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General Public Backs FAA's Safety Programs

The public is behind the Federal Aviation Agency and the tireless efforts and contributions of its personnel.

As the FAA approaches the anniversary of its second birthday (December 31), increasing evidence of wide-spread public support for its programs, particularly those of a controversial nature, is shown from an analysis of unsolicited correspondence steadily received by the Agency and editorials appearing in the Nation's major newspapers.

During the recent wildcat pilots' strike, nearly 150 letters were received by the Agency and only five were critical.

Nearly all the writers, while expressing their support for the FAA position in the "third seat" problem, also added in their letters that they were 100 percent behind FAA's overall program to improve aviation safety.

The opening paragraph of a letter to the Administrator from a family in Chelmsford, Massachusetts is typical: "Just want you to know we think you are doing a tremendous job of making flying amazingly safe for the public." A President of an electronics firm wrote, "Speaking as a commercial traveler, with close to a half a million air miles, I would like to express my appreciation for the stand you have taken in your present controversy with the air line pilots."

Another writer from Winston-Salem says, "As a frequent traveler on commercial airlines, I am in complete agreement with your policies on airline safety requirements. I believe you are doing an excellent job and I am sure you have the support of the traveling public. Any measure you deem necessary to insure the safety of air travelers will have my full support."

Some writers included with their letters, copies of letters they had sent to their congressmen. An automobile dealer in Michigan wrote to his congressman, "We wish to go on record that we are of the conviction that the program that General Quesada has accomplished and is proposing is in the area of air travel safety, and we wish to pledge our support to his continued efforts in that direction."

The Administrator pointed out that the letters "are a tribute to everyone who

works for the Federal Aviation Agency. All employees of the FAA should regard these letters as testimony of the success of their efforts."

The same overwhelming support was evident in the nearly 100 editorials written covering the "third seat issue."

The Portland (Maine) PRESS-HERALD noted that the pilots used this issue "as an excuse to express their general resentment toward the new and stringent campaign to see that aircraft are flown by the book." Across the nation the PORTLAND OREGONIAN wrote: "Pete Quesada doesn't seem to care whose toes he steps on in his aggressive campaign to improve aviation's safety record. He has made some influential enemies and he probably will make more. But the great majority of airline passengers approve wholeheartedly of what he is trying to do."

The NASHVILLE TENNESSEAN saw the pilot strike this way: "...Sympathies of air travelers are in support of the FAA on tougher safety rules, and the pilots are only alienating good will by discommoding innumerable travelers who see the third seat controversy as a tempest in a cockpit teapot."

The Atlanta (Georgia) CHRONICLE, condemning the pilots strike, wrote, "A person in public office is sworn to uphold the law and enforce the regulations and we cannot help but admire the

Additional Air Space For Civilian Aircraft

Effective August 31, 1960, 6000 square miles of formerly restricted airspace were made available for civilian aircraft through the FAA's rulemaking procedures.

Restricted areas, blocks of airspace set aside for military use, are denied to civilian aircraft because of hazards to normal air traffic. They are used by the military for such purposes as aerial gunnery, flight testing, bombing runs, and other hazardous air operations.

One section released August 31, was a block of 5518 square miles over the Olympic Peninsula in Washington, formerly used by the Air Defense Command for interceptor training. The second section consisted of 813 square miles over Hammond Bay, Mich.

Administrator Quesada, in praising the Air Force, cited the action as "another example of joint FAA-military cooperation in making available for civilian use restricted airspace no longer required."

The August 31 revocation action raises to about 18,000 square miles the total amount of formerly restricted airspace made available for civilian use since the FAA airspace program began in May of 1959.

FAA Chief for his determination to do his duty."

An analysis of the editorials indicates that all were opposed to the employment of a strike as a means of settling the issue. A majority admitted that while they didn't understand the reason for the strike, they had no sympathy for the contention that presence of an FAA safety inspector constituted a safety hazard.

Coast Guard, FAA Test Nav. Aids

Early in October, the U. S. Coast Guard Cutter, ANDROSCOGGIN, sailed from Curtis Bay, Baltimore, for a month's testing of ocean-based air navigation aids by the FAA.

