



Read:
"Pearl Harbor
'Attacked'"
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Airport Classes At 5 Major Hubs Heavily Attended

NEW YORK—It was virtually "standing room only" at the recently-completed series of orientation courses on the Federal-aid Airport Program held in each of the contiguous regions.

The courses drew municipal and metropolitan planners, aeronautical commission members and consultants, some from as far away as Alaska and Hawaii.

Classes of 20 students each on a four-and-one-half-day schedule had been planned for each of the regions by Irl D. Miller, Jr., Chief of the Airports Training Branch at the FAA Academy, who headed the group of three instructors conducting the orientation. As it turned out, however, the first class, held in Los Angeles, had 26. The second class, in Kansas City, had 30. Subsequent classes, in Oklahoma City, East Point, Ga., and New York were packed to capacity.

Because of the interest in the course, the Airports Training Branch has been asked to conduct courses in about 20 locations next year.

Although locations have not been decided upon for the series of classes planned for the next fiscal year, every effort will be made to accommodate as many registrants as possible, Miller said.

Procedures required for obtaining government financial and technical assistance on airport projects were covered in detail during the orientations. Also covered were compatible land use, runway length requirements, airport gradients and airport capacity. Design matters, including design of paving, lighting and drainage, were discussed.

Miller was assisted in the briefings by Airport Training Branch Instructors Jim Wiggins and Jack Burke.



Now It's Official

The new FAA Administrator, John H. Shaffer (right), takes the oath of office from John A. Volpe, Secretary of Transportation. The Administrator's wife, Joan, held the Bible during the March 24 ceremony in the Washington headquarters auditorium. Among witnesses to the ceremony were the Shaffers' three children, John H., Jr., Jacqueline and Susan.

Hidden Weapons Spotted By Electronic 'Watchdog'

WASHINGTON—A new potential weapon in the agency's anti-hijacking program—an electronic "watchdog" that detects concealed weapons—was demonstrated for the press recently at FAA Headquarters.

The device, still under development and refinement, flashed a red warning signal when Joseph K. Blank of the Office of Compliance and Security, assisting in the demonstration, walked past it with a concealed weapon on his person.

There was no such indication when he passed the device without the weapon.

For obvious reasons, details on how the metal-sensing mechanism in the detection device operates were not revealed. Deputy Administrator D. D. Thomas told the press the detection device would be tested further at airports in cooperation with Eastern Airlines, which has suffered the largest number of aircraft hijackings.

"The sole purpose of this phase of our plan is to test electronic signal levels generated by passengers and other persons at airports," Thomas said. "It is reasonable to assume that a workable system will involve more than one component, more than one type of device and more than one technique."

Congressman Harley O. Staggers, Chairman of the House Committee on Interstate and Foreign Commerce, was present at the demonstration and said he was "highly impressed by it."

"I want to congratulate the FAA for the work they are doing in this field," the Congressman stated.

Dr. H. L. Reighard, Deputy Federal Air Surgeon, chairman of the agency's task force on hijacking, conducted the press briefing and answered technical questions.

He emphasized that the device was "only a part of the weapons detection system." A major component of the system, he pointed out, is a specification of behavioral characteristics of hijackers.

"By using this specification in conjunction with the hardware, we expect to develop a system that is fairly discriminatory, even before

(Continued on page 7)

Award System Revision To Take Effect July 1

WASHINGTON—Significant changes in the Government-wide Incentive Award Program have been adopted and will be effective July 1, 1969.

Aimed at streamlining and clarifying the program, the changes fall into two principal areas: awards for suggestions and awards for superior job achievements.

Radio-Controlled Parachute Device Could Save Lives

By Don Byers

WASHINGTON—A radio-activated device that would permit an experienced jumpter on the ground or in the air to open a student parachutist's auxiliary pack in an emergency is being evaluated by FAA's Aircraft Development Service.

Inexperienced jumpters' parachutes normally are opened by a static line—a webbed belt firmly attached to the airplane which activates the parachute opening device, eliminating the need for the jumper to pull the ripcord. If the main chute fails to open, the auxiliary chute must be activated by pulling the ripcord or, in some cases, by an automatic device triggered by barometric altitude.

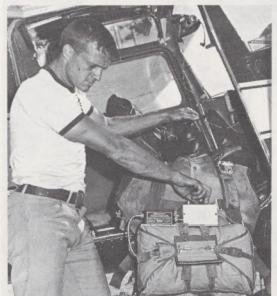
Auxiliary Packs Required

FAA regulations require sport parachute jumpers to wear auxiliary packs. Normally carried on the chest, these parachutes are designed to be operated manually in the event that main parachute canopies fail to open.

In some fatal accidents, trainee jumpers may have failed to recognize a malfunction in the main parachute or may have been unable to pull the ripcord on the auxiliary chute.

Under an FAA contract to Parachutes, Inc., of Orange, Mass., and Pioneer Parachute Co., of Manchester, Conn., an experimental radio-activated opening device is being developed for use on auxiliary parachutes. Prototypes use a five-watt transmitter operating on

(Continued on page 7)



Chutes Tested

Final adjustment of a new radio-actuated device to release a parachute jumper's auxiliary chute remotely is made by FAA contractor Lee Guilfoyle, of Parachutes, Inc., prior to one of some 200 jumps being made to determine reliability.

superior job achievements. New Civil Service Commission guidelines are intended to achieve consistent application throughout the Federal service.

Cash awards for employee suggestions will be limited to those directly contributing to economy or efficiency, or directly increasing effectiveness in carrying out FAA's mission. Suggestions must show

(Continued on page 7)

This Mishap Was for Reel

WASHINGTON—An FAA film crew was on hand recently when a general aviation accident occurred at an airport—and the accident was filmed in its entirety.

The crew was at an airport to film sequences for a new FAA accident prevention movie when they observed the accident—and promptly turned their cameras on it.

A pilot, who was taking his girl friend up for her first flight, left her in the cockpit while he went outside to hand prop the aircraft. The prop caught, sending the plane into an unstoppage ground orbit while the terrified—and helpless—girl watched from inside the aircraft. In trying to hold the plane, the pilot clung to the strut until he was thrown off by centrifugal force and was run over by the tail wheel. The plane halted only after striking another aircraft.

Questions pertaining to use of this film, from other than GADO personnel, should be addressed to the Chief, Special Projects Division, IS-30, in Washington.

Those who saw the spectacular color footage of the accident agreed it could be used effectively in the agency's accident prevention program. Therefore, reversing the usual motion picture procedure, a script was written describing details of the accident as depicted in the film. Don Doak, well-known Washington television personality, narrates the film, which runs a little less than five minutes.

The film, which will be used solely by the staffs of the General Aviation District Offices at aviation safety meetings and flight clinics, concludes with a number of questions addressed to the audience, such as: What mistakes did this pilot make? How should he have avoided them? How could his problem, once begun, have been solved?

