REGION VI NEWS

A MONTHLY NEWSLETTER OF SIGNIFICANT REGIONAL AND WASHINGTON ACTIVITIES

CIVIL AERONAUTICS ADMINISTRATION, LOS ANGELES, CALIFORNIA

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THE JOB OF AN AIR ROUTE TRAFFIC CONTROLLER

This is the kick-off of a series of articles describing the many different kinds of jobs in the Sixth Region. We hope this series will give all employees a word picture of the duties and responsibilities of the CAA team.

Our first article - The Job of an Air Route Traffic Controller - has been written by a Controller in the Los Angeles Center. His remarks are applicable to 51 colleagues in the L.A. Center, 50 in the Oakland Center and 30 in the Salt Lake Center -

When an air route traffic controller reports for duty on a nasty day, he brings most of his equipment along with him - - in his head. Engraved therein is a picture of his control area: a maze of airports, radio range stations, compass locators and fan markers, all superimposed on a contour map of several states. This is the invisible highway system over which blind-flying aviation moves during bad weather.

In another section of his noggin the controller carries the Civil Air Regulations, the laws dictating the minimum vertical, lateral and longitudinal separation of aircraft, and local rulings on altitudes and procedures. From a conference with the meteorologist he crams in more information: ceilings and visibility, vertical and horizontal extent of cloud layers, frontal trend, icing levels, direction and velocity of winds at various levels aloft.

Now he walks over to a tilted board, alive with bits of paper mounted on metal holders - perhaps only ten, perhaps a hundred strips of paper. These strips represent aircraft, and the notations on them tell each plane's type, route, altitude, last reported position, next estimated position, and the instructions under which it is flying.

The controller studies this mass of detail, superimposes it on his mental map and these planes begin to fly through his imagination. The paper strips sit still until someone shifts them. But the planes they represent are moving fast and in all directions - climbing, descending, leveling, turning at two to six miles per minute, unable to see one another or the terrain because of the clouds which shroud their wingtips.

Now our controller has a strange task to fulfill. Before him is a giant puzzle, made up of moving planes filled with very live people. He, no more than a pilot, can see these planes in other than his mind. He must now begin a guessing game, mentally computing the future positions of each of these aircraft and assigning airspace separation between these blind pilots on the gamble that his computations are accurate.

This airspace represents time and money and life to many people. If the controller is over-cautious, and wastes some of this fluctuating space, many of his planes will be delayed. If he is under-cautious, some of his planes will be in danger of colliding with one another or with terrain.

Attached to his tilted board the controller has fast telephone connections to the scores of towers and radio stations within his assigned area. Unable to converse directly with pilots in the air, the controller receives pilot reports and requests from radio operators who are maintaining ground-to-air communications, and delivers his instructions through the same medium. A recording machine preserves every word.

With a pencil the controller notes on the related paper strips the information he has received, his position computations, and his instructions. He constantly shifts and replaces the strips. Old planes land or fly on, leaving airspace; new planes fly in, needing space; planes roll out on runways, wanting space; flight plans are filed, reserving space. Airspace is his product, and his job is to dispense it as fast as he can, consistent with safety.

Behind these "routine" duties lurks the ever-present possibility of an emergency. A pilot fails to report his position on schedule - has he crashed or lost his radio transmitter? A plane reports in space already assigned to someone else, or advises unable to maintain altitude because of engine failure or icing - the controller must blast a path through occupied space, and fast!

Of many such instances, this is but one example: during the war a large military transport plane suddenly radioed its position over Bakersfield at 18,000 feet, barely topping the turbulent, icy clouds. The pilot advised that he lacked sufficient fuel to reach Fresno, his destination 100 miles north, and requested to land at Bakersfield.

There was heavy traffic occupying all altitudes below 15,000 feet. While the emergency plane descended these 3,000 feet, the controller edged away all traffic above 11,000 feet, and gave the army pilot a continued descent. Now the controller turned and twisted the balance of his planes away from the descent path, and the army pilot was cleared to the ground. As he reported leaving 8,000 feet altitude normal traffic was resumed.

