HORIZONS

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Summertime Is "Air Show Time" Pages 4-5

No Finer Bunch

McKee Lauds FAA Staff At Air Safety Hearing

WASHINGTON—During a Congressional hearing examining the problems of air safety, General McKee vigorously defended the agency against charges that it was derelict in pursuing improvements to air safety.

"I do not know of any 43,000 people in the United States who work around the clock and work harder than the people in FAA. And in defense of those people—and you can give me all the hell you want to personally—but I stand up for those people every speck of the way.

"We have got 14,000 controllers working in this control work and working in these centers and I am very proud of them. There is not a finer bunch of men in this country and if everybody in this country did the job those people are doing, this country would be a hell of a lot better off. That is my speech and I will stand by it."

The hearings were held by the House Interstate and Foreign Commerce Committee on July 23 to explore the government's efforts in keeping air safety abreast of the fast-growing aviation industry.

K.C. To Get New Center

KANSAS CITY, Mo.—A new international teletypewriter switching center for aeronautical data, fully automatic and computerized, will be established here, the agency has announced.

Greater efficiency and economy will result from the new system, which will greatly speed up relay of important aeronautical data over international teletypewriter circuits.

The consolidated switching center will become part of the worldwide Aeronautical Fixed Communications Network (AFTN), serving the Atlantic and Caribbean areas.

The new equipment will be used to consolidate here at this one location all local and long range teletype operations of four communications switching centers presently located at the New York, Miami, san Juan and Balboa, C.Z.

A contract of $1,541,125 for the equipment was awarded by the FAA to the Digitronics Corporation of Albertson, N.Y.

Recognized By Boy Scouts

PUERTO RICO—Mack R. Wood, San Juan area manager, recently received a plaque for outstanding services to scouting during the year 1966-1967 from Boy Scouts of America Pack 49, Exchange Club, El Comandante, Rio Piedras, Puerto Rico.

Employee Insurance Bill Passes; Gives More Coverage at Lower Cost

A bill liberalizing life insurance coverage for all Federal employees has been passed by the Congress and sent to the White House for the President's signature. The bill is a consolidation of separate bills prepared by the Administration and the House of Representatives, and represents a compromise on which all are in agreement. In plain language, Uncle Sam will pay a larger share of the premium cost, and employees will get better coverage. Provisions of the bill are:

- Minimum amount of life insurance for employees earning less than $7,500 is increased to $10,000. This affects employees generally below GS-8.
- Maximum amount of insurance available to employees in higher grades is increased from $20,000 to $40,000.
- All employees earning more than $7,500 a year will be eligible for life insurance policies equal to one and one-third times their annual salary, rounded off to the next higher thousand. This represents a one-third increase in coverage.

The employee's share of insurance cost will be reduced from 67 per cent to 60 per cent, while the government's share will be upped from 33 per cent to 40 per cent. However, because of the steady increase in the total cost of the program, the employee's contribution may increase in the neighborhood of perhaps three cents a thousand. The employee's contribution may be about 28¢ per $1,000 of coverage. Actual costs will not be available until some 60 days after the bill has received Presidential signature. Here is a chart to show the coverage available under the new bill.

"If annual pay is— Greater than—	But not greater than—	Amount of group life insurance and accidental death and dismemberment insurance
0	7,500	10,000
7,500	8,250	11,000
9,000	9,750	13,000
9,750	10,500	14,000
10,500	11,250	15,000
11,250	12,000	16,000
12,000	12,750	17,000
12,750	13,500	18,000
13,500	14,500	19,000
14,250	15,000	20,000
15,000	15,750	21,000
15,750	16,500	22,000
16,500	17,250	23,000
17,250	18,000	24,000
18,000	18,750	25,000
18,750	19,500	26,000
19,500	20,250	27,000
20,250	21,000	28,000
29,250	.....	40,000

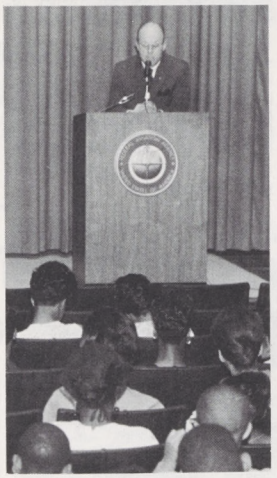
To see what **you're** paying for life insurance premiums now, look over your bi-weekly Statement of Earnings and Leave, FAA Form 3697.1, in the box headed "Group Life".

Government employees have been paying 25¢ per $1,000 insurance, with the Federal employer providing an additional 12½¢ to cover the costs. However, cost of the insurance has been going steadily upward. By June 1965, the actuarial cost per thousand dollars had risen from 37½¢ to 45½¢.

Coverage will go into effect the first pay period following enactment.

SST World Leaders Confer

Three supersonic transport leaders met here recently to exchange ideas on U.S. and Anglo-French SST development programs. Looking at models of the U.S. supersonic transport and the Anglo-French Concorde are (left to right) General Jean E. Forestier, Concorde Program Manager, Paris; Major General J. C. Maxwell, USAF, Director, Supersonic Transport Development, FAA; James A. Hamilton, Director-General of the Concorde project, London.



Youngsters

David D. Thomas, Deputy Administrator, tells more than 150 Youth Opportunity Campaign workers employed at Washington headquarters this summer that their summer work experience, if taken advantage of, would benefit them in the future by teaching them to accept responsibility. Over 1000 YOCs have been hired nationally by the FAA to provide summer jobs for economically disadvantaged youths.

New Vertically Stacked VOR Antenna Planned

SPRINGFIELD, Va.—To overcome signal interference associated with line-of-sight VOR (Very High Frequency Omni Range) transmission, Scanwell Laboratories, Inc., here will develop a vertically stacked VOR antenna.

FAA awarded the laboratories a $139,400 contract to develop a prototype model, consisting of five antenna bays, a mast and tower. The first bay is to be delivered to the NAFEC test site at Atlantic City early in 1968.

