



OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY

Volume 2 No. 1

January 1960

Message To All Employees

The time has come again for us to think beyond ourselves and consider the needs of others. On behalf of the Federal Aviation Agency, I have accepted the Chairmanship of the Federal Service Joint Crusade and the National Health Agencies Campaign. The joint drive will be conducted in the Continental United States during a six-week period between January 1 and April 30. The Washington area campaign will take place from March 1 to April 15, and in other areas the precise time will depend on local option.

This is a most important campaign, approved and strongly endorsed by the President. The following research, education, and community welfare agencies solicit our support in the National Health

Agencies Campaign:

American Cancer Society, Inc.
American Heart Association, Inc.
Arthritis and Rheumatism Foundation
Muscular Dystrophy Association of America, Inc.
National Society for Crippled Children and Adults, Inc.
National Society for the Prevention of Blindness
National Association for Mental Health, Inc.
National Multiple Sclerosis Society
United Cerebral Palsy Associations, Inc.

The agencies which make up the Joint Crusade are:

Crusade for Freedom
The American Korean Foundation
CARE, Inc.

The magnificent accomplishments of these agencies make them most worthy of our generous support. I call upon each of you to help conduct this joint drive vigorously, conscientiously and I hope, successfully.

E. R. QUESADA
Administrator

Research and Development

Reorganized Within FAA

Administrator Quesada has announced an extensive reorganization of the FAA's Bureau of Research and Development. "The organizational realignment," he said, "will strengthen our capability for a broader continuing research and development program."

James L. Anast, who was named to the post of Director of the Bureau of Research and Development last September, pointed out that the reorganization would "...facilitate the timely introduction of the modernization of the airways planned over two years ago."

In place of the six previous divisions plus NAFEC at Atlantic City, N. J., the new structure calls for 10 divisions with five program divisions and five staff divisions. Program divisions have as their main function the research or the development of new FAA systems. Staff divisions are primarily concerned with advising and assisting the director of the bureau.

Three new program divisions were created. One of these, the Research Division, was formed by combining the former Systems Analysis and Operations Analysis Divisions. The Research Division will carry out analyses, studies, and technique developments in order to provide bases for specifying new systems to meet future requirements.

The Systems Engineering Division is designed to permit full time activity such as that carried out by the Curtis System Engineering Team and the Systems Engineering Team of the FAA's Bureau of Research and Development. This division will be occupied with over-all system design, and the carrying out of the details of logistics planning and resources planning required in order to insure smooth and efficient transfer from de-

velopment, test, production and operation.

The Air Defense Integration Division was formerly a branch under the Systems Analysis Division. It was raised to division status in view of the importance of integration with Air Defense facilities.

Names of the staff divisions are: Plans, Operations, Contracts, Budget and Administrative Services. Program divisions are as follows: Research, Test and Experimentation, Systems Engineering, Air Defense Integration, and Development. Division chiefs named to date include Albert Brown, Plans Division; John A. Donahue, Contracts Division; Dr. Richard H. Hordan, Research Division; James H. Mollenauer, Air Defense Integration; and William E. Jackson, Development Division.

Hans Giesecke, formerly chief of the Systems Analysis Division was named chief scientist of the Test and Experimentation Division.

The Bureau time schedule, Mr. Anast explained, calls for systematic introduction of automation to the management of air traffic by 1963. Major aspects of the research and development program include: the joint use of air defense facilities for air traffic control as well as military operations, automatic communication between pilots and the ground for routine air traffic control, a cooperative project involving FAA, the Weather Bureau and the Air Force for the introduction of automation in the gathering and distributing of weather information and the development of an all-weather landing system. Coupled with the last project is an accelerated program for the development of procedures and equipment for dual runway IFR operations.

Responsibilities Realigned for FAA Field Operations

Realignment of responsibilities for FAA field operations as the first step in strengthening the Agency's organization in the field became effective January 1, 1960. The announcement was made December 15 by Administrator Quesada.

Under the new organization, Washington Bureaus and Offices with program responsibilities will exercise direct supervision over all program activities in the field except in Alaska and Hawaii.

The position of Regional Administrator is abolished under the reorganization. Six new posts of Regional Manager will be established to carry out the Administrative and support functions required by the program Divisions in the field.

Regional Managers in Alaska and Hawaii will be charged with full responsibility for program execution as well as supporting services because of the special conditions existing in those Regions. They will exercise their responsibilities subject to the policy and technical guidance of the appropriate Washington offices.

The Washington Bureaus and Offices being given new direct authority in the Regions include: The Bureau of Flight Standards, Bureau of Air Traffic Management, Bureau of Facilities and Material and the Office of the Civil Air Surgeon.

No changes are being made in the number of Regions or the location of Regional offices. However, the structure of the field organization will remain under continuing study.

Mr. Quesada said that under the old organization there was often uncertainty as to who was responsible for results in the field because both the Regional Administrators and the Bureau and Office Directors in Washington were held accountable for field operations.

"In the future," Mr. Quesada said, "I shall be able to hold a single official responsible for the execution of each of the Agency's programs." He added that, "Studies recently completed by the FAA

confirmed the need for prompt clarification of Washington-Regional relationships."

