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AGENCY ASKS PILOT VIEWS

Regional conferences sponsored by FAA to hear the ideas of pilots and obtain their reactions to Agency proposals are planned for several cities across the country.

Under Project AIR-SHARE—"Air Your Views; Share the Benefits"—the FAA Bureau of Flight Standards will outline the air safety problems ahead, as speed and traffic increase through the 1960s, and hold open discussions on solutions.

Tentatively, two such meetings will be held this spring in each of the four continental FAA regions and one each in Alaska and Hawaii. Representative region-wide attendance will be sought and pilots who attend will be encouraged to hold AIR-SHARE conferences in their local communities.

The AIR-SHARE conferences are part of a policy outlined by Oscar Bakke, Director of the Bureau of Flight Standards, to brief aviation groups on matters under active consideration and to elicit grass-root opinions concerning proposed regulatory actions.

Time and place of the meetings will be determined by the Bureau's Field Division Chiefs in each region.

The meetings will also feature a discussion of FAA aids to business and private fliers, including the new VFR flight following service.

COLOR VISION TEST REQUIREMENTS EASED

Applicants for Class II and III certificates no longer are required to take the "practical signal light test." In addition, passing scores for tests to distinguish aviation signal colors—red, green and white—have been lowered.

An applicant who fails to make a passing score on the color vision test may now be issued a limited medical certificate if he meets the other physical standards. As an alternative, he

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HALABY NEW ADMINISTRATOR OF FEDERAL AVIATION AGENCY

Najeeb E. Halaby, 45, a former test pilot and business executive with a distinguished record of Government service, has been named Administrator of the Federal Aviation Agency and principal aviation adviser to the President.

3D Radar Shows Promise

Initial experiments on a new radar which measures aircraft height have been successful. The new Airport Height Surveillance Radar (AHSR-1) is designed to provide controllers with aircraft altitude within a radius of 50 miles of busy terminal areas.

James L. Anast, FAA's Director of Research and Development, estimated that a full AHSR-1 prototype system could be operational in New York in about 18 months. AHSR "requires no equipment aboard the aircraft," he said.

BUDGET INCLUDES AID TO AIRPORTS

Funds requested for the Federal Aviation Agency in the 1962 fiscal year amount to \$686 million, including \$40 million in direct appropriations for grants-in-aid to airports.

The budget also includes \$109.2 for modernizing existing navigational facilities and installation of new radars, instrument landing systems, visual glide slopes and TACANs at points on the airways where they are most needed.

As in past years the grants to airports, to be matched by local funds, will be spent on runways, control towers, lighting and other items contributing to the increased safety of airport operations. The budget message also proposes an extension of the Federal Airport Act.

The \$65 million asked for research and development includes funds for medical research. The budget also provides for approximately 2,000 additional technicians, inspectors, controllers and other immediately concerned with aviation safety.

As vice-chairman of the White House Aviation Facilities Study Group (The Harding Group, 1955-57), Mr. Halaby helped pave the way for the establishment of the Federal Aviation Agency.

President Kennedy, in announcing Mr. Halaby's appointment, said that this was one of the most challenging jobs in the Federal service and that to fill it, "We have looked for the best qualified and professionally competent man. We have found him in Najeeb Halaby of Santa Monica. He reports directly to me and will be my principal aviation adviser . . ."

Mr. Halaby, queried by reporters after meeting with the President, said that he was gratified that the line of communication between himself and the White House would be a direct one. He added that he was approaching the job with an open mind and that he would review what had already been done before coming up with his own program.

Legal Training

Prior to his appointment as Administrator of the FAA, Mr. Halaby practiced law in Los Angeles, heading his own firm, and was secretary-treasurer of Aerospace Corporation, a firm that is principal technical adviser to the Air Force missile and space program. During 1957-59, he was Executive Vice President and a director of Servomechanisms, Inc.

The new Administrator, who got his student license in 1933, tested Lockheed planes from 1941 to 1943 and then went into the Navy where he set up its first school for test pilots and became its chief instructor. While on active duty he flight-tested America's first jet aircraft, the Bell X-P59, and made aviation history when he made the first transcontinental non-stop flight in the

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EDITORIAL

A New Frontier in Aviation

by N. E. Halaby

The problems and tasks facing American aviation today are opportunities for progress not conflict—challenges to be met rather than blocks to be upset. These opportunities are here and now for individual citizens, for special groups, for the whole government and specially for those of us in the Federal Aviation Agency. These challenges face all who choose to seek their vocation—or avocation—in the world of flight.

When one stops to consider the strides made in American aviation in little more than half a century, it is truly a magnificent accomplishment. And that accomplishment, in which literally thousands can rightfully take pride, was the sum contribution made by individuals, groups and government all working together.

