FAA HORIZONS

Read:
'An Airport for Two Cities'
Pages 4-5

Vol. 3, No. 11 | Published biweekly for employees of the Department of Transportation/Federal Aviation Administration | May 26, 1969

Aviation Introduction

Careers in aviation—and minority group participation in them—are discussed with students by Edward Gibbs (right), founder and national president of Negro Airmen International, and Atlantic City Commissioner Karlos LaSane.

NAFEC Trip Opens Up Minority Career Vistas

ATLANTIC CITY—What aviation career opportunities are available for Negro youth—today, and in the near future?

To find the answers, a hundred high school juniors and seniors from Philadelphia and Newark recently visited NAFEC for a day-long program conducted by Negro Airmen International, Inc. (NAI). The FAA and the Atlantic City Airport management provided the major portions of the program.

From talking with the experts, taking plane rides and touring the airport and the center, students gained a better understanding of the opportunities available in the field and the education required to qualify.

Apart from highlighting career opportunities, the purpose of the program was to bring students into personal contact with successful members of the black community. Talking to Negro airline pilots and to Negroes who own and operate their own airplanes, NAI believes, will help motivate these youngsters in the direction of productive careers.

Primary FAA coordinator for the group's visit to NAFEC was William Broadwater, Air Traffic Service, an active NAI member. Heading up the program for NAI were regional directors Roscoe Draper, Haverford, Pa., and Herbert Southern, Rahway, N.J.

By Bus and Aircraft

Most of the students arrived in buses. Some, however, flew in with NAI members. The youths were greeted officially by Karlos LaSane, Atlantic City Commissioner of Parks and Public Property. LaSane, a student pilot and Atlantic City's first Negro commissioner, arranged with his superintendent of airports, Paul Argus, to present a series of informal briefings on different aviation occupations. The need for interested students to get a good education, regardless of their occupation, was stressed.

After sessions with Edward Gibbs, NAI's founder and national president and NAI members from as far away as Chicago, students were divided into groups for flights aboard N-6, the agency's DC-3 hangared at Washington National Airport.

Six orientation flights extended over a two and one-half hour period. Pilots David West, Office of the Deputy Administrator, and

(Continued on page 7)

Photo Contest Winners Announced

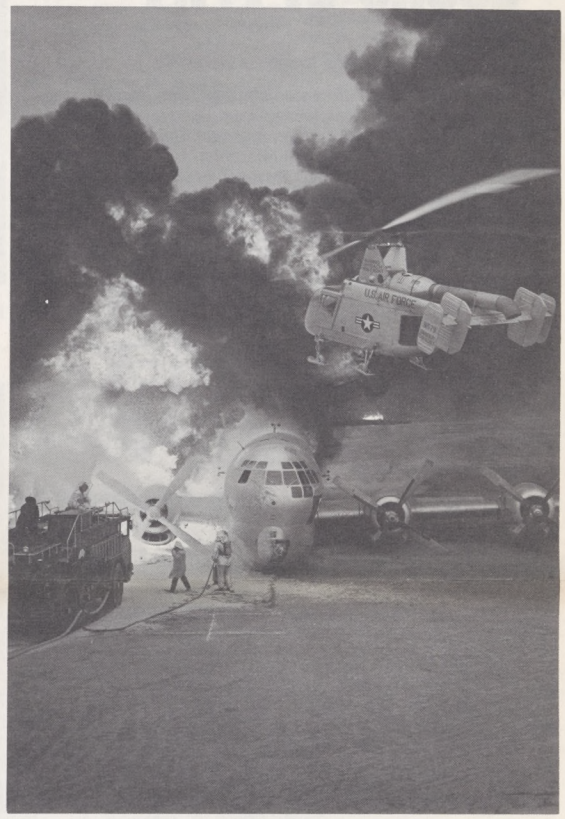
WASHINGTON—A dramatic action photo of FAA crews battling an aircraft blaze as part of a fire-crash technique study at NAFEC won for Joe C. Cox, scientific photographer at NAFEC, the $100 first prize in the recently concluded agency photo contest. A close-up of an FSS specialist preparing a see-through weather map brought to Thomas M. Black of the Elko, Nev. FSS one of the two $50 second prizes. Black also won two of the 12 third prizes of $25 each for two other striking photos, one depicting maintenance employees at work on delicate FSS equipment, the other showing a specialist operating a VHF-UHF Direction Finder.

The other second prize winner was Byron Van Dake, Minneapolis Tower controller. Van Dake's $50 photograph captures a busy scene in the tower cab—dramatically "freezing" action reflecting the responsibility shouldered by FAA controllers in the course of a normal day.

Two of the 12 third prizes were garnered by William S. Lacomba of the Navaids Section at Santurce, Puerto Rico. In one of Lacomba's photos, a 300-foot antenna is framed by two palm trees, providing vivid contrast between natural beauty and man-made utility. In the other, an aerial shot, with sunlight shimmering on the waters at the approach to Runway 29 at San Juan International near the localizer, provides an unusual effect.

Also taking two third prizes was Arthur Cazares, the agency's Air Traffic Representative at Castle AFB, Calif. One of Cazares' prize-winners frames the Chandler Field,

(Continued on page 7)



The Big Winner!

Firefighting in the interest of aviation safety is demonstrated in this dramatic study of NAFEC crews extinguishing a spectacular aircraft blaze during a study of fire-crash techniques. A helicopter hovers watchfully over the controlled "holocaust." The photo won a $100 first prize in the recently-concluded FAA photo contest for Joe C. Cox, Technical-Scientific Photographer at NAFEC.

Major National Honor Goes to George Moore

WASHINGTON—The National Civil Service League has named George S. Moore one of the ten winners of its 1969 awards for outstanding public service. Moore, Associate Administrator for Operations, and the other awardees will be honored June 13 at a banquet to be held at the Washington-Hilton Hotel.

At the event, the NCSL will present each with a citation, an inscribed gold watch and a check for $1,000.

Moore received the award on the basis of his outstanding contributions to aviation safety and to increased efficiency in government operations. Also considered by the NCSL in honoring him were his superior public service achievements and his notable career progression through the ranks from an air carrier inspector to his present key Federal position.

George S. Moore
Associate Administrator for Operations

As Associate Administrator for Operations, Moore oversees the agency's four operating services: Air Traffic, Airports, Flight Standards and Systems Maintenance.

His 27-year career in Federal Government began in June, 1941 when he joined the CAA as an air carrier inspector at Memphis.

In order to handle the legal aspects of his regulatory and enforcement responsibilities, he earned his law degree by attending night school.

Washington positions he has held since joining the agency include the following: Chief, Scheduled Air Carrier Branch, Chief Air Carrier Division, Chief Safety Regulations Division, Deputy Director Flight Standards Service, Director of Flight Standards Service and Deputy Associate Administrator for Programs.

Moore also has served as Chief of the Flight Standards Division in the Southwest Region.

He holds degrees from Holy Cross College and Southern Law University.

Acceleration Is Predicted In Operations at Dulles

By David H. Brown

WASHINGTON—By 1980, Dulles International Airport will surpass Washington National in aircraft operations and the amount of cargo handled and will narrow considerably the gap in the number of passenger boardings.

