



Read:  
'Research for  
Safer Flying'  
Pages 4-5

## Air Safety Ideas Paying Off Nicely For 9 Employees

WASHINGTON—Winners have been selected in the *FAA Aviation News* Cartoon Contest. There were 12 entries chosen, submitted by nine entrants. (Three were double entry winners). Each winning idea will receive a \$25 cash prize.

Winners were chosen by a panel composed of Charles Warnick, Director, Information Services; William Flener, Acting Director, Air Traffic Services; James Rudolph, Director, Flight Standards Service; and Robert Osborn, nationally known cartoonist. More than 500 entries were submitted.

In speaking of the Cartoon Contest, Warnick stated: "The judges and the noted cartoonist Robert Osborn were highly gratified by the large number of excellent suggestions that were received.

"The contest has provided us with a fine backlog of cartoon suggestions submitted by FAA's firing-line people."

Winners are: Robert Wilson Brown, Jr., Oklahoma City; William Orner, Kansas City, Mo.;

(Continued on page 7)



### Entries Judged

Sitting through the more than 500 entries in the FAA Aviation News contest are (left to right): Charles G. Warnick, Director, Information Services; William Flener, Acting Director, Air Traffic Services; and James Rudolph, Director, Flight Standards Service. A panel, composed of these three FAAers and cartoonist Robert Osborn, chose the twelve winning ideas.

## Fresh Emphasis Placed On Handicapped Skills

WASHINGTON—FAA's year-round program of giving full consideration to handicapped persons in filling positions within their capability will be re-emphasized during "National Employ the Handicapped Week," to be observed Oct. 6-12 by Presidential proclamation.

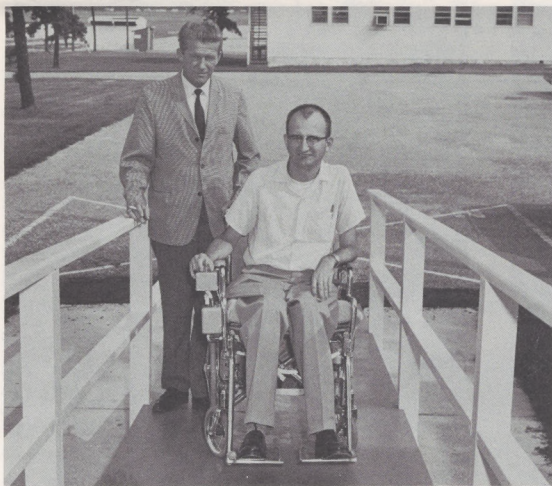
The agency has been commended by the Civil Service Commission for effectively using the skills of handicapped persons and for recognizing the contributions they are making.

Within the past four years, the FAA has employed 210 handicapped persons in a variety of positions. Typical of recent efforts was employment of three blind persons as computer programmers and four deaf persons as card punch operators, at the Aeronautical Center.

Among recent new hires who are expected to be fully effective in their positions despite handicaps is William Mooney, assigned to NAFEC as an electronics technician, though he must work from a wheel chair.

In addition to employing the handicapped whenever possible, the agency makes every effort to recognize their contributions. Mrs. Ira

(Continued on page 7)



### Duty Bound

Jack Stewart (left), NAFEC Coordinator for the Employment of the Handicapped, escorts Electronics Technician William Mooney into his new work area. Ramp was specially constructed to accommodate Mooney's battery-operated wheelchair.

## Stephens New SST Advisor

SEATTLE—Col. Robert L. Stephens, holder of four of nine new world speed and altitude records set in the delta wing Lockheed YF-12A jet interceptor, has been assigned here as a technical advisor to Maj. Gen. J. C. Maxwell, Director of the SST Program.

Stephens will be based at The Boeing Company plant where the SST is being developed. He has been serving as Chief of the Air Force's SR-71/F-12 Test Force at Edwards Air Force Base.

On May 1, 1965, with Colonel

Daniel Andre, who was the fire control systems operator, Stephens piloted the plane and averaged 2,070 m.p.h. over a 17 kilometer course and then flew at 80,257 feet in sustained flight to better existing Russian speed and altitude records.

Colonel Stephens and Andre received many awards for their record-setting flights. These include the MacKay, Thompson and Flying Tiger trophies. Stephens also received a Gold Medal from the Federation Aeronautique Internationale.



Col. Robert L. Stephens  
Technical Advisor on SST

## Alaska Launches Drive To Curb Accident Toll

ANCHORAGE—"Smooth Cat," a statewide program aimed at reducing the number of general aviation accidents, has been launched by the Alaskan Region's Flight Standards Division.

## McKee Heads New Consulting Firm In Arlington, Va.

ARLINGTON, Va.—General William F. McKee, USAF (Ret.), former FAA Administrator, has been elected president and member of the board of B. A. Schriever Associates, Inc. management consulting firm here.

The name of the firm will be changed to Schriever-McKee & Associates, Inc. and General Schriever, USAF (Ret.) will continue to serve as Chairman of the Board.

General McKee retired as Vice Chief of Staff of the U.S. Air Force in August 1964 and joined the National Aeronautics and Space Agency (NASA) as Assistant Administrator for Management Development. In June 1965, he was nominated by President Johnson to be FAA Administrator. The Senate confirmed his nomination June 30 and he was sworn in July 1, serving until July 31, 1968.

Schriever Associates was organized by General Schriever in 1967 and has since provided management consulting services to industry and government in research and development, urban affairs, transportation, national security, and government-industry interface.

General McKee is a 1929 graduate of West Point and spent 35 years in military service.

Originator of the new accident prevention program is Burdette L. (Ben) Thompson, general aviation operations specialist.

Alaskan pilots are being asked to pledge themselves to 10 common sense rules of air safety. Those who have an accident-free record a year after "taking the pledge" will be awarded "Smooth Cat" decals which can be displayed on the windshields of airplanes or cars.

Pledge cards are being made available at flight service stations and fixed base operators throughout the state.

"Smooth Cats" pledge: "To preflight my aircraft prior to each flight; to be qualified in the aircraft I am going to fly; to have sufficient fuel to complete my flight and some to spare; not to fly in uncertain or marginal weather; not to make tight turns near the ground; to fly at a safe altitude over existing terrain; not to drink before flying; to tell someone where I intend to fly; to stay with my aircraft until rescued, if forced down; and to be especially alert for other aircraft."

