FAA HORIZONS

APRIL 1965

OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY

EDITORIAL:

FAA's New Image

As I look back over my years with the Federal Aviation Agency and its predecessor agencies, I cannot help but note the contrast in the "old" and "new" images. Formerly, we were an agency highly regarded primarily for its technical skills. Now, we are recognized as a technical agency with management expertise.

While the FAA has continued to expand its highly technical skills, Administrator Halaby has also stressed the importance of good management. Within the past few years we have moved from a position of complacency in managerial philosophy to a full realization of the value of good management practices. Moreover, we have endeavored to catch up where we have previously lagged.

This new FAA image in management has been developed by molding our expert technical people into excellent top-level managers. Regional directors, heads of services, division chiefs and assistants, as well as supervisory personnel in all levels of management, have been affected. Many of these only a few years ago were basically technical experts in the fields they now manage.

This new managerial skill was achieved without depreciating the technical skills or without decreasing the importance of doing a good technical job. Rather, the new managerial skills have enhanced the technicians' work. These managers have deep roots in the technical fields where, as technicians, they worked with and utilized people, money and material, but seldom managed them. Now, with proper training in management, they are able to understand and supplement the technical field with good management techniques—an understanding which is making FAA management one of the best in the government. Also, management training, tailored to the needs of the Agency, has made possible greater things for "comers" within the Agency through career development planning.

This procedure is a practical approach where new skills are demanded by each improvement in our vast inventory of equipment and changing operating procedures. By providing top level management training, technicians are extending their horizons far into the future and sharing their experiences and knowledge in the effective and efficient management of the Agency. Their energy, initiative and teamwork have produced managerial maturity and refinement.

Our managers are being further developed in selected schools, where they are trained for maximum accomplishment in management methods keyed to present and future needs. Our Administrator has provided the action which created the proper climate for the encouragement and development of these potential skills. Additional training will be provided to close important gaps in each manager's skills, often preparing him in advance for forthcoming changes.

Today, FAA's historic reputation for technical know-how has not changed. From it has grown management expertise. Efficient top managers will share the FAA spotlight so long as imaginative training in the proper environment is available and utilized. Performance and results have proved there is no better way. All of us can justifiably be proud of the progress we have made and the image we have helped to create by being not only top-notch technical personnel but excellent managers as well.

Archie W. League

Archie W. League
Director, Southwest Region

The Southwest Region employs more than 4,600 people who work at 240 different locations. From Regional Headquarters in Fort Worth, Tex., the Regional Director manages FAA activities in the states of Arkansas, Louisiana, New Mexico, Oklahoma and Texas; the Republic of Mexico and that portion of the Gulf of Mexico covering the oceanic control area and the domestic offshore control area under the supervision of regional facilities. Director Archie W. League moves to the FAA Headquarters in Washington on June 1, 1965 when he becomes director of the Air Traffic Service.

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F E D E R A L A V I A T I O N A G E N C Y

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Pacific Region's Air Traffic Controller Edward L. Demain typifies the dedicated controllers who help keep the nation's aircraft moving safely and smoothly.
(See Pages 4 and 5).

CONTROLLERS ON THE FLIGHT DECK . . . *and pilots in the TRACON room*

Above: It's "all systems go" as Honolulu Tower clears flight for immediate departure. Below, left: Prior to boarding for the flight to Tokyo, Douglas E. Bronson, controller, Honolulu ARTCC, watches as Pan Am Captain Gordon Brakesman, Palo Alto, Calif., checks flight plan.

Controller Charles E. Alderson (left) discusses radar techniques with United Air Lines Captains James Day and H. A. (Bud) Gurney (right) in Honolulu Tower TRACON room. Gurney once barnstormed with Lindbergh.

An air traffic controller sitting in the jump seat of an airborne jet transport is tending strictly to business despite the novelty of his environment.

He would be occupying the observer's seat under an agreement between the airline industry and the CAB.

This activity is FAA's Flight Familiarization Program which permits controllers to observe flight operations. The flight is made at no cost to the Government, and with no forfeiture of a paying-passenger seat on the airline's part.

The program, as outlined in the Agency's manual, AT P 7230, recommends that air traffic operating personnel ride the jump seat of air carrier aircraft and become familiar with the pilot's viewpoint. Normally, familiarization flights are not made by the same individual upon any one air carrier more than one round trip a year. The program varies throughout FAA's regions depending upon local requirements.

Operating officials wanting to get maximum program benefits, administer it judiciously. The controller, as watch schedules permit, may take advantage of the program's opportunities only a specified number of times a year and only over certain routes.

Benefits Pilots and Controllers

Familiarization trips are another example of the constant striving between the Agency and the aviation industry to cooperate for the benefit of aviation and the flying public.

The association of controllers and pilots—in the controllers' environment as well as in the cockpit—has been educational for both. That is certainly the consensus among controllers in the Pacific Region. Pilots have been enthusiastic in their appraisal of the familiarization program and many have indicated that they would welcome more controllers.

Controllers, in general, find that the flights give them a chance to discuss various problems of interest to themselves and the crewmembers. Pilots have felt that the program gives them a better understanding of the controllers' problems under various conditions. Some actual situations encountered during a flight cannot be easily simulated on the ground.

New Procedures Adopted

Many suggested changes to procedures have been adopted by the National Airspace System as a result of discussions between a controller and a pilot. Phraseologies also have been changed accordingly to provide better understanding of instructions through a slight change in terminology.

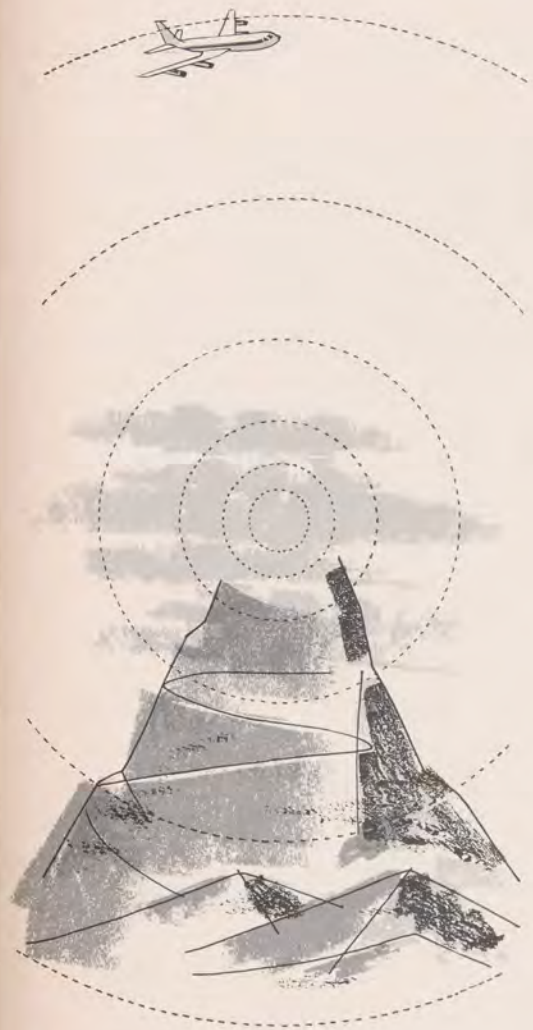
Air carrier pilots flying the Pacific routes are happy to greet the controller boarding the aircraft as an observer. The flights are generally long and uneventful so the crew has plenty of time to discuss FAA in general, and air traffic control in particular. And, too, Pacific Region controllers, like all controllers, are proud of their organization and are quite fluent in talking about their jobs.

Controllers always remember that they are guests of the airline; that they are, in effect, in a training status for the purpose of acquiring information that may help them and their fellow controllers provide more service in the "strip to pip" process. They appreciate the fact that pilots also read the procedures on air traffic control and have a general understanding of it.

Both controllers and pilots are dedicated people, sincere in their devotion to a singleness of purpose: the safe, orderly expeditious flow of air traffic and to the advancement of aviation. #

Louis V. Paresa Jr., (pointing) Honolulu Tower controller, takes Captains Gurney and Day on a tower tour prior to boarding for a familiarization flight to San Francisco. Controller at mike is giving landing instructions to incoming aircraft.

Captain Gurney and Paresa discuss pre-departure planning. The skipper has over 39 years of flying experience, 33 of which are with United Air Lines. The association of controllers and pilots on such familiarization trips is educational for both.



FROM HIGH ATOP THE BECLOUDED ANDES

High in the Andes, on a cloud-covered mountain peak overlooking Quito, Ecuador, sits one of the world's highest VORs. Its powerful signal, transmitting navigational information in all directions, is providing an infinite number of courses to pilots who fly to or away from the Latin American station.

Getting the VOR located and operating on this lofty mountain peak for the Ecuadorian Government was the task assigned to FAA's Civil Aviation Assistance Group and the Southern Region.

In 1963 Ecuador decided to purchase a modern VOR to guide aircraft safely to and from the Quito area. After purchasing an American-made Wilcox very high frequency omni-directional radio range (VOR), the Ecuadorians asked the FAA to provide technical assistance.

The Agency was asked to select an appropriate site for the VOR and to flight check the navaid after its construction was completed. In addition, a number of Ecuadorians had to be trained to maintain the facility.

Gordon S. Wight, FAA's representative in the Civil Aviation Asistance Group in Lima, Peru, was assigned the job of supervising construction of the VOR.

Although somewhat uneasy about the stories of the Jivaros Indians, renowned for their head shrinking customs and the Aucas who are still implacably hostile, Wight and Southern Region personnel spent many days in the mountains exploring possible installation sites before the final selection was made.

During the exploratory period, the crew suffered the extremes of below-freezing weather at night and short-sleeve heat at high noon before selecting the mountain peak location, 11,778 feet above sea level on Condorcocha Mountain.

Mixed crews of United States experts and Inca Indians worked together on the construction project. Natives accustomed to the rarified air in the high altitudes had no difficulty, however FAAers had to be "supercharged" with an occasional refreshing whiff from portable oxygen bottles while working on the site.

When the construction was completed, Southern Region's flight inspection team headed by Maurice McGranahan, chief of the Miami Flight Inspection District Office, was assigned the job of checking the new VOR. McGranahan and DC-4 crew members, Paul Dennis, G. J. LaSpina and James Parnell, all of Miami, made the precision flights required to check the facility. Their flights were limited to the early morning hours, from sunrise to 10 a.m., because by midmorning, dense clouds socked in the entire mountain, precluding further visual flight checking.

After hours of flight testing, the new VOR performed exceptionally well. Its signals were being received half-way to Panama or more than 300 miles.

Although only a few pilots may ever see the Quito VOR which is usually blanketed with clouds, its signal will be heard and put to use providing the western coast of South America with another important air navigational link. #

A 35 foot antenna was swung into place by Lloyd Boggs and Art Moskowitz as the Eastern Region Accident Support Team used an FAA transceiver to link the FAA Region and the accident site.

