

FAA HORIZONS

JUNE 1964

OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY



FIRE DRILL ON WAKE

EDITORIAL:

How Broad Is Our Perspective?

The FAA cannot escape the effects of its origin. As a part of the "aviation community," we bear the imprint of our aeronautical culture and technology, and, I believe, take pride in this identification. Our language, personal experience and natural bias unavoidably develop patterns peculiar to the airman. Small wonder that we frequently have less difficulty communicating professionally with our foreign counterparts than with members of other agencies in the United States Government. Small wonder, also, that we in aviation so often stand accused of talking only to ourselves and viewing the world through an aeronautical knothole.

Yet, the world in which we operate is one of many distinct facets and diverse forces. In the political area, we see a hierarchy of governmental levels—local, state and federal—each with its own origins and traditions, necessarily differing in organizational structure and operating method. In the Federal Government there exists a multiplicity of governmental machinery and processes with varying degrees of political sensitivity and technical sophistication. Enabling statutes reflect the moods of the period in which they were created and, accordingly, embody different methods, structures and philosophical predilections.

Although the unique traditions of aviation and the diversity of government tend to isolate the Federal Aviation Agency, throughout our economy there is much evidence which highlights our interdependence. Our water supplies, power distribution systems, communication networks, labor markets, sources of fuel and food and the very air we breath and in which we fly, are disdainful of our tightly defined statutory jurisdictions. The fortunes and calamities of industry carom against each other, interacting far longer and more remotely than we generally suppose. Natural disaster disregards political law and coldly ignores legal jurisdiction. And that most extreme occurrence by which we often test the standards of the day—the nuclear holocaust—will be impudently careless of political boundaries.

No amount of legislative wisdom could have prevented all the forces which tend to exaggerate FAA independence, but, where the statute is circumscriptive, the mind and will of man are flexible. The Administration has sought to stimulate interfunctional awareness and interagency collaboration. The creation of Federal Executive Boards in large metropolitan areas has served as a catalyst for coordination with other Federal and local agencies, but this is not sufficient.

Recognition of the reality of economic interaction must be more than acquiescence; it demands the highest order of leadership. To admit interdependence between highway and airport development is, also, to lead the way to intensified coordination of governmental activities in these areas. To understand the relationship between economic environment and need for air commerce, is also to demand documentation concerning the measure of environmental factors. To appreciate the increasing dependence of industry upon aviation as a prime mover of high priority people and goods is to insist upon aeronautical participation in industrial planning.

We must be prepared to invade every pertinent area of our industrial and commercial life, and to demand a voice in the multitudinous community and regional planning efforts currently under way. We must collaborate with the Housing and Home Finance Agency and member agencies, Bureau of Public Roads, Interstate Commerce Commission, the military departments, to name but a few whose roles vitally influence aviation development. We must remain alert to every effort on the part of local government to affect the environment of commerce, such as zoning, land use planning, urban redevelopment and recreational area promotion; we must take the initiative in marshalling the entire aviation community to prepare for the day of national emergency when aviation will be called upon to demonstrate how truly valuable its speed and flexibility can be.

The nation deserves nothing less than the maximum effective exploitation of aviation for the public good. Certainly, this objective cannot be achieved with a knothole perspective.

Oscar Bakke



Oscar Bakke, Director
Eastern Region

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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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Art Director

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COVER:

Meet George Leong, a firefighter with the Wake Island Protective Services. Mr. Leong, sometimes acts as Assistant Fire Chief, taking complete charge of operations. Fire Chief Harold Krueger has developed a professional force ready to cope with what he has long ago learned to expect—the unexpected.



Fire Brigade. Emergencies on Wake Island find men and equipment in state of readiness.



Realistic training is conducted in order that firemen will be familiar with conflagrations from different origins. Here the men control highly volatile fuel fire.

WAKE'S LIFE AND PROPERTY IN GOOD HANDS

Protective Services on Wake Island is probably one of the best organized groups on American soil. Its three distinct units—the police department, fire department, and the sea rescue unit—are so well coordinated during emergencies that they can operate as one.

By Act of Congress, FAA has complete charge of the island, serving a varied population. A unit of the Military Air Transport Service is stationed on Wake, Air Rescue Service has a detachment there, a Coast Guard detachment operates a Loran station, Facilities Management Corporation provides some contractual services, the Navy contracts for communications facilities on the island, and there are a few commercial concerns there, including Pan American World Airways.

Everyone seems to go about his daily business with the intent of getting a job done and cooperating with his neighbor and fellow worker. Primarily because of this, and perhaps partially because of the isolation, there is no organized crime on Wake. And juvenile delinquency is just something that exists elsewhere.

Although there have been some structural fires, loss by fire is at a remarkably low rate, considering the number of temporary frame buildings still being used. Fortunately, there are not many emergencies at sea near the island.

All this does not mean, however, that the Protective Services people aren't busy.

Under the leadership of affable, efficient Theodore K. "Ted" Awana, the 40-odd members of Protective Services

keep watch around the clock. Their training is intensive. Off duty, they are strongly encouraged to participate in recreational activities. They play handball and volleyball, organize or join baseball teams, engage in weight-lifting, and sharpen their eyes with sidearm, rifle and shotgun firing on the range. Plain, old-fashioned exercises are the order of the day when other activities aren't practical. This is a part of the training of all three units of Protective Services.

Ted Awana learned the value of physical training and athletic competition during his many years as a detective with the Honolulu Police Department. He also did a stint with the Hawaii State Fire Marshal's office.

Stanley Ho, Police Chief, insists that members of the force be not only physically fit and alert, but also that each member be highly skilled in self-defense, marksmanship and investigation work. Each member of the police force is trained in karate, a Japanese system of hand-to-hand defense similar to jiu-jitsu. Police officers, in addition to engaging in regular training on the firing range, organize turkey shoots and other firearm competitions.

Emphasis on fire prevention programs in the residential and industrial areas of the island has resulted in very little property damage from fires. Fire Chief Harold F. Krueger has organized a highly-efficient team of fire-fighters who practice extinguishing a deliberately-started blaze in pieces of discarded equipment, not only during the daylight hours, but also at night.

"Since a fire at night provides a far different perspective

than a fire by day, when flames are harder to see, I want the boys to know what fire looks like, no matter under what conditions they encounter it," Chief Krueger says. And that they do.

Chief Krueger also believes strongly that he, as well as others in a supervisory capacity, should be backed up in depth. During the training sessions, various members of the department are given the chance to lead the others in directing the training operation against every possible type of fire his men might have to face.

The Sea Rescue unit is headed by Captain Ichito Nagao, skipper of the FAA "navy"—the *Sapphire Wake*. Captain Nagao's crew displayed their proficiency last fall when they won the acclaim of veteran rescuers. Five U. S. Coast Guard personnel, who had gone fishing in a skiff a half-mile or so off-shore, discovered that their engine would not start. They drifted helplessly for hours. Finally, other members of the Coast Guard unit became concerned and search was made of the 40 miles of shoreline, with no favorable results. All aircraft inbound to Wake were notified, and an Air Rescue Service aircraft began a search of the surrounding area.

Finally, a MATS C-124 crew spotted what it thought to be a boat on their airborne radar while on final approach to the landing strip. The information was given to the SAR aircraft which proceeded to the area, followed by the *Sapphire Wake*. It was already dark when the FAA boat reached the scene. The crew of the skiff hearing the air-



Above: The *Sapphire Wake* heads into port. Below: Standard operating procedure whenever needed or requested, truck and men stand-by for duty.





A fast game of volley ball keeps the reflexes sharp.

craft, set fire to a gasoline-soaked shirt on the deck. The skiff was sighted by the aircraft, which then dropped parachute flares to light the area. The *Sapphire Wake* found the skiff, took the Coast Guardsmen on board and delivered men and skiff to the dock.

Because Ted Awana, as well as Chiefs Ho and Krueger and Captain Nagao, believe in versatility for their respective units, a cross-training program makes each department proficient to assist another during emergencies. It would not be too unusual to find a fireman patrolling a beat, nor to find a deckhand assisting in fighting a fire.

The dispatch of all Protective Services units is handled through a central control located in the police headquarters. Two-way radio equipment, capable of reaching police, fire and rescue personnel, is manned around the clock. A system of alarm boxes blankets the three islands that make up Wake, insuring speedy assistance in an emergency.

Fighting fires, jailing unruly citizens and pulling people from the drink are not the only duties of Protective Services. PS personnel check fire extinguishers and conduct safety inspections in homes and industrial areas, keep tabs on nearly a hundred dogs registered with the Area Manager's office, issue vehicle and operator licenses, conduct vehicle safety inspections, register firearms, and monitor a host of other activities.

There are 300 motor vehicles and 700 operators on Wake, and their activities are confined to about ten miles of roads. Though Wake's land area is only three square miles, there are about 40 miles of irregular shoreline to be patrolled.

But, with personable, well-trained people, including the staff of the Area Manager, Chaplain Canice Cartmell, and a host of other conscientious Wake Islanders—coupled with the good-natured cosmopolitan population—life and property on Wake Island is not only safe and secure, but the atmosphere is probably more peaceful and serene than in any comparable American community.



Police Chief Stanley Ho (left) and Fire Chief Harold Krueger on job.



Patrolman J. Jerome uses radio. Patrolman Whittey (r) on firing line.



J. Gonsalves, Dispatcher. Capt. T. Nagao (r) *Sapphire Wake's* skipper.



"Security Council." (l to r) Capt. Nagao, Chief Ted Awana, Chief Krueger, Chief Ho. Mascot Pau Itchi inspects island's only fire hydrant.

THEY FLEW TO 65,000 FEET ... *The Easy Way*



Inside the altitude chamber at Moody AFB, Ga., after the "flight" to 65,000 feet, 10th-graders Mike Woodham (with flask) and David Lewis, observe at close hand what they saw from outside the chamber: Bill Wilson (center), chief of FAA's Valdosta RAPCON, listens intently as TSgt. Elliott Stoffregen, Jr., NCO-in-charge of Moody's Physiological Training Section points out some of the effects of high altitude flight on experimental specimens. (Official USAF Photo).

Through the combined efforts of certain segments of two large and very busy Federal agencies, two small boys, whose scientific knowledge was furthered, may someday make their own great contributions to the Space Age.

These events started when two aviation-minded high school students from Thomasville, Ga., envisioned a scientific experiment which they hoped to enter in competition with their classmates . . . the winning entry to be entered at the annual Science Fair at Albany, Ga.

These bright, tenth-grade boys from Central High School, Mike Woodham (son of Mr. and Mrs. J. C. Woodham, Jr.) and David Lewis (son of Mr. and Mrs. H. W. Lewis) decided they would like to test the effects of high altitudes on plant life and small animals.

To start the project, David checked out the possibilities of sending the plant and animal life aloft in a balloon. They were confronted with several problems . . . the mechanics of the venture and the necessity for compliance with FAA regulations governing the operation of unmanned balloons.

The FAA extended a helping hand by responding to these energetic students with information on the restrictions as well as their best sources for technical assistance.