When the lights go on, it is hoped that a lively discussion will take place to pinpoint the pilot's several errors.



A Sobering Sign

Severe penalties attached to the crime of hijacking will be called to the attention of would-be hijackers by this sign now appearing at airline ticket counters and other strategic points in air terminals. The new sign is discussed by Deputy Administrator D. D. Thomas (right), and Congressman Harley O. Staggers of West Virginia, Chairman of the House Interstate and Foreign Commerce Committee.

Mechanics' Curriculum Authorized for Everett

EVERETT, Wash. — Everett Community College's aviation powerplant mechanics program has become the 100th such training program authorized by the FAA.

Leland P. Hughey, Assistant Area Manager for Washington and Oregon, and other agency officials visited ECC recently to present agency certification. ECC is the third school in western Washington to receive such certification.

Accompanying Hughey were Robert Jones, Chief, Seattle Area Flight Standards Branch; Donald Frost, Supervising Inspector, Seattle General Aviation District Office; and Ernest Heald and T. J. Smith, general aviation maintenance inspectors.

Representing the college were President Paul McCurley; Dr. Marvin Lieske, dean of instruction; Roland Stemmer, chairman of the Division of Vocational Education; Ralph Sellhorn, director of technical education; and Fred Bacon, aviation coordinator.

Other air agency certificates have been granted to Holgate Technical School, now part of Seattle Community College, and Clover Park Technical School,

south of Tacoma, now part of Fort Steilacoom Community College.

"There is a critical need today for qualified aircraft mechanics, especially at smaller airports," Frost said.

Second Phase Slated

Everett Community College's aviation powerplant mechanics classes are being conducted in a leased hangar at Paine Field. A second phase, airframe mechanics, will begin next year. Students are prepared for FAA certification in airframe or powerplant mechanics or both.

Instructors are Roy Kogle and Leslie Henderson, both experienced in aircraft maintenance.

Already in full operation is a two-year commercial pilot training curriculum, including a ground school coordinated with flight training. These and other courses also may be taken as part of student's preparation for careers in airport management, aeronautical engineering and transportation. The courses also provide groundwork for a career as a stewardess and other aviation-related jobs.



100th Certificate

The 100th agency certificate authorizing A&P training is presented by Leland P. Hughey (left), Seattle Assistant Area Manager, to Paul McCurley (right), president, Everett Community College. Looking on is Fred Bacon (center), aviation coordinator for the college.



He's Outstanding

Frank Wiltz, offset duplicating operator in the Western Region print shop, receives a Sustained Superior Performance Award from Ruth Howlett, Chief of the Printing Section. Wiltz has received several group awards and letters of appreciation. He joined the FAA in 1958 and transferred to the print shop in 1963.



Procedures Committee

Members of the FSS Procedures Committee, which recently completed a two-week workshop at Washington Headquarters, pause for the camera before returning to flight service stations in the field. Contributing to the continuing program were (left to right, standing): Hugh Southerland, Cedar City, Utah; Howard Clement, San Diego; Goldman Bandy, Delta Junction, Alaska; Milton Moskowitz, New York City; David Malueg, Green Bay; Albert Rohlfing, Secretary, Kansas City; and Robert Strait, Orlando. Seated are: Ed Chun, Honolulu; Harry Hood, Houston; Orville Hinds, Memphis, Chairman; Reginald Hoskins, Montpelier; and Russell Wooten, Pine Bluff, Ark.

Runway Grooving Assists Braking

ATLANTIC CITY — Runway grooving, designed primarily to help prevent hydroplaning by speeding the drainage of surface water, may also improve the effectiveness of braking on wet runways, according to a recently released agency report.

Grooves seem to improve aircraft braking by reducing the number of braking cycles applied, particularly on aircraft with anti-skid systems.

The report, based on nine months of tests conducted at Washington National Airport, compares friction values of wet and dry runway surfaces before and after runway grooving. Used in the tests was a "skidometer"—a friction measuring device.

NAFEC project engineers were William Hering and Charles Grisell.

The tests indicate grooving tends to reduce the many and large differences of friction values noted on a wet, ungrooved runway. These variations are generally due to rubber deposited by tires of land-

ing aircraft, making the runway slippery when wet.

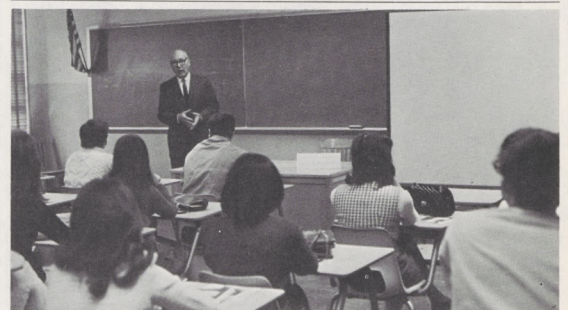
For the tests, transverse grooves spaced one-inch apart, an eighth

of an inch wide and deep were cut across the north-south runway at Washington National along its entire 6,870-foot length.



'Save' Program Winners

Winners of the 1968 Air Traffic "save" program to honor employees whose contribution to flight assists is considered outstanding are shown in Washington following presentation of awards. In front row (from left) are Dave Strachan, John Hochbarger and Duane Rugg of the Wausau, Wisc., FSS; Irving Greenblatt, Charleston, W. Va., Tower; and Andrew McMorrow, Huntington, W. Va., FSS. In second row (from left) are Ward Saunders of the ATS Evaluation Staff at Washington Headquarters; Lawrence Proffitt, Charleston Tower; Mrs. and Mr. Jack McCormick, Burlington, Iowa FSS; Mrs. and Mr. Ronald Vandermolten, Burlington FSS; and William Fiener, Director, Air Traffic Service, who presented the awards.



Telling It Like It Is

The excellent career opportunities available in the aviation industry are explained to a class at the Bethpage High School, Long Island, by Fred Rochmis, New York Area Office Employee Development Officer. Rochmis gave the same presentation to several other classes at the school as part of a week-long aerospace education conference featuring top-level speakers from industry and government. An FAA exhibit was also part of the program.

New-Type Heater Reduces Outages At TACAN Sites

WASHINGTON—A new method of heating TACAN antennas, developed by the Systems Research and Development Service, shows good results in reducing air navigation facility outages that occur in winter weather.

Flight checks show satisfactory performance of helical-wound wire antenna heaters at nine VORTAC evaluation sites located where extreme weather conditions are experienced.

A Western Region report advises that the Burley, Idaho, installation performed satisfactorily during two wet, windy snowstorms of the type which usually cause facility outages.

Other sites where heater elements were evaluated this past winter are: Elko, Nev.; Medicine Bow, Wyo.; Sheridan, Wyo.; Julian, Calif.; Colorado Springs; Manchester, N. H.; Whitehall, Mont.; and Hallsville, Mo. A tenth installation is currently scheduled at Briggs, Ohio.