Current flight restrictions expected to continue at National, coupled with development of huge high capacity jets that National will not be able to handle, will prove a boon to Dulles' future.

These predictions are contained in a fiscal 1969-1980 FAA forecast. The report also contains passenger projections for Baltimore's Friendship Airport.

By 1980, Dulles is expected to have 394,000 landings and takeoffs —a 78 per cent increase over 221,000 in FY 1968.

Washington National will have 366,000—seven per cent over 342,000 of FY 1968.

Combined, the two airports by 1980 will have 760,000, a 35 per cent rise over 562,700 the fiscal 1968 figure.

As to cargo, Dulles will handle 265 million pounds—a 381 per cent increase over 55 million of fiscal 1968.

Washington National will handle 196 million pounds—a 22 per cent rise over fiscal 1968.

With respect to passenger traffic, Washington National will have 16 million air carrier passengers—a 70 per cent rise over 9.4 million of fiscal 1968.

Dulles will have 11.3 million — a 606 per cent rise over 1.6 million of fiscal 1968.

Educational TV Looks at FAA

By Gene Kropf

Nineteen educational television stations from coast to coast are giving millions of Americans an "over-the-shoulder" view of FAA controllers and technicians at work, by showing a recently-completed film.

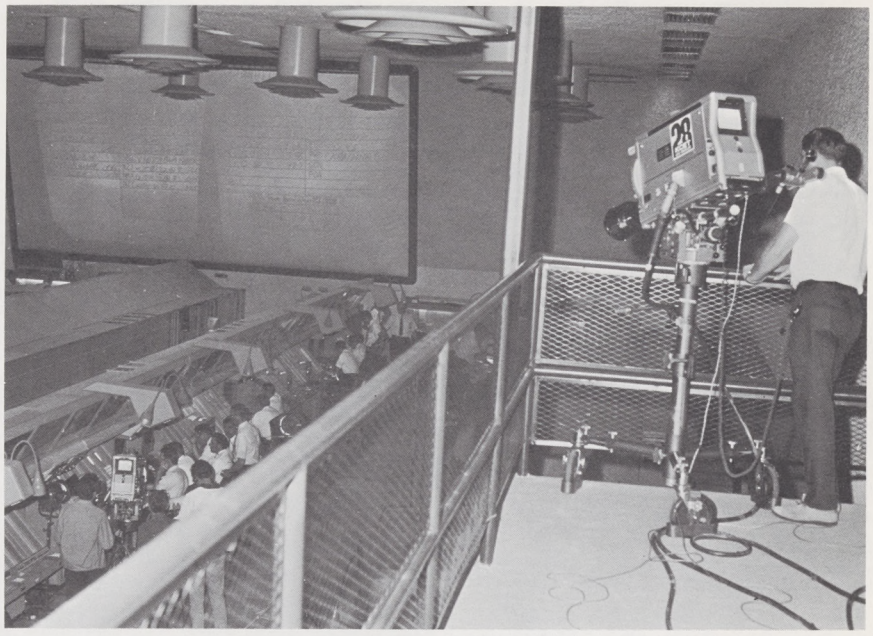
The film, an hour-long "R&D Review" produced by Channel 28, KCET, serving the Los Angeles Area, features the Los Angeles ARTCC at Palmdale.

About 25 minutes of the production is made up of footage from FAA's new film, "NAS Stage A."

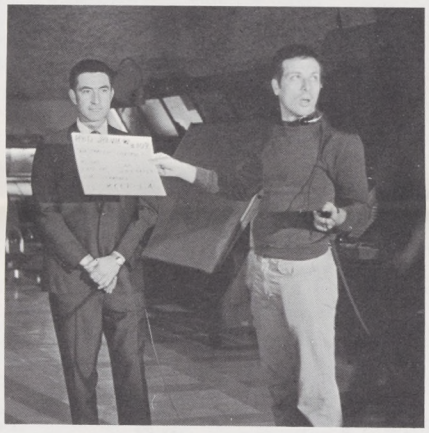
Serving as technical director and also appearing in the film was Allan Andrews, the Western Region's National Air Space Automation Coordinator.

The show opens with some excellent shots of present-day equipment and procedures, focussing on the Avenal High Altitude Sector and Controller Robert B. Smith.

The production then traces the history of air traffic control. It concludes with a depiction of system operation when automated facilities are in place.

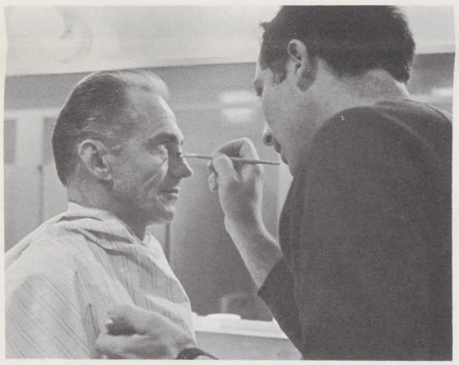


TV photographer sets up his equipment on the balcony for a panoramic shot of the Los Angeles Center.



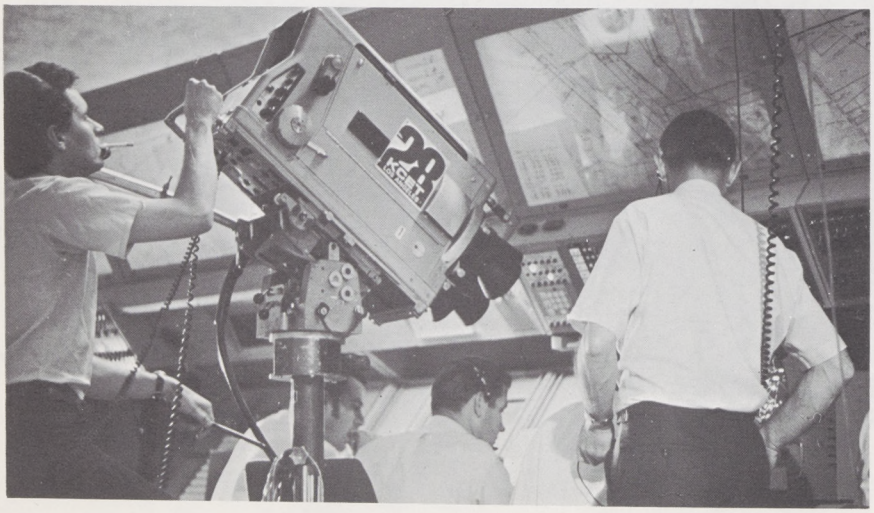
In typical Hollywood fashion, the show's identification shot is made with Dr. Albert Hibbs of Pasadena's Jet Propulsion Laboratories.

The host of the show, Dr. Albert Hibbs, goes over the script with Allan Andrews (right), Western Region's NAS Automation Coordinator.



Before appearing on camera during the filming, FAA's Allan Andrews goes through the make-up routine.

The Avenal Sector, featured in the production, comes under the eye of educational TV.



FAAers can see "R&D Review" on their local educational TV channel by referring to the following schedule. The actual hour of showing can be obtained from newspaper television listings.

