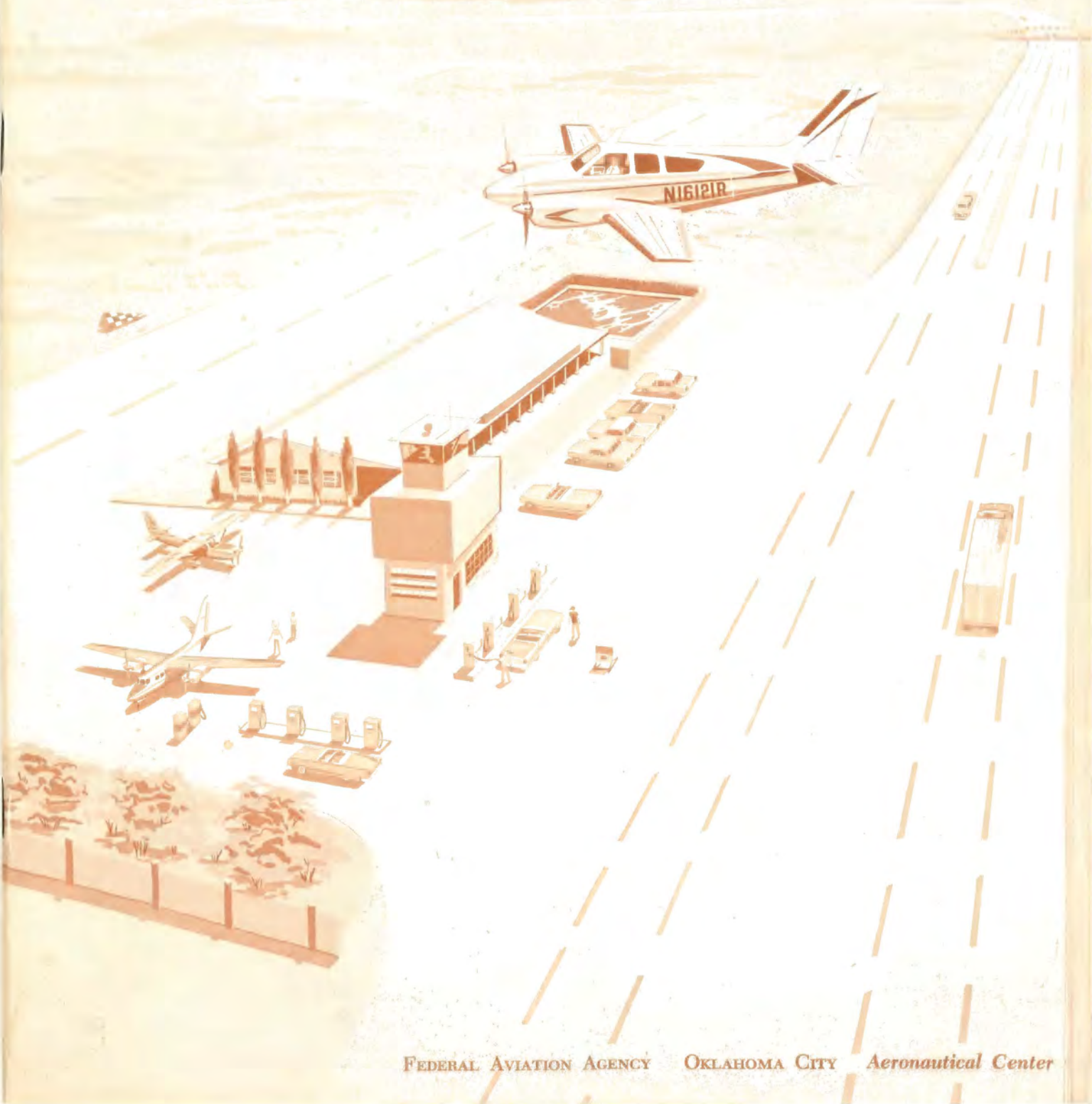


# BEACON

AUGUST, 1962





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Cover by Tinneman shows airstrip along a busy highway.

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Inside back cover is night photograph of the work that goes on in one of the Center's hangars in this jet age.

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Harry and the Co-Pilots this month points up the size and the big business that is today's General Aviation.

#### LOOKING AHEAD

The scene on the cover of this month's Beacon may become a familiar sight along the highways and turnpikes of this nation.

Depicted in the artistic sense is a turnpike airstrip — designed for General Aviation usage. Oklahoma has four of these airstrips — not quite as elaborate as the artist's concept — planned for turnpikes in the state. These airstrips would permit the pilot to re-fuel, eat leisurely, get the latest information on weather ... and go on.

The issue this month also takes a long look at the work being done by the Depot in keeping the Agency's air nav aids operating full-time.

The next issue will carry a complete story on the new Aeromedical Building; it is nearing completion at the Aeronautical Center and will be the scene of a symposium and dedication this October.



#### POINT OF VIEW

##### CIVIL AVIATION MEDICINE — A REALITY!

Prior to the establishment of the Federal Aviation Agency, Aviation Medicine in its truest form was a product of the military services. The civilian component of the aviation industry was completely dependent for its medical principles upon the US Army Air Corps, the US Navy and later, the US Air Force.

The dawn of "civil" Aviation Medicine occurred simultaneously with the dawn of the space age when the military services began to focus their entire attention toward space and when the Aviation Medical Service of the Federal Aviation Agency was created. That dawning day has in just a few short years become a full day by necessity and by the dynamic leadership shown by the personnel who make up the FAA Aviation Medical Service. With the recent order establishing the entire operational service portion of the Aviation Medical Service here in Oklahoma, the Service has become of age and is daily attaining stature and effectiveness within the aviation industry on a world-wide basis.

For example, it has always been the custom within the industry to design and construct an aircraft and turn it into the fleet — but without the prior advice from the biomedical experts. However, as aircraft began to assume higher performance, higher altitudes and greater complexity, both for the pilot and the passenger, far greater problems were being encountered. It was then, and only after-the-fact, that medical personnel were being asked to do something about it. Gone were the days of "flying by the seat of the pants." The pants just plain did not fit any longer!

In the meantime, Aviation Medical experts were carrying along their research calmly and systematically, knowing full well that in time a point would be reached in which their advice would be asked and the fruits of their years of research in the human factors of flying would be needed. That point has been reached.

Designers, engineers and pilots have at long last come to realize that their greatest friends within the industry are the "MEDICS". These are the people who are dedicated to flying safety as no other single group can possibly be. They are dedicated to the lives of people just as all doctors are — the preservation of life. However, even within their own profession, the doctors, too, have realized that Aviation Medicine is one of the most complex and one of the most dynamic specialties within a complex profession. It is the "living" specialty that encompasses all aspects of medicine and its allied sciences — physiology, psychology, physics, mathematics, anthropology, engineering — to name only a few.



Until the present time, the only training ground for this complex specialty has been the schools of the US Air Force and the US Navy. Consequently, the talent for this practice has been invested in the military services. Our Aviation Medical Service has been visionary enough, however, to realize that the Services have turned to other things in space explorations and have left unanswered the many and devious problems that still involve the civilian component: the Air Traffic Controller, the crop duster, the Flying Physician, the Flying Farmer, the ordinary business flyer, the supersonic transport, and the ordinary day-to-day passenger ranging from the unborn to the octogenarian, none of which concerns the military. Since the military service cannot be expected to solve the problems which are outside their purview, we have been — over the past several years — working out a program that will make our Service an adjunct training ground to meet the requirements of the Committee for Education of the American Medical Association, which is responsible for granting board certification in this specialty.

This dramatic step forward becomes an actuality in this academic year beginning in September, 1962. At that time, two of our Service doctors will enter a School of Public Health, which is the first requirement for certification. At the end of that academic year, they will complete the requirements for a Masters Degree in Public Health — the first step forward.

The second step in training will then be a year of academic training at the US School of Aerospace Medicine at Brooks Air Force Base, Texas. This training, which is also a requirement, will be by reciprocal agreement between federal agencies. At the end of that year, will come the most important step of all to us. The students will then return to our Service facility here in Oklahoma and begin their required year of "supervised" practice. During this time, they will be assigned directly to my office but will then be "farmed" out to other divisions so that they may become proficient in all phases of Aviation Medicine: clinical, research and administration.

Under special agreement between our Service, the Council for Education of the AMA and the Surgeon General of the United States Air Force, this vital year can now be performed under our direct tutelage because we have been granted affiliation with the Air Force training center. For the first time in the history of the United States — or for that matter — in the entire free world, special training in "civil" aviation medicine becomes a reality! To those of us in the profession, and hopefully to everyone in the aviation industry, this is a monumental step forward.

The Aeromedical Center in Oklahoma then becomes a unique facility not found anywhere within the free world. Our Aviation Medical Service now becomes the "cradle" of civilian aviation medicine and we can envision that in the future the day will come when it becomes of age and extends itself into a global adult center for such medical education.

GEORGE R. STEINKAMP, M.D.

Deputy Civil Air Surgeon for  
Research and Operations

## FAA NAMES DR. HAYNES TO PSYCHIATRIC POST

Dr. H. C. Haynes has been named Chief of the Federal Aviation Agency's newly established Psychiatric Services in the office of the FAA Civil Air Surgeon, Aviation Medical Service.

"Dr. Haynes' appointment will assure a unified FAA medical program with proper emphasis on the psychological as well as medical needs of the nation's airmen," according to Dr. James L. Goddard, FAA Civil Air Surgeon, "He has acted informally as an Agency consultant over the past year, and his effectiveness in the psychiatric area has been well demonstrated."

Dr. Haynes interned at St. Elizabeth's Hospital, Washington, D. C., and, after joining the U. S. Air Force in 1953, spend three years residency training in psychiatry at Walter Reed Army Hospital in Washington. He received his aeronautical rating of Flight Surgeon in July 1958, while stationed at Eglin Air Force Base, Florida, where he served as Assistant Chief of the Psychiatric Service and Chief of the Aviation Medical Service. While stationed at Andrews Air Force Base in Washington, 1959-61, he was Project Officer on an applied research program which developed the Human Reliability Program directed toward nuclear safety for the Air Force.

Dr. Haynes was certified in psychiatry by the American Board of Psychiatry and Neurology in 1960. He is a member of the Washington Psychiatric Society, Aerospace Medical Association, and the American Psychiatric Association. Since 1960, he has served as a Clinical Instructor in psychiatry at Georgetown University Medical School in Washington, D. C.

