

FLY BY

OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY

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TIGHE APPOINTED SP. ASSISTANT TO DEP. ADMINISTRATOR



Mr. Jack V. Tighe, former CAA Liaison Officer, North American Air Defense Command, Colorado Springs, entered on duty recently as Special Assistant to Deputy Administrator Pyle.

Bringing with him to FAA some thirty years of extensive aviation background, Mr. Tighe also holds a commercial pilot's license and is active in the Quiet Birdmen organization. He is a Lt. Col. in the Air Force Reserve.

His aviation background began in 1928 with National Air Transport, forerunner of United Airlines. In early 1936 he was one of ten aviation experts recruited from the airlines and aviation industry to establish the first Air Route Traffic Control Center and procedures for the control of en-route air traffic under the sponsorship of the air carriers. Responsibility for operation of the system was assumed on July 1, 1936 by the then existing Bureau of Air Commerce, Department of Commerce.

Mr. Tighe served successively as Controller, Center Chief, and subsequently in 1945 as Air Traffic Control Branch

Chief in the CAA Regional Office at Kansas City.

After three years in the U. S. Army Air Force (1943-45) and two years in private business, Mr. Tighe returned to CAA in September 1948 to an assignment in the Air Traffic Control Branch at Kansas City.

In 1951 he was assigned, along with other CAA personnel, as CAA Liaison Officer to various components of the Air Defense Command where he assisted in the development of plans and procedures for the joint participation of CAA and Air Defense Command in Air Defense activities. Since July 1952 he has been CAA/FAA Liaison Officer to Headquarters North American Air Defense Command (NORAD) at Colorado Springs, the position he held immediately prior to his present appointment.

Mr. Tighe was born in Chicago, grew up in Kansas City, and now resides with his wife in Arlington, Virginia. His only child, a daughter, recently presented him with a granddaughter.

MALLOY NAMED CHIEF OF OIC

Raymond B. Maloy has been appointed Chief of the Office of International Coordination. He has served as Director of the Office of International Cooperation (now the Office of International Coordination) since April 1957 when the office was established. He started his government career in the CAA in 1939 as Aeronautical Engineer in Kansas City, Missouri. In 1945 he was appointed Chief of the Engineering Flight Test Branch, serving there until 1955 when he was assigned to Paris as Chief of Aircraft Engineering in the International Office.

Mr. Maloy is an Associate Fellow in the Institute of Aeronautical Sciences, and also holds an Associate Fellowship in the Royal Aeronautical Society. He has served as Chairman of U. S. airworthiness delegations to ICAO conferences, and has been cited as "Distinguished Alumnus" by his Alma Mater, the University of Michigan.

GEN. HUTTON NAMED DIR. OF TRAINING



Brigadier General Carl Irven Hutton, U. S. Army, has been named Director of Training of the Office of Personnel and Training.

He transfers to the FAA from Headquarters, U. S. Army, European Command, where he has been serving as Artillery Commander of the 8th Infantry Division. Prior to that time he was Commandant of the Army Aviation School and Commanding General at Fort Rucker, Alabama.

General Hutton began his military career in April 1925. He was appointed to the U. S. Military Academy in 1926, and has since served in a variety of commands. In 1946 he attended the Department of Air Training of the Artillery School at Fort Sill, Oklahoma. He was later appointed Director of that department and subsequently appointed assistant chief of staff for logistics of the Artillery Center at Fort Sill. In 1951 General Hutton attended the National War College, graduating in June 1952. He was promoted to Brigadier General in March 1953. He has been awarded the Silver Star, Bronze Star Medal with three Oak Leaf Clusters and the Air Medal.

RANDOM NOTES FROM THE EDITOR

* The primary purpose of FLY-BY is to inform. Employees at all levels must be kept informed of internal developments and happenings. On the other hand, our mailing list includes a small number of non-FAA'ers who have a direct interest in our operations--airport managers, for example. We are experiencing an increasing "outside" demand for FLY-BY--at a time when we are able to print an average of only one copy per five employees. The fact that several of our recent articles have been re-printed in various non-FAA publications is indicative of the widespread interest in our functions and activities.

You can help. After you read FLY-BY, pass it along to another employee. If you run across a good story idea, a newsworthy photograph, or any other bit of information that might be of agency-wide interest, send it in to us. We try to keep our "ear to the ground and our nose to the wind" but we must count on you to help. Any and all correspondence concerning FLY-BY is welcome in our editorial office.

** We goofed on page 5 of the April issue. The photograph of twenty-one airport traffic controllers at Chicago's Midway Airport was inadvertently reversed and consequently did not correspond to the caption. Our apologies.

*** We are still being asked to explain the meaning of the word FLY-BY. The word is a noun which, in popular usage, connotes one or more aircraft flying by an audience or reviewing stand, a passing parade in the air, so to speak. For example, the program for Armed Forces Day in your area might show: "3:30 - 4:00 Fly-by of the latest types of jet interceptors." Therefore, at 3:30 you could expect the planes to begin passing overhead in review. For our own use, we think FLY-BY is particularly appropriate in that we hope to present in our house organ an up-to-date review of the passing parade in the air.

FLY-BY

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**** Another 12-page issue this month. We hope you find it worth the few extra days' waiting.

