



A MONTHLY NEWSLETTER OF SIGNIFICANT REGIONAL AND WASHINGTON ACTIVITIES

CIVIL AERONAUTICS ADMINISTRATION, LOS ANGELES, CALIFORNIA

VOL. III No. 5

NOVEMBER 1, 1955

THE WHY, WHERE AND HOW OF A VOR

By

Fred J. Wild

Technical Service & Planning Section
Facilities Establishment Branch

As a passenger on a recent flight during instrument weather, I was amused at my fellow passenger's question of anxiety to the stewardess: "How does the pilot know where we are in all these clouds?" as well as her answer: "Well, he has instruments and follows dots and dashes. He knows where we are all the time." From the public relations viewpoint, her answer was satisfactory as he appeared to be reassured. I relaxed, however, with the knowledge that the pilot knew considerably more about instrument weather navigation than the stewardess. Further, I felt at ease knowing the "dots and dashes" routine was out on that airway segment (we had discontinued the low frequency ranges in the area) and were relying on the "high fidelity" radio navigation aid, the relatively static free and stable visual omni-directional radio range -- the VOR.

The ultimate user is prone to accept the VOR as matter-of-fact and rather routine. It is complimentary to the Administration that this feeling of confidence exists. Few people outside CAA employees, however, realize the extent of planning and coordination and effort that go into siting and installing one of these "derby hat" aids.

Our location problem would be simplified if we could put dots on a map of the region at 50-mile intervals in every direction to indicate VOR sites. True, this was our ambitious plan when the VOR implementation Program was originally conceived but was abandoned when complications upset our planning cart. First, as explained by Art Johnson in the September REGION IV News, the VOR propagates a radio wave that is akin to light in that it tends to follow straight lines. Unfortunately, in this most mountainous region, we usually find our ideal location in a valley where surrounding mountains cut off or deflect the propagated waves. Again, as VOR radiated waves are straight and identifiable in space, we found that it was often advantageous to place them where they could do double duty by serving as a letdown aid to a terminal as well as an enroute aid. (A further step incidentally, led to the development of the TVOR = Terminal VOR - which is intended solely as a letdown aid.)

(Continued on next page)

Again, common sense deleted many locations dictated by the checker-board coverage concept. As the locations of airways are determined by the locations of air terminals, considering the lowest terrain between such terminals, we concentrated on providing VORs along these airways, forgetting the aeronautically barren area where little if any air traffic exists. Lastly, acting as a governor on the whole program, budget limitations set up by the Congress required our examining and reexamining every possible site to insure we were installing each of our VORs for the greatest utility, be it for enroute, terminal, or a combination of these uses.

With due regard to the above factors, we continually review aeronautical activity to determine where VOR installations will expedite traffic movement or increase safety, or both. The Aviation Safety Division may advise of a route segment to be flown by an airline recently equipped with VOR receivers, or the Airways Operations Division may request an installation to implement a bypass airway to relieve congested traffic conditions in a terminal area. The Facilities Division may recognize the need for such an aid to fill an airways coverage gap, or to improve the technical functioning of an existing aid, calling for a relocation project.

Before a project at a specific location is transmitted to Washington as part of a budget submission or as a non-programmed item, all divisions concerned review the originating division's recommendation to determine the impact of the facility on each Divisional program. Such elements as safety, traffic control, and operation and maintenance features are considered. If all Divisions are in accord we submit the item to our Washington Office for screening and eventual consideration by the Bureau of the Budget, if included in a budget submission, or solely by our Washington Office if reprogramming is required using funds already allotted and held by Washington.

Upon receiving Washington Office approval, Facilities Division engineers scout the area concerned and select several sites if possible that afford technical possibilities, are reasonably close to utility lines, and provide ready access for ease of maintenance. In some areas of mountainous terrain there is only one possibility. Arrangements with the property owner for field testing and eventual leasing are made at this time. Naturally, due to the temperamental type of aid involved, compromises are often required which call for continual coordination during site selection with other Divisions concerned to insure that their areas of interest are covered. With Regional Office blessing, we test the sites selected using a portable ground installation, and calibrated airborne receivers in Flight Inspection aircraft. After flight-testing has indicated the most desirable site, details as to location and use are presented to the Air Coordinating Committee through the Regional Airspace Subcommittee in order that interested industry and government agencies may consider the facility, either approving, or disapproving if it appears an airspace conflict to any agency program will result.

With industry clearances and money in pocket, we issue a proposal which includes plans and specifications prepared by the Facilities Division from civil and electronic engineering investigations. This proposal invites interested contractors to offer a bid for erecting the building and antenna. This construction, supervised by Facility Division engineers, normally requires 2 to 3 months for completion after notice to proceed is given the accepted contractor. Utility contracts are obtained during this period. After the physical structure is complete one of our electronics installation crews installs the complex radio equipment and supervises equipment adjustments during acceptance flight checks, performed by our Flight Engineering Branch aircraft. Upon acceptance as a satisfactory facility complying with our rigid

(Continued on page 4)



REGIONAL ADMINISTRATOR'S COLUMN

We have had two serious accidents during the past month -- an air carrier accident in Wyoming, and a private plane accident in California. The airline aircraft struck a mountain with fatal results to all aboard. The private plane struck an apartment building causing the death of eight persons. Now you notice I said, "We". Of course

these weren't CAA airplanes. We did not own or operate them directly. On the other hand in one sense CAA is on board in every airplane that flies. Every accident should and does involve a critical analysis of our own activities as they relate to the accident. Was there anything we should have done that would have provided more safeguards for the flight and possibly prevented the accident? Is there anything we still can do that would help to eliminate the possibility of future accidents?

Routinely we always check the navigational aids after an accident, and rightly we should; not only to determine if an aid could have been a possible contributory cause, but also to determine if there is some additional aid or some change in operating procedure which would provide additional safeguards. We check the aircraft for malfunctioning or structural failure. Statistics indicate that very few accidents are the result of structural failure, but if we do find some they should be corrected, and perhaps it points the way toward a change in the method of construction that would increase safety if applied to other aircraft. We check the maintenance to be sure that the airplane was currently airworthy. We check the pilot to see that he was properly certificated and rated for the type of flying involved. Occasionally some pilot error is discovered which goes clear back to the instructor who taught the pilot to fly. Perhaps this indicates need for improvement in our instruction methods and our rating of instructors. We check the airport if it is involved. We check our traffic control procedures. These are all a part of our self-analysis. It is a good thing to do and we should be on the alert not to build up a defense for our past actions but to discover ways and means to improve. This attitude and these efforts are particularly important at this time because public feeling runs high and sometimes verges on a degree of hysteria.

For example, it has been suggested that single engine aircraft be prohibited from flying over the City of Los Angeles at night. This proposal would punish everyone for one person's mistake. It is like the school teacher keeping everyone after school when she couldn't identify the one student who threw the ink. It's like barring everyone the use of the freeways at night on the theory that there is the possibility that there are more accidents at night than in the daytime.

But out of these accidents, and our as yet incomplete investigation and associated self analysis have come suggestions and ideas that may be helpful. One has to do with statements we may make which might be misleading. Until the accident investigation is complete it is our policy to release only known factual information, but sometimes these facts in themselves can create a wrong impression. Any statement by a CAA representative will be construed as voicing the CAA position. It is therefore essential that our spokesmen bear this in mind.

For example, from the standpoint of traffic control it may be truthful for the Tower Controller to say, "we do not have any enforcement authority". From the CAA viewpoint this is completely inaccurate and the Controller's statement should be that observed violations are referred to our Aviation Safety Division for enforcement action.

(Continued on page 31)

Continued from page 2.

tolerances, a notice to airman, "NOTAM", is issued advising that another VOR is ready to serve the public. Concurrently, the Aviation Safety and Airways Operations Divisions will develop minimum altitudes and procedures based on this new facility, thus permitting immediate use of another link in the navigational aid system under CAA control of which we can all be proud.

* * * * *

CAA TOASTMASTERS CLUB ACTIVITIES

Wednesday, October 12, 1955, CAA Toastmasters met at King's Tropical Inn for the autumn installation of new officers and a very fine chicken dinner. As customary at the time new officers are installed, Toastmasters' wives and girl friends were invited. The theme of the meeting was a demonstration for the ladies of Toastmaster's objectives. As an added attraction, a contest was held to determine the most prolific liar. Toastmaster Kirk Barry was voted top liar and will represent the CAA club at the area roundup November 5, 1955.

Formal speeches were given during the evening by the following Toastmasters:

Riley Harris	Four Men I have Known
Jim Van Voorhis	Signs
Houghton Miller	Howdy Miller's Notebook
Dick Bache	Strange and Beautiful Land

Dick Bache's speech was judged the best.

The meeting was concluded with the installation of new officers by Area Governor Bob Bromley. The following Toastmasters will guide the CAA club during the next six months:

President	Walt Blankman
Vice-President - Education	Houghton Miller
Vice-President - Administration	Dave Earley
Secretary	Irving Shedd
Treasurer	Kirk Barry
Sergeant at Arms	Riley Harris
Publicity	Merle Zeigner

The next meeting of CAA Toastmasters 1004 will be held October 26, 1955, starting at 5:00 p.m. at Kim's Restaurant.

* * * * *

WISE MEN SAY - One who is contented with what he has done will never become famous for what he will do. He has laid down to die, and the grass is already growing over him -- Boyee.

