FAA HORIZONS

Read 'The Russians Are Coming' Pages 4-5

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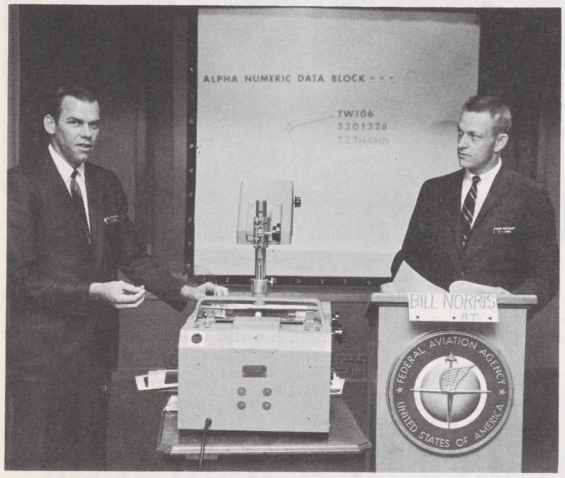


Two for the Road

David Ross (left) and Bill Norris, instructors from the Aeronautical Center, visited Southwest Region recently to explain NASPO plans for the compatible application of computerized and digitized information in ARTC centers. Several four-day symposiums were conducted to inform staff and program supervisors of the new system. The teams will visit all regions.

With World-Wide Interest

OKC Maintenance Meeting Sets An Attendance Record

OKLAHOMA CITY—The Third International Maintenance Symposium just completed here and hosted by FAA, drew more than 400 attendees to the Aeronautical Center.

FAA officials were prominent on the program. Hugh E. Waterman, chief, systems and equipment branch, engineering and manufacturing division, spoke on design of new aircraft systems; Samuel J. Corso, chief, general aviation maintenance branch, addressed the symposium on maintenance programs for new turbine and supersonic transport aircraft; and James L. Hemingway, chief, avionics branch, had as his subject the maintainability concepts relative to Category II landing systems.

Aviation people from 15 nations —representing air carriers, aircraft manufacturers, general aviation and private interests—heard a score of presentations on "The Maintainability and Reliability of Aircraft Systems and Components," the theme of this year's symposium. Previous symposia dealt with engine and airframe problems. Next year's session, the fourth such discussion, will deal with the maintenance airman.

Discussions during the session covered design and testing of various aircraft systems such as electrical, flight control hydraulic, navigation, flight instrumentation, pneumatics, and other components. Emphasis was on future developments.

Thirty U.S. and 10 foreign airlines were represented. Eighty-six U.S. manufacturers and 15 foreign companies were on hand for the two-and-a-half day meeting.

Since the attendance was so much greater than previous sessions, part of the overflow from the Aeronautical Center auditorium viewed the proceedings from the center's conference briefing room by means of closed circuit television.

W. Lloyd Lane, director of the Aeronautical Center, welcomed the

(Continued on pg. 7)

Rescue Team

Bernard Stich (left), Meigs Tower air traffic specialist and O'Hare Tower ATS John Cuprisin combined efforts with George Tannehill (center), Chicago fire department helicopter pilot, to rescue three persons from a sailboat in trouble on Lake Michigan one night recently.

DOTers Rescue Disabled Boat

CHICAGO—Thanks to the combined efforts of North Central Airlines, the Chicago fire department, the Coast Guard, and two alert FAA controllers, a possible tragedy ended on a damp but safe note here recently.

John Cuprisin, O'Hare Tower air traffic specialist, was handling the usual heavy volume of traffic at busy O'Hare International one evening when a call came in from North Central Flight 838, inbound to O'Hare. The pilot had sighted a sailboat several miles out in Lake Michigan that appeared to be in trouble.

Realizing the urgency of the situation, Cuprisin contacted Meigs Tower and requested Controller Bernard Stich to alert the fire department rescue unit stationed there. A helicopter took off immediately and, guided by vectors provided by Cuprisin, located the disabled craft in a short time.

According to the helicopter crew, the boat was not in immediate danger of sinking, but was adrift and taking on water. The 'copter pilot radioed Stich and requested him to notify the Coast Guard to send assistance to help the sailboat to safety. As the helicopter stood by, Stich contacted the Coast Guard. A few minutes later, the disabled craft and its cold and wet crew of three were on their way back to the safety of the Chicago harbor.

General Aviation Has Record Year In 1966

WASHINGTON—General aviation (non-airline) pilots last year flew 104,706 airplanes a record 3.3 billion miles in 21 million hours, consuming 512 million gallons of gasoline and jet fuel, the agency has reported.

A 10 per cent increase in the number of active general aviation aircraft over the 95,442 reported in 1965 is the largest yearly increase since 1946. Miles and hours flown increased over the previous year's record by 30 per cent and 26 per cent respectively—from 2.6 billion miles in 1965 to 3.3 billion in 1966 and from 16.7 million hours to 21 million.

Part of this unprecedented increase in general aviation flying activity can be attributed to the 41-day airline strike which occurred in 1966; however, it is impossible to determine the extent of its effect on general aviation flying.

The 374,610 million gallons of aviation gasoline used by general aviation in 1966 was a 28 per cent increase over the 291,841 million gallons used in 1965. The use of jet fuel jumped 69 per cent, from 81.3 million gallons in 1965 to 137.3 million in 1966.

Business flying continued to be the most active segment of general aviation operations, accounting for 33 per cent of the total hours (7.1 million) flown and 46 per cent of the total miles (1.5 billion).

Flight instruction was the second busiest segment with 27 per cent of the total number of hours and 19 per cent of the miles flown, followed by personal flying with 22 per cent of the hours and 18 per cent of the miles. Commercial general aviation (e.g., air taxi, charter, agricultural, etc.) flying accounted for 17 per cent of the hours and 16 per cent of the miles.

At the end of 1966, there were 915 turbine aircraft in the general aviation fleet, including 588 turboprops and 327 turbojets. In contrast, the airlines were operating 365 turboprops and 1,006 turbojets for a total of 1,371 turbine airline aircraft.

Robert O. Ziegler

Ziegler To Head Minneapolis Area

MINNEAPOLIS — Robert O. Ziegler, formerly chief of the Central Region's air traffic division, has been named manager of the Area Office here.