TIPPETS NAMED DEP. DIRECTOR OF FACILITIES

Joseph H. Tippetts has been designated Deputy Director of the Bureau of Facilities. He is a 22 year veteran of the former CAA. He joined the Bureau of Air Commerce in 1937, served in its successor agency, the Civil Aeronautics Authority, and transferred to the Civil Aeronautics Administration upon its creation. He has held a variety of supervisory posts, including that of Chief, Communications Engineering Division, of the Office of Federal Airways. In 1951 he became Deputy Director, and later Director of that Office in 1956. Mr. Tippetts was recipient of the Commerce Department Gold Medal for exceptional service in 1958.

In 1957 he was cited by the U. S. Civil Service League for outstanding public service.

INTERESTING STATISTICS

FAA is the Federal Government's second largest independent agency--second only to the Veterans Administration which has more employees.

FAA is larger than any one of three Departments--Justice, Commerce and Labor--and is larger than the Legislative and Judicial branches of the Government combined.

As of March 31, 1959, FAA had 31,655 employees.

SPURGEON ACTING CHIEF OF PUBLIC AFFAIRS

On April 24, Mr. Quesada named Chester "Chet" Spurgeon as Acting Chief of the Office of Public Affairs. Mr. Spurgeon was previously Director of Information for the CAA.

R & D MOVED TO T-5

Move of FAA's Bureau of Research and Development Washington office from its southwest Washington location to T-5 Building, 16th and Constitution Avenue, was made on April 27.

The move centralizes the Bureau with the other FAA offices and brings it closer to the Agency's main office headquarters at 1711 New York Avenue.

NEW BUREAU ESTABLISHED

An amendment to Agency Order No. 1 has been approved establishing a Bureau of National Capital Airports and assigning that Bureau the responsibility for the operation and management of the Washington National Airport and the second airport now under construction near Chantilly, Virginia. The Bureau will be headed by a Director and a Deputy Director and will contain divisions responsible for operations at Washington National Airport and the second airport respectively.

The Bureau of Facilities will continue to be responsible for the construction of the second airport but all economic planning, negotiations with airlines and concessionaires, and all other matters relating to airport operations will be handled by the Bureau of National Capital Airports.

Mr. Lucius W. Burton, who has been serving as Director, Washington National Airport, has been made Acting Director of the new Bureau effective May 11.

AIRWAY PIONEER DIES

Captain Frederick C. Hingsburg, U. S. Coast Guard (Ret.) and "father" of the vast network of air navigation and communications facilities on the Federal Airways System, died at the age of 69 on March 26, 1959 of a heart attack at his home in Orleans, Mass.

In 1926, immediately following the enactment of the Air Commerce Act which created the CAA, Captain Hingsburg was selected to head what was then known as the Airways Division of the Aeronautics Branch, U. S. Department of Commerce. For the next seven years he directed the establishment, maintenance and operation of the Federal Airways System and was in direct charge of the development of aeronautical lights, radio ranges and other aids to air navigation, including the original instrument landing system. Many of the facilities in use today are a direct result of his pioneering efforts.

In addition to the original development of the instrument landing system, Captain Hingsburg supervised the early development of the simultaneous radio range, as well as airport lighting system and approach lighting systems.

He was well known to many thousands of employees of Federal Aviation Agency and aviation officials throughout the United States and many foreign countries.

... Society of Airway Pioneers
News Release

A LAWN STORY MADE SHORT

The men of the FAA Communications Station at Unalakleet, Alaska, recently received by air a most unusual gift—a strip of grass six feet long by one foot wide. The donor? Sympathetic personnel of Radio Station KOL in Seattle.

How did it happen? A reporter for the Anchorage Daily News learned that the Unalakleet Station had received a second-hand powermower from a nearby deactivated satellite station. Nothing unusual about that, he thought, except that Unalakleet has no lawns. Smelling out a humorous story possibility, he wrote his yarn which was published in the Anchorage Daily News under the title: "Whoops! Trouble in Unalakleet--Power Lawnmower, No Lawn."

Station KOL came into the act and sent the Unalakleet men something to mow.

What the reporter (as well as KOL personnel) didn't know is that Unalakleet is going to have lots of grass this summer --in keeping with FAA policy of beautifying its stations for the sake of employee morale and erosion prevention. With 20 hours of sunshine every summer day, the grass (which may be planted by now) will flourish and the powermower will be much in demand.

As a finale to the good-natured episode, the FAA graciously accepted the Seattle sod with a thank-you-note which said that the strip of green will be made the nucleus of a beautiful lawn which the Unalakleet station would have had anyway.

AC PHOTOGRAPHER WINS NATIONAL RECOGNITION



Robert L. Newkirk, official photographer for the Aeronautical Center, recently walked off with two of the top five honors in the annual national contest sponsored by the Professional Photographers Association.

There were five categories for entries. Bob entered two categories and won first prize in both of them.

His photograph of the interior of the lobby at the Aeronautical Center won first prize as the "Best commercial print." His photograph of the front of the same building won top honors in the "creative" exhibit.

Bob could have entered any number of prints in any classification; however, he entered only the two shots. Therefore, his accomplishment in winning the two awards is doubly significant.

Recent issues of the FAA house organ

have shown some of his work illustrating Aeronautical Center stories. His main assignment at the Center is the taking of technical photographs needed in the training and avionics aircraft programs.