Houston (KUHT)	May 27
Madison, Wis. (WHA)	June 3
Milwaukee (WMVS)	June 22
Lincoln, Nebr. (KUON)	June 29
Portland, Ore. (KOAP)	July 11
St. Louis (KETC)	July 27
Seattle (KCTS)	July 28
Washington, D.C. (WETA)	August 16
Duluth (WDSE)	August 17
Boston (WGBH)	August 24
Tampa (WEDU)	September 14

The film already has been shown on educational channels in Los Angeles, San Francisco, San Diego, Cincinnati, Sacramento, Phoenix and St. Paul.

Photographed for Safety

The APAX photo of a turbine wheel which failed after passing a standard X-ray inspection is examined by: (from left), Maj. Frank W. Musgrove, Division Chief Harry A. Turnpaugh and Sam J. Corso, Chief, General Aviation Maintenance Branch, all of the Maintenance Division of Flight Standards Service.

Colored X-ray Pictures Help Combat Accidents

WASHINGTON—A new technique in X-ray inspection of aircraft structural components shows promise of preventing accidents and is currently being evaluated.

The technique—Automatic Photographic Analysis of X-rays (APAX)—literally extracts additional information from X-ray plates currently being used in aircraft inspection. Although the conventional X-ray method has been effective in pinpointing weakened aircraft components, microscopic cracks within metal components are sometimes very difficult to locate using present X-ray techniques.

Under the new process, X-ray negatives of the conventional type are processed to produce color prints. Through a study of color variations which show up on the prints, structural cracks become clearly discernible, even to an untrained eye. Instead of seeing metal densities as very subtle shades of grey as they appear on black-and-white X-ray plates, the new process assigns bright contrasting colors to various density levels. A minute crack, for example, will show up on the X-ray color print as a contrasting colored line, even though no such distinction would appear on the X-ray negative.

In one instance in which the APAX system was used, an aircraft turbine component failed on the test stand. X-ray negatives were checked but no reason for the failure could be ascertained. When the negative was converted into a color positive, rings of metal density which were clearly imperfect showed up vividly although the imperfections had not been evident on the negative. The color print looked as though an artist painting the rings allowed paint to run from one ring into an adjoining one.

"We think APAX offers a great deal of promise," said Harry A. Turnpaugh, Chief of the Maintenance Division, Flight Standards.

Development of the technique by Philco-Ford Corp. is continuing, with an assist from agency research and development funds totalling approximately $80,000. Maj. Frank W. Musgrove of the Maintenance Division is coordinating agency aspects of the project, which has elicited the interest of the Federal Highway Administration and other agencies.

The new process also has medical applications, including diagnosis of tumors and cancer.

More Beautiful Airports

In recognition of the way the Southern Illinois Airport Authority is cooperating with the National Airport Beautification Program, Paul E. Cannom (right), Chicago Area Manager, presents a Certificate of Commendation to James Zimmer, president of the Authority. Attending the ceremony were: (from left, seated), Col. Alexander MacMillan, USAF Ret; Senator John G. Gilbert, O. B. Young, and Authority member Philip M. Kimmel; (standing): John Lonergan, Southern Illinois University architect who helped with the beautification plans; George Wagner and William Quinn of the Chicago Area Office; and chief pilot, J. E. Ketring, and operations chief, Gene Seibert, of the Southern Illinois Airport.

Facts Given on FAA '3R' Program

Editor's Note: The following article, prepared by the Office of Personnel, is a part of a continuing series on FAA's personnel and training policies.

WASHINGTON—Several questions are received each month concerning FAA's reemployment, restoration and return rights program. Some of these questions stem from the fact that there has been a general upgrading of certain types and categories of positions in major program areas. Others reflect a basic misunderstanding of the philosophy and intent of the "3R" program.

In 1964, FAA pioneered a new policy in administrative return rights for employees in the overseas service. The unique feature of this policy was the guarantee of grade protection for those who remain overseas for a specified period of time. Few, if any, government or industrial organizations offer such guarantees.

Since 1964, approximately 1,000 employees have returned from overseas service. Most returnees have been brought back at the grade they attained in their overseas assignments. Prior to 1964, it was difficult to return at all. If successful, the returnees often found it necessary to accept a two-grade demotion.

Administrative return rights regulations guarantee return to the former employing jurisdiction (region, center, Washington Headquarters). An employee does not automatically acquire these rights when he leaves the domestic service. After one tour (usually two years) he is eligible to return to the grade he left. After two tours he is eligible to keep the grade attained. If an employee returns to a domestic assignment before completing his first tour, he normally has no rights under the 3R program.

Regulations do not promise return to any particular occupation, facility or geographical location. Neither do they promise return to a higher grade when the former position was reclassified upward during the employee's absence. The full extent of the parent organization's obligation is to restore the employee to a position which is at least equal to the one he is entitled to under the regulations. Although employee preference is taken into consideration, there are times when a particular position or geographic location is not readily available. Of course, an employee completing an overseas assignment may also be considered for advancement under the Merit Promotion Program.

After about five years of operation, the "3R" program is considered a success. It has helped recruitment, fostered rotation and has made better use of the additional knowledge and skills acquired in overseas assignments.

The program assures career continuity to the extent that the employee gets to keep promotions he earned while overseas.

The program does not, and cannot, guarantee the grade the employee might have attained had he remained in the domestic service.

Mexican Visitors

Approach control operations at the New York Common IFR Room, Kennedy Airport, are explained to a group of Mexican aviation officials by Crew Chief Herb Rausch (left). The group, headed by Fernando Molinar, (second from right), Mexico's Director General of Civil Aviation, stopped off en route to Washington Headquarters for discussions on mutual ATC problems. Accompanying Molinar are (left to right): Jesus Hernandez, Jesus Magana, Roberto Kobeh and Ted Uebel, FAA International Liaison officer.

Pilots' Problems Explored

OKLAHOMA CITY — Physical and mental problems of pilots were reviewed by 19 speakers during a recent aviation medical examiner flight surgeon seminar at the Aeronautical Center.

The seminar, sponsored by the Office of Aviation Medicine, was addressed by Aeronautical Center Director W. Lloyd Lane; Dr. J. Robert Dille, Chief of Civil Aeromedical Institute; and James L. Harris, Chief of CAMI Education Branch.

During clinical and discussion sessions a number of potentially dangerous disorders were covered. These included hypoxia, fatigue and sensory problems, vertigo and illusions.

Others topics explored at the seminar included ophthalmology, aviation toxicology, cardiology, psychiatry and neurology, protection and survival methods, and medical aspects of accident investigation.

1970 ATC Satellite Study Authorized

By Don Byers

RENTON, Wash.—A $350,000 contract has been awarded the Boeing Company by the FAA for research on the use of satellites as a means of providing improved air traffic control communications and position surveillance services to aircraft flying ocean routes.

Basic goals of the program are to measure the accuracy, reliability and power of L-band radio signals (from 1540 to 1660 MHz) for aircraft position determination and voice and digital data communications on over-water signal paths.

An FAA flight inspection KC-135 aircraft will be used for the tests.

The FAA hopes to perform demonstrations of voice communications and aircraft position display capabilities of a satellite system, but this work will be secondary to the main objectives of gathering information on signal propagation and establishing basic design criteria for satellite operational systems.