Work in FAA Offices Aids Clerical Studies

ANCHORAGE—High school girls interested in clerical and stenographic careers are being given a practical glimpse of the world of government and business by "going to school" at various offices, including some within the FAA.

Under a vocational program now in its third year, Anchorage High School girls "attend classes" at offices in the Regional Headquarters building here. They are given on-the-job, unpaid training for two hours a day, five days a week over an eight-week period. After one month's training in a specific program area, they are transferred to another office to broaden their experience.

The students' work is graded by sponsors in FAA offices and becomes part of final course grades.

"Girls participating in this program benefit from the practical office experience they receive," said Lionel Maddeford, Assistant Chief of the Personnel and Training Division. "The agency benefits, too. These youngsters turn out a lot of work."

According to Mrs. June Juene-mann, who serves as Operations Director of the program in the Alaskan Region, there is another benefit, too.

"Some of these girls may decide to work for the FAA after graduation," she said. "From the fine work they are doing now, many of them have the potential to become excellent employees."

Mrs. Juene-mann is supervisor of the clerical pool in the Airway Facilities Division.



Pupil and Teacher

Operation of a specialized typewriter is explained to Sharon Hill, Anchorage high school student, by Mrs. June Juene-mann, Operations Director of a unique vocational program at Alaskan Regional Headquarters. At right, intricacies of a laminating machine in the Compliance and Security Division are explained to Doretha Williams, a junior at East Anchorage High School, by Mrs. Viola Dick, her FAA supervisor.

Pilot 'Saved' by Persistent Five-Man Crew

SALT LAKE CITY—A five-man Salt Lake City ARTC Center crew recently triumphed over a discouraging array of natural and mechanical difficulties which plagued them for three hours while trying to rescue a pilot whose circumstances were desperate.

The team went into action when a light plane pilot encountered icing while enroute to Boise from Reno. His requests to the Center to climb, reverse course, then reverse course again to get out of the ice convinced Watch Supervisor Lynn McCreary the pilot was in serious

trouble and needed help. McCreary and Crew Chief Milt Behrens directed efforts of controllers John Downey, Ted Martens and Lyle Davis in coping with the emergency.

The pilot was advised that Boise weather was below minimums. After changing destinations several times, he decided he would return to Reno.

However, because of 100 m.p.h. winds and the pilot's fuel status, he was advised he would not be able to reach Reno. A landing at Elko, Nev., was suggested.

At this point, the pilot again encountered icing—and serious mechanical problems. The aircraft's turbocharger clogged and its artificial gyro ceased to function, making it hard to maintain a heading.

The storm's eastward movement brought low ceilings to Elko, suddenly cutting the pilot off from that airport. It was decided to bring him in to Wells, Nev., or Wendover, Utah, instead.

Once again, however, the plane began to ice up. Its fuel dwindled and the storm grew, but finally headings given the pilot brought him out of the overcast 22 miles northwest of Wendover.

He reported the plane was no longer picking up ice and landed at Wendover two hours and forty-nine minutes after first contact.



Kept Their Cool

Heavy aircraft icing, deteriorating weather conditions and serious mechanical malfunctions weighed the odds against a pilot in trouble high over a mountainous, desolate section of the West, but this Salt Lake City Center team calmly pooled its skills and knowledge to bring him in safely. Members of the "rescue team" are: (from left) Watch Supervisor Lynn McCreary, Controller John Downey, Crew Chief Milt Behrens and Controllers Ted Martens and Lyle Davis.

Studies of Bird Migrations Receive Agency Assistance

WASHINGTON—Counting the bills means a lot more these days to FAA flight service specialists than merely doing homework on their income tax returns. These specialists already have begun collecting information on spring migratory bird flights for the Bureau of Sport Fisheries and Wildlife of the Department of the Interior.

During the spring migratory season, some 100,000 Canada geese, 400,000 blue and snow geese, 50,000 whistling swans and great numbers of various other large waterfowl are on the move, posing a potential hazard to aircraft in flight. As many as 600 collisions between aircraft and birds have been reported in a single year, some at altitudes as high as 22,000 feet.

The bird hazard is particularly acute during the migratory seasons. The spring migratory season runs

from mid-February to mid-May.

Radar provides reasonably accurate information about the size of migratory flocks and the direction of their flights, but information on altitude must be obtained from pilots of aircraft aloft.

In the current migratory bird flight reporting program, 15 FAA flight service stations will have primary responsibility for collecting and forwarding detailed pilot reports on migratory birds to the Bureau of Sport Fisheries and Wildlife. But pilots may report bird flights to any one of the more than 300 flight service stations in the U.S. Among items of information to be collected are the kind of birds sighted, their altitude, location and direction of flight.

The FAA has been collecting pilot reports on bird flights for the past several years.



Exceptional Inspector

For the "exceptional manner" in which he carried out his air carrier inspection duties over the past year, David Switzer (left) was presented a Quality Within Grade award by William Huebner, Chief, New York International Field Office. Switzer, principal operations inspector with the office, is liaison officer between the agency and Pan American Airways.



Inexpensive, Effective

Harry Gunter (left) and Dick Bosik flank their tower-installed award winning panel. It was constructed for \$40 in a home workshop and displays information which can be activated by a data man, radar controller or coordinator.

Twin Data Panels Devised

SEATTLE—Two Seattle-Tacoma Tower controllers recently collected \$100 for coming up with a sure way of "letting the left hand know what the right hand is doing." Harry Gunter and Dick Bosik were awarded that amount for their invention of twin data presentation panels now in use at the tower.

Each of the two plastic-faced panels is divided into two compartments which can be labeled and lighted separately. Though installed at separate locations, each panel is designed to report the status of the other. As a compartment on one panel lights up, the identically-labeled compartment on the other also lights up.

The system can be activated instantly from either position by a

data man, radar controller or coordinator. The panels display a changed status immediately, keeping the message in plain sight until it is cancelled by another positive action.

For instance, if conditions at a secondary airport are changing from VFR to IFR, the current status can be seen at a glance by controllers situated at different locations.

The panel fits into console space above the data position, where it is easily seen and activated, and occupies space not required for other purposes.

Constructed in a home workshop at a cost of only \$40, the system can be adapted to include other panels.

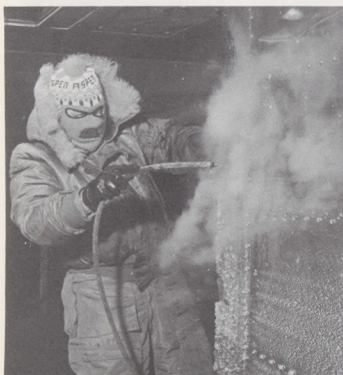


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Colin G. Simpson, ADS General Aviation Safety Division Chief (left) and George C. Hay, his program manager for airframe, propulsion and systems, were on hand when the first tests were evaluated at the icing research tunnel.



Arctic mask gives weird cast to NAFEC technician Gerald Walter, who uses hot-steam hose to clear the leading edge of the wing section after completing an anti-icing test for the FAA.



