REGION VI NEWS

A MONTHLY NEWSLETTER OF SIGNIFICANT REGIONAL AND WASHINGTON ACTIVITIES

CIVIL AERONAUTICS ADMINISTRATION, LOS ANGELES, CALIFORNIA

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## REGIONAL ADMINISTRATOR'S COLUMN

### Oklahoma City Conference

On May 11 and 12 there was a conference of Regional Administrators in Oklahoma City. Washington representatives were Mr. Al Koch, Assistant Administrator for Safety Regulation; Messrs. E. S. Hensley and J. F. Warlick, Deputy Assistant Administrators; Mr. Howard F. Rough, Assistant Administrator for Field Operations, and Mr. Rod Sturtevant, Deputy Assistant Administrator. The conference was called for the primary purpose of discussing Safety Regulation matters, but some of the information developed should be of interest to all.

Mr. Rentzel, new CAA Administrator, will assume the duties of that office on June 1. At that time, it is understood that Mr. Fred Lee, presently serving as Acting Administrator, will assume the duties of Deputy Administrator for all CAA functions. In his previous capacity as Deputy Administrator he exercised jurisdiction over only Airways and Safety Regulation activities.

Among the items discussed was the National Promotion Plan. All Regions reported that they were experiencing extended delays in filling vacancies through the National Promotion Plan. The Washington representatives were cognizant of this objectionable feature and have done some work toward reducing the delays. For instance, for Safety Regulation vacancies, the Washington Office now will institute a procedure by which in the same dispatch which advises a Region that one of its people has been selected for a NPP vacancy, the Region will also be advised of the names of the three qualified eligibles to fill the resulting vacancy.

It was the consensus that a study should be made to improve the method of rating promotional aptitude and the Washington Office representatives agreed to make such a study.

There is some belief that the name of the Office of Safety Regulation should be changed. The use of the word "Regulation" apparently has been misunderstood to mean promulgation of regulations which is a function of the CAB rather than CAA. It is therefore proposed to change the name to Office of Aviation Safety. When this change is made, it is also planned to simplify the names of the Services and the corresponding Regional Branches. Under this proposal the Aircraft and Components Branch will become simply the Aircraft Branch. It was also suggested that the title of Safety Regulation "Inspectors" be changed to that of "Agent". For

the time being the m Agent would be purely an organizational term rather than a classification since t. Inspector Classification Series has only recently been established by Civil Service and it is not desired to delay the conducting of examinations and the attainment of permanent status by our personnel. Appropriate directives to make these changes are now being prepared by Washington.

You will remember that recently the Region was circularized to obtain volunteers for foreign missions in South American countries. A number of people from the Sixth Region volunteered for these foreign assignments. The South American countries concerned had indicated to our State Department that they were desirous of getting the services of these United States experts, but they did not consummate the written agreements when requested to contribute toward the financing of the missions. Therefore, this program has been deferred. Some of them may yet materialize, but in general those of you who have volunteered can relax until something new does develop.

In addition to the conference, the entire group was conducted on a tour visiting all of the facilities of the Aeronautical Center. These facilities are being augmented. The facility for training Communications Branch Maintenance Technicians is being greatly expanded in order to provide all equipment necessary to demonstrate the maintenance problems with which Maintenance Technicians are concerned.

## RENTZEL SELECTED TO HEAD CAA

Long awaited action on the selection of a successor to T. P. Wright as Administrator of Civil Aeronautics has recently crystalized.

President Truman recently nominated Delos Wilson Rentzel, 39 year old radio expert, to take over soon. The Senate confirmed this appointment on May 5th - at the same time that Mr. Charles Sawyer was confirmed as Secretary of Commerce. He is scheduled to assume his new duties as CAA Administrator on June 1.

Mr. Rentzel, a private flier, has had a versatile occupational career since his graduation from Texas A. and M. in 1929. Following his graduation, he served two years as a radio expert in the Navy. From 1931 to 1934, he was with American Airways, Inc. as a radio operator and station manager. During the period from 1934 to 1943, he held the post of Director of Communications with the American Airlines. At that time he assumed an executive hand with Aeronautical Radio, Inc., organizing Aeronautical Radio de Mexico in 1944 to 1947. He presently holds the position of President of Aeronautical Radio.