That is the way the problems should be faced—together, in a spirit of co-operation coupled with a genuine sense of responsibility to the American public. Our goal should be to recognize the rights of all, and in the interest of the safety and welfare of the public, to restrain the exercise of these rights as much as is required and no more. That sense of responsibility makes the subject of air safety fundamental. I hope that all airmen, singly and collectively, agree that when personal freedom of action conflicts with unity and safety of action, desire must yield to duty.

Here at FAA, the subject of air safety should always be uppermost. But in approaching such problems as safety, I am mindful of the fact that the solution may affect different users of the Nation's airspace in different ways. Differing and even opposing voices, speaking with conviction and a sense of responsibility, will get an attentive hearing and full consideration. For mere noise or obvious static, the volume will be turned to "low" or "off."

As my first step taken to understand, define and meet the problems, I asked all my predecessors in office and a number of men with outstanding experience in the administration of aviation programs to meet with me and my staff in Washington. The group, comprised of seven former administrators of the FAA and its predecessor agency, and

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Rules and Regulations

Issued: Fixed wing aircraft will be required to show markings at least 12 inches high on both sides of the fuselage or vertical tail section under Amendment 1-4 of the Civil Air Regulations issued December 30, 1960 and effective January 1, 1966. Aircraft so marked under Special Regulation 412-B already meet this requirement and will need no modification. However, aircraft newly marked, or completely remarked after January 1, 1962, must conform to the new standards.

* * *

Under consideration: Public hearing on a proposal made last September, concerning the adoption of a new Part to the Regulations of the Administrator covering construction or alteration of structures affecting the safety of flight, was held January 10-11 in Washington. Comments are now being evaluated by the Airspace Utilization Division of the Bureau of Air Traffic Management. Regulation would affect broadcast towers, smoke stacks, grain elevators, gas storage tanks, tall buildings, water towers, etc.

NEW OFFICE TO SPEED MODIFICATION OKAY

To speed certification of modified aircraft, the Federal Aviation Agency plans to establish an office within the Bureau of Flight Standards, under the direction of a Chief Modification Engineer, to deal with the issuance of supplemental type certificates.

Certification will be further speeded by the increased authority to be given certain industry facilities under the new rating, Approved Modification Stations, standards for which are now being developed. Other points to be covered are improved methods of disseminating information, and issuance of guides and manufacturers' modification manuals to FAA field personnel.

Modified aircraft, widely used in business aviation, are planes which are changed in important respects to fit the owner's purpose. When such changes are made, FAA requires additional inspection and testing to insure safety.

In the past four years, nearly 3,500 such certificates have been issued.

FLIERS' "BIBLE" IN NEW EDITION

"Terrain Flying," FAA's 100-page compendium of practical hints for non-professional pilots, has been revised and illustrated with strip maps showing the best routes. Written in down-to-earth pilot's language, every page is crammed with knowledge that could save a man's life.

Originally published in 1947, the pocket-sized volume reflects the wisdom of thousands of airmen who have learned from experience what to do and what not to do when flying cross country over the varied U.S. terrain.

The booklet is divided into eight major classifications: The Appalachians; the Great Mountains Areas of the West and Northwest; Flatlands of the Midwest and High Plains Area; Swamp Area; Desert Regions; Badlands, Cut-over Lands, Forests and Frozen Wastes; Ocean, Bay and Lake Shores; Cities and Industrial Areas. Additional chapters are devoted to flying in Alaska and flying in Mexico.

"Terrain Flying" may be purchased for 40 cents from the Superintendent of Documents, Washington 25, D.C.

AIRPORT INSPECTION RESUMED THIS YEAR

Complete and systematic inspection of airports is to be resumed by FAA after a gap of eight years during which pertinent airport information was gathered on a limited basis only.

FAA will station Airport Facility Records Engineers at selected District Offices throughout the country to procure the exact locations of airports, length and composition of runways, lighting installations, landing aids available, number of based aircraft, etc.

This knowledge is essential for the production of aeronautical maps, for publication in the "Airman's Guide" and for airport planning purposes. The ultimate aim is to inspect every airport at least once a year.

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VFR PILOTS GET ADDITIONAL UNCONTROLLED AIRSPACE

Pilots on VFR will get more uncontrolled airspace when the flight visibility is less than three miles, as a result of an amendment to Part 60 of the Civil Air Regulations adopted by the Federal Aviation Agency.