LOS ANGELES AREA OFFICES INAUGURATE
COMBINED CHARITIES PROGRAM

In the past at least six different charity fund drives have been conducted each year at CAA facilities in the Los Angeles area. These have included the Community Chest during October or November, the March of Dimes in January, the American Heart Association in February, the Red Cross in March, the American Cancer Society in April and others at various times throughout the year. While we all realize that these are worthwhile charitable organizations and must be supported in the American tradition by contributions from the citizens of the community, it has been irritating to many of us to have a continual parade of charity drives throughout the year.

In order to eliminate this constant pressure on employees and still provide the funds necessary to support these deserving organizations, a committee (Combine All Aid Committee) has been established to develop and conduct one combined fund raising campaign on behalf of CAA facilities and offices in the Los Angeles area. At the present time these include the Regional Office, L.A. Airport District Office, L.A. ASDO (General), L.A. ASDO (Air Carrier), CAA Hangar, L.A. Communications Station, and L.A. Air Route Traffic Control Center.

Within the policy established by Administrative Order No. 6, each Division elected one employee to serve as a member of the committee for a term of one or two years. The committee is charged with the responsibility of developing policies and conducting a combined charities fund drive. The initial committee consists of the following:

G. D. Woodmansee	Regional Administrator's Staff
R. D. Blanchard	Air Carrier Safety
Dorotheine Dittman	Aircraft Engineering
W. O. Johnson	Airports
L. L. Middlekauff	Airways Operations
F. B. Brace	Business Administration
H. D. Washburn	Facilities
R. V. Ford	General Aviation Safety

During recent years many business firms and government agencies have adopted the practice of conducting a single consolidated charity drive annually rather than individual drives for each charity scattered throughout the year. The success of the combined drive idea is indicated by the fact that over 600 business firms and government agencies in the Los Angeles area alone now follow this policy. We therefore can see no reason why the single drive idea should not be a success in the CAA.

We believe that CAA employees in the Los Angeles area will welcome the idea of the single charity drive instead of the several drives previously conducted and will wholeheartedly support the Combine All Aid Committee in its effort to make the plan a success.

Our goal this year will be to collect at least as much in the one combined drive as was contributed last year in all of the various drives authorized by C.A.A. This will be necessary in order that we may be able to distribute to each of the approved

(Continued on next page)

charitable organizations, an amount equal to that previously contributed by CAA employees.

If employees at any other location in the region desire to inaugurate a similar plan, copies of the various forms, instructional material and general information used in implementing the plan in the Los Angeles area, may be obtained from the Chairman, Combine All Aid Committee, at the Regional Office.

* * * * *

MOBILE TOWERS

Human behavior being what it is, the spectators at a football game cheer vociferously for the home team 'back who makes a first down on a cross-buck through the opposing line. The work of the linemen who made the play possible is for the most part unnoticed by all except the players themselves. The ball-carrier knows that he would have been downed yards behind the line of scrimmage except for the part played by his team-mates.

The part played by Facilities Maintenance personnel in the successful operation of our mobile tower units provides a close parallel. We know of no instance where the operation of these units would have been wholly successful without the spontaneous and whole-hearted support of the Airways Operations Division's team-mates of the Facilities Maintenance Branch. The controllers who operated the units have been first in saying that satisfactory airport traffic control service could not have been provided during the event without the assistance of Maintenance personnel.

Airways Operations Division takes this opportunity of thanking the personnel of the Facilities Maintenance Branch who have on so many occasions contributed so greatly toward the success of the mobile towers. We are keenly appreciative of the fact that without their invaluable assistance, this success could not have been achieved.

* * * * *

DIVISION HIGHLIGHTS

AIR CARRIER SAFETY DIVISION

Activities among the irregular air carriers continue at the same active level with the exception of those carriers based in the Seattle area which have experienced some reduction in operations. The bulk of this activity involves domestic CAM flights and military overseas contract operations.

Several large irregular air carriers are conducting charter flights to Las Vegas, Nevada. These flights generally depart Burbank in the early evening and return approximately 2:00 AM. Similar flights are being conducted from the San Francisco Bay Area to Reno and indications are that these flights are gaining in popularity with the public and will continue for some time. Bixby Airlines operating as a commercial operator under Part 45 certificate is conducting private carriage operations to Las Vegas under contract to one of the casinos in that city.

Los Angeles Air Service has acquired a C-46 from the military and is now in the process of conducting an extensive inspection and modification of the aircraft and its components preparatory to placing the aircraft in operation. The pilots of

(Continued on next page)

this air carrier will be requalified in this type equipment and the aircraft will then be used in domestic CAM operations.

The investigation of the Currey Air Transport DC-3 aircraft accident which occurred at Lockheed Air Terminal on September 8, 1955 has been completed and the final accident report is now being prepared.

North American Airlines has converted one C-54 aircraft to passenger-cargo combination. One C-54 is now undergoing major overhaul at the principal maintenance base in Burbank.

An inspection was conducted of the maintenance facilities at Frankfurt, Germany of the Flying Tiger Line, Inc., which were found to be satisfactory. This carrier has ordered 10 Super Constellations for delivery in 1957. It is expected that these will replace DC-4 and DC-6 aircraft.

Pilots of Great Lakes Airlines and Currey Air Transport will attend a ground school course on transport category requirements and the DC-4 aircraft. This course is to be conducted by the Fowler Aeronautical Service with headquarters at Lockheed Air Terminal, Burbank.

The Flying Tiger Line, Inc. has requested a waiver of flight time limitations to permit a crew of two pilots and one navigator to exceed the 12-hour limitation between California and Honolulu, and Honolulu and Wake Island. The waiver has been requested in connection with military contract Trans-Pacific operations.

On September 23, 1955 a Flying Tiger Line DC-4 aircraft with a crew of five and 15,333 pounds of military cargo ditched in the Pacific, midway between Honolulu and Wake Island. Investigation of this accident is currently in progress.

California Eastern Aviation, Inc. is acquiring two additional DC-4 type aircraft approximately November 1, 1955, which will bring their operating fleet to a total of nine DC-4's. Great Lakes Airlines has added a DC-4 to its certificate. California Central Airlines has leased another DC-3 aircraft which is presently undergoing modification to meet air carrier standards.

Slick Airways' training program continues as a result of the hiring of additional flight crews and the transition to different aircraft with emphasis during this period being placed upon more thorough training for co-pilots. Slick Airways has completed engineering for installing HF communication "package" in C-46 aircraft. This carrier plans to convert one DC-4 aircraft to combination cargo and passenger configuration.

To further increase North American Airlines' maintenance efficiency, all flight engineers are scheduled to attend a two-week course to be given at New York City by the Bendix Corporation on engine analyzer operation and performance.

Reorganization of California Eastern's radio maintenance was completed. This carrier's maintenance base has handled routine maintenance on a continuous basis on twenty-eight C-54 aircraft in the past month.

All aeronautical radio repair shops in the San Francisco Bay Area are certificated and, in addition, one repair shop in Reno was also certificated.

Collins Radio Company conducted extensive demonstrations of their electronic equipment for several air carrier operators in the Los Angeles area. These demonstrations were given in the carriers' aircraft under actual operating conditions. Equipment demonstrated included the AP-101 type autopilot; Type FD-104 Flight Director and Type MC-101 Stabilized Magnetic Compass. It is understood that Collins will shortly have their

new ADF and Weather Radar ("C" Band) available.

S.S.W., Inc., an irregular air carrier formerly based in Region 2, has moved its operations and maintenance base to Region 4. The operating certificate for this carrier will be held by the Burbank District Office. Operations are planned for sometime in October.

Mr. Minorn Taketomi, representing the Civil Aviation Bureau of the Japan Ministry of transportation, visited the San Francisco District Office for several days. He was vitally interested in the approved overhaul periods for the various air carriers based in the local area and the procedures and policies governing the establishment of these periods.

Mr. Seiichi Kawabata, Chief of the Technical Department of Japan Helicopters and Aeroplane Transports Company, also paid a visit to the above office. He was interested in the specifications of various aircraft operated in domestic service.

Alaska Airlines has been attempting to obtain an aircraft which would be suitable for the "Bush" so the company could standardize its fleet. Alaska Airlines is dealing with several engineering firms to obtain certification of the L-13 with a 300 H.P. Lycoming radial installed as power plant. They plan to purchase the engineering data when and if it is available and modify the aircraft in their Everett shops. This carrier has 30 Lycoming engines and adequate parts in stock. The performance data available indicate the L-13 would be an excellent "Bush" aircraft.

A group of Bonanza Airlines personnel are going to Europe next month to inspect the Fokker twin turbo propeller aircraft. They are considering the aircraft as a replacement for the DC-3 aircraft. Available information indicates that the aircraft will be a suitable replacement for feeder airlines.

Agents from the Los Angeles and San Francisco District offices assigned to the American Airlines attended a two-day conference in New York City called by the Agent-in-Charge of that air carrier to discuss matters pertaining to the inspection of the American Airlines system.

The Braniff-United Air Lines' interchange from Houston to Seattle was started on September 25, and Western added a Denver-Casper shuttle in September.

Continental Air Lines is preparing to start installation of the airborne radar equipment in November. Chop marks are being removed and the required additional emergency exit markings are being added.

Frontier Airlines' engine overhaul shop is now turning out approximately five 1830 engines per month. They also have their new portable engine test stand in operation. They have purchased a Bendix analyzer for the test stand which will be installed as soon as possible. This carrier has also purchased a C-47 which will be added to the fleet as soon as possible modifications can be completed. Frontier has made application through channels to send another pilot to Oklahoma City to take the aircraft (Transport Category) Performance and Characteristics Course.

Johnson Flying Service's DC-3 Aircraft N24320, which was involved in an accident at Pittsburgh, Pennsylvania last December, has been refitted and repaired and has flown more than 100 hours in the Forest Service prior to returning to Part 42 operation.

