



A MONTHLY NEWSLETTER OF SIGNIFICANT REGIONAL AND WASHINGTON ACTIVITIES

CIVIL AERONAUTICS ADMINISTRATION, LOS ANGELES, CALIFORNIA

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VHF-DF

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Few of us, including some of the real "old timers" in the Region, perhaps remember or realize that the old Los Angeles Airways Radio Station, which was located on a hill above Glendale, had one of the first ground direction finding units in the entire service.

This installation was made in 1929 shortly after the station was established and was accomplished under the supervision of Elmer Butler, who had been assigned as Chief of the new facility. The direction finder was designed to receive on low frequencies used at the time (mostly in marine work), but it was also capable of covering the band from 2800 to 3200 kc on which we used to operate.

A wheel was used to rotate a loop which extended through the roof of the station to take bearings. This wheel was directly above the operating desk and was easy to work from the operating position. The only trouble with the installation was - "it didn't work!" - at least it was erratic in some directions (mostly north toward the hills); therefore, we discontinued taking bearings. However, this unit remained in the station quarters for many years afterward.

While the value of direction finding from the ground was realized, it was many years, however, before good, dependable equipment was designed for airways work and again installed and used by CAA operating personnel.

Three evaluation units manufactured for the Navy by Western Electric were transferred to the CAA in the spring of 1944. One of these units was installed at Pittsburgh, and it was called upon several times weekly to assist planes lost in the smoke and smog surrounding that area. The service was finally discontinued due to the fact that no more replacement parts were available to keep the equipment in operating condition, since the other two units had been "cannibalized" for necessary parts to keep the one set operative. (Continued on next page)

During World War II, ground direction finding equipment using the VHF and later the UHF bands was developed by several of the large manufacturers which provided bearings with precision accuracy. The CAA first obtained some of the earlier prototypes which were installed in the Chicago and LaGuardia towers. With the development and installation of radar, the VHF direction finder has become a standard component of the radar installation. While this unit can be and often is used separately, its greatest value is for identification purposes on radar screens where used in tower service.

While many of us have heard of VHF/DF or VHF/UHF/ADF, perhaps not too many of us have understood just what is meant by this terminology, how it works, or its value insofar as the pilot or others are concerned. The abbreviation VHF means "very high frequencies" and is usually associated with airway bands between 118-144 mc. UHF, used by the military, means "ultra high frequencies" in the bands between 225-400 mc as used in airway work. DF, of course, is more or less self-explanatory, meaning "direction finding", while ADF means "automatic direction finding."

During 1951, three VHF/DF units were bought for evaluation purposes. One of these was installed at the Red Bluff Communications Station. Since its installation, it has provided invaluable and emergency service in approximately 160 instances (see very interesting article in the September issue of Region IV News by John T. Renfroe).

An interesting report made by a former Air Route Traffic Control Center Chief about the Red Bluff VHF/DF installation is quoted as representative of the reaction of those who have the opportunity to observe this equipment in operation, as follows: "While at Red Bluff, I spent considerable time at the VHF/DF equipment tuning in aircraft which were making position reports and checking DF bearings against reports made by the pilot. It was found that the accuracy of the readings was amazing. The simplicity of operation of the equipment is one of its outstanding characteristics."

The cost of VHF/DF equipment is very reasonable as compared with most electronic aids in use today. Its use has been recognized by RTCA Subcommittee 31, which concerned itself with the "Common System", as a valuable adjunct to the control of traffic, especially where surveillance radar is not installed.

The greatest use of VHF/DF, of course, would probably be for private or non-sked pilots who occasionally get lost or are unsure of their positions. It is a simple matter for a pilot to give a station such as Red Bluff a call and ask his position. While the Red Bluff Specialist cannot tell him how "far" he is from Red Bluff, he can give him a course to follow which will bring him over the field. It is that simple.

In the East (around the Washington area), a number of towers on military and other fields equipped with VHF/UHF/DF are tied together on an interphone which terminates in the Washington Center. When an aircraft gets lost, simultaneous bearings can be taken by a number of towers and these bearings be furnished the Center, which triangulates and plots the position with precision, thus giving the center an instrument which can be used to prevent traffic snarls and bottlenecks as well as giving the lost pilot precise position information. (Continued on page 4)



REGIONAL ADMINISTRATOR'S COLUMN

Someone has said, "No news is good news". I guess that is true when you are sitting on a keg of dynamite. Otherwise, I am not so sure. Certainly we all like to have the latest word about new developments. Maybe we in CAA are astride an atomic missile, but, if so, I think we can say it is a guided missile. I do not have any startling news of new things that are going to happen.