Aboard the ANDROSCOGGIN will be a standard VORTAC installation. VORTAC is a combination of the VOR, an FAA developed very high frequency, omnidirectional radio range which is now in use throughout the continent, and TACAN, a Navy-developed tactical air navigation system. The VOR and the Distance measuring equipment (DME) part of TACAN have been voted the international standard by the Council of the International Civil Aviation Organization.

The tests, being conducted during October in Chesapeake Bay and off the East Coast, will check out the installation of equipment and permit the airlines, the military services and the FAA to experiment with the water-based aid to air navigation. The ANDROSCOGGIN will then sail for her assigned ocean station in the North Atlantic in early November. The FAA and Coast Guard expect to accumulate necessary data there to determine the feasibility of providing air navigational guidance through the use of VORTAC aboard ocean station vessels.

James L. Anast, Director of the FAA's Bureau of Research and Development, said the experimental program may in effect expand the coverage of its VORTAC system seaward, and not require any additional equipment in the planes that use it.

Aircraft flying transoceanic routes today are separated by a full 30 minutes in time. As this flying increases, the separation must be reduced. With accurate bearing and distance readings provided by VORTAC, it may be possible to reduce this 30-minute separation standard with no reduction in safety.

Editor

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FAA Inspectors Become Specialists Under New Program

More than 100 FAA Safety Inspectors are receiving specialist pilot training in the operation of jet, turbo-prop, and other high performance aircraft now being flown by the commercial airlines. The training is part of a continuing program to insure that the FAA inspectors will have the same skill in each aircraft as the airline pilots whose operations they monitor.

The new training is designed to make specialists of the FAA safety inspectors in a particular type aircraft. As specialists, they will inspect the operation of all aircraft of that type in each area. Formerly Agency inspectors were trained in all types of aircraft flown by the individual company to which they were assigned. Commercial airlines are now operating approximately 163 pure jets, 121 Electra turbo-props, and 86 Viscount turbo-props.

To date, 12 inspectors have completed specialist training in the Boeing 707; seven in the DC-8; three in the Convair 880; 11 in the Lockheed Electra; six in the Viscount; seven in the Fairchild F-27; and 12 in the Convair 340. In addition, 25 inspectors have begun or will soon begin specialist training in the DC-6; 12 in the Lockheed Constellation; four in the Convair 880; six more in the Convair 340; and one in the Armstrong-Whitworth Argosy.

In the past, the specialist training has been provided the FAA inspectors through the cooperation of aircraft manufacturers, airlines and the military services. In the future, this training will be provided by FAA in its own planes.

To make possible an expansion in the training program, the Agency is purchasing three new planes, a Boeing 720, a Convair 880 (both pure jets) and a Lockheed Electra turbo-prop. Acquisition of these planes will result in substantial savings by eliminating the need to lease aircraft for training purposes.

Duties of FAA safety inspectors include approving airline pilot training programs, the administering of both initial pilot tests and periodic proficiency tests, and inspecting day-to-day airline operations.

The training being given under the new specialist program is over and above the basic minimum 2000 hours of flying time each inspector must have to qualify for his position.

Lewis N. Bayne AC Manager

Lewis N. Bayne, named as manager of the Agency's Aeronautical Center at Oklahoma City, assumed his new duties October 1. He reported to Oklahoma City from Washington, D. C., where he had been a division chief in the Bureau of Facilities and Materiel.

Mr. Bayne, a native of the Washington area, was graduated from Benjamin Franklin University, Washington, D. C., with a degree in accounting in 1933.

During his nearly 20 years experience with the CAA and FAA, Mr. Bayne rose from accountant to Chief of the Materiel Program Division in the Bureau of Facilities and Materiel.

G. Ward Hobbs Heads NCA Bureau

G. Ward Hobbs, a 30-year veteran of the airline industry, has been named Director of the FAA's Bureau of National Capital Airports.

He will be responsible for the construction of Dulles International Airport, and for the operation and maintenance of Washington National Airport and Dulles International Airport when the latter is completed in the summer of 1961.

Mr. Hobbs succeeds L. W. Burton who served in the dual capacity of Acting Director of the Bureau of National Capital Airports, and as Director of Washington National Airport. Mr. Burton resigned to accept a position as Director of Aviation for Fort Worth, Texas.