## SPECIAL RECOGNITION

C. T. Holman, Chief, Manufacturing Inspection Division, Aircraft and Components Branch has been commended for his part in designing and developing an instrument for the measurement of rudder-pedal forces. The idea for this instrument was conceived by Mr. Holman and Mr. Roy Caldwell (former Chief, Flight Engineering Division, Sixth Region) in 1945.

## REGIONAL BOARD COMPLETES REVIEW OF EFFICIENCY RATINGS

Designation of James E. Read, Assistant Regional Administrator; Robert E. Dake of Airman; A. H. Hadfield of Plant & Structures; Art Johnson of Airways Operations and Glyndon Riley, Regional Personnel Officer, to comprise the membership of the 1948 Regional Efficiency Rating Committee was received recently from Washington.

Mr. Hadfield is the new addition to the Board, succeeding H. W. McKinley, Superintendent of the Communications Branch.

Mr. Riley has been elected as Committee Chairman for the remainder of the rating year.

Committee hearings on this year's rating have been completed and the preparation of the notification slips to the employees is now underway.

## CLASSIFICATION OF INSPECTOR POSITIONS

During the week of April 26-30, Mr. Ernest Hensley, Deputy Assistant Administrator for Safety Regulations, Mr. Don Harvey, Personnel Officer, and Mr. Russell Kunz, Chief of the Classification Division of the Washington Office, were in this Region for the purpose of obtaining information concerning the classification of Safety Regulation inspector positions.

Conferences were held with the Regional Administrator, the Executive Officer, the Regional Personnel Officer, Branch Superintendents and Division Chiefs of the Safety Regulation Branches, in which various problems concerning classification were discussed.

In order to secure additional specific information, several district offices and one factory inspection office (Lockheed) were visited. The information obtained in these field visitations and from the conferences held will be used in formulating classification specifications for the positions concerned.

## REVISED REGIONAL WAREHOUSE CATALOG

At the request of the Washington Office, the Sixth Region is currently engaged in reproducing two thousand copies of the revised Warehouse Catalog to provide for distribution to all Regions. The revised catalog will be distributed to the field by June 20, 1948.

Many of the suggestions received from field personnel have been incorporated in the new edition and every effort has been made to eliminate duplication, provide better classification of items and to furnish a more comprehensive index.

To accomplish the objective of better classification and still provide room for addition of new items, particularly those which will be reported by other regions, it has been necessary to renumber the entire catalog.

Several improvements have been incorporated in the new numbering system; for example, manufacturers' part numbers are being shown in parentheses below the warehouse stock number in the case of engine generator parts and commercial designation of tube types, prefixed by class number "09" is being used as the Warehouse Catalog number in the radio tube section. We believe that this modification will facilitate identification of items.

As the first step in the reproduction process, Addressograph plates were embossed for each of the approximately eleven thousand items. These plates carry the catalog number and complete description of each item carried in warehouse stock. The plates, arranged in numerical sequence by class, are used in preparing the masters required in the Multilith process.

Reproduction of the 1,400,000 pages required for the national catalog is being accomplished with Multilith equipment recently acquired by the Region. This method of reproduction results in more legible copies.

The revised catalog will be considerably smaller than the first edition, totaling approximately 350 sheets printed front and back. Since the new catalog will be less cumbersome than the first issue, the complete catalog will be distributed to all field facilities instead of the limited class distribution originally planned.

The assignment of new catalog numbers necessitates reshelving of warehouse stocks; therefore, routine warehouse operations will be suspended for a two weeks' period beginning June 15. During this interval, only emergency requisitions will be filled. Revised Standard Allowance-Record of Consumption forms bearing the new catalog numbers are now being prepared and will be issued to all facilities operated under the Station Stock Control Plan prior to the effective date of the revised catalog.