Tests are expected to begin in March 1970 and will be conducted initially with an Applications Technology Satellite (ATS-E) scheduled to be launched by the National Aeronautics and Space Administration in September of this year. In 1971, another NASA Applications Technology Satellite (ATS-F) is expected to join the first, permitting a dual-satellite system investigation.

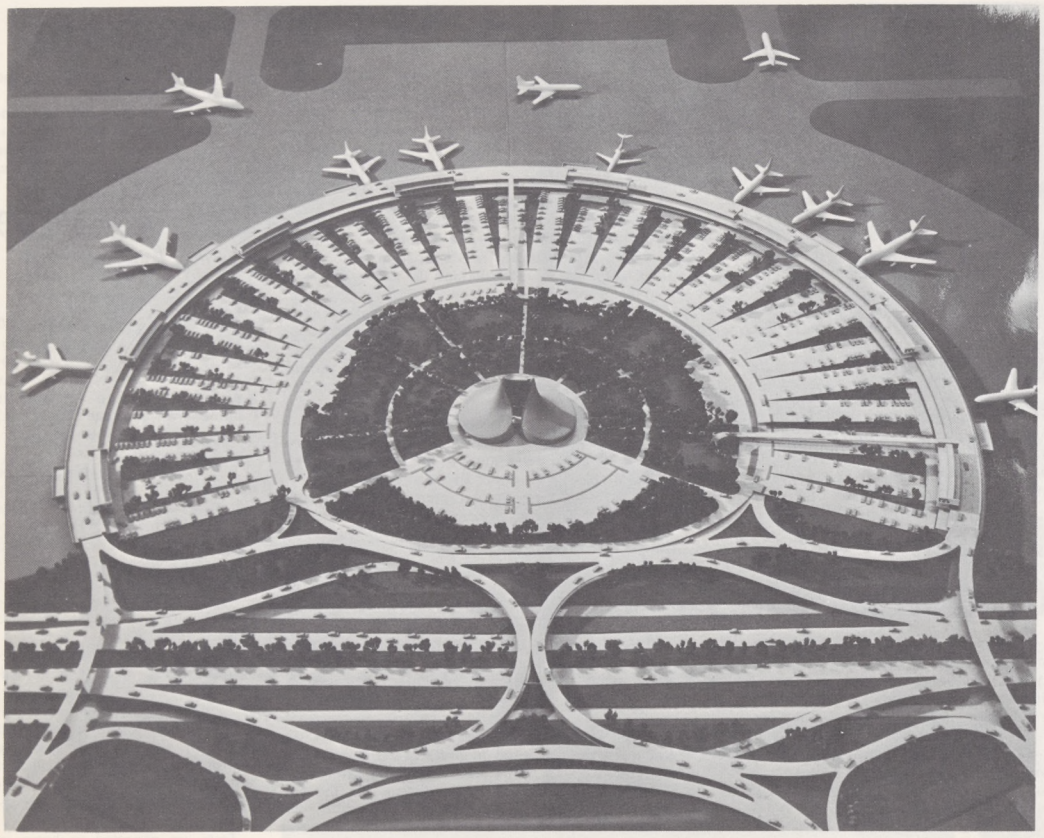
In the initial test phase, a simulated satellite on the ground will be used in lieu of the second satellite. This will be tested in conjunction with precision photo-theodolites (tracking telescope-cameras) and high accuracy tracking radar to determine position-fixing accuracy.

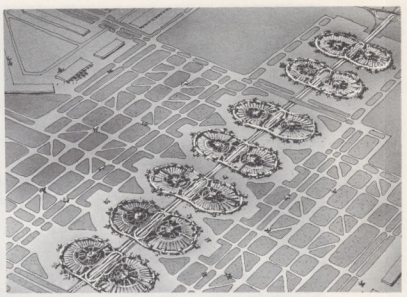
One method of determining position in the test will be tone-ranging. A tone-modulated ground signal is transmitted to the satellite for retransmission after translation into the L-band. The satellite signal triggers an active response from the aircraft transmitter, which goes back to the ground station via the satellite. The phase difference between outgoing and incoming signals, together with the known satellite locations, is then used to compute aircraft position. Also scheduled for test, in cooperation with NASA Electronics Research, are digital ranging techniques.

FAA HORIZONS

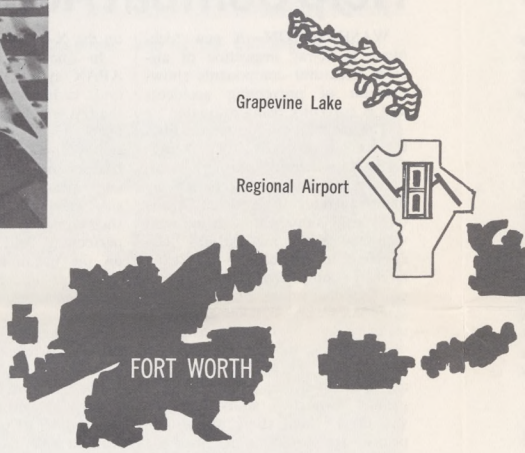
FAA HORIZONS, the official employee publication of the U.S. Department of Transportation, Federal Aviation Administration, is published biweekly by the Employee Information Division, Office of Information Services, FAA, 800 Independence Ave., Washington, D.C., 20590. Telephone: WO. 2-5575. Articles of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

Administrator	JOHN H. SHAFFER
Assistant Administrator for Public Affairs	MURRAY SNYDER
Chief, Employee Information Division	CLIFFORD CERNICK
Layout/Production	GERNOT RASMUSSEN





A six-lane superhighway serves as the spine of the terminal complex, with semi-circular loop structures along the highway. Additional access hubs can be added as needs warrant. Left: this semi-circular loop structure depicts one of the terminals for the regional airport. Each terminal has its own parking and gate facilities.



Located along lines, the airp two cities. A n and departure

For 21st Century Air Travel . . .

An Airport For Two Cities

Rumor notwithstanding, Texans are not about to relinquish their bigness image—at least in the next four years. They're busy building the world's largest air facility—the Dallas-Fort Worth Regional Airport—scheduled to open in late 1972.

To date, $7.5 million of Federal Aid to Airports Program (FAAP) funds have been invested in this gigantic air hub-in-the-making. These include a $2 million FAAP grant for land acquisition and a $5.5 million grant for clearing, grading and drainage.

Following a brief groundbreaking on December 11, 1 8, bulldozers roared into the rural area between these two North Texas cities signalling the start of a cooperative construction effort and ending a controversial 40-year-long "tale of two cities."

But that's water under the bridge. Now giant earth-moving rigs are reshaping the landscape to create an airport community that ultimately will have 40,000 inhabitants and sprawl across 18,335 acres, benefiting both cities.

The airport will extend nine miles from north to south. It will be eight miles at its widest point. Parallel north-south runways will be 11,375 feet in length, with expansion to 14,000 feet programmed for the 1980s. Two addtional parallel north-south runways and two 9,000-foot crosswind runways can be added as expansion needs warrant.