NAFEC Contract Award

Lockheed Aircraft Service, Inc., has been awarded a \$1,133,000 contract to continue to operate and maintain the aircraft fleet of NAFEC for another year. This marks the third time that LAS has been awarded the maintenance contract to operate the FAA fleet at Atlantic City since the base was opened June, 1958.

The contract provides for maintenance and modification services on the Bureau of Research and Development fleet of 21 piston engined and jet powered aircraft of 12 types. The fleet is used to test and evaluate new developments and techniques in air traffic control, air navigation and safety.

Operation Pathfinder Underway in Indianapolis-Chicago Area

The Federal Aviation Agency started evaluating area positive control in the Indianapolis-Chicago Area October 15, 1960. The evaluation program--known as Operation Pathfinder--marks the first major attempt of the air traffic control system to apply positive control on an area basis.

Positive control is a system of air traffic control where all aircraft are provided with separation, regardless of weather conditions. In a positive control environment, all aircraft are under the control of the ATC system. At the present time, this is not the case, except along three transcontinental routes between 17,000 and 22,000 feet mean sea level (MSL). Operation Pathfinder establishes a positive control environment over a wide area, between 24,000 feet MSL and flight level 350 (roughly equivalent to 35,000 feet MSL).

In order to establish this environment, the Administrator has promulgated Special Civil Air Regulation 424C. This Rule gives the Administrator the regulatory means for the establishment of positive control area. It further establishes the following:

No person shall operate an aircraft within a positive control area without prior approval of air traffic control

All VFR activities, including VFR on top, are prohibited from operating in this airspace, irrespective of weather conditions

All aircraft operated within positive control areas shall:

- Have instruments and equipment required for IFR operations and pilots of such aircraft shall be rated for instrument flight.
- Be equipped with a functioning radar beacon transponder which shall be operated to reply on such mode and/or code as may be specified by ATC.
- Be equipped with radio equipment capable of providing direct pilot-controller communications on the frequencies specified by air traffic control for the positive control area.

Following promulgation of SR424C, the Administrator designated a positive control area between 24,000 feet and flight level 350 in the airspace encompassed by the coverage of three long range radars at Indianapolis, Indiana; London, Ohio; and Chicago, Illinois. This designation was accomplished by rule-making in Part 601 of the Administrator's Regulations (14CFR Part 601).

The airspace involved overlies almost all of Indiana, a large part of Illinois and Ohio and smaller portions of Wisconsin, Kentucky, Iowa, West Virginia and Michigan. Chicago and Indianapolis ARTCCs have been especially equipped and staffed for Operation Pathfinder.

The plan calls for evaluation of the area positive control concept in three phases. The first phase, lasting 30 days, excludes certain military activities from the positive control area. This will give control personnel the opportunity to make a smooth transition to the positive control environment. Phase II will bring in the operations previously excluded. The final phase will involve the introduction of activities which are normally not conducted in this area. The purpose of the final phase is to see if the system can provide positive control to any type of aerial activity.

Present plans call for Operation Pathfinder to conclude in the spring of 1961. At that time, FAA's Bureau of Air Traffic Management will publish an evaluation report. Assuming that Operation Pathfinder is successful, area positive control will be expanded to other areas.

Planning and development of this program has been underway for more than a year. In a report in March of 1957, the President's Air Coordinating Committee had recommended the implementation of a positive control system at the high altitude levels. Since then, the CAA/FAA has undertaken a series of moves which were evolutionary steps leading to positive control. Creating the continental control area, establishing positive control route segments and implementing civil jet radar advisory service, were among the most significant of these steps.

In September of 1959, it was determined that the state of the air traffic

control art had reached the point where area positive control was feasible without undue penalty on the users of the airspace. The Bureau of Air Traffic Management, after a study of several sections of the country, decided that the Indianapolis-Chicago area offered the best traffic environment in which to evaluate the new concept. Accordingly, a working plan was developed to implement the service and the Administrator approved it in January 1960.

The Regulations and Procedures Division (AT-300) of BATM was assigned the over-all responsibility for the program; however, all Divisions of BATM and all Bureaus of FAA have participated in an Agency-wide effort leading to implementation of the program. Following approval of the plan by the Administrator, a series of conferences was held with representatives of all segments of the aviation community. The operational requirements of all users were reviewed and special procedures developed to provide for every type of operation. After development of the procedures, every industry user organization was briefed on the concepts of the program.

