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 A CONSTRUCTION ENGINEER

One of the first duties performed by the old Aeronautics Branch in the Lighthouse Service was to build airways. Thus, the Airways Engineer was one of the first positions established by our old predecessor organization. The first jobs connected with the establishment of airways was to build emergency landing fields and erect light beacons to guide the pilots at night. Of course, it was also necessary to light the boundaries of these emergency fields so that they could be used at night. Some of these emergency fields and beacon lights were in far away places where commercial power lines were not available and, therefore, it was necessary to install our own power plants and power lines and construct access roads from the main highways into these facilities.

As the years have passed and new equipment has been developed, the number and variety of air navigation facilities has increased with the addition of such installations as radio ranges, fan markers, "H" markers, "Z" markers, instrument landing systems, approach light lanes, control towers, standby engine generators at most of these facilities to provide power in case of failure of commercial power, and now the installation of radar and DME (Distance Measuring Equipment) systems which were developed during the war. In isolated areas, it is necessary to construct watchhouses for the use of operation and maintenance personnel and to build living quarters with all the attendant facilities required for their upkeep and maintenance.

The Construction Engineer constructing air navigation facilities has to be a rather versatile individual. He is required to have a comprehensive knowledge of many different types of engineering. He has to know highway engineering for the construction of access roads; airport engineering, including a knowledge of soils, for the grading, drainage and paving of landing fields and airports. He must be an expert on concrete, building erection, tower erection, construction of power lines, radio antennas, air conditioning, heating and ventilating for buildings, sound proofing; installation of water systems, sewer systems and power distribution systems, all under the general heading of civil engineering. He must be

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LIVING QUARTERS

familiar with mechanical and electrical engineering in order to install standby engine generators using both gas and diesel engines from 800 watts in size to 125 KVA; the installation of rotating light beacons along the airways on towers ranging from 20 to 125 feet in height; installation of runway lights and approach lights on airports and landing fields; the installation of cables, transformers, etc, in connection with the installation of instrument landing systems, airport surveillance and precision approach radar.

When the Construction Engineer proceeds to a field assignment, his job may be either supervision of a contract job or superintending a project constructed by Government personnel (force account). On a contract job, he must see that all of the work performed by the contractor is in accordance with the plans and specifications under which the contract was made. It is his job to catch any errors and ambiguities in the specifications and iron them out with the contractor or refer them to the office for proper adjustment. To get along with some contractors and still get the job done in accordance with the plans and specifications at times requires a super diplomat. A government force job requires still other talents such as the hiring of skilled artisans and common laborers, the detailed supervision of these employees, and the procurement of equipment and materials. This equipment and materials must be installed and incorporated into the projects in accordance with predetermined plans and specifications as rigid as those set up for work done by contract.

SAN FRANCISCO MOR

The Construction Engineer must be prepared to live out of a suitcase as his assignments keep him constantly moving through the Region. He is generally working under pressure, as construction jobs are rarely started until the day after they are wanted in operation. Formerly the unwritten law was to construct projects in the desert in the summertime and work in the northern part of the Region during the winter. This has now been changed so that advantage is taken of better weather, but assignment of several projects prevents the engineer from enjoying his week ends the way other employees do. But for all his grumbling and griping, he would not change jobs with any one else in the Region, for he was born with an urge to travel and a nature that flourishes on an unending change and variation in the day's work. He is generally a man intensely interested in aviation, has a more than average knowledge of aeronautical subjects and takes pride in the part he plays in the development of aviation.

D'ESTOUT AND KISER RECEIVE EMPLOYEES AWARDS

Henri G. D'Estout, Aviation Safety Agent, San Diego, and Ella B. Kiser, former Communicator have both received Certificates of Award signed by the Administrator and cash in the amount of $10.00. D'Estout's award was granted for recommending that CAA ground code signals be printed on the reverse side of aircraft airworthiness certificates. Miss Kiser's suggestion was that the Federal Airways Manual of Operations be changed to specifically instruct ground stations to terminate the contact with the word "out" when the ground station and the aircraft do not use the same frequency for transmitting and receiving.

Regional Administrator's Column

MAKING DECISIONS

One of the reactions of many people to the operation of Government functions is the apparent reluctance on the part of a large number of persons in positions of responsibility to make decisions. This reaction comes, not only from people in industry who have occasion to deal with Government agencies, but also from many conscientious Government employees. There are many ways, one might even call them devices, by which people avoid making decisions. One is through the excuse of the need for coordination. Now coordination is a fine thing and is essential in many phases of activities in our own organization, and often reaches across into other Government agencies. However, once a question has been coordinated and the recommendations of all concerned obtained, eventually the responsible agency, office, or individual should arrive at a decision even though it is impossible to reconcile all of the various opinions and recommendations.