The airport is emerging in stages. In the first stage, 105 passenger gates and 25 cargo gates will be provided. (By comparison, Dallas Love Field, which the regional airport will replace as the air carrier airport, has under construction 53 passenger gates.)

Terminal complexes will extend for three and a half miles and will be bisected by a six-lane superhighway. The five major terminals will be semi-circular loop structures built along the freeway. Each aircraft gate will have its own terminal loop parking lot within 300 feet of the terminal which the passenger intends to use. Each gate will feature its own ticket facilities, a large passenger lounge, baggage handling activities and apron space large enough to accommodate tomorrow's huge jets.

Rapid Transit

A rapid transit system will speed passengers and luggage between points within the airport complex.

The terminal area can be expanded to accommodate 14 terminal loop half circles if needed, and the freeway can be widened. Loop terminals will be tri-level structures with access from 14 highway lanes —seven north and seven south. Initially, parking for 2,100 cars will be provided in each terminal. Expansion to an ultimate capacity of more than 70,000 cars in the entire terminal complex is possible. A system of high-speed roads—both main and access—to link Dallas and Fort Worth to the airport is being planned.

The airport's configuration actually encompasses two gigantic air hubs, one on each side of the highway, each with its own main runways and taxiways. Ultimately, the runway system will be able to accommodate 300 operations an hour under most weather conditions and 178 under instrument conditions.

Airport planning has been accomplished by a small staff employed by the Dallas-Fort Worth Airport Board, with some help from professional consultants. Thomas Sullivan, who served several years with the New York Port Authority, is the staff's executive director.

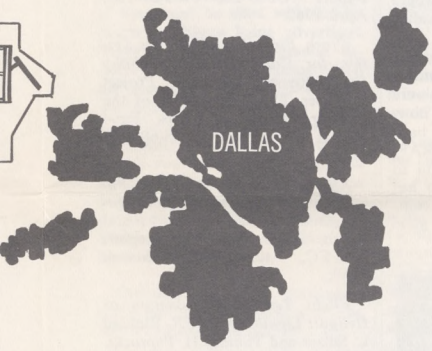
The FAA played a key role in airspace and airport layout planning. FAA airport officials in the Southwest Region worked with other federal agencies as well as state, regional and local governments in planning the hub. Supplying input for the plans and providing technical personnel to assist airport planners are T. A. Adams, Jr., Airports Division Chief; Roland Lewis, Airports Planning Branch Chief and F. J. Schnitzer, Fort Worth Air Traffic Branch. A $250,000 air traffic simulation study, conducted at NAFEC under the direction of Larry Robinson, has been a major factor in insuring adequate air traffic patterns and air navigation aid needs for the airport. Executing an effective land use program and a system of satellite airports to insure an unrestricted future for this new facility is now seen as a major challenge by Southwest Region Director Henry L. Newman.

Tomorrow's Airport

"We are trying to provide an airport for use as far in the future as we can visualize the planes to use it," Newman recently told a Joint University Center seminar. "We have an opportunity to effectively plan and execute a project which can become a model for the world, not only in providing the facilities but in protecting their growth potential for all time by encouraging compatible land use."

he
ures
be added
tructure
port.
lities.

Impact of the new regional airport on the Dallas-Fort Worth area is explained to a large gathering of community leaders by Henry L. Newman, Southwest Region Director. Newman urged community leaders to practice compatible land use principles. Below: Discussing progress of planning for the new airport are (left to right): F. J. Schnitzer, Fort Worth Area Airports Branch Chief; T. A. Adams, Jr., Airports Division Chief; and Roland Lewis, Airports Planning Branch Chief.



Located along the Dallas and Tarrant (Fort Worth) County lines, the airport is approximately equi-distant between the two cities. A network of highways is planned for easy access and departure from the airport complex.

Earth-moving machines move through farmland between Dallas and Fort Worth to reshape the area into a vast "airport of the future." In the background is Irving, one of the "Mid-Cities." Right: ground was broken last December for the new Dallas-Fort Worth Regional Airport, one of the "Big Six" airports of the future (the others: London, Paris, Tokyo, Los Angeles and New York). Participants included (left to right on ground): Henry L. Newman, Southwest Region Director and Thomas Sullivan, Airport Board Executive Director.

Newman, an enthusiastic supporter and a spokesman for the regional airport concept since he came to Fort Worth in mid-1965, has spoken at numerous meetings boosting the airport. And he has seen the magic of cooperation gradually draw the two former rivals of Dallas and Fort Worth into a solid pact to construct in partnership one of the world's great airports.

Delay Helpful

"Delay experienced in joining to build this airport actually proved beneficial," Newman said. "Had this project been attempted 10 or more years ago it probably would now be outdated and the site on which the airport is being constructed would not be available. We have profited from the experience of others and have the opportunity to build a facility for the next century."

Until the regional airport pact was signed by Dallas and Fort Worth officials in 1965, the two cities, located 30 miles apart, had separate facilities. Today, Dallas Love Field with its 1,200 acres, is among the nation's busiest in serving the area as the air carrier airport. Upon completion of the new airport, it will become a major general aviation facility. Greater Southwest International Airport, midway between the two cities, was constructed by Fort Worth in the early 1950s as a regional airport. However, it failed to generate the traffic expected. Greater Southwest no longer serves air carrier flights and is used principally for air carrier pilot training.

Chariot Racing Hobby Enjoyed by Specialist

By Maxine Faubion
Secretary, Boise FSS/ATCT

BOISE—When his daily tour of duty is over at the FSS here, Kingsley L. Lowe, air traffic control specialist, dons his red and white striped helmet, steps into his chariot and takes a brisk turn around the track. His chariot is a half-barrel equipped with two motorcycle wheels and harnessed to a pair of fast-stepping quarter horses.

Lowe, who trains race horses as a hobby, got interested in chariot racing three years ago. He says he much prefers chariot racing to any other form of horse racing. He raises, trains and drives his own chariot horses.

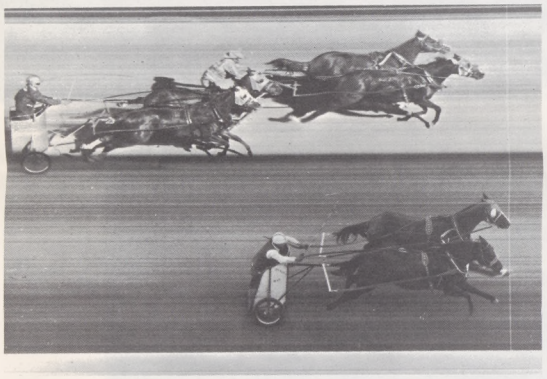
On his ranch near Kuna, Lowe has a three-horse starting gate with 350-yard straightaway and a half-mile circle track for training. Lowe's barn has room for 11 horses and an electric walker for cooling them off. He trains both pleasure and race horses, for others as well as himself. At present, he has nine horses on a full-time basis and four others part-time.

This year, his team—"Chip Nap" and "Clab 2 Win"—placed in the local elimination races as did another team which he owns in partnership with another racer. Both teams thus qualified for the world championship races in Pocatello.

Although Lowe didn't bring home any trophies, the thrill and excitement of chariot racing will keep him trying again next year.