VOR, the standard short range air navigation aid used in the U.S., is also used in most of the populated areas of the world served by air transportation. Selection of a suitable site for VOR installations always has been critical because of interference from natural or man-made obstacles to their radiated signals, which travel approximately a line-of-sight path.

Snow and ice deposits on the antenna counterpoise — a 52-foot horizontal array—distort the signal, while external objects such as fences, buildings, clumps of trees, or hilly terrain can cause signal deflections known as roughness or scalloping. These conditions often result in severe signal propagation difficulties with the conventional antenna, resulting in course deviations.

The new vertical stacking arrangement will eliminate the need for a counterpoise, thus minimizing the effects of heavy ice and snow accumulations. And by mounting the vertical array on a 75-foot tower, many of the problems associated with natural and man-made obstructions may be overcome without expensive grading and clearing operations otherwise often necessary.

Upon delivery to NAFEC, comparative performance of the new stacked antenna will be tested with a conventional VOR station and at completion of each of several contract phases.

First phase of the contract is for development of a single bay, which is required to perform at least equal to the entire conventional VOR antenna. By stacking five such bays—with proper current phasing in each bay—the desired vertical plane field intensity pattern will be achieved.

FAA Helps Youths Find Themselves

by Norman Anderson

WASHINGTON—The Federal Aviation Administration is leading the way in aiding educationally and economically disadvantaged youth through its experimental Neighborhood Youth Corps (NYC) training program.

Developed in response to a need arising in the NYC employment program, the program has been recommended as a model for regional FAA offices.

Since April 1966, the FAA has provided employment for 19 NYC enrollees.

Under the program, an enrollee may stay with the FAA six months if he does not go to school, but up to 18 months if he does.

The program recruits high-school drop-outs between the ages of 16 and 22 who have been out of school for at least six months and are economically disadvantaged.

The aim is to encourage enrollees to get their high-school diplomas and to provide them with meaningful work experience.

After about a year of operation, the program ran into an obstacle.

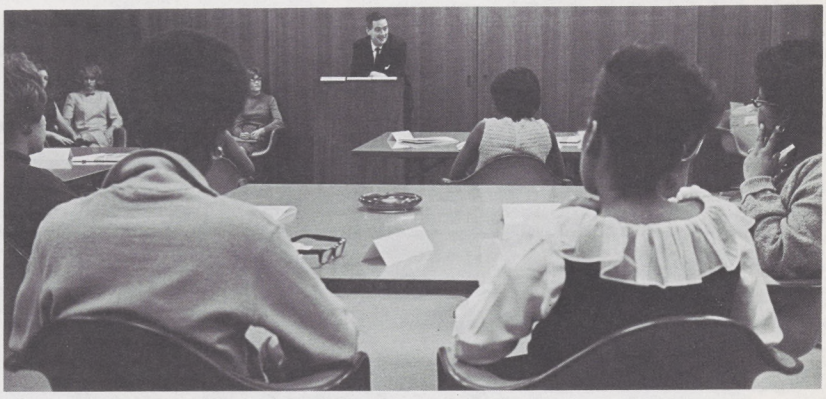
A seminar held earlier this year by NYC coordinators concluded that the major obstacle to NYC employability is the prospects' lack of adequate communication skills—such as speech, grammar, and typing.

The FAA set out to eliminate the problem. Leo Powell, personnel staffing specialist in charge of the Equal Employment Opportunity program, was put in charge of establishing an experimental special training program.

Drawing on college talent in the area, he hired a graduate student in speech and one in English to run the sessions. An FAA official was recruited to teach clerical skills.

A 22-page manual was then written, outlining fundamentals in speech improvement, written communications skills, and clerical training.

The experimental 14-week course began on Feb. 21 with a class of 22.



Hello, Young Workers

James T. Murphy, manager of headquarters operations in Washington, welcomes 19 enrollees for meaningful employment under the Neighborhood Youth Corps. The second such program to be held this year has added training in business arithmetic and reading development.

Two, one-hour sessions were held three days a week until the training program ended on May 26.

Evaluation of the experiment is still in progress.

Issue Training Manual

However, the immediate success of the program was great enough that Don Higgins, EEO coordinator for the Office of Personnel and Training, and E. L. Embry, acting chief, Personnel Programs Division, have forwarded copies of the training manual to regional offices in the hope of stimulating them to initiate similar training programs.

In a memo attached to the copies, they stated: "This program has helped identify Washington headquarters as a preferential worksite to NYC placement officials and has resulted in the referral of enrollees selected as having the most potential.

"An improvement in job quality, morale, and attitude of enrollees has been noted due to the training program."

An expanded second training program began July 3rd, with 165 enrollees for summer employees in the YOC program. The new program will be more selective and will aid training in business arithmetic and reading development.

Mini-Jet

To demonstrate jet propulsion principles to more than 150 school teachers attending Middle Tennessee State's 14th Annual Aerospace Education Workshop, Robert O'Neil, FAA special assistant for aviation education, uses a scale model of the Boeing 737 aircraft. To provide thrust for the model aircraft, O'Neil uses a small carbon dioxide capsule mounted in the tail section.

Tennessee Teachers Hear Story of Modern Aviation

MURFREESBORO, Tenn.—The FAA was spotlighted during the recent two-day Middle Tennessee State University 14th Annual Aerospace Education Workshop held for teachers here.

The annual workshop, largest of its kind, is sponsored jointly by the Tennessee Aeronautics Commission, FAA, Air Force, Civil Air Patrol, National Aeronautics and Space Administration, and the Tennessee Department of Education.

Emceeing the two-day FAA program, which featured a number of FAA officials, was Southern Region Director James Rogers.

Deputy Administrator David Thomas kicked-off the program with his presentation, "The Structure, Organization and Purposes of the FAA."

SST chief of plans and programs Jerold Chavkin discussed "The Supersonic Transport."