Motorized Emergency Kit Serves Well

The pre-dawn light over the Atlantic Ocean illuminated just the outline of the Short Beach, L. I., Coast Guard Station when an FAA 2½-ton van-type truck pulled up beside it. William J. Kingston already had the cab door open and while he went into the station, Arthur Moskowitz and Lloyd W. Boggs jumped out of the cab and entered the truck's van.

In short order, the FAA technicians had converted the van into a field headquarters for CAB/FAA accident investigators. Two telephone lines and two-way radio contact with Eastern Region Headquarters at nearby Kennedy International Airport were hooked up to help solve a major aircraft accident—an Eastern Air Lines DC-7 had crashed at 6:25 the evening before in the Atlantic approximately 13 miles southeast of J. F. Kennedy VORTAC.

The nearness of the Coast Guard Station helped because commercial power and telephone lines could be tapped with standard equipment in the truck. But even in an isolated location two-way radio contact would have been possible. Three transceivers plus all the necessary batteries, battery chargers and generators are also available.

Known as Eastern Region's Accident Investigation truck #1, the truck contains the FAA Accident Investigation Fly-away Kit which is designed for immediate shipment by air, if necessary, to the site of major air crashes. Eastern Region personnel were using truck #1 on a real accident for the first time.

The experience of several dry-runs with the pre-packaged equipment enabled Eastern Region's accident investigation support personnel to start operating quickly. In addition to providing a CAB/FAA field headquarters, they were able to extend support to Eastern Air Lines and the Nassau County police when Coast Guard frequencies and commercial telephone lines became saturated.

After the main part of the wreckage was located on the ocean floor, Robert Nelson of the Eastern Region set up a communications base aboard the search vessel. This network of transceivers—one at Regional Headquarters, another at Short Beach Coast Guard Station and aboard the Navy's submarine rescue and salvage ship, the *USS Tringa*—kept all Agency personnel in immediate touch with all phases of the operation.

After fragments of the wreckage were taken to Floyd Bennett Naval Air Station for assembling later in a vacant hangar, technicians Boggs and Moskowitz set up a second field headquarters in a second truck.

The Eastern Region's experience with the kit is expected to enhance its usefulness even more. Simulated accident investigations in the Southern Region helped clear up potential problems with the communications equipment and the experience the Western Region gained using the kit following the crash of Bonanza Air Lines' F-27 near Las Vegas on Nov. 15, 1964, brought further improvements.

As a result of the Eastern Region's experience, consideration is being given to obtaining "foul-weather" clothing and equipment from military sources. This would supplement equipment already in the kit which consists of three transceivers, 10 FM walkie-talkies 10 spare batteries, three battery chargers, two phone patches, five portable recorders, three portable generators and distinctive orange-colored coveralls for investigative personnel, and other special equipment. #

Left: Gerald G. Garrett (left) is briefed on the workings of an offset press by Edward J. Dubay. Above: Illustrator Carol Emrich explains copying camera to Dr. Morton P Eanet and Dr. Charles W. McMillin. Right: Alan G. Glass (right) is introduced to the Ozalid by foreman Darald Hottman (center) and Kenneth Law, machine operator.

INSIDE THE WORD WORKS

Words, words, words—millions of them, marching endlessly in disciplined ranks across a limitless expanse of paper, a mighty army mobilized in books, manuals, pamphlets, orders, directives, letters, instructions—these are the things that help make our complex world function.

How these words are transformed from wispy thoughts to the printed page is no longer a mystery to scores of Central Region employees. Following an invitation from Montague E. Davis, chief of the Publishing and Graphics Branch, they trooped through his shop recently in a steady stream during an open house coinciding with International Printing Week.

Central Region FAAers saw the many intricate steps that must be taken before specifications and deadlines spelled out in a work order become a "pick-up" item ready for the user. The complete tour took visitors through the three sections in the branch—printing, distribution and visuals.

In the Visuals Section, illustrator Carol Emrich, deftly wielding the airbrush, showed visitors how photographs can be tailored to suit editorial requirements. She demonstrated how photos are changed from glossy prints to screened half-tone illustrations for reproduction in books and pamphlets. An automatic headline machine and two kinds of copying cameras help speed her work.

Darald K. Hottman, a supervisor in the Printing Section, and a cost-conscious man, labeled each of the machines under his control with price tags, each indicating its cost and what it produces. The platemaking copy camera, for example, costs the taxpayer $1,535 and turns out 140 plates a day at a cost of 66 cents each.

Visitors were fascinated when they viewed the region's two collating machines in action, their mechanical fingers plucking sheets of paper from pre-stocked bins and neatly and tirelessly shuffling them into book form. Stapling and, in some cases, drilling, follows to create a bound book or pamphlet.

The two giant Ozalid blueprinting machines, with their distinctive astringent aroma of ammonia, obligingly spewed out yard after yard of electrical drawings, much to the delight of the viewers. Thousands of these precision drawings are used by the region's electronic, construction and airport engineers.

Joseph V. Geiger, supervisor of the Distribution Section, closed the show with an act that would be tough to follow any place—a demonstration of high-speed automatic envelope addressing, paper folding and mechanical envelope stuffing. #

CONTROLLERS HONORED

For many years, flight service, terminal and center personnel have been performing what is one of the most exciting—and gratifying—actions in the field of aviation—assisting pilots in distress. Flight assists are now so routine that FAA's air traffic controllers regard them as part of the day's occupation.

In 1961, Eastern Region's Air Traffic Division (AT) took a hard look at flight assists and came away amazed at the diversity of emergency situations and inspired by the ingenuity of AT personnel. The hard look gave birth to Eastern Region's "We Point With Pride" program designed to recognize personnel who performed outstanding flight assists.

The program recognizes in two forms air traffic controllers who performed outstanding flight assists. A regional bulletin, "Eastern Region Points With Pride," is distributed throughout the Division. The Bulletin consists of a one-page story containing in narrative form the details of the flight assist, and photographs of personnel singled out for praise. Later, at an appropriate ceremony, a plaque commemorating the event is presented to the controllers. The metal and wood plaque is tastefully designed in the form of a shield, making it a decorative table or wall piece for office or home.

In 1964 approximately 550 flight assists were provided in Eastern Region. Assists ran from routine (expeditious "pick-up" by radar and trouble-free vector to a safe landing) to more dramatic assists where the controller or flight service specialist reassures an inexperienced pilot caught on top of an overcast or in bad weather, follows him on radar and vectors him to safety.

All flight assists, regardless of circumstances, require a full measure of professionalism from the Region's air traffic specialists. And while many flight assists are quietly rewarded in a controller's sense of pride for a job well done, or in recognition from associates, a few assists, symbolic of all, are recognized in an enduring form by the Eastern Region plaque, "We Point With Pride." #

Frank S. Greco

John Cernohorsky

Charles R. Castiliano

Paul C. Lebert Jr.

William Susa

Willard C. Burner III

James A. Perry

Hulton H. Schuler

Robert A. Davis

Bernard T. Schramm

Theodore L. Stafford

Russel E. Leeper

Adam P. Stefansky

Marcus E. Levy

Effrain Bestard

PILOT PEDAGOGS POLISH PROCEDURES

Walter (Pop) Fullwood of Kerryville, Tex., is a pilot, who has 20,000 hours, about half of which were logged while teaching fledgings how to spread their wings and fly right. His daughter, Mrs. Rosa Lea Meek, is a chapter off the old log book; 2,000 of her 5,000 hours were racked up as a flight instructor.

Pop and his daughter were among 20 flight instructors assembled in Austin in late February to attend the three-day Flight Instructor Refresher Clinic sponsored by the Texas Aeronautics Commission (TAC). A light workout with pencil and pad revealed that the "pupils" had between themselves over 100,000 hours. And 100,000 flying hours among 20 people anywhere, even in Texas, is an impressive amount.

What brought this obviously talented group of flying instructors to Austin? An urge to keep abreast of the latest teaching techniques and the feeling that all pilots "need a little more training from time to time—even the instructor."

With the Federal Aviation Agency assisting the TAC in the ground school, the students moved with practiced ease through a well-rounded program of class lectures, demonstrations and actual flying. Three days of instruction, from 8 a.m. to 5 p.m., plus evening sessions, gave the pilots 15 hours of ground school and 12 hours of flying.

Working within guidelines spelled out in Agency policy governing this kind of participation, the FAA Academy's Flight Standards Training Division sent James W. (Pete) Campbell, Carl L. Edmison and Jim Shelly to Austin to conduct part of the instruction.

Campbell explained the Agency's part in the clinic: "The purpose of the flight instructor refresher training is safety, brought about by increasing the knowledge of these pilots and updating their flight information. This is the principal reason for our part in the program."

Campbell pointed out that some of the instructor pilots have not had a refresher course in many years. "This doesn't mean that these flight instructors are not conscientious, but what held true 25 years ago in aerial operations doesn't fit into our airspace facilities today."

In addition to the standard program of ground school subjects, the airborne pedagogs heard a staff member of the Austin weather bureau present weather briefings and advice on what to expect from the weather under various conditions.

Edward Walters, a guest lecturer from the Austin RAPCON, discussed the need for more efficient use of radio communications and went on to explain landing procedures. He was followed by Herbie C. Olson, principal operations inspector at the San Antonio General Aviation District Office, who talked about problems peculiar to flying in the South Texas area.

Laurance N. Lightbody of the Southwest Region's General Aviation Branch, Flight Standards Division, served as regional coordinator with the Texas Aeronautics Commission in setting up the clinic. He worked principally with V. E. (Jack) Ball, TAC's project officer, and Tom Fiorello, another TAC staff member.

Policy on this kind of non-Agency participation in the ground school was modified to permit FAA participation in the ground school and the general conduct of the courses. General aviation industry groups and Flight Standards Service representatives agree the educational approach is essential in advancing the safe and effective use of aircraft. Emphasis in the program is on updating the flight instructor, increasing his knowledge, skills and training techniques.

It is Agency policy to encourage and assist national, state and industry groups to conduct such programs. Setting the stage for a clinic required several days of preliminary work between Flight Standards personnel, the designated flight examiners and the local flight instructors who conducted the flying part of the seminar.

Aviation interests in the Austin area cooperated with the clinic by furnishing seven single-engine, four-place aircraft. Gasoline and general servicing were also donated.

The questions asked during the refresher clinic indicated that the flight instructors, in many instances, were learning something new. But the questions indicated something else—the instructors were genuinely interested in learning more about their profession. Their enthusiastic participation has prompted the Texas Aeronautics Commission to plan two more instructors clinics this year; other states have reported similar successes.

The Austin clinic demonstrated again what it takes to put together a worthwhile package—a progressive state agency, flight instructors who really want to broaden their scope and specially trained Agency instructors. Put them all together and they spell safety, the mission of the FAA. #

The subject is flying and how to teach the art as these instructors take a break during classroom sessions. Among them, the 20 who took the three-day course in Austin had over 100,000 hours flying time. The school combined theory with 12 flight hours.

They organized the clinic. From left: Tom Fiorillo and V. E. (Jack) Ball, both of the Texas Aeronautics Commission, and Laurance N. Lightbody, Southwest Region general aviation specialist who served as coordinator. Additional clinics are planned.