He succeeds Lyle K. Brown, who was recently reassigned as director of the Alaskan Region. Ziegler is a veteran of 21 years with the agency and a licensed pilot. He launched his FAA career as an airport traffic specialist at Chicago's Midway Tower in 1946.

Outside Experts Attend Regional Staff Meetings

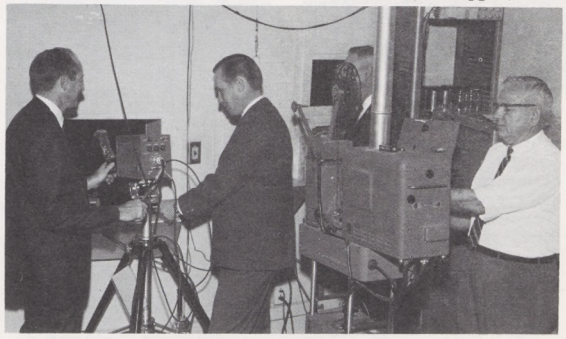
LOS ANGELES—A new program aimed at providing better understanding by the public of the agency and its mission has been started in the Western Region.

Instituted by Arvin O. Basnight, Western Region director, the program calls for inviting outside experts to sit in on staff meetings and observe the manner in which FAA conducts its activities.

The first group to participate in the plan was from *Flying* magazine, and consisted of top executives of that publication. Included were Robert B. Parke, editor and publisher; Richard B. Weeghman, executive editor; Archie Trammel, associate editor, Southwest; and Robert Blodget, associate editor, West.

The group visited Western Region headquarters and sat in on the regular morning Area Telecon. Later, the guests were given the opportunity to ask questions and express views on subjects of mutual interest.

Future guests will include airline captains and officials, fixed base operators, and airport managers.



For the Back Room

This audio-visuals crew set up a television camera and sound equipment in the Aeronautical Center auditorium, so that Maintenance Symposium proceedings could be projected by closed circuit TV into a conference room. This took care of the overflow crowd unable to be seated in the auditorium. They are (left to right): Bill Archer, chief; Charles Smith, illustrator; Walter McNallan (behind reel), assistant chief, and Hugh Hampton, projectionist.

Virginia Flying Club Adds Third Aircraft

LEESBURG, Va.—Leesburg Flyers, Inc. flying club, most of whose 50 members are employed at the Washington ARTC Center, has added a third aircraft to its fleet.

Club president James Truxel has taken delivery for the club on a 1966 Cessna *Skylane* which has a cruising speed of 160 m.p.h. With its long-range fuel tanks, the four-place plane has a non-stop flight range of nearly 1,000 miles.

"This was necessary," Truxel said, "because our people use the aircraft for cross-country flights to places such as Canada, Florida, and Nassau, in the Bahamas. You could say we've got a real swinging group."

The club puts in an average of 1,500 hours per year on its planes, but the new Cessna will probably get more as eager members check it out.

Leesburg Flyers began its fourth year on November 1. The pilot-controllers started out modestly with a $1,500 Aeronca Champion. Now they have the new *Skylane*, a 1966 Cessna 150 and a 1961 Cessna 172A, whose total value is nearly $26,000. The aircraft are based at Godfrey Field, in Leesburg.

Truxel noted that 15 club members have received their private pilot licenses, while many others have added additional ratings to their present licenses. "One former member," he pointed out, "now flies a Boeing 727 jet for Eastern Airlines."

In addition to Truxel, the club's officers are: Irvin Kemp, vice president; Gary Pase, secretary; and William Grupe, treasurer.

After a long week at the radar scopes, club members find flying a wonderful tonic for that tired feeling. "Besides," says Truxel, "it's nice to do some flying yourself, after controlling other people in airplanes eight hours a day."

Third Bird

Leesburg (Va.) Flyers Treasurer William Grupe (left) presents a check for a new Cessna "Skylane" to Colgan Airways President Charles Colgan at Godfrey Field. Club President James Truxel oversees the transaction.

Birthday for the Biggest

The Western Region credit union—the agency's largest—celebrated its 18th birthday recently, with a huge cake served in the Los Angeles Regional Office cafeteria. Houghton (Howdie) Miller, who guided the growth of the credit union from a $35 start 18 years ago to more than $12,400,000 in assets today, is seated second from right. With him are employees and officers of the credit union.

For Alaskan Pilots

Talks by Nation's Best Instructor Taped to Aid Bush Region Pilots

FAIRBANKS—Flight Standards in Alaska has taken a lead from Francis Bacon in its safety education program.

"If the mountain will not come to Mahomet, Mahomet must go to the mountain," wrote the 16th Century philosopher and writer.

"If pilots in the bush country country can't come to our aviation lectures, why not bring the lectures to them?" That was a question Richard Thwaites, chief of general aviation in the Regional Office, often pondered last summer. The answer was easy: Thwaites could video tape the lectures and send them to pilot groups in Kotzebue, Umiat, Cold Bay and all the other remote places where such instruction is needed.

FAA management bought Thwaites' idea, and purchased a self-contained solid state unit with TV set, camera, and recorder—all of which fit into a package the size of a suit case.

The new equipment was put to excellent use recently at a flying safety meeting held in the Regional Office. Henry Hubbell, Alaska's new Flight Standards chief lectured Anchorage-based pilots and flight instructors on the fundamentals of aerodynamics affecting small aircraft operations over Alaska's rocky terrain. Thwaites carefully recorded the two-hour presentation with the new unit.

"Hank Hubbell's lecture will be seen all over the state—anywhere we can get pilots together," stated Thwaites.

Hubbell, recently honored as "Instructor of the Year" by the National Flight Instructors Association, will probably become a TV personality way out in the bush, spreading the gospel of aviation safety. And that is where this type of instruction is sorely needed.

Flight Standards has many plans for the new equipment. Flight instruction can be recorded live. The phenomenon of "white out" conditions, approaches to airports, and flight maneuvers, can be brought into the classroom.

The video tape unit should pay for itself many times over. "If we just save one life, it will have paid for itself," Thwaites figures.

Safety Gospel

Henry Hubbell (left), chief of Flight Standards, explains how the video-tape TV camera works to Charles Miller (center), former president of the Alaska Airmen's Association, and Lyle K. Brown.