The program has been endorsed by Alaska's State Department of Commerce, Environmental Science Services Administration and by the National Transportation Safety Board. Though launched in September as part of "Aviation Safety Month" proclaimed by Governor Walter J. Hickel, "Smooth Cat" will be a continuing program.

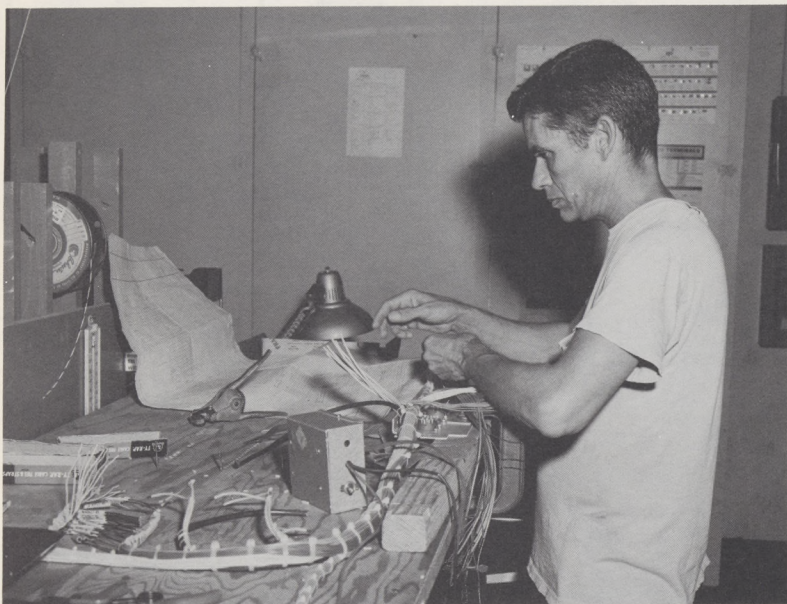
"Smooth Cat" awards for air taxi operators and flight schools also are being planned.

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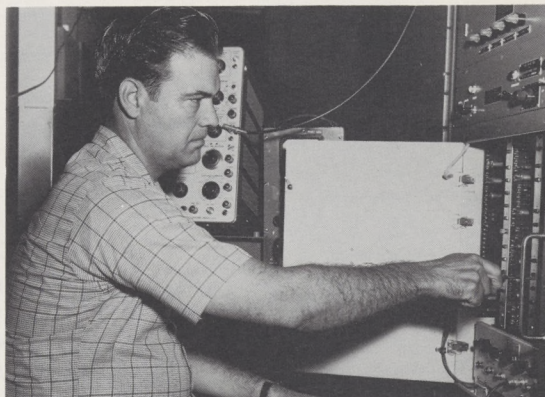


### Safety Push Starts

Statewide "Smooth Cat" program in Alaska, launched by the FAA to cut the toll of general aviation accidents, is discussed by (left to right): Lyle K. Brown, Director, Alaskan Region; William Burns, State Commissioner of Air Commerce and John Hafer, Chief of the National Transportation Safety Board's Alaska office.



◀ Edwin Mallory works temporarily in the same shop where he started his FAA career. After working on the ASR-3 radar, he went to the regional office in Fort Worth, where he regularly works in the electronics shop.



Odis Borden finds being detailed for Dallas duty enjoyable. He has done much of the wiring for the consoles at the new ASR-3 radar site near Dallas Love Field.

When Work Piles Up . . .

## All Hands Pitch In

By George Burlage

FORT WORTH—Electronics Technician Edwin Mallory expertly threads a maze of wires into a panel in the Southwest Region electronic shop.

He is at home with his work, even though his regular duty station assignment is more than 2,000 miles away, in Seattle.

Mallory is one of 12 electronics technicians "borrowed" by the Southwest Region this summer to help cope with an escalating workload, which grew beyond the capability of the authorized staffing. Work centered in the Fort Worth Area Facilities and Equipment program.

Area work piled up in the Dallas-Fort Worth complex due to a "crash" program calling for installation of a second radar for the TRACON, expansion at the Fort Worth Center for the T-38 and NAS programs and installation of a new instrument landing system at Dallas-Love Field.

### Projects Ranked by Priority

Critical program schedules were submitted to the region by the three areas in the Southwest Region so total requirements for manpower could be determined. Projects were ranked in priority on a region-wide basis.

From the tabulation, it was determined that commissioning goals could not be met with manpower available in the region. Program adjustments and rearrangements were made in other areas to permit electronics personnel to aid with the Fort Worth projects.

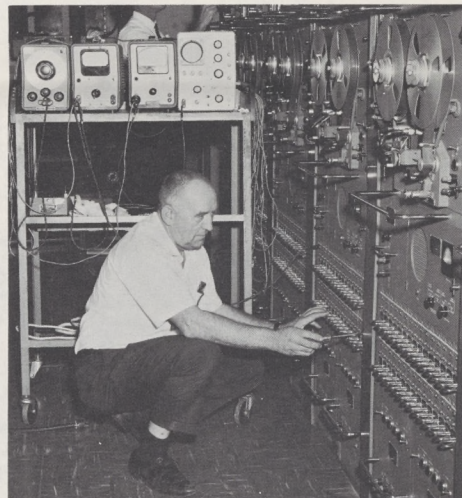
Within the Southwest Region, Roger Smith and Lionel Edmondson were detailed from Albuquerque. T. C. Lambert, Edward Cooper, William Harrison, Otis Wood and W. R. Stephen came from the Houston Area. Adjacent regions were asked for a detail of personnel for the emergency period.

The response was excellent. Clyde Goul worked with relocation of the flight service station and communication equipment from the old to the new terminal building at Fort Worth's Meacham Field. Ernest Walker aided in the expansion work at the Fort Worth Center. Both men were detailed from the Minneapolis Area for 90 days.



◀ Ira Schrawyer finds both his temporary duty and the Texas weather enjoyable as he wires a panel in the electronics shop to help Fort Worth meet projected schedules.

Harold Wailes has a chance to learn more about recorders in his temporary four-months assignment at the Fort Worth Center. Among his duties was relocation of the recording equipment in the Center's expansion work.