Another means of avoiding or delaying making decisions is the "committee" system. In some cases, a committee is a good means for bringing together information and consolidating viewpoints in order that a sound decision can be reached. However, in many cases the committee approach is used by an official in order to shift the responsibility for making the decision, thereby avoiding possible criticism if the final decision appears to be an unpopular one.

Still another method of deferring or avoiding personal responsibility for decisions is to refer matters which require policy decisions to succeeding lower eschelons in the organization for recommendation, which in turn must be coordinated and initialled as they return up the ladder for the responsible official's signature. This method makes it possible for the Chief to "pass the buck" in the event the decision is later criticized. Also, decisions reached in this manner may not always be accurate because such decisions recommended by the technical working level, due to lack of understanding or knowledge, may not have taken into consideration related policy at the organizational level of the responsible office.

Accepting responsibility for making prompt decisions is applicable throughout the organization down to and including every supervisory position. Do not misunderstand me when I say "prompt" decision by confusing it with "snap" decision. Every decision should be based on the best available information and the use of sound judgment, and should include such coordination as is essential. The information should be obtained quickly, the coordination effected expeditiously, and the decision issued without delay.

What I have said here is not intended as a criticism of our own agency. It is apparent in many Government organizations and in some industrial companies. To the degree that it does exist in our own organization, to that extent we should attempt to correct it.

JOE PILOT VISITS BAKERSFIELD

Joe Pilot, flying into Kern County Airport at the Southernmost end of the San Joaquin Valley, adjacent to the City of Bakersfield, finds a CAA operated Communications Station, Airport Traffic Control Tower, and a Maintenance Technician to keep the radio and related gear going.

Coming in the "pattern", Mr. Pilot may have the luck to receive his landing instructions from the effervescent, pint-sized Chief Controller, Clyde Boughton, who has been "head wheel" in the tower there for about eight months now.

CLYDE BOUGHTON

Clyde likes Bakersfield, regardless of the heat and dust storms, because there is a high local interest in aviation, plus the fact that he has a first-rate crew to work with. His tower is rated as Class 2A, based on its workload, which means that there is a total complement of nine, including the Chief himself. The "A" indicates that the tower has approach control, which was added early this year.

There are eight scheduled trips per day by United Airlines, and itinerant traffic is high; in fact, constitutes 27½ percent of all traffic. Since there are 160 privately owned aircraft on the field, seven fixed base operators, and an Air Force Reserve Squadron, you can imagine the weekend "rat race" the tower has. In fact, the traffic count shows approximately twice the weekend load compared to the average mid-week load. In the summer, during the hotest period, flying drops off during the day because of turbulence (which becomes terrific), though there are a considerable number of early-morning and late-afternoon "birds".

Each weekend brings in a few "flying farmers" - pilots who do most of their flying off their own hay fields - and who don't seem to know very much about traffic control, and care less.

Much of the north or south-bound traffic stops for fueling, a check on the weather, or for a "coke". Not infrequently, south-bound traffic will RON (remain over night) at Bakersfield if the weather is bad in and about the "hills" to the South.

Boughton's crew consists of T. L. Powell, W. B. Spears, B. A. Ill, L. T. Knutson, E. H. Pattee, R. B. Curry, W. Conner, and W. M. Larkin. Incidentally, Larkin used to manage Claude Thornhill's Band and is now doing some radio script writing on the side. Ill has been working toward a law degree on an after-hours basis and is just about nearing completion. Conner, according to Clyde, is a "devotee of the sun", whatever that means!!!

Before Joe Pilot departs for his designation, he will probably want to check on the weather along his route and also to file a flight plan, so he will seek out the Communications Station, which is located in an Army surplus frame building just to the north of the Administration Building. The building, which has been completely refurbished for our needs also houses the Weather

Bureau and the Maintenance Technician.

Chief Communicator, C. H. Willhoite, is assisted by Communicators A. Richards, D. W. Hegland, G. G. Ragland, D. W. Alguire, L. M. Norman, L. W. Gardina, G. W. Mowen, Jr., and W. A. Godar. The station's workload places it in the Class 4 category. Handling flight plans for the itinerant traffic plus volume of air-ground contacts are responsible.

C. H. WILLHOITE

The staff all have a high personal interest in aviation, and several, including Hegland, Norman, and Alguire, are licensed pilots. All take a turn now and then in the Link Trainer, which the Bakersfield High School has made available for their use.