Born in Clarksburg, West Virginia, in 1920, he is a graduate of The Choate School, Wallingford, Connecticut. He received his B.S. degree from Princeton University in 1947 and his M.D. from the College of Physicians and Surgeons, Columbia University in 1952.

## AVIATION MEDICAL SERVICE COMPLETES MOVE TO AERO CENTER

The move of elements of Aviation Medical Service to the Oklahoma City area and the Aeronautical Center was completed in July. Only the office of Doctor James Goddard, civil

air surgeon for the Federal Aviation Agency, remains in Washington.

Aviation Medical Service has been growing in scope for about two years. By the end of the summer over 200 employees will either be hired or transferred to the Oklahoma City area.

Doctor George Steinkamp, deputy civil air surgeon for research and operations said one of the largest divisions moved is the certification section, responsible for the final review of the medical records of nearly a half-million pilots throughout the country.

Other areas are the clinical, standards and areomedical research divisions. Doctor Steinkamp has a long history in medical service. During World War Two he was a surgeon with air force fighter units in India, North Africa and England; was chief of medical inspection, 9th Air Defense Command in Europe.

After the war, Doctor Steinkamp did post-graduate study in internal medicine at Vanderbilt University and then engaged in private practice in Little Rock, Arkansas.

Steinkamp has been a professor of survival medicine at the School of Aviation Medicine, Randolph AFB. He has been chief of special projects, high altitude research development command in Washington and was chief of the space medicine division of the USAF School of Aerospace Medicine at Randolph and Brooks until 1959.

Doctor Steinkamp became chief of the environmental health division of the Bureau of Aviation Medicine for the Federal Aviation Agency in Washington, and in 1961 was appointed Deputy Civil Air Surgeon.



"It's a message from the chief mechanic at the last airport."



## Electronic Engineer Executives in FAA Orientation Program



John L. Dumbacher, Hazeltine Corp; Robert Meuleman, AVCO; Ralph Raabe, Lear Siegler; George Balakian, Burroughs; P. B. Stokes, General Precision; R. White, Ling Temco Vought; Alfred Tesler, Tasker Instruments; R. Wayne Masters, Melpar, Inc.

"Working" air traffic in the Terminal Radar Control laboratory. Although the radar information is simulated, the scopes are identical to those used at most Radar Approach Control Facilities (RAPCONs). Located just above eye-level and in front of each controller are maps and approach charts of the local area.

Fourteen electronic engineer executives or firms throughout the country took part in a 5-week FAA orientation program this July. The orientation program was aimed at providing key industry personnel with a broad understanding of FAA's operation, organization, problems, plans, and equipment.

This 5-week program may lead to a regular two way exchange arrangement between FAA and a cross section and its industrial partners in the aviation and electronic world. Further planning will await evaluation of this pilot effort. The 14-member group spent one week at FAA Headquarters in Washington, D. C.; three weeks at FAA Aeronautical Center, Oklahoma City, Oklahoma, and a concluding week at the Agency's national aviation facility experimental center at Atlantic City, New Jersey. FAA administrator, N. E. Halaby, met with the group to begin the orientation session.

The week in Washington was devoted to lectures and discussions covering the full spectrum of Agency activities including air traffic control, research and development, flight standards, installation and materiel, and maintenance.

More specialized technical examinations of operation, equipment, and systems was provided at the Aeronautical Center, Oklahoma City, Oklahoma, and the national aviation facility experimental center at Atlantic City, New Jersey. Technical personnel training, aircraft and equipment maintenance, and aviation medical research are conducted at the Aeronautical Center. During their three weeks at the FAA Aeronautical Center, the group spent a week in air traffic control studying procedures and had active demonstration of control and operating procedures. The second week involved a close look at air nav aids and other means of communication. This include VOR, ILS and several days in radar studies.



Howard K. Morgan, Bendix Corp; P. B. Stokes, General Precision; R. White, Ling Temco Vought; Floyd R. Scripture, Raytheon Co.; John L. Dumbacher, Hazeltine Corp.

Working at the non-radar control positions of an En Route Air Traffic Control Center laboratory. Each strip of paper in front of the "controller" represents an aircraft in his control sector. The "controller" communicates with ground stations via interphone lines, and with pilots via radio.

The Atlantic City facility conducts research and development, and testing program on current and planned equipment. Members of the group were:

Henry D. Abajian, Assistant to the Vice President, Airborne Instrument Laboratory Division of Cutler-Hammer Inc., Deer Park, New York.

Robert Meuleman, Chief Engineer, Electronic Control Systems, AVCO, Cincinnati, Ohio

Howard R. Morgan, Director, Commercial Aviation Systems, Bendix Corp., Detroit, Michigan

George Balakian, Senior Systems Engineer, Burroughs Laboratory, Detroit, Michigan

L. L. Hilliard, Manager, Avionics Products, Collins Radio, Cedar Rapids, Iowa

P. B. Stokes, Staff Engineer, Aero Space Branch, General Precision, Terrytown, New York

John L. Dumbacher, Engineer, Plans and Programs Department, Hazeltine Corporation, Little Neck, New York

Ralph Raabe, Field Research Engineer, Lear Siegler, Los Angeles, Calif.

R. E. White, Electronic Representative, Lane, Temco, Vaught, Dallas, Texas

Thomas Powell, Design Specialist, Advanced Program, Martin Company, Baltimore, Maryland

R. Wayne Masters, System Associate, Engineering Division, Melpar, Inc. Falls Church, Virginia

Floyd R. Scripture, Staff Engineer, Raytheon Company, Lexington, Mass.

Etheridge C. Best, Manager, Advanced Systems planning, Sanders Associates, Nashua, New Hampshire

Alfred Tesler, Research Engineer, Rasker Instruments, Van Nuys, Calif.



Alfred Tesler, Tasker Instruments; R. Wayne Masters, Melpar Inc; George Balakian, Burroughs; Ralph Raabe, Lear Siegler; Robert Meuleman, AVCO.

Observing aircraft as displayed on a radar scope similar to that found in En Route Traffic Control Centers.

## AIRLINES-FAA ORIENTATION

Airline and aviation industry officials held a three day study in June of the Federal Aviation Agency Academy methods of training agency flight inspectors.

Thirteen officials from seven companies were involved in an orientation study of FAA training methods. The airlines represented were American, Alaskan, Trans World, Delta, Northeast, Convair and General Electric.

This first-of-a-kind conference could result in a standardization of training by airlines and industry to coincide with the FAA training program.

Flight inspectors are FAA pilots who fly in airline cockpits as observers to determine if crews are following correct safety procedures. Through the three day session, the officials, composed primarily of chief pilots and directors of training for their respective firms, had a complete look at the FAA Center's air navigational aid training program and air traffic control procedures. These two areas primarily were shown the visitors in order to give them a closer picture of the FAA stress training given these people who later will man control centers, towers, and maintain the electronic equipment in the field. The FAA boast is that electronic equipment operates efficiently 99.99% of the time.

The last of the three-day study involved actual flying in the aircraft used for flight inspection training at the Aeronautical Center. The visitors went through all of the standard procedures and emergency flight training procedures used by flight inspectors who fly with the airlines.

Another session similar to this three day study has already been asked for by other airlines such as United and Eastern.

## EXPANDED RADAR SERVICE TO BE GIVEN VFR PILOTS IN TERMINAL AREA

A new and expanded terminal radar service to handle the mixing of aircraft operating under visual (VFR) and instrument flight rules (IFR) will be offered by the Federal Aviation Agency at Atlanta, Georgia, beginning November 15, 1962.

The Atlanta Airport Traffic Control Tower has been selected to start the voluntary program which, with possible modification, may



be expanded to other high activity terminal locations later.

Participating pilots will receive radar separation, radar vectoring and, if landing at Atlanta Airport, sequencing service for landing. Radar advisory service also will be provided to the extent possible.

The new service follows one of Project Beacon's major recommendations for improving air traffic control services — the segregation of controlled from uncontrolled aircraft around airport terminals. This will be accomplished by setting up a special terminal radar service area for participating aircraft, with enough airspace reserved below the area for the use of nonparticipating aircraft.

The terminal radar service area will include the airspace from 2,000 feet to 6,000 feet within a 15-mile radius of the Atlanta Airport except that the base will be lowered to the ground within the immediate vicinity of the airport. Radar service will be provided to all VFR and IFR aircraft operating within this airspace area, including aircraft arriving and departing from nearby adjacent airports as well as the Atlanta Airport, and aircraft operating en route through the area.

Pilots will participate voluntarily and no regulatory action will be taken in connection with the program.

No special airborne equipment will be required other than two-way radio. Special radio frequencies will be set up for the service but if a plane is not equipped with these frequencies, contact with the tower can be maintained by using other general aviation air/ground frequencies listed in the Airman's Guide for the Atlanta Tower.

Before entering the terminal radar service area, the participating VFR pilot will report to "Atlanta Terminal Control" over well-established VFR reporting points or radio fixes which are on the perimeter of the 15-mile terminal service area. This will be done to enable Atlanta approach control to establish radar identification. If more than one plane reports over a particular fix, the controller may request a turn for more positive radar identification. Once radar contact is established, the pilot will be radar vectored through the area or, if landing at Atlanta Airport, directed to fly specific headings or routes for proper se-

quencing with other arriving VFR or IFR aircraft.

Radar separation of three miles will be the primary separation standard used. However, altitudes may be assigned to participating planes to minimize holding and eliminate excessive coordination with other operating positions in the tower.

VFR departing flights will receive traffic information service by contacting, first, the ground controller, and after take-off, departure control. Specially-assigned controller-coordinators will coordinate both arriving and departing aircraft with the approach and departure controllers as well as the local controller in the tower cab.

VFR pilots taking part in the program will still be responsible for seeing and avoiding other traffic operating in basic VFR weather conditions and for maintaining sufficient terrain and obstruction clearance.

The new service will be outlined in the Airman's Guide before it is implemented and a new VFR chart for the Atlanta area will be issued.

The program was developed with the cooperation of various aviation organizations. The FAA is encouraging participation by VFR pilots in order to obtain valuable operational experience in providing radar control and separation services to VFR traffic and in the mixing and sequencing by radar of VFR traffic with IFR traffic.

Availability of additional radar and communications equipment, radar controller-coordinators, and Atlanta facility know-how based on past experience with related operations makes the new program possible.

#### **FAA CONSIDERS STEPS FOR GREATER FLEXIBILITY IN MAINTENANCE OF GENERAL AVIATION AIRCRAFT**

The Federal Aviation Agency is considering two steps to increase the flexibility of general aviation maintenance requirements, according to FAA Administrator N. E. Halaby.