FAA representatives at Valdosta, well aware of the great hazard of unmanned balloons to air traffic and the expense that would be involved to permit the safe ascent of a balloon, contacted Air Force officials at Moody Air Force Base's physiological training section, near Valdosta.

Air Force people at Moody readily agreed to assist these boys by allowing them to conduct their experiment in Moody's high-altitude chamber where flight conditions could be easily simulated and the results immediately studied, without risk

to the busy airways in the area.

Southern Region's Bill Wilson, chief of the Valdosta radar approach control (RAPCON) arranged for Mike and David to travel to Valdosta, and escorted them to Moody AFB.

The excited boys brought with them quite an odd assortment of specimens . . . a live rat, snails, spiders, a cactus plant, nuts, a candle, and a balloon. This unusual collection was placed on a table inside the altitude chamber . . . the chamber door closed . . . and the simulated ascent was begun. The altimeter climbed steadily as the boys, the operator, Wilson, and others watched, made valuable notes, and took pictures.

Thus, instead of a hazardous balloon flight, with questionable results, the students were able to see what was occurring at each level of altitude. At 35,000 feet, for instance, the rat began to show loss of strength . . . at 38,000 feet, inability to move . . . gasping at 42,000 feet . . . body distension at 44,000 feet . . . and death at 50,000 feet. The candle burned bluer as oxygen decreased . . . the plants wilted . . . the insects survived longest, but ultimately died. The ascent continued to 65,000 feet, followed by rapid descent.

Dave and Mike were bursting with questions about other features of the Physiological Training Section and were given a tour of the facility following their experiment.

After their tour, they were invited to attend the Armed Forces Day observance at Moody, and with a reminder of the intense interest that both the Air Force and the Federal Aviation Agency have in the aerospace education of America's youth, the two young students reluctantly gathered up their specimens for their trip home to Thomasville.



This solitary transport (top) arriving at Wichita gives no clue city has earned title of "Air Capital of the World." Wichita tower (r.) handled 190,547 operations in 1963. Wichita-made Lear Jet (below, c.) has woolen tufts on wings during flight tests. Production line (bottom, l.) of Cessna tandem-twin Skymaster. Fore and aft mounted engines have created stir in aviation industry. More than 7,000 Beechcraft Bonanzas (bottom, r.) have been produced over 17 years. This distinctive V-tail single-engine aircraft is well known in business flying. Aircraft manufacture in the Wichita area started in the '20s.



WICHITA . . . General Aviation Center

Wichita, Kan., has been described as the "Air Capital" of the world. As you read on, you will discover why the FAA employs more than 100 people in Wichita with a total annual payroll of nearly one million dollars.

Today, the largest single industry in the United States is the aerospace industry. During 1963, one segment of this rapidly expanding industry—general aviation—operated some 84,000 aircraft out of more than 8,000 airports in the U. S. By contrast, the airlines operate only 2,000 aircraft, and the military about 19,000.

Since 1958, general aviation activity has increased from 50 per cent to 63 per cent of all operations recorded by the FAA. It accounted for more than five out of every eight operations reported by FAA towers last year.

General aviation can be listed in four categories: (1) Business flying—private aircraft used for business. (2) Commercial flying—air taxi service, charter flights for passengers or cargo, and agricultural spraying and crop dusting. (3) Instruction—teaching pilot techniques and flight training. (4) Personal—private aircraft used for travel and pleasure.

It was in the late 1920's, when such notables as Lloyd Stearman, Matty Laird, Walter Beech and Clyde Cessna were building and flying some of the nation's first commercial airplanes, that Wichita became known as the "Air Capital of the World."

Aircraft Production Is Major Business

During this period, Wichita boasted more than a score of airplane companies. Today there are four, employing 70 per cent of the city's manufacturing work force.

Beech Aircraft Corporation, with three main plants in Wichita, employs 6,300 persons and produces ten different Beechcraft models. Cessna Aircraft Company employs 4,800 people at its three Wichita plants and in 1964 produced 14 models.

About a year ago the Lear Jet Corporation plant was built north of Municipal Airport. Lear is constructing a new 108,000-square foot addition to the existing 96,000-square-foot facility. By the end of this year, Lear Jet expects to employ nearly 1,000.

Although not a producer of light aircraft, Boeing Airplane Company, employing 18,000, is a landmark of this aviation center. Boeing-Wichita produced most of this country's B-57 and B-52 jet bombers.

To handle the many necessary details, inspection, tests, and other matters involved in certification of aircraft, the FAA maintains an Engineering and Manufacturing District Office at Wichita under the supervision of J. R. Smith.

In the Wichita Metropolitan area (Sedgwick County, Kan.), there are nearly 650 registered general aviation aircraft based at 17 airports. Wichita Municipal Airport ranks among the top airports in the nation in general aviation operations. FAA air traffic facilities at Wichita log many operations from flight test activities.

Managing all aspects of operational and maintenance matters for the FAA as they pertain to general aviation is General

Aviation District Office No. 22, headed by J. P. Colton, supervising inspector, and six operations and maintenance inspectors.

Busy Air Traffic Area

Air traffic operations in the Wichita area are directed from the FAA RAPCON/Tower at the Municipal Airport. Chief P. H. Messner, who is also area coordinator at Wichita, supervises nearly 40 controllers who handled 190,547 operations during 1963.

Perhaps the closest tie to the general aviation pilot in the area are the flight service specialists at the Flight Service Station headed by W. P. Hurst. These specialists provide pilot briefing services and other assistance to those who drop in at the station located in the tower building.

Maintenance of such aviation facilities as navigational aids, communication equipment, the RAPCON/Tower and Flight Service Station, is provided by the systems maintenance personnel in each area. Wichita has one Systems Maintenance Sector (No. 609), supervised by C. J. Perricone, to handle all maintenance in the area. A Sub-Sector, under S. W. Jantzen, is responsible for maintaining the RAPCON/Tower exclusively.

In 1963, Cessna produced 3,456 aircraft; Piper, 2,321; Beech, 1,061; Aero Commander, 114; and Mooney, 502 units. Of this total, 60.6 per cent were built in Wichita, the "Air Capital of the World."

In February, 1963, Cessna Aircraft Company produced and delivered its 50,000th airplane and before the end of the year had produced over 53,000 aircraft. Beech Aircraft Corporation has built more than 22,000 commercial and military aircraft in its 30 years in aviation.

According to FAA estimates, general aviation is expected to increase at the rate of about 3,000 units per year for the next five years, bringing the general aviation fleet to nearly 99,000 by 1968. Market research indicates that light twin-engine and high performance single-engine aircraft will continue to be in greater demand. Piston engine aircraft will continue to lead the market. Late in the five-year period, turbine engine and pure jet aircraft will be seen in increasing numbers. Lear Jet forsee a demand for 3,500 pure jet executive aircraft in the next decade.

Over the past ten years, general aviation aircraft production has tripled. Today almost 25 per cent of the total production is in foreign sales.

Project Horizon clearly defined the importance of general aviation to the welfare and economy of the nation. And the FAA, vitally interested in the private airplane pilot, is doing much to further the progress of general aviation. Since 1958, the FAA has commissioned more than 60 new towers, largely at general aviation airports.

Also, under the Federal Aid to Airport Program for fiscal year 1963, more than 400 airports received grants for construction and improvements.

The reliability of the airplane today is the result of continuous design and structural improvements which have contributed greatly to the safety of air travel. A great share of this development has taken place in Wichita.



Night view of the new \$1,600,000, 150-foot LaGuardia Airport control tower. Built by the Port of New York Authority, it will be equipped and operated by the FAA. Below: The "new" LaGuardia opened for business 25 years ago.



Remembrance of things past. EA's flight standards personnel and an airline pilot stand for inspection with old "Tin Goose," the pioneer Ford Tri-Motor transport plane.



New Tower and Terminal Dedicated at LaGuardia

The past and the future shared the spotlight at LaGuardia Airport in April when Eastern Region and the Port of New York Authority dedicated the \$36 million dollar passenger terminal and the \$1.6 million control tower, principal structures of the "new" LaGuardia Airport. The ceremonies also marked 25 years of air service to the community.

Some 1,000 Federal, state and local government officials, aviation industry executives, airport operators, community leaders and the press attended the dedication ceremonies at the 1,300-foot long terminal building.

Speakers included Robert F. Wagner, Mayor of New York; Mario J. Cariello, President of the Borough of Queens; Oscar Bakke, FAA's Eastern Region Director; Robert Moses, President of the New York World's Fair 1964-1965 Corporation; and Alfred N. Warnick, chairman of the aviation committee of the Queens County Chamber of Commerce.

At the dedication, the airport's early years were recalled by tributes paid to the late Mayor Fiorello H. LaGuardia as his widow, Mrs. Marie LaGuardia, unveiled a plaque in his honor. Twenty LaGuardia Airport pioneers, among them an EA air traffic controller, who played important roles in the airport's history were honored guests. A Ford Tri-Motor, a Pitcairn Mailwing and a Stearman C3R aircraft used when the airport was being planned, were displayed on the apron to represent the airport's early days. In contrast, two Boeing 727 three-engine jets, which will begin service at the airport on June 1, were parked beside the old aircraft as a symbol of the airport's future role in the jet age.

A variety of aircraft were on public display during an airport open house. Two Boeing 727's were displayed for "walk-through" inspections, in addition to a Lockheed JetStar, a North American Sabreliner jet, a Vertol 44 helicopter, a Sikorsky S-61 helicopter, a Convair 440 twin-engine piston

aircraft and a Ford Tri-Motor.

La Guardia Airport is in the final stages of an \$80 million redevelopment program which started in 1957. A separate \$39 million project under way to lengthen both runways to 7,000 feet is scheduled for completion in 1967.

Employment at the airport, which now totals about 4,000 people earning \$33 million a year, is expected to increase to 11,000 people earning \$106 million by 1970.

The gleaming new passenger terminal, with 650,000 square feet of floor space, is 1,300 feet long, the equivalent of six city blocks. It consists of a four-story central section, two three-story wings and four bi-level arcades leading to 36 aircraft gate positions.

A roof-top observation deck, extending the entire length of the central section and wing buildings, provides a breathtaking view of Queens, Manhattan, the Bronx and Long Island Sound. The magnificent panorama of airport, aircraft and marine activity is expected to be a major attraction for visitors to the area.

The first and second floor lobbies of the central section of the terminal have retail shops and consumer service to cater to the needs of the air traveler. They include newsstands, a drug shop, florist, bank, post office, book store, hobby shop, barber store and cutlery shop. A completely equipped nursery is located on the second floor.

An air of spaciousness is created by an open area in the center of the second floor lobby from which visitors may look down upon an indoor ground floor garden. The ground level contains offices, a first-aid room and a press room for interviews. The third floor is used for office space.

The glass-enclosed LaGuardia Terrace Restaurant, seating 400 people atop the central section of the terminal, overlooks the airport and Flushing Bay. It provides a view of

the strikingly designed Fiorello Park with its fountain and pool and 64,000 trees, shrubs and flowering plants.