Other speakers were Dr. Stanley Mohler, chief of aeromedical application, who spoke on FAA's aeromedical research programs and Regional Public Affairs Officer Jack Barker, who spoke on "FAA and Teachers." Agency officials served as panel members during a lively question-and-answer session.

Each year, 100 scholarships are given to Tennessee school teachers. This year, 50 additional teachers enrolled in an Advance Aerospace Workshop which included flight instruction.

In addition to their classroom activities, participating teachers are given airplane and helicopter demonstration rides, visit local Air Force bases, and tour local airport terminals, FAA, Weather Bureau, and Air National Guard facilities. To round out this year's program, field trips were made by the teachers to the Marshall Space Flight Center at Huntsville, Ala., and the Arnold Engineering and Development Center at Tullahoma, Tenn.

In a recent letter to Rogers, the director of the Middle Tennessee workshop, Dr. Bealer Smotherman, commented, "This year's workshop is the best—we were delighted with FAA's presentations which we consider to be highly significant in making our program so successful."

Fox Will Head Albuquerque ARTC Center

ALBUQUERQUE—Gerald B. Fox, the new chief of the Center here, assumed duties July 17th.

Since June, 1965, he had been assistant chief of the Houston Center, and before that was chief at San Antonio from April 1958 until its closing. Earlier experience was as Memphis Center Chief.

Fox began his career as a radio operator and later station manager for commercial airlines. In 1941 he became an airway traffic control operator in St. Louis, later transferring to Jacksonville.

In 1944 he moved to Atlanta, where he was assistant center chief before moving to Memphis.

Tower Topics

Or, up . . . Up . . . UP go the tower cabs—as earthquake, fire and expanding terminal needs put the old ones out of commission and call for replacements. At left, crew readies a portable tower for shipment to Fairbanks to substitute for the regular cab, damaged by an Alaskan quake. Plywood panels will be removed on delivery to the new site. In center photo, a temporary tower loaned as a substitute for the regular Hollywood-Burbank Airport, California, tower burned out by fire a year ago, is being returned to Oklahoma City—with "thanks!" At right, a new 20-ton glass and aluminum tower cab is hoisted into position atop a 120-foot concrete shaft at Oklahoma City's Will Rogers World Airport.

Fort Worth FAAer Wins Lady Derby

FORT WORTH—Three women employees in the area are holding more than their share of the spotlight for the distaff side of aviation. At work, two are flight service station specialists and one is a teletype operator.

But when off-duty, they like nothing better than to compete fiercely against the next girl—throttle to the wall—to get there 'fustest'.

One of them, Mrs. Lee Waller, FSS specialist here, recently paired with the famous Mrs. Edna Gardner Whyte, internationally-known aviatrix of this city also, to win the June 23rd Sky Lady Derby. The important race was flown over Texas and Oklahoma.

Another female 'Roscoe Turner' here is Mrs. Patsy Henninges, FSS teletypist, who won a Sky Lady Derby trophy as outstanding pilot having the least amount of flight time. The race was her first flying event since receiving her pilot's license recently.

Third and best known is Mrs. Hazel McKendrick, Dallas FSS specialist, who participated as a co-pilot in the Sky Lady Derby and is a veteran of many air races for women. She recently finished 10th in the four-day All-Woman Transcontinental Air Race (Powder Puff Derby).

This was Mrs. McKendrick's fourth consecutive year as a Powder Puff Derby contestant. Earlier this year she competed in the International Air Race from Montreal to Miami.

Air Race Pilots

FAA employees competing in the Sky Lady Derby pose before the race (left to right): Mrs. Patsy Henninges, who finished as the outstanding low-time pilot; Mrs. Lee Waller, who shared first place with her partner, Mrs. Edna Gardner Whyte; and Mrs. Hazel McKendrick, who participated and also came in 10th in this year's Powder Puff Derby.

Beauty Prefers Agency Career To Show Biz

NEW YORK—A beauty contest winner who could go on to become "Miss World" was hired recently as a clerk-stenographer at Eastern Region headquarters.

She is Patricia McKeegan, 19-year old raven-tressed hazel-eyed beauty.

Pat, competing as "Miss Nassau County," won the title of "Miss New York State World" in June, making her eligible for the "Miss USA World" competition in Baltimore later this summer. The winner of that contest will go to London for the "Miss World" competition against the loveliest young ladies from more than 30 countries.

Pat's steno position with flight standards is her first job since school. A recent graduate of St. Helena Business High School in the Bronx, she has no 'show biz' aspirations.

"The life is too hectic and insecure" she said. "All I want is a good steady job for a while, and then in four or five years I'll get married and raise a family."

Even if she should win the "Miss World" title, the fame and fortune that go with it won't make her change her mind, Pat declares firmly.

"I've already found working for the FAA very enjoyable," she said.

Doors Open

When you're lovely to look at, like Patricia McKeegan, new 19-year-old clerk-stenographer at Eastern Region headquarters, many doors are opened. Latest for Patricia is one leading to "Miss USA World," as a recent winner of the "Miss Nassau County" contest.

I'm Home!

Controller Richard Davert, of Edwards RAPCON, and wife Edna recently adopted Kim Sue, age 3½, from Seoul, Korea. Red tape was unsnarled when their daughter Stacy (not shown), age 8, wrote the President at the White House that her little sister in Korea was unable to come to this country.

California FAA Couple Adopts Korean Orphan

FREMONT, Calif.—While millions of Americans were riveting their attention on the weirdo antics of San Francisco hippies, Dick and Edna Davert were having a psychedelic experience of their own, just across the Oakland Bay Bridge.

It took the form of a nightmarish happening in which the Daverts were trying to cut through reams of red tape infinitely streaming between Washington and Seoul, Korea — ultimately wrapping itself around a stark orphanage that housed the two-year old, abandoned little girl the Daverts wanted to bring home.