(Continued on next page)

Los Angeles Airways is investigating the feasibility of installing a rocket motor on the tip of each main rotor blade of their S-55 helicopter. In this connection, a meeting was held at Los Angeles Airways between representatives of the Los Angeles Airways, Reaction Motors, Inc. (builders of the rocket motor) and the CAA Engineering and Air Carrier maintenance personnel. This carrier took delivery of a new S-55 helicopter at Bridgeport, Connecticut in September. Agent Paul Thornbury and Fred Milam Director of Operations for L.A. Airways, ferried it to Los Angeles in 37 hours of flying time.

Pacific Northern Airlines is in the process of modifying the Lockheed 10 aircraft to be used for pilot training on ILS and VOR facilities.

During the month a meeting between the assigned agents and Pacific Northern Airlines was held in the District Office at Seattle. All phases of maintenance, communications and electronics concerning P.N.A. operations were discussed.

Pacific Southwest Airlines' spare parts program is essentially complete for the DC-4 aircraft to be delivered the latter part of October. This carrier plans to convert to complete DC-4 operation as soon as equipment can be acquired.

Southwest Airways has been granted their permanent certificate by the Civil Aeronautics Board to serve the following cities: Medford, Oregon; San Francisco, Oakland, San Jose, Sacramento, Marysville, Santa Rosa, Chico, Redding, Eureka-Arcata, Crescent City, Monterey, Santa Maria, Santa Barbara, Oxnard-Ventura, Burbank and Los Angeles, California. This carrier was also given a three-year authority to serve San Luis Obispo, Santa Cruz-Watsonville, Ukiah, Fort Bragg, Red Bluff, Yreka and Stockton, California. For Paso Robles, it won renewal for three years of its permission to serve the city through a common airport with San Luis Obispo, leaving it up to the airline to choose which airport. The Board also awarded Southwest Airways a "three-year" temporary route from San Francisco to Los Angeles via San Jose, Monterey, Bakersfield and Palmdale.

United Air Lines was given permission to reroute service to Santa Barbara, Monterey and Eureka, California in competition with Southwest Airways.

United Air Lines' training activities at the Denver training center continue at a high peak and from all indications there will be no decrease in training activities in the near future.

An agent from the Denver District Office attended the regular United Air Lines' Quarterly Safety Meeting with the heads of the departments in Denver. A critique was held on a recent emergency (precautionary) landing at Denver and the shortcomings of the ground traffic control were outlined. Corrective action is being instituted. This is a continuing program in conjunction with the practice of having an agent to accompany UAL safety representatives on inspections.

The problem of unweighed and untagged carry-on baggage continues to plague the carriers. United Air Lines is doing a good job in reducing the number; however, it appears that a nationwide enforcement program might be necessary.

United Air Lines is continuing the study of the purchase of jet-powered aircraft for scheduled service. It is understood the field has narrowed down to two West Coast aircraft manufacturers.

(Continued on next page)

The City of Monterey has purchased a TVOR to be installed on the Monterey Peninsula Airport. Southwest Airways is contemplating the purchase of a glide path to be used in conjunction with the city-owned TVOR. The combination of a TVOR and glide path installation at Monterey will probably be the first installation of this type in the country and will require the establishment of a criteria for this combination by our Washington Office. A request for this criteria has been received from Southwest Airways.

West Coast Airlines has started to work on dual VOR installations in its DC-3 aircraft. Two aircraft will be wired for the installation by the first of the year. Planning is for the entire fleet to be VOR-equipped by July 1956.

West Coast Airlines have assigned supervisory personnel to their ground station maintenance and now have a total of four men assigned to ground radio maintenance, including their radio navigational aids.

This carrier has purchased its fourteenth DC-3 aircraft. It will be given a complete overhaul before it is entered on West Coast's operating certificate.

Western Air Lines have completed the inspection of the propellers on their CV-240. This inspection included a portion of the area under the cuff. Nine blades were returned to Hamilton Standard due to moisture having been found under the cuff. One blade was returned due to corrosion pits and defects in the plating under the cuff.

The San Francisco District Office is continuing their work on the coordination of air traffic procedures and problems with the Oakland ARTC Center and the San Francisco and Oakland Towers' personnel.

Personnel from the Denver District Office gave control tower practical examinations to five new appointees at the Natrona County Airport, Casper, Wyoming on September 30 and certificated all as Senior Controllers for that airport. Operations were observed on commissioning day, October 1, and were satisfactory. All field agencies expressed satisfaction in having a CAA Control Tower at Casper and the airlines in particular are hoping for the addition of approach control at this location. Due to high level of activity at this location, it is felt that considerable added safety has been provided through the commissioning of this control tower.

The Los Angeles Air Sea Rescue Committee met to review accomplishments of the past year. This committee is composed of representatives from all the major airlines operating into this area, manufacturers and CAA. The Los Angeles area has little, if any, civil or military facilities to effect prompt air sea rescue measures in the event of ditching at sea or searching for a pilot forced to parachute from an aircraft. This committee was formed to overcome this deficiency. Its accomplishments will be outlined in the October highlight report.

The Minneapolis ASDO requested Agent Wertman of the Seattle Air Carrier District Office to conduct a conformity inspection and enroute evaluation of their newly developed Atkins Danger Light for aircraft. The light is designed to fit the elliptical base of the large Grimes Anti-collision Light. The Atkins light incorporates 3 Strobe bulbs with each bulb covering 120 degrees and each bulb flashing at a different rate. This different rate of flashing is intended to provide directional information to observers at a glance. The enroute inspection and evaluation indicated no effect on the radio and electrical system.

The mock-ups for the Douglas DC-8 and the Lockheed Electra are both well along in construction.

(Continued on next page)

GENERAL SAFETY DIVISION

Reports from the district offices for the month of September, 1955, continue to show a high level of activity in most areas. These reports are beginning to reflect the seasonal change in aviation and show a pattern of activity noticeably different from that of the summer season.

According to our Medford District Office, many local operators have been kept busy on forest fire patrol and have dropped many "smoke jumpers" into critical fire areas. It is reported that this fire season has been the worst in Oregon since 1951. Our Reno Office reports also that the large numbers of forest fires in their area has resulted in the Forest Service utilizing all available equipment over an extended period of time during the month.

The problem of the farmers' constant battle with migratory birds during this time of the year has been solved, at least temporarily, by one farmer in the Sacramento Valley according to our district office in that area. It was discovered that this farmer had obtained a surplus military beacon and was operating it in the middle of a rice field in order to keep the birds from feeding on his crop. While reports indicate that such beacons have been used for this purpose for several years, this is the first time it has been called to the attention of the local district office.

While the level of agricultural aviation is beginning to show a decline, one interesting aspect of this work is continuing in the Yakima District Office area. This is the time of the year when the aerial applicator is applying not only insecticides but also hormones to the apple crops. These hormones are used to prevent the apples from prematurely falling to the ground.

Through the continued efforts of the Seattle Office, the State of Washington has agreed to award a State trophy to the highest scoring flying club in the State of Washington under the rules of the National Safety Program. Agent Princen, along with several important aviation officials, recently met with Governor Langley in this regard. The Governor assured this group that the State of Washington would present a perpetual trophy to the top club in the state at the National Flying Club convention in Seattle during August, 1956. This is the second state in this region to offer such a trophy. It is hoped that all other states in the Fourth Region will have a similar award for their clubs in the not too distant future.

The Seattle Office has been working closely with the Washington State Aviation Association and the State Director of Aeronautics in the drafting of an aviation science course, primarily for senior high school students. As a result, this course will be offered during the next semester to all high school students in the State of Washington.

Our Supervising Agent at the Palo Alto District Office reports that the increased activities of executive and corporation flying in the local area has stimulated a local operator into providing facilities for this type of pilot training. The operator intends to offer facilities and personnel to attract corporation pilots for instrument and airline training, as well as instrument refresher courses.

The Chief, General Maintenance Branch, accompanied Agent Demaree of the Los Angeles ASDO on a field trip to observe a Benson Gyro-glider in which the builder had installed a small auxiliary powerplant from a Drone target plane to pull the machine. He expected this powerplant to replace the normal towing; and with power added for free flight operation, it was necessary to identify the craft and issue an experimental certificate.

(Continued on next page)

The initial attempts to fly this modified craft were unsuccessful due to inadequate power. The builder anticipates installing a plant of more horsepower and another attempt at a power flight.

Chaffey College, approved mechanic school in the Ontario district, reports an all-time high of student enrollment. They also report the opening of a jet engine school with a F-84 fighter for instruction. This school is conducting up-grading courses for mechanics in the industry and for Lockheed aircraft mechanics. Mt. San Antonio School in this district reports more applicants than they can accommodate in their school.

AiResearch Aviation Service Company of Los Angeles has broken ground and started construction on a \$600,000 hangar (300' x 300') to house the extensive service repair, overhaul, and modification activities of their approved repair station.

Agent Annis of the Denver ASDO has been appointed to the Aircraft Advisory Committee of the Emily Griffith Opportunity School, an approved mechanic school.

Agent Vandewark of our Billings ASDO has aided in supervising the rebuilding of a large number of personal aircraft that were badly damaged in a recent hail storm. These aircraft were privately owned, and the expense of repair promised to be a considerable burden on the owners. These owners organized a project to help each other and banded together to work as a group on one airplane at a time under the supervision of certificated mechanics. They set up an order of precedence; and as each airplane came to its turn, it was moved into a lighted hangar, and the group made the repairs, often with the personal assistance of Agent Vandewark and the mechanics in charge. The workers were served coffee and doughnuts during the evening. This project has proved very interesting, and the owners have learned a great deal more about aircraft and the importance of maintenance and repairs than they could have in any other way.