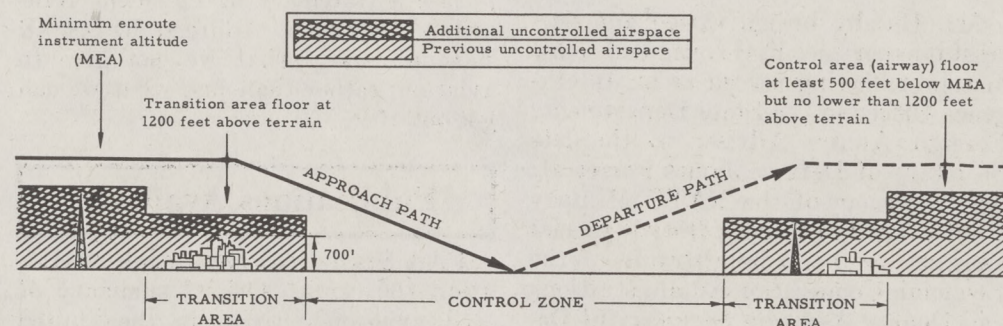
This will be accomplished generally by raising the floor of control areas (airways) from the existing 700 feet above the surface to at least 1,200 feet above the surface, thus providing an additional 500 feet or more of uncontrolled airspace.

Beneath control areas (airways) overlying ground obstructions, even more uncontrolled VFR airspace will be provided where possible to afford

visibility is more than three miles VFR of 700 feet above the surface will be established at airports having no control zone but for which instrument approach procedures have been prescribed.

All of the airspace beneath the floor of established transition areas and the control areas will be *uncontrolled* airspace, and will be available to VFR pilots when the visibility is as low as one mile. Within *controlled* airspace, however (and this includes the newly created transition area), VFR flights may not be made without an air traffic clearance whenever the flight visibility is less than three miles. When the

NEW AIRSPACE STRUCTURE



VFR flight safely over ground obstructions such as TV-radio towers, smoke stacks, etc. This will be accomplished by establishing the control area (airways) floor at least 500 feet below the minimum enroute instrument altitude (MEA). Minimum enroute instrument altitudes are presently established at least 1,000 feet over ground obstructions.

New Rules Outlined

Specifically, Amendment 60-21 establishes that the control zones around airports shall normally be five miles in radius with extensions where necessary for arriving and departing IFR flights and will extend upward from the surface. Transition areas to contain the flight paths of IFR aircraft operating between airports and control areas will be established around control zones and will have a floor of at least 1,200 feet. However, transition areas with a floor

flights will not be affected.

The new amendment will also permit VFR operations "clear of clouds" in *uncontrolled* airspace at and below an altitude of 1,200 feet above the surface instead of the previous maximum of 700 feet.

Amendment 60-21 also provides for a 300 foot buffer zone between VFR and IFR flights operating within transition areas and a 500 foot buffer zone between VFR and IFR flights operating within control areas.

Revisions to Take Time

The new amendment will not automatically revise the structure of the controlled airspace. It will serve as the instrument by which revisions in the existing structure may be made on a case by case basis. The public will be afforded an opportunity to comment or request a medical flight test by

CROP SPRAYING UNDER STUDY

Reports from two groups of aerial applicators are being studied by the FAA to acquire data that might be useful in writing regulations for that industry if it is found necessary to do so at this time.

The type of flying involved in aerial application (crop spraying) is presently conducted under certificates of waiver or authorization granted by FAA safety inspectors in the field. These waivers authorize flight at altitudes below the minimums specified in the CAR, provided certain provisions are met to insure safe operation.

The net effect of the certificate of waiver is to substitute one safety standard for another in varying degrees.

Operators Differ

Preliminary discussions were held in Oklahoma City last December between representatives of the Bureau of Flight Standards and applicators from the southwestern and far western States, who gave general approval to FAA's proposed "Aerial Applicator Standards and Requirements." However, at a subsequent meeting in Topeka, Kansas, agricultural fliers from the Midwest disagreed.

According to FAA, first consideration must be given to human safety, followed by the matter of economic responsibility. It is possible for drifting chemicals from an airplane treating a particular field to have harmful effects on crops in adjacent fields, a fact which could have an important bearing on insurance rates.

Benefits Seen

It is felt that the spraying industry stands to gain stature by meeting whatever standards and requirements are laid down by FAA, since the Agency's seal of approval constitutes public assurance that certain safety standards have been met and will be adhered to.

Amendment 60-21 will become effective on February 21, 1961 but due to the complex nature of the action to be accomplished, the total revision of the airspace structure cannot be completed for some time.

Amendment 60-21 was proposed as rule making by the FAA in Draft Release 60-8 on May 7, 1960. In addition to written comments, a public hearing was held on August 10, 1960.