For the first two years of her life, Kim Sue's meager existence was being financed by the Oakland ARTCC where Dick was a controller. (He subsequently has transferred to the Edwards AFB RAPCON.) In return, the orphanage periodically sent photographs of Kim Sue to the Center.

Even from thousands of miles away, Kim Sue caught the heartstrings of Dick, Edna, and their eight-year-old daughter, Stacy. Almost from their first glimpse of her picture, the three Daverts decided to adopt Kim Sue.

But all the cards seem stacked against them, and Kim Sue. First, Dick was told that immigration quotas were filled for Koreans. Even if a slot opened, the adoption fee of $700 was prohibitive.

Only plucky Stacy refused to take "no" for an answer.

With the undaunted faith and naivete of a second grader who was just learning to write a letter, Stacy borrowed a piece of her mother's best stationery and directed her remarks straight to the top. She laid it right on the line with the man who soon would become the world's most famous grandfather and solicited his personal assistance. And he gave it to her.

To everyone's astonishment except Stacy's, wheels started to turn. A social worker from the International Social Service soon appeared at the Daverts' home with the news that a quota opening had become available and that the fees would be reduced under the circumstances. On the heels of this came word from Korea that Kim Sue had been released from the orphanage and was in a foster home awaiting her departure to the United States.

When Kim Sue arrived recently at San Francisco's International Airport, undoubtedly she was oblivious to the hippies on their "trips." Her own, which must have seemed interminable for a three-and-a-half year old, was one she would cherish for the rest of her lifetime.

He Needed Help Fast

Three FSS Men Work As One To Help Diabetic

MINERAL WELLS, Tex.—You say you're flying a patient suffering from diabetes mellitus in your twin-engine transport and suddenly he no longer can get the vital glucose he's been taking in—the flow has stopped completely?

The patient needs examination, possible treatment and to have that life-giving flow re-started . . . and the nearest airport is more than a quarter-hour away, and no doctor there?

Cheer up. Don't let the world get you down. Flight service stations are not racking up a reputation for lending a helping hand to troubled pilots upstairs for naught.

In this recent actual emergency case here, the pilot had cranked in the FSS right away. Three men sprang into action simultaneously.

While Specialist Forrest F. Ruwwe assured the pilot of assistance, Chief Z. C. Jacobs and Specialist H. J. Wall were on the phones locating a doctor who could grab his bag and run to the field immediately. They found one.

Doctor and plane arrived simultaneously at the airport ramp, where the patient was examined and the glucose intake started flowing again.

Thanks to the pilot's prompt call and quick action by the three FSS men, the patient was made comfortable and flight resumed—within an amazing 17 minutes of the original emergency call.

Lakey Named Chief, Midland, Tex., FSS

MIDLAND, Tex.—Cecil Lakey assumed duties as chief of the Midland FSS July 5, transferring from Truth or Consequences, N.M., FSS, where he served as chief from 1960.

Lakey started work with the old CAA at Seattle in 1944, and has served at flight service stations in Montana, Wyoming and Idaho prior to coming to New Mexico in the Southwest Region.

HORIZONS

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Air Show Time!

Straight Up!

Stunts at jet fighter speeds, wing-overlap formations with only three feet between canopy and the next pilot's wingtip, and flawless back-to-back passes are all in the bag of tricks of every Navy pilot—but doing them at low-altitude takes that something extra. Over several decades, Blue Angels teams have convinced millions of people of the Navy's flying skill.

By Thom Hook

Dedicated to the individual FAA specialists who monitor events held around the nation to attract the public into spending an afternoon at their airport.

ANYTOWN, U.S.A.—"You'll see inside and outside loops, Texas eights, four- and eight-point rolls, the high speed knife-edge pass, the hammerhead stall, and the fantastic end-over-end 'Lomcevak'—all before your very eyes," promises the itinerant promoter to the local television interviewer. And they run an exciting film clip to prove it to their viewers.

On local radio, the show promoter calls attention to the bullseye-hitting parachutists, who usually open such shows (he may be the star jumper himself). He will find it difficult to tell how he still gets sweaty after hundreds of jumps, standing by the small single-engined aircraft's void, the door removed, and looks out at 3,000 feet of air ocean and throws the ribbon down . . . down . . . down to watch how the wind drifts.

In newspapers, the advance publicity may show a close-up of "The Flying Professor" reading up on "How To Fly," and a shot of his Cub almost scraping its wings on the ground. Or it can call attention to the derring-do of the traditional ladder pick-up as the passenger leaps from a speeding auto up the rungs into the plane overhead.

Finally, posters on trees and buildings will dazzle the eye with a biplane in inverted flight, picking up ribbons held between poles only 20 feet above ground. All the public needs further is the time and the place, for its day in the sun.

There are many promotional devices to get the public out to the airports, as the fields move progressively farther from the city centers. Among them: the open house, air fair, sport aviation convention, air races, the antique planes fly-in, experimental plane gatherings, and the 'Air Show.'

This latter is the exciting event that concerns us, if we can define an Air Show as very much a 'non-static' display of aircraft. It usually promises great pilot skill, specially beefed-up aircraft, plenty of stunting, and a varied program of performers.

Often the shows aim strictly to make a profit. Sometimes they do, but sometimes they are "weathered out," or have competing events in the area which detract from the crowd's attendance. Rarely are they staged on a benefit-the-community basis.

For FAAers within the three-state Washington, D.C. area for example, there are some 25 air shows during the six-month season of good weather for such events.

One show, built on a "benefit the community" base, is coming up Saturday, August 19th to celebrate National Aviation Day, at Dulles International from 10 a.m. until 7 p.m. The action begins at 2 p.m., and only 9,000 cars can be accommodated (by ticket only). For early birds, there will be all kinds of DOD winged wares on display before the aerobatics.

Elsewhere around the nation, many more shows are listed in the calendar of coming events in most of the flying magazines all summer long—an average of a dozen a month being announced in advance.