New Director

Lyle K. Brown, recently made FAA Director in Alaska, addressed the pilot group about safety. His message, too, was recorded "live."

Video Tape Unit

Richard Thwaites, Flight Standards Division general aviation chief (left), explains versatility of new videotape unit to secretary, Carolyn Estep. Larger TV console may be substituted for small screen before large audiences.

FSS Specialist Adds an Auto To His 'Saves'

DAGGETT, Calif.—Lee Atkinson, FSS specialist, has saved many an aircarft. Now, he can add a car to his list of saves.

Recently, Atkinson was driving in nearby Barstow when he saw smoke billowing from a parked, unattended pickup truck.

He quickly opened the truck door and snatched a smoldering bundle of cloth from inside the truck and threw it to the ground, where it immediately burst into flame. Then he kicked the flaming bundle into a gutter, where it was extinguished by running water.

Atkinson reported the incident to the owner of the business firm in front of which the truck was parked. He was told the owner of the truck was a local pest control operator and the truck was loaded with chemicals. These could have produced a disastrous fire but for Atkinson's prompt action.

Floating Antenna

If your newly constructed tower is in an area of hydraulic fill, as at Quonset Point, R.I., Naval Air Station, how do you move a heavy ASR-5 antenna into place? Simply hoist it aboard a barge and float it within a few feet of the tower, answer FAA technicians charged with the task.

U.S.-Mexican Meeting Opens Door To Better International Aviation

YUMA, Ariz.—This southwestern city of 28,000 mixed its own hospitality with the congeniality of Mexico in a double conference recently designed to improve general aviation flying conditions between the United States and Mexico.

The twin meetings—Second Arizona State Aviation Conference and Third Annual Reunion of Private International Aviation—brought together Administrator William F. McKee and Mexico's Civil Aviation Director General Ramon Perez Morquecho. Problems on both sides of the border were agreed on and discussed.

Activities of the Administrator also included a press conference, panel discussion and luncheon. In a brief speech he emphasized the need for better understanding of requirements and procedures by U.S. pilots entering Mexico, and indicated the agency would soon publish guidelines for flights into that country.

McKee praised his counterpart for the progress made in Mexico's aviation since he had taken office, and offered assistance to the Mexican government in the establishment of an airway system. Mexico is improving its airports, installing 50 VORs and establishing a communication system to provide air-ground capability.

To facilitate private flying to Mexico City for the Olympic Games, priority is being given to north-south traffic from the Mexican capital to the U.S.

The Director General and his staff held several meetings with FAA representatives to discuss specific problems. Working level discussions were headed by Director Henry L. Newman, whose Southwest Region is responsible for FAA activities in Mexico. Arvin Basnight, Western Region director, also participated.

We Agree!

Administrator William F. McKee and Ramon Perez Morquecho, director general of Mexico's civil aviation, chat during brief recess during international discussions in Yuma early this month.

Pilots Meeting Draws Crowd

OTTUMWA, Ia.—This city's FSS hosted a safety meeting attended by an overflowing crowd of more than a hundred pilots.

According to Roger J. Dessert, FSS chief, such meetings are held periodically to keep local pilots abreast of changes in FAA rules and regulations; to acquaint them with new and improved flight techniques, and, most of all, to encourage and promote a high degree of safety in flight. This particular meeting placed emphasis on the need for pre-flighting and pre-planning flights.

Chief Dessert spoke on the value of pre-flighting and pre-planning flights. Don Gabel, flight service specialist, explained recent changes adopted by FAA. Wilson Fry, pilot, instructor and A & P, delighted the enthusiastic audience with his experiences of the past two decades related to the subject matter. Films also were shown.

Brannon Cited For Chicago Board Service

FORT WORTH—Kirby L. Brannon, who recently reported to the Southwest Region to fill the newly-created position of evaluation officer, has been cited by the Chicago Federal Executive Board for his work as chairman of the "Employee of the Year" committee.

The citation resolved that "We recognize the excellent, energetic, and intelligent services that Kirby L. Brannon has rendered the Federal Executive Board. We feel that the high regard which the Board attained has been due in part to his earnest efforts and untiring devotion to the aims and purposes of the Federal Executive Board."

Brannon served for two years, prior to his Fort Worth assignment, as Chicago Area manager.

Air-Minded Gals

Air Traffic Specialist Philip Eidson points out incoming air traffic to a group of visiting secretaries from a Sarasota, Fla., space program contractor. Since the firm's 30 secretaries are responsible for booking most of the air travel for the firm's traveling engineers, a tour of Sarasota-Bradenton Airport and FAA facilities was arranged to better acquaint the ladies with operating procedures, quarters and services.

Quiet Trio Make Data Processing A Lively Thing

LOS ANGELES—Daleen Free, Connie Perkins and Carol Weenig—three comely young ladies who work for the agency—have much in common. All are in their early twenties, single, and went to the same high schools and the same business college. All are now accomplished card punch operators.

And all happen to be deaf mutes.

Despite a seeming handicap, they have earned nothing but praise from their boss, Edward J. Downey, chief of data production, who says:

"The girls are good workers. We don't have any communications problem in spite of the speech handicap. They get along well with all their fellow workers."

Daleen, 25, is from Panaca, Nev. She went to school in Ogden, Utah, because Nevada did not have the specialized education she required. Connie, 23, hails from Ogden, and her family still lives there. Carol, 24, is from Salt Lake City and is working the swing shift in the data processing center.

To prepare for their careers, the girls went to high school at Utah State School for the Deaf and Blind. Later, they completed courses at Stevens Henager Business College, in Ogden, and then took typing and keypunch operating at business school. They worked at Hill AFB before being employed by FAA.

Carol Weening

Connie Perkins

Daleen Free

'Space City,' Alabama Dedicates New Airport

HUNTSVILLE, Ala. — "Space City, U.S.A.," as this modern metropolis is known, was welcomed to the jet age by Deputy Administrator David Thomas at ceremonies commissioning the city's new jet airport and FAA's new air traffic control tower.