I don't even have any new rumors. Somebody did say that Cresap, McCormick and Paget had recommended that all operational functions be further decentralized from Washington to the field and that administrative functions be centralized in Washington to a greater degree, but this was determined to be one from the Wild Guess Department with no foundation in fact. I do know that a lot of planning is being done at higher levels to insure that our guided missile stays on course. We in Region Four are trying to do some scientific and common sense planning too. We are trying to figure out where we are going in our part of the National program, and how we are going to get there. We have a subcommittee of our Facilities Clearance Committee working full time to find out what our Establishment of Air Navigation Facilities program should be. What do we need to do to complete our portion of this "Common System?" What additional facilities are required in these eleven Western states to have a complete VHF Avigation System and a full coverage Communications system? When we get our CAA ideas together we will discuss our proposals with the users of this Western air space. After crystallizing the thinking concerning all items that should be included in the program, we can determine how much of it we can do with the money that is made available to us for next fiscal year and the relative priority of projects in the program as governed by overall CAA policy and local aeronautical need. This subcommittee I referred to is contacting CAA field offices too, doing it through the Traffic Control Centers I understand.

By the time this goes to press, there will have been a District Airport Engineers' Conference at which our latest planning and problems about the work of that Division will have been discussed.

We are continuing the planning in connection with the Airways activity consolidation. Preparations for the Seattle-San Francisco combination are progressing. You have seen the February 26th letter on the Discontinuance Program. It isn't a drastic cut and we are reasonably confident that we can place everybody. In this connection, we set up a couple of ground rules which we hope will help. We have said that people demoted in a RIF will be considered as in-grade bidders for vacancies in the type of job from which they were demoted. This is a new Regional policy. Secondly, we have in Airways Operations defined the eligibility of certain GS-9's to move in-grade into existing vacancies when affected by a reduction in force situation. We believe these two actions which we have taken are the fairest ones possible and we hope they will help.

During the month of March, Art Johnson, Jerry Melville, Morrey Plotkin and I visited those locations in New Mexico which we had not previously seen -- Zuni, Carlsbad, Hobbs, Roswell, and back through Albuquerque. You made a good impression with us -- we learned some new things. Thanks for your helpful ideas.

On March 30, there is an Airspace Subcommittee Meeting in Seattle. A group of us plan to spend the rest of that week visiting some of our installations in Washington and Oregon. We are looking forward to seeing the members of our CAA family in this area as we have in the others.

VHF-DF (Continued from Page 2):

Pilots like to check other electronic navigational equipment such as omni-ranges and DF units with VHF/DF as a verification that they are functioning properly. This can be done easily by giving ground stations a call, obtaining a bearing, and at the same time checking the bearing on their omni or DF unit.

During "blackouts" of navigational aids in emergencies declared by the military, VHF/DF bearings could be used to advantage without the necessity of a ground facility emitting nav-aid signals which the enemy could use advantageously.

Probably the greatest asset as far as the commercial air lines are concerned is the ability of ground stations to vector lost aircraft off busy airways, thus relieving bottlenecks which frequently have developed from this cause, such as occurred at Columbus, Ohio, April 30, 1950, when nine aircraft - six of which were airliners - two Navy transports, and one National Guard plane were held in stacks for several hours during a heavy snowstorm with poor visibility and low ceiling, at a cost of many thousands of dollars to operating companies plus inconvenience to an estimated 227 aboard these aircraft at the time.

The use of VHF/DF or UHF/DF is simple, it is quick (bearings can be taken in two or three seconds), and it is accurate. As time goes on, it is predicted that every facility will be equipped with ground direction finding equipment to supplement radar and other navigational ground aids.