Charioteer

Holding the third place trophy he won in the Boise Valley Cutter Association races is ATC specialist Kingsley L. Lowe of the Boise FSS.



Like 'Ben Hur'

Speed, daring and even a bit of pageantry are reflected in this shot of a photo-finish in a chariot race—a sport rooted in antiquity. Only this time the race was in Idaho and one of the participants was an ardent FAA charioteer.

Outstanding Careerist

A personal letter from the Administrator and an engraved silver Paul Revere bowl is presented to Roy Keeley (right), by Deputy Administrator D. D. Thomas, on the occasion of Keeley's retirement. Keeley was one of the first two recipients of the new Administrator's Career Achievement Award presented to retiring employees whose service is considered distinguished.

'Air Knocker' Assist

When heavy spring snows in the mountains stranded Ralph (Randy) Morgan (right), a Crew Chief at Edwards RAPCON and two Boy Scouts, co-worker Capt. Jim Floyd, USAF, flew his personal Aeronca Champion to the isolated site to bring in food and provisions.

Marooned Trio Helped By Enterprising Airman

By Don Frantz
Chief, Edwards RAPCON

EDWARDS AFB, Calif.—The two Boy Scouts and Ralph (Randy) Morgan, a Crew Chief at Edwards RAPCON, planned only a short weekend of camping at Saline Valley, an isolated desert bowl. Because of heavy spring snows, however, they soon found themselves stranded and all roads cut off.

One of Morgan's fellow workers at the RAPCON, on temporary assignment, Air Force Capt. James R. Floyd, kept the incident from becoming serious or even tragic. Captain Floyd, who was taking radar air traffic training and rounding out an eight-month period with FAA before returning to Edwards AFB as flight facilities officer, volunteered to fly his personally-owned light plane to the valley to hunt for the stranded trio.

But for an entire week, the weather remained snowy, windy and generally bad for flying a 1946-era plane. By the eighth day, Morgan and the two boys were down to eating blackbirds and mudhens they managed to shoot.

With weather at last clear enough for VFR flight, Captain Floyd in his off-duty time took off and had little difficulty spotting the weary, marooned outdoorsmen. He set his plane down neatly on a road near the campers, who were overjoyed to see him. Though disheveled and hungry, they were in good shape—perhaps due to Boy Scout training and skills.

Floyd learned from FAAer Morgan that the three outdoorsmen would elect to stay with their gear and car rather than be flown out one by one in the two-seater airplane.

"Could you bring us some provisions and extra gasoline?" Morgan asked. "If we can hold out a couple more days, we should be able to get out over the roads, now that snows are melting."

Floyd's little red-nosed plane took to the air again and returned within a short time with replenishments.

"A snowplow should reach you tomorrow or the next day," Floyd told Morgan. Then he returned home, satisfied that the trio now had plenty of supplies and would be able to drive out of the valley soon.

Twelve days after they had departed on their weekend outing, Morgan and the two youths were able to leave the bowl over now-passable mountain roads. Now back at his crew chief job at the RAPCON, Morgan is very grateful to his Air Force colleague (who has returned to regular duty after completing his training) for the good deed.

Second Award

For the second time this year, Airport Engineer Edgar P. Vie (right), was honored, this time with the Vietnam Air Service Medal, Honorary Class, for assisting in developing airports and related facilities for joint civil-military use. Presenting the medal in behalf of Republic of Vietnam Armed Forces is Maj. Gen. Tran Van Minh. Col. Ross A. Beckham looks on.

FAA Jobs Publicized

Discussing the agency's recruiting program and display designed to acquaint the public with various FAA job opportunities are Central Region Director Edward C. Marsh (right), and Erick E. Erickson, Regional Personnel and Training Division Chief. The display was set up in the Kansas City Civil Service Commission office as part of the local program.

REPORTS and PAPERS

(Unless otherwise noted, the source for each of the following reports and papers is TAD-484.3)

Benefit-Cost Analysis of Approach Lighting Systems, Kal, John C. Staff study prepared for SRDS, FAA, Washington, March 1969.

Approach Lighting System Flush Flasher Assemblies, Chybik, F. and Bambenek, R. A. Contract report prepared for SRDS by Amglo Corp., Chicago. Report No. RD-69-3, Jan. 1969.

Distance Measuring Equipment for Terminal Area, Hirsch, Charles J. Contract report prepared for SRDS by Charles J. Hirsch, P. E., FAA Consultant, Princeton, N.J., March 1969.

Solid State VHF Omnirange Transmitter, Fredrickson, D. L. Contract report prepared by Hydro-Space Systems Corp., Cedar Rapids, Ia. Report RD-68-65, Dec. 1968.

Evaluation of the ASDE Bright Display, Tarr, Robert L. Prepared for SRDS by Engineering Design Section, NAFEC, Atlantic City. Report NA-69-20, (RD-69-15), April 1969.

Crash Fire Hazard Rating System for Controlled Flammability Fuels, Russell, Ralph A., Project Engineer. U.S. Department of the Interior, Bureau of Mines. Final Report NA-69-17 (DS-68-25), March 1969.

Effects of Selective System Parameters on Communications Intelligibility, O'Brien, Paul J., and Busch, Allen C., Final Report, NAFEC, Atlantic City, March 1969.

Flight Test and Evaluation of Heliport Lighting for VFR, Richard L. Sulzer and Thomas H. Paprocki. SRDS Report NA-69-2 (RD-68-61), NAFEC, Atlantic City, March 1969.

Test and Evaluate Runway Alignment Indicator Light (RAIL) for Approach Guidance, Bernard J. Weinstein. SRDS Report NA-69-7 (RD-69-8), NAFEC, Atlantic City, March 1969.

Flight Evaluation of SEAL Glide-Slope Receiver, Jules E. Blazej. SRDS Report NA-69-24 (RD-69-2), NAFEC, Atlantic City, March 1969.

Effects of Selective System Parameters on Communications Intelligibility, Paul J. O'Brien and Allen C. Busch. SRDS Report NA-69-21 (RD-68-59), NAFEC, Atlantic City, March 1969.

ATCBI-3 Altitude and Identity Readout Modifications, George H. Mahnken. SRDS Report NA-69-28 (RD-69-5), NAFEC, Atlantic City, March 1969.

In-Service Improvements to USAF Tower Cabs, J. Roy Bradley, Jr. SRDS Report NA-69-14 (RD-69-13), NAFEC, Atlantic City, April 1969.

A Study of Two Frequency Capture Effects on ILS Receivers, Charles Manney. SRDS contract Report RD-69-12, Wilcox, Kansas City, Mo., March 1969.

Interface of VTOL, STOL, and CTOL Traffic in Busy Terminal Areas, Meyersburg, Robert B., SAE National Air Transportation Meeting, New York, April 21-24, 1969. SAE Paper 690422.

DIRECT LINE

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

I have two questions:

Question: (1) A former AF Section Chief, whose job was reduced in rank in 1964 to that of Technician-in-Charge, GS-11, is now told that if and when the job he is now doing is upgraded to an AF Section Chief, the job will have to be advertised and there is a possibility he will not be selected for the position since the TIC position is not considered supervisory. Is this true?