After Joe Pilot obtains the desired weather information, files his flight plan and then, after warming up his ship, obtains take-off instructions from the Tower, his contact with the CAA Bakersfield has ended. However, there is a third member of the team whom he has not met; namely, the Communications Maintenance Technician. He is the "guy" who keeps the teletype machines, radio transmitters and receivers, and the outlying aids "pumping".

Tow-head Jack Hammond, Maintenance Technician in Charge, is ably assisted by Maintenance Technicians Bob Shiraga, John Click, and Jack Teatsorth. Relief Maintenance Technician, H. G. Pack, is based at Bakersfield, but is now attending the Oklahoma City School. During his absence, Dennis Cosby is filling in.

In the sector for which Hammond is responsible, there is the Communications Station, Tower, low frequency range, instrument landing system, high frequency range (VOR), two fan markers -- one located at LeBec, 50 miles southwest and one at Famoso 20 miles to the north - and a compass locator. Though most of these aids are right around Bakersfield, the two fan markers stretch the sector out 70 miles at the greatest point.

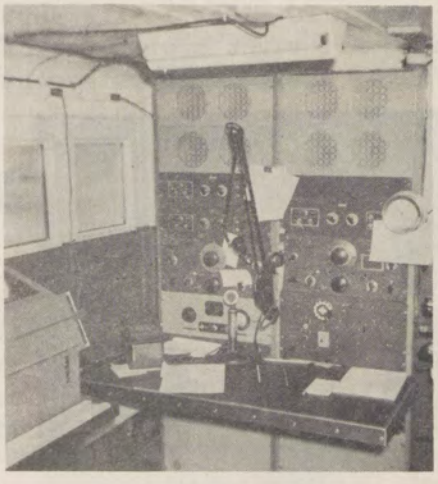
JACK HAMMOND

The compass locator is in a residential section of the city, and its signal is noticeable on broadcast receivers in the immediate vicinity when tuned to certain stations. An elderly lady, living within the area affected, is a bit unhappy about this. It seems that there is a particular soap opera broadcast from a Fresno station with which the compass locator signal interferes. Jack is puzzled on this one.

"Our greatest maintenance problem peculiar to Bakersfield," according to Hammond, "is created by the dust storms. Keeping equipment clean and dust-free is made a lot more difficult. Strangely, these storms have not always been associated with the area. According to the local Weather Bureau office, they have started and are increasing in number each year.

EMERGENCY OPERATIONS AT DELTA

Service at the Airway Communications Station, Delta, was restored to normal, April 1, following the fire which destroyed the station March 21. Installation of service was accomplished by equipping a field intensity measuring truck with necessary receivers, amplifiers, teletypewriters, interphone, etc, for temporary use until a new station can be built. Those concerned with setting up the truck and restoring operations are to be complimented for their fine work.



CIVILAIR SPRING DANCE

On Friday night, April 22, a Spring Dance sponsored by Civilair, Inc. was held in the Cafeteria Building at the Regional Headquarters.

In connection with the dance, a "Queen" contest was held in which a candidate was elected from each Branch. Those elected were:

Aircraft Branch:	Eileen Farrell
Airports Branch:	Helen Wilson
Airways Operations Branch:	Patricia Kiley
Communications Branch:	Edith Rosenblum
Plant & Structures Branch:	Ann Tobias
Business Management Branch:	June Tiffany
Office of Regional Administrator and Staff, Flight Operations and Airman Branches:	Muriel O'Meara

In determining who would be crowned as "Queen" of the dance, one vote was allowed for each ticket purchased. The contest was quite heated throughout with the lead shifting during the two weeks period preceding the dance. The voting ended at 3:00 p.m. on April 22 and the winner was Miss Patricia Kiley, the very attractive secretary of Chief Aircraft Communicator Don Fulton, Los Angeles The queen was crowned by Mr. Marriott at the dance and received a beautiful compact as a gift. Needless to say, the "Operations Boys" were very proud of their "Queen".

THE QUEEN IS CROWNED

The music was provided by Frank Sutter's band whose charming feminine vocalist Letty Derus is the sister of our own Gladys Derus (Regional Attorney's Office).

A total of 304 tickets were purchased prior to the voting deadline and although all did not attend the dance that evening, a very fine crowd enjoyed themselves to the fullest extent.

PERSONALITY OF THE MONTH

James E. Crenshaw can lay claim to one of the most varied engineering careers of anyone in the region.

Although he spent his boyhood in Arkansas, he stepped down to Texas for his education with a Mining Engineering degree from Texas School of Mines and Metallurgy in 1919.