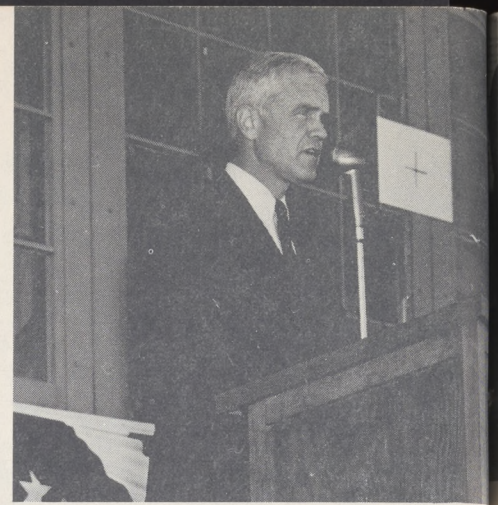
The Bureau of Research and Development, using the Aircraft Armaments Dynamic Simulator, simulated Operation Pathfinder at NAFEC over a five week period. This simulation program marked two firsts. Operation Pathfinder was the first project assignment undertaken by the new simulator, and the control sectors were equipped with the new Bell 300 interphone system. Controllers from Indianapolis and Chicago centers participated in the simulation.

The Airspace Utilization Division (AT-100) took six separate rulemaking actions under Parts 600, 601, 602 and 608 of the Administrator's Regulations in connection with this program. All of these actions became effective October 15, 1960.

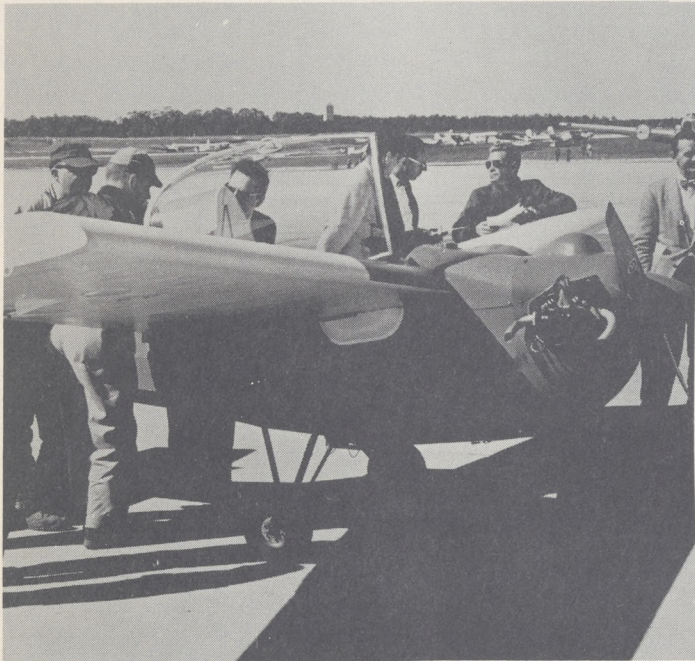
The Field Operations Division (AT-200) has worked closely with the Bureau of Facilities and Materiel in arranging for the procurement and installation of the necessary equipment for Indianapolis and Chicago centers. They have also worked on the development of the manpower requirements.

Operation Pathfinder will create the safest environment possible for the present state of the art of high altitudes. The procedures for the control of the air traffic will revolve around the use of long range radars and sophisticated radar beacon equipment. Operation Pathfinder promises to be a program which the entire aviation community will follow with interest.





VISITING PILOTS register on arrival. Mr. Pyle welcomes general aviation pilots and enthusiasts and they get chance to look over light craft and some of the static displays.



MOCK-UP of Atlanta area traffic complex undergoes careful scrutiny. NAFEC tower handled approximately 400 private airplanes which descended the runways for the one-day fly-in.