The first step toward increased maintenance flexibility, Halaby said, is a proposal that FAA grant manufacturers "the privilege of servicing their own aircraft in their own plants." He

spoke to the 13th National Maintenance and Operations Meeting in Reading, Pa.

Halaby also announced that the FAA will soon begin using its new computer for tabulation of all general aviation incidents to help the Agency gain a better idea of how the general aviation safety picture might be improved. This data can not be maintained in statistical form without computers due to its volume.

The maintenance proposal "would be an important convenience to manufacturer and owner," Halaby said. A repair station certificate would be required of the manufacturer in addition to his production certificate if the aircraft included equipment and components manufactured by another company.

FAA also is exploring the feasibility of a new inspection system which would supplant the presently-required annual inspection for general aviation aircraft in the not-for-hire category. Halaby said FAA feels that delegating this responsibility to manufacturers and their dealer organizations would be "flexible, convenient, and a more business-like arrangement all around," consistent with safety requirements.

So long as an aircraft owner maintained his aircraft in accordance with the manufacturer's approved system, the present annual inspection would not be required. A special sticker might be supplied by either manufacturer or FAA identifying the aircraft's inspection status. This would be valid wherever the aircraft went.

#### **PILOT-TO-FORECASTER SERVICE EXTENDED FAA PLANS THIRD FACILITY**

The Federal Aviation Agency Pilot-to-Forecaster Service operating at Washington, D. C., and Kansas City with the cooperation of the U. S. Weather Bureau will be continued without interruption on its present frequency, 122.6 mc., until October 1, 1962. By that date a similar test unit will be activated at Los Angeles and all three units will operate on a new frequency, one which can be given national application.

The pilot-to-forecaster service, inaugurated July 1, 1961, on a test basis, has proved highly popular with all classes of pilots—military, airline and general aviation. Washington has been averaging over 1000 air-ground contacts a month and Kansas City 700.

The service, which is provided 24 hours daily, augments the standard aviation weather services and furnishes information to airborne pilots when unexpected conditions are encountered. By switching to the 122.6 megacycle frequency, a pilot can speak directly to a qualified meteorologist who will provide him with information tailored to his current needs. At the same time the forecaster acquires on-the-spot knowledge of conditions aloft which he makes immediately available to other pilots, to air traffic controllers and to FAA Flight Service Stations.

A total of 24 Weather Bureau forecasters and assistants are engaged in the project.

#### **HALABY AND DISCIPLINE**

At a press conference in the Mobile Lounge, Dulles International Airport, Chantilly, Virginia, on May 11, 1962, Najeeb E. Halaby, Administrator, expressed his opinion regarding the kind of philosophy this Agency ought to have with respect to certain disciplinary actions.

Mr. Halaby stated that there are three kinds of cases. The first one is where through no fault whatsoever of his own, the employee is involved in a situation unanticipated, either equipment or traffic, that he cannot deal with. In that situation, he is faultless, it is a system problem, and we can only fix the system up until we get a modern, full-scale system.

The second case is where negligence or carelessness or irresponsibility is a factor, and in that case, we are simply not going to tolerate any short-comings that endanger the public.

And then, there is the middle ground, where negligence, carelessness, irresponsibility, do not seem to be a factor, but serious questions are raised as to whether the employee is capable of doing the job under those difficult circumstances. In other words, his judgment and efficiency, and the high level of physical and mental performance required, whether he can handle it or not, and there is the case where we just have to look at the man and his record, and the merits of that individual case. Maybe he needs to be put in a less demanding assignment, maybe he needs to be retrained. This is the way we are going to deal with these cases, and I hope that we can do justice, first to the public, and second to the individuals involved."



## TURKISH CONTROLLER



Gonul Simsek

The very few times — probably less than half a dozen — there has been an American girl in the Basic Air Traffic Control Class for FAA personnel, it has created quite a flurry of interest about the Center. For in this country best estimates are that there are probably not more than 25 women Air Traffic Controllers.

There was understandable excitement when for the second time in 36 International Air Traffic Control classes, a distaff member of the present ATC International Class showed up at the Center on the morning of July 9. Miss Gonul Z. Simsek (pronounced Goonull' Shim-shek), from Istanbul, Turkey, has the distinction of being the second international lady Air Traffic Controller to take the basic ATC Course at the Academy. Number one was a girl from Chile who was in one of the very early international classes at the Center about 8 years ago.

In the accompanying picture, Gonul is shown at the console of the Air Route Traffic Control Laboratory with some of the 17 members of her class, TF-36. Identified from her right are: Oscar Moscoso, Bolivia; Albert Rene McDonald, Surinam; Salim Mushtaq, Iraq; and Nezamudin

Deljo, Afghanistan. There is one other student from Turkey in this class, Mr. Kazim Suha Ozturk from Ankara.

Gonul celebrated her 22nd birthday the second day of school in Oklahoma City and has been employed at the Yesilkoy International Airport, Istanbul, since she was 17. Her first job was in the briefing room, assisting pilots in obtaining flight information (work carried on in FAA Flight Service Stations in this country). At the same time, she received training from the Civil Aviation School, Istanbul, which led to her job first as an Assistant Air Traffic Controller, and then a year ago she received the certificate which allowed her to work as a controller of air traffic. For a while there were a few other women Assistant Air Traffic Controllers in Turkey, but Gonul understands that they have been transferred to the Radio-Telecommunications Section and that when she returns home, she will be the only woman Air Traffic Controller in her country. Upon completion of her scheduled courses in Basic Air Traffic Control, Radar Operations Course for Traffic Controllers and the Instructor Training Course, Gonul will receive about four months on-job training in Control Towers and Air Route Centers in this country. As a result of her training here, she expects to be an area control instructor when she goes back to Turkey.

How Miss Simsek came to enter what is still a man's field of work in any country is an interesting story. About two weeks after graduating from high school in 1957, when she was just 17, her father died very suddenly of a heart attack. Her older brother was in the Turkish Army at the time and this made Gonul responsible for the care of her mother and five-year old sister. Turkish custom and circumstances make it impossible for mothers of small children to work outside the home. Until then, Gonul had planned to enter the university and become either a teacher or engineer. Faced with the necessity to earn a living for her family, she accepted the help of her uncle, General Directorate of State Airports, in taking the examination which led to her first employment at Yesilkoy International Airport. Since their home was a three-minute bus ride from the airport, this seemed the best place for her to work.

She has not given up her dream of a university education, although she has done quite well in her present career. For a while, she attempted to work nights at the airport and study days at the university. Her health forced her to discontinue her studies. She hopes that soon there will be night classes at the university and she can someday work out a college degree.



Left to right: Gonul Simsek, Turkey; Oscar Moscoso, Bolivia; Albert Rene McDonald, Surinam; Salim Mushtaq, Iraq; and Nezamudin Deljo, Afghanistan, at the console of the Air Route Traffic Control Laboratory.

Gonul's work in the Control Tower at Yesilkoy Airport required an ability to speak and understand English. Having received very rudimentary English instruction in high school, she studied English on her own and now speaks the language quite fluently. Her first name, Gonul, literally translated means "hearts and love", while her last name, Simsek, means "lightning". This explains why American pilots flying into Yesilkoy International Airport ask to hear the voice of "The Lightning".

As the only woman Air Traffic Controller in her country, Gonul Simsek should be accustomed to "firsts"—but the other day she had the distinction of becoming the first woman member of the Northwest Kiwanis Club of Oklahoma City — up to now a strictly man's organization. Northwest Kiwanis asked to supply host families for TF-36 long before they arrived in Oklahoma City. Monday, July 16, the class attended the noon luncheon meeting of the club, met their host families and received certificates naming each of them honorary members of Northwest Kiwanis.

When asked about her most pleasant impression of this country, Gonul was quick to name the friendliness and hospitality of Americans,

especially that of Oklahomans. She is especially appreciative of her "Second Mother", Mrs. Doris Hansen, with whom she is living while in Oklahoma City, and Mrs. Clayton Hulme, a member of the Oklahoma City Chamber of Commerce Host Family Committee. Both Mrs. Hansen and the Hulmes have made many friends among the people from Turkey who have studied in Oklahoma City.

Gonul Simsek is well accepted and respected by the male members of her class. If the first two weeks of classwork are any criteria, she may set a scholastic record that will make the midnight oil burn to keep them up with her.



The picture was made on July 16 at the luncheon meeting of the Northwest Kiwanis Club of Oklahoma City. The occasion was the presentation of certificates of honorary membership in Northwest Kiwanis to members of TF-36, the International Air Traffic Control Class at the Aeronautical Center.

Before the Class of TF-36 arrived in Oklahoma City on July 9, the Board of Directors of Northwest Kiwanis had voted to sponsor a project of hospitality to the class as a whole. Members of the Club have volunteered as host families to the individual members of this class and the class as a group will attend a noon meeting once each month as guests of Northwest Kiwanis.





In the picture, left to right: Ronald Pulling, Manager, Aviation Facilities Depot; Enar B. Olson, Director, FAA Academy; Zuhair Beydoun, Director of Civil Aviation for Lebanon; Lewis N. Bayne, Manager, Aeronautical Center; and Norman Hodkinson, Acting Chief, Aircraft Maintenance and Engineering Center. It was taken at the time of Mr. Beydoun's visit to the Aeronautical Center on May 24.

Mr. Beydoun is visiting aviation facilities and aircraft and airline companies in about a dozen cities of this country as a participant in the Foreign Leader Program of the Bureau of Educational and Cultural Affairs, U. S. Department of State, in cooperation with the Federal Aviation Agency.



The gentleman, center, in the picture is the Commander-in-Chief of the Nationalist Republic of China Armies, General Ho Chin. With

the General are Ron Pulling, left, Aviation Facilities Depot Manager and Enar Olson, right, Director of the Federal Aviation Academy.

General Ho was in charge of the group of players with the Moral Re-Armament Association. "The Dragon", the MRA play, was presented in Oklahoma City this June . . . and played to a capacity audience.

#### AERO CENTER'S CHIEF COUNSEL



Allen H. Barr, long-time attorney with the Federal Aviation Agency and the old Civil Aeronautics Administration on the West Coast, is the new Chief Counsel for The Aeronautical Center.

Barr, who has been with the CAA and the FAA since 1946, moved from the Western Regional offices in Los Angeles in June to take over the newly created legal office at the Center.