A special salute from FLY-BY, Bob. We hope to be featuring your work often.

HAD YOUR POLIO SHOTS?

56% of our population has failed to protect itself with the three-shot immunization against polio.

Millions of Americans are flirting with danger unnecessarily. Are you? The vaccine is readily available. Private physicians are equipped to administer it at small cost--and in many cases, the vaccine can be obtained free.

LENGTH OF SERVICE PINS

When the length of Government service pins were ordered by CAA for this year, the purchase order was placed through the Department of Commerce. In keeping with an administrative decision, the order was placed for just enough pins to supply those employees who would have completed 15, 25, 30, 40 and 50 years of service as of December 31, 1958.

The Washington Incentive Awards Program Office has been receiving requests for pins from employees who have completed 10 and 20 years of service. As indicated above, no pins were ordered for 10, 20, and 45 years of service.

When a decision has been reached either to continue using the present pin or to develop one bearing FAA's name, a sufficient number will be ordered to take care of all eligible employees.

FAA EXPANDS OVERSEAS FLIGHT INSPECTION



THE BEIRUT, LEBANON FIG— (l. to r.) Charles Wallach, Electronic Engineer (on detail to FIG); Loring Craymer, Senior Pilot and Chief of FIG; John Haynes, Pilot; William Croft, Pilot; and Kurt Ahlstrom, Electronic Technician Flight Inspection.

FAA Flight Inspection Services have been activated in Beirut, Lebanon and Frankfurt, Germany. This new type of FAA Overseas Office is known as the Flight Inspection Group (FIG) and is being administered by the Bureau of Flight Standards, assisted by the administrative staff of the Office of International Coordination.

DC-3 Flight Inspection Aircraft, N-17 Beirut and N-28 Frankfurt are assigned to the respective Groups. Their functions are to test and check modern ground installed radio aids to air navigation used by air transportation services. Although most passengers believe their safety rests with the skilled crew and the good quality of the aircraft in which they are flying, safe air travel would be impossible without the complex ground installed radio aids to air navigation.

The Flight Inspection Groups are each provided with an aircraft equipped with the most modern testing devices to insure safe and adequate operations of these ground aids, and are prepared to perform this indispensable and vital duty. In addition the Groups are ready to furnish advice and information to foreign aviation controllers on the development, installation, and use of air navigational equipment, and to assist them in the establishment of their own flight inspection programs.

Members of the Beirut Flight Inspection Group are: Charles Wallach, Loring Craymer, John Haynes, William Croft, and Kurt Ahlstrom. The Frankfurt Group is comprised of: Eugene Lowrance, Charles McDaris, Norman Cannon, John Baird, and Ellen Stokes.

A typical itinerary for the Beirut Group in their N-17 (pictured) is as follows:

- | | |
|-------------|--|
| February 18 | Depart Beirut for Khartoum Via Cairo to Flight Check Khartoum Visual Omni Range. |
| February 25 | Depart Khartoum for Entebbe, Uganda for recertification Flight Check Entebbe Visual Omni Range. |
| March 4 | Depart Entebbe for Nairobi for recertification Flight Check of Nairobi Visual Omni Range. |
| March 8 | Depart Nairobi for Salisbury, Southern Rhodesia to Flight Check the Salisbury Visual Omni Range. |
| March 13 | Depart Salisbury for Nairobi to obtain routine maintenance check of aircraft from East Africa Airways. |
| March 18 | Depart Nairobi for Aden for Flight Check of the Aden Visual Omni Range. |
| March 27 | Depart Aden for Beirut. |

The FAA expanded overseas program may soon bring the same flight inspection services to South American and Far East countries through establishment of FIGs in these areas.

FAA NOW MAKING SAFETY RULES

The Federal Aviation Act of 1958 provided for the transfer to the FAA of the safety rule-making functions previously exercised by the Civil Aeronautics Board. This authority was given to the FAA to centralize responsibility for issuing, administering and enforcing the safety rules and regulations within one agency.

The authority for formulating and recommending to the Administrator the necessary safety regulations is the responsibility of the Bureau of Flight Standards, the Bureau of Air Traffic Management, and the Office of the Civil Air Surgeon.

The Bureau of Flight Standards develops and recommends to the Administrator the rules and regulations required to promote the national security and flight safety of civil aircraft (except those relating to mental and physical fitness of airmen and general air traffic rules).

The Bureau of Air Traffic Management develops and recommends to the Administrator the air traffic rules and regulations considered necessary for the safe and efficient utilization of airspace.

The Office of the Civil Air Surgeon assists the Administrator in establishing the rules and regulations concerning mental and physical fitness of airmen, air traffic controllers and others concerned with flight safety.

The Office of the General Counsel is responsible for the form and legality of safety rules.

In exercising its rule-making functions, the FAA will follow requirements of the Administrative Procedure Act which is designed to assure public participation in the rule-making process. In addition, the FAA intends to distribute notices to persons and organizations who have evidenced interest in the safety rules, in order to secure maximum participation by those concerned or affected by the rules.