The reorganization will substantially speed up Agency operations outside Washington. Greater uniformity in the application of nationwide policies and programs also will result from the increased supervisory authority placed in the Washington Bureaus and program offices.

Medical Research Center Slated For Oklahoma City

Plans to locate a Civil Aeromedical Research Center in Oklahoma City at the Aeronautical Center have been announced. Negotiations for construction of the building will be initiated with the Oklahoma City Airport Trust when Agency plans for the building are completed. Plans call for completion of the new facilities by June 30, 1961. In the meantime, personnel will be housed in FAA Aeronautical Center facilities.

The work of the Research Center, which will be carried out under the direction of the FAA's Civil Air Surgeon, has been planned to meet both existing and anticipated aeromedical problems. The basic objective of the new center will be to develop the significant scientific data necessary to further promote air safety for pilots, aircrews and passengers. Dr. James L. Goddard, FAA Civil Air Surgeon said, "The operation of modern aircraft poses problems involving the biological capabilities of the human body. The research program will permit greater attention to the human factors aspects of air operations, long recognized as an important facet of flight safety."

The research will stress the development of the advance medical data necessary to meet anticipated operational problems as civil air operations move into higher altitudes and greater speeds. The research program will permit the Agency to carry out more fully its responsibilities to establish proper standards for public safety.

In tackling the problems, teams of scientists in the various medical and related fields and in engineering will combine their skills to do research in many areas. Included in this research would be studies of oxygen systems for high altitude aircraft, escape and survival procedures, effects of aging on the proficiency of airmen, the prevention of injuries by improved design of aircraft interiors, and the development of psychological tests to aid in selection of air traffic controllers.

The results of investigations in these and other areas will also contribute to the entire field of aviation medicine.

The research projects will be carried out by three of the five branches of the Aeromedical Research Center: The Biophysics Branch, Aviation Psychology Branch and the Environmental Physiology Branch.

A fourth branch, the Clinical Examinations Branch, will perform detailed diagnostic medical evaluations of applicants for airmen medical certificates who have medical conditions whose significance cannot be determined by standard medical examinations. A similar examining unit is already in existence in Washington, D. C., and a third is planned for the FAA Regional Office at Los Angeles.

The employee Health Branch will provide various medical services for personnel at the FAA's Aeronautical Center.

Airport Program Announced For Fiscal Year 1960

A list of 288 airport construction projects programmed for the United States and Territories under the fiscal year 1960 Federal Aid Airport Program has been announced by the Administrator.

The announced program will involve the expenditure of \$57,076,702 in Federal funds which will be matched on a 50-50 basis by local project sponsors. The allocation of funds was based on \$63,000,000 made available by the Congress under a two year extension of the Federal Airport Act. An equal sum will be available for airport work in fiscal year 1961 beginning July 1, 1960.

Mr. Quesada said, "In formulating the fiscal 1960 program, the FAA adhered closely to an announced policy of allocating funds to safety projects. Funds were allocated when local sponsor funds were assured; in cases where airport sites were selected and approved; for land acquisition to meet existing needs, and for runway development made necessary by traffic volume and wind coverage."

Of the \$57,076,702 programmed, 38 percent representing \$21,684,604 was allocated for runway construction; 34.1 percent or \$19,474,139 for taxiways and aprons; 16.7 percent or \$9,560,751 for land acquisition. The remainder of the available Federal funds were allocated for lighting, marking, construction of control towers, clearing and obstruction removal, fencing, roads, and buildings other than control towers.

FLY-BY

Editor

Thomas J. Wholey

The official employee publication of the Federal Aviation Agency. Published monthly by the Personnel Relations Branch. Send all materials for publication to: Editor, Fly-By, PT-26, Federal Aviation Agency, Washington 25, D. C. Telephone: ST-3-2100 Ext. 3459.

Decentralization Of Agency Functions

Recent newspaper accounts and survey activities within the Agency have caused concern among employees in the Washington headquarters that a large-scale program of moving activities out of Washington is under way. In order to understand the FAA policy in this matter and the implementing steps which are now being taken, the following facts are provided:

It is the policy of the Administrator that the Washington headquarters of FAA shall consist insofar as practicable of employees concerned with the over-all planning, direction, and coordination of the affairs of the Agency. Activities which do not fall under these categories will not be established in Washington and, in those instances in which they are now being carried on in the headquarters office, they will be removed to appropriate field locations.

There is no plan to reduce the over-all number of employees in Washington headquarters. On December 31, 1958, when the FAA assumed its full responsibilities under the Federal Aviation Act, there were about 2700 authorized positions in the Washington headquarters. As a result of the enlarged responsibilities of the Agency under the Federal Aviation Act, this staffing was permitted to increase to 3000 positions during the 1960 fiscal year, or an increase of 300 positions. The Administrator has approved a ceiling of 3100 positions for the 1961 fiscal year, which will actually permit a slight increase in Washington staff. Removals of activities from Washington will be on a highly selective basis for the purpose of assuring that the 3100 ceiling will be able to accommodate the growing number of employees required for the over-all direction of the Agency.