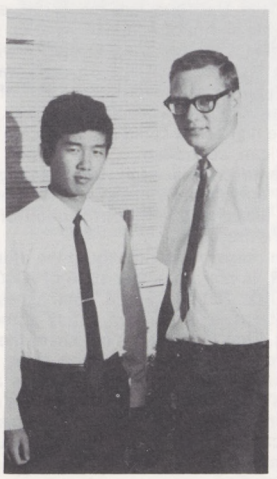
The Army's Redstone Arsenal and NASA's Marshall Space Flight Center have enlarged this once small town into a thriving city. Ten years ago, when FAA first opened its control tower in Huntsville, the annual number of airline flights was about 7,000. This past year, according to Tower Chief John Harrison, the airlines scheduled more than 25,000 flights in and out of the old airport.

Two days of ceremonies were concluded on Sunday, October 29, when the agency's *Jetstar* made the first flight into the new jetport. Accompanying Thomas, who piloted the airplane, were city, county, military and government officials. On hand to greet the first flight were James Rogers, Southern Region director; Birge Alexander, Memphis Area manager; William Flener, deputy director of Airports Service; John Harrison, Huntsville Tower chief and local coordinator, and others from the Area Office.

The day before, Thomas and his party were given a VIP tour of the Redstone Arsenal by its commanding general. The latest missile and rocket fire power used by the Army was displayed and explained by Army missile experts.

Dr. Wernher von Braun, famous director of the Space Flight Center, briefed the group on the Saturn V. "Moonshot" program. They then visited the test stand where the first stage of the huge Saturn V vehicle tested its engines. Dr. von Braun pointed out that a seismograph at Purdue University in Indiana was able to detect vibrations each time the powerful engines were tested.

Huntsville Mayor Glenn Hearn presented certificates to Deputy Administrator Thomas and his party making them Honorary Citizens of Huntsville.



'Adopted' Son

Koji Itoh, of Nagoya, was one of 65 Japanese students who spent the summer in the U.S. as a part of a Youth Exchange Program sponsored by Lions Clubs in both countries. Richard Kutz (right), of the Red Bluff, California airway facilities sector, hosted Koji and treated him to a tour of Northern California points of interest.

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"THE RUSSIANS ARE COMING . . . THE RUSSIANS ARE COMING . . ."

John Shaffer, FAA's coordinator, was among the group which braced against minus 36 degree weather in Moscow last winter.

The tiny hammer and sickle is barely discernible on the high, T-shaped tail of the IL-62, which touched down on American soil 50 years and nearly two weeks to the day of the Bolshevik Revolution—and three days following the fifth anniversary of Dulles International Airport.

"We are very pleased to find a common viewpoint . . ."
—Petrov

". . . it will bring our countries closer, and as we get to know each other better, it will make our problems fewer."
—Cary

by Sue Silverman

WASHINGTON—The wonderful world of Walt Disneyovich might have inspired the souvenirs offered to the first Americans to scramble aboard Russia's Ilyushin 62 when it landed last month at Dulles International Airport.

Beaming Soviet stewardesses handed out brightly-colored postcards depicting a handsome Russian prince and his beautiful princess soaring over Moscow on their blue magic carpet. Below them lay golden-spired palaces, ruby stars flashing from Kremlin towers, and St. Basil's Cathedral looking like a mixture of striped candy sticks, pineapples, and upside down ice cream cones.

Yet other details on the postcard suggested all was not a fairy tale. A silver jet streamed over the heads of the prince and princess; and at the bottom of the card a message written in the Russians' unusual Cyrillic alphabet cajoled: "Save time! Fly by Aeroflot!"

The postcards, complimentary glasses of vodka (straight), and gratis gifts of pins, emblems, and decorous spoons served as Russia's way of capitalizing on her capitalistic airplane: the 560 mph. IL-62, slated to fly between Moscow and New York on a regular scheduled basis after the U.S. and the U.S.S.R. work out a final agreement involving various technical and policy considerations.

Pan American World Airways would fly reciprocal flights along the same 4,800 mile route.

Aeroflot has filed a request with the CAB to make an intermediate stop at Montreal; Pan Am probably would choose Copenhagen.

State: "Da" or "Nyet"?

Whether or not the IL-62 will be permitted to carry passengers over one vast ocean, three seas, and a half-dozen countries depends, in large part, on FAA. The Department of State, however, will negotiate the final agreement with the Kremlin. The IL-62 was brought to the U.S. late last month for a series of proving flights and to bring Soviet aviation specialists to Washington and New York to confer with agency officials on technical matters. At issue was whether or not the plane was airworthy, capable of operating in American airspace, and perhaps most important, whether the flight crew could communicate effectively with American controllers.

These same criteria apply to all foreign carriers wishing to operate in this country. However, FAA's difficulties associated with certification of the IL-62 and its crew are unique.

The main reason, towering above the others, is that the U.S.S.R. is not a member-state of ICAO, the arm of the United Nations which establishes a single code of international aviation safety standards and procedures. That Russia does not share the mutually-binding provisions means, for one thing, that FAA inspectors have had to examine various aspects of the Soviets' airworthiness code (similar to our FARs), to determine if the standards are compatible with the American airspace environment. If Russia were an ICAO member, FAA acceptance of the standards would be routine.

Also, the Russian code is written in 250 pages of Cyrillic — difficult to translate under any circumstances, but especially tedious and exacting when so many technical terms and formulae are involved.

Warming the Chilly Climate

These facts, coupled with last minute changes by the Soviets and the long overdue introduction of the IL-62 into commercial service, have created a spate of formidable problems for FAA staff members spearheading the air route project.

At the helm is Charles Cary, Assistant Administrator for International Aviation Affairs, who has headed the American technical group since March of this year. It was he who signed the technical memorandum of understanding with the Russians on November 29, the agreement that cleared up the unresolved technical points. The State Department took over from there to work out other snags preventing fulfillment of the U.S.-U.S.S.R. Civil Air Transport Agreement signed in Washington on November 4, 1966.

Almost as responsible for the project as his boss, Cary, is John Shaffer, IA's Operations Liaison branch chief, who has been program coordinator for FAA since the bi-lateral agreement was signed last year. Shaffer was a key member of the American delegation which braced themselves against minus 36 degree weather in Moscow last January to start technical talks leading to the Moscow-New York link.

