief, Minneapolis Area office; and Albert Drakenberg, airspace and planning section chief, Minneapolis Area office.

Attractive packets of FAA material were prepared and given all pilots in attendance. Blanks provided for use in submitting questions to the panel led to a lively question and answer period following individual presentations and a coffee break.

The forum was for pilots of every category — student, private and commercial.

It was a comprehensive attempt to review the rules of flight and tell about FAA services. Topics covered included terminal and en-route control, and GADO services.

Pilot's Call for Help Gets Quick Joliet Aid

JOLIET, Ill.—During a seemingly routine day at the flight service station here recently, a terse message from N8028P read, "Chicago area radio, do you hear N6745E calling you on 122.6? He's in distress and calling for help!"

The reply was negative. A few minutes later, the pilot of N6745E was heard intermittently still pleading, "Please, someone help me—I'm lost!"

Working through N8028P, a DF bearing was received on the scope soon afterwards and altitude, fuel reserve, and other pertinent information followed quickly.

A compass heading of 320 degrees was given N6745E via N8028P, as well as DF procedures to follow.

A short time later, positive contact was established and the "lost" pilot landed at Joliet Airport, 41 minutes from the time of his initial call.

The drama did not end there, however. An ecstatic pilot, together with his pasenger, arrived at the FSS exclaiming "Where is that man who rescued us after we got lost?"

The heroes of the episode, Flight Service Specialists William Daily and Michael Nizetic, revealed they were responsible. Not satisfied, the pilot offered them a generous monetary reward.

Politely but firmly it was refused.

"What can I do for you people?" asked the pilot. "I want to show my appreciation somehow! How about your favorite charity?"

The two specialists explained that they were only doing their job, and it was all in a day's work.

The unsung hero of the episode was the pilot of N8028P, without whose alert help and radio communications the lost pilot might have become another statistic.

FAA Man Wounded

(Continued from page 1)

back from the airline.

"Another man and I were sitting on a table when the rocket hit 20 feet above us, knocking me about 10 feet. I got up and started helping the wounded."

The person with whom he was sitting received more serious wounds, his body shielding Zaremza from a fuller blast of shrapnel.

Zaremba got into an ambulance with those he had helped rescue and went to the nearby air evacuation station for treatment. He was given a choice of staying for further treatment or continuing the trip.

Returning to the airport, he got a flight at noon that day. "The ride was a bit uncomfortable," he said, "but there were seven of us in the same shape."

The others were military men. All had been given first aid and allowed to continue, with the medics' assuring statement that "as long as you can walk, you're O.K."

None of the homeward-bound wounded contested this philosophy. They were glad to leave Saigon.

Attacks by the Viet Cong actually had started earlier for the Tan Son Nhut passengers. At 6 a.m. Zaremba had been scheduled to leave on a C-141 military transport for Dover, Del. As the passengers started to board a rocket hit the runwway, damaging a plane. All planes took off unloaded to escape further damage.

Zaremba had been stationed three miles from Long Dinh, a town 29 miles northwest of Saigon. His group was installing equipment in control towers which the Army is building to handle helicopters.

"We watched the fighting almost every night as gunships fired into enemy positions," he said. "The closest fighting had been about three miles from the base, but the morning before I left the ammo dump at Long Dinh was hit."

Zaremba has returned home on emergency leave because of the unexpected death of a sister. He had arrived in Vietnam last December.

An FAA employee since 1955, Zaremba served in Fort Worth until the Albuquerque area was actiated in 1965. Assigned to airway facilities, he worked most recently in the installation of equipment in the El Paso Tower/TRACON.

For Zaremba, his Vietnam duty is his second trip to the Far East. An Air Force electronics specialist during the Korean war, he was with the 44th Fighter Group at Clark Field in the Philippines, a unit which also served in Korea.

His wife Norma and their three children, Lynn and Barry, high school students, and Joan Marie, a second grader, live in Albuquerque. They tried unsuccessfully to talk him out of returning to Vietnam when his emergency leave ended in early March.

He explained his return to the war zone philosophically and simply, "There's a job to be done, and I've committed myself to help do it. So—it's back to Vietnam for me."

Panel

Panelist Cliff Waterman, operations and training officer, Minneapolis Tower, addresses a throng of people attending "Flight Forum '68," a program presented by Minneapolis Area employees.