As of December 2, 1959, the only activity which has been specifically identified for transfer out of Washington is that of the Examination and Records Division of the Bureau of Flight Standards. This transfer has been approved because it has been found that the functions involved can be performed in Oklahoma City with equal efficiency and less cost. The move will affect 112 employees.

It is realized that in some cases the necessary transfer of functions out of Washington may result in hardships to individual employees. It is the objective of the Agency to minimize the problems of the individual employees by adhering to the following policies:

- The individuals affected will be notified immediately when the Administrator

has decided to move a function out of Washington.

- In most cases the employees will be offered the opportunity to transfer to the new location and FAA will finance the cost of moving the employee, his family and his household effects to the extent permitted.

- A serious effort will be made to place all employees not desiring to leave Washington in other positions in the Washington office insofar as jobs are available for which they are qualified.

- Sufficient time will be allowed between the announcement of the move and the actual date of the transfer so that employees will have a reasonable period in which to make their decisions and arrange their affairs.

Deputy Administrator Pyle Participates in Dedication of Colombia Airport

Deputy Administrator James T. Pyle, accompanied by Theodore C. Uebel of the FAA's Office of International Coordination in the New York Regional Office, participated in the recent dedication of the new jet age international airport in Bogota, Colombia.

The giant new Bogota International Airport was built by Colombia, with the assistance of the ICA and the FAA Civil Aviation Assistance Group in that country. Funds were provided by ICA. The FAA provided the technical personnel to staff the office. The Agency has also assisted in a program to train engineers and other technical personnel.

Pietro Vigna, one of FAA's airport engineers worked with the Colombian government to assist with the planning, design and construction of the airport.

Built to conform to ICAO and FAA standards, the new international airport is rated one of the largest and finest in the Western hemisphere. Located nine miles northwest of the City of Bogota, it is designed to accommodate all types of commercial aircraft including the turbo-prop and turbo-jet aircraft. The new airport replaces the present Bogota-Techo airport which did not meet the ICAO standards. The runway is 12,500 feet long and 150 feet wide, the taxiways are 100 feet. The terminal consists of a 10-story concrete building which includes the control tower.

Mr. Pyle stopped off at Caracas, Venezuela, en route to Colombia, at the request of the government to discuss their flight safety program, and to assist in selecting VOR sites.

Proposed Personnel Legislation By FAA

In a memorandum to the Heads of all Offices, Washington and Field, Mr. Pyle requested that all FAA personnel be informed as to the current status of the Agency's proposed personnel legislation.

Up until early last month, information had not been released because current discussions could well have resulted in substantial changes in the Agency's thinking, and publication of findings or recommendations would be premature. However, recent statements in the press, unfortunately not accurate in some respects, have made it desirable to let you know the general direction of Agency thinking, and the basic principles on which current proposals are based.

- In keeping with expressed Congressional intent, FAA is seeking to meet its personnel needs without changing the civilian status of the Agency or its employees. There is no intention to "militarize" FAA employees in any sense, at any time.

- FAA employees will stay within the basic civil service merit system. This means that they will keep their Government civilian career status, rights, and benefits.

- If they are to be available to FAA to carry out defense missions, essential FAA employees cannot maintain any conflicting obligations. Therefore, the Agency plans to propose that all essential employees be required to relinquish membership in military reserve organizations. At the same time, the Agency is aware of employee equities in this regard and takes the position that every effort should be made to provide appropriate compensation for loss of military reserve benefits.

- The required response to defense needs also demands that FAA demonstrate that its essential employees will be on the job whenever needed. For this reason, current proposals would place some restriction on the right of essential FAA employees to resign or be willfully absent from duty in periods of emergency or war.

- In accordance with the mandate of Congress and our continuing interest in the welfare of our employees, we are exploring the need for changes in pay and other employment benefits.

New Regulations Affect Air Carrier Training Programs, Copilot Qualifications and Copilot Proficiency Checks

New regulations, now being established by the FAA, will affect Air Carrier (airline) Training programs, the qualification of copilots, and copilot proficiency checks.

Mr. Quesada said the new rules will bring "a greater measure of safety for the flying public." He noted that the new ruling "may result in some additional costs to the air carriers," but added, "it appears that such costs are far outweighed by the considerations of safety involved."

Applying to all U. S. air carriers, the new regulations, in brief, require that:

- Each air carrier must obtain approval of its training program by the FAA.

- More comprehensive training must be given to air carrier copilots.

- Proficiency checks must be given to air carrier copilots who serve as second in command by the FAA or by a designated check pilot of the air carrier. These proficiency checks must be given once each 12 months.

The new regulations will become effective January 1, 1961. The interval will permit the air carriers sufficient time to obtain approval of their training programs and to qualify their copilots under the new training and proficiency requirements. The air carriers are required to submit their training programs to the FAA for approval by May 1, 1960.

Here is further detailed background information.