Restaurant Associates will operate the LaGuardia Terrace as well as other dining facilities in the new terminal, including a 150-seat employee cafeteria. Restaurant Associates also operates the world-famous Newark restaurant at Newark Airport and many other well-known dining facilities in the metropolitan area.

The ultra-modern Control Tower is in the western arcade of the passenger terminal. Construction began in 1960 and was completed in October, 1962.

Located in the center of the 575-acre airport between the two runways, the 150-foot-high tower, 47½ feet in diameter at its base, affords EA controllers the best possible view of runways, taxiways and ramp areas.

About 100 FAA electronic and air traffic control specialists will staff the tower around-the-clock and maintain the complex electronic network. A radar room and a twelve-sided aluminum and glass control cab topped with a spherical radome 14 feet in diameter are built on a setback at the 10th floor.

The unique structure, designed in the shape of a flared urn, has 12 working levels and a total area of 22,700 square feet. The first 10 floors house offices and equipment. A central shaft rising from the base encloses an elevator, stairways and electrical conduits.

EA is installing about \$100,000 worth of air traffic control communications equipment in the tower. More than \$2.5 million worth of navigational aids will be operated and monitored from the tower. This includes airport surveillance radar-4, two instrument landing systems, three visual approach slope indicator systems, precision approach radar and VORTAC.

Four visitors to the new LaGuardia airport tower get some first hand information on an IFR room from traffic control specialist Jesse Cookson.



Open House visitors inspect the Boeing 727 tri-motor, newest of the jets to go into airline service. They are scheduled to fly from LaGuardia June 1.



Tower specialist explains Aldis Lamp to group of visiting dignitaries. Red and green lights are used to signal messages to aircraft without voice communications.





Members of the Oklahoma City Amateur Radio Club worked 17 hours per day during the week.



Al Hankinson and Ed Murta check over W5PAA's station log book.



CQ CQ, CQ ALASKA

The Alaskan earthquake now is a part of history. Only the rebuilding continues and will for many, many months. There is one story that has not been told. It's a story of devotion and sympathetic understanding of human needs and sorrows. Involved in that story are more than 200 Federal Aviation Agency employees, a number of them members of the Amateur Radio Club at the FAA Aeronautical Center. Their amateur radio gear, located at the Oklahoma City facility, sped messages of good news from Alaskan survivors to nearly 3,000 people in every area of the U. S.

A willingness to help others in distress, coupled with technical competence, have long characterized the Amateur Radio Club. Station equipment, owned and operated by club members, consists of an 800-watt transmitter and a 60-foot beam antenna. The "shack" is completely equipped for any emergency operation with a stand-by mobile generator near the door.

All this equipment was mobilized the night of the earthquake when the Aeronautical Center club started receiving signals loud and clear from Alaska. The first move made by the Aero Center hams was to contact Alaska stations and ascertain their immediate needs for replacement of air navigation facilities. During this phase, the ham station operated as an official FAA facility until FAA Washington took over. The Oklahoma City station then returned to working personal messages.

By Saturday noon, the Oklahoma City hams were working Fairbanks and Clear, Alaska. Al Hankinson, then President of the hams (he has since transferred to NAFEC) talked to some people on King Salmon Island by a telephone patch

into Fairbanks radio.

Messages, as they came through, spelled a word mosaic of conditions in the shock-torn state. Because Alaska's own local and regional communications network had been disrupted, most information was sparse but nevertheless welcome.

The weather conditions on the North American continent gave problems to a number of radio people. A station in Seattle could not contact Alaska. So they forwarded all their messages to Oklahoma City and the Center relayed the messages to Fairbanks. Another weather freak forced an Air Force jet flying near the north pole to contact Oklahoma City, rather than directly contact Alaska for information.

The Oklahoma City ham station worked from 7:00 A.M. to midnight every day during the week, with five men taking turns at the microphone and 18 others filing messages and answering the telephone.

The Aeronautical Center operators came into the picture, too, directing many urgent calls to the radio shack from all parts of the nation.

Radio club members created a coded type message during the crisis. The initial letters and numbers indicated the kind of request with a long list of names to follow. It saved many hours of transmission time.

Almost all the requests received in Oklahoma City were seeking information about an individual or family in Alaska. On several occasions, Alaskans sent out a runner to find a person because the ground communications were destroyed.

When the key closed for the final time, W5PAA operators found that there were 2,990 messages worked in "Operation Alaska."

ALASKA QUAKE DIDN'T SHAKE CS

The proof of the pudding is in the eating. Compliance and Security activities in the Alaskan Region received such proof last March when the catastrophic earthquake struck the region.

The response of Compliance and Security was swift and sure, resting on a solid foundation laid much earlier in anticipation for just such an emergency.

With utilities and communications knocked out, it was impossible to determine at once the extent of the damage. As quickly as they were able to, supervisors and employees returned to their duty stations to make their own damage appraisals. Many of them loaded emergency survival equipment in their cars and, with their families accompanying them, proceeded over the fractured roads to take stock of the damage to the Agency.

Compliance and Security officials by the nature of their work are careful, methodical men who place great store in planning for the unexpected. As the Region's CS men hurried to their duty posts each ran his own mental checklist of things to do, to watch out for: protection of Agency property; condition of classified and privileged information files; security of cryptographic vaults and equipment; conduct of Agency personnel under stress in a manner that reflected credit on the Agency. These were the matters of immediate concern.

To get to the regional headquarters building one had to pass schools, apartment houses, homes, and business buildings which were shattered and crushed in varying degrees. It was a relief to see the headquarters building still erect, even though it was battered, beaten, twisted and torn. CS men looked for gaping holes in the building where intruders could enter to plunder or pry; their trained eyes sought out guard



Mrs. Eileen Kramer (left) secretary to the chief, air traffic division is one of many to apply for an ID Card to enter Elmendorf AFB, temporary home of Alaskan Region Hq. Rogers E. Walker, chief, C&S division explains the procedures.

forces personnel on duty protecting Agency property in the face of personal danger.

Moving with reflex action the duty officer and guard had evacuated the building and stood outside the trembling structure. No one attempted to enter the building. A local contact point at the Anchorage flight service station was set up for regional officials to check in. Testing and restoration of radio and telephone communications were begun.

As soon as possible after the initial quake, a survey was conducted to determine if security storage containers were intact and crypto materials safe, all with favorable results. Sound security practices had assured their protection.

A conspicuous factor in the ensuing activities was that the Compliance and Security functions were being accomplished not by division staff members alone, but by regional personnel at all levels. As a result of constant indoctrination and training, region employees automatically worked to protect agency property and to secure classified materials.

Compliance and Security emergency headquarters were set up in the temporary RO at Merrill Field flight service station. Under crowded conditions and disrupted schedules the work of "digging out" was begun. Skeleton records, set up for defense readiness purposes, were utilized; the job of issuing over 200 identification cards was begun. All the while a wary eye was kept on the building as new seismic jolts threatened additional damage.

In summing up, Compliance and Security officials found that the Region had been tested under the most rigorous conditions; that FAAers stood firm under fire, carrying on the work of the agency and providing positive assistance to the community. The agency has shown itself capable of protecting information of a highly privileged nature and is a trustworthy partner of the Department of Defense. Property was protected in an orderly fashion; no serious loss of control or accountability occurred, even though equipment and supplies had to be shuffled extensively.

Rogers E. Walker, the chief of the Compliance and Security division, isn't looking forward to any more "live" tests. However, he reflects that "Riding out the storm of an earthquake has been an interesting and enlightening experience, but we wouldn't recommend it to anyone."

This group issued over 200 ID Cards working out of a six-foot-square temporary office at Merrill Field. Mrs. Florence Martin (left) receives instructions from Mrs. Lavina Boatright. Rogers E. Walker (right) instructs Lorine Jensen.





Dick Disney (foreground) briefs CAF pilots before air show time.



H. S. Hubbell, SSF GADO, explains show restrictions to Bill Drawe (c) and Dick Disney.



A P-40 Warhawk, with the famous shark-mouth air scoop of China-based "Flying Tigers," ranks the row of World War II fighter aircraft of the Confederate Air Force.

CONFEDERATE AIR FORCE PATROLS TEXAS SKIES

The days of the propeller-driven fighter planes are gone—except in Texas. Down in the Lone Star State, the gallant men and honored World War II fighter craft fly regularly.

Men loyal to the fighters that swept the skies of enemy planes in every theater of operations during World War II have assembled nine veteran planes at Mercedes, Texas. These planes comprise the "fighter squadron" of the Confederate Air Force based at Rebel Field and include the P-51 Mustang, FG1-D Corsair, FM2 Wildcat, F8F Bearcat, P-47 Thunderbolt, P-40 Warhawk, P-38 Lightning, F6F Hellcat and P-63 Kingcobra. Three T-6 Texans make up the "training squadron."

CAF Colonel Lloyd P. Nolen, former military flight instructor and now operator of the Mercedes Flying Service, is credited with founding the CAF (not to be confused with two other organizations bearing the same name). He and a group of friends bought a P-51 in the late 1950's for their Sunday afternoon flying. When old Navy pilots argued that the Bearcat was a better plane than the Mustang, Nolen spent a year running down leads and finally bought one. The Mustang-Bearcat duel was a toss-up, but it sparked Nolen and the men to start a non-profit organization devoted to acquiring and maintaining one of each of the WW II fighters.

As the organization developed, a mythical commanding officer, Colonel Jethro E. Culpeper, began issuing orders and awarding the "Silver Magnolia Blossom" for heroic flying. The mythical commander precludes the possibility of any member, all with the rank of colonel, from stealing the lime-

light. Many of its pilot-members—which includes farmers, doctors, car dealers and lawyers—come from the 56 crop spraying firms which give the lush Rio Grande Valley the largest concentration of aircraft in the United States. CAF colonels wear a grey uniform complete with aviator's wings and topped with a Confederate-type cavalry hat.

At first the colonels, like the Confederates of a century ago, fought a lost cause. Their fight was with government regulations which forbade the sale of surplus war planes to individuals although the planes were doomed to the smelters. Fighting their uphill battle, the CAF, in addition to their P-51 and Bearcat, acquired their planes after many leads: P-40, one of the two flyable ones in the world, from a man in Chicago; Corsair, as it sat on the brink of a smelter in Arizona; P-38, from an aerial survey company in California; Wildcat and Hellcat, from private owners in Florida and California; P-47, fully armed from the Nicaraguan Air Force; and the P-63, from the Honduran Air Force. Recently, the CAF acquired the P-39 Aircobra, which is still in pieces awaiting assembly.

During the rise of the CAF, maintenance and operations inspectors from the San Antonio GADO worked closely with the colonels. The FAA inspectors checked the planes for specifications, airworthiness and unauthorized alterations and then issued operating restrictions. Some of the planes are restricted from certain airports and from operating over large population centers. Pilots are assigned certain areas in which they can practice.

H. S. Hubbell, Supervising Inspector, San Antonio GADO, said, "Our job is to try to keep the aircraft as safe as possible and to guarantee the safety of the spectators."