Nothing further was heard from the army pilot. He neither landed nor talked. The controller arrested traffic below the 8,000 foot level, alerted search agencies, issued the necessary emergency reports. Two days later the wreckage and eleven bodies were located in the mountains to the east.

In every such tragedy, the activities of the controller undergo close scrutiny. Split-second thinking and snap decisions are not always accurate; but given only the split second in which to decide, the controller cannot afford to err, because a mistake in this job may be counted in lives. Sometimes, as in this instance, an accurate and fast control job will (continued on page 9)

Regional Administrator's Column

POSITION CLASSIFICATION SURVEY

All CAA Regions have been instructed to make a classification survey of their positions. Authority has been delegated the Regions to determine the proper classification of positions up to and including CAF-5, SP-6, and CPC-7. We make recommendations on the appropriate grades for higher positions. In accomplishing this work we are responsible for carrying out the provisions of the Classification Act which is the basic law covering the classification of positions.

In some unknown manner, a rumor has gotten started that this program is a deliberate attempt to down grade positions. Nothing could be farther from the truth. It is possible that some jobs might be upgraded and that others might be downgraded. The basic principle of the Classification Act is to insure equal pay for equal work responsibility. Any appreciable deviation from this standard defeats the entire purpose of the Act and would permit discrimination between employees. However, if the assumptions were correct in the original establishment of the position, and if the duties as originally described are actually being performed, the majority of positions will undoubtedly remain in their present classification.

Supervisors can assist by delegating the full responsibility of a position to the incumbent, and the employee can help by assuming as large a portion of responsible duties as possible.

The United States Civil Service Commission has the responsibility of enforcing the provisions of the Classification Act, and is now engaged in an extensive audit to determine the accuracy of classification in the various government agencies. In this connection, it is necessary for all CAA Regions to fully implement the Classification Act in accordance with the rules and procedures established by the Civil Service Commission and our Washington Office.

The Personnel Division is charged with the responsibility of accomplishing the audits and recommending proper classification. The program has been somewhat delayed because of shortage of people to do the job in our Personnel Division. However, we have recently augmented the staff by one Classification Analyst and hope that the work will proceed more rapidly; although it should be pointed out that in some respects this is in the nature of a continuing program.

Please bear in mind that it is the position and not the person occupying that is being classified. The duties and responsibilities assigned to the job are what determine the grade. It is the policy of the Sixth Region to interpret the Civil Service standards liberally, and to resolve questions of doubt in favor of the position involved.

INTERNATIONAL CIVIL AVIATION ORGANIZATION GUIDES PEACETIME AVIATION

In 1944, 52 nations sent representatives to a Conference called in Chicago by the United States for the purpose of establishing a peacetime organization to insure that the great potentialities of international aviation would be developed in the interest of mankind and that civil air transport would not become a source of international friction.

This conference followed several former attempts to bring about the orderly development of international civil aviation. In 1919 an International Commission for Air Navigation was set up under the League of Nations and in 1928 there had been a Pan-American Conference on Air Navigation. After the war, nations focused their attention on the means by which the technological progress achieved in aviation could be turned to peaceful channels.

The Chicago Conference drew up a charter of an organization to guide and develop international civil aviation. A provisional body was established to function until the charter had been ratified by one-half the number of prospective members. On April 4, 1947, the International Civil Aviation Organization, known as ICAO, came into existence. Montreal, Canada, was selected as permanent headquarters.

The ICAO is a specialized agency affiliated with the United Nations Organization, and is divided into three principal units. The Assembly, a legislative body which meets annually and in which each member nation has one vote; a Council of 21 members selected by the Assembly to serve as an executive body and as a tribunal for the settlement of international disputes; and the Secretariat, which performs the administrative functions of the ICAO.

ICAO has created standards for international air navigation; organized regional meetings to determine what air navigation facilities are available and needed and to establish regional operating procedures for air and ground crews; provide financial and technical aid for the maintenance of air navigation and air transport facilities in territories of member states and in regions of the world where low population density or uncertain sovereignty make it impossible for one nation to provide them; co-operate with memberstates in making recommendations to minimize and eliminate the red tape of customs, immigration, public health, and other formalities which take up time at border airports; and develop international air law.