OFFICE OF PLANS AND REQUIREMENTS

The Administrator has approved Agency Bulletin 59-26, effective April 26, 1959, prescribing the internal organization structure of the Office of Plans and Requirements. The principal components of the office will be the following:

Office of the Assistant Administrator
Jet-Age Plans Division
Emergency Readiness Division
Planning Division
Analysis Division
Requirements Division

SAFETY NOTE No. 1 -- CASE OF THE TOO-HASTY TURN-AROUND



Two gun-totin' airmen took off to hunt coyotes from the air. While still climbing, following their takeoff run, they suddenly glimpsed one of the critters silently observing their airborne efforts. The pilot, momentarily forgetting his ABC's of flying, whipped the plane around to put his buddy in a better shooting position. The plane stalled and hit the ground. Luckily there were no serious injuries, except pride. A reminder of our continuing role in air safety—for the little guy—as well as the big air carrier. WE MUST EXERT EVERY EFFORT TO ASSURE THAT PILOTS KNOW AND UNDERSTAND THE MANEUVERING LIMITS OF THE PLANES THEY FLY. (First of a new FLY-BY series)

THE ORANGE-PEEL GIANT AT AC



Of all the vast array of electronic training equipment sprouting into the air at the Aeronautical Center, the ARSR-1 (pictured above on left) reigns as king. The orange-peel giant is a completely standard long-range radar, except that it is housed in a larger building having plenty of space for students to practice their laboratory experiments. The student experiment room, with ARSR-1 consoles and video mapper, is pictured on the right.

This "king of surveillance" is a guinea-pig facility. It is inspected, probed, experimented upon, tuned and detuned, deliberately crippled with troubles and restored to normal by FAA's vital groups of electronic technicians serving their internships as "doctors of radar." Training on the new radar facility is provided as a Radar Option Specialty in the 16-week radar course conducted by the Air Navigation Facilities Branch. This is but one of the many specialized courses in the maintenance of air navigation facilities offered by the ANF Branch. During February, there were 750 students in daily attendance in the various classes.

THE STORY OF WASHINGTON'S NEW INTERNATIONAL AIRPORT

Shortly after World War II, it became obvious that Washington National Airport could not long adequately serve the Nation's capital. The post-war expansion in civil aviation made an immediate study imperative. The conclusion was that the solution lay in the development of an additional airport.

In 1950, Congress enacted enabling legislation which authorized the construction and operation of an additional airport, and made an initial appropriation of funds to begin the acquisition of a site. In 1951, a site near Burke, Virginia was selected and a portion of the necessary land was acquired. The selection of this site caused a controversy which was a factor in the delay of any further action toward a second airport until 1957. In August 1957, Congress appropriated funds for initial development of an airport with the condition that no funds were to be expended until a special Presidential report was made, selecting the site to be developed.

CHANTILLY SELECTED

After a full study of all available sites made under the direction of Mr. Elwood R. Quesada, then Special Assistant to the President, a site 23 miles west of Washington, near Chantilly, Virginia, was selected. The announcement of this site was made on January 14, 1958, and since that time, rapid progress has been made in the planning and construction of the airport, with completion scheduled for early 1961.

The site consists of approximately 9,600 acres of land, located in Fairfax and Loudoun Counties, Virginia. The area is presently primarily devoted to agriculture with low population. Growth is anticipated in the areas around the airport, however, just as it has occurred around all major airports in this country. It is not contemplated that further acquisition of land will ever be required. The scope of the land acquisition gives assurance to surrounding communities that they can develop with the minimum possible interference from the airport. Likewise, the airport is assured that community development will not interfere with airport operations inasmuch as the degree of land acquisition provides for 150-foot clearance at any point on the airport boundary.

LAYOUT

The layout of runways consists of parallel N/S runways, 11,500 feet in

length, separated by 6,700 feet, and overlapping 50 percent of their length. Initially, a single E/W runway was provided but subsequent studies of wind conditions at the site dictated a shift of this runway to a WNW/ESE direction. Likewise, it was determined that a sufficient volume of westerly winds would occur to warrant the provision of parallel runways in this direction. The final plan, therefore, provides for parallel WNW/ESE runways, 10,000 feet in length, and separated by 3,000 feet. These runways also overlap by approximately 50 percent of their length.

The terminal area will be located in the area between the parallel N/S runways and within the overlapping of their lengths. A feature of the runway layout is that, with 60 percent of the operations expected to be from south to north, the easterly runway will normally be used for landings and the westerly runway for takeoffs. High capacity is afforded, however, by placing the easterly end of the northernmost WNW/ESE runway in close proximity to the takeoff end of the westerly N/S runway. This gives the pilot and the controller the option to takeoff aircraft simultaneously on both of these runways since the takeoff paths are divergent.

Each of the runways will be provided with high-speed taxiway turnoffs. Because the runways have parallel taxiways adjacent to them, wide radius turns have been provided at the intersections of the high-speed turnoff taxiways and the parallel taxiways. This will permit fast turns to be made onto the parallel taxiways if desired, or if necessary because of inadequate deceleration of the aircraft. The high speed taxiway turnoffs are designed for a maximum runway exit speed of 60 miles per hour.

Apron facilities, not yet finally designed, will incorporate provision for utilities at ramp parking areas. An underground aircraft fuel system is planned to serve each gate position. Although there will be a fuel storage facility on the airport, no decision has been made as to the method of transportation for aircraft fuel to the airport. Various alternate methods are currently under consideration.