Carl L. Edmison, FAA Academy instructor, uses a model plane to demonstrate the correct landing approach attitude. The instructors made extensive use of visual aids in the course. Below: Academy instructor James W. Campbell chats with veteran pilot and instructor, Walter (Pop) Fullwood and Pop's daughter, Rosa Lea Meek, an instructor herself, with 5,000 hours behind a spinning prop, 2,000 as a flight instructor.

FAA CREW FOILS DEATH

By Frank W. King
Air Traffic Control Specialist
Salt Lake City, Utah

Atop Francis Peak, Utah, at the FAA radar site, the radio receiver's chatter broke the stillness of the calm winter morning. Whoever was calling was hard to understand. George C. Baird, FAA maintenance technician, asked the caller to repeat his message.

Robert Johnston, a U. S. Forestry Service employee, finally was able to tell Baird that he and a companion, Robert D. Doty, had been driving up the canyon from Farmington, Utah in small two-man snow vehicles to measure the snow pack. Suddenly, a snow slide cut in front of Doty, who was following Johnston by 100 feet. A second slide cascaded down, burying Doty under about 15 feet of snow.

Johnston rushed to the radio-equipped FAA garage nearby, broke the lock, and got the radio working. After giving Baird the information, he returned to the slide area to wait for help.

"I knew the FAA road crew was working in the lower canyon," Baird said. "We were going to be relieved that day after 13 days of duty and the FAA relief crew was on its way up. The National Guard boys, who also stand duty with us, hadn't left Salt Lake yet."

Via micro-wave relay telephone circuit, Baird called the Utah Air National Guard at the Salt Lake Municipal Airport and asked them to alert the Forest Service, FAA crews and the Davis County Jeep Patrol.

Baird then strapped on a pair of skis and started down the mountain, but wind, snow and poor visibility forced him to turn back to the security of the FAA's radar site.

In response to the emergency radio call, FAA crews and Air Guardsmen arrived at the avalanche scene. FAAers who participated were James R. Shaw, Wilford F. Teuscher, Raymond A. Menke, Jack L. Shurtliff, Melvin L. Stevens, Owen C. Cobb, David A. Reed and Raymond E. McCormick.

Later, Sheriff's deputies, a jeep posse and Forest Service employees arrived. Long, hollow avalanche probes were used in the desperate hunt for the entombed man. Suddenly, one of the searchers heard a muffled noise from below.

"I hear something down there! Here he is! Here he is!," a young guardsman yelled.

The men began to dig frantically. First they uncovered Doty's right hand, then his nose and face. He was dug out at 3:20 p.m., almost four hours after the avalanche buried him.

"I was lying on my right side after the slide knocked me off my machine," Doty told rescuers. "I managed to clear an air pocket in front of my face. Because of this, and because my parka hood stayed on my head, I was able to keep breathing."

Doty said he was unconscious most of the time. A square hole, made by one of the probe poles, was found in the snow close to where Doty's head had been. Rescuers credited the hole with saving Doty's life because it provided him with enough air to keep alive.

The accident apparently left Doty unharmed and he returned to his home in Logan, Utah that night. In a grateful letter to the FAA, he said: "This is an experience I will never forget and the work the FAA men did will remain in my memory." #

Using hollow probes rescuers search for Doty. Right: Four hours after he was swept from his sno-cat, Doty is uncovered. Apparently unhurt, Doty returned that night to his home.

William T. Zendler, NAAIS instructor, points to an aircraft radio recovered from a crashed plane. He explains to students how a trained investigator can determine what frequency was in use at the time the aircraft struck the ground.

Above: NAAIS instructors Alfred A. Dessert (left) and Clifford G. Sheker, Civil Aeronautics Board, examine an aircraft flight data recorder. Below: A DC-7 propeller hub assembly occupies the attention of these NAAIS students who will attempt to learn the engine power setting by determining the angle of the blade.

...The Probable Cause

To the untutored eye the torn, twisted and sometimes scorched wreckage of a crashed airplane represents an end to the question: "How did it happen—what went wrong?"

But crashed planes frequently have a tale to tell, one that could lead to corrective changes in design or flying techniques. Learning to comprehend this silent but eloquent language is not difficult; it requires thorough training in observation, assembling the facts, filtering these through a solid background in aircraft technology and arranging the result to produce a logical conclusion.

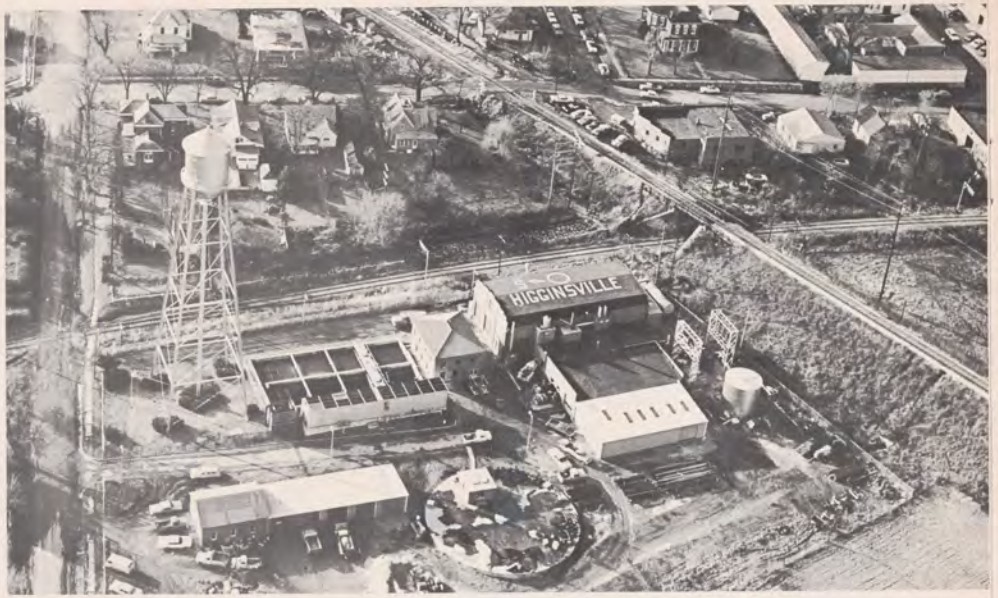
The language is being taught in an intensive six-week course at the National Aircraft Accident Investigation Course at the Aeronautical Center, Oklahoma City. Founded in 1963 as a joint venture of the Civil Aeronautics Board and the Federal Aviation Agency, the school now has an alumnae body of 93 skilled investigators, including one each from Australia, Canada, Great Britain and the Netherlands.

The course load is heavy for the 16 students enrolled in each of the six classes held each year. A daily eight hours of classroom work and a minimum of one hour per day outside study is the standard prescription. Thirty hours go into structures investigation and 25 each into powerplants and management of the investigation. The other 17 subjects in the course require from one to 22 hours of study. Before the books are closed for the last time and the students depart for their home stations they will have devoted 240 hours to understanding scientific investigation of aircraft crashes.

Dean of the seven man faculty is Rudolph A. Doering of the CAB, who succeeded Marion F. Roscoe, the school's first dean, who returned to Civil Aeronautics Board Headquarters in Washington. FAA men on his staff are: Alfred Dessert, who teaches operations, procedures, human factors and accident investigation photography; Jay W. Hickenlooper, a specialist in maintenance, powerplants and airframe; and William T. Zendler, aircraft systems, instruments, radio, controls and records.

The three other regular faculty members are CAB personnel. In addition to these, students receive instruction from visiting lecturers from the Agency, CAB, industry and universities. Traditional "sit-at-the-desk" classroom work is supplemented by laboratory exercises. Considerable use is made of visual aids and simulators at the FAA Academy. Shattered aircraft components salvaged from crashed planes provide the students with actual hardware, some of which plainly show the ". . . probable cause."

Aircraft accidents do happen—approximately 5,000 per year in the United States—and men will never cease trying to determine their cause and provide a remedy. The silent language is being deciphered and translated into safer aircraft and flying techniques by the graduates of the National Aircraft Accident Investigation School. #



Located near prominent landmarks likely to be seen from the air, the water tower and the railroad intersection, a roof-top sign painted by the Missouri Jaycees gives both the distance and the direction to the nearest airport. Above: Don Beswick points out the location of a proposed air park on a map for Largo before they inspect it from the air. Top right: Mysteries of the transit are explained by Bill Howard.

Above: Certificates of appreciation presented to the Central Region by the Missouri Jaycees are displayed proudly in the deputy director's office. From left, Donald E. Beswick, William J. McGill, Henry L. Newman, the deputy director and Michael A. Largo. Below: Michael A. Largo, sparkplug of the Missouri Jaycee's air marking and air park project, is an FAA motor fleet examiner.

HIGGINSVILLE AIRPORT... FIVE MILES THATAWAY

The man carrying a bucket of paint as he climbed to a roof-top in Higginsville, Mo., was no itinerant painter. He was a young business man and an active member of the Missouri Junior Chamber of Commerce.

His role as a painter was inspired by FAAer Michael A. Largo, an inspector-examiner in the Central Region's Administrative Services Division. Largo, who is also a state international director for the Jaycees, has mobilized his fellow Missouri Jaycees behind an FAA program which depends almost 100 per cent on the good will of aviation enthusiasts. His group is painting air markings on Missouri rooftops for the benefit of general aviation pilots.

FAA is still actively interested in air markings even though all Federal funds for navigation aids go into electronic equipment such as radar, ILS, VORTAC and related equipment. (The last Federal money for air markings was a $100,000 appropriation in 1947). An active program promoting air markings and advising cooperating individuals and groups is still carried out from FAA Headquarters by veteran aviatrix, Mrs. Blanche W. Noyes.

When Largo explained his project to Henry L. Newman, the deputy director of the Central Region, he got enthusiastic support. The assistance of William J. McGill and Bill J. Howard of Airports Division, Central Region, was enlisted, and Jaycees Largo and Donald E. Beswick were given pointers in promoting air park construction, air marking, site selection and use of surveying instruments. Armed with this information, the Jaycees have approached communities throughout Missouri and Jaycee groups in other states.

Higginsville's Chamber of Commerce was the first to act under the Jaycee's stimulus. Four additional air markings have been painted by the group.

The work of the Missouri Jaycees augments a program which has been carried out for some time by John Owens, Missouri director of aviation, through the Missouri Pilots Association. This group, spearheaded by Robert L. Williams of Sunset Hills, Mo., was responsible for the construction of 55 air markers in 1964 and has kept Missouri among the states which have active volunteer air marking programs. In 19 states, air marking programs are carried out by the state aeronautics authority, but in several others, like Missouri, civic groups or aviation enthusiasts conduct the programs voluntarily. In Indiana, the Air Traffic Control Association has constructed 61. The Ninety-Nines, Inc., is active in Texas and many other states.

The air marking and airport promotion program sparked by FAAer Michael A. Largo augments an existing Jaycee program, "Add An Air Park".

It also puts Largo in the position of carrying out his civic duties and promoting an FAA program on his own time. #

Air Force's mobile ground control approach (GCA) unit (left) and the control tower at Northway were flight checked by FAA's DC-3 in background.