While the revised catalog is believed to be a distinct improvement over the first edition, we realize that numerous revisions will be necessary in the future. Your continued cooperation in offering constructive criticism is requested.

## CALIFORNIA LEADS NATION IN NUMBER OF REGISTERED AIRCRAFT

As of January 1, 1948, California had a total of 10,221 registered aircraft. This was over twice the total of any other state with the exception of Texas, which held the second spot with 8,347 aircraft. The California total represented an increase of 1,765 registrations over the preceding year. This increase was almost double the increase reported by any other state.

## PILOT INGENUITY FINDS NEW JOBS FOR AIRCRAFT

A recent survey made in the Sixth Region by field inspectors of the Non-Scheduled Operations Division reveals an amazing assortment of aircraft uses in commercial flying. Hunting lost persons and air police activities top the list of 52 different types of operations reported by over 1,000 operators using over 2,000 aircraft. Many operators are engaged in several different activities, and a single plane is frequently used for a number of related jobs. Nevertheless, it does show that pilots and planes are available for an incredible variety of jobs in the Region.

## PLANNING THE AIRWAYS

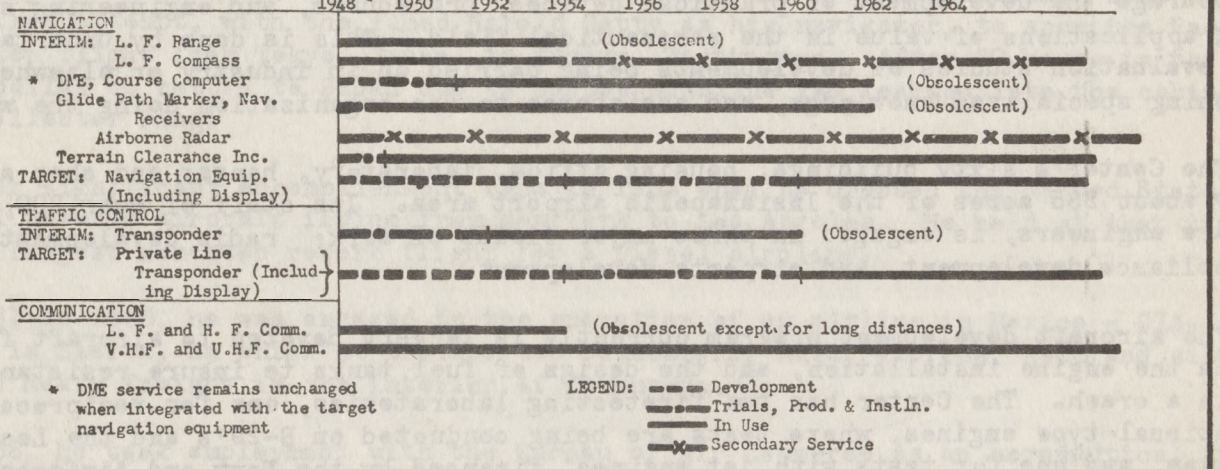
The Radio Technical Commission for Aeronautics, in its S. C. 31 report, has proposed a fifteen year program of airways development. The objective of the plan is to provide all-weather electronic airways. The plan will require the expenditure of $836,600,000 and will, if successful, improve the efficiency of the present Federal Airways system by better than 50%. The chart following shows the planned evolution of airborne and ground equipment.

When complete, the target potential or system will consist of 550 en route stations equipped with search radar, traffic data relay equipment, safety separation equipment (block signals) and Nav-Aid; 550 airport control areas; and 50 general control areas, each of which will contain a general planning unit and a detail flow control unit.