Two other Seattle Area technicians, Ira Schrawyer and Harold Wailes, are also on detail. Odis Borden reported from the Denver Area. All are on 120-day assignments.

"These men picked up their part of the work load immediately and demonstrated that as long as they are in this region, our deadlines and goals are going to be theirs," C. A. Commander, Fort Worth Area Manager said. "Such an approach by personnel from other regions working for and with stangers is an outstanding example of one of the resources of these regions for which they can be proud."

### Move on When Work Is Done

Schrawyer and Mallory first worked at the new ASR-3 radar site near Love Field and moved to the electronic shop when their work was completed. Borden worked at the site continuously since his assignment.

It was almost like homecoming when Mallory reported to Fort Worth on his detail. He joined FAA in Fort Worth in 1960 and spent his first 30 months in the same shop. After leaving Fort Worth he made a one-year stop in Salt Lake City before going to Seattle.

"I am enjoying my stay here, but now prefer the cooler weather in Seattle," he said.

Schrawyer, unlike his Seattle co-worker, said he liked the Fort Worth Area duty and even "enjoyed Texas hot weather." His 11 years in the FAA have been spent in the Mountain States, with the last four in Seattle.

Working on relocation of equipment in the Fort Worth Center expansion, Wailes said he was happy to have a change of duty for awhile. This gave him an opportunity to learn about recording equipment, one of his principal jobs so far, adding to his knowledge of nav aids and instrument landing systems. He, like Schrawyer has been with FAA 11 years, but all of them were spent in the Western Region.

Borden has enjoyed his ASR-3 assignment, he says, and bid on one of the Airway Facilities positions available in the realignment of offices. He did much of the wiring of the consoles.

"The smoothness of the absorption and assumption of the total workload in the field by composite forces from other regions and areas show we are still one great FAA," Area Manager Commander said.

# Disadvantaged Glimpse 'Good Life'

FORT WORTH—Two busloads of disadvantaged youths recently were able to visit one of the nation's largest amusement parks—most of them for the first time—thanks to the generosity of FAA employees and employees of other DOT components in Fort Worth.

More than \$300 of the \$525.20 required to finance the trip to Six Flags Over Texas, a popular amusement park, was provided by FAA employees.

Donations were presented by

Southeast Region Director Henry Newman to Green Trimble of the Fort Worth Community Action Agency, who arranged the tour.

It was felt that two purposes were served by the trip: unemployed, disadvantaged youngsters were given an entertainment treat they otherwise could not have afforded and these youngsters were given a bright glimpse of benefits to be derived from education, training and qualifying for productive employment.

DOT offices participating with the FAA in the project included the Federal Railroad Administration, Federal Highway Administration and the National Transportation Safety Board. A branch of the Association of General Contractors also assisted.

For the action in assisting disadvantaged youngsters in the Fort Worth vicinity, Regional Director Newman received a letter of commendation from the Acting Administrator.



### For Park Outing

Henry Newman (second from left) presents Green Trimble, Fort Worth Community Action Agency representative, donations to send two busloads of disadvantaged youths to an area amusement park. They are flanked by George Clark (left) Chief of the National Transportation Safety Board and Delmar Holmes, Director of the Federal Railroad Administration.

## Program By FAA Helps Draw 540 To Regional Meet

MIAMI—"Superb," commented Ted Limmer, Civil Air Patrol Project Officer, about FAA's role in CAP's 1968 Annual Southeastern Regional Conference recently concluded at Hollywood, Fla. The conference attracted some 540 conferees and 65 aircraft.

According to Limmer, who is also Wing Commander, CAP Georgia Wing, some 100 CAP pilots were successfully upgraded after completing five intensive ground and flight instruction courses. Emphasis was placed on instrument flight training at altitudes up to 12,000 feet within a 500-mile radius of Fort Lauderdale.

Written examinations were administered by Charles (Chuck) Smith and Glen Ellis, general aviation operations inspectors from the Opa Locka GADO. Four other GADO operations inspectors served as flight instructors during the conference: Harold Weekley, Atlanta; David Falkner, Jackson, Miss.; and John Kostura and Jack Kenny, both from Opa Locka. Representing FAA from Flight Standards Service in Washington was Andrew Prokop.

Flight planning and pilot weather briefing services were furnished by Miami Area flight service specialists during the four-day conference.

FAA/CAP conference details were coordinated by J. B. Whitehead, general aviation operations specialist at Southern Region Headquarters.



### Father and Son

Marion Neary (right), FAA Maintenance Liaison Officer at Oakland ARTC Center, recently took a sentimental journey in the form of a jet orientation flight with his son, Lt. Jon Neary, a U.S. Navy pilot.

## Digitizer Tester Is Patented

ATLANTIC CITY—A NAFEC engineer has been granted a patent on a device now being used by the FAA at several locations.

Albert A. Lupinetti, Chief, Data Processing Facilities and Operations, has invented a device which generates electronic signals simulating those emitted by radar.

The device is used in testing digitizers and computers and in determining how they react to radar signals. It is being used principally to test components of the NAS Stage A en route model now in operation at NAFEC and at the Jacksonville Center.

Recently, Lupinetti was presented with a cash award by the agency for the contribution his invention is making to agency efficiency.

Since joining the FAA in 1964, Lupinetti has been cited twice for outstanding performance.

# Samaritans Extend Aid To Victims of Eruption

MIAMI—FAAers here are doing what they can to alleviate losses suffered by Costa Rican citizens following the recent series of volcanic eruptions in that small Central American country.

When Mt. Arnel blew its top, it left scores of citizens in surrounding areas homeless and without most of their personal belongings.

The drive to help those left destitute by the upheavals was spearheaded by Ernie Werner, International Liaison Officer, and his sec-

retary, Mrs. Arminta Oates.

So far, more than 60 large boxes of clothing has been collected for the unfortunate Costa Ricans. Before shipment, a large tag was affixed to each box. It stated: "To our friends in Costa Rica from the FAA in Miami."

Werner's office coordinated the drive with the local Costa Rican Consulate, which arranged for LACSA Airlines to airlift the mercy shipment to San Jose, where distribution to the needy was arranged.