POLAR STRIKE–A COLD WAR EXERCISE

Starting from upper left, clockwise: David R. Willman, flight inspection technician, uses theodolite to check glide angle of FAA's DC-3 making GCA approach to Northway. ● Gordon J. Baber (right) Operations Branch, quizzes S/Sgt Pierson, USAF, on traffic control procedures. ● Anchorage and Fairbanks bore brunt of heavy military traffic. Lee Devlin (right) and Freeman L. Lathan work aircraft at their positions. ● Gary L. Near at Northway FSS gives airport advisory to C-124 landing. ● From right, pilot Charles H. Paske and technician David R. William plan flight checks with Air Force personnel.

Parachute assaults and helicopter combat landings, simulated nuclear blasts and the roar of heavy military equipment on the move, heralded the start of Polar Strike as United States and "aggressor" forces recently slugged it out in Alaskan temperatures that plunged to 50 degrees below zero.

Polar Strike—a three week military exercise in which FAA played an important part—was the largest of its kind ever held in that northernmost state.

Each winter the United States stages war games in "the 49th" to maintain top military efficiency. These are grim exercises that test men, equipment and tactics in areas where 40 degrees below is normal and frostbite just a fingertip away.

Keeping any militant nation from using Alaska as a staging area for further aggression against the North American Continent is the constant concern of military commanders stationed there.

No Margin for Error

Keeping accurate tabs on aircraft movements in the region is a joint task of the FAA and the military. There is no margin for error in that outpost terrain; jet fighter aircraft and nuclear missiles are only minutes away from a potential aggressor's launching sites.

Not only is military/FAA cooperation a necessity for safe use of the nation's airspace, it is also vital for national survival in the event of war. Nowhere is there better military/FAA teamwork than in strategic Alaska.

This year, a full battalion of Canadian infantrymen from London, Ontario, joined United States forces as the "aggressor nation" attempted to take over 8,000 square miles in east-central Alaska.

Northway Airfield was in the thick of Polar Strike. It is owned by the U. S. Government and operated by the FAA. Located 270 miles northeast of Anchorage near the Canadian-Yukon border, Northway is the port of entry to Alaska for pilots flying from Canada. The Agency maintains a flight service station there to assist the many itinerant aircraft pilots who go through U. S. Customs.

FAAers Assigned to Northway

For Willis B. (Wink) Avery, area manager, and the seven other FAAers assigned to Northway, winter is almost a welcome respite from the heavy flying activity of the summer months. With decreased flying, Wink Avery and his team are mainly concerned with keeping the station in working order and the runway cleared of snow during long winters.

This routine was shattered at the FSS when Air Force four-engine C-124 *Globemasters* landed at Northway which had been established as the logistics base for the exercises. On the first day of the exercise, the giant cargo planes, which landed and took-off every 30 minutes, were loaded with tons of defense equipment.

Airmen, soldiers and their gear, food and fuel, communications and ammunition were off-loaded by experienced ground crews within minutes which permitted the *Globemasters* to return to Anchorage for more cargo with a minimum loss of time.

Mobile airport control towers and ground controlled approach (GCA) radar units were flown into Northway and Tanacross—fifty miles west—to handle aircraft movements during the war games.

The Alaskan Region was called upon to flight-check GCA radars and communications at the two locations and a third at Fort Wainwright. These checks were made under existing agreements between the Department of Defense and the FAA, which assigns to the Agency most of the flight inspection of military air navigation facilities.

Check Air Force Equipment

A Flight Standards crew made up of pilots, Charles H. Paske and Earl Brooks Jr., and technicians, David R. Willman, Wiley W. Knighton and Glenn A. Minnich, checked out the Air Force equipment making numerous approaches under radar control at each airport.

Air Traffic Division personnel also played an important role in support of Polar Strike. Anchorage and Fairbanks Air Route Traffic Control Centers handled hundreds of additional flight plans. Fairbanks Center was located in the combat area.

Gordon J. Baber of the Air Traffic Division certificated Air Force personnel to provide airport traffic control service at Northway, Tanacross and Big Delta. He gave on-the-spot oral and written examinations to the mobile tower operators. Ronald W. Logan of the Fairbanks Center briefed fighter pilots on traffic control and radar procedures at their request.

Polar Strike has ended. From lessons learned, new tactics will be developed and new techniques will be tried in subsequent exercises which keep the United States military forces razor sharp in their year-round mission of being ready to defend the northern approach to the continent.

FAAers in the Alaskan Region, well aware of the important role they play in the defense effort, are proud partners of the military in providing top cover for the United States. #

CHANGES IN FLIGHT ENGINEER TICKET PROPOSED

Major changes in flight engineer certification requirements have been proposed by the FAA in an effort to modernize this career field and bring it in line with technical developments in transport type aircraft.

In general, the proposal would update knowledge, experience and skill requirements for the flight engineer certificate. In addition, it would establish for the first time provisions for flight engineer class ratings.

Three class ratings would be issued to cover reciprocating, turboprop or turbojet aircraft. Aeronautical skill and experience requirements would be made compatible with each of the three class ratings.

Invalid in Two Years

Provision would be made for exchanging existing flight engineer certificates as well as limited certificates for the new certificates. Under the proposal, present certificates would become invalid two years after the effective date of the proposed amendment. They could, however, be exchanged within five years of the effective date of the proposed rule for a new certificate. The five-year provision is intended to provide a grace period for crew personnel who hold flight engineer certificates but who may be currently employed otherwise.

Class ratings would be added to the new certificates if the holder meets the required qualificatons for the rating. At present, class ratings are not required for flight engineers.

Holders of a flight engineer certificate with one of the new ratings would be able to obtain an additional class rating by passing that part of the written test and a flight test appropriate to the particular aircraft class. Satisfactory completion of an appropriate training program also would satisfy the flight test requirements.

Under experience requirements, the proposal would allow credit toward qualifying for an "unlimited" certificate for flight time obtained in high performance aircraft having less than four engines. Present rules provide for a "limited" certificate for flight engineers whose experience has been restricted to aircraft having less than four engines.

The proposal would cancel the limited certificate and recognize flight engineer experience obtained on such high performance airplanes as the Boeing 727, the De Havilland *Trident* and the twin-engine *Caravelle*.

Other proposed eligibility requirements would allow credit toward the flight engineer certificate for certain experience obtained by a co-pilot performing the functions of a pilot-in-command under the supervision of the pilot-in-command.

Skill requirements under the proposal would generally remain the same, except that an applicant would be required to take the flight test in the class of airplane for which he seeks the rating.

With regard to training courses, the significant change in the proposal would provide for the addition of an appendix to the present rules that would include flight engineer ground school and flight training course requirements. The present regulation fails to outline the requirements for an FAA-approved course of instruction for the training of flight engineers. The appendix would fill this gap.

FAA/SAC Cooperation Pays Off in Radar Returns

Joint FAA-SAC operational flight evaluations to check radar returns on the supersonic delta-wing B-58 *Hustler* bomber were completed in January.

Eighty-four GCA runs were recorded during a four-day evaluation period. Two degree and two and a half degree glide slopes were used. Data gathered on this evaluation are to be used in attempting to identify glide path position of aircraft with the operational characteristics of those aircraft which fly final approach in a nose high attitude. Included in this group are the Mach 2 B-58, the Mach 3 RS-70, and possibly some of the supersonic transport designs.

This is the second FAA-SAC operational evaluation held. The first was staged at Little Rock AFB, Ark., where low visibility maneuvering and circling approach characteristics of the B-58 were evaluated.

FAAers Earnest E. Callaway, chief of the Standards Development Division, Flight Inspection and Procedures National Field Headquarters, accompanied by Russel S. Fleming, electronic engineer, and Frank R. Parr, project coordinator, joined the Strategic Air Command Project Officers, Lt. Col. Robert Leuchtmann, 2nd AF Hq., and Lt. Col. John Parker, 305th Bomb Wing, at Bunker Hill AFB, Ind., on the joint evaluation project.

Coulter Named Deputy Director Of Agency's Southwest Region

A. Leighton Coulter, a veteran pilot and 18-year career FAA employee, was named Deputy Director of the Southwest Region by Administrator N. E. Halaby effective March 28, 1965. He succeeded Phillip M. Swatek, who was named Director of the Agency's Pacific Region.

In his new post, Coulter will work with the Regional Director administering the activities of the FAA in five southwestern states — Arkansas, Louisiana, New Mexico, Oklahoma and Texas. The FAA Southwest Region Headquarters is in Fort Worth, Tex.

Joined CAA in 1946

Coulter joined the Civil Aeronautics Administration, FAA's predecessor agency, in September 1946 as an aviation safety agent and spent two years in Alaska before transferring to Washington Headquarters. He worked as a flight operations specialist in the Washington office for eight years, followed by two years service as assistant to the Director of the Office of Flight Operations and Airworthiness. From March 1958 to March 1959, he served as special assistant to the Administrator. In 1959 he became chief of the Safety Regulations Division in the former FAA Bureau of Flight Standards, a position he held until September 1961 when he was named chief of the Southwest Region's Flight Standards Division in Fort Worth.

A native of Payette, Idaho, Coulter was a U. S. Naval aviator during World War II and served as a patrol plane commander in the Pacific. He left military service in 1946 as a Lt. Commander. He is still an active pilot with an air transport rating.

LARAMIE FSS IN RESCUE OF STORM DOWNED PILOT

Veteran pilot Dutch Van Dox of Chicago says he owes his life to the FAA.

Recently, because of a combination of mechanical difficulty and weather, he missed an approach to Laramie, Wyo., Airport and was forced to put his light plane down in the wilderness on a plateau northwest of the airport. Temperatures were hovering near the zero mark and a Wyoming blizzard howled around the downed plane.

Van Dox spent more than 20 hours in the plane awaiting rescue. Darkness and deep snow hampered progress of ground rescue parties, but for many hours the pilot was able to maintain radio contact with the Denver ARTCC and Laramie FSS.

A Trans World Airlines plane alerted to the search by the Denver ARTCC first sighted the downed aircraft and was able to accurately fix the location for ground parties and a Frontier Airlines pilot Capt. Jack Gardner assisted by guiding ground parties to the scene.

The key to the rescue was the Denver Center's communications capabilities.

When he returned to Laramie, Van Dox, an airline captain with Transocean Caribbean Airlines in Africa, thanked personnel at the FSS, stating: "The FAA in Laramie is the finest."

"If it weren't for the efforts of FAA personnel," the pilot, who was calling the Denver ARTCC from his motel, said, "I wouldn't be around to be climbing into a nice hot tub at this time."

He added that he wanted to let the entire general aviation industry know of his personal experience to illustrate the time, expense and effort expended in the interest of his safety and welfare.

Denver ARTCC personnel who assisted in the rescue included Dee E. Rudd, watch supervisor, and Thomas J. Florea and LaVern R. Stephens, both sector controllers. Facility personnel at the Laramie FSS participating included Cornelius H. Weidner, station chief, Joseph A. McChesney, Wesley D. Butler, George E. Jauss and Richard H. Guy.