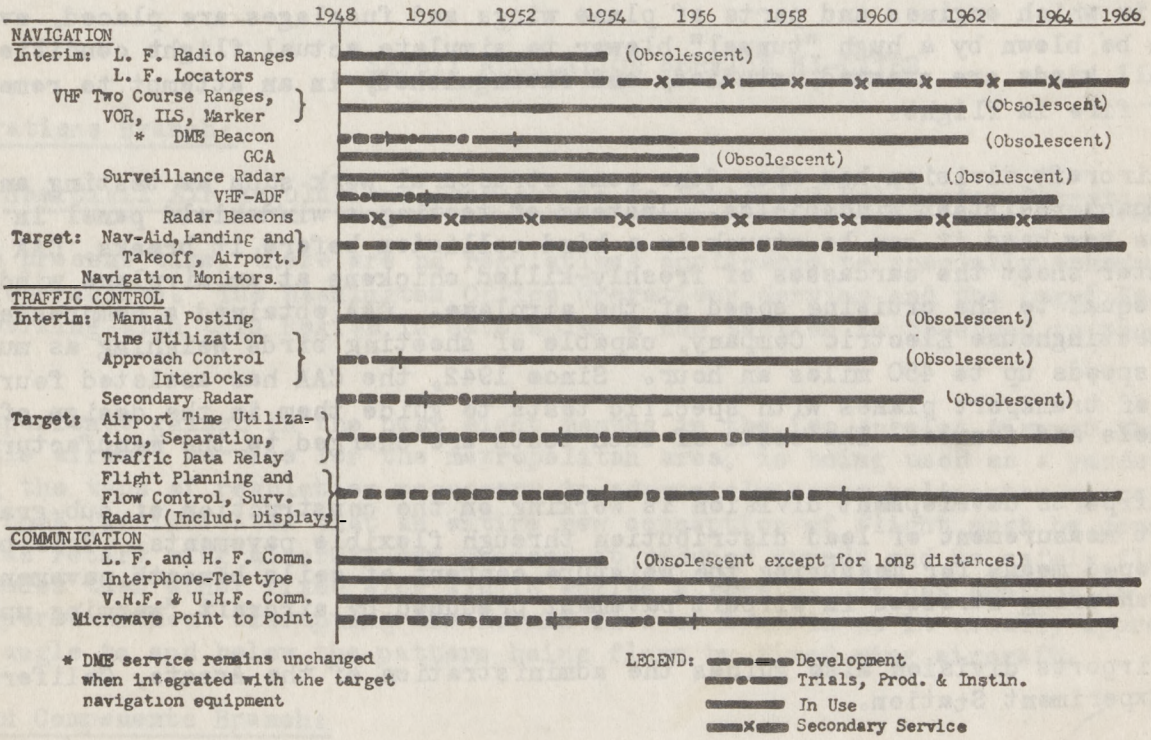
The system is designed to handle a fleet of 100,000 aircraft of which 55,000 will be private planes, 10,000 airline transports and 35,000 military aircraft. Approximately 15,000 military planes and 5,000 commercial airliners are expected to be equipped with dual airborne equipment for safety purposes.

Major technical problems to be solved in the target system include development of a schedule computer and the private line communications system. Top priority is recommended for private line research and development since it is a key in both interim and target systems and will relieve the already overcrowded voice communications channels.

## EVOLUTION CHART OF AIRBORNE EQUIPMENT




## EVOLUTION CHART OF GROUND EQUIPMENT



## TECHNICAL DEVELOPMENT CENTER EXPERIMENTS FOR CAA

The CAA maintains an experimental station, the Technical Development Center, at the Indianapolis Municipal Airport in Indiana. The Technical Development Service provides the initial point of contact between the operating units of the CAA and new developments in aeronautics.

The Technical Development Service does not engage in basic research or attempt to invent unless invention occurs as a byproduct of its normal activities. Its function is to encourage the development of practical devices, procedures, and engineering standards having applications of value in the aeronautical field. This is done by undertaking technical evaluation studies of developments being carried on in industry or elsewhere and furnishing specialized knowledge, and assistance to the organization doing the work.

The Center's sixty buildings, housing office, laboratory, hangar and shop activities occupy about 285 acres of the Insianapolis airport area. Its staff of over 200, most of whom are engineers, is engaged in three major fields of work: radio development, aircraft and appliance development, and airports development.