Clad in Arctic clothing, NAFEC technician James H. Dailey prepares the leading edge for adhesion test. Here he uses an electric divider to make room for the special jig which tests the amount of pressure needed to remove ice from the wing.

Anti-icing tests' working crew minus face masks at the icing research tunnel are: photographer and technician Gerald Walter; Donald Millar, project manager and James H. Dailey, all of NAFEC. The entrance leads into tunnel with below freezing temperatures and strong winds.



Two observers at the FAA anti-icing tests look through the top of the icing research tunnel to watch ice form on the leading edge of the wing section. Dave Allen (left), from DuPont, and Dave Byer of Flight Standards Service's Engineering and Manufacturing Division observe the effects of icing on one of the products being evaluated at the Lewis Research Center.



Donald Millar, project manager, NAFEC, checks adhesive characteristics of one of the products being tested by the FAA. He is shown using a special jig designed at NAFEC especially for these tests. (Below): Icing research tunnel controls are worked by Harry Minster (seated), NASA aerospace mechanic. Millar checks console for proper icing conditions and air velocity.



Results May Be Boon To Pilots . . .

Waging War On Aircraft Icing

By Alex Garvis

Although many aircraft ply the skies even when icing conditions are predicted, pilots of small aircraft must sit out such weather conditions because de-icing equipment is too expensive.

In an effort to solve this problem for the small plane pilot, the FAA has been conducting an intensive study of low cost passive anti-icing materials. The Aircraft Development Service's General Aviation Safety Division, headed by Colin G. Simpson, and George C. Hay, program manager, is seeking the answer.

Low cost anti-icing materials which can be sprayed on or attached to small aircraft wings are now being studied by the FAA at NASA's icing research tunnel at the Lewis Research Center in Cleveland.

Donald M. Millar of NAFEC heads the technical crew at the tunnel where more than 15 anti-icing products are being evaluated. Each product is being observed in the icing research tunnel to determine its ice accretion characteristics. Products tested include plastic films (such as Teflon-S), and silicone waxes.

Experts in this field believe that icing may be prevented or retarded by smooth, slick plastic films containing a solid, water-soluble form of ethylene glycol, the main ingredient in most de-icing fluids and anti-freezes. When moisture hits the material, the chemical turns to liquid and tends to prevent ice formation. Silicone waxes prevent ice adhesion by "bleeding" and releasing anti-icing silicone when moisture contacts them.

Each product is being applied to a section of a leading edge wing section constructed especially for the icing tunnel by Edward LaDrew, Herman Regal, Robert W. Shinn and Edwin J. Call, all of NAFEC's Engineering Support Section. The six-foot wing section weighs about 400 pounds and conforms to the type of wing used in general aviation. Before it could be accepted for the icing tunnel, the wing had to meet stringent NASA specifications.

The wing section is being tested in the tunnel under two types of icing conditions; intermittent maximum icing (formed in cumuliform clouds having high liquid water content for short times) and continuous maximum icing (based on icing conditions resulting from flights through layer or strata type clouds). Such conditions are manufactured in the icing tunnel by a NASA tunnel operator. The tunnel permits simulation of small aircraft flights at cruising speeds of 150 knots and holding speeds of 100 knots. The leading edge angle of attack can be moved for each test to approximate its actual flight position.

Assisting Millar at the test site are Gerald Walter and James H. Dailey, both NAFEC technicians. Dailey prepares the wing section for each test, using heating devices and hot steam to melt the ice after each test. Besides providing other technical assistance at the site, Walter is making an instant color photographic record of each series of tests.

The series of tests, initiated with the cooperation of the Aircraft Owners and Pilots Association (AOPA) and the Air Line Pilots Association (ALPA), have attracted many observers from the press, trade associations and industry. Although the tests will be concluded this month, a report will not be available until late this year.

"The work these men are doing will help us determine the relative anti-icing qualities of these products," George C. Hay, program manager said. "The results will help the FAA in the future should any of the product manufacturers request product certifications for aviation use."



Sayonara, Connie San!

Tokyo FIG's Constellation aircraft, N-121, takes off on its final mission to flight check navigational aids in the Pacific, Far and South East Asian areas. Based at Tachikawa AB, the aircraft was retired this month after 34,000 hours of flying time and 8.5 million miles. The last of a fleet of fiveConnies used by the agency, it has been based in Manila, Honolulu and more recently, Tachikawa.

FAA's 'Connie' Concludes Its Farewell Pacific Flight

TACHIKAWA AB, JAPAN—After 34,332 flying hours and 8.5 million miles of flight, the Pacific Region is retiring what one FAAer called "The Grand Old Lady of the Air," the FAA's N-121, a Lockheed Constellation.

Commonly called the "Connie," the four-engine aircraft made its last major flight Jan. 21 when it touched down at Tachikawa after flying to Hong Kong and Kuala Lumpur, Malaysia.

The Tokyo Flight Inspection Group plans to replace the Connie and its two T-29 Convair twin-engine prop planes later this year with two Sabreliner jets, the civilian version of the Air Force's T-39.

A familiar sight in the Pacific area with its prominent orange stripes along the fuselage and its three orange vertical tails, the Connie was built by Lockheed Corpo-

ration in the late 1940s and purchased from an airline in 1963 by the agency.

Assigned to the Pacific Region since that time, it is the last of a fleet of fiveConnies used by the FAA and has been based in Honolulu, Manila and more recently, Tachikawa.

Equipped with electronic gear for calibration of air navigation aids, it has been used to flight check ground navigation facilities at sites in Japan, Korea, Taiwan, Okinawa, Iwo Jima, Hong Kong, Singapore, Malaysia, Indonesia, Guam, Wake, the Philippines, Midway, Hawaii and Pakistan.

The Connie's final flight was Feb. 12, when it went on a flight check mission to Itazuke AB in Kyushu.

All who remember N-121 bid "The Grand Old Lady of the Air" a fond "Sayonara."

Radar Helps Foil Suspect's Flight

By Dave Myers

WICHITA—As police began to close in on two men suspected of robbing a Wichita supermarket recently, one fled on foot while the other took off in a stolen aircraft from the Stafford, Kans., Airport.

A few moments later, the usually quiet mid-shift at the Wichita Control Tower was enlivened by an urgent call from the local FSS concerning the stolen aircraft.

The call triggered a chain of events at points from Central Kansas to Southern Oklahoma and ultimately involved FAA controllers in three states.

Wichita Tower was asked to assist in locating the red and white Piper PA-22 Tripecar with the fugitive aboard. Since Stafford was beyond the range of Wichita's ap-

proach control radar, Controllers Kenneth Cumberland and Bob Scheurer called Kansas City Center.

Working that Center's Wichita sector were Controllers Leland Welty and Leland Rhodes. They quickly spotted a slow-moving target near Stafford and began tracking the plane. Reports on the plane's circuitous flight path were promptly relayed to Wichita law enforcement officials by Cumberland and Scheurer.