Locator Beacon

(Continued from page 1)

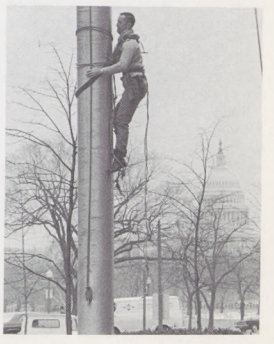
search authorities, saving not only lives but also many hours now spent in fruitless search missions.

FAA has on several occasions made known to the aviation community that it considers survival equipment such as a crash locator beacon to be of considerable benefit, and has encouraged pilots either to lease or purchase such equipment. The agency has resisted regulatory action on the question because of the high cost of such equipment and the unavailability of related airborne search units which could be used to locate the crash site quickly.

Comments are invited and can be submitted to FAA by May 1.

Confidence

Desk-bound Carl R. Brooks of Arlington, Va. becomes a part-time steeplejack to free "Old Glory" after March winds blew Washington headquarter's flag tips and it stuck upside down beneath the pole's ornamental ball. He uses a nylon stirrup rope rig of his own design, climbing the hundred feet in ten minutes to file away the traitorous burr.



Radar 'Fires' Signal From Old Gun Site

By Gerrie Cook

PANAMA, C. Z.—Most terminal radar facilities have the same characteristics and structure. Not all of them enjoy a location such as FAA's ASR-5 here.

The Panama radar facility, providing surveillance approach to Tocumen International Airport and Albrook AFB, is atop Perico Island, overlooking the Pacific entrance to the Panama Canal.

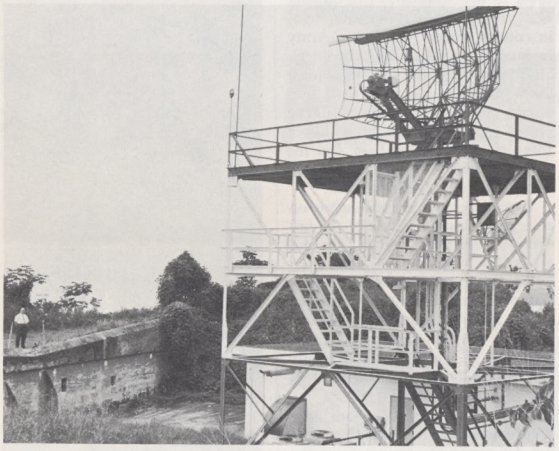
Known as Battery Newton, this island site formerly served the U. S. army as an emplacement for a giant 16-inch rifle, mounted on a disappearing carriage. Until 1943, the huge weapon was part of the coastal artillery defenses guarding the Canal.

During World War II the big gun was retired and ultimately dismantled.

Battery Newton, named in honor of Maj. Gen. John Newton, a Civil War Army officer, was built during World War I, with a railroad running all the way to the top of its 230-foot elevation overlooking the Pacific Ocean. The railroad was used to expedite the construction of the island defenses, and later to deliver ammunition to the battery.

In 1964, because of Battery Newton's strategic location, FAA acquired the site and installed its ASR-5 equipment on the spot where the long-range artillery rifle had once stood vigil.

Although the old railroad has been long abandoned and the gun's deep underground ammunition facilities and plotting rooms are deserted, Battery Newton still serves as an important sentry post. Where once the giant 16-inch rifle on its huge carriage stood ready to fire at an enemy far at sea, FAA's airport surveillance radar on its high steel pedestal now "fires" electronic signals at the enemies of safe flight—bad weather and lost aircraft needing the agency's help.



'Fires' Radar Now

Standing on part of an old 16-inch rifle's concrete fortification in Panama, Balboa Area's Walt Watson (left) reflects on the history of the location of FAA's modern ASR-5 terminal radar. The radar, serving both Tocumen International Airport and Albrook AFB, was constructed on the old artillery gun emplacement at the highest point on Perico (Parakeet) Island.

Metz Named N.Y. Area's First Top 'Engineer of the Year'

NEW YORK—Electronics engineer Eugene Metz has been named "Engineer of the Year" by the Area office here. He is the first winner of the award which is granted for professional engineering excellence.

Metz's selection was based on the excellence in which he carried out his role as coordinator for all equipment installation connected with the establishment of the New York Common IFR Room. Completion of the CIFRR, now scheduled for July, is a top priority project in the Eastern Region.

Selection was made by the Area manager after an ad hoc committee of supervisory engineers had evaluated the qualifications of each nominee.