Answer: (1) No. Prior experience as a supervisor is not required for first level supervisory positions. Positions upgraded for such reasons as gradual increase in duties and responsibilities over a period of time must be filled with the incumbent without being advertised. However, positions upgraded because of management actions which increase duties and responsibilities and thus result in a higher grade, must be filled in accordance with the agency's merit promotion policy. If your position is changed by planned management action, it appears that you would qualify for consideration along with other qualified candidates in filling the position.

Question: (2) What determines if the job (ET GS-856) is a TIC or AF Section Chief Position?

Answer: (2) Duties, assigned to a position by management govern the grade allocation and the position title. This principle applies to all positions. In the particular question you raise, the following rationale applies. The grade of a Technician-in-Charge position is based on Electronic Technician duties assigned, i.e., technical workload. In addition, the TIC fulfills the leadership need in a small work group. These additional duties constitute a small portion of the total job and are, therefore, not grade controlling. On the other hand, an AF Section Chief position has as its primary responsibility the achievement of work through the direction of subordinates. Any position whose primary responsibilities are supervisory in nature should be classified on the basis of those responsibilities and not the technical workload.

Two recent premium pay laws have created a rather interesting situation in my AT facility. First, overtime is paid at true time and one-half rates. Second, for Sunday work we get 25 per cent premium. Thus, Employee A can work his regular 5 day plus overtime on Sunday and in effect be compensated for 6¼ days' work. Employee B works his regular five days including Sunday and then works overtime on Tuesday. He in effect gets compensation for 6¾ days (¼ extra for Sunday plus ½ extra for the day of overtime).

I have two questions on this subject.

Question: (1) Is it unethical or illegal to reschedule days off so that employees A and B receive the same pay?

Answer: (1) Employee watch schedules should not be changed for the sole purpose of equalizing irregular overtime premium pay. Many employees who work rotating watches have different working hours and different days off. These watches are established to provide adequate coverage to satisfy work requirements. When overtime work is required, employees on duty may be required to remain for additional hours. Employees on their regular days off may be requested to work overtime at the time such overtime work is required.

Question: (2) Does FAA policy on premium pay conflict with the principle of equal pay for equal work?

Answer: (2) No. Sunday premium and overtime pay are two types of extra compensation authorized for certain special work situations. It is not a question of "equal pay for equal work" because basic compensation is the same. The principle of equal pay for substantially equal work is considered in the process of classifying the job. The situation you describe is generally equalized over a period of time because of rotating watches. Facility chiefs make every effort to distribute overtime equitably in accordance with agency Handbook 3550.11, Chapter 2.

Question: Can an employee's day off be changed in order to avoid payment of overtime?

Answer: No. Agency policy states specifically that tours of duty shall not be changed arbitrarily. In addition, all regions have been advised that shifts shall not be artificially adjusted for the purpose of avoiding Sunday pay or any other type of premium compensation. Notice 3550.13, dated 2/13/69, clarifies overtime administration.

Question: *Direct Line* recently stated that a within-grade increase may not be deferred pending a determination for a medical disability. Under what circumstances could a within grade be deferred?

Answer: A determination that an employee is or is not working at an acceptable level of competence must be made on completion of the waiting period. An adverse action in process based upon misconduct or unsatisfactory performance is the only basis for delaying a determination (see paragraph 19.g. (2) (c), PT P 3550.1A). There may be instances in which a determination is delayed unintentionally, solely because of an administrative error or oversight (see paragraph 19.m., PT P 3550.1A).

Winners

(Continued from page 1)

Calif., tower within the branches of a tree in full blossom. The other shows the tower from a different, dramatic angle, demonstrating again that a creative photographer can transform the commonplace into a thing of beauty.

Other outstanding photos brought $25 each to the following FAA employees:

• **Jimmy C. Burgess, ATCS, Scottsbluff FSS, Gering, Neb.** This winning photo shows a FSS specialist at the microphone, speaking to the pilot of a departing light aircraft, seen in a vignette over the specialist's shoulder. Title of the picture is, "Glad to Be of Service."

• **Edward N. Boyde, Airway Facilities Sector, Newark Tower.** In Boyde's photo, Newark Tower at night is depicted with exceptional impact.

• **Melvin D. Phillip, Airway Facilities Sector, Austin Straubel Airport, Green Bay, Wis.** Phillip expertly depicts an FAA employee engaged in the delicate, exacting task of putting together a TACAN antenna.

• **Winfred R. Tilger, an ET at Murphy Dome, Alas.** The beauty of glowing radar domes atop a lonely Alaska mountain in sub-zero cold is vividly portrayed in Tilger's photo.

• **Jerome Sotkiewicz, Indianapolis Center, Speedway, Ind.** An IBM 9020 computer circuit is superimposed as the foreground of a scene showing two radar controllers, conveying a sense of the technical complexity of FAA's operations.

• **Brian M. Romer, ATC Tower, Albuquerque, N. M.** Romer won with an unusual close-up of a maintenance technician preparing a patch cord at Albuquerque Center.

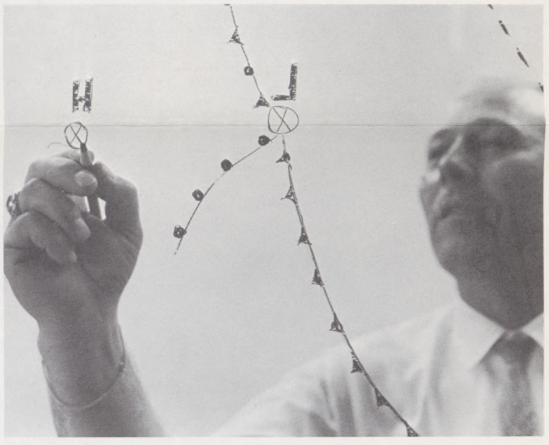
Judges from the two offices which jointly sponsored the contest—the Office of Information Services and the Office of General Aviation Affairs—were: Sue Silverman, Cliff Cernick, Robert Beasley and Sanford Rogers. A fifth judge was Robert K. Snyder of the Visuals Branch, Office of Headquarters Operations.

Judges reported that selecting winning entries was difficult because of the many outstanding photos submitted. They asked *Horizons* to thank all who participated.

The photos will be used in preparation of agency exhibits and in the aviation education program.

A Thousand Words

Speaking volumes is this remarkable photo of controllers in Minneapolis Tower during a routine work day. The unposed action shot was snapped by Byron Van Dake, a controller in the tower, bringing him $50 in second prize money.



One of Three

This close-up of a flight service specialist preparing a weather map won a $50 second prize for Thomas M. Black, Elko, Nev. FSS. He also picked up another $50 with two of the 12 third prize winning photographs.

Growth Needs Emphasized

CLEVELAND — Calling America's transportation a "many splintered thing," Administrator John H. Shaffer told the nation's top engineers that the agency advocates accelerated efforts to meet airport and airways needs and to gain more effective affiliation between civil aviation and other modes of transportation.

In a speech before members of the American Society of Mechanical Engineers meeting, Shaffer said the various components of America's transportation system are too often "strangers to each other."

"We have compartmentalized transportation too long," he said. "It's time to mix and match our transportation capabilities, to get more mobility for our transportation dollar."