The aircraft development program currently is largely devoted to aircraft fire prevention in the engine installation, and the design of fuel tanks to insure resistance to impact in a crash. The Center has two firetesting laboratories, one for reciprocating, conventional-type engines, where tests are being conducted on B-29's and the Lockheed Constitution, and one for tests with jet engines; financed by the Navy and Airforce.

The firetest laboratory consists of a special building with a large room, open at each end, in which engines and parts of plane wings and fuselages are placed, over which flames can be blown by a hugh "tunnel" blower to simulate actual flight conditions. Here, fires of all kinds are started, studied, and extinguished, in an attempt to remove the hazards of fire in flight.

The aircraft division has also done some structural work such as testing and development of impact-resistant windshields. Instead of testing a windshield panel in a laboratory to see how hard it can be struck in a bird collision before it breaks, CAA technicians at the Center shoot the carcasses of freshly-killed chickens at an airplane windshield at speeds equal to the cruising speed of the airplane. CAA obtained a compressed air cannon from the Westinghouse Electric Company, capable of shooting birds weighing as much as 20 pounds at speeds up to 450 miles an hour. Since 1942, the CAA has assisted fourteen manufacturers of transport planes with specific tests to guide them in the design of their windshield panels and frames. The costs of such tests are charged to the manufacturer.

The airports development division is working on the construction of sub-grade that will permit measurement of load distribution through flexible pavements. This branch has also developed means for measuring the moisture content of soils beneath pavements and determining shearing stresses in airport pavement produced by aircraft "warming up".

The airports division also guides the administration of the Arcata, California, Landing Aids Experiment Station.

In radio development, CAA has been responsible for every development and the establishment of every radio facility in use on the Federal Airways to date, including the low-frequency ranges that make up the present navigational system, the very high frequency markers and location markers, the very high frequency communications systems, including radio teletype, VHF omnidirectional ranges, distance measuring equipment, and instrument landing system.

## PERSONALITY OF THE MONTH - HAROLD BROMLEY

For a colorful career in the field of aviation, we nominate Harold Bromley, Flight Personnel Division Chief of the Airman Branch, who has had one of the most spectacular.

In tabulating over 11,000 hours in the air, Bromley's aeronautical background dates from the Fall of 1917 when he was a flier in the Royal Air Force.

Probably his greatest claim for national attention occurred in September 1930 when he made the first attempt, with the famed Harold Gatty as his navigator, to span the Pacific in a non-stop flight from Tokyo, Japan, to Tacoma, Washington. After 30 hours in the air, he was compelled to return to Japan due to carbon monoxide gas leakage into the cabin from a faulty collector ring.

Another significant accomplishment came in 1933 when he crossed the United States in a Diesel powered aircraft flying from New York to Los Angeles. He held at that time the unofficial longest non-stop record flight for a Diesel airplane.

In 1931 to 1936, he was engaged in the operation of an airline in Mexico - CIA. Aeronautics de la Sierra, in which he transported passengers, mail, express, gold and silver bullion and heavy freight in the interior of Chihuahua.

In 1936, he took employment with the Bureau of Air Commerce as an aeronautical inspector, taking over as the Superintendent of the Civilian Pilot Training Service in May of 1942. He assumed his present duties as an Airman Division Chief in August, 1946.

## SAFETY REGULATION SERVICE HI-LITES

### Flight Operations Branch:

#### Seek Civil Air Regulations Appropriate to Scheduled Helicopter Operations

At the present time, there are no regulations applicable to specially scheduled helicopter operations. The Washington Office Operations Service and the Legal Section have been working with this Region in developing a new section to be added to the regulations.

The experience gained in the past eight months in the Los Angeles Airways which provides shuttle airmail service for the metropolitan area, is being used as a yardstick in determining the type of regulation necessary to adequately cover helicopter operations. Experience thus far indicates that an entire new conception of flight must be considered in as much as rotary wing aircraft can proceed at reduced speeds and be safely flown at lower altitudes than other fixed wing single engine aircraft. It can operate in and out of busy airports without disrupting the normal flow of traffic as it usually approaches at a right angle to and below the pattern being flown by fixed wing aircraft.