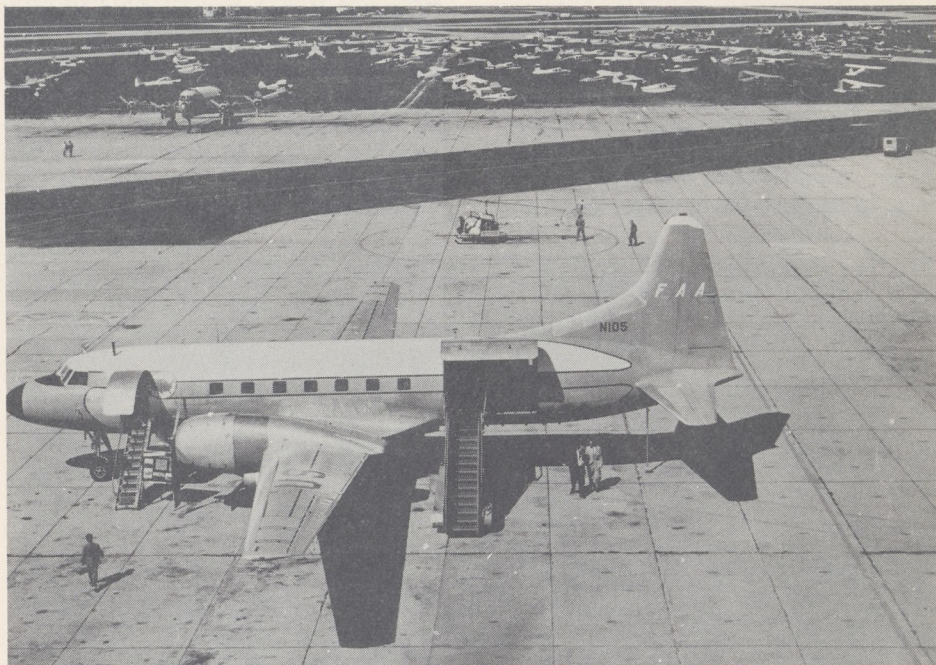
SOME 2000 visitors viewed displays and gathered on bleachers to listen to the welcoming speeches. Center photo shows some of the 400 planes which were flown in for the event.

Second Annual Fly-In

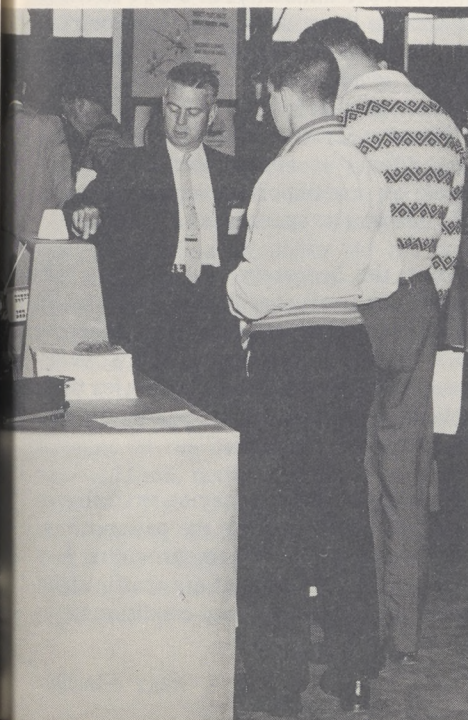
at

NAFEC

October 1, 1960



A MOCK-UP is explained, then it's on to the old fashioned outdoor dutch treat clambake.



Operation "Sky Shield" Proves Huge Success

Normal air traffic over North America between the hours of 2:00 a.m. and 8:00 a.m. EDT, on September 10, 1960, would have included some 1000 commercial flights carrying about 37,000 passengers and additional flights by 700 general aviation aircraft. These flights were grounded for reasons of air safety while the North American Air Defense exercise SKY SHIELD was being conducted.

Before the operation was held, Mr. Quesada said, "The SKY SHIELD exercise is a vital training requirement for our entire air defense system. I am confident that by understanding the need for the exercise, the public will not object to the short period of inconvenience they will experience."

From communiques received by the FAA, it is apparent the exercise was a

huge success: Some are quoted as follows:

From Commander in Chief, North American Air Defense Command: "General Laurence S. Kuter, Commander in Chief of the North American Air Defense Command announced that exercise Sky Shield has been completed. He emphasized that the entire command was exercised under realistic conditions and lasting benefits would result from Sky Shield.

"General Kuter expressed his sincere appreciation to the American and Canadian publics, airline operators and civilian authorities for their understanding and cooperation during the temporary grounding of civilian aircraft during the exercise. He stressed that this measure was absolutely necessary to protect the

safety of passengers and crews of civilian aircraft during the period when normal aids to air navigation and traffic control were not available."