### Mercy Shipment

When restless Mt. Arnel volcano (left) in Costa Rica erupted violently recently, much devastation was wrought in surrounding areas. FAA employees in Miami donated 60 boxes of clothing to help the stricken citizens. At right, Ray Stone, Youth Opportunity trainee and Mrs. Arminta Oates secretary, load boxes of clothing from Miami Area Office employees for air shipment to Costa Rica.

(Volcano photo courtesy Miami Herald)



### New Island Homes

Ground was officially broken recently for new 14-unit apartment complex to house FAA and Coast Guard families stationed at St. Thomas in the Virgin Islands. The project, designed by Jimmie Hodges, Resident Engineer with the Southern Region Airway Facilities Division, will be set for occupancy next summer. Ground-breakers are, (from left) Lt. David Wither, Coast Guard; Alton Adams, Virgin Islands Airport Authority; Cyril King, Acting Governor of the Virgin Islands; and Mack Wood, San Juan Area Manager.



HORIZONS

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

Acting Administrator	DAVID D. THOMAS
Director, Office of Information Services	CHARLES G. WARNICK
Chief, Employee Information Division	CLIFFORD CERNICK
Layout/Production	GERNOT RASMUSSEN



In the Psychology Laboratory, Robert Lewis operates research equipment which permits a variety of tasks to be required of the operator under various conditions of workload. Tasks include visual and auditory monitoring, signal detection, pattern identification, mental calculations, reaction time and team problem-solving. For team problems, four additional operators participate. The same psychomotor functions are used in piloting aircraft. It is hoped to establish correlations between laboratory tests and real-life flight circumstance.



Research related to air traffic control problems is conducted in the Psychology Laboratory. Sharon Bowles records data as David Schroeder directs simulated traffic. Tape recording of other reactions is obtained as Schroeder responds to changing demands of the traffic situation. It is hoped that the machine portrayed, one of six constructed at CAMI, will provide useful data in easing controllers' work situations.

## Oklahoma City Labs Wage War on R<sub>x</sub>: Research for Safer

OKLAHOMA CITY—Researchers at the Aeronautical Center's Civil Aeromedical Institute are conducting studies aimed at making air travel safer.

Under the policy guidance of the Federal Air Surgeon, 23 senior scientists are working in four major areas: (1) pharmacology-biochemistry; (2) physiology; (3) psychology, and (4) protection and survival of passengers and crew.

Research on the effects of toxic substances on the brain and nervous system will benefit the more than 5,000 crop dusters in the nation, who must fly precise, low-altitude patterns and run the constant risk of exposure to poisonous insecticides. The value of blood tests in revealing poisoning and the selection of antidotes is also being investigated.

Studies have been made on the effectiveness of filters and masks as a protection against poisonous substances. Suggestions to manufacturers of crop dusting aircraft already have resulted in a safer, "de-lethalized" cockpit for agricultural aircraft.

Other studies have shown what happens to a pilot's reasoning ability and reactions following one or more cocktails. One of these studies indicated, for example, that a time period of about eight hours should elapse before the drinking pilot can fly safely.

Physiological research is dealing with stresses experienced by controllers at high density air hubs. The relationship of altitude and hypoxia to fatigue is being studied, as is the effect of rapid crossing of time zones on the mind and body.

To improve communication and speech intelligibility, the hearing sense is being explored. Noise in cockpits and elsewhere is carefully measured to determine how to prevent ear damage. Techniques for overcoming vertigo (the sensation of dizziness), disorientation and defects in color-vision are also being evaluated.

Psychological investigations at the Civil Aeromedical Institute have related primarily to the performance of controllers and pilots. Efforts are being made

to determine optimum work performance under varying work loads and work-rest schedules. Also being studied are the influence of fatigue and commonly-used medications on performance and the effects of sudden stress situations on physiological functions.

Physiologists, anatomists, anthropologists, biologists, engineers and crash investigators are attempting to determine the best means of protecting passengers and crew members and to improve chances for human survival following crashes. With a view to minimizing injuries primarily in aircraft and secondly in automobile accidents, studies are being carried out on human tolerance to crash forces and the kinds of materials best suited to "giving" under stress so that the impact energy is absorbed. The data apply to all modes of transportation including cars, buses and trains.

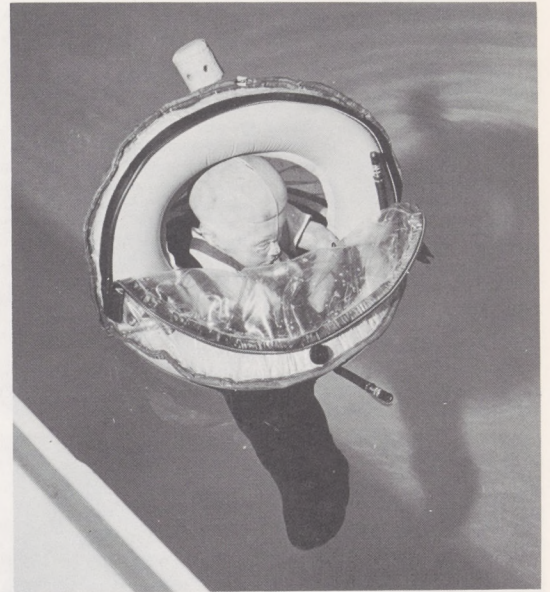
Also being examined is the effectiveness of smoke hoods in making possible survival and escape from burning airliners following air crashes. Other devices