To achieve its full effectiveness, the ICAO looks for the support of member governments and their public and for a wide participation by the nations of the world.

ACTION TAKEN TO ADMINISTER CIVIL SERVICE EXAMINATIONS

As the first real step toward announcing the long awaited competitive examinations for Radio Technicians, Air Traffic Controllers, Airways Maintenance Technicians, and Aircraft Communicators, a board of Civil Service Examiners is now being appointed.

Although comprised of CAA personnel, the Board will operate under the technical direction of the Civil Service Commission. Within 60 to 90 days, it is expected that announcement of examinations for all grades Maintenance Technicians

will be made. Tests for the other positions will be scheduled subsequently as rapidly as possible.

Full publicity will be given the tests so that all interested Civil Aeronautics Administration personnel will be advised and have an opportunity to compete.

FUNDS FOR FISCAL YEAR 1949 RECEIVED

For the first time in a coon's age, CAA has the approved fiscal program in hand before the beginning of the new fiscal year!

Usually, the appropriation bill is one of the last items passed by Congress before it adjourns, and it is well toward the end of the first quarter before the agencies are able to straighten away for operations. This year is the case that proves the exception!

The approved Salaries & Expenses program for the Sixth Region for fiscal year 1949 is $7,515,033, which represents a 11.6% increase over the fiscal year 1948 program. The Regional program for the Federal Aid to Airports Program is $294,064 which is 8.4% less than the 1948 program; funds to be made available by transfer from the War Assets Administration for disposal of surplus airports are $23,383, which is 44.4% less than the amount set up for fiscal year 1948.

At the time of publication, no information was available concerning the finally approved fiscal year 1949 regional program for Establishment of Air Navigation Facilities.

The Region's estimate of personnel and fund requirements for fiscal year 1950 was submitted late in May and largely represented requests for changes over or under the fiscal year 1949 program level occasioned by the addition or deletion of planned facilities and functions.

SAFETY REGULATION TITLE CHANGES

Effective June 1, 1948, the title of the Office of Safety Regulation was changed to Office of Aviation Safety. Concurrently, the title of the Aircraft and Components Branch was changed to Aircraft Branch.

The term "Agent" has been substituted for the term "Inspector" wherever it occurs in any position title connected with the functions of the Office of Aviation Safety. No change was made in the functional responsibilities of these organizational units or positions. For the present, these changes are for administrative purposes only.

COMMENDATION

Glyndon M. Riley, our Regional Personnel Officer, has been commended by the Assistant Administrator for Business Management for the work he accomplished while detailed to the Washington Office in January.

The project, which was initiated under his supervision and guidance, involved the writing and coordination of position requirements for positions falling under the National Promotion Plan. Copies of these requirements have recently been received in the Region.

PERSONALITY OF THE MONTH - STAN BOGGS

Stan Boggs, Assistant Superintendent of Airports, still has a tendency to quiver in his "boots" as he recalls his most perilous incident.

It happened in 1920 on one of those foggy San Francisco days when Boggs was an Air Mail Pilot with the Post Office Service. Taking off in a single-engine ship enroute eastward to Salt Lake City, his engine failed while over the central part of the city.

The fog was so thick that Boggs was unable to determine exactly where he was. At this point, we could write "finis" if the fates hadn't been in Boggs' favor. On the descent, Stan recalls glimpsing the tops of several tall buildings. When he managed to detect what appeared to be a street, he steered for the opening. However, while descending, his ship struck some transmission lines and burst into flames. To this date, Stan is unable to explain how he escaped from the wreckage without serious personal injury.

Flying has been part of the Boggs make-up since he was commissioned a flying officer in the First World War. After leaving the Air Force, he joined the Post Office Department at the time of the inauguration of the Air Mail service. On September 9, 1920, Stan flew the first air mail into San Francisco from Salt Lake City in an Army De Haviland DH-4, a single engine bi-plane. There were no aids to navigation in those days, no beacons, no intermediate landing fields, no air-to-ground radio equipment. You just dumped your sack of mail in your ship and took off. You didn't even know what the weather was ahead of you because somehow or other weather reports over the Western Union wire always arrived at your take off point about an hour after your departure. All you had was a cockpit compass telling you in what general direction you were heading. Many times, you went through "on top" at 15,000 feet to 18,000 feet or dodged around the mountains following snow sleds and highways.