In a letter to Administrator Halaby, Van Dox said: ". . . On the night of 9 Feb. 1965, I made a forced landing 14 miles northwest of Laramie, Wyo., in a blizzard. Only through the efforts of a lot of people coordinated through Cornelius H. Weidner and the rest of the men at the Flight Service Station at Laramie, am I still alive.

"If I were you I would be so proud of all the men (and women) who make the Federal Aviation Agency, I'd burst. Those men at Laramie are not exceptions but typical of the dedicated men who can qualify for careers in the Agency's facilities and centers and towers.

". . . I personally want to call your attention to the expertness that your people deliver their trades with and that I appreciate it with my life."

Stiff Penalties Are Prescribed For Airman Examination Cheats

Cheating and other irregularities committed in connection with airmen tests and related records will automatically result in a one-year disqualification for a certificate or rating, according to new regulations issued by the FAA.

Such violations would also be a basis for suspending or revoking any certificates or ratings already held.

The new rules were effective March 20. They apply to the examination and records of pilots, flight instructors, ground instructors, flight engineers, tower operators, aircraft dispatchers, mechanics, repairmen and parachute riggers.

Penalties for Fraudulent Data

Similar penalties will apply in cases of fraudulent or intentional falsification of applications for airmen, ground instructor or medical certificates or ratings; falsification of entries in logbooks, records or reports to show compliance with any requirement for a certificate or rating; and fraudulent reproduction or alteration of certificates or ratings.

Prohibitions regarding written tests include copying or removing test material; receiving or giving assistance; taking the test for another person; and using any unauthorized material while taking the test.

It also is possible for civil penalties to be imposed under the new rules, either alone or in conjunction with sanctions.

HERCULES NOW WEARS "CIVVIES"

Southern Region Director Arvin O. Basnight (center) shares flight deck of Hercules 382 during test flight with A. E. Flock, Lockheed-Georgia chief engineer (left), and FAA's H. E. Waterman, of Hercules certification board.

Hercules 382, nee Air Force C130, drones on to its recent record flight of 25 hours, one minute, eight seconds. Hercules was second cargo carrier certificated in Southern Region in two-week period; the other, Air Force C-141.

VALUE ENGINEERING IS EVERYBODY'S BUSINESS

Cutting costs without a reduction in quality or safety was the goal of the Southwest Region when it held its Value Engineering Seminar last January—the first in-house study of this type and probably one of the first in the non-defense agencies.

The course was a 40-hour prototype program spread over a two-week period. Fourteen engineers, specialists and supervisors participated in cost analyzing projects from gravel access roads to antenna towers. Final team reports indicate a potential savings of several thousand dollars on the recommendations, if adopted by the region.

Value engineering can be thought of in different ways. Value is defined as the lowest price one must pay to provide a reliable function. Value engineering is a management tool which provides an organized approach to eliminating unnecessary costs.

Industry has other names for this tool which are appropriate: value analysis, value assurance and value control. They all use the philosophy and methodology developed over the years. This philosophy and technique, plus a team of positive-minded, technically-trained people, are all the tools the manager needs to eliminate frills and unnecessary costs in equipment and material. In practice, it boils down to a common sense approach to eliminate expenditures which provide neither quality nor necessary functions.

Approaching the situations presented them, the Southwest Region "students" first studied the project for background information and then reduced the equipment or procedure to their basic functions. With this information they proceeded to speculate on an alternative that would cost less but perform the same duties without any reduction in quality or service. Their recommended action was then checked with the supervisors responsible in that operational area for desirability and feasibility.

Ray H. Fowler of the Installation and Materiel Division's Fiscal Program and Planning Branch conducted the seminar after attending classes at General Dynamics Corp. in Fort Worth. He used ideas gathered in the course and from managers associated with value engineering in other industries and tailored them to the Agency's needs. Representatives from four major aircraft and electronic firms in the Dallas-Fort Worth area also assisted in the FAA seminar.

Each participant in the class was enthusiastic in his search for better management of money and equipment and each, in his own work, is expected to trigger greater interest in savings through employee awareness. With interest running high, value engineering will become everybody's business.

WHIRLYGIRL CHAMP GREETED

Center Manager William F. Harrison welcomes Gay D. Maher to NAFEC at end of the longest solo flight ever made by a woman in a helicopter. Mrs. Maher flew from coast to coast in 11 days, making 33 en route stops, to deliver the chopper to its purchaser in New Jersey. She flew the entire distance under 1,000 feet.

Temblor Damages Airport, Halts Communications on Shemya Isle

Taxiways took a beating from temblor that hit Aleutian chain last February. Damage to facilities was slight.

A temblor—the latest in a series which have continued to shake the 49th state since the Good Friday earthquake of 1964—hit Shemya, Alaska, an island on the tip of the Aleutian chain, on February 3. It measured 6.5 Richters on seismic recording instruments. It started at 6 p.m. and for five minutes shook the Shemya Air Force Base where five FAAers are stationed.

Damage to buildings and facilities was slight, although some breaks occurred in taxiways.

Station Manager Charles H. Shenkel reported that all five air-ground HF transmitting channels were found to be inoperative when the shaking subsided. This left only one VHF channel in service; HF receivers were not affected.

Sixteen hours later all transmitting channels were restored after a hectic night of trouble shooting by electronic maintenance technician Kenneth W. Zahn and by Air Force personnel. High winds, heavy rains and flooding conditions hampered their efforts until the difficulty was located at the remote transmitter site. Spaced down-leads from the far end of the Tokyo rhombic antenna to its associated dissipation box had become twisted, thereby shorting out the entire system. Emergency repairs were made; the antenna was returned, reloaded and the facility was back in service the next morning.

Shenkel singled out Zahn and air traffic control specialist Robert J. Bevans as contributing most to the rapid recovery of the Shemya station.

FAA HELPS AGENTS BAG DOPE SMUGGLER AT SUTTER COUNTY AIRPORT

When a Canadian-registered Mooney *Mark* 20 touched down at Sutter County Airport near Yuba City, Calif., the evening of Feb. 11, 1965, the FAA set in motion a chain of events which helped to crack a dangerous international dope ring.

The pilot of the plane was a Canadian bush pilot who was returning to Canada from Mexico.

FAA facilities had been asked to be on the lookout for the plane after Narcotics Agent Frank L. Briggs advised the Western Region that a cache of narcotics was believed to be aboard.

Richard P. Sokoloski, specialist on duty at the Marysville FSS, Marysville, Calif., notified the regional duty officer that the plane was on the ground after receiving word that the plane landed at Sutter County Airport. The regional duty officer alerted Briggs who, with another agent, made immediate preparations to fly to Yuba City to make the arrest.

Since no immediate commercial schedules were available, the FAA arranged to fly the agents to Yuba City Airport in an FAA aircraft. Cecil J. Coles, FAA mechanic, and Leon (Curt) Whalon, Flight Standards pilot, were alerted in the early hours of Feb. 12.

When the plane was searched, a cache of narcotics worth approximately $50,000 on the illegal drug market was discovered under the instrument panel.

The pilot was arrested by agents as he showed up at the field ready to continue his northward journey. He has been charged with violation of the Federal narcotics law and is being held on $25,000 bond in Sacramento.

At about the same time, two men believed associated with the pilot were arrested by Canadian narcotics agents.

Following the arrest of the bush pilot, the Los Angeles office of the Federal Narcotics Bureau paid tribute to the FAA for its cooperation in the case.

"We would not have been able to make this arrest without FAA assistance," said Agent Briggs. He credited the Agency's alert personnel and extensive network of communications with making the apprehension possible.

Maintenance Specialists Given Checkout on SPAN

Seven Central Region Systems Maintenance employees recently received certificates after completion of training on the computer portion of Stored Program Alpha Numeric (SPAN) conducted by UNIVAC Company, a division of Sperry Rand Corp., at St. Paul, Minn., and Utica, N. Y.

SPAN, an electronic system which displays aircraft identity and altitude directly on long-range radar scopes, is now being installed at the Indianapolis ARTCC. It is the first of its type to be installed in the Central Region.

Those receiving SPAN training certificates were: Wayne B. Miller, David C. Kouns, Charles R. Houghtby, Drexel D. Collins, Alfred L. Stout and William E. Adkins, all systems maintenance employees, and William S. Shaw, communications program engineer, all of Indianapolis. Certificates were presented by John E. Shaw, chief of the Indianapolis Systems Maintenance District Office.

RE-FORMERS AT WORK

Seventeen Agency form managers took part in an FAA/GSA Forms Management Workshop in February in Washington where discussions centered on improving methods of handling FAA's 8,000 forms. From left, Ernest D. Cope, Todd Thoman, Louise M. Hanney, Charlotte D. Owens, Eunice F. Staley, Claude W. Kennedy and Donald A. Williams, were present at the one-week session.

Parachute Club Looking Better As Toni George Joins Chutists

Antoinette C. (Toni) George, an attractive, 20 year-old brunette secretary in the Flight Standards District Office at the Washington National Airport, celebrated Inauguration Day by making her first parachute jump at Manassas, Va.

Miss George has been training with the Tri-Par Sport Parachute Club since November 1964. She became interested in parachuting through her contact with applicants taking parachute rigger examinations.

Toni thinks sport parachuting is a great sport and not half as scary as she first thought. "In fact," she said, "the hardest part of the whole operation was getting into the plane with all that jumping gear on.

"The exit was easy. The chute opened automatically. I heard a flapping noise as the canopy deployed and then felt a tug on my harness. I looked up to see one of the most beautiful sights in all the world—the open canopy. The quietness and the view up there was overwhelming."

Anchorage Gets Flagpole

Howard H. Bennett of the Alaska Patrol System raises colors on the first flagpole to be installed at FAA Regional Headquarters in Anchorage.

NAFEC CITED BY ARMY

The Evaluation Division at the National Aviation Facilities Experimental Center has been commended by the Commanding General, Maj. Gen. H. W. O. Kinnard of the 11th Air Assault Division for extending close cooperation in a project recently completed in the Center's simulation laboratory.

The project involved the simulation of Army helicopter IFR flights.

Individual members of the Division cited for their participation are: Division Chief H. V. Hermansen; Gus S. Hall, chief of the branch which handled the project; Howard F. Slattery, section chief; Donald O. Brown, project manager; and John J. Maurer and Lt. Col. John H. Hunt, USAF, project members. Also commended was Ellis C. Langford, FAA Technical Services Division.

KRIEGER AT DEDICATION

Wiliam R. Krieger chief of the Western Region Flight Standards Division, represented FAA at the dedication of downtown Los Angeles' first helistop 32 stories above the street.

Flights to and from the unique new helistop are regulated from a master control panel in the sub-basement of the $25,000,000 office building complex. Rooftop wind speed and direction are registered and 24-hour radio contact is maintained with the landing helicopter from this subterranean control tower.

Helicopter Association of America's Hal C. Connors directed the day's traffic.

HIGH RISE STRUCTURE REGULATIONS SIMPLIFIED

Notifications to the Federal Aviation Agency about proposed structures which might adversely affect air navigation have been simplified by revision of Part 77 of the *Federal Aviation Regulations.*

The revision, which becomes effective May 1, also consolidates FAA obstruction standards and streamlines Agency procedures for determining the impact of proposed structures on air navigation.