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VOLUNTARY PLEDGE PLAN NOTES

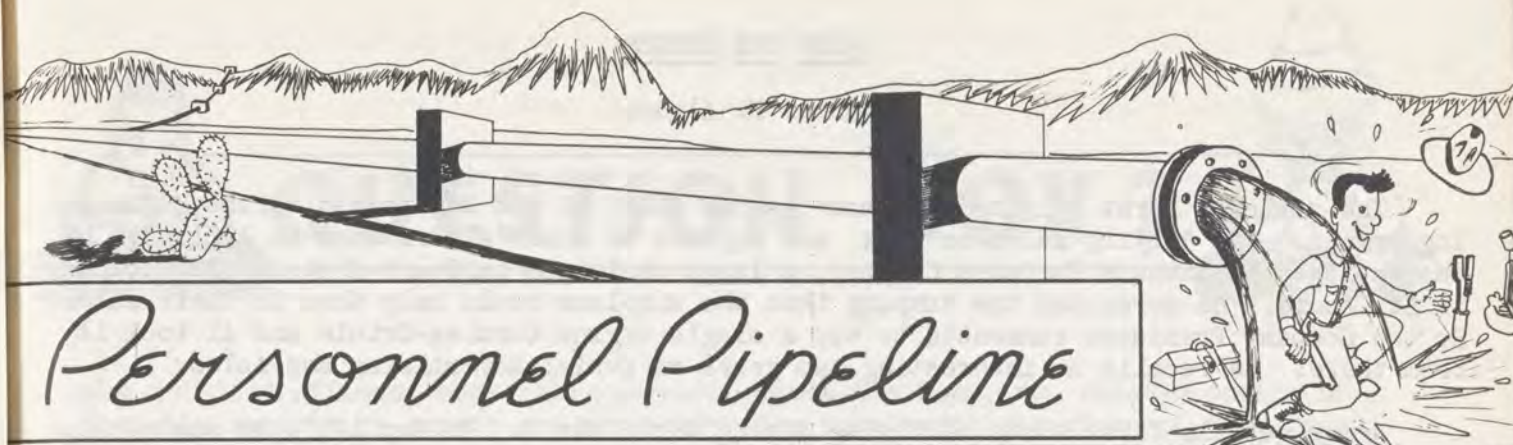
News of the passing of James L. Gibson, on March 5, 1954, has been published earlier. On March 6, 1954, a check for \$2500 was forwarded to his beneficiary. On March 22, the balance in the account, amounting to \$5,087.55 was forwarded in accordance with current rules.

We would like to urge that Pass Books be forwarded when renewing pledges and that names of individual members be enclosed. Also, if new names are added, the employee's previous location should be indicated. Many times it is necessary to go to personnel files to locate a member's card so that it can be placed in the proper group.

If a member drops out, give the reason - resignation, transfer out of region, desire to discontinue membership, etc. Employees who move about constantly often send in a check for \$5.00 with no identification other than the signature. If those people will indicate their group number or location, it will be much easier to locate their card and may save an error that would be disastrous to the member. Please review past issues of the Region IV News and Administrative Notices for proper procedure.

New employees must have a current physical taken within the LAST 30 DAYS to be eligible.

Keeping the accurate records of approximately 1600 members is quite a chore -- your help by following the correct procedures will simplify the work materially. We suggest that you clip instructions published in the News or A. N's in your V.P.P. file for ready reference.



Personnel Pipeline

Plaudits for Milligan!

The article written for the Region Four News by George Milligan of the Medford Tower carried word for word in the March 1954 issue of the Federal Times, a new West Coast newspaper for Federal employees. Milligan was commended by Corliss Harris, the Editor, for planning, developing and administering Mercy Flight, Incorporated, of which he is now Chairman. If you haven't yet read Milligan's article, we suggest you take five minutes to do so.

Designating a Beneficiary:

If you are unmarried, we suggest that you designate a beneficiary to receive any monies for leave or salaries in the event of your death. You can do this by filling out SF 1152. The value of doing this is quite apparent when you realize that any monies due you go to your estate. The persons who eventually get it may otherwise have a long wait. This can be prevented if you'll take just a few minutes to fill out the proper form and send it to the Personnel Branch.

Orienting New Employees:

We are now working on a program geared to improve our methods of orienting new employees. This is an important aspect of every supervisor's job. We have heard that more people quit after the first day of employment than at any other time. The underlying cause is generally traceable to an ungracious reception. (Our approach will be to furnish supervisors with orientation aids and tips. Basically, it pays more dividends to improve a worker's attitude toward his working conditions than actually improving the working conditions themselves. Time spent in doing this is regarded, in our opinion, as time well spent.

Around the Corner, Maybe?

On the legislative front, many "fringe" benefits for Federal employees are being discussed. Included are such items as longevity pay increases for GS-11 to 15 (they now are not eligible); overtime pay of time and a half on salaries up to the top of grade GS-9 (now \$5810). Also, a "call back" pay provision is proposed on which a person would be authorized a minimum of two hours pay at overtime rates when called in for unscheduled overtime. There is a move to repeal the Whitten Amendment. It was enacted for the Korean emergency, but is still on the books. A bill has been introduced to broaden the Incentive Awards Program for government. Also a "rule of five" is being considered to replace the "rule of three". As it now operates, the appointing office gets from the Civil Service Commission a list of three names from which to select.