As the plane entered the area covered by Wichita Tower radar, Cumberland and Scheurer picked up the target and followed it until it once again disappeared from their scope. Welty and Rhodes continued to track the same wily target until it moved off their scopes when the plane was about 15 miles west

of Ponca City, Okla. By this time, however, the Fort Worth ARTC Center, which had been alerted earlier, had the target spotted.

Fort Worth controllers Richard Ard and Ronald Bragg followed the fugitive's "blip" as it moved southward to Fort Sill, Okla., and began to approach El Reno, Okla. Lawmen converged at the airport at El Reno in response to progress reports furnished by the FAA.

Some three hours after the search began, the plane disappeared from radar near El Reno and the police were advised that a landing had taken place there.

They were waiting when the stolen plane touched down and the very surprised fugitive, unaware that he was being "trailed" by radar, was apprehended.



Electronic 'Sleuths'

A robbery suspect, fleeing in a stolen plane, failed to realize that close tab of his getaway flight was being kept by a number of FAA controllers in three states, including Wichita Tower Controllers Kenneth Cumberland (left), and Robert Scheurer (right). The surprised suspect was nabbed when he landed because his meandering flight—which covered 175 miles from airport to airport—was constantly shadowed by terminal and enroute radar operators, including Leland Rhodes (standing) and Leland Welty of the Kansas City ARTCC.

Hunter in Wilds Given Help Fast

GRAND JUNCTION, Colo.—Air Traffic Control Specialist Samuel Scharf of the local FSS had a key role in the lifesaving search for a stricken hunter recently.

While flying over Cochetopa Pass, pilot George Hazard of Saguache, Colo., spotted what looked like a signal fire. Punching the mike button, he called the Grand Junction FSS and Scharf contacted the State Patrol.

Within minutes, a search party was heading for the pass. Hazard circled the area giving directions to the party through the FSS.

Less than two hours after the initial sighting, the rescue party reached the hunter, Ralph Smith, Jr., a diabetic in need of immediate medical attention.



Junior Engineer

Systems Research and Development Service Director John A. Weber (right), and Environmental Development Division Chief Harvey Wendorf (left), welcomes Ellis Ray McElroy to the FAA. McElroy is the first junior engineer recruited from the nation's colleges in a program designed to provide the agency a continuing source of qualified engineers in a number of specialties. McElroy is a George Washington University civil engineering graduate.

Engineer Trainee Reports

WASHINGTON, D.C.—Ellis Ray McElroy, a February 1969 civil engineering graduate of George Washington University, is the first engineer trainee to report to the Systems Research and Development Service under the agency's program to recruit honor engineering graduates from the nation's colleges.

McElroy has been assigned to the SRDS's Facility Systems Branch working under the direction of Murray E. Smith, Branch Chief. While in Washington, McElroy will spend two years receiving intensive on-the-job training, selected reading

assignments and structured counseling.

Previously, engineer trainees were assigned to the field for this preliminary training. Now, those scheduled to be hired by the SRDS before the end of June will be trained at Washington Headquarters prior to assignment to FAA field units.

"These outstanding young engineers will help us meet the need for future top level replacements in research and development," said John A. Weber, Director of the Office of Systems Research and Development.

Employee Hobby Show Held

LOS ANGELES—A National Hot Rod Association prize-winning Roadster, a 1932 Cadillac Cabriolet, stoneware, oil paintings and a battery-operated "daisy clock" were among the unique displays at a recent FAA Hobby Show sponsored by Civilair, Inc., the Western Region employee organization.

March Harrison and Harry Hunt of the Airports Division were co-chairmen of the show, which is expected to become an annual event.

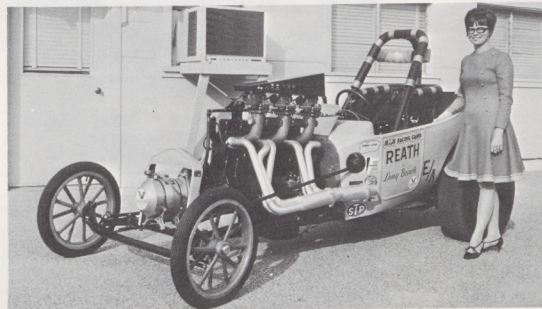
Margaret Lange, Personnel Division, an art student most of her life, showed paintings. Charles Blomer, of the Aircraft Engineering Division, who studied photography in New York, put several portraits on display.

Cal Cubberley, Administrative Services, displayed stoneware vases he made while attending the College of San Mateo last year. Will Wilson, Aircraft Maintenance Base Avionic Unit employee, displayed his rock and mineral collection in specially-designed cases.

Bob Flock, Airway Facilities Division, showed his 1932 Cadillac Cabriolet which is in original condition except for a new top and paint job. The 38-year-old auto-

mobile has been driven only 75,000 miles since it was purchased.

Priscilla Alexander, Airport Division, exhibited a Roadster which was winner of the National Hot Rod Association winter nationals at Pomona in February 1968. The car was clocked at 134.93 m.p.h. in the quarter mile.



A Prize Winner

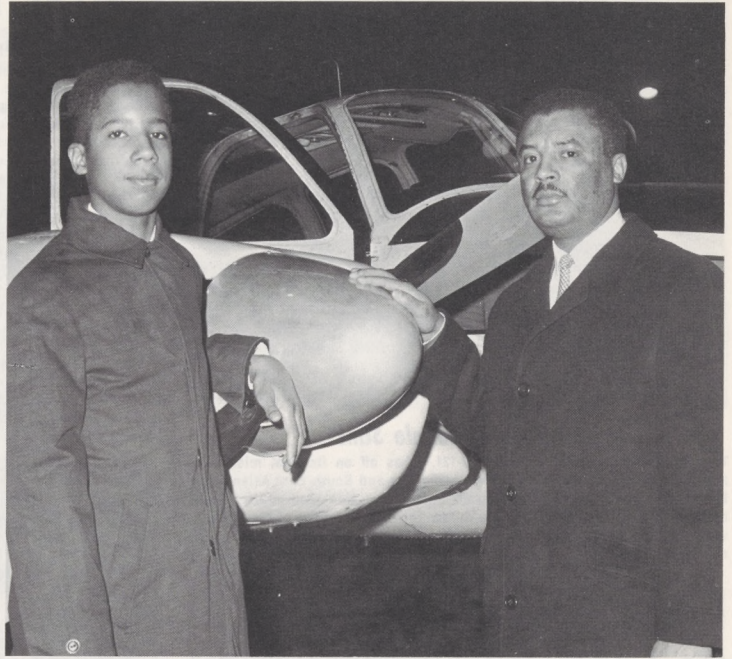
Among the main attractions at the Western Region's recent hobby show was this Roadster which was clocked at 134.93 m.p.h. at the National Hot Rod Association's winter nationals at Pomona. Priscilla Alexander (above), and her husband, Ray, worked two years to fashion this automotive gem.