Amended FAR Part 77, for example, will require notification on any proposed construction or alteration which would extend more than 200 feet above ground level at the site. The regulations currently require notification on all proposed structures rising more than 150 feet above ground level.

Exceptions from this requirement will be permitted when the proposed structure would be shielded by existing structures or topographic features of equal or greater height and would be located in the congested area of a city or town "where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation."

New notification criteria for proposed construction and alteration in the vicinity of airports also is specified. The notice requirements will be applicable for airports either listed in the current *Airman's Information Manual* or operated by a military agency.

Amended Part 77 also simplifies the provision covering FAA acknowledgment of notices of construction proposals. The acknowledgment will advise each construction sponsor on two subjects—the possible application of the Agency marking and lighting standards and whether the proposed structure may be a hazard to navigation.

On the first item, the acknowledgment will indicate whether the construction proposal would be of a type included under the provisions of the FAA Manual on "Obstruction Marking and Lighting" and, if so, how the structure should be marked and lighted. On the hazard question, the acknowledgment will generally state whether the construction or alteration would exceed any of the obstruction standards prescribed in the amended regulation.

It also will include either a determination on whether the structure would be a hazard to air navigation or advise that further study is required to resolve the issue.

TURN BACK THE CLOCK

Washington's first control tower, installed in 1934 was at the old Hoover Airport. Adding to photo's interest is the man in foreground. Now a high-ranking FAA official, he was Washington Operations Manager for American Airlines. His name? G. Ward Hobbs, director, Bureau of National Capital Airports.

NINE SHARE IN $4,500 TRAFFIC CONTROL MELON

They saved the Government $1.6 million. Standing, from left: Raymond L. Goodman, Lenville A. Maxwell, Dayton Jenkins, James V. Flanagan, Felton E. Jackson, William J. Evans, John P. Keenan and J. Griff Edwards. Seated are A. Maxine Ball, flanked by Associate Administrator David D. Thomas and ATS Deputy Director Clifford P. Burton.

Nine Air Traffic Service employees in Washington, D. C. whose recommendations saved the Government more than $1.6 million in programmed funds have been awarded commendations and $500 checks.

Each was cited for "special service" in connection with a review of FAA work projects such as the installation of control towers, instrument landing systems, navigation aids, radars and other facilities and equipment. Acting on instructions from Administrator N. E. Halaby, the group examined more than 6,000 projects and recommended changes which will meet the requirements of the growing aviation community at less cost.

David D. Thomas, FAA's Associate Administrator for Programs, in making the awards, noted that the review of work projects is a continuing task within the Agency.

"However," he added, "this group exercised unusual initiative in accomplishing extensive savings and has earned special recognition and reward."

Lost Pilot Finds Air Strip After 16-Mile Taxi Run

Zuni (N. M.) Flight Service Station specialists make several flight assists a year for pilots in this isolated region near the New Mexico-Arizona line, but a recent one was different. They brought a pilot and his plane to Black Rock strip in an unusual manner—by land.

It all started when the pilot of a Cessna 150 reported he was altering his flight plan course from Albuquerque to Winslow because of snow. He said he was calling for himself and another Cessna pilot enroute to a West Coast flight school and that he would report again over the St. John, Ariz., VOR. Specialist Jose R. Hernandez, working the Zuni inflight position, could not get any further response from the pilot.

After a lapse of 54 minutes the pilot again called Zuni, saying the two planes had waited out the weather at an abandoned ranch airstrip, but had run into more snow when they were airborne. The other pilot had returned to the ranch strip, but the pilot now calling could not locate the strip on his chart and wanted assistance in finding a landing spot close to the strip.

As the Zuni VOR was temporarily out of service, Hernandez used the St. John VOR to direct the pilot toward Zuni. He was spotted by Zuni SMS technicians and directed to the Black Rock airstrip by Hernandez. Gusty winds overturned his plane on the landing roll, and both FSS and SMS personnel assisted the pilot, shaken but unhurt, from the plane.

The pilot wanted to locate his companion and described the ranch airstrip. From the description, SMS Chief William H. Thorn pieced together his knowledge of the area, pinpointing the possible location. FSS Chief Clayton E. Beckner headed the search party by car in a full-scale blizzard and located the plane about 20 miles from Zuni Pueblo. The plane could not be flown out so it was taxied 16 miles along the back-country road to Black Rock airstrip—to the astonishment of a few sheepherders. When the weather cleared, the pilots departed for the West Coast in the "rescued" plane.

Regional Employees Get Course In Air Traffic Familiarization

An air traffic familiarization course for 13 employees not assigned to ATC activities was completed recently at Eastern Region Headquarters.

The four-day course included a tour of the New York ARTCC at Islip, L.I., and the tower and flight service station at adjacent MacArthur Field to observe various control techniques first hand and lectures covering air traffic control.

James P. Hennessy, Eastern Region Headquarters, conducted center and FSS instruction and George Powell of the Newark Tower handled terminals.

Those attending were: Williams Collins, assistant district airport engineer, Washington; John Middleton and James Bushee, airport engineers, Columbus; Chester P. Cherry and Ronald Henrikson, airport engineers, Harrisburg; John B. Komick, assistant district airport engineer, Boston; and Samuel Greenman and Samuel G. Marotta, electronic engineers; Vincent Scarano, construction management engineer; Kenneth J. Humbert, general engineer; Emma F. Levert, Personnel and Training Division, and Salvatore Maggio, Compliance and Security Division, all of Eastern Region Headquarters.

Closed Circuit Television Saves Pilot From A Wheels-Up Landing

Closed-circuit television is proving a real boon to controller and pilots alike at Los Angeles International Airport.

During a period of poor weather recently, controller Richard J. Mathews watched on closed-circuit TV as a light plane approached runway 25L. The plane was a quarter of a mile from touchdown when Mathews noted that its landing gear was in the up position.

He immediately advised the pilot who lowered the gear and was able to land without incident.

DRIVES 188 MILES A DAY

Controllers at the New Orleans ARTCC think U. S. Highway 61 between New Orleans and Baton Rouge should be renamed "Sullivan's Drive."

Since April 5, 1963, when air traffic control specialist Douglas G. Sullivan started work at the Center, he has driven the 188-mile round trip between the two cities, making a 4½-hour round trip each work day. As of Feb. 5, 1965, Sullivan has logged approximately 2,047 hours of accident-free driving and 85,540 miles.

Hazel McKendrick Wins 'Copter Card; Is 85th Woman to Qualify

After taming the 'copter Hazel H. McKendrick is pinned by B. M. Kitzmiller and FAA Inspector Turner

Mrs. Hazel H. McKendrick, flight specialist at the Dallas FSS, fulfilled a long-cherished dream on Feb. 15. That was the day she became a "Whirlygirl"—the 85th member of the exclusive group of women helicopter pilots.

A private pilot since 1944 and holder of a commercial license and instrument rating, Mrs. McKendrick soloed the helicopter after five hours of instruction. When Principal Operations Inspector Menzies W. Turner of the Dallas GADO certificated her after the final flight check, Mrs. McKendrick became the sole current helicopter-rated pilot in the FAA family of women employees.

Mrs. McKendrick started flying in 1943 while a student at Texas Woman's University to qualify for WASP duty, but took a position with the then CAA instead. She holds a bachelor degree in general education and speech.

Last summer Mrs. McKendrick competed in the Powder Puff Derby, flying a Cessna 182. She plans to enter the race this year.

THEY'RE OUTSTANDING

Certificates of Outstanding Performance were presented to nine controllers in a brief ceremony held recently at the Cleveland Air Route Traffic Control Center. All former Detroiters, the men were cited for superior performance at the Detroit ARTCC before it was phased out and its operations were transferred to the Cleveland ARTCC.

Receiving certificates were: Clifford J. Essenmacher, Jack G. DeYoung, James C. Pearson, Phil D. Patterson, George E. Lloyd, Richard L. Rago, Leo W. Keith, Charles E. Russell and James A. Scrivener. George C. Campbell, Cleveland ARTCC chief, presented the awards.

AERO CENTER T-29 TESTS NEW NAVIGATION AIDS

Flight evaluations of the new Pictorial Display and Course Line Computer (PD/CLC) are now in progress by the Flight Inspection's Standards Development Division in Oklahoma City.

The Aeronautical Center's Convair T-29, which is the test laboratory for the new system, utilizes course and distance signals from the standard VORTAC as the navigation system signal source.

The VORTAC signal is converted by the system into a visible red "blip" on a transparent map in the cockpit, showing the pilot precisely where on the map his aircraft is located.

The current series of tests are being run in the T-29 and Aeronautical Center flight simulator. They will be followed up by *Queen Air*, DC-3, and KC-135 evaluations. The objective of the flight evaluations is to determine the advantages and savings in miles, flight time, and dollar cost by utilizing PD/CLC in the enroute and terminal environment as compared to the cost of other navigation methods.

The flight evaluations made at the Aeronautical Center are to be used to determine whether a cost/benefit advantage exists which will warrant the installation of the PD/CLC in air carrier aircraft for further operational tests on established routes.

Personnel involved in the evaluations include Norman C. Heidger, Donald W. Geiger, and Lee G. Schoen, all of the Aeronautical Center's Flight Inspection National Field Headquarters.

New Handbook Has Latest Word on Heliport Design

A revised, up-to-date FAA guide on the design of all types of heliports is now available.

The *Heliport Design Guide* contains recommendations on site selection, physical layout characteristics and operational safety. The new manual also contains a classification of heliports and helistops as well as a review of local and Federal regulations. It replaces a similar FAA circular published in 1959.

As heliports are built by local authority, the FAA recommendations are advisory rather than mandatory. However, the responsibility of the Federal Aviation Agency for operational safety of helicopters, both in the air and on the ground, requires the observance of minimum operating standards by heliport owners and operators.

JENKS EARNS HIGH AWARD

Flight Standards Service Deputy Director Clifford W. Walker (left) pins the FAA Meritorious Service Award on Arthur H. Jenks following his recent disability retirement after 24 years service. Known in aviation circles world-wide as "Mr. Flight Inspection" Jenks is a prolific writer and expert on navaids.

LANCE'S CAR IS A MOBILE FIRST AID STATION

When Curtis J. Lance, Project Management Branch construction representative, I&M Division, in the Southwest Region, finished his American Red Cross first aid course last summer he didn't hang his certificate on the wall to admire. He went right on learning—and teaching others.

Lance, who became an instructor in August, holds classes whenever his services are requested either by the FAA or other groups. As a construction representative he covers much of the Southwest Region and courses are arranged to meet his schedule. FAA classes are held after regular working hours and attendees buy their own supplies.

Recently one of Lance's ex-students, Civil Engineer George M. Lawshe, proved Lance had taught him well when he came upon the scene of an automobile accident near Gallup, N. M. Lawshe promptly gave first aid to the victim who suffered a severe cut from the shoulder to below the elbow by sterilizing the wound, joining the severed parts and applying bandages.