The men who put the planes through such air show maneuvers as "Beauregard flips, whifferrills and do-wa-ditties"—the Rebel equivalent of the Yankee barrel rolls, Immelmans, loops, Cuban 8's, spins and inverted passes are nearing the mid-century mark in age. They include men like Dick Disney, an FAA flight examiner in the area and a veteran of 30 years and 30,000 hours, who flies all the aircraft; Clyde Elliott, retired Navy aviator and crop duster operator, who spent years in carrier operations with Corsairs and Wildcats; and approximately 60 other men in almost daily contact with aviation.

At the Second Annual Rio Grande Valley Air Show in March, an estimated 45,000 people, about one-tenth of the Valley population, saw the Confederate Air Force in action. They came to watch pilots and planes of another era in action—a team that wrote pages of history.

Today, the colonels are attempting to preserve that tool of history. Collectively, out of their own pockets, they have spent \$102,000 for planes and parts. Now, with their goal of one model of each World War II American fighter plane in sight, they are attempting to locate a British Spitfire, a German Messerschmitt, and a Japanese Zero to complete a collection of the world's great fighters. The latter two planes, the colonels know, will be difficult to find. They may have been too efficient when they fought as members of Yankee air squadrons in World War II.



Colonel Lloyd Nolen gives instructions and maps out air race plan on board.

Fritz Long, SSF GADO, checks the landing gear of a Wildcat.



CRACKED UP FOR SCIENCE

A most successful crash test of a work-weary DC-7 airliner was conducted by the Federal Aviation Agency and the Flight Safety Foundation on April 24. Crash experts believe it will yield the most comprehensive scientific data yet available on the vital problems of reducing fatalities from impact forces and crash fires.

Site of the test was Deer Valley Airport, just north of Phoenix, Ariz. Originally scheduled for April 22, the test was delayed twice because of technical problems and high crosswinds.

The plane, bought by FAA for \$29,000 from an aircraft salvage company, impacted the man-made barriers with greater force than had been anticipated, with the result that the wreckage settled over an area of about 1,000 feet in length.

The idea was to simulate four real-life accidents in which impact forces would be recorded to give information on passenger and crew seat strength and restraint systems, cargo restraints, and fuel containment systems. The crash followed the hoped-for patterns.

Investigators were highly enthusiastic to discover that instrumentation on the basic aircraft structure as well as the 16 wired dummies inside the cabin functioned properly. Twelve on-board cameras and others mounted externally, which were time-correlated with the recording equipment, came through the test with little damage.

An on-site analysis disclosed that most of the dummies would have survived the impact forces. Some seats and restraint systems held, others gave way.

Photos and recorded equipment are being processed for scientific analysis of overall test results.

Dummies and a child's doll were wired and instrumented to measure the impact forces.



Above: A spectacularly successful experiment. This DC-7, purchased from a salvage company and used to simulate actual accidents, yielded a tremendous amount of needed technical information. Below: the crash followed hoped-for patterns while cameras inside and outside recorded the results.



Above: Isaac H. Hoover, Airframe Program Manager, briefs press. Below: FAA's Harold D. Hoekstra (r) with Lt. Cmdr. Robert Simmons and Millard Haskin.

Above: Jules Bergman of American Broadcasting Co. and George P. Bates, Jr., Acting DS-1. Below: Isaac H. Hoover talks with Robert L. Paulin, FS-125.

FIRST ALL FAA TACAN IS COMMISSIONED IN SO



Southern Region SMS electronics technician, D. E. Sullivan at work inside the Crestview, Fla., VORTAC.

In a beautiful green setting on a slight plateau in northwest Florida, six miles northwest of Bob Sikes Airport at Crestview, is a new, white panel fence around a bright, white building.

The building has a round top and a cone-shaped steeple. Is it a church? No, it's a VORTAC (VOR and TACAN navigational facilities) facility providing navigational distance and direction in a

"Rho-Theta System" for the flying public.

What sets this particular VORTAC apart from other VORTAC facilities? This is the first *civil* TACAN (UHF navigational facility) equipment to be commissioned in the Southern Region and, possibly, in the Common System. It is designed to FAA specifications and provides a complete unit which "fits" into its environment.

Heretofore, many VORTAC facilities have consisted of a blend of FAA VOR with military versions of TACAN beacons and monitors or military beacon and civil monitors, and each of these units had to be adapted by modifications to design, each with its own problems.

Now, in Crestview, there is a tailor-made facility, one in which each part is engineered to fit together. This facility was installed and inspected by Southern Region engineers. No manufacturers' representatives or special technical representatives were hired for this job. This facility will be maintained by Systems Maintenance field technicians.

FAA Employee in AF Interceptor That "Downs" B-52 Jet Bomber



Wallace Rose (c) looks on as Capt. Chuck Winter shakes hands with R. Brock, AT supervisor at Selfridge.

Air Force fighter pilot Captain Chuck Winter recently gave an indoctrination flight to Wallace W. Rose, CE-507.2 in an F-106-B interceptor of the 94th Fighter Interceptor Squadron, Selfridge Air Force Base, Mich.

The mission called for firing passes on a B-52 target aircraft which was "destroyed" on each of four passes.

Reeves Commends FAA Employees In Letter to the Administrator

In a recent letter to the Administrator, Lt. General R. J. Reeves, Commander in Chief of the Alaskan Command, made the following remarks:

"Immediately subsequent to and during the days following the earthquake which struck Alaska on March 27, we of the Alaskan Command had the opportunity to observe our partners in aviation in Alaska—the personnel of the Federal Aviation Agency—operating under the stress of actual emergency conditions.

"It was most reassuring to see how quickly FAA responded to the emergency and how efficiently communications and navigational aid services were restored.

"I believe the effective military-FAA teamwork that existed during this period once again demonstrated the value of FAA participation in military readiness exercises.

"As your organization plays a most important role in military air operations in the United States, your participation in exercises such as 'Key Chain' are of inestimable mutual benefit when an emergency occurs.

"The quick response by the FAA in Alaska to the conditions caused by the earthquake reflect most favorably on the leadership of your organization and the professionalism and sense of duty of all its members."

Flying Housewife Honored



President Johnson presents Mrs. Jerrie Mock with the Agency's Aviation Award for her recent solo flight around the world which made her the first woman to fly around the earth alone. After the presentation, Mr. Johnson named her Vice Chairman of the Women's Aviation Committee. Also at the ceremony were (l to r) Administrator Halaby; Mrs. T. J. Frederitz, Mrs. Mock's mother; Russell Mock, her husband, and daughter Valerie. Valerie too received a White House "award"—a birthday cake for her fourth birthday celebrated the day before.

LIBRARIANS CONVENE AT 800 INDEPENDENCE AVE.



Pointing to the shelves laden with reference material, Claire Tedesco, Medical Librarian, explains its use.

The April meeting of the Military and Transportation Divisions, Special Libraries Association, D. C. Chapter, was held at FAA headquarters in Washington.

Members, 104 strong, enjoyed a roast stuffed young turkey dinner in the Executive Dining Room and later toured the new building.

The Library was one of the tour's highlights, naturally, and the accompanying picture shows Mrs. Claire Tedesco,

Chief, Medical Library Branch, Library Services Division, HQ-640, explaining her reference material in the stacks (not shown here) among which are books, periodicals and reports.

To the left of the picture, Wilmer H. Baatz, Chief, Library Services Division, listens approvingly to his colleague as does the group, among them representatives of all the major libraries in Washington.

After the library tour, the members adjourned to the auditorium for a discussion of the Tentative Draft Standards for the Librarian Series, GS-1410, and the Library Assistant Series GS-1411.

The professional discussion was moderated by Raymond Jacobson, Chief of the Standards Division, United States Civil Service Commission.

In the past year the FAA library has expanded its many services and participated in the exchange of aeronautical information with libraries and research agencies in the Department of Defense. Among them is the Defense Documentation Center. FAA also is on an exchange basis with the National Aeronautics and Space Administration (NASA), and the Science Information Exchange.

Anchorage Will See the First of Alaska's New Type Control Tower



Model of the control tower to be set up at Anchorage.

A control tower built to the Agency's own design—the first to be set up in Alaska—will replace the one demolished by the earthquake at the Anchorage International Airport.

The tower is being prepared for shipment in the "lower 48" at the present moment and will be ready for business in the fall, according to U. M. Culver, Chief, I&M Division.

Developed by FAA, it is pentagon-shaped and free-standing, with a cab that gives controllers 360 degree visibility. It will also be air-conditioned to provide proper operating conditions for the sensitive electronic equipment—not to mention personnel.

MEN FROM THE ISLANDS



Facility chiefs from the Pacific Region pose for photograph at conclusion of their recent Honolulu meeting. Standing, l. to r. are: Ted Escobar, Wake; Cyril Amerling, Wake; George Avery, Canton; Robert Davis, Canton; James Haines, Samoa; Mervel Valentine, Wake; Donald Berrigan, Wake; Homer Willess, Guam; George Harris, Guam; Lyle Kilpatrick, Guam; Victor Cox, Canton; Edward Warner, Guam. Seated, l. to r.: Thomas Musson, Chief, Island Operations; Raymond Woodward, Chief, Flight Standards; Robert I. Gale, Director; Captain Hugh Laing, Deputy Director; and Donald Long, Chief, Air Traffic. Conference was pronounced successful by all.

Longtimers in LaGuardia Tower Receive Length of Service Pins



LaGuardia Tower group is congratulated by the New York Air Traffic Area Office Supervisor Mark Hammond (extreme right) for dedicated service following presentation of Length of Service Award pins. Recipients, left to right, are: A. Graham, 15 years; E. Skaggs, 20 years; A. Passariello, 20 years; B. McKenzie, 20 years; and A. Spencer, 15 years.

BEHAL TAKES HIS RADAR "KNOW-HOW" TO RIO



Bob Behal is all business when it comes to teaching.

Rio de Janeiro's Galeao International and Santos Dumont Airports now have radar controlled approaches, thanks to the capable efforts of Robert Behal, IA-242, Training Resources Group. On loan from Washington headquarters, Behal proceeded to Rio early this year to assist the Directorate of Air Routes of the Brazilian Government. In a short seven weeks, he retrained Brazilian operators in the use of radar for instrument control of air traffic and vectored some 2,000 aircraft into the Rio terminal area.

Behal's technical assistance and know-how speeded up the commissioning of radar in the Rio area. As a result, delay times were reduced for international jets terminating long non-stop flights from Europe and North America as well as Brazilian domestic traffic.

Kids' Letters Short on Spelin But Mighty Long on Luv

The old expression, "out of the mouths of babes . . ." was brought to mind recently when George Smith, Chief of the Kansas City Center, received thank you letters from 24 second-grade students from Olathe, Kan., who had toured the facility.

The notes differed in as many ways as the writers. Some were the evident result of patient printing, some showed talent in a journalistic way, others just tugged at the heart.

Reproduced here is a composite letter which tells the story the children felt and put across in their individual notes. Each sentence is taken verbatim from

the original letter.

"Dear FAA,

We enjoyed the trip. And we all had fun. We thank you and we like the radar scopes and teletype machines. We liked the big map of all the airports and bass.