Crenshaw makes no apologies about a 10-year career which followed as a mining engineer. The assignment he remembers the easiest carried him across the pond to S. Rhodesia, South Africa in January 1921. With 400 miners to aid him in his efforts, Jim was charged with all development and experimental work

at one of Africa's largest Asp Mines. After two years of this, young Crenshaw's longing for the USA brought him back to his native habitat in 1923.

He was later engaged as an engineer and inspector in building the tunnel which supplies Los Angeles with water from the Colorado River.

When Crenshaw came with the Washington Office of the CAA in 1940, this was not his first real contact with the aviation industry. While serving in World War I, he was a selected naval cadet with the U. S. Naval Aviation Flying Corps. He had attained the rank of Aviation Chief Rigger when he laid his uniform aside.

He came to Region Six as a Construction Engineer in December, 1941. His present assignment is that of a Civil Engineer in the Construction Division of the Plant and Structures Branch.

Crenshaw is married to another product of his native Arkansas. They have a son who now attends USC.

THIS IS A GOOD SUPERVISOR

If he is pleasant, he is too familiar.
If he is sober-faced, he is a sour puss.
If he is young, he doesn't know anything.
If he is old, he's an old stiff.
If he belongs to the branch, the members expect favours.
If he goes to church, he's a hypocrite.
If he doesn't, he's a heathen.
If he drinks, he's an old souse.
If he doesn't, he's a tightwad.
If he talks to everybody, he's a gossip.
If he doesn't, he's stuck up.
If he insists that the rules of the Region be kept, he's too particular.
If he doesn't, he's careless.
If he looks around, he's snooping.
If he doesn't, he's unobservant.
If he tries to settle all complaints, he must have the wisdom of Solomon.
If he worries about them, he'll soon be crazy.
He should have the patience of Job, the skin of a rhinoceros, the cunning of a fox, the courage of a lion, be blind as a bat, and silent as a sphinx.
What a man!
Are there any good supervisors?
Yes, plenty of them, and they're not all in cemeteries.

- Man and Metal

REPORT ON SCHEDULED AIRLINE OPERATIONS, 1948

Emory S. Land, President, Air Transport Association of America, has released a report showing that more progress was made during 1948 in almost every phase of scheduled airline operations than in any year in the history of the industry.

Admiral Land says that from the record of 1948 it would appear that the post-war readjustment period is about over for the airline industry.

Not to be overlooked is the fact that with the addition of many new planes and continued improvement of airline navigation and control facilities the airline industry has been strengthened as an important element of national security. In case of war, the industry now stands ready to offer the military services approximately ten times the lift capacity it had in 1941.

The air navigation and traffic control facilities, which the airlines, the military, and the Civil Aeronautics Administration have implemented during the past year at great expense, also are immediately available for military as well as commercial use, either to be integrated into the existing military system or to operate independently on a complementary basis.

OPERATIONAL IMPROVEMENTS

During 1948, it was possible for the first time, to measure the effects of several programs developed by the Air Transport Association, the military and the Civil Aeronautics Administration for the betterment of airline operations. These programs include the installation of ILS, GCA, high-intensity approach lighting, VHF radio communications and other modern navigational devices. Results are demonstrated by the fact that cancellations due to weather were reduced 50 percent, while delays due to weather were reduced 62 percent.

SAFETY

During 1948 there were four accidents on scheduled domestic airline routes involving 83 passenger fatalities as compared to five accidents and 199 passenger fatalities in 1947.

PASSENGER FATALITIES AND RATE OF PASSENGER FATALITIES PER 100,000,000 PASSENGER MILES

	1941	1942	1943	1944	1945	1946	1947	1948
 Domestic Scheduled Air Transport Planes	35	55	22	48	76	75	199	85
Rate	2.32	3.66	1.32	2.09	2.14	1.20	3.21	1.41 (Est)
 Buses	*	*	*	*	120	140	140	*
Rate	.24	.23	.22	.22	.17	.19	.21	*
 Railroad Passenger trains	39	110	262	249	145	115	75	*
Rate	.14	.17	.31	.26	.16	.18	.16	*
 Passenger Automobiles & Taxicabs	*	*	*	*	12,900	15,400	15,300	*
Rate	4.0	2.7	2.7	2.9	2.9	2.5	2.3	*