Since his initial course Lance has taken other advanced first aid courses.

Lance has also equipped his personal car, which he has driven more than 45,000 miles since becoming an instructor, as a mobile first aid station.

ATC Simulation Conference Set for May at NAFEC

Approximately 100 air traffic control experts from throughout the Agency are expected to attend a two-day conference on air traffic control simulation at the National Aviation Facilities Experimental Center (NAFEC), May 11-12.

The conference, sponsored by Systems Research and Development Service (SRDS) has three goals: to bring present users and potential users up to date with SRDS simulation laboratory capability: to update SRDS personnel with present and future problems in the operational air traffic control environment; and to explore ways of using the simulation laboratory to help in solving these problems.

The air traffic control simulation program has grown from a single simulator with six target simulators which was assembled in Indianapolis in 1951, to the intricate system at NAFEC in which 108 target generators can simultaneously provide aircraft to be "flown" in the complex system of today. Future air traffic control systems and procedures can be reproduced on the simulator so that controllers can be trained in advance to handle such equipment as the supersonic transport.

The conference will take the form of a combination briefing-discussion-demonstration. Comments and suggestions for the conference are being solicited from throughout the Agency by Marvin H. Yost, RD-65, FAA Headquarters.

Fast Action by Tower Men Saves Helicopter Crew

When a military helicopter crashed two miles southwest of the Colorado Springs, Colo., injuring its occupants, FAA personnel from the Peterson Field Tower played life-saving roles.

Because of darkness, it was not possible to pinpoint the exact location of the crash. Robert W. Stewart, who was on flight data position at the time, searched the area in his private jeep and quickly located the crash.

He gave first aid to the two men and pinpointed the location by flashing the jeep's lights, which were visible from the tower. Joseph Vegh, an electronics maintenance technician who was in the tower, then led an emergency crew and an Air Force ambulance to the site in a radio-controlled vehicle.

Without this quick response by FAA personnel there could have been serious injuries or possible loss of life, according to John F. Keleher, chief of the Peterson Field Tower, Colorado Springs, Colo., and William N. Gibb, watch supervisor.

FAA/USAF Join Traffic Control Operation Set Up at Oxnard AFB

The Western Region and Headquarters, Western Communications Region, Air Force Communications Service, at Hamilton Air Force Base have signed an agreement covering RAPCON operational changes.

Under the agreement, the FAA will provide a chief and five watch supervisors for the mobile RAPCON at Oxnard AFB in California. Radar approach control service will be provided for Ventura County Airport and Oxnard AFB. Controllers for the remaining RAPCON positions will be provided by the military.

Responsibility for approach control service at Kingsley Field, Klamath Falls, Ore., was transferred to the military.

Labor Union Confers Honorary Membership on NAFEC's Manager

William F. Harrison, manager of the National Aviation Facilities Experimental Center, recently was made an honorary member of the Bricklayers, Masons and Plasterers' International Union of America. In the 92-year history of the Union, only 187 persons in the nation have been so honored. Presenting the credentials, Charles P. McCarthy, president of Atlantic City Local 33, said that Harrison was honored in appreciation of his understanding of labor matters and for the excellent labor relations program conducted at NAFEC.

Happy Controllers

Associate Administrator David D. Thomas, commends Afghan controllers, Qiamuddin Ahmadi (left) and Rafiuddin Rafat, upon completion of FAA's air traffic controller course. It included duty at Allentown, Pa. CS/T.

ON THE SCOPE

RISKS LIFE: Arville J. Ludwick (right) of SW Region gets Certificate of Merit from Mervin M. Martin, for saving a pilot from a burning aircraft.

EYES RIGHT: Honolulu ARTTCer Herbert T. Kumabe, had a reason to be proud when son, Bert, was nominated for appointment to the USAF Academy.

PLANS DEFENSE: Paul W. Dahl, gets "Employee of the Year Award—1964" from Dulles Manager P. F. Steiner for the airport's Defense Readiness.

EXPLORERS: Explorer Service Program officials met at Headquarters to discuss FAA cooperation. From left: Dr. C. R. Brooks; Dr. Mervin K. Strickler Jr., J. H. Browne and Maj. Edward M. Crockett.

QUEENLY INTEREST: Her Majesty Queen Mother Elizabeth, visited the JFK Tower on a stopover in New York. From left: C. B. Pattarini, N. Y. Port Authority, Theodore C. Ubel; and William Parenteau, tower chief.

SUGGESTIONS: Left: FS Aircraft Inspector William J. S. Chong (left) shows his special tool to Kam Wing Yap and Enichi Matsuda (right) for which he was awarded $1,030. Right: Willis Cannon, crew chief, Honolulu ARTCC, modified a lighting arrangement on a control board chart which netted him an award of $150.

AFTER HOURS

NATIVE'S RETURN: Hermann N. Kurriger and wife Lenore, who surprised him at Christmas with round trip flight from Anchorage to Munich, Germany.

WINNER: Oren K. Haggbloom (right) chief, Flying Cloud Tower, Minneapolis, accepts award for his facility's excellent service to general aviation.

GOOD DEED: Boston ARTCC personnel contribute $533 to a hospital for the retarded. Waldo Aldrich, (right) assistant chief, hands check to official.

PAYOFF: Controllers at Washington Center buy an airplane for their Club. William J. Grupe (center right) treasurer, hands check to the former owner. Other members stand by to fly the new Cessna 172.

TICKETED: New Pacific Region Director Phillip M. Swatek was tagged by Jane Satoda for FAA Club membership almost before he unpacked his trunk.

HEARTLINE: Jack W. Ferguson (left), Aero Center Employee Association president, presents radio to John M. Gurley of the Sunbeam Children's Home.

LONG TIME AGO: Clarence Clabaugh, Allentown GADO (center), taught Maurice K. Osterhout, NAFEC (left), to fly and he soloed Albert DeRonde.

TOASTMASTERS ITALIANO: Rome-based FAAer Lester H. Saucke (right) accepts charter of first Toastmaster Club in Rome from M. Masiani (left), past president of the Naples Toastmaster Club.

TECH TALK

ONE FOR THE RECORD. The Agency has proposed a rule to relocate and upgrade the accuracy of flight recorders in order to improve the dependability and survivability of this vital accident investigation tool.

The proposed rule would require compliance after June 1, 1966.

Flight recorders automatically record on tape such aircraft operating data as headings, altitude, vertical acceleration (gravity forces), airspeeds and elapsed time. These are vital in determining the probable cause of aircraft accidents and incidents.

The proposed rule would require flight recorders to be located in the tail section or elsewhere to the rear of the plane's pressurized compartment and away from any aft-mounted engines.

Accuracy would be increased under the proposed rules by requiring airspeed, altitude and heading data to meet accuracy limits prescribed for the first pilot's flight and navigation instrument system.

Recorders would be tested for ability to give intelligible readout after being subjected to impact shocks of 1,000 G-force peak acceleration, impact shear forces equal to a 500-pound steel bar dropped from ten feet and static crash forces of 5,000 pounds.

JET FUELS EQUALLY SAFE. After a year of study and investigation, the Coordinating Research Council of New York, a scientific body representing the American Petroleum Institute and the Society of Automotive Engineers, has reported that ". . . no clear-cut basis now exists to confirm that either kerosene or JP-4 (a mixture of gasoline and kerosene) aviation fuel offers more over-all safety qualities than the other."

The Council undertook the study in February 1964 at the request of Administrator Halaby following the fatal inflight explosion that occurred in a jet airliner Dec. 8, 1963, near Elkton, Md. The aircraft was carrying a mixture of JP-4 and kerosene when it exploded in a lightning storm, giving rise to the question of the relative safety of the two fuels including the effects of mixing the two.

To conduct the inquiry the Council drew on the talents of a team of fuel experts from the petroleum, aircraft manufacturing and airline industries, including representatives of FAA, National Aeronautics and Space Administration and Naval Research Laboratories.

The research group confirmed Mr. Halaby's contention that there is almost a complete lack of information regarding the details and extent of fuel spray and mist formation under actual flight conditions. FAA and the Naval Aviation Experimental Center, Philadelphia, Pa., are already working on a high priority program to obtain detailed engineering data on fuel spray and mist formation encountered under actual flight conditions.

TOPPING THE TANKS. Before the end of this year the five-million-gallon capacity aviation fuel tank farm at Dulles International Airport will be filled largely by two spur lines tapping a 1,300-mile pipeline stretching from the Gulf Coast to a terminal in the New Jersey-New York area.

The first spur, opened in February in the vicinity of Fairfax, Va., is now delivering more than a million gallons a month; the second branch line to be completed later this year is expected to deliver 3 to 4 million gallons a month. Previously, Dulles had been supplied entirely by tanker truck from Baltimore.

The Dulles' aircraft fueling system presents a startling contrast to older methods. At Dulles a 28-man force handles 4 million gallons a month while some 120 are needed at Washington National Airport to pump 5 million gallons.

SEER IN SRDS. Jack W. Grewell, chief of the Systems Research and Development Service's Program Analysis and Reports Staff, lays no claim to clairvoyant powers but things he talked about six years ago are coming to pass.

In a paper presented at the World Congress of Flight on April 16, 1959, in Las Vegas, he said: "Now to continue on Cloud 99, I expect that it will be possible to file flight plans by means of an ordinary telephone."

The first step in this direction has already been made, as reported in the January 1965 issue of *Air Transport World* in the article "Reservations by Touch-Tone Telephone."

The author describes a new development in communication by telephone which "can revolutionize airline reservation processing and flight information inquiries." Prepunched cards containing the flight number, segment and account identification will be inserted in the telephone instrument and push-buttons used to address a central computer. If the reservation is available, the transaction is made and the customer is billed automatically. If not, reservations sales agents could "inquire" from other airlines' computers about alternate space. The Touch-Tone method, according to the author, could be extended to include operations and administrative data, flight arrival and departure information and other kinds of routine airline data processing.

In his technical treatise Grewell went on to say: "It is possible that the aircraft and airman certificate issued in the year 2000 will be a card which can be inserted into the telephone and used in flight plan filing by depressing a single button. Variable information which must be entered will include the proposed point of departure, destination, fuel on board and proposed takeoff time. Route and altitude information will not be required since they will be determined by machine analysis."

The only point at which Grewell appears to have erred is the matter of time. With a rather elementary form of such a system just over the threshhold, it seems safe to predict an advanced, sophisicated version such as he described much sooner. The glow can be seen on the horizon.

Touch-Tone phone uses punched cards for automatic dialing direct to computers.

YOUR HEALTH

LOSE A POUND A WEEK AND ADD YEARS TO YOUR LIFE

If you were asked to carry two five-pound cans of lard around all day for no reason, you'd think it was a crazy request. But, if you're 10 pounds overweight, then you're doing just that, figuratively speaking.

Perhaps you've been putting on weight so gradually that you haven't even noticed. It's easy, but dangerous, to ignore even a few additional pounds each year.

Obesity is a major health problem. Overweight makes people susceptible to illness and threatens life itself. Some form of chronic illness is present more frequently in overweight persons than in the non-obese. For example, in the 40-59 age range, chronic illness was found in 206 of 1,286 overweight subjects studied. This was nearly twice that of the non-obese group.