"For every show which goes on, a waiver has been obtained from FAA," explains Russell Scarberry, air traffic control specialist at Washington Air Route Traffic Center, Leesburg, Va., "and a qualified FAA monitor must be on the scene. But on everyone's shoulders rests the safe performance of the entire program."

Prop Planes Work Closer Than Jets

True versatility is needed by the FAA monitor, as seen by two air shows which Zolton John Adam monitored this summer. Regularly, Adam is the FAA air traffic representative at the Naval Air Station, Patuxent River, Md.

Smoke Burst

U. S. Air Force fighting jet "Thunderbirds" perform one of their fly

Father's Day weekend, Adam had to handle an old-fashioned "barnstomer" show with 3,000 spectators at Aqua-Land, near tiny Newburg, Md.

Within a month he was responsible for the annual Open House show at his own base, before some 70,000 people—with the Navy's Blue Angels coming at him from four different directions.

For the slower prop airplanes at Aqua-Land, he made sure they performed no closer than 500 feet horizontally from the crowd. For the jets, Adam saw to it they did not come nearer than 1,500 feet horizontally from the audience.

For him, planning for both shows had gone into action months before.

FAA Issues Waiver

"Before any air show can be staged, the sponsor must first come to FAA to request a waiver of Part 91 Federal Air Regulations (FAR)," explains L. I. Pearce, chief of the air traffic branch at the Washington Area Office. "The request goes to Washington Center, where a man there puts together the details with flight standards people.

"It all boils down to giving a reading to the promoter as to whether or not he can put on the show, and if so, what he will be permitted to offer and still maintain required safety.

"This is where air show plans get involved,"

. . . from clipped-wing Cubs to high-speed F-100s, it's an upside down world—where flying is fun!

Smoke Burst

m one of their flying maneuvers that have made them world-famous.

Pearce says. "It is spelled out in our waiver exactly where the spectators must be. Evidence also must be presented by the show promoter of his ability to control the crowd, i.e., adequate police support to keep the crowd out of trouble." The FAA also must check aircraft certificates, Pearce said, as well as qualifications of the pilots.

"Most performing pilots have been in the game so long," Pearce said, "that we know of their individual skills and records."

"If it becomes necessary to find out more about a new air show pilot on whom our information is not clear," says Allen E. "Pappy" Taylor, another air traffic control specialist with 28 years' experience," we find out more about him from his local GADO."

Taylor, who has worked many air shows, is in the FAA Washington Area Office.

"Shows involving jets require perhaps a bit more vigilance, in that for some demonstrations, the high-speed jets approach from all directions," Taylor said, "and within 1,500 feet of spectators."

However, performing aerobatics in prop ships is allowed 500 feet from the crowd.

It's one profession in which a pilot has to work his way down to get ahead.

"If an air show star is new at the game," explains veteran announcer Bob Wyant, of Lynchburg, ""the FAA will probably add an extra thousand feet of altitude, so that his acts can be performed at less risk to spectators. As he proves himself, his ceiling can be lowered."

Briefs Pilots On Rules

For Zolton John Adam of Patuxent, and FAA specialists in his area, there is an established work plan once the waiver has gone through and the show can go on. Here is Adam's eight-point check-list of duties:

- Establish the time and place for a pilot/performer briefing.
- Make certain all participants attend the briefing.
- Review waived sections of FAR 91, and special provisions included as part of the waiver.
- Make certain that special provisions requiring advance preparation have been complied with, i.e., issuing a Notice to Airmen, closing the airport to transients, provisions for adequate policing, ambulance, fire truck, etc.
- Review the schedule of events, pointing out restrictions on hazardous maneuvers, such as the high-speed 360-degree turn.
- Discuss aircraft or pilot limitations set by Flight Standards Service personnel.
- Call attention to the hazard if at the conclusion of the aerial demonstrations, spectators were to be invited to view participating aircraft on the ramp or landing area while there might be an appreciable movement of other aircraft, such as departing transients, in that area.
- Point out any other actions dictated by particular circumstances.

Circular Tells About Waivers

An advisory circular (AC No. 91-5) spells out in detail the do's and don'ts about air shows. A waiver is issued for aerial demonstration only when it can be conducted without hazard to persons or property in the air or on the ground, and won't cause hardship to other flight operations.

Copies of waivers and applications for aerial demonstrations need not be forwarded to Washington, the circular states, unless the issuing or regional office deems it advisable.

With a dozen really big air shows going on monthly during the season, it's not a bad idea to get out to the airport and see some well-regulated flying skill on exhibition, as well as static displays of modern, experimental, antique or homebuilt aircraft.

The reader should bear in mind that while FAA never 'sells' such shows, we do provide the 'man behind the scene' who does everything possible to see that such events are safe and without incident, backed by as many FAA specialists as are needed within that region.

Show Narrators

In the event you don't remember a hammerhead stall from an outside loop, you can depend upon the air show announcers to tell you what's going on. Sharing rapid-fire commentary at a classic barnstormers' get-together at Aqua-Land, Newburg, Md. are (left to right) Marion Baker, of Wakeman, Ohio, and Bob Wyant, of Lynchburg, Va.

Pilot's Pal

Zolton John Adam (right), FAA air traffic representative at the Naval Air Station, Patuxent River, Md., poses with air show performer Dean Ortner and the latter's P-51 Mustang. Adam is one of the FAA representatives based at military airfields who are called on to see that aerobatics in air shows are done under FAA safety rules.