The 45-year-old attorney has a long career in government legal work, having been active in carrier, legal problems, medical hearings, and contractual studies.

A graduate of the University of California School of Law in 1939, Barr was admitted to the California State Bar and Courts that same

year. He practiced law in San Francisco just prior to World War Two.

The Center's new "legal eagle" lives with his wife and three children at 5212 Hamilton Drive in Oklahoma City.



Mr. Irving D. Smith reported for duty as Special Assistant to the Director, FAA Academy, on June 8. Up to the time of his appointment he has served as Chief of the Personnel and Training Division in the Pacific Region, with headquarters in Honolulu. He had served in this position since 1951. Prior to that time from 1948 to 1951 he had been in the Personnel Office of the former Seventh Region of CAA, with headquarters in Seattle, Washington.

Mr. Smith has had extensive Government service, having entered the Federal Government in 1935 as Personnel Officer for the Resettlement Administration, Portland, Oregon. His service with the Government goes back as far as WW I, during which time he served as navigation officer on a troop ship.

Mr. Smith will be providing leadership to two major activities in the Academy. One concerns the development of a new FAA Agency Orientation Course designed for persons at the senior executive level who are either new to the Agency or who have recently been promoted into positions requiring Agency-wide

perspective. The second one concerns leadership from the Office of the Director of the FAA Academy on problems of students that are associated with their role as students, in contrast to those problems primarily associated with students in their capacity as Government employees. The latter function will continue to be a primary concern of the Personnel Division of the Office of the Manager, Aeronautical Center.

#### RADAR IN AIR TRAFFIC CONTROL TRAINING

A new concept of air traffic control training has been recently introduced at the FAA Academy. An air route control center laboratory and an airport control tower laboratory have been integrated with complete communications and a complete radar environment installed in each.



Portrays the terminal IFR radar training room utilizing CPN-18 radar simulators.

Using two of the FAA's Servonics radar simulators with a capability of twelve simulated radar targets and four surplus CPN-18 radar indicators this installation is capable of simulating for training purposes any type of air traffic control in use today. Many thousands of dollars were saved by the use of surplus CPN-18 radar indicators instead of using additional radar indicators for the Servonics simulators.

The terminal laboratory is equipped to provide any environment varying from VFR local air traffic control to an approach control facility with an IFR room or to a RAPCON. It actually



provides capability for any combination of terminal facility training.

The same two simulators also provide the other half of the laboratory environment, en route air traffic control with radar problems. The en route laboratory is equipped to provide either manual or radar air traffic control or both. The two laboratories are joined together by a communications system and the joint use of radar targets produces a combined effort from en route and terminal facilities in the solution of a traffic problem. Aircraft targets may enter the control area and proceed, through vectors by en route, hand-off from en route to terminal and approaches by terminal to a landing. Likewise a departure may take-off and be vectored by departure control to hand-off point for en route control. The only change that has to be made is the normal and necessary change of air/ground communications frequencies.



A portion of the target generator positions for the radar simulators including the closed circuit TV indicator used for monitoring and for training of the target generator operators.

All the target drawers to simulate the aircraft for this training are located along one wall in the en route laboratory. The operators of the targets (pilots) have the advantage of monitoring the complete problem as well as their own targets' progress through the use of TV. A closed circuit TV system is used to provide this monitor feature. A camera picks up the display from a Servonics radar indicator having coverage of the control area used in the problem.

At the present, participants in the Two-Week ATC Indoctrination Course, Seventeen Week

IAS International Course and ATC Basic Radar Course for Advanced IAS participants receive their manual and radar air traffic control training in this combined laboratory.



Left to right: Hughes Helicopter Inspector Whitmore; Instructor Jim Kerr; Inspector Turner; Brantly Helicopter.

On May 7, 1962, the first inspectors reported for helicopter flight training at the FAA Academy. The courses are conducted under the supervision of Mr. Kenneth Archer, Chief, General Operations Branch, Flight Standards Training Division. The first inspectors were Mr. M. W. Turner, GADO, Dallas, Texas and Mr. W. S. Whitmore, GADO, Nashville, Tennessee. Each inspector receives 35 hours of flight time using the Brantly B-2 and the Hughes 269A. During their stay of four weeks at the Academy, they visited the Brantly Helicopter Plant at Frederick, Oklahoma and the Bell Helicopter Plant at Fort Worth, Texas.

The helicopter flight courses are conducted by Mr. James Kerr, whose extensive experience in the helicopter field and interest in instruction provides excellent flight training for FAA General Operations Inspectors. Jim came to the FAA from the U. S. Army, where he had been involved in helicopter programs since 1946. As examples of Jim's prior experience, he was Project Officer on the Sikorsky S-56 (Army H-37), a 31,000 pound helicopter using two P & W R2800 engines. This is the largest production helicopter in the free world. As Project Officer and Chief Pilot of this operation, Jim and his crews flew one of these S-56's 1000 hours in five and one-half months. In the fall of 1958, as Chief of the Flight Test Division for the U. S.

Army Aircraft Test Activity at Fort Rucker, Alabama, Jim established and supervised an accelerated evaluation of two Sikorsky S-58's (Army H-34) and two Vertol 44's (Army H-21), each of the four helicopters was flown 1000 hours in 82 consecutive calendar days.

## FLIGHT INSPECTION AIRBORNE CONSOLE SIMULATOR



Standing, left to right - G. F. Murray, Honolulu; T/Sgt R. W. Sweet, Westover AFB; T/Sgt. W. C. Coultas, Chantute AFB; T/Sgt. J. L. Maddux, Tinker, AFB; R. D. Moore, AF-926; R. L. Maury, Columbus; M/Sgt. M. C. Law, Tinker AFB; F. X. McCaffrey, FS-920. Seated, left to right are instructors J. L. Ronald, W. D. Prewitt, and R. H. Gober.

The photograph shows a recent graduating class of Flight Inspection Technicians grouped about the Flight Inspection Airborne Console Simulator. This simulator is a duplicate of the equipment installed in the DC-3's used by the Federal Aviation Agency to carry out in-flight inspections of all radio communications and navigational aids incorporated in the 360,000 miles of the Federal Airways System, sometimes called "the radio highways of the air."

The simulator is used by the Flight Inspection Training Branch to train technicians and pilots in the methods of collecting data and the interpretation of this data to determine the efficiency and quality of performance of a considerable variety of radio aids on which public safety in air transportation depends. Training is conducted for Air Force and Foreign representatives as well as FAA personnel.



The Engineering Branch, AF-950, is proud to have John D. Swihart, Jr. represent our FAA Aeronautical Center in the College Brochure for the 1962-1963 Fall issue. The publication will be similar to the booklet published this year entitled "For The Tomorrow Minded." The purpose of this booklet is to provide information on some of the agencies located in the Eighth Region for college students interested in Federal Career Service.

Mr. Swihart is an honor graduate of the University of Oklahoma. He joined the FAA staff as an Electronic Engineer in the spring of 1959. He serves in a capacity of Supervisory Electronic Engineer, responsible for the modification of aircraft electronic systems installed in flight inspection type aircraft to compute functional aspects of ground navigational aid equipment. Also, he is a 1st Lt. in the Army reserves.

John lives at 6320 S. Villa in Capitol Hill with his wife, Mary, and two children, four year old Susan, and Timothy, who will be three years old in September. Mary was graduated from the Mercy School of Nursing this summer and is now a R. N., which is a feat in itself, being the mother of two small children.

\* \* \*

The world is full of willing people . . . some willing to work, the rest willing to let them!

\* \* \*

There's a rumor going around that the government is considering this directive; Anything that moves, control it. If you can't control it, tax it. If you can't tax it, give it a billion dollars.



## JET GEMS

### *The Airline Score*

#### *Passengers*

U. S. domestic airlines passenger miles gained only 0.9 per cent in 1961 to 29,534,800,000 and passengers dropped 1.2 per cent to 44,781,000. For the first time air passenger miles accounted for more than 50 per cent of the total U. S. common carrier market, and also for the first time coach travel surpassed first class, accounting for 57.8 per cent of total domestic traffic.

#### *Fleets*

U. S. Airlines added 117 turbojets to their fleets in 1961 for a total of 319-turboprops in service at the end of 1961 totaled 257—making a total jet powered fleet of 576 aircraft. The piston powered aircraft fleet was reduced to 1283 in 1961 making a total fleet of 1859 U. S. Airline aircraft.

#### *Fuel*

U. S. airlines consumed more than 2,000 million gallons of jet fuel in 1961 (domestic trunks 1,508,532,799 gallons, international airlines 554,999,293, locals 23,676,909, cargo 12,688,651, helicopter 54,682, Alaska, Hawaii and territorial 6,613,622). Avgas consumption dipped below the thousand-million gallon mark to 916 million gallons (domestic trunks 629,153,251 gallons, international 113,860,772, local 79,359,438, cargo 72,334,175, helicopter 2,414,134, Alaska, Hawaii and territorial, 21,505,267.

#### *Safety*

Fatality rate for U. S. certificated airlines per 100 million passenger-miles flown in 1961 was 0.29 compared with 0.75 in 1960. It was the tenth consecutive year in which the rate has been less than one. U. S. international carriers operated without a single fatal accident. Supplementals had a fatality rate of 6 per 100 million passenger miles.

#### *Airports*

First two jet airports in the U. S., at Miami and New York, went into operation late in 1958.

Now there are 58 jet airports in operation and by 1967 there will be 128. Biggest user of the nation's airways is the general aviation fleet of about 75,000 planes comparing with an airline fleet of about 1900. Two thirds of the 3280 FAA-recognized airports in the U. S. and its territories are general aviation airports and there are an estimated 4000 additional private airfields and landing strips in use.

#### *Operations*

Recently, an airline president said that pilots should align themselves more closely with managements efforts to create profits. As a "president" of a "jet corporation" the pilot has assets of \$6 million. The salaries of the jet crew are higher than those of top management of a ground industrial organization of comparable assets. The airline president pointed out that each jet flight minute costs \$11.98 and each minute of taxi time costs \$5.72. If poor management of each jet airplane in the fleet results in an additional three minutes of flight time and one minute of taxi time to each departure, annual expenses will climb \$1 million!

#### *Baggage*

Airline damage claims on baggage has approached the \$1 million figure. Luggage manufacturers complain that the low limitation on passenger baggage allowance is mainly responsible. They contend that the airlines should establish standards for construction of airline luggage with the weight stamped on the bag—which would be deducted from the passengers allowable baggage weight.