SUPER HIGHWAY PLANNED

As a part of the project, a high-speed access highway is being developed to connect the airport with planned highways which will provide rapid access to down-

town Washington. The 17.8 mile highway is planned initially as a 4-lane divided highway, with limited access, but with a right of way of sufficient width to permit a dual-dual express highway to be ultimately developed. The State of Virginia has estimated that the average daily vehicular traffic generated solely by the airport will be 44,000 vehicles per day in 1975. In addition, it is necessary to plan for a high volume of traffic that will be generated by the development of areas between the airport and Washington.

PROVISION FOR HANGARS

No hangars will be constructed as a part of the initial development of the airport. Adequate provision, however, is being made for their location in developing the master plan. It is anticipated that they will either be developed by those who need hangar facilities, or will be developed with Federal funds on the basis of self-amortizing leases which are entered into by prospective tenants. It is contemplated that many associated facilities such as food service, kitchens, motel or hotel, filling station, etc., will be developed under this same alternate pattern. The site is sufficiently large to provide ample areas on which to build all types of needed airport facilities.

OLD AIRPORT TO STAY BUSY

The development of the Washington International Airport will, in no way, minimize the importance of the existing Washington National Airport. That airport will continue to serve a substantial segment of Washington's air traffic. No definite determinations have, as yet, been made as to the division of traffic between the two airports. It is logical, however, to assume that, initially, the longer range flights will be operated from Washington International Airport. As traffic demands increase, and with Washington National Airport expected to continue to operate at its optimum peak capacity, virtually all of the increase demand will have to be accommodated at Washington International Airport.

FORECASTS

The present forecasts of FAA indicate that the number of passengers at Washington National Airport will increase from the 4,500,000 actually arriving and

departing in fiscal year 1958, to an annual level of 6,000,000 passengers, which has been determined to be the optimum passenger capacity of the airport. It is likewise contemplated that the number of passengers using Washington International Airport will reach a total of approximately 4,000,000 in 1965, 6,600,000 in 1970 and nearly 9,000,000 in 1975. With this forecast in mind, all facilities at the airport are being designed so that they can be readily expanded, enlarged or supplemented as the need arises. The contract with the consultants provides that, in addition to plans for initial construction, working drawings and specifications will be provided for facilities required in the ultimate development of the airport. By developing these plans for the ultimate airport, with provision for frequent reappraisal, the airport can be readily expanded whenever or wherever it is needed.

COMMUNITY RELATIONS

Community planning has been a paramount objective in the consideration of each facet of the airport. Constant liaison has been maintained with all of the local, county area, and regional planning agencies that are affected by the airport. The objective is that the airport will be a good neighbor and that both the airport and its adjacent area can develop in complete harmony, one with the other.



Grading underway at Chantilly



A road that will soon go nowhere



The wide open spaces at Chantilly—horse country and fertile farm land

NEW "SMALL AIRPORTS" BOOKLET AVAILABLE

The Federal Aviation Agency has released its newly revised publication "Small Airports." The booklet provides general guidance for those who want to establish a small community airport. Although designed primarily for planning the publicly owned airport, the information is equally applicable to the private airport built to serve noncommercial local flying.

It covers such basic considerations as site selection and design features; construction, including drainage, surfacing and lighting; and offers suggestions on operations and finances as well as tips on maintenance.

The types of airports discussed range from the simple turf strip to the larger airport with paved runway, taxiway and apron with complete supporting facilities.

The "Small Airports" booklet may be purchased for twenty cents from the Superintendent of Documents, Government Printing Office, Washington 25, D.C.

NEW OAKLAND ARTC RISES ON PASTURE



After several years of rumors as to the time and location of the new Oakland Air Route Traffic Control Center, the ground breaking ceremony took place on December 18, 1958 at Fremont, California. The site is 18 miles south of the present center and half way between Oakland and San Jose, California.

The center site is located on what was good pasture land, until a short time ago. As a matter of fact, a number of sad-faced bovines showed up for the ground-breaking ceremony. At Fremont, a six lane freeway cuts across this land and just one quarter mile from this freeway, the new building is literally "mush-rooming."

The building has many unique features. Starting from the ground floor, due to the high water level of the ground, the basement was excavated down only three feet. The floor of the basement is called a membrane floor and is made up of a layer of six inches of gravel, three layers of heavy building paper with a layer of tar between each sheet of building paper and then a standard six inch concrete floor. Around the outside of the building, the ground will slope up to the bottom of the main floor which will be about seven feet above the surface of the surrounding ground. This will give a gentle slope of landscaped area.

The basement under the main control room will be 63 feet by 170 feet. Rising from this floor are 14 giant reinforced concrete columns, each column is 2 feet by 2 feet and 14 feet tall. Running up through these columns are six reinforcing steel rods, each one and a

half inches thick. These rods will tie into the main control room floor when it is laid down. There will be a total of over 40 miles of construction steel in the building, ranging from three eighths of an inch to one and a half inch in diameter. The wall around the main building up to the main floor is 18 inches of reinforced concrete. At the present time, the contractor has poured 2300 yards of concrete and will pour 1200 more by the time the building is finished.

Around two sides of the control room there will be a "blast wall" which will be made up of "Lincoln Logs" of reinforced concrete. Each "log" is made of reinforced concrete 2 feet by 2 feet and 20 feet long. These concrete "logs" will be laid so as to make a wall eight feet high from the control room floor. The "logs" will be fabricated on a specially constructed 40 feet by 60 feet concrete slab laid next to the control room wall. A concrete crew of six men can pour three "logs" a day.