AIRCRAFT ENGINEERING DIVISION

Mr. Baumann has advised that he is about to conclude arrangements for financial backing for the Model B-290. This project has progressed to the stage where the Type Inspection Authorization is nearly ready for issuance. It is understood that Baumann is investigating the practicability of having components of this aircraft manufactured in Japan. Assembly of the components would be done in this country.

Considerable engineering work is being done on the Boeing 707 project to determine the applicability of the present airworthiness requirements for certification of this type of aircraft. Tentative plans call for the Preliminary Type Certification Board Meeting to be held in Seattle about December 12.

Meetings were held with Boeing, Pan American-Pacific Division, Pan American-Atlantic Division, and Northwest Airlines personnel regarding fatigue cracks in wing spar splices on Boeing 377 aircraft. An interim telegraphic Airworthiness Directive has been agreed upon and issued pending the completion of fatigue tests being conducted by Boeing which, it is hoped, will lead to the development of a permanent fix for this unsatisfactory condition.

Engineering work on the Convair Model 440 is continuing and it is understood that approximately 30 of these aircraft have been sold. As previously reported, the 440 is fundamentally a 340 airplane which will incorporate aerodynamic clean-up items, exhaust silencers, and additional soundproofing.

As a result of the AAL Convair 240 accident at Fort Leonard Wood, Mo., Convair is expediting the development of necessary changes to prevent accidents of this type. It
(Continued on next page)

appears that Convair's opinion of a minimum safety change will consist of the substitution of steel for aluminum fuel and hydraulic lines in Zone 3, and the incorporation of improved fire detection. Simultaneously, Convair is doing engineering work on a steel or titanium nacelle which will extend the fire protection for the nacelle structure back to the wing leading edge. Other miscellaneous improvements also are being developed. It is understood these changes will be applicable to both Convair 240 and 340 aircraft. Evaluation of the changes from an Airworthiness Directive standpoint is scheduled to be made as soon as Convair submits data regarding them.

Engineering work on the Douglas DC-7C is progressing approximately on schedule. The present indications are that this aircraft may be ready to begin CAA flight tests about the first of the year.

An Application for Type Certificate has been received on the Douglas DC-8. This aircraft will be designed as both a domestic and an over-water aircraft. Douglas reports it will incorporate at least two different engine installations, including the P&W JT3L and JT4-3 engines. Structurally the domestic and over-water versions will be designed for the same weights. The Douglas Company has requested meetings with Washington and Regional CAA representatives early in November and, perhaps, again in December. Douglas anticipates holding the Preliminary Type Certification Board Meeting and Inspection of the mock-up in January or February, 1956.

The first Douglas C-133 turbo-prop military transport being built for the USAF is nearing completion at the Long Beach plant. The Aircraft Engineering Division of this Region has been invited and authorized to participate in the engineering inspections and tests on this project. The USAF Contract Technical Compliance Board is scheduled to convene on November 9 and representatives of this Division are scheduled to attend. A very comprehensive test program covering both powerplant and structures has been established for this project. It is expected that much valuable information will be obtained from this program. Douglas personnel indicate this model may be submitted to the CAA for civil certification.

The Herrmann cam engine tests have been discontinued because of a piston failure and difficulties which were experienced with the magneto. It is understood that Herrmann is working on remedial actions for these difficulties.

A Type Inspection Authorization has been issued and CAA flight tests are beginning on the Hiller UH-12C helicopter. The present configuration is essentially similar to the basic UH-12 except for the removal of the engine flywheel and a new canopy configuration. Ultimately the UH-12C is scheduled to include Parsons metal blades; however, these blades are not expected to be ready for test for several months.

Meetings have been held recently with top level Hiller personnel in an effort to find a way for continuing the type certification program on the HJ-1 ram-jet helicopter project. Hiller personnel now agree with the CAA that full power-off autorotation landings in this machine do not provide an adequate level of safety for civil certification in the configuration presented. Inasmuch as there are two ram-jet engines installed on this helicopter, Hiller now is investigating the feasibility of presenting the machine with revised systems which might permit its evaluation by CAA as essentially a multi-engine helicopter. This might be acceptable if the probability of a full power-off autorotation is made extremely remote, in which case the safety level already demonstrated might be acceptable for the full power-off case. Under this approach, the failure of

(Continued on next page)

one engine would not necessitate a full power-off autorotation but, instead, would result in a one engine out landing. This new approach may require several new and unique policy determinations on the part of CAA.

Central Lamson advises they have undergone a Company reorganization and work on the Lamson Model L-101 Air Tractor will be continued on a reduced basis. Mr. Lamson plans to move to Yakima and to handle the remaining engineering work on this project personally.

Lear personnel are investigating the feasibility of obtaining approval on modified Lockheed aircraft which incorporate portions of the Learstar conversion kit. Present indications are that some of these configurations can be certificated with little difficulty; however, when the modifications involve power or weight increases beyond the limits specified in Special Regulation 407, the modifications become difficult and, perhaps, may not be economically feasible.

A Final Type Certification Board was conducted on the Lockheed Model 1049F (USAF C-121C) airplane. This model now is considered eligible for type certification as a cargo airplane.

Lockheed has requested a status report which they hope will indicate essentially complete structural and powerplant approval of the Model 1249 turbo-prop airplane as soon as possible for use in their negotiations with the Air Force. Several powerplant reports which are needed as substantiating data have not yet been received; however, a concentrated effort is being made to assist Lockheed in this matter.

Engineering work on the Lockheed Model 1649 aircraft is continuing. It is understood this project is approximately on schedule; however, Lockheed reportedly is making efforts to advance the delivery date for the first airplane of this model.

Lockheed personnel advise that the wood mock-up for the Electra turbo-prop aircraft is nearing completion. Only a small amount of technical data have been received on this project; however, tentative arrangements are being made for a Preliminary meeting between Lockheed, CAA Washington and CAA Regional personnel early in December.

The Pre-Flight Type Certification Board Meeting for the Morrisey "Nifty" Model 2000C airplane was held. The static and dynamic test programs have been completed and it is expected that CAA flight tests on this model may begin in the near future. Most of the engineering work on this project is being done by CAA designees and early issuance of the Type Inspection Authorization depends on the completion of necessary work by the designees plus correction of several items found during the Type Certification Board inspection.

Engineering Flight Test Agents Gray, Tymczyszyn, and Ford have participated in the USAF Model YC-131C turbo-prop evaluation program at Kelly Air Force Base during this month. This training and experience is considered extremely valuable in view of the rapid progress being made on civil turbine-powered transports in this Region.

AIRWAYS OPERATIONS DIVISION

Chief, Airways Operations Division, is presently attending the CAA two weeks¹ ATC Course at the Aeronautical Center after which he will proceed to Omaha to attend the ADLO conference October 25-27. Mr. Breniman, Chief, Technical Services & Planning Branch, AOD, attended the Aeronautical Center ATC class starting October 10.

(Continued on next page)

On October 1, 1955 the name of the Great Falls AFB was changed to Malmstrom AFB in honor of Colonel Malmstrom, former Deputy Commander of the Base, who was killed in a jet aircraft accident near Great Falls on September 29, 1954.

Airport traffic surveys were completed for the third quarter of 1955 in preparation of a quarterly report to Washington on recommendations concerning establishment of airport traffic control tower service within this region.

Action was taken to commission 257.8 mc in the newly commissioned Casper Tower. Most of the military aircraft operation from the Casper Airport are UHF equipped.

The commissioning of additional Phase V UHF facilities throughout the region has been delayed pending Washington negotiations with the Air Force for maintenance and operating funds to permit operating additional UHF communications channels over and above those actually in operation as of September this year.

In coordination with the Facilities Division engineering plans are being developed for future installation of ASR repeater scopes at Seattle-Tacoma, Portland, San Francisco, Oakland, Burbank, Long Beach, Denver and Salt Lake towers.

A proposal for new airways structure in connection with the establishment of Kiowa VOR is being prepared for submission to the Airspace Committee.

Developed chart showing location of 254 enroute aids planned for this region as of 1965. Chart also shows both low altitude and high level routes planned.

A new teletypewriter circuit, the OFACS "B" was commissioned October 3. This permits direct transmission between Oceanic Stations, Regional Offices, and Washington. There is no word limit restriction on messages handled via this circuit.

The service "B" Improvement Program was commissioned as scheduled October 17. Message word limitation remains in force.

Orders have been placed with the Washington Office for interphone 102A key equipment for all radar towers.

Coordination was completed with the Navy and the Air Force for the following frequency changes: Sacramento LMM 260 kc; Ukiah J 278 kc; Crows Landing Tower 257 kc; Richmond MHW 265 kc; and Dixon HW 270 kc.

Coordination completed with Honolulu and Coast Guard for change of frequency. Trans Pacific voice circuit 2780 kc to 2868 kc and 5165 kc to 5680 kc, effective December 15.

A survey of the region has been completed and results forwarded to Washington re radio interference from locations affected by radio frequency stabilized arc welders.

Engineering completed with TELCO for modernization of Lovelock, Nevada communication station.

Project of relocation of interphone switching from Las Vegas to Needles has been disapproved by the Washington Office pending further study due to the excessive cost of the proposed move.

VOR frequency assignments were obtained for Utah Lake, Utah, and Kiowa, Colorado.
(Continued on next page)

H.B. Wright, AOS, Technical Services & Planning Branch, attended ATC Training Course, Oklahoma City and visited Kansas City and Fort Worth regional offices to discuss methods and means of streamlining landlines ordering procedures.