Air Carrier Training Programs--Air carriers were previously given full control over their training program subject to inspection by the FAA. Under this plan, FAA officials said, some carriers prepared and administered excellent training programs. Others, however, in the opinion of the FAA, did not achieve the minimum safety objectives sought by the training requirements of the Civil Air Regulations.

Accordingly, the new regulations specify each air carrier is required to obtain FAA approval of its training program and any subsequent changes.

The new regulations do not alter the responsibility which each air carrier has at present for the preparation and administration of its training program.

Qualification of Copilots--Prior to these new regulations, the air carriers were required to certify that their copilots had received instruction during initial flight training in landings and take-offs and emergency procedures in each type aircraft they operated. This stipulation still holds.

The new regulations require additional initial training and practice in the following maneuvers and procedures in each type of airplane to be flown by the copilot in scheduled operations:

Taxiing; takeoffs and landings; climbs and climbing turns; slow flight; approach to stall; engine shutdown and restart; takeoff and landing with simulated engine failure; conduct of flight under simulated instrument conditions, including instrument approach at least down to circling approach minimum and missed approach procedures.

The copilot must also receive initial training and be proficient in the conduct of flight under simulated instrument conditions, utilizing all types of navigational facilities and the letdown procedures used in normal operations. Except for those approach procedures for which the lowest minimums are approved, all other letdown procedures may be given in a synthetic trainer (simulator) which contains the radio equipment and instruments necessary to simulate other navigational and letdown procedures approved for use by the air carrier.

Proficiency Checks for Copilots--The FAA said the previous system in which the pilot in command checks the copilot during daily operations is not adequate for assuring continued copilot proficiency.

Copilots must (under the new ruling) be given proficiency checks by an FAA or designated company check pilot. This flight check shall include a proficiency demonstration in flight maneuvers plus an oral or written equipment examination. Copilots will be given this proficiency flight check once every 12 months.

Qualifications for "Second in Command" in Three Pilot Crews--In the case of a three-pilot crew, previous regulations required the "second in command" to have the same airline transport pilot certificate and the rating for the aircraft held by the pilot in command. The new regulation adds to this requirement the stipulation that the second pilot in command must fulfill the same initial training requirements required of the pilot in command.

Proficiency Checks for Second in Command in Crews of Three or More Pilots--The new regulations require that proficiency checks shall be given by an FAA or company-designated check pilot. These proficiency checks must be the same as those given the pilot in command and must be given once every 12 months.

ARTC Building Accepted By FAA at Fremont, Calif.

The new Air Traffic Control Center Building that has been under construction for the past 10 months at Fremont, Calif. was officially accepted by the FAA at ceremonies held Nov. 17, 1959.

The building, the first of its kind in the West, is now ready for the installation of \$2,000,000 worth of electronic equipment necessary to control all air traffic in Northern California and half way across the Pacific. When the new facility is commissioned late this year, it will replace the present center located at Oakland International Airport, Oakland, Calif.

Participating in the acceptance ceremonies were representatives from the FAA, General Services Administration, J. H. Pomeroy Company, builders and owners of the structure, and civic officials from Fremont and the surrounding area. On hand to accept the gold key to the building from the Mayor of the City of Fremont, and to give the main acceptance address was Joseph H. Tippetts, Director, Bureau of Facilities. Mr. Tippetts in turn presented the key to Walter P. Plett, Regional Administrator of the Fourth Region. Plans call for the key, properly inscribed, to be mounted in the wall of the lobby of the building.

Following the key presentation and ribbon-cutting ceremonies, the official participants were escorted through the building and shown where the control equipment will be installed.

The location, design and construction of the building were in line with established criteria of the FAA calling for such structures to be out of a potential target area; fire and earthquake proof, and equipped with a washdown system capable of protecting the structure from nuclear fall-out radiation.

Ground was broken for the three-story structure on December 18, 1958. Construction actually started January 1, 1959. General Services Administration represented the government on behalf of the FAA in all negotiations with the contractor and owner. The building is now owned by the Fremont Corporation and will be leased to FAA for a 10 year period. FAA has the option to purchase the building at any time.

When the new center is commissioned this year, it will be linked with others on the West Coast located at Los Angeles and Seattle, all of which are a part of the nation-wide network of FAA control stations located in 32 cities. Total personnel at the new center will number about 400, of whom 300 will be traffic controllers.

AGE LIMIT OF 60 SET FOR AIRLINE PILOTS

Questions and Answers Describe FAA's Stand

On December 5 the FAA announced an amendment to the Civil Air Regulations to require that "No individual who has reached his 60th birthday shall be utilized or serve as a pilot on any aircraft while engaged in air carrier operations." The regulation will take effect March 15, 1960 and will then have immediate effect on some 40 airline pilots who are 60 years old or older. In the next eight years, approximately 250 airline pilots will have reached the age of 60.

The FAA is acting purely in the public interest from the standpoint of flying safety. Because of the increased public attention focused on the background which led the FAA to issue the regulation, the Agency's Office of Public Affairs has issued pertinent questions and answers on the issue. FLY-BY presents these questions and answers in the belief that Agency employees should be well informed in matters such as these.