What can be more fun than to actually sit in that left-hand seat? Eric Hudson considered this the highlight of his FAA visit.



Someone To Look Up To

*Project MEN Points Way
To Brighter Tomorrow*



Al Faison, Office of Personnel, escorted Eric on his visit to key FAA offices in the Washington area.

A number of eighth grade Negro boys in Washington, D.C. are taking their first steps toward meaningful careers through the help and encouragement of officials at FAA headquarters.

The youngsters are visiting FAA headquarters and receiving briefings on various FAA positions by agency officials, most of whom are themselves Negroes.

In the visits, during school hours, boys participating in the program are told about education and training required for various types of work and the steps that lead to that particular occupation.

Each youngster joins his sponsor for lunch and is treated in essentially the same manner his own father might treat him if he were visiting him at work.

The program, called "Project MEN"—(the MEN refers to Male Employment Network as well as to the program's objectives)—was initiated by the District

of Columbia's Citizens for Better Public Education, Inc. It is similar to the Big Brother Movement.

FAA's cooperation in the program was requested by the Civil Service Commission's Interagency Advisory Group.

In meeting and conferring with Negro men who have made a place for themselves in government, the youngsters are given someone to look up to and emulate. The sponsors of the program believe that it will also motivate the youngsters in their school studies and give many of them a career target.

Agency officials participating include: Earl L. Ginyard, Personnel Management Specialist, Office of Personnel; Leslie L. Evans, Digital Computer Programmer, Office of Headquarters Operations; Spann Watson, Air Traffic Control Specialist, Air Traffic Service; Harry L. Burton, Air Traffic Control Specialist, Air Traffic Service; Henry L. Dickson, Computer Programmer, Office of Headquarters Operations; Wil-

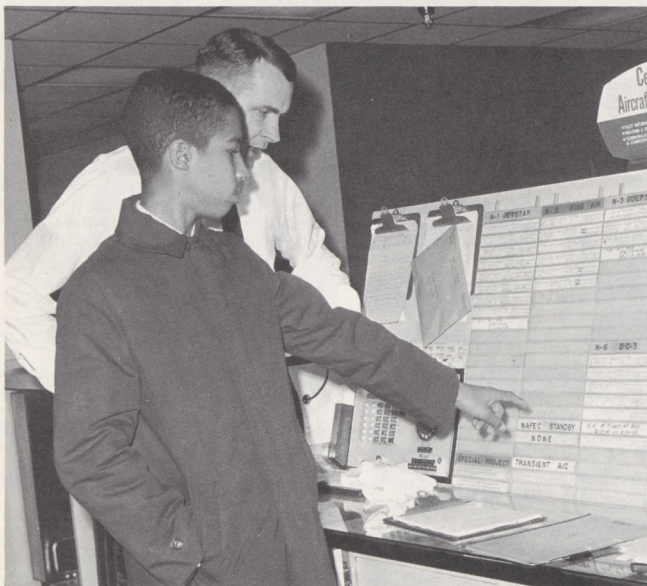
liam A. Treadwell, Computer Programmer, Office of Headquarters Operations; Macieo G. Wells, Digital Computer Systems Operator, Office of Headquarters Operations; and Alexander Faison, Personnel Staffing Specialist, Office of Personnel.

One of the first visitors was 13-year-old Eric C. Hudson of Backus Junior High School. He visited with Faison in his office and was taken to key offices in the building and to FAA facilities at Washington National Airport.

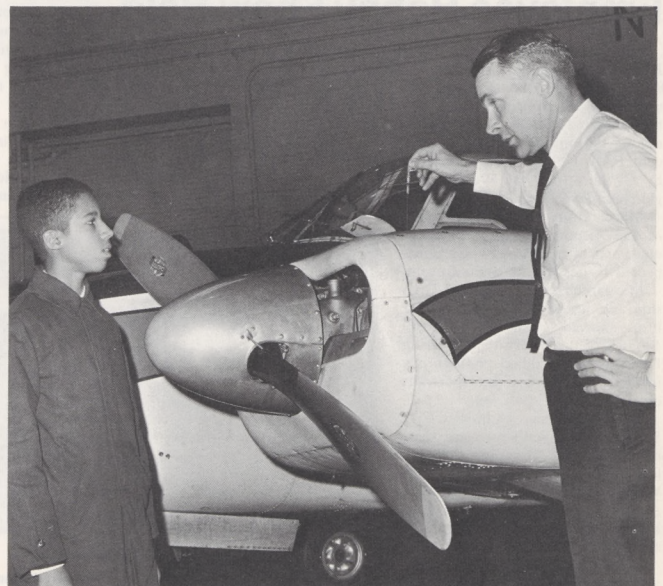
Eric, who hopes to be a pilot, felt that the highlight of his trip was a visit to Hangar 6, where an FAA pilot briefed him on the operation of agency aircraft.

The program, scheduled to continue through May, is showing many a youngster his first glimpse through the door of opportunity.

Although the program is experimental, indications are that lasting benefits are being derived by those participating.





The vital—and to a youngster, exciting—task of dispatching FAA aircraft was explained to Eric by John C. Crouse, an FAA pilot at Central Aircraft Dispatch.



Though a boy may dream of the adventure of flying, there are down-to-earth details about an aircraft that must come first and these were explained to Eric by John C. Crouse.

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 PI-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?

Question: What is the status of the study being conducted by the Civil Service Commission on the Communication Series GS-390, 391, 392, and 393?

Answer: FAA's portion of the fact-finding phase of this study was completed in mid-November and forwarded to the Civil Service Commission, which hopes to have the classification portion of this project completed in June.

Question: According to regulations, a person sent to a temporary duty station by air carrier cannot start drawing per diem until he boards the airplane, although he may have to drive up to 50 miles to board the plane. Does this mean he is not on official business when he leaves his home?

Answer: No. A traveler is considered to be on official business when he actually leaves his home, office or other point of departure. The trip ends when he returns to his home, office or point of departure. However, in computing per diem allowances, official travel begins when the airplane is scheduled to depart from the airport, except when a traveler uses an automobile or other non-scheduled means of transportation from his home to the airport and the airport is located more than 50 miles distant. In this case, official travel for computing per diem allowances begins when the employee actually leaves his home. Whether a traveler is on Government time when he leaves his home en route to the airport depends on whether the travel to the airport is performed during normal duty hours or during non-duty hours. Agency policy is that supervisors schedule travel so that employees perform official travel during normal duty hours to the maximum extent practicable.

Question: Is the answer given in this column to the question: "What can I do as a concerned citizen to take positive action against co-workers who make inflammatory remarks about political and civic leaders?" consistent with the Constitutional guarantee of freedom of speech?