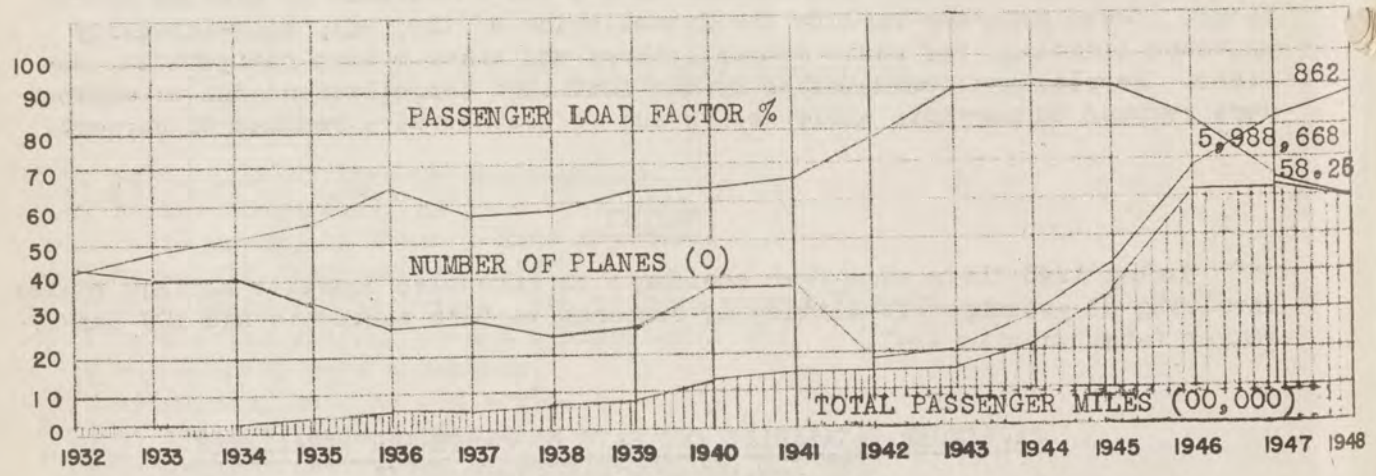
*Not available

TRAFFIC

Domestic airlines showed a decrease of 3½ percent in total revenue passenger miles in 1948. Total revenues for passenger traffic, however, showed a gain of 7 percent.

Revenue passenger miles for 1948 totaled 7,768,786,000 with a total operating revenue of $643,541,849. Total operating expenses amounted to $650,277,263.

The number of planes in the domestic airline fleet in 1948 increased from 810 in 1947 to 862 in 1948, and the average available seats reached 32.1 per plane as compared to 29.33 in 1947. The airlines carried 13,002,000 passengers in 1948, a total of 337,872,000 revenue miles for a daily average of revenue miles flown of 925,677.



PLANES & EQUIPMENT

Scores of new-type Lockheed Constellations, Douglas DC-6's, Convair 240's and Martin 202's made their appearance on the nation's airways and added new standards of speed, convenience and comfort for air travelers. Boeing's new double-deck Strato-cruiser is scheduled to begin operations on several of the airlines during 1949.

AIRPORTS

There were an estimated 6,100 civic airports in the United States at the end of 1948, an increase of 16 percent from the 5,258 at the beginning of the year. Certificated airline stops totaled 773, of which 249 had not begun operation because of incomplete construction and other factors.

Question Box ... eh!

Q. If a CAA employee receives a passing grade in a Civil Service examination for the position he presently occupies, will he be automatically converted to a permanent status regardless of his place on the register?

A. No, not necessarily. It is necessary for the person's name to be reached in the regular manner before his name can be certified by the Civil Service Commission to the CAA. It goes without saying that persons who make the highest grades on the examination will be certified to the various Federal agencies first.

Q. When am I required to make comparative cost when I use my privately-owned automobile for official transportation?

A. 1. In all cases where the travel order requires that travel cost shall not be in excess of common carrier cost.

2. If the travel order authorizes use of privately-owned car as being more advantageous to the government and the itinerary does not indicate that such privately-owned car use is more advantageous to the Government. In this case, in lieu of a comparative cost, a brief statement indicating why use of personal car is more advantageous will preclude the necessity for comparative cost. In making a comparative cost statement on rates for commercial transportation should be EXCLUSIVE of the 15% transportation tax.

Q. How do Federal Airways Facilities obtain new items of working equipment covered by Part II of the Standard Allowance Schedules?

A. Requests for new items of working equipment should be submitted in memorandum form to the appropriate operating division for approval. The memo, if approved, will be forwarded to the Property Management Branch for the preparation of a requisition to furnish the requested items.

Q. Why is it necessary to restrict field purchases on certain items? (A. O. No. 200, Attachment "A", Restricted List)

A. The restricted list is issued to prevent field employees from making illegal purchases on items covered by contract which makes the purchase mandatory from the contractor. Open market purchases of such items constitute a breach of contract.

AVIATION SAFETY HI-LITES

AIRMAN BRANCH:

Agent J. F. Matthews of the Ontario District Office gave an interesting lecture on mechanic schools before an aviation teacher's conference at California Junior College, Ontario, on April 9, 1949.