The FAA inspection group which flew aboard the Soviet jetliner during its week-long American stay was headed by FAA's Bill Huebner, chief of the New York International Field Office with which Russia's eventual application to fly into New York will be made. Huebner supervised the proving flights into Washington, Philadelphia, and Boston, which have been selected as the alternate airports for scheduled Russian flights to New York's John F. Kennedy International Airport.

FAA Was Candidly Surprised

The Soviet plane is roughly equivalent in size and performance to the intercontinental version of the Boeing 707 and DC-8. Its wings are dramatically swept back along the silver-azure-and-white fuselage. The plane is powered by four turbofan jets clustered in pairs on either side of the base of the high, T-shaped tail. FAA officials were candidly surprised by the outstanding performance of the aircraft, which can carry up to 186 passengers.

The interior of the plane was especially surprising

▲ Dmitri I. Petrov (right), who headed the Soviet delegation to the U. S., speaks to reporters through an interpreter upon arriving at Dulles. FAA's Charles O. Cary stands beside him. NBC's well-known broadcaster Peter Hackes (far left), takes notes.

Arven Saunders (left), director of the Bureau of National Capital Airports checks the Russian printed on the little sacks of candy.

◄ The mirror in the galley reflects the good will expressed by 28-year old Aeroflot stewardess, Lara Ruznerava. Equally warming were the glasses of vodka provided to American visitors who toured the jetliner.

▲ The IL-62 is roughly equivalent in size and performance to the Boeing 707 and DC-8. Note how it is capable of mating with Dulles' Mobile Lounge.

► Blues, greens, reds, tweeds, checks, and prints provide sharp and colorful contrasts inside the IL-62 cabin.

to this observer who, only five years ago, traveled on Russian air carriers whose straw bucket seats were of the trolley-car variety (and no seat belts, either), which lacked a public address system (the stewardess kept repeating her message to small groups of passengers), and whose decorations, such as they were, might have been borrowed from the Karamazovs' drawing room.

By contrast, the cabin of the IL-62 was as modern as the ones that grace our friendly skies. The decor reflected a most unusual combination of color, but what was lacking in harmony was compensated for by opulence.

Ironically, when one considers the proletariat state, there are both first and economy class accommodations. The former has two seats on either side of the aisle, carpeted by a plush red-and-black fabric whose design can be seen in most American theater lobbies. The upholstery is flecked black-and-white tweed; the serving trays are red; and green-and-white checkered blankets are folded in the racks above each seat. Economy class has a green and black carpeting; the chairs (six abreast divided by an aisle) alternate between the black-and-white tweed and a blue-and-white tweed; and the same green-and-white checked blankets are overhead. The two compartments are divided by a galley, one of whose doors leads down a flight of stairs to a rather large kitchen.

Bolshevik Progress

Beginning its American stay, the IL-62 touched down at Dulles during the chilly dusk hours of November 20—fifty years and nearly two weeks to the day of the Bolshevik Revolution. The long-awaited arrival of a Russian commercial transport on American soil signalled at least one fact about the first-half century of Soviet rule: if the Communists' Utopia remains a mirage in some areas, its aeronautical progress is no die-hard myth—like fairy princes and princesses floating over a romantic land on magic carpets.

Vast Communications Cover Huge Pacific

HONOLULU—What is now the FAA's massive and sophisticated telecommunications system covering this vast Pacific area can look back on modest beginnings at the International Airport here (formerly John Rodgers Airfield, and adjacent to historic Hickam Field).

For the quarter century just passed since the system's birth in 1941, the agency in discharging its basic responsibility of promoting aviation safety has steadily improved and extended its communications operations.

Today, at its command is a vast central nerve system—a farflung telecommunications network capable of accommodating the requirements of civil aviation as well as certain segments of military aviation and its supporting activities.

Playing a vital part in the history and growth of this FAA operation have been facilities located on the islands of Hawaii, Kauai, and Maui in the Hawaiian Islands, and at Canton, Palmyra, Wake, Guam, Midway, and American Samoa. Early facilities at Port Allen, Kauai; Canton; Palmyra; Puunene, Maui, and Midway served effectively, then fell before the pruning shears of progress as higher performance aircraft came into use, air routes changed, or economic considerations dictated shifts in the bases of operation. Through a gradual evolution in the state of the art, early facilities were expanded and new ones established, until the present air route structure, geared to today's economic and political situation, emerged.

As opposed to the simple radiotelegraphic circuitry of the early Honolulu station, today's vast telecommunications complex comprises telephone, teletypewriter, and facsimile devices, radio, landline, and submarine cable service. Reliability of air/ground communications has been perfected to the point where long-distance radiotelephone service, complemented by special selective signaling devices, is commonly accepted.

FAA's present fixed service system in the Pacific consists of 34 long distance teletypewriter channels, 10 long-distance telephone circuits and numerous local telephone and teletypewriter circuits. The long-distance channels/circuits include those which form a part of the International Civil Aviation Organization (ICAO) Worldwide Aeronautical Fixed Telecommunications Network (AFTN). They interconnect San Francisco, Honolulu, Pago Pago, Nadi (Fiji Islands), Kwajalein, Midway, Wake, Guam, Tokyo, and Manila.

Through relay actions at the gateway terminals they are connected to hundreds of points throughout the world. The Honolulu telephone and teletypewriter circuits create a communications network within the State of Hawaii connecting the outlying facilities with the central hub at the Honolulu IFSS inside Diamond Head crater.

Besides aviation messages, a unique service provided over this local hookup is the dissemination of seismographic information on tsunamis and earthquakes. At Honolulu, several of these long distance and local channels/circuits are interconnected through a Western Union Plan 59A fully automatic teletypewriter switching system. This system, which handles over 20,000 messages daily, has the distinction of being the first in the world to be connected to the AFTN, and has provided effective and reliable service for the past five years.

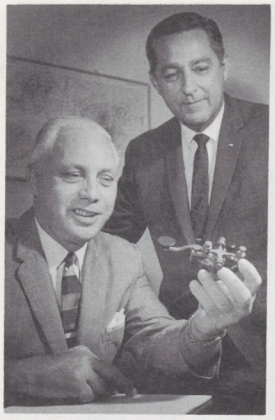
The air/ground coverage extends from Honolulu westward through the Central Pacific to the Philippines, Formosa, Okinawa, and Japan, southward to Pago Pago (American Samoa) and the surrounding area within a radius of some 1,500 to 2,000 miles. This long distance service is supplemented by numerous short distance channels used by certain facilities to provide short distance en route air/ground communication channels, direct pilot-to-controller communications, approach control, airport control and ground control communication service.