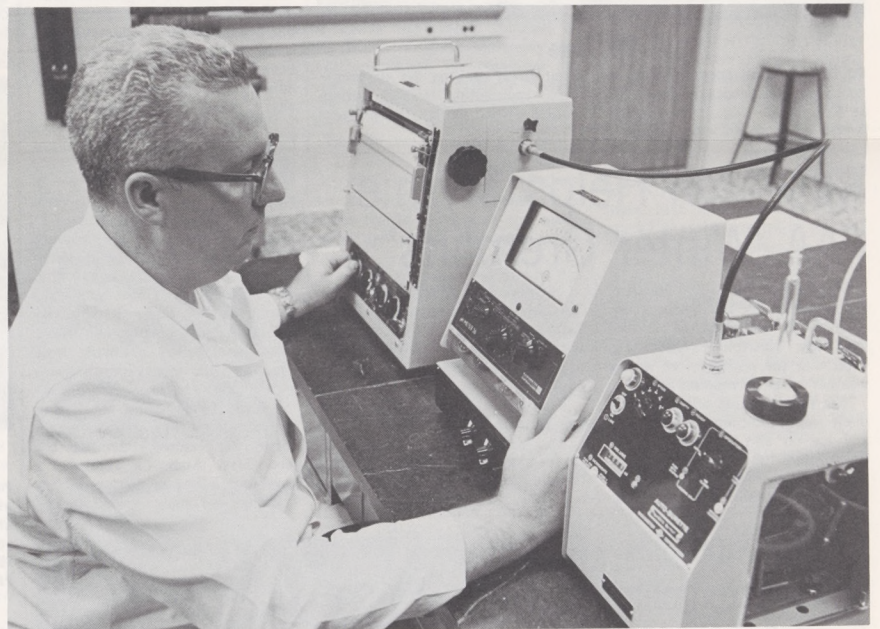
Re-investigation of the effects of altitude in development of fatigue utilizes CAMI altitude chamber in which subject (foreground) is instrumented for physiological recordings and monitored for alertness.



To measure alcohol content, Mrs. Pat Roberts injects blood sample from an aircraft accident victim into a gas chromatograph.



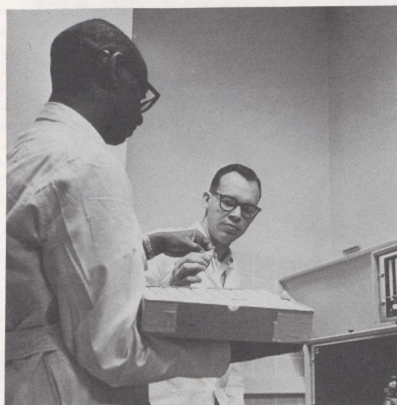
This prototype of an inflatable, self-ventilated, thermal protective infant flotation device occupied by an anthropometric dummy, simulating a three-year-old child, appears to have the best utility in circumstances where adult protection cannot be afforded the infant or youngster.



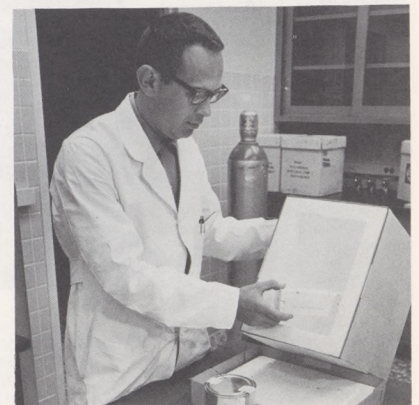
Enzyme activity of a crop duster pilot's blood is measured to detect whether he has absorbed an excessive amount of a poisonous pesticide.

# ar on Accidents fer Flying

under study include shoulder harnesses, flotation equipment, oxygen equipment and inflatable slides. Personnel of FAA's Civil Aeromedical Institute working with many other medical research groups across the nation to achieve greater safety in flying include: pharmacology-biochemistry: Paul W. Smith, Ph.D. (Chief), Charles R. Crane, Ph.D., George Clark, Ph.D., Al M. Revzin, Ph.D., and Wallace Friedberg, Ph.D.; physiology: P. R. Iampietro, Ph.D., (Chief), Michael T. Lategola, Ph.D., Carl Melton, Ph.D., and J. M. McKenzie, Ph.D.; psychology: William E. Collins, Ph.D. (Chief), Roger Smith, Ph.D., Jerry V. Tobias, Ph.D., W. D. Chiles, Ph.D., Bart B. Cobb, Richard Thackray, Ph.D., and Mark F. Lewis, Ph.D. The Protection and Survival Laboratory's research is conducted by John J. Swearingen (Chief), J. D. Garner, Clyde C. Snow, Ph.D., and E. B. McFadden. The work being carried out by these men represents a never-ending quest for the answers to today's safety problems—and tomorrow's.



Delbert Lacefield packs kit containing accident victim specimens to be sent to CAMI for analysis.



Radioactive samples are fed into a counting device by Roosevelt Ford (left) and Boyd Endecott.

## 'Flightlines' Broadcast Is Enlightening Public

LONG BEACH, Calif.—"This is Ed Balsis speaking to you from the control tower at Long Beach Airport." These are familiar words to thousands of Long Beach and Los Angeles listeners of radio station KFOX.

For the past 18 months, Balsis, a watch supervisor at Long Beach Tower, has been conducting a radio program called "Flightlines," sponsored by the City of Long Beach Department of Aeronautics.

Through his public affairs program, Balsis hopes to increase awareness on aviation matters on

the part of both the general public and flying public.

Subject matter largely concerns operations at Long Beach Airport, but a number of scripts contain information on FAA such as a recent broadcast covering recruitment of personnel for agency air traffic control positions.

"Because of its excellent caliber of presentation, we intend to continue 'Flightlines' for an indefinite period," the KFOX program director told Balsis' supervisor, Stanley Dilatash, Chief, Long Beach Tower.



### Air Time

Ed Balsis, Watch Supervisor at Long Beach Tower goes on the air with a regular public service program "Flightlines," spotlighting aviation matters as they affect Long Beach Airport. A station official termed the program "one of our most important presentations."

## Research Helps Stymie FAA 'Winter Gremlins'

WASHINGTON—A technical report issued by the Systems Research and Development Service will help electronics technicians cope with the onslaught of winter weather on air navigation aids.

The report points out that relatively small accumulations of snow and ice on and around TACAN transmitting and monitoring antennas and on VOR field detectors can cause operational deficiencies.

Methods of modifying VOR and TACAN monitor antennas to eliminate outages due to snow and ice accumulations are described, as are results of tests on modified equipment.

The bulk of the data is new and has general applicability.

The report, titled "VORTAC Performance in a Snow and Ice Environment," is issued under number RD-68-3.



### Number One

Mrs. Ann Ross Anderson, believed to be the FAA's first woman general aviation operations inspector, prepares to give her first flight check after reporting to work at the Grand Rapids, Mich. GADO.

## Michigan GADO Welcomes New Inspector—She's First

GRAND RAPIDS, Mich.—Recently, a new general aviation operations inspector was sworn in by Ralph Ruedy, supervising inspector of the local GADO.