#### *Silverware*

A major trunk line reportedly spends \$25,000 monthly replacing silverware filched by light fingered souvenir hunters. One wag suggests replacing the silver plated eating tools with plastics having "Snatched from ..... (name of airline) in gold letters as an advertising "gimmick".

## FLIGHT STANDARDS TRAINING DIVISION ARRANGES DOPPLER NAVIGATION EQUIPMENT DEMONSTRATIONS



Mr. Warren W. Smith, Chief, Flight Standards Training Division, Mr. Harold Slaut, KC 135 Pilot, Flight Inspection Field Office — High Altitude; Mr. Richard Cox, Supervisor, Flight Inspection Field Office — Intermediate Altitude; Mr. C. O. McAtee, Sales Engineer, General Aviation, Bendix Aircraft; Mr. Paul Roberts, Central Region Sales Representative, Bendix Aircraft Co.; Mr. Hope Biggers, Chief, Air Carrier Maintenance Section; Mr. Tom Laughead, Pilot, Sales Engineer, Bendix Aircraft Co.

Recently arrangements were made with Mr. Paul Roberts, Bendix Representative, Dallas, Texas, to obtain the Bendix Doppler equipped Aero Commander aircraft for the purpose of familiarizing supervisory and instruction personnel with the latest developments and use of Bendix airborne Doppler equipment. Several groups received demonstrations on how to

make the various adjustments and the accuracy of the equipment in flying triangular courses.

Mr. Guy Arnold, Flight Navigator Specialist who recently made a trip on a TWA flight from New York to Madrid, Spain using this equipment, was available to clarify long range utilization of Doppler equipment.



Rufus C. Cox, Supervisor of the Structural Steel Group, Plant Materiel Section, AF-972 retired from the FAA, on May 31st following more than 20 years of Federal Service.

Fellow workers and friends honored him with a banquet before his retirement. Mr. Pulling, Manager of the Depot, presented Mr. Cox with a plaque and a rod and reel from his many friends and fellow workers.

Born January 10, 1895 Rufus Cox is a part of the Aeronautical Center's history, from the scrap steel and hand sketched drawings of yesteryear to the carefully cataloged parts and detailed drawings of today.

Mr. Cox traveled to France and other European countries, while in the Army from June 1918 to June 1919.

After his Military Service, he was a farmer until going to work for Mr. V. C. Bratton, owner of Gilt-Edge Dairy, as his first employee where he stayed 10 years.

He began his Federal Service at the Naval Installation in Norman in December 1942. He came to the, then, CAA in August 1946. Known as "Rufus" to countless friends, his name has been and always will be synonymous with steel.

Rufus' wife, Ruth, has been a tireless helpmate and partner during his long and successful career as "Mr. Steel".

There was no need to ask their plans for their leisure, as everyone knows, to them fishing is the only way to spend a leisure moment.



Mr. and Mrs. Rufus Cox

## FAA Old Timer Retires



George M. Murchison, who worked in the Aircraft Services Base, retired July 11, 1962.

George Murchison has had a long career in both military and civil aviation. He started flying with the old Army Air Corps back in 1931 and spent the next eight years flying military missions. In 1937, Murchison flew a daily high altitude weather mission during the development of radiosonde, used extensively by weathermen.

During the war years, Murchison served with the Air Transport Command.

His experience with the CAA/FAA started in 1939 as a CAA Inspector in the area that now is the Central Region. Following the World War Two period Murchison again worked for the CAA as a Flight Operations Inspector, spending a great deal of his service in the Oklahoma City area.

Murchison is a retired Air Force officer, a Lieutenant Colonel and is a member of the Quiet Birdmen.

## DIRECTED STUDY TECHNICAL ASSISTANT ACCEPTS NEW POST



Following several years of dedicated service in the Academy, Directed Study's popular Technical Assistant, Roy N. Pickett, has returned to Aviation Facilities for a new and challenging assignment.

Bert came to Directed Study from Fairbanks, Alaska, via Salt Lake City where he served for a time as Acting Sector Maintenance Chief. In 1958 he transferred to the Resident Radar School where, in addition to his instructor duties, he prepared training materials and texts.

Transferring back to the Non-Resident Training Division as Technical Assistant in 1960, Bert performed exemplary service in organizing and conducting training for new instructors, developing budget estimates and workload formulae, providing quality control of Directed Study instructional methods and materials and in providing career guidance to the instructor staff through his activities as a member of the various educational and Civil Service committees. He was also a member of the Printing Standards Committee, which produced the first Format Standards for Aeronautical Center publications.

In his new assignment, Bert will represent the Radar Branch of the Systems Equipment Division at Telecomputing Company, North Hollywood, California.

In the picture, Bert (on the right) is shown receiving congratulations and best wishes from Non-Resident Training Division Chief Art Schmitt, as members of the Directed Study Staff look on.

## ROSTER OF THE "46'ers"

For several months, information has been gathered on a roster of present Aeronautical Center employees who were on duty here in 1946. That date, of course, marked the formation of the Aeronautical Center.

Of the handful (less than three hundred) who formed the original staffing, a surprisingly large number still are on duty. This speaks well for both the loyalty of employees to the Center and for the quality of management that makes the Center a desirable place to work.

Some of the original crew have passed on to whatever Valhalla that awaits the faithful CAA/FAA'er in the beyond. Many more have "bid out" to other jobs. In almost all cases these have been to better paying and more responsible positions. Again, this speaks favorably for Center management.

The list which follows does not name individuals in any order of date of reporting for duty, responsibilities assumed, or alphabetical sequence; it is purely haphazard.

Daisy L. Dovell, Weldon F. Burnett, George J. Dennis, Harold D. Murphy, James T. Jones, Jr., E. W. Peterman, Glen Browning, Harvey B. Smith, Mary Ava Wells, Robert J. Winkler, Harry F. Donceel, Rufus C. Cox, Herbert G. Blanchard, Carl C. Drumeller, John H. Ott, Claude E. Gardner, Eugene G. Crippen, Cecil R. Skidmore, Esther Woods, George Hudson, Monroe Ebner, Hope Biggers, Bill Jones, Melvin Cameron, Joel Chennault, Ivan Cullen, George Downs, Roland Hain, Victor V. Lambert, Roy Meineche, Joe Motley, A. E. Krag, Carl Nucholls, Rayford Orren, Gordon Post, George Ross, Loyd E. Sells, Ida Smith, Phillip Van Ostrand, Lawrence E. Shedenhelm, Dayton L. Parker, Steve Brodnan, Alvin R. Elgin, Theodore F. DeWitte, Eddie Routh, Juanita Foltete.

If you should have been listed but were left out or if your name was not spelled correctly, before you feel too abused, stop and ask yourself the question: "Did I send in a written request for a listing?"





Jack Huntress, Assistant Chief, Plant Engineering, Congratulates Johnnie Nolen.

#### A CROWN OF LAURELS TO JOHNNY

Johnnie Nolen, Plant Engineering employee, is a young man recently being graduated from Oklahoma City University with a Bachelor of Industrial Arts Degree.

Johnnie was born January 4, 1929, at Ada, Oklahoma. He attended the Napier Grade School and Douglass High School. While attending High School he played basketball. He played the trombone in the High School band.

He entered the Army and was stationed on Guam from 1946 through 1948. He enlisted in the Navy and served aboard the LSD-17 USS Catamount during the Korean Crisis 1952-1956. He completed high school through the U. S. Armed Forces Institute while in service.

In 1956 he was employed by the Civil Aeronautics Administration, Janitorial Services Unit. During the years from 1958 to 1962 he worked nights and maintained a full-day schedule at Oklahoma City University, graduating with a BIA degree. He states he has done nothing exceptional by working nights and getting his education during the day. He believes if a person wants an education, he will go to any extent to get it. In July, 1961, he was issued a First Class Radio Operator's License.

Helping him get his college education is his wife, Lonzetta, who worked during that time. They have three children, Candice, age 11; Norwick, 4; and Chandra 14 months. They are members of Mount Olivet Baptist Church.

He enjoys baseball, football and basketball. His hobbies are reading and fishing, but he says he hasn't had time to enjoy any of these. He likes all kinds of books and hopes to get caught up on reading during the next year. After a year's rest and getting better acquainted with his family, he plans to work on an Electronic Engineering Degree.

**CONGRATULATIONS, JOHNNY!**

#### FAA Employees Picnic Set for August 11

The Annual FAA Picnic, sponsored by the Employees' Association, is just around the corner. This Saturday August 11 is the big day. This is the only event of the year in which our employees and families are invited—so plan on an all day affair. Springlake Park is the location and entertainment is available all afternoon. Maybe an early trip to the Lincoln Park Zoo would put the young'uns in the right mood for all they can eat at 6:00 PM. Glen's Hik'ry Inn, one of the finest catering services in Oklahoma, has accommodations to serve everyone in a very short time so that no one will have to stand in a long, hot line. In case it rains, the serving and eating will be completely under shelters. And don't forget to go back for more if you like—one ticket is good for all you can eat. While you are dining, Mr. Sublett Scott will be conducting a 30-piece band, composed of professional musicians.

Springlake has declared August 11 as FAA day and FAA'ers will get special consideration. \$1.00 will buy \$1.65 worth of ride tickets, and at 8:00 PM there will be free entertainment in the Amphitheater. If you haven't ridden the Big Dipper you are in for quite a ride. Lone Star Brewery will have a truck to accommodate all buyers with better than wholesale rates, so be prepared to take a case home.

These prices are considerably less than they cost the association, which is absorbing the loss. All your children under 12 eat FREE, so take advantage of another Employees' Association benefit.

A drawing for door prizes will take place on stage of the Amphitheater immediately after the 8:00 PM performance.

#### WORLD WIDE MAINTENANCE OF AIR NAV AIDS

**"99.9 Percent Efficiency of Operation!"**

That's the cry of the engineers and technicians who keep the Federal Aviation Agency's network of air nav aids operating. While it may not reach that almost perfect figure, the percentage of reliable and continuously operating electronic equipment remains near the absolute — somewhat better than the famous slogan of percentage purity used by a soap company.

The key word in this kind of operation is "preventive" maintenance. Whether the VOR component, the ILS part, or PAR element is located in Oklahoma City, New York or Bangkok, Thailand is just a question of simple logistics. The operation carried out at the Oklahoma City Federal Aviation Agency Aeronautical Center's Depot calculates outages — or failures — on a basis of hours in use. Through long experience the finely-trained technicians and skilled engineers in the FAA Depot have been able to set a time factor figure—in most cases it is within a few hours of an actual breakdown time. As an example, it has been profiled rather accurately that the average PAR component will operate efficiently for 2-thousand hours and that a VOR part will do its job for about 12-thousand hours. Any number of hours beyond that time would put the operating of the ILS or VOR—whatever the nav aid—into the range of uncertain operation.