As massive as the building appears, a provision is made for future expansion in that built into the outside walls are several eight feet by ten feet panels that may be easily removed and the building extended in two directions.

The new center, with its abundance of office and control room space, is a considerable improvement over the 20 by 20 feet control room which comprised the original center in the second floor of the Oakland Tower. The original center, manned by Ponton deArce, Bill LaRue, Bud Stock and Howard Firebaugh, has grown to the anticipated 300 personnel who will man the new center.

NEW PROCEDURES FOR ALLOCATING AIRSPACE

Completely new procedures for allocations of airspace to meet civil and military requirements and to provide maximum and more efficient use of the Nation's airspace by all users will become effective May 15.

The changes in the procedures were made following a thorough study and analysis by the Federal Aviation Agency aimed at developing methods of handling airspace matters in line with its responsibilities under the new Federal Aviation Act. The study showed that, to carry out the letter and the spirit of the law, the Administrator, Federal Aviation Agency, must act independently of the Air Coordinating Committee on airspace matters. Consequently, Part 409 of the Regulations of the Federal Aviation Agency was adopted to replace regulations of the Administrator of the former Civil Aeronautics Administration. The new regulation serves to inform all interested parties how they should proceed in making requests for use of the airspace and in submitting their views in connection with airspace cases. It also establishes procedures to conform with provisions of the law requiring that assignments of airspace be made by rules issued in accordance with the Administrative Procedure Act.

The authority over airspace matters is now vested solely with the Federal Aviation Agency.



A SPLENDID VIEW—Headquarters personnel at 1711 New York Avenue have a magnificent view as shown above by the night photo taken from the seventh floor of B building. The view is equally pleasing by day when part of the mall area, as well as the tidal basin, can be seen. The pink of the cherry trees has turned into bright green—as has all of the surrounding landscape. As one nature-loving employee was moved to say, "one can put up with the minor irritations of moving into a building still being renovated when one has a view like this."

BERNARDO ELECTED V-P OF NAEAC

At its annual convention and business session, the National Aviation Education Council (NAEC) elected James V. Bernardo of the Federal Aviation Agency to serve as Vice President of the organization.

The NAEC is an organization which brings together elements of Education, Industry, Labor and Government in an effort to develop a national program in Aviation (or Aerospace) Education leading to an enlightened America in which the influence of flight and related activities is better understood. Membership is from the four areas listed above, with school and college teachers and administrators making up the majority.

Recently appointed Chief of the Examination and Records Division, Bureau of Flight Standards, Jim Bernardo has a long and distinguished record in Aviation Education. He has pioneered many of the nation's outstanding programs in this field and is considered throughout the land as the "Dean" of College Workshops for teachers in aviation education.

"THE AGENCY SHALL HAVE AN OFFICIAL SEAL."

The above words, taken from the Federal Aviation Act of 1958, have not been forgotten. The design of an official FAA seal is well underway.

A proposed seal, designed by FAA's Graphic Arts Section, has been approved by the Administrator. Following prescribed procedures, the Administrator referred the design to the Heraldic Branch of the Department of the Army for their evaluation and recommendation to the Fine Arts Commission.

It is hoped that FAA will have an official seal by July 1.

SAFETY PHILOSOPHY

SAFETY COMES FROM MAN'S MASTERY OF HIS ENVIRONMENT AND OF HIMSELF. IT IS WON BY INDIVIDUAL EFFORT AND COOPERATION. IT CAN BE ACHIEVED ONLY BY INFORMED, ALERT, SKILLFUL PEOPLE WHO RESPECT THEMSELVES AND HAVE A REGARD FOR THE WELFARE OF OTHERS.

... MS-182 Memorandum, quoting from the New York Times

3-D RADAR CONTRACT LET

A contract for the development of a radar system that will automatically provide traffic controllers with the missing element of altitude information in the use of radar for air traffic control was announced on April 27 by FAA.

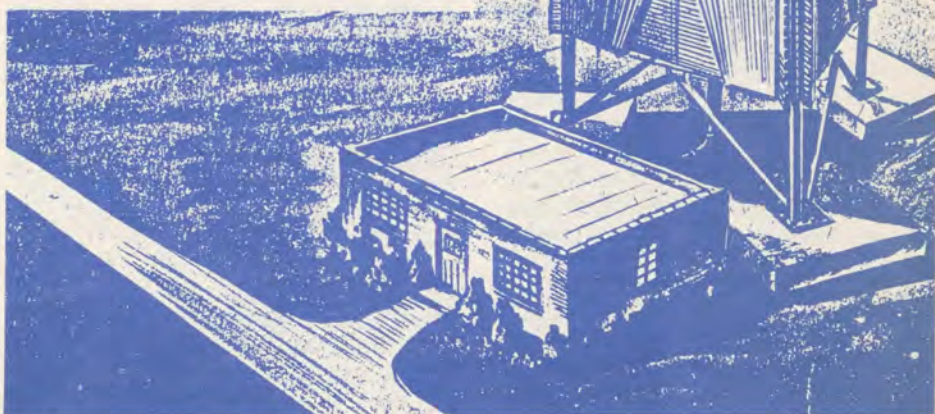
The development contract was for \$1.7 million and was awarded to the W. L. Maxson Corporation of New York, N. Y. by the FAA Bureau of Research and Development.