Ordinarily, bringing a new employee "aboard" is a routine thing, but not in this case. The newcomer is Mrs. Ann Ross Anderson, believed to be the first woman to be employed by the FAA in the capacity of GADO inspector.

Mrs. Anderson is no newcomer to aviation, however. She holds a commercial instrument rating for both single and multi-engine aircraft, and has been flying since 1941.

Born and reared in the Dakotas, her flying has taken her to places throughout the Midwest, as well as to points in Texas and California. In the course of her aviation career, she accumulated more than 4,000 hours of flying time and instructed more than 500 student pilots.

Asked if she could recall any outstanding or unusual experiences during her extensive aviation career, Mrs. Anderson replied, "I have had a few engines quit, but I always got them started before

I had to land."

She remarked that her students sometimes were awed by having a female flight instructor, but found that after the first trip they usually got over such reactions. And she is confident the same acceptance will be evidenced by those with whom she works in her new position.

## New Plant, New Aircraft Emerge In Record Time

By Gerrie Cook

SAVANNAH, Ga.—In almost record time, Grumman Aircraft Engineering Corporation established a new aircraft plant at Travis Field and, within a year, met all agency production requirements for manufacturing the new Gulfstream II, reputedly the world's fastest corporate jet.

The FAA's Production Certificate was presented at the new plant by Deputy Director Gordon Williams, accompanied by Gordon Becker, Chief, Flight Standards Division and John Vogel, Chief, Engineering and Manufacturing Branch.

The Gulfstream II, a successor to the earlier turbo-prop Gulfstream I, is a turbo-fan jet with transcontinental range. Two specially-designed Rolls-Royce Spey turbo-fan engines power the new swept-wing jet. The plane offers outstanding airport performance and exceptional flight qualities, according to Lester Ward, Operations Inspector, Atlanta GADO, who is type-rated on the aircraft. As many as 19 passengers can be carried by the Gulfstream II, depending upon the seating configuration.

Though it has transcontinental range, the plane is equally capable of making several efficient short hops without refueling.



### Century of Service

Harry A. Turnpaugh (center), Chief of the Flight Standards Service Maintenance Division, recently honored four members of his staff upon completion of a total of 105 years of Federal service. From left are: Gordon May, 25 years; Ruth Williams, 25 years; Turnpaugh; Helen Monkusky, (his secretary), 25 years; and William J. Weis, Jr., 30 years. Each received the appropriate FAA Length of Service pin.

## Young Employees Cover Waterfront

By Don Johnston

Houston Area PT Branch

HOUSTON—Twelve area summer employees here literally went "Down to the Sea in Ships" recently.

It was all part of a tour arranged by the Houston PT Branch to acquaint summer hires with other DOT segments. Host was Commander W. S. Petterson of the U.S. Coast Guard Air-Sea Squadron.

Cdr. Petterson first arranged a tour of Coast Guard, Air Force and Air Guard facilities at Ellington AFB.

He then arranged for a dozen youths and two PT chaperones to board the Houston Port Authority's cruiser "Sam Houston" for a two-hour trip down the ship channel and return. The young people saw Coast Guard facilities and a variety of ships from around the globe that were visiting Houston, third largest U.S. seaport.



### For Public Use



New York Area Manager Christian B. Walk, Jr. (left), discusses future plans for public development of Republic Airport with Dr. William T. Ronan, chairman of the Metropolitan Transportation Authority. The FAA recently approved a Federal Aid to Airports Program (FAAP) grant to the Authority for acquisition of the airport at Farmingdale, Long Island, N.Y., to serve general aviation.

### National Fire Prevention Week: Oct. 6-12

ON-THE-JOB "HOUSEKEEPING" RULE:



## DIRECT LINE

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

## Air Safety

(Continued from page 1)

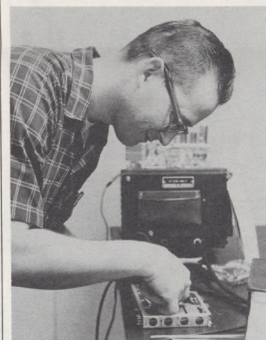
Larry Larkin, Tulsa; Walter Mayberry, El Dorado, Ark.; L. Dravenstadt, Burlingame, Calif.; K. R. Grant, Seattle; Ed Bushong, Washington, D.C.; Robert Horton, Paso Robles, Calif.; and Claudette Laferty, Columbus, Ohio.

Eleven of the 12 entries submitted were in the form of couplets. Winning rhymes are: "Don't make a smear, Lower the gear;" "Fate can be cruel, If there's water in the fuel;" "Leave buzzing to the bees, Stay clear of the trees;" "Above ten, Use oxygen;" "Monitor the freq, Before you speak;" "A couple of drinks can't do harm, But on takeoff he bought the farm."

Other winners are: "In mountain terrain during inclement weather, Many pilots and rocks have gotten together;" "Keep your head, Stop engines dead;" Beware of crossing final approach course, There may be a jet with a kick like a horse;" "Don't let his wake, Lead to yours;" and "Keep a watchful eye, For the student in the sky."

The 12th winning entry submitted a paragraph explaining the danger involved in a pilot making a right-hand airport traffic pattern against the normal left-hand pattern at uncontrolled airports.

Winning entries will be used in safety cartoons appearing on the back cover of FAA *Aviation News* during the coming year and will be distributed to airports and aviation organizations throughout the country as aviation safety posters.



### Old Skills Useful

John Arnott, former telephone company lineman now working as an avionics maintenance technician with the FAA-FIG at Rhein-Main AFB in Germany, pitches right in to do a job. When the avionics shop had to move its pole-mounted calibration antennas, Arnott volunteered to return to pole climbing rather than bring in a mobile crane and ladder. The job was done much quicker. In top photo he is seen doing his regular work.



### Just Plain Joe

Jim Yohe (left), Chief of Western Region Compliance and Security, recently uncovered a well-kept secret of the region's Equal Opportunity Officer. Eager to share it with 44,000 FAAers, Yohe sent "Horizons" a picture of the authentic nameplate he presented to "Joseph Americo Ponce de Leon Ferdinand Ascension Alvarez de Barron-Montes." Commented the recipient: "Please, just call me Joe Alvarez!"