During the past three years the Pacific Region has been engaged in a program to integrate certain of its telecommunications facilities with those of the Defense Communications Agency. This is being given highest priority in the efforts of its planners, engineers, technicians, and operating personnel. On completion, there will be an air traffic control system with top telecommunications efficiency, capable of meeting both current and future requirements and at less cost.

The question, "Where do we go from here"? can best be answered by citing some of the tangible yields from these technological advances. Some already are available. Others, almost within our grasp, are already on the horizon: high speed data channels; automatic in-flight position reporting direct to computers; computer-initiated in-flight interrogation; response evaluation and memory; computer-produced data correlation, analysis, decision, and instruction transmission; earth satellite communications channels; and "self-healing" telecommunications system complexes to eliminate loss of service due to failure of one or more components.

These or similar devices and systems will eventually be placed in service as the requirements of the high performance air vehicles and their users increase, and as the need for the coordination and control of space vehicle launching and reentry airspace becomes greater.

Though yesterday barely an infant, today the realm of communications is vast, with a growth rate so great, physically and technologically, as to stagger the imagination of the most forward-thinking planners. Keeping pace, FAA aims to channel in an agency direction every possible benefit it can derive from the spectacular growth in communications in its continuous effort to support this area of its mission.



Dah-Diters

Gordon Pearson, air traffic chief, holds a telegraphic key first used at Honolulu's old John Rodgers Airfield, where FAA's vast Pacific area telecommunications system had its modest birth. Roy Clemens (right), chief of program planning, and Pearson, remember their "good ole days" as telegraphers when they sent a fast 15 to 25 words-per-minute. Modern teletypewriters now can send up to 200 words per minute.

Long-Distance System

This fully automatic teletypewriter switching system at the Honolulu IFSS can handle more than 20,000 messages daily. Todays modern communication system for the agency carries not only aviation messages, but also advises of impending earthquakes and tsunamis, the so-called 'tidal waves.'

Long Beach Tower Reaches 100,000 Mark

LONG BEACH, Calif.—Controllers at this city's general aviation airport—one of the busiest in the country—are proud of their new record.

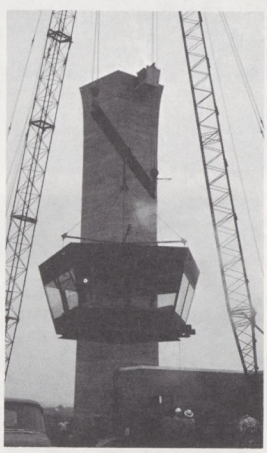
Recently, the airport hit a 100,000-per-year pace of instrument takeoffs and landings. The previous instrument operations high point was 84,000 operations, during 1966.

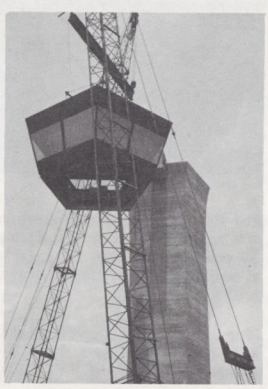
Stan W. Dilatush, tower chief, expects the tower to exceed 120,000 such operations before the year ends.

The 100,000th instrument operation since January 1, 1967 was a Douglas DC-9. The Douglas plant is situated near the airport.

The FAA radar controller for the landing was Crew Chief Ray Northam.

Other air traffic specialists on the crew at the time the new milestone was set were Ron Washington and Val Monroe, with Ed Balsis as watch supervisor.





up ... up ... and On Top

Getting a new five-sided standard tower onto its concrete shaft at Huntsville (Ala.) Airport, requires considerable grunt and groan, mostly from the large cranes that do the job. It's complicated by the fact that the cab weighs in at 20 tons and the cab area has 275 sq. ft.

The tower base houses the TRACON room as well as electronic, mechanical, and telephone equipment rooms, the ready/training room and new administrative offices.

FAA Managers Hear EEO Talk

SAN FRANCISCO—A seminar on equal employment opportunity, designed to help FAA managers understand the problems and methods of extending equal employment opportunity to all present and prospective FAA employees, was held here recently.

Similar seminars have been held or are being scheduled at FAA offices in Washington, Atlanta, Houston, Fort Worth, Minneapolis, Albuquerque and Oklahoma City.

The seminars help managers gain insight into their own attitudes concerning prejudice, while giving them an opportunity to listen to and question some of the nation's most knowledgeable authorities in equal employment opportunity.

Industrial and academy representatives participating in the seminar included: Dr. Leonard P. Aires, vice president, National Conference of Christians and Jews; Dr. Anna Porter Burrell, professor of education, State University of New York College, Buffalo, N.Y.; J. Curtis Counts, vice president, employee relations, Douglas Aircraft Company, Santa Monica, Calif.; Dr. Harold A. Lett, consultant in labor-management-community relations, Newark, N.J.

Education First

After a review of its curriculum by the Lindenhurst, N.Y., GADO, Aviation High School of Queens, N.Y. was recertificated for a combined airframe and powerplant curriculum, the first time this has been done anywhere in the U.S. This permits students to acquire ratings in both specialties, whereas before they could only qualify for one. Maintenance inspector Daniel Radice of the Lindenhurst GADO (second from left) presents new certificate to school principal Frank Woehr.

Direct Line!

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

Q: I am an electronics technician who has a flight instructor rating. Is it permissible for me to give flight instruction to members of the local flying club to which I belong? Also, is it permissible for me to make occasional trips for a local bush pilot during the summer time? Also, would I qualify as a general aviation operations inspector?