The FAA is a big building. Do you get sleepy? My daddy works there. The airplanes are thankf. We all say many interesting things. It was fun looking from the balcony. I had a good tim. I like the cook. The food smelled good. The cafeteria smelled good.

I hope that we can come again when we are a little older. Thank you for the nice trip. Love."

Old-Timer Was "Brass Pounder" As Early Aerial Communicator



Charles E. Snider, once directed battleship gunfire.

Back in 1924 Charles E. Snider got his first introduction to wireless communications when, as an aerial spotter, he rode in an observation plane and flashed target information via Morse back to the fire control center of the USS *Maryland*. On March 31 of this year, he ended a 35-year career with the FAA and predecessor agencies which saw advances in communications far beyond the wildest dreams of the Morse Code era.

During his long career, Snider saw both radio and aviation grow into giants. As a planning officer for a number of years, he kept abreast of the changes and progress in communications. Midway through his career he obtained his private pilot's license.

Snider's first post-Navy work was as radio operator in Reno, Nev., in what was the "grandfather" of the present-day flight service station. Navigation aids in those days were principally radio and beacons. After several other duty assignments, he transferred to the Airways Operations Division in 1940 at Atlanta.

Progressing through senior controller duties at the Center, he became Deputy Chief, Airways Operations Division, in 1948. He transferred with other headquarters staff personnel to Fort Worth in 1953 when the two regions were combined and continued in the position until 1958 when he became head of the division's planning branch. Since 1961, he had served as Chief, Terminal/FSS Section.

One of the highlights of his career came in 1948 when he was chosen air traffic control representative to accompany State Department officials to South American conferences of ICAO in Lima and Rio de Janeiro.

AREA COORDINATORS HOLD MEETING IN ATLANTA



Bruce Chambers, Southern Region Public Affairs Officer addresses semi-annual meeting of SO Area Coordinators.

The semi-annual meeting of the Southern Region's Area Coordinators stressed current Agency programs and highlighted SO's goals for 1964.

Among those who addressed the two-day assembly were Director Basnight,

Deputy Director Boatman and Georgia State College President, Dr. Noah Langdale. One session was conducted by Bruce Chambers, SO's Public Relations Officer. Climax was a "teletalk" from Administrator Halaby, in Washington.

FSS Spots Emergency Airport for Troubled Pilot

An excellent example of the type of service being furnished the aviation public by flight service stations was reported recently by A. J. Allison, chief of the Salinas, Calif., FSS.

FSS personnel who participated in this "assist" were Sharon M. Goodwin and George H. Moorefield.

Allison reports that a pilot called Salinas radio and advised he was having engine trouble, and was about 20 miles north of King City.

"I doubt whether I can get to the King

City airport," he said.

A detailed description of a dirt strip used by aerial applicator aircraft and located near Greenfield, about five miles from the pilot's position, was immediately furnished the pilot by the FSS.

The pilot advised that he had the strip in sight.

Radio contact was lost and the Monterey County Sheriff's office was asked to have a unit check the Greenfield strip. A call brought the information that the pilot had made a safe landing.

Fairbanks Center Men Helping to Raise a Boy in Far-Off Ecuador.



Pedro Bolanos now has 23 "Fathers" and may get more.

How would you like to have 22 parents? This is the case of young Pedro Bolanos of Ecuador who was fatherless until last February. Destitute, Pedro's mother, a widow, appealed to the Foster Parent Plan, Inc. for help. Twenty-one controllers and electronics men from Fairbanks Center responded and are now helping Mrs. Bolanos raise Pedro. Allen Hall expects to enroll 30 men of the Center who would like to play dad through the Foster Parent Plan.

FISH DAY AT THE PAGE MENAGE



Arnold Page, son Kenneth and 76 pound silver marlin.

Arnold Page, Engineer at Wake Island SCATER Station, had this 8' x 4" silver marlin to prove that it didn't get away. Arnold decided to mount the fish on his living room wall. Wife Phyllis, Secretary in Manager's Office, had a better idea—all their friends were treated to steak.

GIFT TO THE SYMPHONY'S FUND

FAA International students have been guests of the Oklahoma City Symphony Orchestra for many years. This spring they showed their appreciation for the many evenings of fine music by a cash contribution to the Symphony's maintenance fund. Riad Sha-Ban from Syria presents the gift.

Wedding Bells at Wake



Area Manager Cy Amerling (rear) concluded the marriage ceremony by joining Adele Costa, Wake Island school teacher, and Harold Riordan, Air Traffic Control Specialist. The bridesmaid was Estrella Bayne; best man was Ben Marcelo. Wendel Bayne gave the bride away. A reception at the FAA Community Club followed.

Burbank Gets "New" Tower



Leslie A. Songstad, right, FAA tower chief at Burbank, Calif., is interviewed at dedication of Burbank's tower. At left are WE Director Joseph H. Tippets and Charles Warnick, ID-1. Modernization included a new IFR room, new communications, remodeling of the tower cab, and installation of new equipment consoles.

REWARDS FOR GOOD WORK



Left: Harley E. Shottliff, Detroit air traffic supervisor and area coordinator is shown presenting Janis Tavormina, secretary, with a Performance Award Certificate as City Tower Chief W. R. Giddings looks on. Right: Shottliff presents a Sustained Superior Performance Award to E. B. Schaeffer, Supervising Inspector at General Aviation District Office No. 5 in Ypsilanti, Mich.



700 RADIO HAMS ZERO-IN ON "SWAP FEST" GALA



Despite the casual headgear this is serious business.

Specialist Ray E. Leverich, Midland, Texas, FSS, presided over the spring "swap-fest" sponsored by the Midland Amateur Radio Operators Club of which he is president. Approximately 700 radio operators from seven states attended.

The swap-fest was held for ham operators to swap equipment and ideas. Representatives of various radio equipment manufacturers displayed equipment and gave hints on ham radio operations.

Leverich has operated his own station, W5BSM, for 13 years. He is also a member of the Pegasus Skydivers Club in Odessa and has logged 29 jumps.

Chicago ARTCC Technicians Burn the Midnight Oil

The local Airways Engineering Society (AES) Chapter at SMS-801 (ARTCC) at Aurora, Ill., has launched a successful program to help technicians of all grades attain a better understanding of the material in the FAA Academy Directed Study Courses.

The Electronic Fundamentals and Engineering Mathematics (DFF-100) Course is the first one being tackled. The services of Don Case, head of the Mathematics Department of Aurora East High School, were engaged to teach the course in 20 sessions at the rate of one session a week. A nominal fee is being charged.

The course covers mathematics to the threshold of calculus in the first portion,

and continues on into an extensive study of DC and AC circuits using mathematics. Mr. Case is a former communications officer with the Army, which fits in quite well for the latter portion of the course. The course ends with a final supervised examination.

There is plenty of enthusiasm in the 20 to 25 technicians attending the course at the Chicago ARTCC. Technicians of all grades from the systems maintenance sectors at Aurora, O'Hare, Midway and Joliet are enrolled.

Interest in this activity has been so gratifying, more training courses are now in the planning stage. Courses are open to all FAA personnel in the area.

New Building at Salt Lake City



This is the new building scheduled for construction at Salt Lake City Municipal Airport to house FAA facilities at that key Western Region city. Other construction taking place in the Western Region is the completion of a new Flight Service Station at North Bend, Ore., and ground breaking for new SMS buildings at Pocatello, Idaho, and Olympia, Wash., and completion of the remodeling of the new co-location building at Seattle.

EA Handicapped Employee Cited During Kiwanis Club Luncheon



Sterling Timmerman, ATCS at Watertown FSS received kudos from both New York State and EA during award ceremonies conducted at Watertown Kiwanis Club. Timmerman, a handicapped employee, received a citation from EA and a plaque from the Governor's committee for his outstanding performance. Above, left to right, Watertown FSS Chief John Asafayo, Mrs. Timmerman, Sterling Timmerman, and EA Deputy Director Wayne Hendershot.

New Somalia Air Chief



Enar B. Olson, Director of the FAA Academy, presents Geilani Ali, newly appointed Director General Civil Aviation, Somalia, West Africa, a graduation certificate after he completed a recent National Aviation Systems Course at the Academy.

GROUND SCHOOL IS AIRBORNE

The eighth session of the FAA Flying Club ground school was held at the headquarters building in Washington, D. C. The 20-hour after-work course consists of 10 two-hour sessions. Dr. R. L. Wick, AM-210, instructed the class in Medical Facts and Private Flying and Weather. Other instructors and subjects are: Merwin K. Strickler, GA-30, Principles of Flight and Aircraft and Engine Operation; Ralph R. Lovering, GA-30, Navigation; Lt. Col. William R. Fuchs, USAF, FS-103, Radio Telephone Procedures, and Frank M. Jamison, Jr., FS-446, Publications, Rules and Procedures.

DAYTONA BEACH AUTOMOBILE CLASSIC DRAWS SWARM OF PRIVATE PLANES



Part of the 500 planes that made Daytona Beach City Airport their temporary roost during the races.

Daytona Beach City Airport was one of the busiest in the nation recently as some 500 airplanes flew in with hundreds of spectators for Daytona's 500 NASCAR Race.

The FAA Control Tower at City Airport handled 1,210 operations, most of which landed between 8:30 A.M. and 12:30 noon and departed between 4:00 P.M. and sunset. During one 60-minute period, 160 airplanes took off. It is estimated that at least \$25 million dollars worth of planes were parked at City Airport during Race Day activities, from small Pipers and Cessnas to JetStars.

The International Speedway is located adjacent to City Airport. Every year, the crowd gets larger as racing fans learn they can fly to City Airport in the morning, walk to the race track, and return home the same evening, avoiding the expenses of hotels and motels and annoying traffic jams.

TIP SHEET CUTS ACCIDENT RATE IN SW REGION

Aviators in South Texas and Mexico are reading copies of an information sheet prepared by the San Antonio GADO and are finding it a profitable pursuit. The sheet includes operational and maintenance tips and covers airworthiness directives, comments on recent accidents and violations, and reference and study material.

GADO inspectors point out that accidents have been cut in half since the in-

formation sheet was initiated 18 months ago. Last winter was the first winter on record during which no fatal accidents occurred due to weather.

Additionally, GADO personnel have translated into Spanish parts of the Federal Air Regulations for the benefit of Mexican pilots who use the San Antonio facilities. Many Mexico pilots visit the Alamo City for aircraft maintenance and for shopping.

Major Is First Ft. Wainwright Man Named as Flight Examiner



Jay McCausland, right, Supervising Inspector, FSDO, Nr. 2, Fairbanks, gives Major Leo Bryan, Detachment Commander, Yukon Territory, Ft. Wainwright, center, a Flight Examiners Designation Certificate. Sidney V. Stone, left, certified the officer for a Pilot and Instrument Examiners Rating.

This was the first time a military man at Ft. Wainwright had been appointed a flight examiner in the Fairbanks area.

ABBOTT NEW ELKO FSS CHIEF

Raymond E. Abbott recently reported for duty as the new chief of the Elko Flight Service Station.

He is a veteran of 27 years of experience with the FAA and came to Elko from Delta, Utah, where he was chief of Delta FSS. Abbott has served at numerous stations, including Wendover and Salt Lake City. His total Federal service exceeds 33 years.