According to a release issued by the Veterans Administration, over 62,000 veterans' requests for GI Bill training in courses frequently pursued for avocational or recreational purposes have been reviewed in the seven months following the passage of restrictive legislation. Of these, 30,000 were applications for flight training and related aviation courses. Over 16,000 veterans were able to demonstrate that aviation courses serve a bona fide use in connection with their present or contemplated businesses or occupations and have been approved for training.

AIRCRAFT BRANCH:

Roy Outcen, piloting a rental aircraft with Don Houghten, aeronautical agent, as passenger, had a narrow escape while endeavoring to land at the Ontario International Airport. Mr. Outcen radioed for clearance to land, and, upon clearance, made normal approach and landing. However, just as the wheels contacted the runway, Mr. Erp and Mr. Draper in the tower observed the left wheel bounce back into the well and then drop down again. Mr. Erp radioed Mr. Outcen to give full throttle. Meanwhile Outcen had observed the "dropping off" of the left wing and, realizing his peril, throttled and was airbourne almost immediately. He then circled the tower awaiting instructions.

All indicators, including the visible indicator on the left wing, showed the wheels down. Outcen turned over the controls to agent Houghten and removed the front seat cushions to observe the landing gear apparatus. Determining that the left gear would not support the weight of the aircraft, he radioed the tower that he would attempt landing and to have crash equipment in readiness. A dead stick landing was made without injury to personnel and with a minimum of property damage.

Skydrol, a non-inflammable hydraulic fluid, has been approved for use in the Douglas DC-6 superchargers. This is a step in the right direction, as hydraulic fluid has always been a potential fire hazard in case of leaks or a crash.

FLIGHT OPERATIONS BRANCH:

Non-Scheduled Flight Operations Agents Barber, Fydell and Leimantine of the Palo Alto, Burbank and Salt Lake City District Offices, respectively, are at the Regional Headquarters undergoing an ATR training course, utilizing Link Trainer and the Twin-Engine Beechcraft, under the tutelage of Agent Dewey. Agent Ownby of the Phoenix District Inspection Office is being temporarily detailed to Salt Lake City to cover for Mr. Leimantine. Mr. Ownby declares he'll not go skiing this time. It seems he has a rather vivid recollection of once having broken his leg in this manner.

Agent Perry, Burbank, who was injured in line of duty on January 21, is still confined to the Birmingham General Hospital at Van Nuys. He had a setback and it appears he may be hospitalized for another month or six weeks. When you are in the vicinity why not drop in for a short time and help Mr. Perry "wile away" some of those tedious hospital hours?

* * * * *

Flight Operations has just completed preliminary discussions and has authorized the use of FIDO at Los Angeles Municipal Airport. Present authorization will permit operations down to the same minimums authorized for natural ceilings and it is not contemplated reducing the minimums until high intensity approach and runway lights are installed. The FIDO system should provide ample ceilings and visibility to permit operations under almost all fog and low ceiling conditions. There are still a few problems which will have to be worked out before full utilization of the FIDO system is realized.

It is of interest to know that Los Angeles is the first municipal airport to be equipped with FIDO system within the United States. About 1½ years ago, we authorized the use of FIDO on an experimental basis for Southwest Airways at Arcata. Traffic in and out of that station increased tremendously when the air-minded population realized that even in bad weather, with the use of FIDO, the scheduled arrival and departure time of the airliners was no longer a nebulous matter, but a certainty.

AIRPORTS BRANCH HI-LITES

Rebuilding of the Phoenix Municipal Airport:

To those familiar with the facilities at the Phoenix Sky Harbor Airport (Municipal) during the past several years the present large scale construction activities may present a confusing picture of site development and perhaps an explanation from those responsible for these changes is in order.

For the past eight years, the landing facilities available at this airport consisted of three runways, the longest being 5200'. The E/W runway was constructed by the City of Phoenix with Federal assistance under the W.P.A. Program and the remaining two runways were constructed by the C.A.A. under the program for the Development of Landing Areas for National Defense. In 1946, the Phoenix Airport was one of the busiest airports in the United States insofar as total movements of aircraft are concerned and had reached its capacity.

To alleviate this condition, the City early in 1947 engaged the services of a consulting firm to make a detailed study of the airport needs of the City of Phoenix and to prepare a master airport plan which would insure adequate facilities for all future aeronautical uses. The final master plan, calling for the complete revamping of the existing airport was completed in 1947 after coordination and approval by City representatives, private flyers, the airlines and the C.A.A. The approved master plan required the acquisition of an additional 980 acres of land, a portion of which was under subdivision development. In acquiring this property numerous utilities had to be rerouted and existing roads and streets closed, as well as new streets constructed.