Q. What prompted FAA to propose the maximum age limit for airline pilots?

A. Consideration for public safety. (This is consistent with the specific responsibility assigned to the FAA Administrator by Congress.) In the Federal Aviation Act of 1958, which created this Agency, Congress provided specific guidelines to be followed by the Administrator in prescribing standards, rules and regulations affecting air carriers. Congress requires that "the Administrator shall give full consideration to the duty resting upon air carriers to perform their services with the highest possible degree of safety in the public interest . . ." and "The Administrator shall exercise and perform his powers and duties under this Act in such manner as will best tend to reduce or eliminate the possibility of, or recurrence of, accidents. . ."

Q. Has it been demonstrated that age is a factor in the occurrence of air carrier accidents?

A. No. Fortunately there are very few air carrier accidents. There are also, at present, very few air carrier pilots in the older age brackets--around 40 of them 60 or over, for example. As a consequence, it would take quite a number of accidents before we would have proof of a relationship to the age of the pilots involved.

Q. Then, what basis do you have for limiting the age of air carrier pilots?

A. The general knowledge of what happens to all humans as they grow older has been applied to a specific group of humans--air carrier pilots. From the

general knowledge of the processes of aging it is apparent that the functions which make up the skills required of airline pilots begin to deteriorate well before the age of 60.

Q. How many pilots will be affected by the establishment of a maximum age of 60?

A. At present there are approximately 40 air carrier pilots aged 60 or over. The number who will be in this age range is increasing steadily, however. For example, it is estimated that in 8 more years there would be 250 active air carrier pilots over 60. Many others over 60 would have retired voluntarily or for other reasons would no longer be serving as air carrier pilots. Eight years ago there were none who had reached age 60. This is a reflection of the age of the air carrier industry itself--pilots have grown old with it.

Q. Isn't it true that persons vary considerably in the retention of their skills as they grow older? Why can't you individualize and eliminate only those who have been significantly affected by the aging process?

A. Everyone ages. The individual functions may decline at a different rate in the same individual. Since we are talking about changes in a multiplicity of individual functions, psychological and physiological, which collectively contribute to the skills of piloting aircraft safely, it is apparent that a precise assessment of the combined effect of multiple deteriorations would be difficult. As a matter of fact, in the present state of knowledge, the extent and significance of individual impairments cannot be measured with any degree of accuracy.

Q. It appears that because of the lack of knowledge necessary to individualize, you have decided on an arbitrary age cut-off. Is there a precedent for such action by the Federal government?

A. To our knowledge the Federal government has not previously set a maximum age limit for any group in private industry. Because of the safety considerations involved in air carrier operations, it is not surprising that the FAA is currently involved. It is interesting to note that of the large European airlines queried one has a compulsory retirement age of 60 for its pilots; the

others compel pilots to retire at age 55.

Q. Does the recent introduction of jet aircraft add to the urgency of establishing a maximum age limit?

A. To a certain extent, yes. Because of the seniority system which exists in the air carrier industry the older more senior pilots have first choice of the newer aircraft and the added benefits and prestige associated with flying them. As a consequence, the average age of jet pilots today is considerably higher than the average age of all airline pilots. When you consider the faster speeds, higher altitudes and greater numbers of passengers carried per plane, it is apparent that the operation of these planes is more critical and there is responsibility for an increased number of lives in any given flight.

Q. Will it ever be possible to individually select pilots who will be safe to continue beyond age 60?

A. Not in the immediate future. For example, with the state of knowledge at present, despite millions being spent in medical research, the prediction of incapacity from heart disease in an apparently healthy individual is almost always impossible. Such incapacity occurs with a greatly increased frequency beyond the age of 40. One large industrial organization, which has an outstanding medical department and preventive medicine program for its employees, found that 85 per cent of the workers suddenly incapacitated by heart attacks had been found free of any indication of such a condition in the preceding medical examination accomplished within six months to a year before the attack.

We hope that, as medical knowledge advances, ability to select on an individual basis will improve to the point where a flat age cut-off would not be necessary. Since the creation of the FAA, considerable attention has been given to the development of a medical program which will meet the needs of the Agency's overall safety program. As knowledge which can be applied to pilots is developed by the Office of the Civil Air Surgeon and by medical researchers generally, it will be utilized in support of air safety. Studies of the effects of aging as applied to pilots have been given high priority.

Far North FAA Couple Relate How Help Can Bring Sight to Eighty-Two Blind in Alaska

The following article appeared in the November issue of the Fifth Region's house organ, MUKLUK. It is reprinted here as a matter of interest to all FAAers.

Eighty-two Alaskans are waiting in darkness for sight which may be brought to them by the Eye, Ear, Nose and Throat Foundation, of which Norman Potosky, FAA, is president and Romayne Potosky, Federal Electric, is Secretary.

Sight can be restored to any one of these four score Alaskans through the proven technique of transplanting the cornea of a donated eye within 48 hours after the death of the donor.