### Aircraft and Components Branch:

#### Seek Cold Weather for Anti-icing Tests

Flight engineering inspector William Gray conducted an anti-icing test on the Consolidated Vultee Model 240, flying over the Siskiyou Mountains in northern California and the Olympics in the area east of Seattle, Washington. He encountered rather heavy icing conditions, but it was determined that additional tests will be required, as the heat exchangers did not provide sufficient heat to remove the ice.

Flight Engineering Inspector Bert L. Bantle conducted similar tests on a United Air Lines DC-6 with a new electric cycling system for the propeller. During the tests, heavy icing conditions were encountered over Colorado, Kansas and Nebraska, and the tests were considered satisfactory.

Further tests are anticipated, and arrangements have been made for flights into Canada and Alaska if necessary to find suitable icing conditions.

## Resume Tests on Howard Hughes Boat

Experimental flight tests will be resumed on the large eight-engine Howard Hughes HK-1 cargo boat about June 15. George W. Haldeman, Superintendent of the Aircraft and Components Branch, will be the official representative for the RFC during the tests.

## DC-6 Engine Fires Reported

Douglas personnel report that three engine fires have occurred on DC-6 aircraft since they were returned to service. The first fire was on a United Air Lines airplane between San Francisco and Honolulu; the second fire on a Braniff airplane was detected and extinguished before any appreciable damage resulted; and the third fire was on an American Air Lines airplane near Cleveland. It appears that all three were due to engine failures. The Braniff and UAL fires apparently occurred as a result of cylinder failures, while Douglas indicated the Cleveland fire may have been caused by an impeller or cylinder failure.

Airman Branch:

## New Flight Panel to Reduce Operations Expense

During World War II, Lockheed Aircraft Corporation, Burbank, California, developed a flight engineers panel at a cost of approximately $125,000. It took a year and seven months to construct this panel for use in training flight engineers. To date, there have been 396 applicants trained through the use of this panel, which is located at the Burbank plant.

Fifty hours of practical flight operation are now required for a flight engineer's certificate for the Lockheed Constellation. If this panel is approved, twenty-five of the total fifty hours can be credited on this panel. From an economic standpoint, this would greatly reduce the present expense of flight practice.

# FEDERAL AIRWAYS HI-LITES

## Preliminary ICAO Meeting Held

A preliminary agenda meeting on air traffic control was held May 24-28 at Seattle. This meeting was preliminary to the ICAO North Pacific Regional Air Investigation Meeting to be held at Seattle beginning July 13. Mr. G. I. Smith, of the Regional Office, represented the Region at this preliminary conference, in which representatives from Regions 7, 8 and 9 also participated.

## New Plant and Structures Maintenance Sectors Established

New Plant and Structures Maintenance Sectors have been established at Needles, California and Hanksville, Utah. Mr. Henry Berg and Mr. Jesse Biddle are the Airways Maintenance Technicians, respectively, at these new sectors.

## Plant and Structures Construction Projects

Bids have been advertised for the paving of the intermediate field at Bryce Canyon. Construction work is now actually underway for the new MOR at Pescadero, California. The new INSAC building at St. George has been completed. Progress on construction of VOR ranges at Ukiah and Julian, California, is being temporarily withheld pending the results of experimentation with counterpoise screens on the Liebre Mountain range. If these screens prove in practice what they do in theory, Ukiah and Julian ranges may possibly be relocated to places more accessible than presently selected mountain top sites. Construction of housing units at Battle Mountain and Hanksville is proceeding rapidly and the addition of housing units at Bryce Canyon will be soon underway.

## Needles VOR Burns

Because of a fire of undetermined origin, the new VOR at Needles burned May 18. This range has only been completed and operating on a test basis a matter of two weeks. The transmitter building and contents are a complete loss. It is known that the fire did not originate from the standby plant and was apparently not due to gasoline or oil sources, nor to voltage regulater overheating. The antenna tower and counterpoise were not seriously damaged.