This plan calls for the complete obliteration of two runways and the reconstruction of the remaining runway. In addition, the plan includes the construction of a new parallel E/W runway and two new diagonal runways. The parallel E/W runway will have an ultimate length of 7000' in keeping with the classification of this airport for continental type air carrier service. The two parallel runways are located approximately 3600' apart and in this area of approximately 70 acres, it is planned to locate all major terminal facilities. In addition to hangars, aprons and administration buildings, this terminal area will provide for enterprises not found at present-day airports, including such facilities as areas for amusement and recreation, shopping and display service and hotel accommodations. These non-aviation type facilities will, it is believed, help to place the operation of the Phoenix Municipal Airport on a sound financial basis. The existing administration area is to be retained primarily for private flying activities.

Due to the deteriorating condition of the old E/W runway, it was necessary to start utilizing the new parallel runway as soon as it was completed. Utilization of this runway made controlling of traffic from the present tower extremely difficult due to the lack of site clearance between the existing tower and the ends of the new runway. In order to overcome these difficulties, a temporary tower is being erected in the vicinity of the new runway. Upon completion of the terminal area, a new tower will be erected atop the administration building.

The total cost of the improvements to date is in the amount of $2,144,796 of which $1,121,374 was furnished by the City and $1,023,422 furnished by the Civil Aeronautics Administration. The total cost of the completed project is estimated to be in the amount of $6,557,756, the City's share being $2,849,930, and the Federal share $3,707,826. It is estimated that it will require approximately six years to complete the entire facility with the terminal area ready for use during the latter part of 1951.

FEDERAL AIRWAYS HI-LITES

Airways Operations Branch:

The program of having five Chief Aircraft Communicators visit the Regional Office each week is being continued. Chiefs of the following stations have completed familiarization tours: San Diego, Ogden, Donner Summit, El Centro, and Mt. Laguna - week of March 21; Lucin, Montague, Williams, and Paso Robles, week of March 28; Red Bluff, Stockton, Battle Mountain, Cedar City, and Daggett, week of April 4; Bakersfield, Santa Barbara, Phoenix, Prescott, and Indio, week of April 11; Douglas, Gila Bend, Hanksville, Bryce Canyon, and Sacramento, week of April 18.

A program has been inaugurated to have Air Route Traffic Control personnel detailed for approximately one week to nearby towers and to have tower personnel detailed for a similar period to nearby centers so that they may become more familiar with, and appreciative of each other's problems.

Operation of the airport traffic control tower at Van Nuys, California (Metropolitan) was taken over by CAA April 16, 1949. Since this tower was not in the CAA program, its operation by CAA is being financed by the City of Los Angeles.

Plant and Structures Branch:

A contract has been awarded for a new watchhouse for the INSACS at Crescent City, California, and work was started April 22, 1949.

All agreements and plans have been completed with United Airlines for the construction and occupancy of the INSACS quarters at Reno, Nevada. The Weather Bureau will also occupy part of this building. Construction is being accomplished with Government force and is under the supervision of Clancy Steene.

Bids for the remaining work to be done for the completion of the Winnemucca, Nevada INSAC station will be opened May 2, and work on the project will start soon thereafter.

The major portion of the construction contract for the Los Angeles Precision Approach Radar and Airport Surveillance Radar facilities is completed, and it is expected that Gilfillan Bros, Inc., will start installation of the electronic equipment the first of May.

A construction party is dismantling Beacon Sites 23B and 24 on the Los Angeles-Salt Lake Airway and a new beacon is being installed on the mountain five miles northeast of Good Springs, Nevada. Beacon Site 21 on the Tucson-El Paso Airway is being relocated to a site thirteen miles northeast of the Bisbee Douglas Airport in Arizona.

Communications Branch:

Additional stations of the omni-directional type that have been commissioned this month are as follows:

Facility	Commissioning Date
Fresno, California	April 4, 1949
Douglas, Arizona	April 19, 1949
San Diego, California	April 19, 1949
Tucson, Arizona	April 20, 1949
Sacramento, California	April 20, 1949

The period between April 4 and April 19 was spent largely in attempting to standardize settings of the aircraft receivers used in checking VOR facilities and in getting the aircraft equipment ready for flight. Two aircraft in the Sixth Region are fully equipped to flight check and commission VOR facilities and both of these aircraft have been used to the fullest extent in this commissioning work while the receiving equipment in these aircraft has been in operation. It was necessary for Flight Inspection and Engineering personnel to arrange for the loan of test equipment from the Collins Radio Company, together with the services of an expert receiver man employed by Collins Radio Company. This equipment was set up in the Sixth Region aircraft hangar and was used to get our receiving equipment in condition for commissioning flight checks. We hope, in the near future, to have a set of standardized equipment for omni-directional receivers of our own which can be used at any time.