"The need now is for donors," Romayne Potosky, for years an AOS with the CAA in Alaska, said recently. "The operation has been widely successful, the cornea of any healthy eye is suitable, and the requirement to bring the patient and the eye speedily together is now possible, thanks to air transportation. This matter of transportation is especially important in Alaska, but we have that solved now. We can get suitable eye corneas from as far away as New York to the operating table in Anchorage within 24 hours of the death of a donor. Our big job today is to inform people throughout Alaska of this tremendous blessing they can make possible merely by telling the EENT that they will be donors--to encourage the living to say now: 'Immediately after my death, you may have my eyes.' Except life itself, there is no more precious thing they can give, than the gift of sight."

A dramatic example of eye bank operation came recently when Douglas McKay, late Secretary of the Interior, saw a pic-

ture of Mrs. Eisenhower with a young boy whose sight had been restored by a cornea transplant. He was impressed and agreed with his wife that their eyes might be so used after death. Half a year later, he died at Salem, Oregon, and his eyes were rushed to the Eye Bank in Portland where they were transplanted, one to each of two waiting patients.

While the cornea of the eye cannot be preserved, or "kept in the bank" for longer than 48 hours, many other needs for eyes are included in the Eye Bank operation. In research laboratories of the Eye Bank for Sight Restoration in New York, with which the Alaska bank is affiliated, eye diseases are studied and some have been conquered through use of donated eyes.

"Without this research, transplanting and restoration of sight would have been impossible," Potosky says. "Now, thanks to research, surgery and fast transportation, we can quite literally give sight to the blind. Here in Anchorage we maintain a 24-hour-a-day telephone service. Surgeons, the hospital, patients and the Eye Bank are ready for immediate action whenever it is possible to obtain eye corneas. Of course, it would be far better not to have to depend on the eye bank in New York. And so, we welcome any who will make gifts of their eyes--not will them because this introduces delaying legal matters--to someone who otherwise must go through life blind."

The age of a donor does not matter so long as the cornea is healthy. There is no cost involved. Any who are interested in becoming donors can get additional detailed information from Norman Potosky, AN-76.

There is a happy ending to this story which appeared in the same issue of MUKLUK as a bulletin. Here is that bulletin.

As this story was being prepared for the Mukluk, the hoped-for event took place, and the cornea of the eye of a donor in New York became available to the EENT of Anchorage. The Foundation arranged with Northwest to bring it on the non-stop flight from New York, the patient was prepared and the surgeon, Dr. Milo H. Fritz, was in readiness.

The operation was performed at 8 a.m. October 17. On the 29th, the bandages were removed, and a mother could see again!

Now, there are eighty-one.

New Computer Installed At Indianapolis ARTC

The FAA took another step toward automation in air traffic control when it tied the computer at the Indianapolis Air Route Traffic Control Center with similar equipment in Washington, D. C., Cleveland and Pittsburgh. An IBM 650 RAMAC, it is the first air traffic computer to automatically exchange information with other FAA traffic control centers equipped with computers.

In going into full operational use, the Indianapolis ARTC Center will be the fourth link in a chain of computer integrated FAA centers. Such centers are planned to provide automation in the air traffic control of high traffic density areas over the northeastern United States.

Other computer systems at the Pittsburgh, Washington and Cleveland FAA centers became operational recently. Computers at the New York and Boston centers at present lack automatic transmitting capability. However, work is underway to link this feature into the computer systems installed at these two centers. When it is completed, adjacent centers within the network will have the ability to "talk" to each other, by automatically receiving and transmitting the vital flight data that the human controller must now prepare and relay manually.

According to David Thomas, Director of FAA's Bureau of Air Traffic Management, the Agency plans to install electronic computers in some 30 centers throughout the country. Western centers are scheduled to receive theirs within the next two years. The central section of the nation will become computer-equipped by the end of 1965.

Mr. Thomas said that computers will assist, but not replace, the human air traffic controller in the business of providing safe control of air traffic over the nation's 128,000 miles of airways.

The RAMAC unit integrates incoming information with information already stored in its magnetic disk memory files. The stored facts include geographical locations of airways and radio beacons, reference tables, and a complete record of flight plans, including those awaiting processing. New data is added, changes are made, and the updated strips to be forwarded to adjacent centers are automatically entered into the system by a special keyboard and punched paper tape for teletype transmission. Outgoing messages are also monitored by the new 650 unit.



Lindy Loudermilk (right) shown signing Alaska's Regional Manager Allen D. Hulen for the eye bank has signed 100 who agree to donate.

Health Benefits Program Shifts Into High Gear

The task of putting the Federal Employees Health Benefits Program into operation by July is one of the biggest that has ever faced the Civil Service Commission. With some 1,800,000 employees and about 2,200,000 employee dependents expected to be enrolled, it will be the largest employer-sponsored health benefits program in the world. It will also be one of the most complex because of the variety of benefits plans that will be offered.

To meet the July 1960 deadline for establishing the program, the Commission has set up this time-table of approximate target dates:

- By March 1--Complete contract negotiations for the Government-wide service benefits plan and the Government-wide indemnity benefits plan. Decide which non-Government-wide plans, including those offered by Federal employee organizations, are eligible to participate in the program.