## Alaska Drive

(Continued from page 1)

"We are proud to be part of this program emphasizing flight safety," said Lawrence Mahar, Director of the Weather Bureau's Alaskan Region. "Carelessness or neglect of weather and the manner in which it affects flight safety continue to be the cause of far too many aircraft accidents. We recognize the need of pilots to maintain respect for the weather and to be aware of the folly of ignoring weather in planning and executing flight."

In proclaiming "Aviation Safety Month," Governor Hicckel called attention to the fact that Alaska has more registered aircraft and more pilots per capita than any other state.

"Alaskans, always mindful of the vast wilderness stretches of their state, are particularly aware of the need for carefully observing the rules of safe flying," he stated.

Alaska's Commissioner of Air Commerce William Burns said one of his department's major concerns now that winter is near is making certain that pilots have proper survival equipment aboard their aircraft as required by state law.

"We provide lists of survival gear free of charge to pilots who request them," Burns said.

The FAA's flight safety program also has the support of the Alaskan Command which has a number of Air Force, Army and Navy installations throughout the state.

## Handicapped

(Continued from page 1)

Guidry, an employee of the Flight Training Branch, Course Development Section, at the Aeronautical Center, received national honors as "FAA Handicapped Employee of the Year."

Regional honors were accorded Paula Hundley of the Central Region and Carlton Mariner of the Western Region, and honors for Washington Headquarters went to Marguerite Scarry.

Handicapped workers are a relatively untapped source of manpower in today's tight labor market. A recently-issued CSC report states that suitably-placed handicapped workers are steady and dependable and continue to prove themselves on the job. According to the report, successful programs depend on open-minded and progressive managers who work with their personnel offices to find new opportunities for the handicapped.

Changing the duties of positions to take advantage of handicapped persons' capabilities is gaining wide acceptance among managers.

Federal job information centers in 78 major metropolitan areas are providing handicapped applicants with employment information. Also, there are Civil Service Commission advisers at many of the more than 70 U.S. Veterans Assistance Centers established this year to help returning servicemen, including those who are handicapped, find Federal jobs.



### Neat Desk

On his birthday, Robert Hordan, program analyst in the National Airspace System Program Office in Washington, came to work to find things looking like this. Secretaries in the NS-300 office remained after work the night before to transform his desk as a birthday surprise. Getting work done on a decorated desk is difficult, Hordan admits.

Question: Why is Chapter 3, PT P 3550.11 (payment of night differential during period of leave with pay) not applicable when leave of one hour must be taken as a result of setting clocks ahead for daylight saving time?

Answer: Civil Service regulations covering General Schedule (GS) employees provide that night differential is paid for the hour lost on change to daylight saving time when both of the following conditions are met: (1) the hour lost was charged to paid leave (annual or sick); and (2) the total amount of paid leave (including the hour lost) taken during that pay period is less than eight hours. Night differential is not paid if the hour lost was charged to leave without pay. Night differential would not be paid to GS employees for any leave time when eight hours or more of paid leave is taken during a pay period.

Question: As a union official on union business, may I write directly to the Area Office, Regional Office and the Washington Office of FAA?

Answer: Yes, you may write directly to any level in the agency. However, the basic purpose of the Employee-Management Cooperation program is to provide a channel of communication that will encourage consultation at appropriate levels. Therefore, the kind of response you get when you write will depend on the kind of question you ask and on the level of recognition your organization has. Consultation at the national level is limited to issues that properly require national consideration. Additionally, your union may have recognition at the local, area, regional or national level. An employee organization is entitled, at all times, to present its views, in writing, to the head of the unit by which it is recognized. Generally speaking, the agency attempts to answer any communication at the level which has the information requested or the authority to take the desired action. You might check your union with respect to such correspondence. They may have certain internal procedures they would like you to follow.

Question: I am a Mexican-American; does this qualify me as a minority group member? Please define the term, "qualified minority group member," as used in Equal Employment Opportunity literature.

Answer: The term "minority group member" generally refers to U. S. citizens of either Negro, Mexican, American Indian or Oriental extraction. The term "qualified" minority group member means a person in one of these groups whose education, training, or experience qualifies him for a particular job. It does not mean that the person is qualified to be a minority group member.

Question: Is one permitted to ex-

ercise the privileges of a commercial pilot while employed as an ATCS (Tower) and/or to be the owner or co-owner of a small flight service?

Answer: According to 3750.3A, Regional, Center and Service Directors are responsible for establishing procedures to assure full implementation of Regulations on Employee Responsibilities and Conduct, and Review Officials are designated in assigned areas to review and make determinations concerning possible employee conflicts of employment and financial interests. This directive also provides in paragraph 14 for counseling service by Deputy Counselors and Personnel Officers. Check with your supervisor for the best way to get a decision in your case.

Question: In the Direct Line Column of April 1, 1968, "callback duty" versus "standby duty" was defined. Since that time, this question has been raised: What is the difference between "callback duty" and "callback overtime"?

Answer: Thanks for pointing this out. The term "callback duty" is probably jargon used by technical personnel, but having the same meaning as "callback overtime." Callback overtime exists when an employee is required to return to his place of employment outside the scheduled hours of his regular tour or on one of his scheduled non-workdays, if the hours of overtime are not continuous with the regular tour of duty.

Question: My present job title is Clerk-Stenographer, but I am performing all of the duties of a Secretary. If I left my present job for a secretarial position at a higher grade level, I would not be promoted for at least three months, even though I am eligible. I do not believe this is fair. Why does this apply only to secretaries when everyone else is promoted immediately without a qualifying performance period?

Answer: Without all of the facts, it is difficult to give you a precise answer, but there could be at least two reasons for the condition you describe: (1) you may not have the required secretarial experience to be promoted immediately from a Clerk-Steno position, or (2) the supervisor may want to be sure that you will participate closely in his work because this is a definite grade controlling factor in secretarial positions. There is no agency policy requiring that you serve in a secretarial position for a certain time before promotion if you are otherwise qualified and eligible for promotion. However, such a practice is proper, especially in a situation such as you describe. Check with your supervisor or your personnel office for more specific information; you will probably find that one of the two situations described above applies in your case.

## Enterprising Engineer Discovers Key to Zest

By Bob Huber

LOS ANGELES—When you're an aeronautical engineer, a pilot, a flight instructor, a designer of homebuilt aircraft and a parent of teenagers as E. L. (Gene) Turner is, you don't have a problem finding what to do with your spare time.