FAA READYING FIVE FLYING LABS TO CHECK NAVAIDS

Some of the most intricate electronic equipment ever devised for civil use has been installed in the first of five FAA Convairs designed to flight check, from between 10,000 and 24,000 feet, ground navigational aids (nav-aids). The remaining four Convairs, will become operational by late spring.

Called SAFI (for Semi-Automatic Flight Inspection), the system makes use of a magnetic tape prepared in advance by an IBM 704 computer which automatically tunes in on each navaid at a pre-selected point.

Flying the Grid

The number and complexity of present day navaids required the FAA not only to modernize its flight checking equipment, but also to improve the costly and time consuming procedures which required flying circles around and radial courses across each aid.

Thus the "grid" system was originated, so-called because a pattern of straight lines is superimposed across the length and breadth of the country, intersecting at stated points to form squares or grids. Flying along any grid line, the flight check aircraft covers an area from 80 to 160 miles wide while signals from every navaid within the area are received, converted to digital form and recorded on magnetic tape.

Data Processed Quickly

While gross errors in the navaids are revealed in flight and can be corrected at once, more subtle deviations are detected when the tapes are analyzed by the 704 computer at the Aeronautical Center, Oklahoma City.

The swiftness with which the computer handles the data—it can reduce 2,000,000 readings to 15,000 pertinent

VISION—(Continued from page 1) may request a medical flight test by the Regional Flight Surgeon in order to obtain an unlimited certificate.

This simplified procedure is in contrast to the previous rule that required the applicant first to get authority from the Regional Flight Surgeon to take the practical signal light test, and then arrange with an FAA inspector to meet him at an airport where there was a control tower with signal lights. After that he was tested with color signals at random distances.

facts within an eight hour period—will permit every navigational aid in the Continental United States to be checked from the intermediate altitudes at least once every sixty days. On alternate flights, standby transmitters located at every station along the airways are also checked.

The FAA is readying two KC-135s, counterparts of the Boeing 707 jet, to do this work at the high altitudes.

HALABY—(Continued from page 1)

YP-80 Shooting Star. He holds a commercial license with single and multi-engine ratings and also holds a commission in the Naval reserve.

Varied Background

Mr. Halaby brings varied and successful experience in Government to his new post, having served as an Intelligence Officer in the State Department; Foreign Affairs Adviser to the late Secretary of Defense James Forrestal; first chairman of the NATO Military Production and Supply Board; special assistant to the Administrator of the Economic Cooperation Administration; and Deputy Assistant Secretary of Defense for International Security Affairs.

In 1953 he was named the recipient of the Arthur Flemming Award given to the "outstanding young man in Federal Service," an award given for administrative achievement.

Born in Dallas, Mr. Halaby was educated at Stanford University, the University of Michigan and Yale, where he received his law degree in 1940. He is a member of the bars of California, the District of Columbia and the Supreme Court of the United States. He is on the Board of Directors of the Flight Safety Foundation and is a member of the Society of Experimental Test Pilots and the Quiet Birdmen.

Mr. Halaby is married to the former Doris Carlquist. They have three children.

A total of 15,213 square miles of restricted and prohibited airspace was returned to public use during 1960.

FRONTIER—(Cont. from page 2)

eight others with wide aviation experience, reviewed FAA accomplishments to date and made suggestions for future programs. I feel sure that this full and frank exchange of views with those who have been here before will be mutually beneficial to the entire aviation community.

But there is no intention of stopping here. In developing a New Frontier in Aviation, I welcome and expect the help of all whose realm is the world of flight. We will shortly launch Project Horizon, which will set National Aviation Goals for the Sixties. Soon we will bring together some of America's outstanding scientists to review and advance the Airways System of the future. You will be seeing some fresh ideas and perhaps a few new faces—all aimed at advancing aviation.

I ask only that you use the same guide that we here at FAA Headquarters will use. And that is, to paraphrase a statement in President Kennedy's Inaugural Address, let us all start planning what we can give to aviation, rather than just what we can get out of it.

Publications Available

FAA Statistical Handbook of Aviation—60 cents. Official summary of civil aviation activity in the United States thru December 1959.

Guide for General Aviation Administration Buildings—25 cents. A practical guide for any community where the volume of general aviation activity justifies an airport administration building.

Flight Test Guides (3)—10 cents each. Private pilot single or multi-engine, or commercial pilot single-engine.

International Flight Information Manual—35 cents. Contains worldwide directory of airports, passports and visa data, foreign flight regulations, monetary exchange rates and other information.

FAA Air Traffic Activity, Fiscal Year 1960—45 cents. Statistics on terminal and en route activities over the Federal Airway System.

Available at prices listed from:
Superintendent of Documents,
Washington 25, D.C.