- By May 1--Make available to agencies for distribution to employees detailed informational literature on the benefits plans that will be available.

- By June 1--Begin enrollment of employees eligible for the program.

The program will go into effect for employees on the first day of their first pay period after July 1.

The Bureau of Retirement and Insurance is now involved in a great deal of activity looking toward meeting these self-imposed target dates. Exploratory meetings are now being held with representatives of Blue Cross and Blue Shield. The Blue Cross-Blue Shield national organizations, with their local affiliates, will be the carriers of the Government-wide service benefits plan and will enter into a contract with the Civil Service Commission for this purpose.

Contract negotiations with the insurance company, which will write the indemnity benefits plan, began last month. The Commission hopes to select the carrier of this plan shortly.

Aetna Life Insurance Co. of Hartford, Conn., has been selected as the carrier of the indemnity benefit plan for the FEHB program. Under the Act, the carrier must reinsure with other health insurance companies eligible to participate in the program.

The Bureau is also moving as rapidly as possible in considering health benefits plans of Federal employee organizations. About 30 employee groups have

already applied to participate in the program. By the December 31, 1959 deadline for these groups to apply, it was expected that similar requests from additional organizations would be received. In connection with these plans the Bureau will soon schedule meetings in Washington, D. C., with official representatives of the employee organizations to keep them up to date on the progress being made and to discuss problems that may arise in working out the program.

These meetings will be in addition to those that are being held almost weekly with the Health Benefits Advisory Committee appointed by the Commission to advise it on health benefit matters of concern to employees. The group represents all employees, both organized and unorganized.

The Bureau also expects to meet the March 1 deadline in approving any comprehensive medical plans that may be submitted. These are either group-practice prepayment plans or individual-practice prepayment plans. More than 75 of these associations have been asked to contact the Bureau, if they are interested in participating in the health benefits program.

Progress is also being made in other areas which relate to the target dates. Plans are shaping up for providing Federal employees with detailed information about the benefits plans that they may choose from. This information will be worked up in a form which will permit you to compare features of the various plans in order to select the one which best fits your own particular needs. This information will be distributed on an individual basis.

Early this month, representatives from the Commission's 11 regional offices met in Washington for a two-week training course on the health benefits program. These representatives then returned to their regions where they made themselves available to assist agency field establishments.

The June 1 target date for beginning employee enrollment under the health benefits program will be revised to an earlier date if it is at all possible. In connection with this and other target dates, one of the biggest jobs underway is writing regulations to govern the operation of the health program.

Eligible employees who elect to participate in the health benefits program will be covered under the plan they select beginning on the first day of their first pay period following July 1, 1960. Deductions from their pay checks to cover their share of the subscription costs will also begin in that pay period. For most employees this date will be July 10.

"Pancake" Landing Lights

A system of domed pancake runway lights, protruding less than one-half inch above the surface pavement, is being installed by the FAA in the runways, taxiways and high-speed turn-offs for night landing tests at NAFEC.

Tests with the pancake lighting system are part of a comprehensive analysis of airport lighting requirements.

The pancake lights will be tested for satisfactory performance of two kinds of functions. In one they will serve as runway centerline and narrow gauge landing lights, and in the other, as high-speed taxiway turn-off lights to guide pilots from the runway to a taxiway. Lights are being installed every 20 feet down the centerline of the 10,000-foot instrument runway at NAFEC and at 10-foot intervals along the centerline of a high-speed taxiway turn-off.

Developed under the direction of Leslie C. Vipond, FAA engineer, as a service unit based on a "button light" used in a high-speed turn-off study by the University of California, the pancake light is one of the first products of the FAA's Bureau of Research and Development to be tested in the field.

As a narrow gauge light, the new-type lights are designed to indicate the touchdown area of the runway and aid the pilot in making the transition from approach to landing and taxiing. Lights for high-speed turn-offs are designed to speed the flow of terminal traffic.

Each light is six inches in diameter and protrudes only seven-sixteenths of an inch above the surface. This low profile will present no hazard to aircraft nor will it interfere with snow removal operations. The unit is held firmly in place by recessing it seven-eighths of an inch in the pavement, and cementing it in place with a new type of epoxy resin. Lights receive electricity from wires placed in inch-deep sawcuts in the pavements. The sawcuts are then sealed with a special joint sealing compound.

For testing their utility as narrow gauge lighting units, the new lights are being installed in sets or bars of 10 lights each. Each set, or bar, begins 21 feet on each side of the centerline of the runway and extends 22½ feet laterally to the runway edges. The lights in each bar are spaced 2½ feet apart. In the narrow gauge configuration the bars of pancake lights will be placed at 100-foot intervals throughout the first 2000 feet of Runway #13.

The units are being installed with electrical circuits which will furnish combinations of lights, thus permitting a more comprehensive analysis of the system.

RAPCON Controllers-- Alert, Quick and Sure Minded

Diversified, intricate, complex and complete are words nearly describing the RAPCON (Radar Approach Control) Controllers' method of operation. By nature, he must be aggressive, alert, quick and sure minded. He does more than direct turn-ons or pick up aircraft from one or two fixes simultaneously.