Completed Flow Chart for military IFR traffic in Region IV.

Completed approximately 90% of the work connected with the preparation of a Flow Chart for VFR and DVFR traffic.

We have received inquiries from the CAA Bangkok office requesting both technical and operational information regarding the mobile tower program. It seems that the program is causing quite a bit of comment even in far-away places.

Approach control was commissioned at Larson Air Force Base October 10 - this approach control to be conducted 8 hours per day until sufficient personnel are trained when it will be expanded to 16, then to 24 hours.

Automatic weather broadcast service is to be implemented at Los Angeles, Seattle, Portland, Albuquerque, Oakland, and Denver sometime in the future, particularly for evaluation purposes. Los Angeles installation will be the first to be completed.

Modernization of the communication station at Seattle is progressing and should be completed about November 15. This will terminate the program that began some months ago when the OFACS was relocated to San Francisco.

Approach control was inaugurated at Ontario, California, October 14.

Plans are proceeding for the remote controlling of Fort Bridger by Rock Springs but implementation date now anticipated as of November 1. All communications channels with the exception of 3023.5 will be remotely controlled from RKS. Weather observations will be discontinued during the test period.

Mr. O'Hara, Bureau of the Budget representative, has visited several of our field installations during the month in order to become better acquainted with the CAA program.

Col. Delaney, new Commanding Officer of the AACS Training Sector, Orlando, Florida, visited the Airways Operations Division, R.O. and some of our field facilities.

It now appears that we will proceed with our Miramar RAPCON program as originally scheduled - installation and operation will be at the Base itself rather than nearby. There is no further information on Hill and Fairfield RAPCONs except we anticipate receiving allocation of training positions and money within the next few days.

A telephone call from Washington indicates limited available space will require Hill RAPCON operation with but one scope/console for approximately one year.

Weather Bureau advises plans automatic weather stations at Jordan, Montana; Bryce, Utah, and Blue Canyon, California.

The Division agreed to eliminate 257.8 UHF receivers at Gooding and Winemucca in order to permit commissioning 257.8 two-way at Casper Tower.

Oregon State Board of Aeronautics advises that the State will "provide and install a 112.8 weather and airport advisory radio station" at Meacham, Oregon. The equipment will be housed in the Weather Bureau office and manned by U.S. Weather Bureau personnel.

(Continued on next page)

FACILITIES DIVISION

Flight Inspection Branch. Mr. Campbell spent two weeks at Oklahoma City attending an Air Traffic Control Course.

Flight Inspection Branch spent several days checking facilities in regard to accident which occurred at Medicine Bow Peak near Laramie, Wyoming. All facilities were found to be operating properly.

Jack Webb flew N-71 to Oklahoma City for engine change.

Thomas W. Binczak reported for duty as Airways Inspector, and with Jack Webb, will check military UHF facilities.

Establishment Branch. A study was completed concerning the tentative consolidation of the Great Falls RAPCON and Air Route Traffic Control Center. Recommendations were developed and forwarded to Washington.

Because of increasing aeronautical activity, above that anticipated, the City of Billings was requested to provide space in their new administrative building for a separate tower and communications station rather than combine the facilities as originally planned.

Norman Carlberg completed installation of Service "B" relay equipment at Paso Robles, California INSAC.

Norman then joined forces with Sam Rosenfeld to complete the installation of Service "B" Military Flight Service relay equipment at Thermal INSAC for relay operation with March Air Force Base.

Carlberg is now at Lovelock beginning the move of A/G console and teletype equipment from the tower cab to new operations space on the ground floor. The move is being made in order to accommodate Service "B" relay equipment.

Sam Rosenfeld departed for Raton, N.M. where he will install teletype equipment as part of the re-establishment of the Weather Bureau Station at Crews Field.

Red McCauley completed the temporary installation of Service "B" relay equipment at Lovelock and departed on annual leave.

Roger Baker completed installation of Service "B" teletype equipment in Los Angeles ARTC Center for the Flight Data position. He also completed the modernization of the teletype layout in the Regional Office Message Center.

Ed Pardee and George Martin continued the installation of 4-channel control equipment at Denver ARTC Center.

Riley Harris, Bill Foker and Dave Hegland completed the installation of an approach control position in the Ontario CS/T and the installation of a SECO unit for operation with Weather Bureau automatic weather observing equipment.

Riley Harris, Bill Foker, Murry Asilowitz and Dave Hegland continued the rearrangement of transmitters and tune-up of receivers and transmitters at Saddle Peak as part of the modernization of A/G communications facilities in the Los Angeles ARTC Center.

(Continued on next page)

Frank Dettmer completed rebuilding the hangar-top antenna structure at Pueblo, and has plunged into the INSACS remodeling and broadcast booth installation at Los Angeles International Airport. The remodeling work involves floor trenching and rearranging of partitions; with this work going on during the communication operations the pedestrian traffic is really congested.

Jim Crenshaw, now on annual leave, will soon start on the enlargement of the INSACS operations room at Daggett, California. In addition to the building extension, there will be revamping of the electrical system and additional lighting.

Tom Tarpo made miscellaneous improvements at facilities in the Wyoming-Colorado area. His next assignment is for miscellaneous improvements at the Grand Junction VOR site.

Fred Yandell supervised installation of the heating system at Bellingham, Washington and is now at Laramie, Wyoming soliciting bids for a delta frame antenna structure.

The Rock Springs-Fort Bridger Satellite console modernization project is now progressing satisfactorily. The missing equipment finally arrived. Paul Allee, Dick and Darel Preator, Tom Carrington, and Tom Bracken are again raising the dust in order to complete this project on schedule. Looks like they are going to do it.

The Seattle-Tacoma Center and Tower Modernization is still in progress with Howard Pyle, Jim Carr, Clyde Olson, Bob Payne, John Elwood, Hank Scribner and Earl Jobe in attendance.

Udell Larsen and W. Harvey have completed the Service "B" work at Oakland and are in Seattle relocating the localizer equipment.

Wes Martyn is our newest addition to our Regional Office engineering force. He is already knee-deep in VOR problems and is pitching into them like an old hand.

Fred Townsend is taking a few days away from the R.O. to participate in acceptance inspection of the Kiowa VOR and explore the Colorado Springs area for a possible VOR site. Before the end of the month Fred will also see for himself whether or not it snows early at the Utah Lake VOR.

Marion Frampton has returned to duty after quite a session with the man who wields the knife. He says he is fully recovered now and anxious to get back in the harness again.

Bill Beekman prepared for some rugged field work by taking a short rest and a check-up with the "Doc". Upon return to duty, he made a flying trip to Whidbey Island to obtain the necessary data for us to proceed with a VOR construction contract. He is now at San Jose where he is exploring the area for a place to relocate the San Francisco VOR.

Marion Duncan has been the Government representative for the construction of the Kiowa VOR. Our high-speed contractor has completed this facility in less than 30 days, so Marion has hardly had time to get settled. His next assignment will require that he travel across the region to San Diego where he will supervise dismantling of the San Diego VOR.

V. O. Vick continues as Government representative for construction of the Utah Lake Mountain-Top VOR. He hasn't reported any deep snow atop the mountain so far so, with a little luck, perhaps he will miss it all. He will next go to San Francisco and oversee the completion of the TVOR construction. After that, we expect he will be ready to head north toward Seattle for some well earned annual leave.

(Continued on next page)

Max Pollock and our Technical Services Engineer, Romanishin, are at San Francisco getting the TVOR construction underway. While at San Francisco Max is looking around for a possible site to relocate San Francisco Gap MHW.

Chuck Dickow, Fred Hempt and Don Robb chased the last of the bugs from the Oceanside VOR and saw that facility commissioned. Chuck is now at Lucin for the final inspection and commissioning of that VOR. Fred and Don have headed toward a warmer climate at Banning where they are installing electronic modulators and power supplies at the Fan Marker. They will next head north for a similar project at La Grande, Oregon.

Maynard Hegland and Erwin Clark have spent most of the month working about the Regional Office with some time off to see their dentists. Erwin's jaw showed the results--looked like he had the mumps. They are now at Utah Lake helping with the VOR electronic equipment installation.

Emmett Whitney, Bob Crookshank and Vic Beacken completed the Pueblo VOR and saw that facility commissioned early in the month. Emmett and Bob then took off to get in their annual hunting. Vic Beacken remained in Colorado to install Conelrad control at the Aurora MHW. All three are now at Utah Lake where they are pushing the VOR installation as rapidly as possible.

Boyd Preece and Glenn Shoop are winding up the Lucin VOR. We expect to see them at Walla Walla very shortly where they will start the TVOR installation.

Chuck Daggy, John Williams and Al Calloway have just about completed relocation of the San Diego VOR. They will next remove equipment from the old facility and then take annual leave.

Glenn Kassing and Herb Happoldt have run into an unusual variety of bugs during the installation of the 4-loop antenna assembly at the Portland VOR. The facility is in the flight-check stage and should be back on the air soon. Their next assignment will be establishment of voice and control at the Williams VOR.

Contract was awarded for the relocation of the outer and middle marker sites for the new NW/SE instrument runway at Billings, Montana. The notice to proceed has been issued effective October 24, 1955. Dave Domaskin will be Resident Engineer.

The relocation of the localizer building at Seattle and cable is being completed under the direction of Gene Newman.

Frank Beauchamp, Udell Larsen, "Red" Pedri and Winifred Harvey estimate that they will complete the relocation of the Seattle/Tacoma ILS localizer approximately November 1.

Contract for the Salt Lake City HIAL has been awarded and construction started on October 24, with Harry Mellen as Construction Supervisor in charge.