Wing Rider

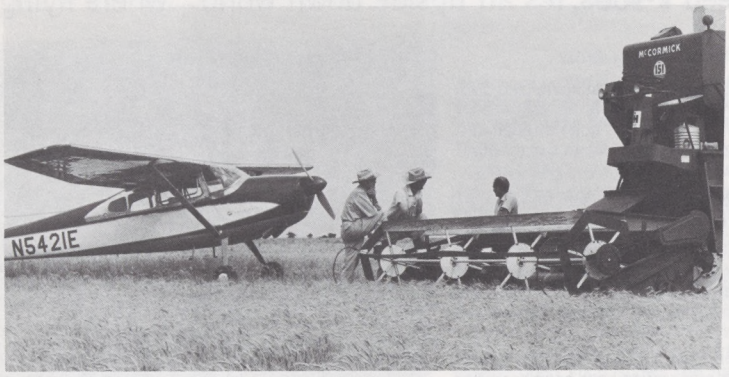
Long a part of the classic barnstormers' air show is the wing-riding girl on a Stearman biplane. Plane's pilot is Brian Osgood, whose father is an air traffic control tower operator in Alaska.

Blues Line-Up

For 21 years they've been the Navy's "Ambassador's of Good Will", and the Blue Angels are never reluctant to land and line-up on the apron ready for their top spot on an other air show program. Here the seventh F-11 Jet Tiger lands at Reading, Pa. for FAA briefing before the recent meeting and air show.

Planes Fight World Hunger!

By Irving Ripps



Cessna 180

By 2000 A.D. the world's population will be double its present 3½ billion, based on the current birth rate of 180,000 each day. Aircraft offer the most efficient means of making better use of farmlands "through their unique ability to work so much faster than other machines and to do so where and when other equipment is incapable of performing at all," says Katharine Stinson.

Engineer and Pilot

Katharine Stinson, technical assistant to the head of engineering and manufacturing in Flight Standards, spoke on the unsung role of agricultural aircraft in food production at a recent meeting in Great Britain.

CAMBRIDGE, Eng.—The airplane probably will prove to be the key element in staving off world hunger, Katharine Stinson told an audience at Cambridge University last month.

Inside one of the mellowed, reddish-pink buildings that have served as a fountainhead of education and culture since 1284, Miss Stinson stressed the importance of the airplane as a principal means of solving the severe food shortages in underdeveloped areas throughout the world.

The technical assistant to the chief of the Flight Standards' Engineering and Manufacturing Division, Miss Stinson stated:

"Most people have little understanding of the beneficial relationship between agricultural aviation and the food they eat, the clothes they wear, the wooden houses in which they live, the trees which shade them, and even the game for which they hunt and fish."

Her remarks were addressed to a gathering of several hundred engineers and scientists from more than 50 nations, meeting to hear and discuss papers relating to the "Application of Technology to the World's Food Problems." The conference was sponsored by the Women's Engineering Society of Great Britain.

Miss Stinson, one of the agency's four women engineers, herself is past president of the Society of Women Engineers in the United States.

By the year 2000, she said, the world's population will be double its present level of 3½ billion, based on the current birth rate of 180,000 every 24 hours.

Agricultural Planes Will Help

The use of agricultural aircraft, she said, can be of inestimable value to man in facing up to the great challenge to his ability to produce enough food to feed the hungry of the world.

There are many ways to make better use of present farmlands, Miss Stinson stated, but aircraft can well be the most efficient means. This is becoming more evident, she said, "through their unique ability to work so much faster than any other machines, and to do so where and when other equipment is incapable of performing at all."

She pointed out that agricultural aircraft today conduct a major part of the fertilizing, crop-dusting, weeding and other necessary tasks in at least 45 countries, treating some 270 million acres of cultivated land annually by air. This has been made possible by the continuing expansion of agricultural application activity.

In the past 20 years, she said, the world-wide fleet of agricultural aircraft has jumped from 200 to about 16,000.

Foresees New Aircraft

New types of aircraft will be developed, with improved capability for getting the work done faster and safer, Miss Stinson said, and when combined with improved operational techniques and equipment, the use of aircraft will attain foremost recognition as a tool in opening up new agricultural vistas for both young and old nations alike.

It will not only prove anew its ability to do the same job as the tractor and other ground equipment with a savings of million of man-hours in labor and time, but it will also demonstrate even more dramatically its uniqueness for covering acreages inaccessible to the ground vehicle, and for accomplishing tasks already considered routine. She referred to such jobs as laying fencing to contain straying herds of cattle and flocks of sheep, irrigating arid lands, eradicating locust swarms, restocking streams and lakes, and in combatting the devasting damage to delicate fruit orchards and other sensitive crops wrought by insects, frost and other enemies of the farmer.

In the years ahead, Miss Stinson concluded, aviation technology applied to agricultural production will occupy a top rung in man's health, welfare, and overall progress.

Piper Pawnee

Agricultural aircraft today conduct a major part of the fertilizing, crop-dusting, weeding and other necessary tasks in at least 45 countries, treating some 270 million acres of cultivated land annually. In the past 20 years, the world-wide fleet of ag aircraft has jumped from 200 aircraft to about 16,000, representing both fixed-wing and helicopter aircraft.

Costs Are K. O.'d By Eager Economy Champions All Around The Agency

WASHINGTON—An FAA engineer who plays trumpet in his spare time really has something to toot about — to the tune of a $1,450 award, a congratulatory letter from President Johnson, and a special citation from the Civil Service Commission.

Richard Ladzinske, a Southern Region electronics engineer, led FAA's parade of "Economy Champions," an elite group of six agency employees who received cash awards totalling $3,200 and commendations from President Johnson and CSC Chairman John Macy for their brainstorming ideas.

The special "Economy Champion" program, conducted by CSC during a six-month period from January through June, 1967, was designed to single out the most outstanding examples of cost-cutting suggestions by Federal employees.

Ladzinske was selected for his invention of a device to ground-test the accuracy of certain airport instruments. Called a "radio telemetric theodolite," the instrument monitors the flight paths of aircraft as they approach the runway on an ILS glide path. Already used by both the FAA and the Air Force, the device has made it possible for more planes to land at more airports under worse weather conditions than ever before.

The savings to the airlines in money and to their passengers in convenience notwithstanding, Ladzinske's invention has saved the government alone an estimated $198,000 in first year benefits.