Answer: The answer as published in the January 6 column was: "Such inflammatory remarks should be called to the attention of your supervisor; the Chief, Personnel and Training Division; or the Chief, Compliance and Security Division. While agency policy does not govern employees' emotions or expressions, such remarks are considered unbecoming a Federal employee. An employee may be subject to disciplinary action for committing acts which reflect adversely on the agency." The answer was intended to be read solely within the context of official duty situations. No responsible employer can condone actions, unrelated to official duties, which are disruptive to orderly work progress. Inflammatory

statements about civic and political leaders, when made on the job, can fall into this category. So, too, can disparaging remarks about a fellow employee's ethnic, cultural, or social background. FAA makes no judgment on the statement's content; it is, however, concerned about the effect on work progress, a legitimate concern of FAA and any other responsible employer. In such cases, the agency can take action appropriate to protect the working environment without infringing the individual's constitutional rights.

Question: I have four questions: (1) Why is the AFS Chief not required to possess certification for the facilities in his section?

Answer: (1) The new AF Maintenance Personnel Certification Handbook (3400.3A) specifies that first-line technical supervisors of employees assigned certification responsibility, but who themselves do not have certification responsibility, must possess certification authority on at least one major system under their jurisdiction. A second-level or higher supervisor, such as the AFS Chief whose duties do not require him to work on the equipment, could probably not maintain currency and would have to forfeit his credentials after two years.

Question: (2) Who should rate the EAR since the SMS Chief is not required to possess current certification credentials?

Answer: (2) Possession of certification credentials by a supervisor is not a prerequisite for rating a subordinate.

Question: (3) What has happened to the Employee Self-Development Program?

Answer: (3) The Agency Directed Study Program is still in effect. The new Airway Facilities Maintenance Technical Training Handbook (300.10) explains the use of directed study training.

Question: (4) Can certification for a system or a facility be taken from an employee for less than a two-year period of inactivity even though the employee possesses a satisfactory EAR and has been serving as the certifying technician?

Answer: (4) Once an employee has received certification authority for a specific system, management and the employee must insure that he retains this competence. Certification credentials remain valid if (1) during the preceding two-year period the employee has been assigned responsibility for not less than six months in an appropriate maintenance or technical activity such as work assignment, evaluation, relief, technical supervision, callback, or performance examiner; and (2) he has performed these duties at an acceptable level of competence as indicated on the employee appraisal record form.

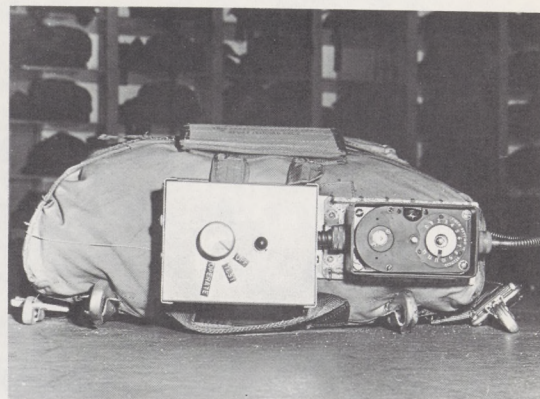
Parachute Device

(Continued from page 1)

the Citizens Band frequency and a selective receiver on the parachute pack. The electronics portion of the device was designed and built by Potomac Research Inc., Bailey's Crossroads, Va. The transmitter provides ten channels by superimposing different audio tones on the carrier frequency, and therefore can serve any one of ten jumpers at one time. Audio tone coding of the channels prevents accidental activation.

When pre-selected tones for a given reserve chute are transmitted, the receiver triggers a solenoid that pulls the ripcord. The jumper himself may override the control system and activate the auxiliary parachute system.

"Preliminary testing indicates the system is feasible," said M. F. Collins, FAA's Program Manager. "We've begun reliability testing to see if it is practical in day-to-day use. If so, and if it ultimately receives FAA approval, the device will give both student and jumpmaster an increased margin of safety and confidence."



Radio Chute Release

This new auxiliary parachute release is being tested for the FAA in Lakewood, N.J. to determine its reliability for use in civilian sport parachute training. The jumpmaster monitoring a student's jump can activate the auxiliary parachute in the event the main chute malfunctions.

Tall New Tower at Travis Dwarfs Its Predecessor



Old and New

The new Travis AFB tower, reminiscent of lighthouse designs, and the old squat facility are inspected by Frank W. Haigler (left), FAA Air Traffic Representative at Travis, and Lew Carrieff, Watch Supervisor, Phoenix Tower, who was at the Air Force Base at the time the old tower was commissioned. The men compare the view with photos from Carrieff's picture album.

FAIRFIELD, Calif.—A new half-million dollar airport control tower was commissioned recently at Travis Air Force Base following a flight check by personnel of the Oakland Flight Inspection District Office.

Towering to a height of 144 feet, the new elevator-equipped structure dwarfs its predecessor by almost 100 feet.

The tower is manned by controllers of the 1901st Communications Squadron, who are FAA-certified. From their much-higher perch in the cab of the new tower, they are now able to see both ends of the two 11,000-foot runways as well as the aircraft parking ramps.

Travis is the Air Force's busiest military airlift airport. Last year, the Military Airlift Command moved 1,270,000 passengers and 242,000 tons of cargo through the airport. Travis is the home of three C-141 Squadrons and one C-133 Squadron. It is scheduled to receive the huge Lockheed C-5 aircraft in the early 1970s.

Watchdog

(Continued from page 1)

development of more sophisticated detection hardware," Dr. Reighard said.

He added that the device demonstrated does not emit any energy of its own and therefore is not harmful.

"These are passive devices which measure changes in the environment produced by the presence of weapons," he said. He characterized the device as one that "electronically samples the magnetic environment" and one that can be adjusted to give differential readings depending on the type of weapons involved.

Displayed at the press conference were placards being placed at major air terminals and ticket offices throughout the country warning of severe penalties that can be incurred by a hijacker—a minimum of 20 years in prison to a maximum of death.

Thomas pointed to the recent reduced frequency in hijackings and indications that Cuba is not condoning hijacking as "some bright spots" in the hijacking picture.

The briefing was attended by national press media representatives.

Alaska Fills EEO Recruiter Post

ANCHORAGE—The first of 18 positions being established throughout the agency to intensify Equal Employment Opportunity recruitment has been filled in the Alaskan Region.

Desmond Edwards was selected for the EEO Recruiter position on the staff of the Personnel and Training Division.

Edwards has been with the agency ten years. He comes to his new position from the Fairbanks ARTC Center. He will concentrate on fuller utilization of minority group members in meeting the region's manpower needs. A portion of his work will involve contacting minority community organizations, schools and other sources to encourage minority group members to prepare for and seek positions with the FAA.

Awards

(Continued from page 1)

savings in man-hours, materials, supplies, equipment or money. Those that significantly benefit the quality, effectiveness or timeliness of the agency's mission also will be included.