Earl Trejbal, Civil Engineer (temporary appointment) is making the surveys for the PAR reflectors at Portland and Seattle.

Jim Cole reports from Portland, Oregon that the IFR room installation is nearing completion with a target date for the acceptance inspection set for the first week in November. Jim is being assisted by Darol Hafner. (Continued on next page)

The Oakland radar repeater and communication installation has been progressing under the guidance of Bob Faul, who is being assisted by Rafael Lopez. Barring unforeseen delays, Bob will complete this job during the first week of November, at which time Rafael will commence his long delayed vacation in Florida.

Paul Watkins, Damon Capps and Doug Brown completed the Denver remote transmitter site ASR cable replacement job October 21. Paul is scheduled to relax and go hunting in Idaho for three weeks. Doug will assist Ed Pardee at the Denver Center until Paul returns from leave. Damon will return to Oakland to assist with the ASR-2 repeater installation.

Don Hughes, Joe Shukal and Clyde Harrell are continuing their work with the Los Angeles ASR. Clyde recently joined the Navigational Aids No. 2 Section of the Establishment Branch, having transferred from the Naval Ship Yard at Long Beach.

Rex Brown is working with Washington Engineer Lou Rudolph on the acceptance of the Burbank ASR-3. The 72-hour check on one channel has been completed; however, we have not received official results of this run as of this writing. It is expected that the acceptance inspection will be completed shortly after November 1.

UHF Ted Kurth and R.E. Joseph conducted engine generator surveys at Bryce Canyon, Cedar City and Delta, Utah.

Bob Chambers and "Nick" Nicholls conducted surveys for initial planning of UHF installations at Butte, Billings and Pocatello. Nicholls conducted final inspection for structural work at Arcata and Salinas.

Phil Nicoletti and crew of Bob Betz, James Barnes, Myron Gaulke and Pat McCarty completed UHF work at Seattle and are now installing UHF equipment at Yakima.

John Rathjen and crew of Joe Covington and Lloyd Allen are installing equipment at Bakersfield.

Wayne Brown and contract crew are at Portland for the completion of the remote station link and INSAC UHF. One tower UHF frequency is involved.

Al Marsden and contract crews completed Cutbank, Montana. They left Spokane, Washington incomplete due to console work in progress. They are now installing UHF equipment at Helena, Montana.

Ed Alfonso and contract crews completed the standby installation at Cheyenne, Wyoming, and halted work at Eagle, Colorado for the extension of the building. They are now working at Delta and Cedar City, Utah.

Orion Betz's crew is starting work on the Oakland link and putting final touches on the Los Angeles Center-Saddle Peak link. Carl Weidert has been in charge while Orion has handled leave relief details for contract crew supervisors. Orion covered a lot of territory to relieve at Eagle, Helena and Portland.

Jack Riebe made station surveys at Reno, Nevada Municipal and Butte, Montana Municipal Airports, and remote site surveys at Reno VOR and Pea Vine Peak, as well as at Copper Mountain in Butte vicinity. He also prepared plans and specifications for the Reno Remote Site.

(Continued on next page)

Clyde Lee supervised construction at Bakersfield, California and has moved to Blythe, California, Prescott and Zuni, Arizona, to supervise construction at all three locations.

Dave Evans has completed the construction at Salinas, California and went on annual leave. His next assignment will be Stockton, California.

Frank Gavin is supervising construction at Pendleton, Oregon. He expects to be finished the first of November in time to handle Yakima, Washington and Lewistown, Montana.

Bob Dahms has completed the construction at Santa Fe and Grants, New Mexico, and is currently supervising construction at Las Vegas, New Mexico.

Jim Pace completed Helena and is distributing proposals for Whitehall, Montana; Idaho Falls, Idaho; and Drummond, Montana, before he reports to Douglas, Wyoming.

Len LaFornara held final inspection for the Santa Fe and Grants, Arizona projects prior to moving to Denver, Colorado where he is supervising construction of the Denver and Akron, Colorado projects.

Bill Murray relieved Clyde Lee at Bakersfield and will complete the job and then depart for Salt Lake City.

Maintenance Branch Ruben Hansen, SES, Livingston, Montana, was released from a Denver hospital on October 6 and he and Mrs. Hansen returned to their home in Livingston. Mr. Hansen was seriously injured in a highway accident near Raton, New Mexico on his return from a DME class at Oklahoma City. We are certainly glad that he is on the mend and will return to duty following a recuperative period.

Messrs. Mackie and Clayton made a familiarization and inspection round robin from Los Angeles to Seattle and Boise and return, with stops at intermediate points.

Jerry Melville is holding an area meeting for Maintenance personnel at San Diego, Wednesday, November 2nd. His trip to ATDS Headquarters has been postponed but he plans to depart Los Angeles on November 7 to the Pacific Northwest and way points.

Three classes of training on Model 28 Teletypewriters has been completed October 21. The students report that this type of instruction will assist them materially in field trouble shooting problems. It probably will be 30 days or more before the Model 28 field training crew will embark upon this training program.

Regional office training on UHF Air Ground equipment began on October 17. There will be three or four Regional Office training classes and then a field crew will commence training in the field.

Two International Region students from Spain completed their training in Establishment and Maintenance programs October 21. Messrs. Julio Gonzales and Jose de la Camara will return to the International Regional Office in Washington October 28. We wish to thank all personnel involved in the good-will training program for their time and efforts in helping these students.

AIRPORTS DIVISION

The first Region IV Grant Offer under the \$20 million appropriation was issued during October to the Salt Lake City Municipal Airport. This Offer in the amount of \$201,388 is for grading and draining the new terminal area. (Continued on next page)

Project Applications totaling over a half-million dollars were received this month from Los Angeles International Airport; Billings Municipal Airport; McCarran Field, Las Vegas, Nevada; and Grand County Airport, Moab, Utah.

Mr. Marriott, Mr. Winger, and District Airport Engineer Drew attended a meeting of the International Northwest Aviation Council at Yakima, after which Messrs. Marriott and Winger visited the Airport District Office at Helena; with District Airport Engineer Perry, they attended the dedication of the new instrument runway at the Billings Municipal Airport.

Mr. Winger attended the 1955 National Airports Conference at Norman, Oklahoma, jointly sponsored by the University of Oklahoma and the American Association of Airport Executives, with the cooperation of the Civil Aeronautics Administration.

Mr. Winger attended the annual meeting of the National Association of State Aviation Officials at Dallas, and a concurrent conference of Regional Airports Division Chiefs. Mr. Herbert H. Howell, Director, Office of Airports, attended both meetings.

(See Highlights continued on page 28)

* * * * *

BOND PROGRAM


In a memorandum to the field July 12, 1955 the regional Savings Bond Chairman included a report of the status of the Bond Program. We had hoped that by October 15 or so participation would be increased. However, the record now stands about as it was on August 5th. Here is the story:

<u>Group</u>	<u>Employees</u>		<u>Employees Part.</u>		<u>% Part.</u>	
	<u>6/1 & 8/5</u>	<u>6/1</u>	<u>8/5</u>	<u>6/1 - 8/5</u>		
Regional Administrator's Staff	16	5	9	31	56.3	
Airports Division	42	10	12	23	28.6	
Business Administration	122	44	59	36	48.4	
Facilities Division	699	165	195	23	27.9	
Caretakers	45	0	0	0	0	
Station Laborers	19	0	0	0	0	
Air Carrier Division	69	16	21	23	30.4	
Aircraft Engr. Division	65	25	33	38	50.8	
General Safety Division	102	40	50	39	49	
Airways Operations Div.	37	13	15	35	40.5	
Field Facilities	<u>1599</u>	<u>393</u>	<u>495</u>	<u>24</u>	<u>31.0</u>	
	2814	711	889	25%	32%	

* * * * *

V. P. P. NOTES

No News is Good News!



FIELD NEWS

AKRON, COLORADO

COMMUNICATION STATION: Big news here is still "Ike". Especially in regard to the VIP flights passing through the Akron-Thurman VOR area. We relay high priority messages for the White House (Lowry at Denver) as a routine function.

Had two incidents of aiding aircraft in distress recently: One October 12 whereby a Twin Cessna, one of those new 310 series called Akron in the evening (after dark) advised he had lost all his navigation instruments and asked for a fix. He was enroute Cheyenne, Wyoming to Garden City, Kansas. The specialist was able to get his reading on Akron before the plane transmitter evidently went out. All information in this regard, the beacon and lights at Akron, weather in the area was broadcast in the blind to the aircraft. Further, all stations within a 250 mile radius were alerted by message on circuit B and the Denver Center alerted. Nearly two hours later, a cancellation message addressed to all stations was sent by Colorado Springs that the aircraft had landed there. This incident was forwarded to the Denver Safety Agent for possible further looking into, as the series 310 may have some bugs in it.

On October 13 a Cessna-120 Chicago to Denver became lost at night (late evening) and if it were not for the beacon east of Akron (Wauenta) and the Akron beacon, field and lights, he would have cracked up as he was LOST. After a cup of java at the station, relaxing and a little pilot briefing he continued on to Denver. (An alert notice was out on the aircraft.)

Here is a simple but useful way to meet deadlines. As memo's, dispatches, etc., are received, requiring answer on such and such a date, make a couple of entries on your pad or executive calendar several days in advance of the deadline. A note as to the Division Bulletin number or date/time group of the dispatch should be sufficient. It works for me.

This should evoke memories from former 5th Region men. Claude Buckley entered on duty here as a trainee. He advised he had formerly worked for the CAA at Overton, Nebraska. If my memory serves me, believe Overton and Big Springs were shut down about 1945.