Boggs also inaugurated the use of an all metal plane on an air mail route. This was on the New York to Chicago run which Stan flew in a German Junker which the Post Office Department had obtained after World War I.

In 1928, Stan joined the Department of Commerce, serving in such capacities as Airways Extension Superintendent, Assistant District Manager at Oakland, and field and lighting inspector. He joined the Airports Branch in 1942 and assumed his present position as the Assistant Branch Superintendent in July, 1946.

AIRPORTS BRANCH HI-LITES

The San Francisco airport project (the Region's number one project from a dollar viewpoint) involving $1,700,000 of Federal funds, has been reviewed by the Regional Office and transmitted to Washington for approval. The project will provide funds for land reclamation by drainage and field grading, paving of runways, taxiways, aprons, roads and adjacent parking areas. The project also provides for high intensity as well as standard runway lighting.

It is anticipated that this project will receive final approval soon and that work will get underway within the next few months. This project is only one phase of the program destined to make the San Francisco Municipal Airport one of the finest terminals in the world.

The City has approved by a bond issue funds totaling $20,000,000 for airport development.

SAFETY REGULATION HI-LITES

Flight Operations Branch:

A recent experiment conducted in the San Joaquin Valley has indicated a new use for aircraft that is destined to put the humble honey bee out of business. An experiment conducted by a non-scheduled operator in conjunction with the University of California at Davis proved the value of pollenization with aircraft. By mixing a vial of pollen into a tank of water and dispensing it over an almond grove in a fine spray, successful pollenization was achieved.

Aircraft Branch

20th Century Rainmakers

Man-made deluges have been successfully obtained in this Region. Recent experimental flights conducted in Arizona and California have opened a promising field for commercial aviation operations. These modern rainmakers fly specially-equipped aircraft at altitudes ranging up to 25,000 feet. The objective is to get over a cloud mass and drop dry ice pellets or liquid iodide into the formation. The resulting chemical reaction increases the temperature of the cloud mass, causing condensation and subsequent precipitation.

The Precipitation Control Company of Phoenix, Arizona, conducted an extensive test between March 17 and April 8 over California's San Bernadino mountains in an area served by the Bear Valley Mutual Water Company. In 68 hours of experimental flight time a 58 year record for rainfall for this period was broken.

This Branch has issued experimental air worthiness certificates to aircraft modified with cloud-seeding equipment to two companies located in this Region.

Airman Branch:

Cross-Country Courses Approved

This Region now has seven schools offering a private pilot experimental cross-country course. The new course permits students to spend approximately half of their flying time in cross-country flights. The objective of the course is to accelerate familiarization with the problems involved in cross-country flying. Most approved flight courses provide for only a few hours of cross-country flying, the student spending most of his flying time near the airport. This provides an excellent curriculum for the business man pilot who primarily intends to use the airplane in connection with his work. The first experimental course was authorized approximately three months ago at Santa Rosa, California.

FEDERAL AIRWAYS HI-LITES

Status of Construction Projects

Bids have been opened for the lighting at Holbrook, Arizona airport and for the repaving of the Bryce Intermediate Field. Preliminary surveys have been conducted for the Oceanside-Blythe route and for an ILS at Sacramento, California. The site has been surveyed for the construction of a MH facility at the Siskiyou County Airport at Montaque, California. Projects completed during the month of June include the housing units at Battle Mountain, Nevada; parking apron at the Wells, Nevada Intermediate Field; and the extension of a watch house at Bryce Canyon Communication Station.

Special Tests of the Liebre Mountain VOR Conducted

As mentioned in the last month's issue of the Region Six News, special tests are being conducted with the Liebre Mountain VOR, which include the addition of an outside metal screen and the installation of radar cloth between the metal screen and the antenna shelter. This modification is being tried in order to determine to what degree it is possible to control the signals emitted from the VOR, eliminating certain undesirable effects. This experiment is being closely checked by both Regional Office and Washington observers. Flight checks are currently underway.