A: FAA regulations prohibit FAA employees from engaging in any private aviation business activities. One reason for this is to make sure that FAA employees do not compete with private businessmen and their employees whose livelihood is dependent upon private civil aviation business. Another reason is to prevent conflict-of-interest situations. Obviously, the FAA could be open to criticism if an inspector in a GADO were to certificate an airman whom he had instructed. However, waivers can be granted by regional directors or, in some cases, by area managers, when:

1. **Other flight instructors or pilots are not available.**
2. **There are not enough instructors or pilots to meet the demand for flight instruction.**
3. **The FAA employee would not be in a conflict-of-interest situation.**
4. **The FAA employee would not be competing with private aviation business and depriving them of income.**
5. **The outside employment does not have an adverse effect upon the quality of his work performance in his regular FAA job.**

In your particular case, you should submit a request for a waiver to your area manager or regional director. Detailed information on how to request a waiver may be found in agency Handbook 3750. 1A, Conduct and Discipline.

It appears from your letter that you have all of the licenses and ratings (with the possible exception of a multi-engine rating) to qualify as a General Aviation Operations Inspector. You can confirm this by writing or calling your area personnel office.

Q. I am a supervisory air traffic control specialist assigned to a flight service station. Would I become eligible for premium pay if I am required, by the agency, to travel on what would normally be a regular day off?

A: The Federal Employees Act of 1965 requires supervisors to schedule travel within normal duty hours whenever practical. When this can't reasonably be done, the law provides that the time an employee spends traveling away from his official duty station is considered hours of employment (therefore payable) when (1) the travel time falls within the employee's regularly scheduled workweek, including regularly scheduled overtime hours (2) or the employee must actually work while traveling or must travel under arduous circumstances. The Congress has been concerned about this whole subject on a number of occasions, and it is currently looking into the matter again. If the law is changed, FAA policy will reflect the change.

Q: (1) How and why were the IBM 9020 Central Computer Complex technician jobs classified at both the GS-856-9 and GS-856-11 levels?

(2) What is the current policy regarding promotion of employees out of an occupation in which there exists a shortage of qualified personnel to replace them?

A: Technicians who hold these jobs work on the digital computer and related equipment in NAS Stage A centers. When first set up, the technician slots were drawn up at two levels, with the GS-11 having full system responsibility and the GS-9 having sub-system responsibility. The grades were set up using existing classification standards and a special guide issued by the Office of Personnel and Training. When this guide was put out, it was recognized that it would be necessary to look at the guide again after the actual installation and operation of NAS got going. In September, an SM/PT team visited the Jacksonville Center as a part of this study. The results of this visit will show up in a revised guide which will be issued in the near future.

The agency's policy on promotions remains the same. The best qualified individual will be selected for promotion under the principles of the Merit Promotion Plan. Critical shortages of personnel in particular occupations do not restrict the members of that occupation from competing for promotion.

Q: Why not have a section in *Horizons* where employees could offer to buy or sell items, request information about other locations, arrange common transportation, etc.?

A: The thought behind your idea is a good one, but the administrative problems of providing such a service to our 43,000 employees makes it impractical. FAA is widely scattered in relatively small groups, and the items you speak of are of rather localized interest. It might be possible, as an alternative, for local employee recreation and social clubs to work out a system for exchanging such information among themselves. Bulletin boards offer another good means of exchanging such information.

'Operation Raincheck'

To familiarize general aviation pilots with how the IFR system works in detail, the Oakland ARTC Center has started a 12-hour course, held on three evenings for four hours each. Called "Operation Raincheck," the program has been a resounding success since, up to now, 475 pilots have been enthusiastic graduates. Other major Western Region facilities have started similar programs and there are better than 400 pilots on the waiting list.

'The FAA'

BOOK REVIEW

An attractive and highly readable book, "The Federal Aviation Administration", by Robert Burkhardt, has just been published by Frederick A. Praeger.

This well-documented history of FAA and its predecessor organizations provides interesting anecdotes and insights into aviation—one of the fastest growing industries in our history, while depicting the government's role in fostering this burgeoning giant.

Long-time aviation writer and private pilot Robert Burkhardt has included a very readable chapter on FAA's three administrators, showing each man's highly individualistic way of running the agency, each one's contribution to aviation safety and the problems each encountered.

In 1926, Congress passed what has been called the legislative cornerstone for the development of commercial aviation in America—the Air Commerce Act—and thereby initiated the U.S. Government's role as mentor, arbitrator, provider and regulator to the then infant aviation industry.

The Act established the Aeronautics Branch in the Department of Commerce, and gave the Secretary of Commerce the power to do most of the things being done today by FAA, i.e. foster air commerce; designate and establish federal airways; establish, operate, and maintain aids for air navigation (except airports); arrange for research and development to improve such aids; license pilots and other airmen; issue airworthiness certificates for aircraft and major aircraft components; and investigate accidents.

Author Burkhardt has appended a transcript of a tape called "The Lost Pilot" which shows in human terms and in just a few pages FAA's valuable contribution to aviation. The book should serve as a handy reference work.

Book for Christmas

Administrator William F. McKee (right) talks over a point with author Robert Burkhardt on the latter's just published book, "The Federal Aviation Administration." McKee is one of three administrators whose contributions are featured in the well-organized history of the agency.

Head Table

Seen at dinner during the Maintenance Symposium were (left to right): Harry A. Turnpaugh, chief of flight standards maintenance division; George Weitz, who preceded Turnpaugh in that position and is now a special assistant, maintenance; Richard Skully, deputy director, Aeronautical Center; General Maxwell, SST Development director; and W. Lloyd Lane, director, Aeronautical Center.

Maintenance Men

The 360 people who attended the Symposium buffet dinner in the Sheraton-Oklahoma Hotel heard the latest word in maintenance techniques.

OKC Maintenance Meeting Is Largest

(Continued from pg. 1)

guests on the opening day of the meeting. Harry A. Turnpaugh, chief, maintenance division, Flight Standards Service, Washington, D. C., presented an outline of present and future aircraft maintenance programs.

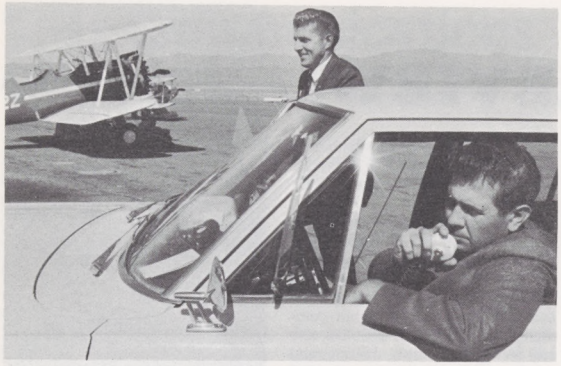
Nine companies offered exhibits for the Maintenance Symposium, varying from non-destructive testing, electronic equipment, radio isotope inspection, to turbine engines.