When developed the system will add altitude (the third dimension) to the present two dimensions, distance and bearing, now provided by basic radar equipment. The key element of the system will be a three sided fixed antenna 150 feet in height and capable of receiving radar energy reflected from aircraft in flight in any one of 100 elevation beams. The Maxson equipment will be designed to provide accurate height information on aircraft up to a range of 50 nautical miles.

The system will be known as Air Height Surveillance Radar (AHSR-1). It will be capable of use with existing airport surveillance radar used in the vectoring of aircraft into and out of terminal areas. Chief function of the equipment will be to provide traffic controllers with information that will enable them to provide vertical separation to aircraft within the range of the equipment as well as serve as a means of more positively identifying all aircraft appearing on the radar scope.

All elements of the Maxson system have been previously tried and proven by the Research and Development Division of that Corporation.

Completion of the prototype system is scheduled for October 1960 at which time it will undergo experimentation, test and evaluation at NAFEC.



ARTIST'S CONCEPTION OF AHSR-1. The 3-sided antenna will be 150 feet high with each of three sides 60 ft. wide.

NATIONAL WINNERS IN MAY-JUNE CONTEST

Editor's note: A nationwide suggestion drive was announced last year for the months of May and June by the Administrator of CAA. Local awards were authorized for the three employees (in each region or major field organization) who submitted the best suggestions—and also to the three supervisors in each region or major field organization who contributed the most to the campaign by stimulating and assisting employees. The names of local winners were forwarded to Washington for consideration for additional national awards.

Until now, the results of the national contest have not been publicized. In view of the wide employee interest in this contest—and in view of the fact that the winning suggestions are at work improving FAA operations—FLY-BY presents the contest results.

The May-June nationwide suggestion drive netted 1302 employee suggestions. Many were approved for local application and cash awards were made, 404 were referred to the Washington Office for possible agency-wide application, 76 of these were approved; 269 rejected; and 59 are still under consideration. Awards totalling \$4725 were approved for the 76 which were adopted agency-wide.

NATIONAL WINNERS--EMPLOYEES

The first national prize of \$150 for the most outstanding suggestion was awarded jointly to Ralph D. Byrnes and Kenneth R. Galbraith of Region One. Together they designed an instrument console for use of controllers in IFR rooms. A high level engineering committee recommended their console as being far superior to those in use in all other regions. With the new console, the radar scope is directly in front of the controller and the control switches are logically arranged on each side and above the radar. The speakers are mounted directly over the controller's head. This enables the controller to see, hear and operate the equipment without moving around. With previous console arrangements, the controller had to move around constantly to reach the different switches, increasing the possibility of throwing the wrong switches. The new console is not only far more convenient to operate, but is extremely easy to repair. It will produce a savings to the Government through better controller morale, less maintenance time, and uniform equipment throughout IFR rooms in all of FAA. A further saving will come through volume procure-

ment of the console which can be shipped to the location prefabricated and installed with minimum effort by the maintenance crew, rather than by an installation crew specially sent to the location.

The original award on the suggestion was \$500. An additional \$75 was awarded in that the suggestion won first prize in the Regional contest, and the national award of \$150 was made on the basis that the suggestion was judged the best submitted on an agency-wide basis.

Second prize in the national contest, \$100, went to Walter M. Quitter of the Aeronautical Center. His suggestion greatly simplifies the present procedure for determining the ground reflection coefficient. This in turn enables rapid determination of variation in coefficient of reflection (from wet to dry ground conditions) and establishes a means for easily determining whether the addition of ground matting for monitor stability is required.

Quitter's awards totalled \$475--\$300 original award; \$75 first prize for suggestions submitted at the Aeronautical Center; and second prize of \$100 in the national contest.

Two suggestions tied for third prize in the national contest; therefore, each suggester was awarded \$50. Haywood A. Stanley, Region Two, and Mrs. Elizabeth Walker, Region Three, were the winners.

Stanley suggested that the Degree Seals mounted on the rear of Goniometers be changed to facilitate a more accurate setting of the VOR courses during flight test. This suggestion will save 15 minutes of flight time each time an error is made by ground personnel in setting the yoke adjustment. Considering all VOR facilities and both commissioning and periodic flight checks, this extra time requirement occurs approximately 300 times a year. At 15 minutes each for 300 facility checks, 75 flight hours at \$100 per hour is saved, or \$7500 annually plus the time saved by the pilot, co-pilot and recorder.

An original award of \$225 was made to Stanley, plus a first prize of \$75 in the regional contest, plus \$50 in the national contest.

Mrs. Walker suggested that Airspace exhibits, now prepared by use of Chart-Pak tapes on Radio Facilities and Sectional Aeronautical Charts, be duplicated by Xerox or Multilith. This would allow their inclusion with the multilith agenda and minutes of Airspace Subcommittee meetings so that all recipients of these documents may also have the benefit of

the graphic presentation. After the suggestion was first tried out, the Regional Administrator received letters of appreciation from Air Transport Association of America, Braniff Airways, Air Line Pilots Association, the Federal Communications Commission, as well as praise throughout the agency. The suggestion has been adopted on an agency-wide basis. The total award was \$375—an original award of \$250, first prize of \$75 in the Region, and \$50 in the national contest.