## DME for Los Angeles

DME (Distance Measuring Equipment) is scheduled for early installation at the Los Angeles VOR and Localizer. It is understood that the factory is about ready to release equipment for shipment to this Region. This project is a part of the approved EANF Program for fiscal year 1948.

## Radar

During the recent visit of technical personnel from the Washington Office, it was learned that installation is scheduled during April, 1949, for precision beam and surveillance radar units at the Los Angeles airport. This will be the first unit produced by the Gilfillan Company under CAA contract and involves separation of precision beam and surveillance equipment formerly grouped as one in GCA mobile truck units as used by the Air Services.

## ILS Maintenance

As a result of reports concerning mal-operation of the San Francisco ILS glide path, an investigation was conducted by a representative of the Communications Maintenance Division, Mr. Jay Tayler, and it was found that local personnel had been able to accomplish corrective adjustments. Experience has tended to demonstrate that the ILS glide path isn't as tricky as everyone first thought it to be!!

# AIRPORTS BRANCH HI-LITES

## Consultants Survey Effects of Close-in Airports

Airport management consultants Joe Hicks and Charlie Jones have completed a survey at Calistoga, California, designed to reveal the effects of a close-in airport on real estate values and to determine the public reaction to and acceptance of "downtown" airports. The survey was initiated in collaboration with the Redwood Empire Association as the result of a conference held with that agency last fall by the Superintendent of Airports.

Conducted as a house-to-house canvass, the survey revealed that the majority of proper owners were not opposed to the location of an airport in downtown areas. The survey reported that the effect of such a location would not be detrimental to real estate values in the area immediately adjacent to the airport.

## Airport Program Progress

In April grant offers were made to the sponsors of the San Luis Obispo, Calipatria, Los Angeles, Phoenix, Prescott, Kanab, Vernal, and Salina-Gunnison projects, and grant offers were accepted by the sponsors of the Del Mar, Nephi, Milford, and Elko projects. Contracts were awarded and work started on the Holbrook, Nephi, and Roosevelt airports making a total of nine projects in the Region at the end of the month.

In May construction started at Del Mar Airport, and a grant offer was issued to the City of Santa Monica for the development of the Santa Monica Municipal Airport. A grant offer was issued to the city of Phoenix for further development of the Phoenix Sky Harbor Airport, and construction will begin June 1.

It is expected that construction will start on the Clark County Airport Administration Building at Las Vegas about June 15, and construction on the Milford Municipal Airport has already begun.

## CAPITAL GLEANINGS

PAY RAISE?. . .The Senate and House Civil Service Committees have both reported favorably to their respective bodies differing bills providing for a pay increase for Federal workers under the Classification Act. The Senate bill, in addition to authorizing an increase in the rate of compensation by an average of $650 also overhauls the Classification Act. Among the significant provisions of the Senate measure are (1) merging the five classes of employees into a single schedule with 12 grades, (2) setting a minimum annual salary of $2,350 for all adult, full-time employees and a maximum of $13,850, (3) extending classification authority to the field services, with post-audit by the Civil Service Commission of allocations by department heads, and (4) removing from application of the Classification Act employees in recognized trades or crafts, whose compensation will be fixed adjusted in accordance with prevailing rates by wage boards or similar administrative authority...The House bill is less comprehensive in scope and covers only the matter of a pay raise. The House measure would give Federal workers a temporary increase of $468 per annum and would be effective from May 1 to June 30 of next year...As a result of a recent meeting of Congressional policy leaders, it has been reported that there is little likelihood of either bill being approved as now written, notwithstanding general sentiment in favor of some sort of a Federal pay raise. The problem is one of obtaining agreement as to the amount of an increase and whether an increase should be written in as a part of a general overhauling of the Classification Act...RETIREMENT...The House Civil Service Committee is considering a bill to permit retirement of Federal employees engaged in hazardous occupations at age 50 with a minimum of 20 years service. Included in the group of hazardous positions are Airways Technicians, Radio Maintenance Technicians, Airways Flight Inspectors, Flight Engineering Inspectors, Aeronautical Inspectors, and Flight Operations Inspectors.