From Commander in Chief, North American Air Defense Command: "As a final action in exercise Sky Shield, I must extend my sincere thanks to you for the invaluable cooperation rendered by your organization in the conduct of the exercise. Through your efforts, the North American Air Defense Command has been able to conduct the most far-reaching and realistic air defense exercise in history.

"NORAD has obtained information, experience and training which could not have been obtained by any other means in peacetime. You may be sure that these results will be put to good use toward the accomplishment of the NORAD mission of the defense of North America against air attack.

"Please extend NORAD's sincere thanks to those agencies who have cooperated with you in the exercise, particularly to the air carriers and the traveling public."

From General Curtis E. LeMay, USAF: "May I express appreciation on behalf of all participating U.S. Air Force units for the splendid cooperation your organization displayed in the recent air defense exercise 'Sky Shield'.

"The airspace sterilization required for safe conduct of this exercise was a key factor in its success. I am mindful of the importance of your share in these efforts to provide a safe environment for 'Sky Shield' from which we have gained much by way of exercising our defense posture.

"The cooperation of the Federal Aviation Agency is appreciated and recognized as an important contribution to our military preparedness."

From the Secretary of Defense: "On behalf of everyone in the Department of Defense who participated in Exercise SKY SHIELD, I want to thank every member of your Administration for their splendid cooperation in making the Exercise such a success.

"I realize that the Exercise would have been impossible without the precautions your organization took in providing for the readjustment of civil air traffic thus ensuring maximum safety conditions."



GOLDEN shovels glisten as ground is broken for new Denver Air Traffic Control Center Building at Longmont, Colo. From left, L. M. Wilkins, general contractor, Lt. Governor Robert Knous, Walter P. Plett, Region 4 Manager and Albert Will, Mayor of Longmont.

Formula Provided for Assured Tax Refund

The September 1959 issue of FLY-BY carried an article entitled "Pain Removal For Paying Taxes." This article went on to tell how you could cushion the shock of paying income taxes by decreasing the number of exemptions and have a greater amount of Federal taxes withheld from your paycheck.

It went one step beyond and told how, if that didn't take care of the situation, you could have additional amounts withheld. It also stated, "... you can breathe that great sigh of relief in knowing that when the next April 15th deadline rolls around, you'll be gettin' instead of givin'. That article was absolutely correct.

To further emphasize this withholding system, here is a letter received from the Director, Public Information Division, U.S. Treasury Department, Internal Revenue Service, Washington 25, D.C.

"Thought you would be interested in a sampling tax study my office has made of Uncle Sam's 5,000,000 employees and military personnel who represent a cool 10 percent of the 40,700,000 individuals in America paying Federal income taxes.

"We found upon inquiry to many of our IRS field offices that Federal employees and military personnel experience about the same type of Federal income tax problems as the taxpaying population as a whole and in approximately the same proportion.

"We also found that approximately the same proportion of Federal payrollers as other taxpayers are delinquent in their Federal income tax payments and that we have to institute wage levy collection actions in the same proportion against both groups.

"Under-withholding for tax purposes is the basic problem and we have initiated a nation-wide educational program to tell taxpayers in general how they may solve this problem easily if they wish to do so.

"The solution is simplicity itself. All that the taxpayer has to do is to drop one or more exemptions for tax withholding purposes. For each exemption dropped, the amount of tax withheld will be increased by approximately \$120 a year. This type of action is permitted by law and a convenient form is available in Federal personnel offices to execute it for payroll deduction purposes.

"Taxpayers who drop exemptions for tax withholding purposes do not lose the exemptions. They may claim these exemptions on their Federal income tax returns just as though they had not been dropped for withholding purposes.

"If dropping exemptions for withholding still does not cover the gap between the amount of tax owed and the amount of tax withheld, taxpayers may go one step further. They may request paymasters to withhold an additional amount from their pay checks to cover the gap, or even to assure them a tax refund. Most paymasters, to our knowledge, are will-

ing to approve such employee requests as an employee morale benefit.

"I am bringing the subject to your attention because if you or any component of your agency publishes a house organ or other type of employee publication, you or your components may wish to print the item as a valuable piece of information for your employees during the next filing period.

"Many large corporations already have published the item in their employee publications because they feel an employee is a better worker if he does not have to worry about a Federal income tax indebtedness. Moreover, they are as anxious as we to eliminate, if possible, the nuisance of wage levies for delinquent Federal income taxes.