SUPERVISORS

Each supervisor's contribution was judged by the proportion of his employees who turned in suggestions, the number and quality of the suggestions, and the speed and thoroughness of the supervisor's evaluations.

First prize of \$200 in the national contest went to Vernon A. Qualls of Region Two, who had also won \$100 at the regional level.

William C. Alcorn of the Aeronautical Center received second prize of \$150 in the national contest after having won \$100 first prize at Aeronautical Center.

Third prize of \$100 at the national level was won by Lawrence Smith, a Station Manager in Region Five, who had already won first prize of \$100 in the regional contest.



The winning idea in actual operation

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NATIONAL WINNERS -- EMPLOYEES



Ralph D. Byrnes
First prize winner



Kenneth R. Galbraith
First prize winner



Walter M. Quitter
Second prize winner



Mrs. Elizabeth Walker
Third prize winner



Haywood A. Stanley
Third prize winner

NATIONAL WINNERS -- SUPERVISORS



Vernon A. Qualls
1st prize-Supervisors



William C. Alcorn
2nd prize-Supervisors



Lawrence Smith
3rd prize-Supervisors

FAA TO TEST SAFETY BARRIER FOR CIVIL JETS

Tests to determine whether civil jet transports can be saved by engaging a runway barrier are scheduled by FAA late this spring at NAFEC Airport, Atlantic City. This is the first FAA project to evaluate emergency runway barriers.

Under terms of the \$125,000 contract between the Bureau of Research and Development and the All American Engineering Company, Wilmington, Delaware, a six-months evaluation will be made of "pop-up" engagement mechanisms. To attack the critical problem of engaging the main landing gear, tests will be run on a triggering cable and an air hose mechanism. Both methods throw the arresting cable against the main landing gear after the nose wheel has passed the triggering device.

A full-scale mockup of the landing gear of a jet transport, including stub wings and engine pods, will be built to evaluate the engagement of the arresting barriers. Components in the mockup will have a range of positions to simulate the configurations of both current and future jet airliners.

To accumulate data on a variety of landing and takeoff situations likely to be encountered by jet pilots, the mockup will be operated through approximately 100 barrier engagements.

FAA is investigating the emergency overrun barrier as a safety measure, particularly for airports where jet airlines are landing and taking off.

AGENCY AIRCRAFT NEEDS

The Deputy Administrator has established a committee consisting of the Bureau Directors and Assistant Administrators, under his chairmanship, for the purpose of determining the aircraft requirements of the Agency. The committee is charged with determining necessary Agency uses of aircraft and the performance characteristics and instrumentation which those aircraft should have to meet Agency needs most effectively and economically.

The committee has held one meeting and has established a working group under the chairmanship of Jack Tighe, the new Special Assistant to the Deputy Administrator. At the same time, the Management Analysis Division of the Office of Management Service is undertaking a study of the organizational arrangements and distribution of responsibility best suited to perform Agency functions relating to the acquisition, operation, maintenance, and modification of aircraft.

TRAFFIC AHEAD -- TOWER CROSSING RUNWAY!



ATLANTIC CITY: This strange traffic situation developed on runway 8-26 at the National Aviation Facilities Experimental Center in Atlantic City, where a five-story control tower is being moved half a mile to a new location. Workman at extreme left signals C-119 that all is clear while 1,300-ton structure inches forward on its perilous passage across the field. Engineers estimate journey will be completed in 12 days. When settled on its new foundation, tower will overlook dual 12,000-foot parallel runways to be constructed at Bureau of Research and Development's field facility.

FAA INSPECTORS TO TAKE JET TRAINING

FAA air carrier inspectors will be given flight and ground training on KC-135 jet aircraft at the Air Force school, Merced, California. This training will further enhance the FAA's ability to meet the rapidly increasing schedule for certification of air carrier pilots operating commercial jet aircraft.

Under an agreement with the Air Force, 13 Bureau of Flight Standards air carrier operations inspectors will take the pilot-ing course. These inspectors are assigned responsibilities for certificating the proficiency of pilots on airlines now operating jet powered aircraft or which have them on order.

The 11-week course will encompass academic courses and KC-135 flight simulator training. A complete course of flight training will be accomplished. A team of two FAA inspectors will be assigned to each class. Other inspectors will follow in successive classes at two-week intervals. The first two FAA pilots started training on April 29.

HENRY METZ LEAVES GOVERNMENT SERVICE

Henry I. Metz resigned from Government service upon completing 24 years in April 1959.

In March 1935 he joined the Bureau of Air Commerce in Washington where he handled the development of airway radio markers and instrument landing systems. He was transferred to Indianapolis in 1939 as project engineer for the installation and testing of the first CAA consolidated ILS. From 1942 to 1946 Mr. Metz was in charge of the Indianapolis laboratories. In March 1947, he was appointed superintendent of communications for CAA's second Region. In 1950 he returned to Washington headquarters of CAA and became successively Chief of Maintenance Engineering Division, Deputy Chief of Airways Engineering Division, and from 1956 to 1959, he was Chief of Navigational Aids Engineering Division. He was one of the U. S. delegates to the ICAO international meeting of February 1959 where decisions were made on the world standard for short distance navigation for the next 15 years.