Just what is a RAPCONer and what does he do? He is foremost a Master Controller; one who knows and reacts to any traffic situation whether performing approach, departure or vector duties. He is much like the VFR Controller in directing a traffic pattern. But, he is the one who also navigates and maintains order and altitude coherence between aircraft under radar and ANC-PCAT control. His traffic depends on him to see it and protect it. His watch words are SAFETY and SPEED. No extensive delays, no confusions, or infractions of the rules and regulations are allowed.

The RAPCONer's picture of traffic is one of complexity. Procedural adherence demands complete command of his memory, common sense, split second reaction and recognition of the solid solution to a traffic problem. Think it out? No time is available for this type of control. This controller must be the polished professional of the highest caliber. He must be the one who has an immediate answer to fire at the many aircraft pushing strips out of the bins.

Without these things, he is nothing. Without these controller attributes, the minutes begin to pile up between arrival, departure and vector. Holding patterns begin to fill up and congestion is inevitable. But, by nature and experience, the congruous RAPCONer foresees and avoids the unwanted, despised, drawn out delay.

By utilizing his radar efficiently, the RAPCON Controller often saves everyone time by vectoring low fuel aircraft around others and thus no time is lost by holding or scattering of aircraft.

Untold aircraft "saves" are made as a matter of routine through expeditious and expert operation of the Controller's "right hand"--RADAR.

Surrounded by Low Altitude Tower Control, High Altitude Control, Radar hand-offs, and Low Altitude Center Control Coordination, the RAPCON Controller has a multitudinous job, which does not allow time for looking up pilot responsibilities and details of company operations. These things must be kept in mind at all times. This is a job in which in a matter of minutes the controller may handle many millions of dollars worth of aircraft, plus the most important part--the lives and safety of the human beings who are inside these aircraft.

Often these Controllers handle a 30 to 40-mile radius around their Terminal, performing the duties and accepting the responsibilities associated with their area from the ground to 5000 feet and within a designated jet penetration area from the ground to 23,000 feet. With aircraft arriving or departing at speeds ranging from 100 mph to 700 mph every three minutes, more or less, in a complex area, it is no wonder that the RAPCON Controller is a very important part of the Hi Activity, Hi Complex Facility. His work is not that of one air-speed or a repetitious nature. No, it is one of enlightening experience, the variety of which cannot be understood unless you stand in his shoes and do what he accomplishes five days a week as routine.

Would we trade for anything else? NO. We like our RAPCON, with or without Combined Station or Tower. We believe in the future of aviation, the FAA, the controller who does his job well in any facility, and our ATCA. The future holds many more pleasant experiences. We also like our dependable equipment, our reliable radar and our comfortable surroundings. Who could have more to be proud of? --Norman S. Felker, ATCS, ATC Tower/RAPCON, Montgomery, Ala.

McChord RAPCON has received a meritorious scroll (one of two presented nationwide) from the ATCA for outstanding contributions to air traffic control service. Shown from left are: E.J. Matejcek, FAA watch supervisor; E.C. Crow, FAA Chief, McChord RAPCON; H.W. Fox, FAA controller; A/IC R.J. Orton, 1905th AACS precision approach controller, and N.S. Halvorsen,

Legal Holidays in 1960

The year 1960, now but a few days old, started off with a "long" weekend for federal employees--the first of seven which will occur this year. When you stop to figure that there are only eight legal holidays in the entire year and seven of these go into making up a "long" weekend--well, that isn't bad.

Figure-Filberts will tell you that this is about as close as you can come to bating 1,000 percent. In fact, only Thanksgiving Day (a Thursday) prevents it from hitting that figure.

Here is a rundown on the 1960 holidays that go into making up "long" weekends, starting with New Year's Day, January 1:

Washington's Birthday, Monday, February 22; Memorial Day, Monday, May 30; The Fourth of July, a Monday; Labor Day, Monday, September 5; Veteran's Day, Friday, November 11; and Christmas, Sunday, December 25.

Of course, if you want to go one step further, there's always New Year's Day, Sunday, January 1, 1961.

Living Color On Radar?

At one time or another, FAAers in control towers and centers have their hands full when it comes to handling inbound and outbound traffic. But every once in a while an incident comes up which could be nerve-wracking but, instead, helps to smooth the rough edges of hectic times. The following, as reported in Region Three's FLIGHT LINES, was overheard on approach control frequency at Indianapolis. It proved to be one of those times. Here is what transpired.

Pilot: "Indianapolis Approach Control, this is Beech Nan 76."

Controller: "Beech 76, this is Indianapolis Approach Control."

Pilot: "Beech 76 is about 10 miles west, landing Indianapolis."

Controller: "Roger 76, 10 miles west."

At this point, there was a pause of several seconds in the conversation before it continued.

Controller: "Beech 76, I do not have a target at 10 miles west. Are you past Clayton intersection?"

Pilot: "Uh--say again that intersection."

Controller: "Beech 76, I have a target now at 16 miles northwest. Could that be you?"

Pilot: "Uh--yes, could be. Does the target have an orange tail?"