This is the time when preventive maintenance takes a part in the program. The field engineer or technician installs a new or rebuilt component in the facility and ships the much-used one to Oklahoma City for overhaul. Once it is repaired it is kept in the stockpile of parts until shipped back to the field . . . not necessarily where it originally saw operation.

Air nav aids are in world wide use. Electronic and other kinds of facility components have been sent in to Oklahoma City or sent out from the FAA's Depot to such exotic places as Pakistan, Thailand, Iceland and about every point in the Pacific where civil aviation must fly.

It is a teamwork job — this business of keeping communications going for the air routes of the world. The technicians and engineers in



An FAA design engineer checks hoist equipment built to aid in the installation of TACAN antennas.

the field — in each region — perform most of the preventive maintenance on the prosaic and the exotic machinery of flight safety. Sometimes it requires mountain climbing gear for some of the Federal Aviation Agency are built on the top of nearly inaccessible mountains. Then it may require some means of transportation akin to a swamp buggy. For . . . these facilities are put in specific places for the safety factor in flying and not for the convenience of the technician who must service them.

The Central Engineering Shops of the Aviation Facilities Depot at the Aeronautical Center have provided technical support to the Agency's maintenance program for the past five years. In 1957 the regional shops — and there are seven regions — were consolidated within the Aeronautical Center organization.

A great number of components, from those weighing just a few ounces to parts weighing hundreds of pounds, are funneled in and out of the Depot. Something over 16-thousand items each year are repaired, overhauled or modified for the ground-based Air Navigation and Air Traffic Control systems. This equipment may





Production of ILS Antenna components.

### Plant Engineering

#### METAL WORKING SHOP

SPECIALIZES IN STRUCTURAL STEEL ASSEMBLIES, SUCH AS TOWERS, COUNTERPOISE AND COMPONENTS. CAPACITIES UP TO 3/4" STEEL. EQUIPPED WITH SHEARS, PUNCH PRESS, FORMING MACHINES, AND WELDING EQUIPMENT INCLUDING HELI-ARC.



Metal working shop



Fabricating Tower parts for National Program



Distance Measuring Equipment (DME) Test Generators — A Depot electronic technician is adjusting a test generator after repair and overhaul to insure accurate navigational distance information.

be goniometers for VOR's, antennas for Precision Approach Radar, transmitters, monitors and so on for Instrument Landing Systems, overlay maps for radar screens, Piezo-electric crystals of all types, automatic engine-generators, rotating and gear-train mechanisms, and hundreds of other items.

The shops at the Depot work on an exchange-and-repair, repair-and-return and special transactions basis.

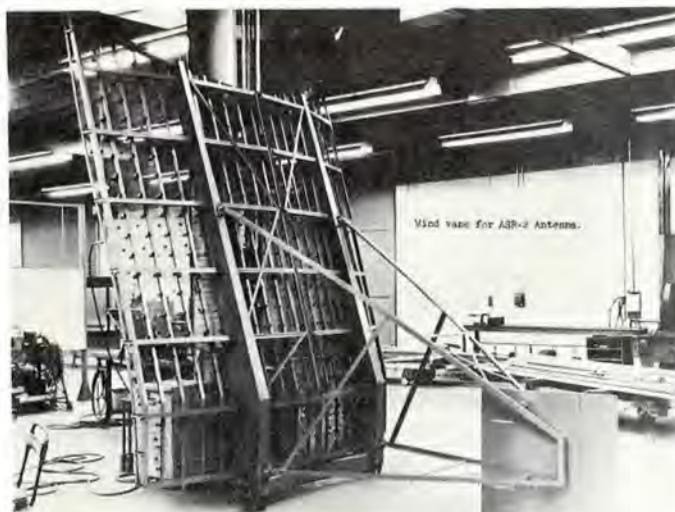
If the Depot cannot supply an exchange item, the field facility can send it in for repair and return. If the item is beyond repair or cannot be modified to meet the requirement, an entirely new item can be manufactured and supplied. This is a special transaction. Piezo-electric crystals have to be custom processed, tested and supplied on crystal requisitions.

Piezo-electric crystals, used in the control of radio frequency transmission, are kept in a "bank". Upon request, the required crystal is ground and tested to particular specifications. Each crystal must be custom-tailored to the particular radio frequency in which it will be used.

An example of the role played by the Central Engineering Shops was dramatized not long ago when a defective part of a highly specialized air navaid was literally hand-carried to the shops where it was modified and repaired and flown back to the facility for re-installation. Lapsed time of facility "out of service" was almost unbelievably short.

This dedication to work is seen throughout all the FAA Regions in the technicians and engineers. The Depot Shops mirror the same skill. If the experience of these men could be totaled, it would run into hundreds of years. Typical skills of the men and women at the Center include professional engineers, electronic technicians, and skilled craftsmen. Whether it's a completely new design requiring engineering or the painstaking and sometimes tedious work of the craftsman working with the miniature components of a radar complex, the "know-how" is there. However, it takes more than "know-how" to handle the complexity that is today's electronic navigational or communications aid. The modification and repair alone require a vast number of tools and a workshop atmosphere where tool power and brain power are pooled into one.

The Central Engineering Shops at the Aeronautical Center have the tools to do anything from metal fabrication to modification of electronic components. The Crystal Laboratory and Bank points up this complexity of specialization.



Wind vane for ASR-2 Antenna.



Aluminum antenna pedestal being fabricated by Heligro.



VOR Goniometers — Showing the heart of the Very High Frequency Omnidirectional Range undergoing overhaul in the Aviation Facilities Depot where precise adjustments are made to insure the accuracy of VOR azimuth information.





Precision Approach Radar Antenna Test Mount — A calibration crew of the Radar Antenna Group carefully plots patterns of a recently overhauled antenna array. The antennas are used with precision which monitor the final approach of aircraft landing at our major airports.

The need long has been recognized for increased preventive maintenance. This has been expanding during the past year and a number of new programs have been started to provide overhaul service in a specific equipment. Future plans of the Systems Maintenance Service indicate that much more equipment, determined as probable out-of-service, in other words, ready for overhaul, will be removed prior to actually failing on the job, shipped to Oklahoma City for repair and returned in a like new condition.

An engineering study is being conducted on each of the components being considered for preventive overhaul. Federal Aviation Agency Washington offices, the Regional offices and



Depot Shop Facilities — Radio transmitters and receivers of many varieties and uses are overhauled in this section of the Aviation Facilities Depot Shops. Each technician is a specialist on FAA air navigation, communications, or radar equipment.

the Depot at Oklahoma City are making the study... hoping to arrive at a logical length of operating time between servicing periods.

So it is! This almost perfect efficiency operation of equipment can be almost perfect only through the technicians and engineers in the field and those in the Installation and Materiel Depot.

## CALLITHUMPING IN THE JET AGE

Have you ever seen a callithump? Ever thought that you might be participating in one? Our Employees' Association is doing just that.

Callithump is just another word for a parade. On the night of August 10, 1962, at 7:00 P. M. the American Legion will kick off the 44th Annual Convention to be held in Oklahoma City on August 10, 11, and 12, 1962. The motto of this gigantic parade is "UNITY IN STRENGTH."

Our Employees' Association is sponsoring a float to participate in this night parade. This is their first venture in sponsoring a float in this type of parade. Our float will portray the Aeronautical Center as being the "CROSS-ROADS OF THE WORLD" in promoting safety in the jet age. Jane Fanning is Chairman of this project.

Many other civil organizations and groups will enter floats in this parade. Many people who "love parades" have missed them since they are usually a daytime occurrence. This night parade should enable many people to attend and take their families.

The floats will assemble in front of the Municipal Auditorium. The parade will begin at the corner of Walker and Colcord Streets. It will then proceed to Hudson and Park Avenue going east; from Park Avenue to Broadway turning south to Main Street, proceeding West on Main Street to North Lee, turning north to return to starting point. The Review Stand for judging the floats, and for seating dignitaries from the civic organizations and local groups, will be in front of the John A. Brown Store on West Main Street.

Don't forget the date is August 10, 1962, at 7:00 P.M. If there is "UNITY IN STRENGTH" in the FAA, see you at the parade!!



OUTSTANDING PERFORMANCE RATINGS were presented to the above employees by Jay H. Moody. Back row — Mildred Southwell, Colleen Newlon, Norma Sue McCarthy, Jay H. Moody. Front row — Bernice Buchan, Bonnie Grover, Asher Bard, Ada Geyer, Reba Gibson, Genevieve Meshew, Jane Gordon. Agnes M. Jones and Bernice Buchan, not pictured, also receive the award.



CASH AWARD FOR SUGGESTIONS presented to Deana Bray, Wanda Longnecker, Darrell Martin and Pauline Faulkner (not pictured), by Jay H. Moody



SUSTAINED SUPERIOR PERFORMANCE AWARDS presented to Avena Lund and Melba Burns by Jay Moody

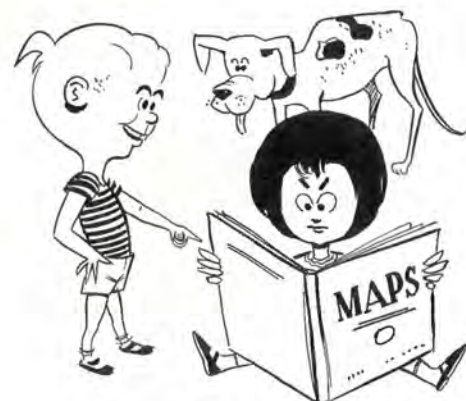




Left to Right: R. W. Pulling, Manager, Aviation Facilities Depot; Ernie L. Burdine, Storage Specialist, Operating Materiel Branch, Materiel Division; Richard D. Williams, Electronic Technician, Program Materiel Branch, Materiel Division; Donald S. King, Acting Director, Installation and Materiel Service, Washington, D. C.

Mr. Burdine received an incentive award for his suggestion concerning designing a first aid box with rubber gasket which makes the box dust proof and large enough to hold a stretcher, linen, and blanket.

Mr. Williams received an incentive award for his suggestion concerning troubleshooting and making operational checks during overhaul and testing of the CA-1314 receiver muting and combining unit.