Employee suggestions not directly focused on economy, efficiency and effectiveness, such as ideas relating to working conditions, housekeeping and building and grounds, will be welcomed, and when appropriate, recognized. They will not, however, be handled as part of the suggestion system. Unsatisfactory Condition Reports (UCRs) can be used for such matters.

Both the minimum level of benefits required to qualify for a cash award and the minimum cash award have been raised. Minimum awards are based on 10 per cent of tangible benefits, up to benefits of \$1,000. Above this amount, the graduated scales set forth in Recognition and Awards Handbook 3450.7 continue to apply.

A single "Special Achievement Award" will replace several existing FAA awards, including the sustained Superior Performance, Special Act and Special Service Awards. The new Government-wide scale for cash amounts to be paid for "Special Achievement Awards" ranges from \$100 to \$150 at grades GS-1 through 4, up to \$300 to \$350 at grades GS-14 through 18. Corresponding scales will be used for positions under other pay systems. Exceptions may be made in unusually meritorious cases.

The new regulations require managers to set up systematic reviews to identify operational programs that show superior results, and to identify and reward individuals or groups whose efforts produced the favorable results. Award actions will be based on objective evidence of successful achievement.

Since its inception in 1954, the Incentive Awards Program has grown steadily. Fiscal year 1968 broke several all-time records with more than 145,000 suggestions adopted resulting in more than \$149 million in benefits to the Government.



To insure the safety of this spectacular re-creation of the Pearl Harbor attack, FAA's Pacific Region officials worked closely with the film's producers. Here Kate torpedo-bombers zero in on battleship row.

PEARL HARBOR 'ATTACKED'

This Time, FAA Assures Air Safety

By George Miyachi

Waves of Japanese dive bombers, their guns flashing, swooped out of the clear Pacific skies recently to "devastate" the historic Pearl Harbor naval base and adjacent Hickam Field.

The "attacks" are virtually a daily event as filming proceeds on a new Hollywood movie re-creating the notorious "day of infamy." This time, the FAA and the U. S. Navy are working closely with the producers to insure that the filmed attacks are carried out with the utmost of safety.

Twenty of the modified aircraft being used in the film have been issued airworthiness certificates by the Pacific Region. Pacific Regioners E. V. Karnowski and John Haverty spent two days on Ford Island, Pearl Harbor, where the aircraft were delivered:

"An excellent job was done in modifying World War II American trainers—AT-6s and BT-13s—to resemble Japanese Zeroes, Vals and Kates," said Keith Anderson, Chief of PC's Engineering and Manufacturing Branch.

Rebuilding was done in California. Fuselages were stretched 40 inches, canopies were restructured, noses were extended and tails were beefed up. Dummy exhaust pipes were added and fume stains were painted on the fuselage. The simulation was so real one mechanic was observed attempting to clean the fake exhaust stains off the fuselage. Instructions were painted on the wings, including the Japanese characters for "Don't Step Here."

In addition to making sure these modifications did not affect the planes' airworthiness, FAA inspectors kept close watch on the movie's "air force" of some 70 aircraft to assure they were operated safely and in accordance with federal regulations. Honolulu GADO Chief George Reece, with the assistance of Bob Stone, conferred almost daily with the movie firm's air operations chief, Art Wildern, on aviation safety matters.

Before the decision to modify American planes was made, movie officials sent research teams to the Solomons, the Yaps, and other far-flung isles in the hope that authentic Zeroes, Vals and Kates could be found.

Japanese aircraft were found on some of these islands, but aerial photos revealed severe deterioration.

Aircraft Collector's Items

The teams estimated it would take at least five authentic Japanese aircraft to make one that could be flown for the film, plus a new engine. The difficulty and cost of moving these aircraft forced movie officials to take the modification route. After shooting the film, the modified aircraft will become collector's items.

Besides the converted trainers, five B-17 bombers, one of which used to be General MacArthur's personal

plane, are being used by the studio. These Flying Fortresses will re-create Major Truman Landon's historic flight into Hickam Field the morning of the attack.

Two P-40s also are being used to show scenes involving Army Air Corps Lieutenants Welsh and Taylor, who took to the air to battle Zeroes.

An old Stearman is being used as a "stage" to depict aviatrix Cornelia Fort's experience of meeting the Japanese attack force in an eyeball to eyeball encounter.

On that fateful morning, Miss Fort, a flight instructor, was flying just off the island of Oahu in a Stearman with a young student pilot. The instruction was disrupted when a sudden swell of roaring aircraft engines caused her to glance in the direction of the sound. She saw strangely-shaped planes with bright red markings. As they got closer, Cornelia found herself looking right into the eyes of a Japanese pilot. The Japanese seemed disinterested—but Cornelia quickly got out of his way.

Agency Promotes Safety

The movie's pool of 41 highly experienced pilots fly six to thirty aircraft for air-to-air and air-to-ground photography.

Pre-dawn briefings, somewhat reminiscent of the early days of World War II, are in a plywood hut at Barbers Point Naval Air Station. Some of the pilots, ranging in age from 30 to 55, have flown in World War II, Korea or Vietnam. Before being certified to fly in the filming of the flights, each pilot was closely checked out in his modified aircraft by FAA inspectors.

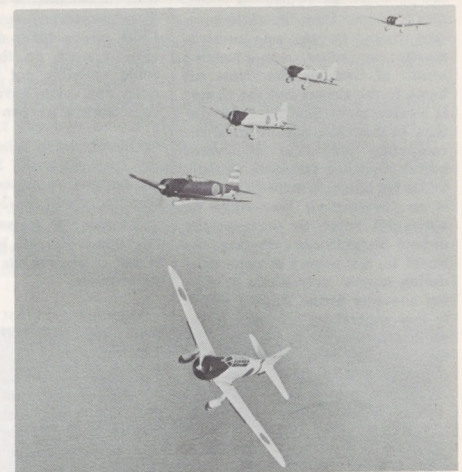
The FAA also kept an eye on daily maintenance performed by a nine-man crew of skilled mechanics. A complete facility capable of installing new engines or partially rebuilding the aircraft, is being maintained on the edge of the airstrip.



Maintenance of modified aircraft being used in a filmed re-creation of the attack on Pearl Harbor is discussed by George Reece (left), Chief of the Honolulu GADO, with John King, who heads 20th Century Fox's aircraft maintenance division.



FAA Airworthiness Certificates were obtained for these "Japanese Zeroes"—actually modified AT-6s—being used in a movie scene showing the strafing of American machine gun positions on the perimeter of Hickam Field.



Twenty FAA Experimental Airworthiness Certificates were issued for aircraft being used in a Hollywood film being shot at Pearl Harbor. Here, a Val dive bomber peels off for a strafing run followed by a Kate torpedo-bomber and other Vals. The planes are modified American trainers.



Among the 41 experienced pilots flying the Zeroes, Vals and Kates in the re-creation of the Pearl Harbor attack is Col. James Ashford, commander of the 154th Hawaiian Air National Guard Fighter Group.