OGDEN, UTAH

COMMUNICATION STATION: Flight planning activity at Ogden almost doubled following the favorable publicity given the service in the near fatal crash landing of N76411 on mountains between Hanksville and Salt Lake City (see Page 5, NEWS for August). Quick action by Search & Rescue saved the lives of the two men on board.

(Continued on next page)

The State Aeronautical Director and local newspapers gave C.A.A. flight planning service full credit for making rescue possible.

Thomas Martin set a station record for "saves" on October 1 by warning Hill AFB Tower of a total of six jet aircraft observed landing at Ogden instead of Hill AFB. One Marine jet did not have fuel to continue to Hill and landed at Ogden anyway -- but with the knowledge that runway length was 5350 instead of 8700 feet.

Thirty-three Fairchild C-82 (Flying Boxcars) were recently sold by Hill AFB. One was acquired by Truman Miley for his local spraying fleet and will remain at Ogden. Several were brought to Ogden for preliminary outfitting before being ferried to Miami and other points. Over 300 surplus C-45 aircraft are expected to be released for sale soon - most Model D-18S, many nearly new. This activity has been a boon to local operators and pilots servicing and ferrying the aircraft.

* * * * *

MONTEE STILL FLYING AT 93!

Airways Flight Inspectors R. H. Lewis and J. F. McCormick helped James F. (Dad) Montee celebrate his 93rd birthday this year. Dad is the oldest active pilot in the United States, and each year celebrates his birthday by taking his family for an airplane ride.

It was done this year in CAA Douglas N23 with Lewis and McCormick serving as host to Dad and twelve family members and the press. It was reported Dad took right over by raising the pilot seat to the correct height, and making other cockpit adjustments as he flew. During the flight various family members came forward to congratulate Dad, and to see how he was doing.

Dad has many accomplishments to his long record in aviation such as: soloing at age 64, the oldest pilot to solo and get a licens; building racing planes in the 1920's, and winning first and second places in the 1925 transcontinental race; heading up the Montee aerial circus, etc.

Dad attributes his keen mind and good health to the philosophy of living each day as it comes and looking optimistically to the future -- And -- taking that airplane ride each year!

* * * * *

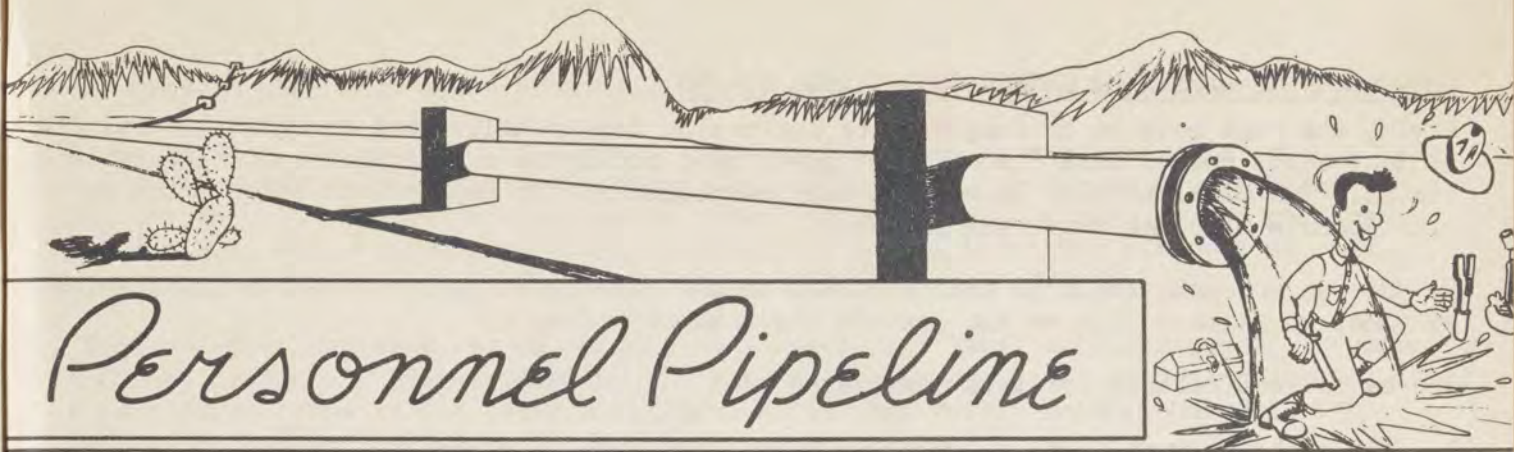
ROY J. BROWN RETIRES

As we see more and more of our old time fellow workers retire, there comes the realization that the C.A.A. is getting up there in years. Ray Brown, Chief of the Ukiah Station is the latest of our people to call it quits. As of October 31, 1955 he leaves the stress and strain of running a Communication Station and retires to the land of milk and honey, Oceanside, California.

Roy is a native California, born and raised in Hanford, California. He served with the Army during the first World War and entered our service at Blue Canyon on November 8, 1929. He subsequently served at Auburn, Livermore, Sexton Summit, Oceanside and Salt Lake City. He was appointed Chief of the Ukiah Station in October 1952.

We are going to miss Roy in our organization and extend our best wishes for many happy days ahead. Good luck Roy!

* * * * *



PROMOTION UNDER WHITTEN AMENDMENT

- Q. I am a grade GS-7 in a Combined Facility, qualified and eligible for promotion to grade GS-9 in a Tower or Combined Facility. If my grade is reclassified to GS-8 will it be necessary to complete one year as GS-8 before being eligible for promotion to GS-9?
- A. Under a new interpretation received from the Civil Service Commission it would be possible for you to be promoted to the GS-9 position without waiting one year since you are otherwise eligible provided:
1. You are promoted at a location where there are no GS-8 positions. In other words since your position is being reallocated you could not be promoted to a GS-9 at the same location without serving in the GS-8 for one year. You could however be promoted at another location where there is no GS-8 position. This authority stems from that portion of the Whitten Amendment which states that two grade promotions may be made if the positions are normally classified at two grade intervals.

This same interpretation would apply for those employees who are already serving in an intervening grade for example:

1. A Communicator GS-5 at Los Angeles who meets all of the requirements for GS-7 Communication position bids and is promoted to a GS-6 position at LAX on June 5, 1955. (Since LAX has GS-6 positions he could not have been promoted to a GS-7 at that location and would have to wait one year from date of promotion to GS-6 to be promoted to a GS-7 at LAX.) However, he bids on a GS-7 at Thermal on October 9, 1955. Since at Thermal there are no GS-6 positions he would be eligible to be promoted immediately without waiting the one year.
2. Likewise a person promoted to a Combined Facility or Tower GS-8 position does not have to wait one year from that date to be promoted to a GS-9 providing there is no GS-8 position at the location to which promotion is proposed. He however cannot be promoted to a GS-9 at his present location since obviously there is an intervening job.

As has always been the case under the Whitten Amendment there is no problem in promoting a man to a grade level which he formerly occupied.

(Continued on next page)

CONVERSION TO CAREER OR CAREER-CONDITIONAL STATUS

During the last session of Congress the conversion requirements were somewhat liberalized so that about 40,000 more "Indefinite" government employees could acquire Civil Service status. The Civil Service Commission has now published the regulations under which we will operate this new conversion program.

We have at present, about 50 employees who do not have status and on a quick check which we made, we believe that we can convert about 40 of these.

The basic requirements for this conversion are:

1. The employee must serve under other than a temporary limited appointment during the period from January 23, 1955 through November 10, 1955 with no break in service. Separation for military service will not be counted as a break if the employee is reemployed after completion of military service.
2. The employee must have completed a minimum of three years of satisfactory service prior to making application. This three year requirement need not be consecutive. Any type of appointment is creditable except an Excepted Appointment.
3. The employee must submit his application to the Agency prior to November 11, 1956. Civil Service Commission Form 493 must be used to apply for conversion. We have ordered these forms and as soon as they are received we will mail them to eligible employees.
4. The employee must have qualified in a suitable civil service examination. For this purpose an employee is qualified if he was eligible in any Civil Service examination taken during the period beginning June 3 1950 to the present which could be used to fill any position which the employee held during the same period. For example - an applicant who was eligible as a stenographer in San Francisco in 1951 and who served in a stenographic position in New York in 1954 in the same grade for which she was eligible would be qualified from an examining viewpoint. If the dates were reversed, the same answer would apply.

If an employee has not passed an appropriate examination his application for status Form 493 (together with Form 57) will be forwarded to the Commission by LA-90 for a non-competitive examination.

5. The employee must be recommended by the Agency before he can be converted. When an employee has been approved for conversion we must then determine whether he is to be given Career or Career-Conditional status. To make this determination we rely on the previous conversion process. To get Career status an employee must have been employed for three consecutive years under an appropriate type of appointment. If he has not, then he must be converted to a Career-Conditional status.

As soon as we receive the Forms 493 we will send them to those employees who are eligible. Please do not send your application to us on any other form.

WAGE SCHEDULE EMPLOYEE - Salary Policy

In the past there has been some question on what happens to a wage schedule employee when he is reassigned to another wage schedule area. We have received some new information from Washington which gives us a pattern to work with for those employees whose salaries

(Continued on next page)

were "saved" when they moved from Classification Act position to Wage Schedule position.

The policy for a Wage Schedule employee currently serving on a "saved rate" who is re-assigned to another position in the same line of work in a different wage schedule area will continue to be paid at his current "saved rate" or will be paid at the step rate of the new schedule which most nearly matches but is not less than his present rate. He will be paid whichever is the higher rate under the above formula.