Incidentally, it has been found that if the counterpoise connections on the VOR antenna are welded, there is a sharp improvement in performance, as demonstrated by flight checks. This was first tried on the Long Beach VOR and is also being done at the Liebre Mountain facility.

No VHF Link to be Required at the Winnemuca-Sod House Facility

It was originally anticipated that a VHF link would be required for purposes of controlling from Winnemuca the VOR to be located at Sod House, Nevada, with a connection to Rome, Oregon (7th Region). The Telephone Company has advised that they will be doing major work in this portion of Nevada and will install control lines at a cost considerably below their first estimate, and less than the installation and operating cost of a VHF link.

VOR Installation Progress

Crescent City, California, and Battle Mountain, Nevada, VOR's are about ready for radio tune-up. VOR's at Fresno and Sacramento, California, were flight checked and placed in operation during the month of June. The Ranges at Red Bluff and San Diego are approaching flight check stage.

Hazards of the Maintenance Shop

Roy Watts, of the Maintenance Shop, was viciously attacked by a dog and seriously bitten while taking a fork lift truck to a service station to be steam cleaned. You just can't trust nobody no more, not even the dogs!

Modification Work in Los Angeles Center Approaches Completion

The installation of the Pittsburgh type traffic control racks is nearing completion in the Los Angeles Center. The Telephone Company is now installing interphone connections and wiring and when done, the board will be about ready for use. Some preliminary work has been started on this type of equipment at Salt Lake but it has not proceeded as far as in the Los Angeles Center. The Oakland Center is next in line for this type of equipment installation to begin as soon as LA is completed.

Division Chief Attends Eastern Conference

Claude M. Smith, Chief, Communications Operations Division, Airways Operations Branch, has just returned from a conference he attended in New York City and in Washington, D. C. concerning both international and domestic communication operational procedures.

CAPITOL GLEANINGS

PAY RAISE!!! It finally happened! . . .At the last minute Congress approved a pay raise which will provide $330 per annum for regular C.A.A. employees. This is a little over $12.50 a pay period before "deducts"...It isn't much, but it certainly will halp making income meet outgo....The pay raise is reported to become effective beginning the second pay period of fiscal year 1949 and will be reflected in the pay check dated August 6...By the way, the President as of this date has not signed the bill authorizing the pay increase...However, it is anticipated that he will do so....

The Job of an Air Route Traffic Controller (Continued from Page Two)

not countermand a combination of bad weather, low fuel and pilot inexperience - but many a pilot lives today because of controller help in an emergency.

There is no place to learn this strange job except in the control center itself. Once learned, there is no place to take it other than another center. And, strangest of all about this futuristic task is the absence of scientific equipment - the job is accomplished mainly with a telephone, a pencil . . and a head.

UTILIZATION OF ADDITIONAL COMMERCIAL BROADCAST STATIONS AS NAVIGATIONAL AIDS

Use of commercial broadcast station KSRO at Santa Rosa by Southwest Airways for let down procedures, and station KIEM at Eureka as an enroute navigational aid only, have been approved and details forwarded to Washington. This makes a total of three commercial broadcast stations in this Region which are now being utilized as navigational aids by scheduled air carriers. Station KDON at Monterey, California, was the first such commercial broadcast station approved as a navigational approach and enroute aid.

COMMENTS ON REGION SIX NEWS

To date, we have received very few comments from field personnel on the value of the Region Six News.

We hope it is serving a useful purpose to all employees of the Sixth Region, but we are interested in finding out whether or not this is true.