MEET THE BOSSES

Armer M. Alcorn

The nation's first "flying salesman" is now Chief of the Region's Aircraft Engineering Branch. The "flying salesman" tag was applied to Armer Alcorn back in 1921 when he was employed by Simmons Hardware Company, a large wholesale hardware distributing company in St. Louis. He persuaded the company that the airplane could help them in their sales. So the Company President consented to buy a single engine Curtiss-Oriole and Al took it from there. He recalls an interesting two years of aerial advertising and sales.

Armer got his first taste of flying during World War I. In May 1917, he was a pilot in the British Royal Flying Corps. Except for a four-year period as an accountant and office manager, he has been at it ever since - something like 33 years.

He began his government service in 1929 as an Aeronautical Inspector. In 1938, he switched over as a Flight Test Engineering Inspector with a Los Angeles assignment. He was later named as Superintendent of Safety Regulation in the former Kansas City and Chicago Regions, and Chief of the Aircraft Branch in Seattle. He came to Los Angeles as Chief of the Aircraft Branch in 1948 to succeed George Haldeman, when Haldeman was named to head up CAA's Aircraft Engineering service.

As for some specifics since being with CAA, the list would go on and on. Among others, he was the Flight Test Pilot on the Sikorsky S-40, one of the first commercial four engine ships, and has had a big part to play in such well-known aircraft editions as Boeing's early model 307 and their late model 377, the big stratocruiser, plus several editions of the Douglas DC-4's.

He's a veteran of three wars, having been an officer in each. During World War II, he was assigned to Wright-Patterson in Ohio as a Flying Safety Officer. During the recent Korean War, he was attached to Norton Air Force Base in San Bernardino as Assistant Flying Safety Officer with the rank of Lt. Col.

While on duty at Norton, he left his family in Los Angeles. With many free moments on his hands, he took up leather carving and can show many purses, billfolds, and belts as the fruit of his efforts. He is also quite handy in woodworking, photography, and gardening.

As for other vital statistics, he was born October 8, 1893 in Mexico of English parents. His father, a Civil Engineer, was assigned in Mexico for over 20 years in developing that country's railroad system. Armer moved to Hackensack, New Jersey, when he was 12.

Clarabelle Glover, a Canadian by birth, encouraged Alcorn to give up his bachelorhood. Al said his "I do's" in 1925. They have two children - Bob, 27 and Paul, 20.

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QUESTION BOX ?



Q. Why do field offices, especially Communications Stations, not receive copies of activity reports by towers and centers? Also complement structure of centers and towers? These items have direct bearing on possible bidding by AOS (Comm). Since the only source of personnel for centers and towers is now from stations, should not this information be made available so that AOS (Comm) is not bidding blind?

A. Reports of activity of all Region Four communications stations are distributed to all stations each month. Reports of activity at CAA towers and centers are published on a national basis by Washington semi-annually. Communications stations' requirements for copies have not been established. If sufficient justification exists to offset printing and mailing costs, the Airways Operations Division will request distribution to communications stations.

The Airways Operations Division periodically publishes and distributes to all facilities a personnel roster (latest February, 1954) of all station, tower, center and combined station/tower positions which includes grades and number of personnel in each grade.

Stations are not the only source of securing personnel for centers and towers. It is possible to recruit from the Civil Service Register; however, current practice is to offer maximum opportunity to AOS (Communications) to transfer to centers and towers when vacancies occur.

Q. Do I have to deposit to obtain credit for retirement purposes for a period of Federal Service for which no deductions were made?

A. No. Full time credit is allowed with or without deposit. If deposit is not made, however, annuity based on total service is reduced \$10 for each \$100 owed.

Q. Is it to my advantage to make the deposit?

A. It depends on the circumstances in each case. Assume 5 years of unpaid service and retirement at 62 with 33 years of service with average salary for five years of \$6500. Using the formula of $1\frac{1}{2}$ per cent, the full annuity would be $1.5 \times \$6500 = \97.50×33 or \$3217.50, per annum. Unpaid deductions with interest equal \$1500, reducing the annuity to \$3067.50. For the 5 years you get $5 \times \$97.50$ or \$487.50 - \$150 or \$337.50. Your \$1500 brought you annuity of \$150. Your five years brought you \$337.50 and you still have the \$1500. You must decide.