An after dinner speech by Major General J. C. Maxwell, director, Supersonic Transport Development, was one of the highlights of the three-day program. General Maxwell discussed the problems associated with the prototype of the SST of the 1970s, saying, "The central issue we have to face is the feasibility for commercial transport purposes. We can't settle that issue unless the prototype is similar to the airplane we expect to produce for commercial service."

General Maxwell went on to describe what might be some of the maintenance problems in this highly complex aircraft of the future. He said it should be thoroughly practical and a maintainable airline airplane. It should be good enough to achieve utilization rates of about eight hours a day after a few years in commercial service.

James J. Koehler, of reliability standards, served as technical coordinator, with Robert Phillips, of program and planning. Coordinators for the Aeronautical Center were Jim Purcell, center executive officer, Joe Manning, Lynne D. Covalt, and William T. Zendler, all of the maintenance analysis center. Attending to the details of the meeting were Mrs. Gladys Anderson of the center public affairs office, Miss Diane Harris of the payroll branch, Mrs. Shirley Cook of the accounting division, and Mrs. Judy Fuller of the maintenance analysis center.

The site and the dates for a Fourth Annual Maintenance Symposium have not been set at this time.



Race Trouble Shooters

Warren Lee and Frederick Pedri (in car), both from the Salt Lake City Area office, air traffic, were "trouble-shooters" during recent National Air Races at Reno, witnessed by more than 39,755 persons during the four days of events. Other air traffic personnel who assisted included Jerry Harris, Kenneth Krohn, Albert Wickstrom, Andre Raynal, Mario Bisio, Darrell Sherman and Arthur Anglin. Flight Standards personnel from the Reno and Salt Lake City GADOs also gave a hand.

Newest TACAN Monitors Work in Ice and Snow

ATLANTIC CITY—A new nonicing face plate for TACAN monitors have been developed at the National Aviation Facilities Experimental Center.

Tests were started when field reports noted that standard face plates were icing up in weather and monitors were automatically shutting down their TACAN stations.

A monitor continually checks the operation of a station, and signals when the station is not operating accurately enough for navigation or when the monitor itself is not functioning properly.

The improvement consists of installing either tempered glass or glass fiber face plates, heated by embedded wiring. The improved face plates first were tested in the center's environmental lab and later under actual conditions in the field.

Some of the TACAN sites where field tests were conducted and where new face plates are installed are: Sandusky, Chardon and Briggs, Ohio; South Bend, Ind.; Dupree, S.D.; and Malad, Pocatello, Burley and Dubois, Idaho.

A technical report on the project, RD 67-6, prepared by project manager Jack A. Muller has just been released. Matthew Naimo and Harold Postel assisted in the lab and field tests. Jerry A. Cosner, of the navigation development division, Washington headquarters, designed the new face plate.

Muller is also completing a similar study on VOR monitors for publication this coming spring.

Study of Aircraft Crash Causes to Improve Safety

LOS ANGELES—Study of certain aircraft accidents has uncovered data that may lead to their prevention, according to an article, "Human Factors in General Aviation Accidents," published in a recent issue of *Aerospace Medicine*.

Co-authored by Dr. J. Robert Dille, formerly Western Region flight surgeon, and Edward W. Morris, administrative officer for the aviation medical division, the article explores conditions contributing to both fatal and non-fatal light aircraft accidents.

Such factors as drugs, alcohol, carbon monoxide, and exposure to agricultural chemicals are examined thoroughly in the study.

Kropf Gets CAP Commendation

LOS ANGELES — FAA's close liaison with the Civil Air Patrol in carrying out aviation education activity has earned a Department of the Air Force commendation for Gene Kropf, Western Region public affairs officer.

In a letter to the Administrator, the director of CAP Aerospace Education, L. D. (Pat) Cody, expressed gratitude for the cooperation and support given by Kropf to CAP aerospace education activities throughout the region.

"Because of Kropf's efforts, the important role of the FAA in air and space travel has been made known to thousands of educators who are assisting American youth to participate more intelligently and effectively in this most complex aerospace age," Cody said.

In passing on Cody's letter to Kropf, the Administrator added his commendations.

"Your work represents a splendid illustration of agency goal attainment through aviation education programs," the Administrator stated.

Xmas Is Early For Miamian

MIAMI—Patrick Brennan, Area Office mail clerk, has good reason to smile. On a routine morning trip to the airport post office, he waited his turn for service behind a woman at the window.

The woman quickly mailed several packages and dashed off to catch a flight. Brennan moved up to the window and before him lay a wallet containing $758—with no identification in it, but obviously left behind by the woman who had hurried away. He immediately turned it over to postal authorities, and went on his merry way.

At 12:30 the same day, Brennan made his second trip to the post office. Awaiting him was a pleasant surprise. The lady—name still unknown — discovering her loss, had retraced her steps to the post office, found that her money was still safe and sound, and left a $58 reward for our merry Miamian.

Wake Islanders Happily Return Home

An Armful

Mrs. Rita Gauthier makes no attempt to hide her elation as husband Richard plants a smack of welcome. PC's N-98 jet aircraft completed six round trips to Wake during week of Nov. 5, returning 97 families to the now partially restored island, which was devastated by Typhoon Sarah's howling 150-mile winds and high surf on Sept. 16.

Hey, There's Dad!

Two unidentified youngsters have spotted their dad—a scene repeated many times at the Wake Airport during the week of Nov. 5. Fathers remained on Wake after the typhoon to reopen essential aviation and community facilities and to clear away hazardous debris.

Happy Days!

George LaCaille, Wake Area manager, beams a welcome to the first evacuees returning to Wake Island and family reunions. LaCaille reports that all FAA homes not completely destroyed by the typhoon have been restored to livable condition, with temporary water-tight roofs, electricity and water.

Long Time No See

Mrs. Douglas Olson, wife of FAA Chaplain (center), being greeted on her return to Wake. After the typhoon, she and some 400 other dependent-evacuees found refuge in Honolulu. A small group continued on to mainland destinations.