Aero Center Employees Study Law on Their Own Time



Judge Charles F. Burns presents the Delta Theta Phi Charter to Paul Black. Others in photo are: Jerry Fent, Judge Elvin J. Brown, and Michael Tesio, Jr.

Two FAA employees of the Aeronautical Center were among 15 law students at Oklahoma City University installed as charter members in the Delta Theta Phi national fraternity in ceremonies in the Oklahoma Supreme Court Chambers.

Jerry Fent (FS-956), a second-year law student, and Carl South (PT-950), a third-year student, were inducted into the OCU chapter which has been designated as the Robert S. Kerr Senate, named in honor of the late Senator Kerr.

Off duty education at personal expense to improve professional competence is a popular pursuit among FAA Oklahoma City personnel.

Other FAAers studying law are: Douglas Althoff, first year (PT-946); Jack Lignon, third year (FS-985); Eli Merlin, fourth year (IM-987); and Don Winfrey, first year (FS-946).

CONTROLLERS' ACTION SAVES INJURED FLYERS

Two FAA controllers, a New Orleans aviatrix and two Coast Guardsmen went up to snatch an injured couple from possible death in the waters of Lake Pontchartrain. Supporting the successful rescue operations were personnel of the Moisant and Lakefront towers, flight service station and the ARTCC.

Action started when the pilot asked for emergency assistance and subsequently ceased to acknowledge instructions from Moisant and other facilities attempting to transmit to him. One of his last transmissions said he was low on fuel. Radar showed he was in a series of shallow 360 degree turns.

Immediately, Moisant supervisor Walton C. Reece alerted Search-and-Rescue through Navy New Orleans tower, and radio contact was made with several helicopters already airborne in the area. They were given a heading to where radar had last identified the lost plane.

Grady C. Neal, IFR Room Coordinator, noting the aircraft was continuing to circle, contacted Mrs. Jeannette M. de Jarnette, who was piloting a Bonanza on VFR about 15 miles from the circling aircraft, and vectored her toward the plane. Approximately four minutes later both the Center and Moisant lost radar contact simultaneously with the elusive

plane. At the time, Mrs. de Jarnette was about two miles south of the last radar fix, the Navy helicopters were from 15 to 20 miles from the scene, and a Coast Guard 'copter was airborne from the Naval Air Station on vector.

Circling the area at low altitude, Mrs. de Jarnette, an instructor with 7,000 hours of flight time, sighted the aircraft in the lake, its tail section above water, and the two survivors swimming. The plane sank within minutes, but Mrs. de Jarnette continued circling the spot until the Coast Guard 'copter arrived and picked up the unconscious pilot and his exhausted wife.

Team effort had pulled two near victims from Lake Pontchartrain, which has often claimed persons in air crashes. Mrs. de Jarnette, whose own flying professionalism became an important asset, was so impressed by the quick-thinking controllers that she wrote a letter to Administrator Halaby. In recognition, the Air Traffic Division presented Special Act Awards and commendation letters to Reece and Neal. Commendation letters also went to Controllers James L. Valicenti and Paul E. Chatelain and appreciation letters to Controllers James R. Finklea, Edward J. Pierson and Joe E. Kemp, all of the Moisant facility.

Savings Bond Citation Received For FAA by Deputy Administrator



This two-inch diameter bronze medal was awarded the FAA for its participation in the 1963 Savings Bonds Campaign. The citation was received by Deputy Administrator Lt. Gen. Harold W. Grant, from the Honorable John W. Macy Jr., Chairman, Interdepartmental Savings Bonds Committee, in ceremonies held in Washington.

CE SERVICE AWARDS

Dispatcher Joseph Palermo and Warehouseman Harry Heitmann received Sustained Superior Performance Achievement Award from W. H. Siegmund, Chief Administrative Services Division. Present at the ceremony (l to r) S. Gottfried, Chief, Motor Fleet Management Section, Joseph Palermo, W. H. Siegmund, Harry Heitmann, A. L. Lombardo, Chief, Property and Supply Management Section and Bruno Ponzi, Chief, Property & Services Branch.

CASH FOR TIME-SAVER



James E. Gibson, regional mail clerk, received a certificate and cash award recently for his time-saving idea concerning the addressing of envelopes.

PACIFIC REGION'S LOSSES OTHER REGIONS' GAINS.



Don and Gene Beggs (l.), and Mr. and Mrs. Ed Williams (with Charles Aldrich, r.) are now in Washington.



Just as summer heralds the passing of spring, it is inevitable that the passing of time witnesses the exodus of personnel. Pacific Region is not unique.

Ed Williams, for the past two and one half years an airways engineer in the I&M Division, is leaving for Washington for a position in the Supporting Services Branch, I&M. Jack Black, assistant chief, Materiel Management Branch, I&M Division, for the past several years (but an employee of the Pacific Region for the past 19 years), has transferred to Denver to assume the post of Materiel Officer for the Denver I&M District Office. Gene Rugg, technical training officer, P&T Division, since January 1962, left for a similar position

with the Western Region Headquarters in Los Angeles; Gene, a former school teacher and ex-Marine pilot, came to the Pacific from the Alaskan Region. Don Beggs, defense readiness officer, has departed for Washington, D. C., where he is an airways engineer, Program Management Division, I&M Service; Don has been in the Pacific Region since December 1960.

Edwin Griffith, with Pacific Region since 1957, has retired after more than thirty years in architectural and design fields. Ed was assisting in an inventory of an engineer base yard at Hickman Field when the December attack came. He is credited with much of the esthetic values of Pacific Region buildings.

Half-Dozen, Plus One



As Project MERCURY becomes history with its famous "Select Seven," FAA's Project ARTS (Advance Radar Traffic Control System) gets under way with its own "Select Seven," in this case, seven Southern Region electronic maintenance technicians, chosen to receive training for technical evaluation of the ARTS Program. Following a detailed briefing by Systems Maintenance Division Chief Cochran, Vernon Louendes (r), Atlanta SMS Hub chief, points out the UNIVAC 1218 Computer's memory and mathematical drawers to the "Select Seven," (l to r) Charles Coburn, W. M. Ferguson, Roger Blythe, Kenneth Wood, Horace Anglin, Charles Bauman, Gerald Spikes, and P&T job classification officer, Floyd Klossing.

Personnel at Denver Center Aid Underprivileged Indian Children

Following a practice of some years standing, personnel of the Denver ARTCC at Longmont collected \$308.55 for a medical fund to aid Navajo children in Arizona.

The money was sent by Robert W. Farris, Denver Center Chief, to the Sage Memorial Hospital at Ganado, Ariz.

Light-Weight Safety Aid



Henri Bouche (l.), French delegate to the Council of the International Civil Aviation Organization, was a visitor to the Civil Aeronautical Research Institute at the Aeronautical Center. He is seen with Dr. Stanley Mohler, Director of CARI, as they examine a new lightweight inertial reel shoulder harness which will appear next year as optional equipment on a popular light airplane.

"Bond" Wagon Gets Rolling



Mr. Halaby accepts new \$75 Kennedy Bond he bought from A. E. Weatherbee, Treasury Department, to launch Operation Security—The U. S. Savings Bond Campaign.

Oh Where, Oh Where Are You Toastmistresses?



The FAA LaFayettes Club, composed of members at Western Region headquarters, was two years old last February. The club, sparkplugged by the

enthusiasm and efforts of Miriam Maiten, stresses better communications, leadership, tact, and human relations. Club members would like to know whether other regions have a toastmistress club or whether this is another "first" for the Western Region. At left are: Front row, from left—Beverly DeLancey, second vice president; Ethel Supantic, president; Madeline Dunn, first vice president. Second row—Ann Hopkins, treasurer; Trudy Tyler, secretary; Miriam, Maiten, club representative (first past president); and Jane Lynam, alternate club representative (past president.)

"Hot" Animals Exposed by New Electronic Device

A gauge for measuring any radiation absorbed by small animals has been invented by an FAA electronics engineer at the National Aviation Facilities Experimental Center.

Reuben H. Holliday, technical adviser to the chief of the Electronics Branch, Experimentation Division, re-

cently was granted a patent for a device which measures the amount of electromagnetic energy absorbed by smaller animals exposed to microwaves. The Holliday invention will be useful in biological research laboratories where studies on the effects of radiation on animals, such as rabbits, are being conducted.



● **Comptroller General Concurs**—Under a ruling of the Comptroller General (B-150729, June 19, 1963), the agency practice of assuming liability for damage, loss or destruction of leased aircraft, in lieu of paying the cost of hull insurance, was declared not in violation of existing law. Agency policy concerning the liability is described in Agency Order 4400.2, (April 15, 1964.)

● **Like To Travel**—An overseas assignment is not an interruption to a career in the FAA but rather, a part of it. This is the keynote of OA 3410.2 (April 20, 1964), "Career Planning for Overseas Assignments." The Notice states that, "It is the policy of the FAA to administer overseas assignments as an integral part of Agency personnel management."

At present, the Agency has some 300 people in overseas slots. Approximately 100 of these are assigned to Agency for International Development (AID) sponsored projects; the remainder are engaged in direct FAA work.

The Agency has representatives in 30 foreign countries, with the largest number serving in the European, African Mediterranean area.

Not included in the meaning of the term "overseas" are the Canal Zone, Alaska, Hawaii, possessions and territories of the U. S.

Some of the positions, but not all, include: air carrier inspectors; electronic engineers and technicians, flight inspection aircraft pilots, airport engineers, aircraft engineers, air traffic control specialists, and airways engineers.

● **QST-QST-QST All Hams**—Many FAA employees have proposed starting an agency-sponsored FAA Employee Amateur Radio Net. Activities have been suggested primarily for morale purposes and, secondarily, to serve as emergency or defense readiness communications media for FAA (see pg. 10).

Agency Order OA 1900.22 (May 26, 1960) spells out the policy on this activity and includes instructions on how to apply for membership in MARS (Military Affiliate Radio System).

● **Fund Raising Within The FAA**—OA 3710.5 (April 6, 1964), outlines current Agency policy with regard to fund raising. It limits the number of on-the-job solicitations to three annually—a local community chest or similar federated group, the American Red Cross (when it

conducts an independent campaign) and the National Health Agencies. Equitable dollar goals or quotas may be accepted as the total agency share of the community goal but employees have the right to disclose individual gifts or keep them confidential. Assignment of individual dollar goals is prohibited, and where guides for giving are developed by the soliciting agencies, there is to be no requirement that individuals meet such guides. The Order further states that while employees shall be made aware of their obligations as good citizens in the community, no practice involving compulsion, coercion or reprisal will be directed toward an employee because of the size of his contribution or his failure to contribute.

● **Please Remain Seated**—Order 3900.2 (April 23, 1964) prescribes that an agency owned or operated passenger motor vehicles will be equipped with seat belts and their use required by employees driving on official business.

A mounting stack of statistics (see pg. 27) proves the value of seat belts in reducing death and serious injuries. Experts note, however, that the seat belts are absolutely useless—unless motorists make use of them. Don't be caught dead sitting on your seat belt!