(Continued on next page)

- Q. I have permanent Civil Service status but due to a break in service (after September 1, 1950) my present appointment is "Indefinite in lieu of Reinstatement". Can anything be done to restore my former status?
- A. Not at this time. If Congress repeals the Whitten Amendment at this session, the Commission may resume probational and permanent appointments.
- Q. I filed for the AOS (Comm.) examination and was selected from the register but was given an Indefinite Appointment in 1951. What chances do I have of getting my appointment made permanent?
- A. When the Commission again authorizes Permanent Appointments they may permit agencies to convert to Permanent those employees who qualified in a regular competitive examination and were selected in regular order from a certificate of eligibles. This would be without further examination.
- Q. When an employee's position has been regraded to a higher grade as the result of classification standards or because of material change in duties and responsibilities, may the service in the lower grade be counted in meeting the 10 years aggregate service requirement for a longevity step increase?
- A. Yes.
- Q. Was the up-grading of the Communications positions in World War II and Air Traffic Control positions in 1949 the result of a "regrading"?
- A. No. The Department has ruled that the general revision of grade levels in both these activities was based upon recognition of materially increased work complication and additional responsibilities than those formerly existing. Service in the lower grade positions does not count in the 10 year requirement for longevity.
- Q. Has there been a change in designating SET allowances as Watch 1, Watch 2, etc? (Note: This applies to former Region 7 sectors only)
- A. No. A change may be made at some future date when allowance designations are made uniform for the entire Region.
- Q. A. O. 200, paragraph II-5 states that a separate series of invoice numbers should be used for military-owned equipment. Does this apply to the UHF Military Program?
- A. No. Use regular invoice numbers except at those locations having Phase II equipment. Phase II replacements are furnished by the Navy and separate invoice and requisition files should be kept. All other phases are a CAA supply responsibility and separate invoices are not required.
- Q. A "Seven Dread Disease" group insurance policy was available to employees of former Region 7. Will this coverage still be possible in Region 4?
- A. We have contacted the insurance company to find out whether or not this is possible. All will be informed when we get their reply.

FACILITIES MAINTENANCE BRANCH MEETINGS

Planned field conferences have finally gotten under way in the Maintenance Branch. The need for these conferences has been known for some time and all personnel involved recognized this procedure as ideal for familiarization of office personnel and personal dissemination of information to field employees.

The first meeting was held at Phoenix, Arizona, on March 4th and 5th. The Maintenance Branch office was represented by Branch Chief J. G. Melville, and Deputy Chief V. M. Clayton. All Maintenance Branch field personnel within approximately 150 miles of Phoenix attended as interested participants. This group was composed of the Electronics District Supervisor from Phoenix, the Grounds and Structures Superintendent from Phoenix, all Electronic Specialists from Phoenix, Gila Bend, Tucson, Winslow, Prescott and Douglas, Airways Specialists from Phoenix and Winslow and our traveling road crew which happened to be working at Salome Field.

A total of 17 people from the Branch field organization made technical, personal and professional interrogations of the Region's office representatives and we believe they received adequate answers. We consider that the conference was a great success and will repeat such meetings throughout the Region until all Specialists and Supervisors of the Maintenance Branch have been given a chance to air their differences and difficulties to their Branch Supervisors.

The second meeting was conducted by our Regional Administrator, J. S. Marriott and J. G. Melville, at Albuquerque, New Mexico, on March 11th and 12th. Personnel attending were the Electronic District Supervisor from Albuquerque, Mr. Mudhenk; Electronics Specialists from Albuquerque, Las Vegas (N.M.); Farmington; Grants; Truth or Consequences; Otto; one Relief Specialist from Denver, and Airways Specialists from Albuquerque and Las Vegas (N.M.) together with the Relief Specialist from Phoenix.

All personnel attending the conference enjoyed discussing mutual problems with Mr. Marriott and Mr. Melville.

The third meeting was conducted at Los Angeles Airport on March 26th by Mr. Melville and Mr. Clayton with our Division Chief, D. J. Mackie attending as an observer. This meeting was attended by Electronic District Supervisors, J. Taylor and H. Andersen, and Supervisory Airways Specialist C. P. Maddox. Also attending were Electronics Specialists from Los Angeles, Burbank, Ontario, Long Beach, and Palmdale, and Airways Specialists from Los Angeles and Burbank. Grounds and Structures personnel attending included the Construction Superintendents of District One and Two, as well as a number of their General Mechanics.

We believe that continuation of these meetings as scheduled will allow us to meet most of our people in person this fiscal year.