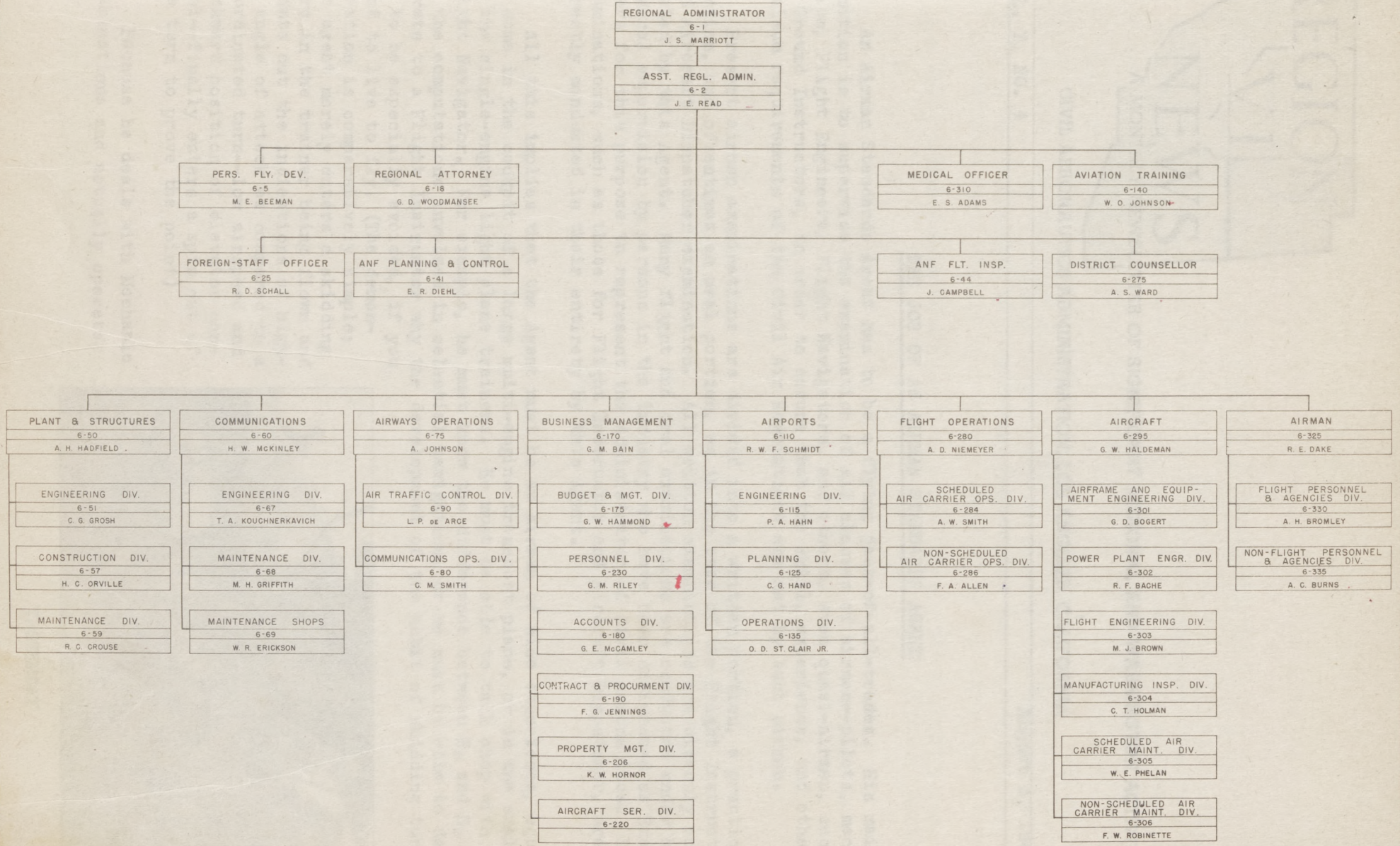
In the event the publication is not serving a useful purpose, we would like to discontinue it.

REGION SIX ORGANIZATIONAL AND PERSONNEL CHART

In order to acquaint field personnel with the what and who of the Regional Office, there is reproduced on the following page a chart showing position titles, encumbents, and routing numbers of Region Six personnel through the Division level.

This chart provides a handy reference in addressing communications, as well as showing organizational relationships in the Regional Office.

Anyone desiring additional copies of this chart may obtain them by addressing a memorandum to the Chief, Property Management Division, 6-206.



REGION SIX
CIVIL AERONAUTICS ADMINISTRATION
PERSONNEL CHART
AS OF JULY 1, 1948

APPROVED: J. S. Marriott
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