However, Ladzinske was not the only engineer among the "Economy Champions" concerned with ILS improvements.

For being the key man in developing a low-cost ILS that is expected to save the taxpayers $2½ million, Washington's Nicholas J. Proferes received $1,000 and a Special Service Award, but unfortunately, he couldn't make the presentation ceremonies. (Proferes, chief of the Ground Based Guidance Section in the Systems Research and Development Service, was recuperating from an illness when the awards were given and sent Mrs. Proferes as his stand-in.)

Walter J. Shaw, procurement agent at the Aeronautical Center, turned his attention to the nation's defense efforts, and for suggesting that engine generators already in stock be converted for use in Viet Nam—rather than purchasing new ones—received $750. This get-more-for-your-money-idea will provide at least $16,000 in first year benefits.

The spirit of invention apparently was pervading the Aeronautical Center. Darrell H. Dye and Paul R. Twigger, electronics technician and teletypewriter repairer leader, respectively, put their heads together and split a $610 award for figuring out how to eliminate certain modification kits, thereby limiting purchases of required components. The joint suggestion of these two Oklahoma City staffers saved $14,250.

The sixth member of the feted group was Pacific Region's Bruno Siko, a budget analyst who analyzed how FAA's budget could be pared by $45,000 as a result of renegotiating an agreement with the Air Force for maintenance support of KC-135 aircraft (the military version of the 707). His personal budget was boosted by $500, and a Special Service Award.

Thus, six FAA employees by themselves contributed $2,773,250 in money-saving ideas to the American taxpayers — a fact proudly noted by Under Secretary of Transportation Everett Hutchinson and Associate Administrators Blatt, Moore and Tippets, who joined Chairman Macy in applauding FAA's "Economy Champion" sextet.

In The Money!

Mrs. Nicholas Proferes, left, was proud to accept $1,000 cash and a Special Services Award for her 'Economy Champ' husband who developed a low-cost instrument landing system that will save Uncle Sam $2½ million. Richard W. Ladzinske, right, demonstrates his 'radio telemetric theodolite' which won him $1,450 and a Presidential commendation as another 'Economy Champ.' The device measures a flight inspection aircraft's flight path as it approaches a runway on the ILS glide path.

Pharo's Daughter

Miss Sharon Osborn is overcome with happiness upon being chosen "Miss Southeastern Ohio". The 19-year old beauty is the daughter of Pharo Osborn, Port Columbus tower crew chief, and has won numerous other titles. She's a Miami University junior.

"Mary Had A Little Lamb"

Aeromedical Nursery Rhymes Keynote Missoula Open House

MISSOULA, Mont. — At first, the kiddies thought he was some kind of nut. Why else would he stand there before such a large audience and recite "Mary Had a Little Lamb" in such a kooky voice? That FAA man sure must be full of hot air!

They were close, but not exactly. He was full of *helium* and his nursery-rhyme recitation merely was a demonstration of aeromedical research. The unusual performance was one of the high-spots of "Parent-Child Day" sponsored by the Missoula Airway Facilities Sector recently to acquaint local youngsters with aviation in general and FAA activities in particular. Of special help in organizing the event was Monica Hartwig, a summer assistant in the Missoula tower office.

The youngsters were escorted through all FAA facilities in this western Montana city, including the control tower, flight service station, and the local VOR site. The Weather Bureau participated, too, and fascinated both the children and their parents with a display of special radar equipment.

For their own part, the AFS staff showed the kids all the hardware at hand and how it worked. In addition to the helium demonstration, the group observed actual use of FAA's transmitters and receivers, teletypes, and tape recorders.

In addition, a make-shift theater was arranged to accommodate those who wanted to see the double-feature matinee: the agency's own "A Traveler Meets Air Traffic Control," and "Density Altitude"—the latter being especially appropriate for pilots flying in the mountainous region.

But the kids weren't pilots?

No, but they were passengers.

Leaving that funny man to recite nursery rhymes, the kiddies climaxed their aviation get-acquainted party by boarding a light aircraft provided by Jack Hughes, chief pilot of Johnson's Flying Service, for an aerial view of their home-town.

Viet Nam Vet Gets Big Taste Of Hawaii Aloha

HONOLULU—A Viet Nam veteran, in Honolulu for five days of rest and recreation, recently returned to the battlefront with fond memories of his stay in Hawaii and the honesty of Pacific Regioner Henry Ryan.

In Honolulu, Army Specialist Fourth Class Michael Malone was riding a rented motor scooter past the Pacific Region headquarters building along the Ala Wai Boulevard when his wallet, containing $203, fell out.

Malone, just beginning his R&R leave from the 9th Division in Viet Nam, was in a tough situation —he had no money to pay his hotel bill for the five days he planned to stay in Waikiki.

But all was not lost, for along came Ryan, an Airway Facilities Division employee, on his lunch break. He noticed the wallet on the road and picked it up. Through the ID in the wallet and Army authorities, Ryan was able to track down Malone.

Not only did Ryan return the wallet, but he had Malone over to his home for a home-cooked dinner.

Lucky Bucks

Pacific Regioner Henry Ryan, left, looks tickled pink as he watches Army Specialist Fourth Class Michael Malone count his money which he lost and Ryan found on the street. Malone needed the money for delightful R & R (rest and recreation) in Hawaii after grueling months with the 9th Division in Viet Nam.

Trudge Last Mile

Twenty-one top FAA Washington and field airport officials met at headquarters the week of July 10 to formulate the Federal-aid Airport Program for the Fiscal Year 1968. Their Mammoth task was to fit more than 700 requests, totaling more than $300 million, into a program funded by a $66 million appropriation to improve and develop public civil airports. Seated are (front row, l. to r.) William McGill; Frank Carboine; Charles Winger; T. A. Adams, Jr.; William Knoepfle; (standing, center row, l. to r.) Joseph Johnson; George Borsari; Henry Rich; William Flener; Chester Bowers; Samuel Hawkins; Wendell Butcher; Lamar Guthrie; (last row, l. to r.) Marshall Benedict; James Howes; Donald Wilcox; Gerald Kempton; Richard Puckey; Robert Bacon; Elliott Perrett; and John Goodwin.