Metz joined FAA in 1958, shortly after graduating from Pratt Institute in Brooklyn with a bachelor of electrical engineering degree. In his ten years with the agency he has earned two Outstanding ratings, two Sustained Superior Performance awards, a suggestion award for $100 and a Quality Within Grade Step Increase.

Pacific Cake

"Thank you" in nine languages adorns the cake presented by the grateful people of Wake to Pacific Region headquarters personnel for typhoon recovery assistance. Making the presentation is Wake's Leonard Nelson (center). Others in photo are (left to right), Charles Aldrich, PC Director Phillip Swatek, Dave Early, John Cyrocki, Don Long, Capt. Waller Moore.

Auto Safety

Although their primary mission is aviation safety, these Central Region employees take time out to attend the agency's new Defensive Driving Course. The course instructs the inexperienced driver and reacquaints the experienced driver with the rules of the road and good driving habits.

Flu Shots Given 1,983 Employees In Southwest

FORT WORTH—Planning and a good supply of influenza, smallpox and diphtheria/tetanus serum helped to set a record for the FAA's aviation medical people here. In an early winter immunization trek in the five-state region, medical personnel gave 4,471 immunizations to 1,983 employees.

Regional Flight Surgeon Clyde A. Lynn and his assistant, Lynn C. Barnes, Jr., immunized employees in seven cities each in Arkansas and Louisiana, eight in Oklahoma, 12 in New Mexico and 37 in Texas. They were assisted by Mrs. Zona Hazle, R.N., Miss Judy Plechus, Mrs. Linda Withers and Mrs. Dorothy Johnson.

Inertial System Undergoes Test

CHICAGO—United Air Lines has logged 122 flight hours using a dual-equipped inertial navigation system to gather test data in domestic operations for the Systems Research and Development Service.

This represents approximately 30 cross-country flights in the regular domestic air route structure.

Previous experience using the inertial system was derived from the relatively simpler over-ocean routes where airways are roughly parallel. The current domestic evaluation program, managed by Sidney Hirshon of SRDS navigation development, is scheduled to run until the end of March.

The navigation system being tested was built by Sperry Gyroscope Company, and is installed in a United Air Lines DC-8F jetliner for evaluation purposes, under contract to the FAA.

When the inertial system was in use, UAL pilots reported two-thirds of the time was spent navigating off-airways and flying the more efficient great circle segments between waypoints. They reported a high degree of cooperation with the regional air traffic controllers in gaining clearance for the off-route operations.

Inertial navigation uses no external reference information, all directional data being derived from gyroscopically stabilized sensors within the system itself.

The inertial navigator constantly updates its actual position by computations resulting from the aircraft's acceleration over the earth's surface.

The Winnah!

Joseph H. Tippets, Vice-Chairman of this Year's Washington area Combined Federal Campaign (center), presents Anton L. Kosinski, Office of Management Services accounting systems branch chief, with the Transportation Federal Credit Union Award ($25 U.S. Savings Bond) for having all of his group pledged through payroll deduction in the recent Headquarters CFC Campaign. At left, smiling with approval, is Victor W. Kowalczyk, Transportation Federal Credit Union board president.

First IBM 9020 Computer Commissioned at Cleveland

CLEVELAND — The agency's first IBM 9020 computer, which was operationally programmed entirely by FAA personnel, was commissioned recently at the center here after 18 months of concentrated effort by Eastern Region and headquarters employees.

Lindy's Tower

Arvin O. Basnight, director of the Western Region (left), and C. R. Campbell, chairman of the San Diego Board of Port Commissioners, share cake-cutting chore at the dedication of San Diego Lindbergh Tower.

With the new computer capability, the Cleveland ARTCC took a giant step toward the automation of air traffic control functions slated for nationwide operation in the 1970s. It is the key component in the full NAS Enroute Stage A development being initially implemented now at the Jacksonville ARTCC.

Capable of making up to 200,000 calculations per second, the IBM 9020 can calculate 500 times faster than the computer it replaced. It processes over 500 flight plans an hour and can be expanded to keep pace with future air traffic demands.

The five organizational units directly responsible for the success of the Cleveland ARTCC facility updating were commended by Administrator McKee.

The Cleveland data systems staff; ARTCC airways facilities computer section; Cleveland Area airway facilities branch; NAFEC central programming branch; and the Washington applications engineering branch, ATC development division, SRDS, were all awarded Certificates of Achievement ". . . in recognition of outstanding effort in integrating and installing in Cleveland Center the agency's first IBM 9020 computer system."