● **Mark Of Distinction**—Recent Air Traffic Service studies have resulted in the adoption of a standard personal identification badge for use throughout the FAA.

Air Traffic facility personnel will wear their identification badges while on official duty. Regional directors will establish criteria for use of the badges by other regional personnel who contact the public and official visitors. The one-by-three inch name plate is not a substitute for the normal agency identification card. Agency Order OA 3790.2 (April 3, 1964) establishes the agency-wide policy on their use.

● **Who Measures Fallout?**—The National Fallout Monitoring Network (NFMN), formerly known as the Fixed Federal Monitoring Network, is an extensive radiological monitoring system established by the Office of Civil Defense (OCD) under a Presidential Directive to measure and report radiation levels throughout the United States following a nuclear attack.

All monitoring stations and facilities of the Federal, state and local govern-

ments, of business and industry, and, in some cases, private homes, are included in the NFMN.

Every FAA office and facility having at least one qualified radiological monitor and adequate radiological instruments is required to participate. Further details can be found in Agency Order OA 1900.23 (April 3, 1964.)

● **Fly the FAA Way**—One of the best ways to conserve scarce travel funds is to make your official trip via FAA aircraft whenever possible. In case you're wondering who may travel in agency aircraft, OA 4030.1B (April 15, 1964) lists the guidelines for use of agency aircraft and the carrying of passengers.

In general, those eligible are FAA employees who are in an official travel status or who are essential to the proper or appropriate accomplishment of the mission. The order goes on to explain when employee dependents, non-agency persons on official business in the interest of civil aviation and other groups may fly in FAA aircraft.

● **There's Still Time**—Some veterans of World War II are still eligible for home loans under the GI Bill of Rights, according to word from the Veterans Administration Headquarters in Washington, D. C.

Benefits may be used for 10 years after discharge, plus one additional year for each 90 days of active wartime duty. However, all WW II benefits expire on July 25, 1967.

Veterans Administration officials stress the point: To get prompt service in all matters relating to veterans' benefits, applicants should always first contact their local VA office.

● **Cut the Red Tape**—President Johnson recently wrote to all executive department heads asking for a close look at the record-keeping and reporting requirements that have been imposed upon individuals and industry, particularly on small business. He pointed out that discontinuing such reporting procedures where possible would result in a long-term saving of time and money by the government, business and general public.

To carry out the President's desires, the FAA published OA 1340.1 (May 14, 1964) which announces an intensive review to be made of the reporting requirements that the agency has placed upon the public.



MANAGEMENT INSTITUTES FOR YOU

If you are one of the agency's intermediate supervisors who has not attended one of the FAA Management Institutes, you probably can expect such an opportunity within the next couple of years. This has been made possible by the decentralization of these management training programs. From October, 1961, when FAA's middle management program began, to July, 1963, under a centralized concept, 10 such institutes were conducted for some 308 FAA supervisors. In 1963, under the decentralized program, 15 institutes were held for some 450 supervisors.

These institutes are designed to provide live-in managerial training for agency personnel in the intermediate supervisory and staff levels—this includes personnel below the level of those normally selected to attend the Executive School and above the first and second line supervisor, such as center and tower chiefs and regional branch chiefs.

The management institutes generally cover three major subject areas. First, there are sessions concerning the functional activities of the manager to plan, organize, direct, coordinate and control. Second, the course deals with group aspects of management concerned with communication, leadership, training and motivation. Finally, the program deals with the personal aspects of understanding human behavior as a basis for effective human relations in the work situation.

With the responsibility for conducting these institutes decentralized to the regions, Aeronautical Center and NAF-EC, it is anticipated that more supervisory personnel and key staff officers will be offered this training.

Further information is available from Victor Onachilla, PT-37.

WILLEY VISITS PACIFIC FACILITIES

R. H. Willey, Assistant Administrator for Personnel and Training, recently completed a tour of Agency facilities at Canton, Samoa, Wake, Guam and the Regional Office in Honolulu. The primary purpose of his trip was to review the unusual personnel problems of the agency's overseas area. Specifically, he gathered information for Agency proposals and policies concerning reemployment rights, housing allocation, pay

differentials and allowances, and other personnel practices.

Upon his return, Mr. Willey observed, "I was impressed with the high technical competence, dedication and experience of the regional leadership and of many employees. Further, I became convinced of the compelling need for a positive program of rotation and reassignment and shall work toward such a system. The data accumulated on this trip will be valuable to us in evaluating and improving our personnel practices."

REPORT ON PERFORMANCE IMPROVEMENT

Two years ago this month, the Agency initiated a Performance Improvement Program which involves all employees. It is appropriate to look at its effects.

First, supervisors received training in performance improvement procedures. Some gained greater skill in developing performance standards with their employees. They also increased their ability to conduct effective performance discussions. This was probably the largest training program for any single activity the Agency has ever provided.

Developing performance standards with employees had been done by effective supervisors long before the FAA had a Performance Improvement Program. An effective supervisor always considered it a major part of his job to discuss with an employee what he is held accountable for, his authority for action and the results expected of his work. Effective supervisors also engaged in continuous discussions with employees about problems on the job; road-blocks which might hinder the employee from performing well; and about what could be done to help the employee improve his own performance. "Performance Improvement" as a formal program merely makes this basic duty of the supervisor somewhat easier to perform.

Some managers and employees throughout the agency have reported significant benefits from using this process.

The employee has a better understanding about what's expected of him. He needs less direction. He can evaluate his own performance and improve it—not after being told to do so but whenever he sees that changes are necessary. The various parts of his job come in better

focus. He is better able to tell the important from the unimportant.

FAA officials also are benefiting by the program in other ways. For example, they find that through it they are able to implement the President's program to help each Federal employee improve his productivity.

Now the Agency is ready to start using the information that can be obtained from this performance improvement process to provide what is needed for Career Planning. Essentially, these are two things. First, from performance standards, the agency can get information about job requirements and know what kind of skills and talents it takes to get the job done. This means that as a job is vacated and a replacement sought, managers will be able to identify the kind of person they are seeking.

Secondly, for career planning, supervisors need to take stock of the skills, talents and capabilities of the agency's 46,000 employees. As supervisors discuss the employee's performance with him, they will get information about the employee's skills and talents, his career interests and long-range career potential. This information will go into the agency's inventory of its work force. Agency managers then will be able to match job requirements very carefully with employee skills and talents. This is an essential part of FAA's Career Planning System.

PERSONNEL PROGRAMS TO BE REVIEWED

In July, the Office of Personnel and Training begins some new in-depth reviews of certain personnel management programs. Survey teams will visit a random sample of various facilities in the Eastern, Southern, Southwest and Western Regions as well as the Aeronautical Center.

On these visits, they will review a number of programs—Merit Promotion, Performance Improvement, Recognition and Awards Program, and possibly one or two others of special interest. The survey is designed to evaluate the amount of success of each program and to identify areas where improvements can be made.

If you are not contacted during July and have comments on any of the above programs, send them to PT-90, Personnel Program Evaluation Staff, FAA, Washington, D. C.



HYPERBOLIC COORDINATE CONVERTER SHOWS PROMISE

A potential "break-through" has been achieved in applying digital computer technology in coordinate converter equipment for use with hyperbolic navigation systems such as Loran-C. Developed under contract by Lear Siegler, Inc., SRDS engineers look hopefully to a significant milestone in highly-simplified and precise long range air navigation.

The FAA development has been underway for a number of months. Because of size and weight factors and required manual operations, Loran-C (a more accurate system than Loran-A, long in use) gear previously could be used economically only for marine navigation. A laboratory feasibility model is now undergoing in-flight evaluation.

The new equipment receives the transmitted signals from a master and two slave stations, automatically converts them into degrees of latitude and longitude which are displayed electronically, then computes bearing and distance-to-go for steering to a preselected destination. Performance of the coordinate converter has been consistently demonstrated to an accuracy of less than a minute of arc in areas of good-quality reception. After a round-trip test flight between Washington and Bermuda, Sid Hirshon, SRDS project manager, stated that the new coordinate converter has a high potential as a means for reducing separation standards and cockpit workload on ocean flights.

AUTOMATED FLIGHT STRIP PRINTER

Today's air traffic environment still calls for using the familiar flight progress strip as the principal display of tabular data.

In non-automated Centers, this data depicting aircraft position and progress is manually acquired, calculated and recorded. In an automated Center, flight progress strip printers, with their associated computer, perform these

In automated centers flight strip printers help controllers with paper work.



functions without intervention by a controller.

It completely checks the data by special error detection circuitry. This assures receiving the data in the precise form that it was transmitted by the associated computer. If a message character is received in error, it will be detected by the printer and a special error symbol will be printed in place of the erroneous character. Also, the error symbol will be printed in a conspicuous place on the flight progress strip where it is readily recognized by the controller that the data on the strip contains an error.

The flight strip printer is a very flexible computer output device. It can print 88 different letters, numbers and symbols in any position on a 72-character line in two sizes, and in either red or black. The printer can detect an out-of-paper condition, when it is at the first and last character position on a line, when it is on the first line of a form or strip, and when the print element is at any preselected print or tab position. It also performs the normal functions of any teletypewriter printing device. The flight strip printer can signal the computer whenever it is in a not-ready status or a busy status and it will respond to a "print" instruction from the computer by acknowledging the completion of any instruction. This design assures that all data transmitted to the printer will be received with no loss of information.

TEMPERATURE/HUMIDITY CONTROL IN RML FACILITIES

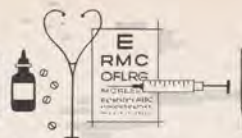
The radar microwave link (RML) system, which transmits radar information from remote radar sites to its point of use in the Center, has experienced deterioration in the Southwest Region due to changes in equipment ambient temperatures. To combat this deterioration, air conditioning units were used.

During the summer, when outside temperatures vary as much as 30 degrees in a 24-hour period, Klystron tubes would drift to unacceptable limits. This caused maintenance technicians to make unscheduled trips to remote locations to restore these very important, round-the-clock facilities to an acceptable operating condition. In winter months, when the building temperature is controlled by automatic electric heaters, troubles are minimized.

One 18,000 b.t.u. (window size) air conditioning unit was placed in each of the seven LMWR (microwave repeater) facilities of the Texarkana-Fort Worth RML system. Their installation indicates that when extreme ranges of inside room temperatures are controlled, there is an increase in equipment stability and a significant savings in man hours and facility downtime.

To obtain further evaluation of the benefits which can be obtained with temperature/humidity control, the Systems Maintenance Service's Plant Engineering Division has authorized a special maintenance project to install additional air conditioning units. These will be placed in six RML facilities of the Kansas City-Omaha and the West Branch-Aurora RML systems in the Central Region, and at four of Southern Region facilities on the Meridian-Memphis RML system.

Comparative records will be kept of tube and electronic component failures, and of technician travel and repair time at both non-air conditioned and air-conditioned facilities. After one cooling season, the results of these tests and cost-benefit studies by the regions and SMS will help determine Agency policies regarding the air-conditioning of all RML facilities. Some of the trial installations are using surplus units available from a decommissioned ARTCC.