All omni-range facilities through Arizona are complete and the only two stations which have not yet been flight checked and commissioned are Gila Bend and Prescott. It is entirely possible that these two facilities may be commissioned during the month of April.

Commissioning of VOR facilities in Northern California has been held up intermittently by bad weather, as well as by lack of receiving equipment used in accomplishing the commissioning checks.

Final installation work has been completed at Bakersfield and Reno and their commissioning awaits only final flight check.

Improved type sideband generators have been installed and are now in operation at Bryce Canyon, Utah, and Paso Robles, Calibornia. With the completion of these two stations, all Sixth Region VAR facilities now are operating with the latest type VAR sideband generator equipment.

Tune up personnel, while working at Gila Bend, Arizona, were greatly shocked to find that they had been walking over a sidewinder which had been resting in the shade along the VOR building. Of course, when the visitor was found he was immediately exterminated. We do not expect this one incident to help the snake situation in Arizona much, but, to discourage other sidewinders from coming onto the plot, the one killed was hung on the fence as a warning.

Instrument Landing Systems:

The Los Angeles Instrument Landing System localizer has been moved during the past week and is now in the process of being flight checked. Airport landing mat material was installed in the critical area in front of the glide path facility, which will result in considerable stabilization of the glide path.

Fan Marker:

CAA is installing a fan marker with voice identification at Morgan Hill to reduce possible confusion with other fan markers in that locality. This installation is being made for the Navy and will be Navy owned and operated. The voice is recorded on a film strip and reproduced by means of a projection lamp and photoelectric cell. The station will announce continuously in voice "Morgan Hill" followed by "dash, dot, dot, dash" on a 3,000 cycle tone. The installation was started on April 18. Other than a pilot installation, which was made at Indianapolis, no other installations of this type have been made in the United States.

"MH" Facility

Installation has been started on an "MH" (low frequency non-directional transmitter with voice) facility at Julian. The "MH" facility will be operated unattended without control lines, but probably will be controlled at a later date from Oceanside.

Inspections and Tests Conducted:

Mr. Walter L. Blankman, formerly assigned to San Francisco OFACS and other Sixth Region facilities, is now a Radio Engineer assigned to the Washington Office and is conducting maintenance investigations. During the period April 13 to 21, Mr. Blankmann visited the San Francisco OFACS facilities for the purpose of assembling engineering data as to specific techniques of measurement, types of test apparatus, etc. This information is to be used in the preparation of a set of detailed technical procedures for A-70 Radio Engineers when conducting maintenance inspections of OFACS radio facilities. The operation of frequency-shift radio teletype transmitting and receiving equipment was tested at San Fran-

cisco, and all equipment was operating in a most satisfactory manner. Coordinator and Liaison Maintenance Officer Mathews and San Francisco station maintenance personnel assisted Mr. Blankmann in the tests. Having obtained familiarization with the maintenance activities at this type of station, Mr. Blankmann is departing for a three to four month inspection in the Eighth Region.

On April 19, Messrs. H. W. McKinley and M. H. Griffith and members of Communications Engineering and Communications Maintenance Divisions, Regional Personnel Office and Property Management Office visited the Gilfillan Brothers Plant to become acquainted with the new radar equipment being purchased from Gilfillan for installation at the Los Angeles Airport and other selected locations at CAA facilities within the continental limits. The intricacies involved in maintenance of this equipment were discussed by the representatives of Communications Engineering Division, A-60, Washington, and our own local radar technicians currently assigned to the Gilfillan Plant and assisting in the factory inspection of this equipment.

Reference Book:

A valuable book for the library of Maintenance Technicians is "Reference Data for Radio Engineers". If not available at local bookstores, address orders directly to the publisher, Federal Telephone and Radio Corporation at 67 Broad Street, New York City 4, New York. The price postpaid is $2.00 per copy.

CAPITAL GLEANINGS

Travel - The House Expenditures Committee has given its okay to the Karsten Bill to raise the travel allowance for Federal workers from $6 to $9 a day. The bill also raises the allowance for private car use on official business from 5 to 7 cents a mile.

Retirement - The House has passed and sent to the Senate the Murray bill to give married women employees the same survivorship retirement rights as men. Retired women are not now allowed to name their husbands as beneficiaries to receive discounted pensions after their deaths. Retired male employees may assign survivorship benefits to their wives.