Playing a number of challenging roles, in addition to his chief one as an aerospace engineer in the Western Region's Aircraft Engineering Division, is a "no sweat" undertaking for Turner, who relishes hard work.

Though conflict of interest considerations bar him from putting to profitable use his flight instructor credentials, Turner was able to instruct his own son, Jerry, who soloed recently at the age of 16. Next in line is his daughter, Jeannine, only 13 but already interested in flying and eager to get her wings at 16.

Turner's real off-duty preoccupation is homebuilt aircraft.

"Ever since high school days, it had been my dream to design my own plane and I finally achieved it," he said.

Over the past few years, he has designed successively more sophisticated homebuilts. His latest is a high performance, two-place job with hydraulically-operated double-slotted flaps. Best of all, its wings fold back neatly to allow hanging in an ordinary garage.

Turner foresees the day when many conventional light aircraft will be modified so wings can fold, as an answer to the problem of parking space.

Approximately 100 Turner T-40's are currently being put together in garages and back yards throughout the U.S. and Canada. Turner distributes detailed plans for the plane, then cheerfully answers a steady flow of correspondence from do-it-yourselfers who run into construction snags.

"The real reward is just working with homebuilders," he said. "My main concern is that they construct a good, safe plane."

With his entire family's keen interest in aviation, his vital career and his absorbing interest in homebuilts, Turner's life is a richly absorbing one. The one thing it conspicuously lacks is boredom.



### Like Glass

A Convair 880 rolls out on a runway as slick as glass at NAFEC, near Atlantic City. A mixture of glycerine and water simulates the icy surface. At the controls is FAA Test Pilot Joe Bailey.

## Ersatz Ice on Runways Used in Braking Tests

ATLANTIC CITY—What distance is required for a typical transport plane to brake to a stop under various icy and wet runway conditions without using reverse thrust? Some of the answers were pro-

vided recently when an agency jet transport completed 127 landings on both icy and wet runways.

To simulate an icy runway, 6,000 gallons of a mixture of water and glycerine were applied to the surface of a 6,000 by 80-foot runway.

A Convair 880, piloted by Center Test Pilot Joseph R. Bailey, was used in the study. Sidewalls of the airplane's tires were specially-painted so skidding could be noted.

Information gained during the tests was correlated with that obtained from a vehicle equipped with a special braking meter.

Test results will be made known this fall in a report prepared by Project Manager Jack J. Shrager. Assisting in the project were William Hering, Charles Grisel and Peter Leleck.

## Employees Get Authorship Rank

FORT WORTH—Two Southwest Region employees have joined the ranks of authors.

Earl Lee Fincher of the Tulsa FSS has written a novel entitled "Alpha, The Gardener," termed by a reviewer as "a book applicable to any period of time."

E. W. Northagel, Watch Supervisor at the Albuquerque Center, has written a collection of poetry published under the title "A Swirl of Tannish Capes." One review of this work terms Northagel "one of the most original poets to appear in many a publisher's season."

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Weitz, George W., "Role of the FAA in Transport Aircraft Maintenance in the 1980's." Annual ATA Engineering and Maintenance Conference, Los Angeles, California, November 17, 1966. Source: FS-300.

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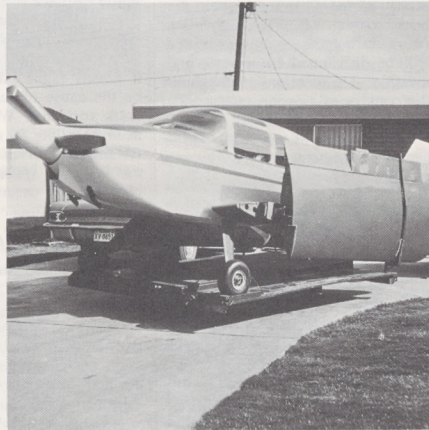
## Simulation Study Seeks Out Ways To Boost Traffic

ATLANTIC CITY—A four-month simulation study of ways to increase air traffic capacity of metropolitan New York in the 1975 period recently began at NAFEC.

Proposed traffic handling procedures and route structures will be tried out and communications plans and controller workloads examined. Effect of satellite airports on the traffic flow will be noted.

New York radar scopes will be duplicated in the lab using radar target simulators which show up on lab scopes as real planes.

The study is scheduled to be completed in December. Howard Slattery, project manager, was assisted by Paul O'Brien and Robert Conway. Two air traffic specialists from New York also are participating. They are Herbert Gross, Deputy Chief of the control tower at Kennedy International Airport and Milton Mard, of the New York Air Route Traffic Control Center, Islip, L. I.



### Flying Family

On the left, E. L. (Gene) Turner, Western Region aerospace engineer, congratulates son Jerry, whom he taught to fly and solo in the Cessna 150 parked behind them. The senior Turner is not only a flight instructor—he is expert in the homebuilt aircraft field. "Dad" Turner designed the folding wings homebuilt seen at right, which he parks snugly in the family garage rather than stand hangar charges.

## Mail 'Savvy' Brings Kudos

FORT WORTH—Cooperation of the Southwest Region in a special mailing of 73,000 pieces of letter mail brought the FAA a commendation from Fort Worth Postmaster Jack Watson.

The large mailing, consisting of aviation accident prevention program pamphlets, was zip coded and sorted for states and delivered to the post office in trays. This made it possible for the post office to bypass two complete operations and to realize a net saving of approximately 80 man hours which would have been required had the mail arrived without such preliminaries.

"Cooperation shown by FAA personnel responsible for preparation and dispatch of mail has been beyond our expectations," Watson told Southwest Region Director Henry Newman. "Many firms in private industry are working with us in planning scheduled mailings, and now we are proud to have a government agency show interest in the program."

Chief of the Southwest Region's Mail and Distribution Section is Bill Gallemore.



### Perfect Record

As fellow employees look on, Frank Roman (third from left), ATC specialist at the Joliet, Ill., FSS, receives a plaque from Chicago Area Manager Paul B. Cannom (center). The plaque recognizes Roman's 28 years of service without once using sick leave. Since joining the CAA in 1940, Roman accumulated more than 2,400 hours of sick leave.