Employees in frequent contact with international travelers are urged to obtain a smallpox vaccination at least once every three years.

Many of the approximately 90,000 international travelers who arrive in the United States daily through various ports of entry come from countries where smallpox is prevalent. Due to modern high-speed transportation, it is possible for a smallpox carrier to enter this country before signs of the illness have appeared. Although the U. S. Public Health Service does an excellent job of surveying arriving passengers for smallpox and other diseases, you can help them prevent the spread of any chance infection by insuring your own protection and the protection of your families against this dreaded disease.

Similarly, Americans traveling abroad must have an appropriate vaccination and carry a duly certified International Certificate of Vaccination.

Discuss this matter with the medical staff in your employee health service facility.

Do not delay—get your vaccination today.

The time of year for picnics, visits to the beach and other general outdoor activities is with us once again. With us, too, is the problem of overexposure to the sun. It's always good practice to constantly be aware of the potential health problems associated with such exposure and to take adequate precautions to prevent sunburn from occurring.

Some people fail to realize that the sun can produce a severe burn to the body on a hazy, 85° day, just as readily as it can on days with clear blue skies.

The following precautions should be taken during the summer season:

1. Exposure to the direct rays of the sun should be in small, graduated doses, at first.
2. When sunning on the lawn or on the beach, it's a good idea to use a bland oil on those parts of the body exposed to the sun.
3. Wear a good pair of sun glasses.
4. Be particularly careful of young children with fair complexions whose skin burns easily. Expose them to gradual doses of sun until a tan is acquired.



... AND SAFETY

Council has released figures indicating that 43,400 persons were killed in 1963 in motor vehicle accidents. This represented a six per cent increase over the 1962 figure of 40,804.

Motor vehicle accidents caused an unprecedented death rate of 110 a day. They resulted in injuries to 1,600,000 people who lost at least a day's work each. The accidents cost about \$7.7 billion in wage losses, medical expenses, insurance and property damage.

The volume of traffic and the number of drivers also rose to record levels. Travel increased by four per cent over the 1962 figure to a record 800 billion vehicle miles. The death rate edged up to 5.4 fatalities for every 100 million miles of travel compared to 5.3 the year before. These figures are reason enough for great concern.

During FY 1963, 407 motor vehicle accidents involved FAA employees driving on official business. This number can be greatly reduced by employees paying strict attention to safe driving practices.

Seat Belt Use. This year, U. S. automobile manufacturers are providing their new cars with two front seat belts as standard equipment. This is an important step in the constant fight to prevent personal injuries due to motor vehicle accidents. However, the mere fact that belts will now be available in more automobiles does not assure a reduction in injuries unless the belts are used.

Many people say they believe in seat belts, and have them in their cars, but because of the inconvenience and nuisance of fastening and unfastening, the belts lie unused on the seat. People must be trained to accept seat belts as just another step in the required operation of the vehicle. After all, we must open doors to enter; we must insert a key and turn to start the engine; we must operate the foot pedals and steering wheel. So, why not fasten the seat belts?

A Lesson Unheeded and a Fire. A recent fire in a Federal building in Massachusetts originated in a cluster of plastic trash receptacles in a basement boiler room, demonstrating again that plastic containers will melt and allow a fire to spread.

The rubbish-filled containers were piled near the exit doors which were severely damaged before the fire was put out. The prompt response of the local fire department kept the property loss to \$1,000.

Over a year ago, the General Services Administration Protection Division published the results of tests which proved that plastic receptacles are unsatisfactory. Safest bet: A metal container with a tight metal cover.

A Record Falls. One of the most enviable safety records of current times came to an abrupt end recently. The National Safety Council in Chicago, with a staff of about 350 persons, was nearing a record of 4,000,000 man-hours without sustaining a lost-time injury. But the end came when an employee slipped on some coffee spilled on the floor and lost two days from work with an injured toe.

Work Injury Benefits. In order for a Federal employee injured at work to be eligible for benefits under the Federal Employees' Compensation Act, he should follow several simple rules required by the compensation law and the regulations of the Bureau of Employees' Compensation:

- a. He should report his injury IMMEDIATELY to his supervisor and obtain first aid as directed;
- b. If further medical treatment is needed, he should obtain an order from his supervisor or the first aid unit for treatment by an authorized physician or hospital.
- c. He should make a written report of his injury within 48 hours on BEC form CA-1 which may be obtained from his supervisor or personnel office.

Traffic Fatalities Set Record in 1963. The National Safety

SINCE YOU ASKED

FAA HORIZONS welcomes any and all comments from employees regarding any aspect of the Agency. No anonymous letters will be used. Names will be withheld or initials used on request.



• Inexperienced Controllers?

Sir:

I understand that the FAA is hiring people for air traffic control specialist jobs who have no previous experience as a pilot or controller. Why would the agency do this?

Bill P.

FAA needs to take steps now to broaden its recruitment base in anticipation of future shortages of experienced recruits for air traffic control positions. As the military services, particularly the Air Force, phase out manned aircraft and air bases, the supply of trained air traffic controllers and available instrument rated pilots will be sharply reduced. The agency has been developing examining techniques, recruiting sources, and training methods for selecting and training inexperienced candidates for this work.—Ed.

• Warsaw Convention

Sir:

Several of the baggage tags shown on the cover of HORIZONS for March refer to the "Warsaw Convention." I am curious to know just what that means.

P.C.M.

The Warsaw Convention is a treaty developed at a diplomatic conference which met in Warsaw, Poland, in October, 1929. Its principal provisions affecting air carriers in international transportation are those which (1) limit liability for passenger death or injury to \$8,300, and damage to or loss of checked baggage or air freight to \$7.50 per pound; (2) specifies certain notices that must appear on passenger tickets, baggage checks or waybills issued in connection with the international transportation of persons, baggage or freight.

The Convention is applicable when a ticket is purchased (1) for a flight from one country to another if both are parties to the Convention or (2) for a flight starting and ending within one country which is a party, if the ticket provides for a stopping place in any other country. For example, it would apply to

the domestic portion of transportation furnished on a ticket for a flight from Los Angeles to London via New York, or from Anchorage to New York via Montreal.

Certain amendments to the convention, including one which would double the liability limitation for death or injury, were proposed by a diplomatic conference at The Hague in 1955.—Ed.

• Retirement Money Fund

Sir:

If an employee does not apply for a refund of retirement money at the time of resignation (or separation) is it possible to make application later?

C.D.P.

Yes. Employees with less than five years of service may, upon resigning, withdraw their retirement money at any time. Employees with five or more years of service may withdraw it at any time prior to reaching age 62. Application for refund must be filed with the Civil Service Commission at least 31 days before reaching age 62.—Ed.

• Now We Know

Sir:

The recent item in the April HORIZONS listed "Fayette" Ark., as one of the scheduled stops in the 1964 Powder Puff Derby. A bona fide resident of this area takes exception to such reference. It does provide an opportunity, moreover, to further elaborate on the All Women Transcontinental Air Race.

Fayetteville, Ark., is the Queen City of the Arkansas Ozarks, and like Rome, is built on seven hills. The west fork of the White River provides the eastern boundary to Drake Field. Into this fertile valley on July 5, Powder Puff pilots desiring to do so will land their planes for the last scheduled stop in the SW Region. Other stops are Albuquerque, Amarillo and Oklahoma City, accounting for stops in four of the five states of our region. Prior to landing at Drake these pilots will pass over terrain that will soon form the northern boundary of the largest man-made lake in the U. S.—

the Eufaula Reservoir in central eastern Oklahoma.

A temporary control tower will be in operation for this event. The City of Fayetteville is sparing nothing to make this stop a memorable one for the Powder Puff pilots. Kay Brick, Chairman of the Derby, has flown the route and worked with those involved at each scheduled stop.

Upon taking off and preparing to leave the confines of the SW Region, these pilots will pass over the last of the large reservoirs on the White River—Beaver Reservoir now 98 per cent completed.

Leon H. Cox
FSS, Fayetteville, Ark.

Our copy reader is now writing a short essay on each of the 20 Fayette's and the 12 Fayetteville's listed in our Atlas. And, thanks for the short feature on an interesting sidelight on the Powder Puff Derby.—Ed.

• Recommended But Not Selected

Sir:

Last month my supervisor recommended me for inclusion on a promotion list. Then he picked someone else for the promotion. Why did he recommend me if he wanted someone else?

Your supervisor probably recommended that you go on the promotion list because he wanted to be sure you were considered. Chances are that he didn't make up his mind about who he was going to select until he had a chance to consider all the qualified people who applied or were recommended.—Ed.

• Beneficiary Redesignation

Sir:

If I transfer from one government agency to another must I redesignate the beneficiary on my group life insurance?

J.M.O.

If you are covered under the Federal Employees Group Life Insurance Act, the designation of beneficiary is automatically cancelled on the day you transfer to another agency or 31 days after you cease to be insured. A new designation must be made in the agency to which you transferred.—Ed.



AIR SAFETY IS NAFEC ROLE

Members of the Technical Advisory Board, a group of civil aviation leaders organized in 1962 by Administrator Halaby to review periodically all technical programs under FAA study, visited NAFEC April 7-8. Starting at top left and reading clockwise, TAB members pose with NAFEC Manager William Harrison (center). • Robert Shank, DD-1 (I) listens as E. Sawtelle and J. Murray describe alphanumeric display • David Thomas, PD-1 (I) and Albert Brown concentrate on alphanumeric display • William Littlewood, American Airlines; Arthur Webster, SRO; James Fleming, Pan American World Airways; and Joseph George, Eastern Airlines, watch Dean Gensamer operate beacon system display that shows aircraft altitude numerically. Explaining details (back to camera) is Electronics Branch Chief Carlo Yulo • Harrison and Littlewood view NAFEC facilities model • Joseph Blatt, RD-1; Dr. Nate Hall, Hughes Aircraft; Richard Hough, American Telephone & Telegraph Co.; and Mr. Littlewood, American Airlines, examine aircraft transponders.



FAAers ON THE JOB



Hazel McKendrick

Hazel is the only FAA employee flying in the 2,573-mile 1964 All Women's Transcontinental Air Race starting July 4, at Fresno, Calif., and ending at NAFEC in Atlantic City, N.J. In 1943, Hazel took flying lessons to qualify for the WASPs, got her private license in 1944, and joined the CAA. She holds a commercial pilot's license, is instrument rated and, three years ago, flew in the Dallas Doll Derby. Mrs. McKendrick, a flight service specialist at Dallas FSS (Love Field), is a graduate of Texas Woman's University where she majored in general education and minored in speech.

James S. Eisman

This soft-spoken gentleman leads a double life—and doesn't care who knows it. By day he makes his rounds of the Washington Headquarters building delivering mail. After hours, his activities are something else again. He has had one book published in a four-volume set on public safety and security and expects to complete all four in 1965. A Captain, U.S. Army Reserve (Retired), his military duties included procedures control, facilities protection and counter-intelligence. He's written under his own by-line for Washington, D. C., newspapers, trade and service publications.