A Wage Schedule employee who is changed to a lower wage level at his request, in reduction in force, or for any other reason except personal cause or change in job evaluation, will be paid at the rate in the lower wage level which most nearly matches but does not exceed the rate he received just prior to demotion.

Determination of Prevailing Rates

Several questions have been raised, which indicate a need for clarification of the way wage schedules are constructed and the relationship between the schedules and the going rates for particular kinds of jobs in the community.

Wage schedules are established and revised based on surveys conducted by locality wage survey boards. Locality surveys are made in recognition of the fact that the general price and wage structure is dynamic from year to year and that the rate of change throughout the country is not uniform. There are no prescribed intervals for such surveys, annual or otherwise. Rather, they are made when the persons charged with responsibility for keeping abreast of industrial pay conditions believe that a particular area's wage schedule has become out of line with local prevailing rates. Existing schedules remain in force until revised schedules are issued.

Local wage data is collected by trained salary and wage analysts who visit various industrial plants and utilities. Such organizations as wholesale and retail outlets, financial institutions, hotels, restaurants, and construction companies are generally omitted because their labor and employment conditions differ materially from ours. There is no attempt to collect data on all the jobs present in the community or in the government installations located there since this would cause the survey to become lengthy, detailed, and prohibitively expensive. Instead, job coverage is limited to certain key jobs which are used as benchmarks for the various levels of skill and responsibility typified by the wage schedule grades.

After the data have been collected, the average rate received by employees in each key job is computed. The average rates are then plotted by grade level and wage level, and after further statistical treatment a schedule is created in line with prevailing rates in the locality.

It should be noted that the technique applied is one of pricing work on the basis of skill levels. There is no attempt to compare jobs as such, and there is not necessarily a direct relationship between the average rates paid to "journeyman" carpenters in the area and the rate provided for the grade at which such carpenters are evaluated under the standards. This technique was adopted because it was felt more important to maintain good internal alignment between level of skills in the government rather than to attempt to maintain a direct pay relationship between jobs-inside and outside the government service.

* * *

Division Highlights Continued from page 22

Airways Operations Division - Air Defense Liaison Officer - 25th ADD

In collaboration with the 25th ADD, Seattle Center and RAPCON we have initiated a project of indoctrination of Air Carrier Operations personnel with McChord AFB activities. Each group consists of about 10 people. Five groups have been handled, the program consisting of the following: A 1 to 2 hour briefing, visits to ADCC, ADDC, Alert hangar where jet scrambles are observed then to RAPCON for final ATC briefing.

The jet indoctrination ride program has been completed as far as the original list of names are concerned. An additional list is being submitted to the 25th ADD for continuation of the program.

Representatives of the Hughes Aircraft Company visited McChord on October 21, in connection with a study they are making on the air traffic control problem.

A release was made to the Western Oregon and Washington press concerning the proposed ADIZs and Regulation 620.

* * * *

INCENTIVE AWARDS STORY

The Washington office recently authorized greater authority to the Regions on granting cash awards for employee contributions.

Heretofore the region has only had authority to grant \$50.00 for employee suggestions. This authority has been extended to \$250.00 provided the award is calculated according to the prescribed scale published by the Department. In addition, the region has authority to make cash awards for superior performance on the job. The minimum such award is \$100.00 and the maximum shall be the equivalent of a one-step increase for the grade of the employee. For example, the region's authority on a GS-3 is limited to \$100.00 since the step-increase for this grade is \$85.00. For a GS-8, the region's limit is \$135.00 since that is the step-rate increase for this grade.

Right now the Incentive Awards Committee is poring over the outstanding ratings referred to it for action. This is a time-consuming chore but a report on the results should be forthcoming within the next 30 days.

Recently the Committee reorganized. C. T. Holman, Chief of the Manufacturing Inspection Branch of Aircraft Engineering was named as Chairman. Vaughn Clayton, Deputy Chief, Facilities Maintenance Branch was selected as Vice-Chairman. Other members include C. W. Larsen, Deputy Chief, Airways Operations and formerly Committee Chairman; W. O. Johnson of Airports and George Hammond of Business Administration. The Personnel Branch representative is Glyndon Riley who serves as the Incentive Awards Program Officer.

The Committee wishes to remind everyone that YOU are the persons who make the Incentive Program work. A suggestion should always be regarded as a message from an employee who is trying to help out C.A.A.

* * * *



QUESTION BOX ?



Q. How do I calculate my per diem claim when rate is reduced after 15 days at a location?

A. Employee on \$10.00 per diem arriving at Boise, Idaho, on November 2 (3:00PM), and departing from there on November 28 (2:30PM) would present claim substantially as follows:

Nov. 2	Depart Spokane	9:00 AM				
	Arrive Boise	3:00 PM	3/4 day @	\$10.00	\$	7.50 (1)
Nov. 3-17	On duty Boise		15 days @	\$10.00		150.00 (2)
Nov. 18-28	On duty Boise,					
	Depart 28th	2:30 PM	11 days @	\$ 8.00		88.00 (3)
Nov. 29	Arrive Spokane	10:00 AM	1/2 day @	\$10.00		5.00 (4)

All transportation by Government Car C-10000.

- (1) First calendar day or portion thereof at basic rate.
- (2) 15 full days at basic rate.
- (3) Reduced rate which holds through midnight of day of departure.
- (4) Basic rate restored 12:01 AM of day after departure.

Q. Can I use duplicate copy of sales slip to obtain reimbursement from an Imprest Fund?

A. Yes, if signature of vendor, and signature of purchaser, is original. Refer to A.O. 123 (Receipts).

Q. Should my Supervisor and I prepare a Form 657, Property Clearance form for me when I transfer to another region?

A. Yes. Transfers are the same as resignations as far as personally charged property; credentials; T/Rs; Forms 44, etc. are concerned. Form 657 should be forwarded in duplicate, through channels, to LA-90 (several days before transfer), after signature by you and supervisor. Final salary check from this region is held until clearance is processed. (See A.O. 205, paragraph V.)

Q. All of us know that cash awards are subject to withholding tax. Can the Cash Award provided in the scale of benefits be adjusted upwards by a sum sufficient to cover the withholding tax?

A. No. the awards scale prescribed by the Civil Service Commission and the Department shows the total cash award to be granted. Tax is then deducted from the award. If it were done otherwise, there would be certain problems. If such an adjustment in the tax were made, the gross award would vary according to the number of dependents and would lead to inconsistencies.

CAA Region Four Federal Credit Union

JUST A. B. C.

The Credit Union plan is a simple plan. No wonder it works so well!

Just A -- A group of people (like us) put our savings regularly into a general fund and then elect a few of us to take care of it.

B -- When we need cash, we borrow from the fund and pay a low rate of interest for use of the money.

AND C -- This money we pay as interest provides the income -- pays the expenses of operation. What's left over gives us a dividend.

Contact your Credit Union today. Joining is as simple as A B C. By the way, if you already belong, tell some of your CAA friends who have not yet realized the many advantages of belonging to the Credit Union.

"SO YOU DON'T NEED THE CREDIT UNION?"

Let's put it this way! How many people in your immediate circle of friends pay cash for a car, a new freezer or other major appliance? Well, THEY need the credit union. Surely they do not save up the money needed for a purchase of any consequence in an old shoe under the bed!

Now, how many people do you know who have purchased a new car or some other major item partially on credit? THEY need the credit union because of the attractive features of credit union financing including low interest, no minimum charges, loan protection and other advantages.

So that leaves the person who NEVER borrows, the one who never saves, but just goes along life's merry way like a grasshopper -- feasting in plenty and starving in want. That person needs the credit union most of all. For himself and for his community -- to establish the habit of thrift and to learn to save for a rainy day.

"Now--who is left who does not need the credit union?"

WHY NOT JOIN YOUR CREDIT UNION NOW?

Fill in and mail this blank today

CAA Region Four Federal Credit Union
5651 W. Manchester Avenue
Los Angeles 45, California

_____ Yes, I desire to become a member of the Credit Union. Please send me membership signature card and additional information

_____ Also, I wish to apply for a loan of \$_____ to be repaid in _____ monthly payments.

Name _____

Address _____

NOTE: Loans up to \$400 may be granted on signature alone if employed by CAA 3 years or more. Higher loans are available provided adequate collateral is furnished, such as automobile, co-signers, etc.

Similarly the Airports Division might say we can help pay for runway lighting but not approach lights. This statement is inaccurate from the CAA viewpoint because the Facilities Division installs approach lights with Government funds (EANF).

Again it would be inaccurate for an Aviation Safety Agent to tell a pilot that the VFR minimums are 1000 feet and 3 miles without adding "but the Tower Controller can authorize VFR flight down to 1 mile visibility within his control zone." So we must all exercise care to be sure statements made are accurate from the standpoint of our total CAA function.

Another thing that appears to be a road sign toward improved safety, coming out of the investigation of the private plane accident is to increase our advisory service in connection with flights under marginal weather conditions. We might well place the inflection or emphasis on discouraging private pilots from taking off under conditions which we know will require IFR flight, without a proper IFR flight plan. Possibly in this connection we are also justified in requesting the pilot to signify on the flight plan that he does have an instrument rating. Perhaps if we see that a pilot is starting a flight which will result in a violation the tower should warn him of that fact and advise that an incident report will be made.

Certainly we should explore every possibility of surrounding these flights under marginal weather conditions with the maximum safety guidance without restricting those who are fully qualified to fly under the existing conditions. We are seriously considering this problem, and it may include recommendations to Washington for changes in procedures and regulations. In the meantime your continued alertness and reporting of unsafe conditions will advance our overall CAA safety program.

* * * *