"DON'T BE SILLY! THAT'S NOT AN ATLAS...  
AN ATLAS IS A MISSILE!"

## CENTER SCORES IN BOND DRIVE

For the fourth consecutive year, more than 90 percent of Aeronautical Center employees have signed to participate in the purchase of U.S. Savings Bonds.

R. W. Pulling, manager of the Depot, and Center chairman of the Freedom Bond Drive, said 91.3 percent of the employees of all organizations are participating.

Final figures show that Academy employees are participating at 95.4 percent, Aeronautical Center Manager's office 95 percent, the Aviation Facilities Depot at 92.7 percent, the Aircraft Services Base at 88.8 percent and the Civil Aeromedical Research Institute at 54.5 percent.

Drive Chairman Pulling expressed appreciation to participating employees for helping the Aeronautical Center to get recognition as one of the outstanding organizations in the state in the drive.



Left to Right: R. W. Pulling, Manager, Aviation Facilities Depot; Clifton E. Hunter, Electronic Engineer, Program Materiel Branch, Materiel Division; Jack W. Kilgore, Supervisory Equipment Specialist, Operating Materiel Branch, Materiel Division; Rayford H. Orren, Supervisory Equipment Specialist, Operating Materiel Branch, Materiel Division, and Donald S. King, Acting Director of the Installation and Materiel Service, Washington, D. C.

Messrs. Hunter, Kilgore and Orren received awards for Sustained Superior Performance.



Eight Employees of the Accounting Division and one employee of the International Liaison office were presented with Sustained Performance Awards by Lewis N. Bayne.

Those receiving the awards from the Manager of the Aeronautical Center, the Liaison Officer and the Chief of the Accounting Division are pictured from left to right as follows:

Darwin T. Maurer, International Liaison Officer; Shirley F. Pfrehm, Sus. Superior Perf.;

June R. Grayson, Int. Liaison office; Fern C. Hughes, Sus. Superior Perf.; LaVerne D. Davenport, Sus. Superior Perf.; Harriet M. Wilson, Sus. Superior Perf.; Lewis N. Bayne, Manager Aero. Center; Hazel M. Beam, Sus. Superior Perf.; Alvin T. Hunter, Sus. Superior Perf.; D. Rojean Lacey, Sus. Superior Perf.; Beryl B. Belisle, Sus. Superior Perf.; John K. Hall, Chief Accounting Division.



Jean S. Patterson, Jim Hendrix and Virginia L. Bishop, with Division Chief John Hall. All received Sustained Superior Performance Ratings. Lenita I. Steward, not pictured, also received a Sustained Superior Performance Rating.



WHAT'S ON YOUR MIND GEORGE?





William Shreve, Aircraft Division, FS-10 Washington, D. C., along with Norman R. Hodkinson, Acting Chief, Aircraft Services Center, presents SPECIAL ACT AWARDS for outstanding performance of duties in connection with the SAFI project at the Aeronautical Center. Those receiving awards are: William E. Bell, Albert J. Harvey, Chester Longman, Bobby G. Kraybill, J. W. Jones, Jimmy Villarreal, Hal Smith, Fred Nipper. Those not pictured, but also receiving awards are: Raymond Corley and Durrell Treadway.



William Shreve, Aircraft Services Division, FS-10 Washington, D. C., along with Norman R. Hodkinson Acting Chief, Aircraft Services Center, presents Sustained Superior Performance Awards to Roy L. Mills and James E. McDaniel of the Production Control Staff, Aircraft Division.



William Shreve, Aircraft Services Division, FS-10, Washington, D. C., along with Norman R. Hodkinson, Acting Chief, Aircraft Services Center, presents a Certificate and award in the amount of \$30.00 to Rufus M. Robinson, Jr., of the Quality Control Staff, Aircraft Division, for a suggestion he submitted concerning improved placards on the exterior of the Douglas DC-3 Aircraft.

## ADMINISTRATIVE SERVICES DIVISION AWARD WINNERS



Administrative Services Division award winners attend a special meeting July 17 in the Manager's conference room where certificates and checks were distributed by Division Chief Vincent F. Burton.

Standing, left to right: Salvador J. Terzo, William G. Murphy, Lyndall Butler, Raymond W. Martindale, Robert P. Williams, J. D. Rush, Lawrence Harding, Ray N. Johnsen, Bobby Haney, and Charles F. Brill.

Seated, left to right: George S. Myers, Jr., Aubrey Roane, Betty R. Millus, William Halacka, Vincent F. Burton, Dorothy A. Pope, Helen E. Domoney, and Janelle McNabb.

Other award winners not pictured are Butler E. Acree (who took the photo), Ray V. Bailey, Donald L. Curtis, Harriet Ann Marshall, Lois Redpath, Jerrie M. Self, Ronald J. Sills, Berry Witt, and Margie Shannon.

### ALL BRANCHES OF ADMINISTRATIVE SERVICES DIVISION WIN AWARDS

At Beacon deadline, the Administrative Services Division had tapped the till of the Employee Suggestion Awards Program, coupled with sustained superior awards, to the tune of \$1,955.00. Twenty-one employees' suggestions were adopted, bringing \$410 to the recipients. Nine sustained superior performances aggregated \$1,550.

Janelle McNabb and J. D. Rush were top money-makers, each parlaying a sustained superior award and an adopted suggestion for \$215.

All branches of the division scored, as follows:  
Forms and Records Management: Charles F. Brill, \$15; Janelle McNabb, \$215; and Margie Shannon, \$15.

Publishing and Graphics Branch: Butler E. Acree, \$15; Ray V. Bailey, \$12.50; Donald L. Curtis, \$15; William Halacka, \$200; Bobby Haney, \$15; Lawrence Harding, \$40; Harriet Ann Marshall, \$15; Raymond W. Martindale,

\$25; Betty R. Millus, \$15; Aubrey Roane, \$12.50; J. D. Rush, \$215; Jerrie M. Self, \$25; Ronald J. Sills, (2) \$30; Salvador J. Terzo, \$15; Robert P. Williams, \$200; Berry Witt, \$150; Lyndall Butler, \$150; Ray N. Johnsen, \$165; and George S. Myers, Jr., \$15.

Library Branch: Helen E. Domoney, \$150.  
Property Management Branch: William G. Murphy, \$50.

Special Services Branch: Dorothy A. Pope, (2) \$30; and Lois Redpath, \$150.



...what happened after you told them, I'll leave when I get good and ready!"





Karen Slack, daughter of Mr. and Mrs. C. D. Slack, PT-935, and a Senior at Northwest Classen High School received the Classen Medal of Honor at an Awards Assembly held prior to graduation. This medal is the highest ranking award given to seniors. Karen also received the Daughters of the American Revolution Award for Good Citizenship and the National Merit Scholarship Letter of Commendation. These honors are given from groups outside the school.

At a second Awards Assembly where recognition is given by the school departments, Karen received a Journalism Achievement and Service Award, French Language Award, Award for outstanding work in all branches of mathematics, Award for outstanding work in Science and a Social Studies Recognition Award.

Austin College, Sherman, Texas; Duke University, Durham, N. C.; and Smith College, Northampton, Mass., offered scholarships renewable for four years of study to Karen and she was one of seventeen winners who completed the work of the Scholarship Competition of the Presbyterian Church, U.S.A. Karen has chosen to attend Smith College and is now enrolled there for the start of her college course of study next fall.

Karen's activities during her four years at Northwest have included A.F.S. exchange stu-

dent to France last summer, nominee for pep club and yearbook Queen, alternate for Alexander Fleming Science scholarship for Oklahoma, member of Oklahoma City Science Seminar, Co-Editor of yearbook, President of Science Club, Chaplain of Coronet Pep Club, Sgt.-at-Arms for Announcers Club, Secretary of National Honor Society, Treasurer of Quill and Scroll, Secretary/Treasurer of Honor Language Club, member of Honor Math Club and a Panel member of Senator Kerr/NASA TV program on Science.

### Main Health Plan Rates Stay Same

Premium rates of the Government-wide Service Benefit Plan and the Government-wide Indemnity Benefit Plan — which together cover about 80 percent of the nearly 2,000,000 employees enrolled in the Federal Employees Health Benefits program — will not be increased for the next contract year which begins November 1, 1962, the Civil Service Commission has announced. The CSC also said that the next "open season" of the program is planned for late 1963, probably in October.

A few of the other 35 plans participating in the program may require premium rate increases. While some plans may make minor perfecting changes in benefits, rate increases will be negotiated only on the basis that they are needed to maintain the proper balance between the cost of present benefits and premium rates. However, any increases in rates by other plans for the next contract year will probably be small, the Commission said.

Although there will be no general "open season" in October of 1962, eligible employees who have previously elected not to enroll will have another opportunity to enroll in a participating plan in October of this year. Also, any employee now enrolled for self-only will be able to change to a self-and-family enrollment in the same plan and option at that time. During a general "open season" eligible employees have an unrestricted opportunity to change from one plan or option to another or, if not enrolled, to enroll in a plan.

The decision to hold no "open season" in 1962 was made after consultation with the Federal Employees Health Benefits Advisory Committee.

## SMOKE SIGNALS

from

### ADMINISTRATIVE SERVICES DIVISION

The Publishing and Graphics branch had a June Bridegroom when **CLARENCE FINCHUM** married Elaine Lee in El Reno. They drove 1100 miles on a two-day honeymoon. *Whew!* . . . **VI OWENS** and **BILL HALACKA** agree that there is nothing to compare with being "mother of the bride" or "father of the bride." Both their daughters will be married in August and special effort will be made to avoid printing the Agency Seal in the form of a wedding bell . . . Auto accidents brought injury to **EDWINA**, daughter of Property Management Chief **KENNETH RICHISON**, who reports her condition improved . . . Publication Specialist **EARL WINFORD** is back on duty following a head-on crash which reduced the value of his car to \$15. He feels lucky to survive a meeting with the wrong-side-of-road-driver . . . Librarians **LOIS STOUT** and **LILAH HECK** are as good as new after recovering from recent fall-injuries . . . **BARNEY CUMMINGS**, Property Accounting Officer, fell out of the shower and is nursing a sprained finger. He doesn't intend to answer to the nickname "bathless Barney" and will take the necessary precautionary measures . . . Farewells were said recently to **ROBERT NEWKIRK**, Chief Photographer here at the Center for several years. Bob made pictures up-in-the-air, down-on-the-ground, inside-outside planes and buildings. Sometimes he scared the "daylights" out of onlookers but always came up with a good picture . . . Publishing Clerk **JERRIE SELF** said goodbye to friends in Mid-July and will make her home in California. Jerrie's kindness and patience has endeared her to the heart of Aeronautical Center and she will be greatly missed . . . Stork visited the home of Special Services Branch Chief **LEON PRICE** and left an 8 pound 5 ounce package. This event occurred on the first day of FY63 and bears the title of Rhonda Jane . . . Last year's Aeronautical Center Employee Association scholarship winner, **KENT** son of **BYRON CUMMINGS**, recently said "I do" and will report for duty at the White Sands Missile Base. He will attend New Mexico State University on a half-time basis.