Shaffer cited the rapid rail system in Cleveland, recently extended to Hopkins Airport, as an alternative to the "public's passion for driving their cars to the airport." The Administrator also referred to off-airport passenger processing, fringe parking with trams to the terminals and greater use of STOL or V-STOL commuter service as means of "closing the convenience gap between the traveler and his modes of travel."

Air transportation objectives which he said "can't wait" if civil aviation is to continue to grow as forecast are increased capacities in the airways and airports.

"The true alternative to the delays that were experienced last summer," said Shaffer, "or to the artificial suppression of traffic through the quota system, is to greatly expand terminal airspace as well as airport capacities." He said user charges and an airports—airways trust fund are the "traveler's aid 1970-style" that are needed to relieve the congestion affecting air transportation today.

NAFEC

(Continued from page 1)

Kenneth Wolff, Systems Research and Development Service, were at the controls. Coordinator William Broadwater did double duty as flight steward. While one group was in the air, others on the ground looked over NAFEC planes and enjoyed hangar flying sessions about the planes flown in and exhibited by NAI members.

The group received a color slide briefing on NAFEC which again stressed occupational skills and opportunities. This was provided by Edwin Shoop, NAFEC's public affairs officer, assisted by air traffic control specialists Pierre Collins and Hugh Milligan, electronics engineer David Lakins and aircraft maintenance inspector James Sheppard.

If aviation gains a few careerists from the group during the next few years, the experience will have been even more rewarding.

Hail the Chief

Chief of the nation's outstanding FSS, John Hummel (right), receives congratulations for his crew from Oscar Thomas (left), Chamber of Commerce head and Mayor Eugene Morin.

Top FSS Crew

ATC specialists present to receive Certificates of Appreciation from the City of Kenai during "Federal Aviation Day" luncheon honoring Kenai FSS are (left to right): Roy Hoyt, FSS Chief John Hummel, Julian Spillers, Walter Hart, John King, Philip Chatlain, Kenneth Jordan, Gusse Myer, Marshal Munro and Danny Girton.

Via Special Delivery

On duty while ten of his buddies were attending a special luncheon for the top-ranking Kenai FSS, ATC Specialist Royal Knight (left), received his personal Certificate of Appreciation in a special visit from Alaskan Region Deputy Director William Comstock.

Kenai Is Surprised, Happy To Learn of FSS Honors

KENAI, Alas.—Leaders of this fast-growing community on the Kenai Peninsula were pleasantly surprised at a recent Chamber of Commerce luncheon—and also very proud—when they learned that the Kenai FSS had been named the outstanding facility of its type in the nation (*Horizons*, April 28).

They had no inkling, when they gathered for the luncheon, that the Kenai FSS had captured the national honor. Col. William Comstock, Alaskan Region Deputy Director, and other FAA personnel had been invited to attend the Chamber luncheon as part of the city's Federal Aviation Day observance. Mayor Eugene H. Morin proclaimed the day to honor FSS personnel "for the honor they have brought our city by winning the title of Alaska's Outstanding Flight Service Station twice in the past three years."

In making the surprise announcement, Comstock told Kenai leaders that productivity, employee morale and public relations were among the factors considered by the agency in singling out the Kenai FSS for the national award.

"Despite a heavy workload of 84,335 flight services recorded during the past year—a 22 per cent increase over 1967—there were no air traffic system errors, no reported near misses and no other departures from air safety," the audience was told by Ormond Robbins, Kenai Area Manager, who has since transferred to Anchorage to become Chief of the Operations Branch, Personnel and Training Division. Robbins also was honored during the luncheon.

He added that the Kenai FSS maintained an active workshop program, working closely with schools, service clubs, pilot groups, the military, and city and state governments in promoting air safety.

Each member of the team of 11 air traffic control specialists, headed by John H. Hummel, received a Certificate of Appreciation during the luncheon.

The community's appreciation to FAA was expressed in a tribute by William Harrison, Kenai City Manager.

He recounted how the agency had helped Kenai improve the airport and air traffic services and added: "Aviation has always been our lifeline to the outside, and has been instrumental in the orderly growth and development of this entire area. I know everyone here joins me in expressing our deepest appreciation to FAA for helping bring modern air transportation to Kenai."

Ready for Takeoff

Flight 64 is "cleared for takeoff" from San Francisco International Airport by 12-year-old Paul Jarmusz as Tower Chief Norman E. Merkel checks the transcription.

Avid Young 'Plane-Watcher' Thrilled by Visit to Tower

SAN FRANCISCO—As Tower Chief Norman Merkel stood by, 12-year-old Paul Jarmusz spoke into the mike, "TWA flight 64, this is San Francisco Tower. You are cleared for takeoff on runway 10-left."

Paul, who lives close enough to the airport to watch the planes descending on their final approach, has counted more than 19,000 landings. But he was not really interested in takeoffs until he visited the FAA tower and was given the opportunity to "clear" the big TWA jet.

Invited to visit the tower after Chief Merkel heard about his hobby, Paul was given a card identifying him as an honorary Air Traffic Controller. He was thrilled by his visit.

Not only does Paul count planes landing at the International Airport, but he also collects airline schedules and tries to identify the flight as well as the aircraft and the airline. He counts landings only because he reasons that those that go up may already have been counted going down, and he doesn't want to count the same plane twice.

National Aviation Club's Top Honor Presented to Maj. Gen. J. C. Maxwell

By John Demeter

WASHINGTON—The National Aviation Club has given its highest honor, the Award for Achievement, to Maj. Gen. J. C. Maxwell, Director of Supersonic Transport Development for the FAA.

In presenting the award, George McTigue, National Aviation Club president, praised General Maxwell for "laboring so magnificently and conscientiously in the public and national service" as Director of the SST program.

The Award for Achievement, conferred annually by the club, is reserved for individuals who have served aviation and the nation with rare distinction.

General Maxwell has been Director of the SST program since October 1965. Under his direction, the program progressed from preliminary design status to its present prototype construction readiness stage.

The decision on whether to proceed immediately to the fabrication of two prototypes of the 1,800 mile-per-hour commercial airliner is currently in the hands of President Nixon.

Among the 300 persons attending the ceremony in honor of General Maxwell on May 1 were: John H. Shaffer, FAA Administrator; D. D. Thomas, Deputy Administrator; Oscar Bakke, Associate Administrator for Plans; T. A. Wilson, president of The Boeing Company; Gen. William F. McKee, USAF (Ret.), former FAA Administrator; Senator Howard W. Cannon (Nev.); and Congressman Garner E. Shriver (Kan.).

General Maxwell, on loan to the FAA from the Air Force, has held key research and development assignments since 1949. A native of Mississippi, the general holds a BS degree in mechanical engineering from the University of Tennessee, and an MS degree in aeronautical engineering from Princeton University. A command pilot, he flew 44 combat bomber missions during World War II.

For Achievement

Receiving the Award for Achievement from the National Aviation Club in Washington is Maj. Gen. J. C. Maxwell (left), Director of Supersonic Transport Development. The award is presented by the club past president, Alexander "Sandy" Hardy, while Mrs. Maxwell looks on.