If pounds are sneaking up on you, consult your physician who will recommend a proper diet.

Start now—not tomorrow or next Monday—procrastination only adds pounds.

Stick to losing a pound a week, and you'll probably be able to hold that line. Shedding a pound a week has its advantages. The weight loss is so gradual that you aren't apt to lose your good disposition, nutritional balance or cause any major twist in daily eating.

Crash and fad dieters may lose with drastic speed. But records show that after a short period of starvation, the weight comes back. Crash diets can be dangerous to health and never really work. You cannot roll off, bump off, drink off, melt off, or sweat off pounds. So don't waste your money on these fads.

Even if sugar substitutes are used in desserts, there still may be calories in the other ingredients. There's no nutritional value in noncaloric sweeteners and very little in special low calorie foods. Unfortunately, much of the so-called nutritional information in print or on radio and TV can be misleading. There is plenty of sound authentic literature available today from your health department or your doctor.

A simple formula to help you lose weight is to do more exercise and eat less. For example, passing up one 300-calorie candy bar a week for a year, can avoid gaining four pounds.

Skip one tablespoon of margarine or butter a day and you'll eat 3,000 calories less a month.

If you're a secretary, and change from a manual to an electric typewriter, watch out. With no change in your eating or physical activity, you may gain 5½ pounds in one year.

Here are some tips for reducing:

- First, resolve to lose—now.
- Check with your doctor to see if there's a medical reason why you should not reduce.
- Ask your doctor or a nutritionist for an adequate reducing diet. It must have enough protein, minerals and vitamins but be low in calories, too.
- After reaching the desired weight, stay there. Continue to watch those calories and get enough physical activity. Keep trim and be healthy.

...AND SAFETY

NEVER UNDERESTIMATE THE POWER OF A MOWER

Just as the airplane pilot has a healthy respect for a whirling propeller, so should the home owner be aware of the danger of the whirling blades of his power lawn mower.

The power mower has become a common household tool and many a grass-cutting family uses one.

The most dangerous and widely used mechanical grass cutter is the rotary blade power mower. The guard that houses the whirling blade is open on one side to throw out the cut grass.

Serious injury can result from unintentionally sticking a hand or foot into the open side while it's running or while trying to remove something from in front of the mower. A slip into the path of the blade could mean the loss of a limb or severe lacerations.

Another source of possible injury occurs when the blade hits an object hidden in the grass. When struck by the high-speed cutter, the object is thrown with enough velocity to cause severe injuries or even fatalities.

For complete safety, familiarize yourself with your mower and carefully follow the operating instructions. A few reminders for safe operation of a mower follow:

- Know how to stop the engine quickly.
- Allow expansion space when filling the fuel tank. The sun's heat causes the gas to expand and if it spills over the hot engine fire may occur. Do not refuel the engine while hot—this too can cause fires. Store gasoline in approved metal or plastic containers and not in glass jugs.
- Never mow the lawn in slippers. Wear safety shoes if available.
- When starting the mower, plant your feet firmly and make sure your feet are a safe distance from the mower.
- Inspect your lawn. Be sure there are no stones, sticks, wire or other debris in the area.
- Under no conditions should young children be allowed to use the mower. Bystanders or pets should not be allowed in the mowing area.
- On hills and banks cut sideways, not up and down. This prevents loss of control, slipping into the mower or the mower sliding into the operator.
- Disconnect the spark plug (or the power cord on electric rotary mowers) whenever you work on the underside. Tip it over by means of the handle. Don't reach under the deck, chain guards, or belt guards of any mower. Keep hands, feet, and clothing away from all moving parts. Never attempt removal of anything from the mower until the engine has stopped.
- Don't use an electric mower when the grass is wet. Be certain that the mower and power cord are grounded.

PERSONNEL PIPELINE

AWARDS PROGRAM HAS MONEY TO GIVE AWAY

Special act or service awards give FAA employees an opportunity to earn from $15 to $1,150 depending on the value of the contribution to the Agency. To be eligible, an individual or a group must do something that brings special benefits to the Agency. For example, a substantial scientific or technological advance or a substantial improvement in administrative procedures might open the door to additional cash and recognition. Acceptance of an article for publication in a newspaper or magazine, presenting a technical paper on an FAA subject to a professional organization or some other personal project which can be shown to have increased public understanding and interest in Agency operations might also do it. There are many other ways, too. Read Handbook PT P 3450.2A for details.

STATISTICS PROVE IT—WE'D RATHER BE HERE THAN THERE

We've always known it, but now official figures confirm it—FAA is a popular place to work. With pride we can announce that our separation rate, based on a seven-year survey, is approximately half that of the entire Federal Government. From FY 58 through FY 64 the annual separation rate throughout the Federal service ranged from a low of 19.5 per cent to a high of 21.9 per cent. FAA's record during that period shows a low of 9.1 per cent and a high of 12.0 per cent. Separations are any actions that take employes off an agency's payroll.

CLOSED CIRCUIT TV TURNS AMATEURS INTO PROS

Closed circuit television and a video recorder were used for the first time recently by the Office of Personnel and Training to teach a group of FAA employees how to interview applicants for positions overseas. It was part of a project known as TIAFA (Training of Interviewers of Applicants for Foreign Assignments) conducted at Washington Headquarters, the Aeronautical Center, Honolulu and Los Angeles. The trainees were real but the applicants were volunteers and the interviews had no bearing on job selection. Applicants were interviewed alone and with their families. Later the entire proceedings were played back on a TV monitor while the trainees took part in analyzing and criticizing their own performances. This contributed immeasurably to the improvement of their interviewing techniques. Termed an extremely successful experiment by PT's Career Planning Division, the improved interview techniques are now being used by interviewers as vacancies occur and positions abroad become available. The Agency staffs some 300 positions in 33 foreign countries. Half of these are FAA jobs held by FAA people—air carrier inspectors, electronic technicians, etc., and the other half are personnel who work for the Agency for International Development including Civil Aviation Assistance Groups on a reimbursible basis. Additionally, FAA fills close to 100 positions in the International Civil Aviation Organization and expects to double, or even triple that figure by providing candidates for many of the other international organizations to which United States contributes financially.

ACTIONS CAN SPEAK LOUDER THAN WORDS

FAA's policy on equal employment opportunities conforms, in word and spirit, to the March 6, 1961 Executive Order signed by the late President Kennedy. This order states that discrimination because of race, creed, color or national origin is contrary to the Constitutional principles and policies of the United States. The order further declares that the plain and positive obligation of the Government is to promote and insure equal opportunity for all qualified persons employed, or seeking employment, with the Federal Government and on Government contracts. The program has the support of President Johnson and Vice President Humphrey who heads the President's Committee on Equal Employment Opportunity. To be successful, however, the policy must be expressed in action.

AN AESOP FABLE RETOLD BY OPT

Every two weeks we earn a pay check; it's our to save or spend.

Every two weeks we earn something else which in its own way is just as valued as the pay check. This is annual and sick leave. It too can be saved or spent.

How one spends it should be a matter of extreme concern to every FAA employee. Accumulated leave could mark the difference between an assured income during a difficult time and going broke.

Compare Goode Foresite the saver and Lief Happy the wastrel. They entered the Federal service the same day; attended orientation talks together and heard the man from personnel explain the ABC's of leave. Goode was impressed and determined to build up her account as rapidly as possible. At the end of five years she had a reserve of 50 days sick and 29 days annual, or a total of approximately 16 weeks leave. So after a serious operation, when she had to stay away from the office six months on doctor's orders, all but eight weeks were covered by pay checks. Her supervisor sent word not to worry. He knew she planned to return to work and he wanted her back because she was a steady, reliable worker. Unhesitatingly, he had authorized up to 30 days advanced sick leave, and her annual leave for the current year. Goode would be on salary until she was well again.

Lief Happy, on the other hand, either failed to grasp the importance of a leave bank or figured he would never need it. He used leave almost as fast as he earned it. As a result, after five years, he had accumulated zero annual and only 200 hours sick leave on the books. When an automobile accident put him in the hospital and he, too, faced six months off the job, Lief had a problem. At the end of five weeks—no money. What then?

In view of his poor leave record his supervisor could deny his request for advanced sick leave. Even if the decision were favorable and the supervisor advanced 30 days sick leave he would still be without income during a large portion of a critical period of his life.

The examples are figurative, of course, but they can be more than matched with real ones.

The moral is obvious—*DON'T MISUSE YOUR SICK LEAVE. BUILD UP YOUR ANNUAL LEAVE WITHIN THE LIMITS PRESCRIBED BY LAW.*

NAFEC—IDEA FACTORY

The Agency's National Aviation Facilities Experimental Center (NAFEC), encompassing 5,000 acres and including 200 buildings, is located 12 miles west of Atlantic City. Here some 2,100 skilled technicians practice some 150 crafts and professions, in the quest to make flying even safer than it is. A World War II naval air station, the site was acquired by the Agency in 1958 and has undergone extensive modernization since. In this short span NAFEC has become a world renowned research center. Clockwise from top right: NAFEC from aloft gives clear view of lengthy runways and shop complex. • Center Manager William F. Harrison has been chief executive at NAFEC since November 1962. • Air traffic control specialist Edward E. Armstrong works at new control console being studied for TRACON (Terminal Radar Control) rooms. • Electronics Engineer Charles A. Richardson briefs visitors on the operation of the ground-based portion of CENDAR (Central Data Acquisition and Recovery), an advanced system used in obtaining data on equipment under actual flight conditions. • Simulator, development technician John F. Fahey Jr. seated in NAFEC's general aviation flight simulator which is used to study improved cockpit displays and configurations in light aircraft. • Project Manager James A. Harrison demonstrates bench testing procedures on an experimental pictorial navigation display in Standards and Calibration Laboratory.

FAAers ON THE JOB

Margaret L. Jenkins

Once upon a time there was both woman's work and man's work—but things are changing, fast. Take the case of Margaret L. Jenkins, who first donned a controller's headset in 1943 in the Fort Worth Tower soon after earning a Bachelor of Science degree from North Texas State University. She's been on the move up ever since and is the highest-rated woman in the Southern Region where she works in the Training and Management Group, Air Traffic Division. Better known as Peggy Lorenzen, her maiden name, Margaret has climbed every rung of the air traffic control specialist ladder under her own steam. Pretty Peggy knows her stuff, as her male colleagues will tell you.

Bert Volker

Variety, that's the spice in the life of Bert Volker, a principal maintenance inspector in the St. Louis General Aviation District Office. In one day recently he exercised his professional talents examining a late-model turboprop executive transport at St. Louis' Lambert Field and then sped 20 miles south to Weiss Airport to probe the innards of a 1929 *Travel Air* biplane being restored by an antique plane enthusiast. Volker's store of technical knowledge easily spanned the 36-year gap separating the two planes. Here, natty in bow tie, we find him putting the gimlet-eye on the tangled plumbing of a Rolls-Royce engine installed in a sleek Gruman *Gulfstream* at Lambert Field.