"Thank you for any consideration you give this suggestion."

Inaugural Flights

A new Agency Practice Bulletin, which supplements Section 5 of Agency Practice 3-735.4 (Conflict of Interest), states FAA policy governing employee participation in inaugural flights sponsored by foreign or domestic air carriers.

The policy, as set down in the proposed APB states that, "FAA employees will not participate as guests in inaugural flights of domestic or foreign air carriers which are flown for goodwill or publicity purposes."

The APB does, however, provide for the authorization to participate in inaugural flights. The authorization may be granted in those cases where it is clearly shown that the interests and responsibilities of the Agency require participation by the invited employee. This authorization may be granted only by the Administrator or Deputy Administrator.

Comments Received Help in Molding Agency Practice

Agency Practice 3-771, Employee Appeals and Grievances, has been approved. If you were among those who answered the appeal for comments (May 1960 Special Issue of FLY-BY), the chances are that when you look through 3-771, you'll notice that some of your comments were approved and incorporated into the Agency Practice.

All comments received from the field, (although the number submitted was small), were taken into consideration before the final draft was written. The ones which would do the most good for the most people were incorporated into the Practice. Comments and recommendations were also solicited from the Office and Bureau heads both in Washington and the field. These, too, were considered.

On October 2, a team from Personnel and Training left Washington to visit each Regional office and the Aeronautical Center to hold orientation and workshop sessions on the new procedure. They will wind up the sessions early in November.

As the team completes the orientation and workshop sessions at a Region, then the concepts of the Employee Appeals and Grievances as set down in the Agency Practice will go into effect for that Region.

FAA Pamphlet a Sellout; Goes into Second Printing

A pamphlet, written by the FAA, outlines what an applicant for a private pilot's license must do to pass his flight test. In order to meet the public demand, it's going into a second printing.

Three months ago, 5000 copies of the pamphlet, "Flight Test Guide--Private Pilots," were placed on sale. Today, the supply is almost exhausted and an additional 15,000 copies have been ordered.

Also available is another Flight Test Guide for a Multi-engine class Type Rating. Planned for future sale are three additional guides for Commercial, Instrument and Flight Instructor Ratings. The Private Pilot and Multi-engine Class booklets can be bought for 10 cents each from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

Multiple Air Routes From, To Anywhere

Multiple air routes "from anywhere to anywhere", using only existing airway ground aids in the U. S. may result from experiments being conducted by the FAA with pictorial displays and pictorial computer devices now being developed for pilots.

Through contracts totaling \$93,000, the FAA Bureau of Research and Development is testing means of displaying to the pilot his exact position over the terrain through the use of the present radio ranges, and an electro-mechanical computer which can make possible automatic instrument flights on or off the airways and on any course which safe air traffic control might dictate.

Tests at NAFEC are under way on two pictorial display items. These are small, light-weight devices connected to the receivers in the plane which are tuned to the range stations that mark the airways. The devices may be mounted in the cockpit or held on the pilot's lap. The two being tested measure about eight inches square and three inches thick. They weigh four to eight pounds.

In the prototypes produced under contract by the ACF Electronics Division of ACF Industries, Inc., of New York, and the International Telephone and Telegraph Laboratories of New York, a symbol marks the position of the plane, and moves on a chart as the plane progresses in its flight. The pilot flies by reference to this symbol and his usual direction indicators. The FAA estimates the display should sell for about \$1000 when in production.

A third device is a pictorial computer, designed for use by larger planes, such as commercial air carriers. Connected with the radio ranges and also with the automatic pilot, this computer will fly a plane accurately on any route designated between any two points, using the ground stations as guides. It computes the course automatically as the flight proceeds. ACF Industries will build a prototype and supply engineering services to the FAA on this computer, at a total cost of \$83,195.

Traffic control experts expect great benefits from these pictorial displays and computers. Any number of paths between two points can be assigned to planes, and pilots can follow these courses safely with assured lateral separation, even at the same altitude. Thus, without adding airways facilities on the ground, the capacity of existing airspace can be materially increased.



LIGHTED like a Christmas tree and resembling a modern-day apartment is the Airport Traffic Control Tower at Newark, N. J. Tower was dedicated on January 18, 1960.