Administrative Services Division Chief VINCENT F. BURTON presented a Suggestion Award to JERRIE SELF at a farewell party given by the Reproduction & Distribution Section.



Mirror, mirror, on the wall, who's the fairest of them all? CLARENCE FINCHUM believes his bride will enjoy the gift received from fellow employees of the Publishing and Graphics Branch.



ROBERT NEWKIRK, photographer of Publishing and Graphics Branch, is shown receiving a farewell memento from Branch Chief H. GLEN McCASLIN.



# COMMUNISM — DEMOCRACY AND MORAL REARMAMENT (MRA) A COMPARISON OF IDEOLOGIES

In these days of international tensions most of us are aware that a conflict of National ideologies (doctrines of a group or class) are involved. Conflicts between ideologies have been present since man first chose to be identified with a group. Usually, ideological differences have been predicated upon such factors as race, population and economic adequacy. Characteristic of the past was the concept of mutual co-existence. In other words when politics, propaganda and ultimately war failed to resolve differences, groups would then acquiesce to a relationship of co-existence. This relationship for the most part was satisfactory

in that recognition of the groups in conflict was mutual and future conflict was not threatened.

Today however the major ideologies of our world have been reduced to two. Communism and democracy. Communism subscribes to the belief that the nation represents the basic social entity with the rights of the individual subordinate to those of the group. Democracy on the other hand is predicated on certain basic rights of the individual which are paramount if necessary to the best interests of the group.

Certain comparison factors are now appropriate to further discussion;

## COMMUNISM

## DEMOCRACY

### (FACTOR)

#### MATERIAL WEALTH

Extracts from each individual according to his ability and furnishes to each according to his needs.

Free enterprise and individual initiative determine distribution.

#### RELIGION

Not recognized as a related part of the individual's total environment.

Freedom of religion is a basic individual right.

#### GOVERNMENT

Dedicated to the perpetuation of government to the exclusions of the rights of the majority as well as the individual.

Principle of majority rule. Basic individual rights inviolate.

#### IDEOLOGY

Dedicated to the ultimate imposition on all the peoples of the world — by force if necessary.

Recognizes the right of other nations to a form of government of their own choosing.

#### MILITARY STRENGTH

As necessary for the achievement of its ideological goals.

As necessary to provide for a deterrent to the communist military force and for national survival.

Communism has recognized that competition for men's minds can further their ideological goal as effectively as the use of military force. To this end Karl Marx conceived of a form of reasoning which would permit an orderly men-

tal movement toward communism. This was the Dialectical Materialism philosophy which is the official doctrine of communism. Under this form of logic a faulty minor thesis, not in itself controversial, is introduced. From this a

major thesis is derived seemingly based upon the acceptable minor thesis. A conclusion is then proffered. It, of course, is fundamentally faulty since it actually derived from the faulty minor thesis. Thus, the dialectical materialism form of logic does *appear* to be objective and tends to satisfy intellectual integrity. A close examination of the stated goals of communism will reveal the faulty reasoning upon which they are based.

Most of us are in need of some brief statement which will easily and clearly permit us to review the communist ideology. *Communism stands for material equality to the exclusion of individual rights and initiative; it rejects religion as a basic human need; it subordinates individual rights to those of the group; and perhaps of most concern is dedicated to the establishment of communism as a world ideology by the use of force.*

The philosophy of Moral Rearmament (MRA) has emerged as a counter philosophy to communism. It is based on a belief that in the competition for the minds of men Dialectical Materialism is not being effectively countered by the ideology of democracy. We must remember that it is not a goal of democracy that all the world shall some day subscribe to its tenets. Therefore the democratic ideology is not geared to compete for the minds of the peoples of other nations and perhaps this is true. MRA's philosophy is simple and direct. It states that *"Men must be governed by men who are governed by God."* There is no effective counter logic to this philosophy. People in all nations and under all forms of government can begin the movement toward this ideology now. It can be best put into action initially at the local level of government. As it succeeds these levels it will become increasingly difficult for an incompatible ideology to survive.

\* \* \*

One always begins to forgive a place as soon as it's left behind — Dickens.

\* \* \*

"Business is like a wheelbarrow — it stands still unless someone pushes it."

\* \* \*

"One of the greatest labor saving devices of today is tomorrow."

## Philosophy of Semantics

The phrase . . . "this office" is one of the most used of all expressions in governmental or industrial memoranda.

Apparently, some offices, like talking dogs, have curious powers. I frequently get letters telling me how smart someone's office is. For example, one fellow said: "This office has studied the problem and made decisions which will be transmitted later." Another man bragged that his office was capable of emotion: "This office feels disappointed," he reported. Another claims his office has eyesight: "This office has seen the report," he informed me and went on to boast that "This office has compiled supplementary data." About the most brilliant office I have heard about is the one that disputed a manufacturer's mathematical computations, made new calculations, and proved the manufacturer wrong!

I wonder how much of this can be proved as the truth. I have tried and I can't get my office to do a thing, not even on order from another office. Once I got a letter saying "Instructions from this office direct your office to make local arrangements." I sat around for a week, and my office never made a move. Finally, I got desperate, and made the arrangements myself. I was ashamed to admit it, so I reported "arrangements were made by this office," and got away with it. I suspect there is a lot of that going on, too, if the truth were known.

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PACIFIC REGION



"SAFE! MAN, SAFE!"



## NEW STANDARDS GOVERN AGENCY GRIEVANCE SYSTEMS

The Civil Service Commission recently issued new standards that Federal agencies must follow in developing procedures for handling employee grievances, as required by Executive Order 10988. The new standards became effective July 1, as part of the President's program for strengthening employee-management cooperation in the Federal service.

Grievance procedures are designed to provide for agency handling of matters of employee concern that cannot be resolved at the level of the supervisor and that are not covered by other systems and generally would cover such matters as working conditions and environment, relationships with supervisors and other employees and officials, and implementation of personnel policies and employee-management agreements.

Principal concepts and provisions of the new standards include:

- Wherever possible, employee problems should be resolved informally at the level of the supervisor; when problems cannot be resolved informally, an employee or group of employees should be able to secure consideration of their complaints elsewhere.
- Grievance procedures established for this purpose should be as simple as possible; ordinarily there should be no more than two levels of decision above the supervisor.
- Consideration of grievances should be expedited at all points in the interest of prompt resolution.
- An employee should have the privilege of making a personal presentation to an individual or group assigned to report findings of fact or findings and recommendations on his grievance; copies of the findings or findings and recommendations must be furnished to the employee and his representative.
- An agreement with an employee organization recognized as exclusive representative may provide for advisory arbitration of grievances.
- Employees and employee organizations should have an opportunity to participate in the development of agency grievance procedures.

- An employee and his representative must be assured a reasonable amount of official time for purposes of presenting a grievance, and must be assured freedom from restraint, interference, coercion, discrimination, or reprisal in connection with the presentation of a grievance.
- Employees should be able to have the help of representatives of their choice in presenting their grievances.

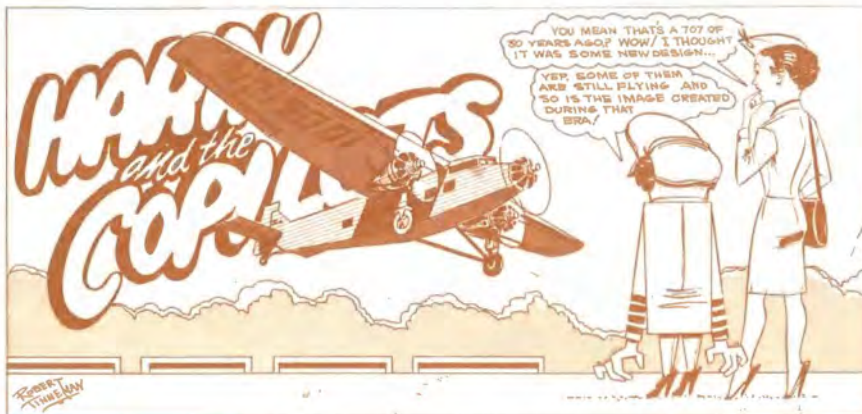
### CREED OF PEACE ✓

- I am **GUILTY OF WAR** when I proudly exercise my intelligence to the disadvantage of my fellow man.
- I am **GUILTY OF WAR** when I distort others' opinions which differ from my own.
- I am **GUILTY OF WAR** when I show disregard for the rights and properties of others.
- I am **GUILTY OF WAR** when I covet what another has honestly acquired.
- I am **GUILTY OF WAR** when I seek to maintain my superiority of position, by depriving others of their opportunity of advancement.
- I am **GUILTY OF WAR** if I imagine my kin and myself to be a privileged people.
- I am **GUILTY OF WAR** if I believe a heritage entitles me to monopolize resources of nature.
- I am **GUILTY OF WAR** when I believe other people must think and live as I do.
- I am **GUILTY OF WAR** when I make success in life solely dependent upon power, fame, and riches.
- I am **GUILTY OF WAR** when I think the minds of people should be regulated by force, rather than by reason.
- I am **GUILTY OF WAR** when I believe the God I conceive is the one others must accept.
- I am **GUILTY OF WAR** when I think that a land of a man's birth must necessarily be the place of his livelihood.

ANONYMOUS







HARRY IS ATTEMPTING TO EXPLAIN THAT AVIATION HAS MADE A GREAT DEAL OF PROGRESS SINCE THE DAYS OF THE FORD TRI-MOTOR AND THE GOSSELS AND SCARE BRIGADE.

CONTRARY TO PUBLIC OPINION THAT OUTSIDE THE MILITARY, THE AIR CARRIER IS NOT THE LARGEST FORM OF CIVILIAN AVIATION. SO MANY OTHER JOBS AND USES FOR AIRPLANES EXIST IN THIS PRESENT DAY THAT THEIR NUMBER FAR EXCEEDS THE TOTAL USED BY THE AIRLINES.