CAP's Commander Observes Cadets

OKLAHOMA CITY—Brig. Gen. William W. Wilcox, Civil Air Patrol national commander was an interested observer of the week-long Civil Air Patrol cadet orientation program held recently at the FAA Academy here.

Forty-nine cadets, representing nearly every state, attended the orientation. They were selected to attend on a competitive basis.

The FAA-CAP cadet orientation program is one of eight special activities scheduled annually and directed from National CAP Headquarters. The course acquaints cadets with the history and organization of FAA, its functions and responsibilities, as well as providing information on career opportunities in the FAA. Highlights of the program are laboratory demonstrations and exercises, and flights in an FAA jet aircraft.

National CAP headquarters is at Maxwell AFB, Ala. Activities include aerospace education for adults and youth, performing search and rescue missions, providing disaster emergency service and cooperating with civil defense and Red Cross disaster relief.

French STOL?

Boyd Relates Importance of Foreign Ideas

RALEIGH, N.C.—Secretary of Transportation Alan Boyd has proposed establishment of an Office of Industrial Cooperation whose function will be "to learn, by all available means, what transportation technology developed abroad would be of value in this country."

The Secretary said the new office would work out agreements with other countries which he feels could lead to significant economies in both time and money.

"In some cases the Office of Industrial Cooperation will be looking for simple international exchanges of technical data," he said. "In others it will seek contract agreements—always reciprocal—which could lead to joint research, joint development and perhaps even joint production of transportation systems."

As an example, the Secretary suggested to the North Carolina World Trade Association, "Let us suppose that a Western European nation has developed a high-angle take-off airplane that would be ideal for short-range passenger operations in our crowded northeast . . . Or let us suppose that another nation has developed a new type of high-speed ground transportation system in which an American corporation or a group of American cities might be interested.

"Why should we in the United States not take advantage of those advanced transportation technologies in other nations, in return for their taking advantage of our advancements?"

Preliminary steps to carry out just this type of idea are already underway. Officials from New York Airways visited the agency to brief the Aircraft Development Service on possible ways of testing a French STOL aircraft for use in the New York area. The plane is a French-built military transport, the Breguet 941, which can carry 56 passengers or 25,000 pounds of payload at 285 mph.

FAA Man Revisits Alaska

Giant Quake Spurred Growth Of Anchorage

By Clifford Cernick

ANCHORAGE—The Anchorage I knew ten years ago—and the Anchorage I looked down on during a recent return visit to Alaska Regional Headquarters this summer—are really two different cities.

In 1957, the pre-earthquake city was still a small community, somewhat undecided where it wanted to go. FAA offices were scattered about town, with office space at a premium. Many streets were unpaved.

The Anchorage of 1967 startles and astounds me. I expected to see a city still struggling back from the 1964 earthquake. Instead I revisited a city literally shaken out of any lethargy it might have had; a city charging forward at a brisk, free-wheeling pace.

The quake lasted four minutes and 21 seconds. It was greater in duration and intensity than the one which destroyed San Francisco. The tremors shook down buildings, broke thousands of windows, levelled the FAA tower at Anchorage International Airport, and sent scores of homes tumbling into the mud flats at Turnagain Arm.

Miraculously, Anchorage has sprung back, gleaming, new and bustling—with one of the continent's most striking downtown areas. In the downtown area, most of the powerlines have gone underground, avoiding the "crossbar-forest" look of many communities.

New skyscrapers have sprung up in several sections of the city. The FAA Management Seminar, which was the occasion of my visit, was held at the gleaming new Captain Cook Hotel—one of the finest I've seen.

FAA, I was told, had a major role in the city's reconstruction effort. Employees pitched in to restore communications, set up emergency shelters, and got things going again. One of my colleagues at the Management Institute, Bob Faller, told of working a full day shift for FAA, then driving a Salvation Army truck all night.

"We put up several 'quake refugees' at our house," Faller said. "I didn't even know their names, but that didn't matter."

FAA employees I talked to are proud of their city.

Regional Headquarters in the Hill Building showed no signs of the quake, though at the time it was badly damaged and had to be closed several months for repairs. Riding up in the elevator, I overheard one employee discuss his recent salmon fishing trip, another mentioned his homestead cabin. These Alaskans obviously like living in the 49th state.

Across the street from the Hill Building, a group of natives went through a colorful tribal dance—a daily noontime ritual during this Alaska Centennial Year celebration.

At the airport, my last sight of Anchorage was a glimpse of FAA's new Type-O tower, built to replace the one levelled by the quake. I thought of the FAA employee who lost his life in the collapse of that tower—and the contribution he and others had made to the growth of this great state.

Anchorage has always been a city of great dreams and great accomplishments. I believe it has already fulfilled the promise apparent back in 1957, when it was much smaller.

One of my Anchorage friends expressed a typical viewpoint reflecting the spirit of Alaskans in all cities and villages: "We're just getting started! In 10 years you won't recognize our city. But don't wait that long to come back!"

Cited For Heroism

Memphis FSS specialist George Metrolis, at the helm of his 17-foot outdrive-powered runabout, takes his family for a cruise on the Mississippi. Metrolis, who also uses his craft as a member of the Marine Rescue Squadron, recently received the Coast Guard "B" Medal, highest civilian award, for speeding to a plane and its pilot who had ditched in the river.

99s Plant

If the recent "Spirit of Holly Bush" at Glassboro is, as yet, but a promise, the international distaff side has made it a reality. In the U.S. for their annual convention, foreign members of the Ninety-Nines (an international group of women pilots), planted holly trees at a number of American airports. The ceremony above at Dulles International launched the project, stimulated by FAA's new Airport Beautification Program.