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DIVISION HI-LITES

General Safety Branch:

An increase in glider flying was reported from several districts. Montana now has several gliders with an active club at Bozeman. Agent Earl E. Myers of the San Diego District Office reports that the Eighth Annual Pacific Coast Mid-Winter Soaring Championship Meet was held at Torrey Pines Gliderport on February 27 and 28. This meet was conducted by the Associated Glider Clubs of Southern California and supported substantially by the local City, aeronautical and business firms.

Aerial applicator work is underway in scattered areas (fertilizing, weed killing, in grains, zinc on orchards). The outlook for the season at this time varies from poor in some areas, due to lack of moisture and low infestation, to very good in other places. Agent John H. Doster of the Billings District Office reports that aerial applicators believe the farmers will spray more this year in an attempt to obtain a higher yield from reduced acreage. Agent E. S. Gull of the Palo Alto District Office tells us the lettuce is five weeks early this year and that it looks like a good year for the aerial applicators. Agent J. P. Waage of the Sacramento District Office is planning to visit the "rice seeders" on the strips again this year.

The Columbia Aviation Country Club of Portland, Oregon, made an air tour with sixteen aircraft carrying forty-five persons to Mexico City with numerous stops in New Mexico and Arizona enroute. This is the organization with which Agent Miles Ruggenberg of the Portland District Office has been conducting an instrument flying ground school. All aircraft returned to base without incident.

A Flight Examiner Conference, conducted by Agent Earl E. Myers of the San Diego District Office, is considered an outstanding accomplishment. Safety was the theme of the meeting. Particular emphasis was placed upon the recognition of instructional deficiencies during flight tests and the disclosure of such deficiencies by accident investigations. It was agreed that all such weaknesses noted by examiners would be brought to the attention of the district office, so that action could be taken to improve the quality of instruction. The system employed by the Washington Office of charging accidents to flight instructors and examiners of the pilots involved was explained in an attempt to gain support for necessary action to effect improvement. It is believed that this conference resulted in better understanding on the part of the participants of the close relationship of instruction quality to pilot proficiency and of the responsibility of the pilot examiner to advance safety in flight.

Agent John Gebelin of the Fresno District Office reports they have been requested by a flying club to prepare a three-hour course in radio operation and procedure, which would be made available to all flying clubs. Preliminary plans include tape recordings of actual control tower and radio station operation.

Agent W. M. McClain flew with nine pilots on the Ontario District Office Courtesy Standardization Program during the month. They report these flights are well received and that the disclosures of pilot technique weaknesses are amazing.

Agent Carl J. Christenson of the Eugene District Office reports that one of his aerial applicators is planning to purchase ground rigs for spraying and dusting, in the belief that this will enable him to offer a better service and will result in increased business for his aerial equipment. (Continued on next page)

Agent E. D. Jacobson of the Yakima District Office advises that a large, local hop growing company has purchased a PA-18A and hired a pilot on a full time basis for the purpose of insect control in their hop fields. He also reports that the U. S. Public Health Service, Wenatchee, Washington, has concluded a program of testing the peripheral vision of pilots who were exposed to organic phosphate insecticides.

Agent John S. Zentner of the Grand Junction District Office has made two excellent recommendations regarding pilot training. He believes that the accident rate can be held to an absolute minimum by indoctrination of pilots in the type of flying they will be doing when turned out, which includes temperature and altitude conditions as well as rough or soft, short, unimproved strips. He believes that much greater emphasis should be placed on check-out procedure in a new make or model aircraft, and that such procedure should include instructional flight with gross weight condition.

Agent Joseph J. Princen of the Seattle District Office reports participation in the dedication of the King-TV Heliport. Test pilot Johnston of the Hiller Factory landed atop the station and made demonstration flights from the building.

An outstanding contribution to aviation safety is signified by two programs of the Seattle District Office. One of the groups of private pilots which has been largely beyond the reach of our safety programs is the membership of the Civil Air Patrol. There are fifteen CAP squadrons with a total active membership of three hundred civilian pilots in the Seattle area, most of whom are private pilots with from forty to one hundred fifty hours of flight time. A proficiency board consisting largely of private pilots is responsible for qualification of the members to fly Air Force aircraft. Agent Princen accepted a request to head up the Flight Operations Section for the Washington State Wing which places him in direct contact with all these otherwise non-approachable pilots. He plans to conduct safety clinics with each squadron and to utilize flight instructors and examiners to raise proficiency standards. Agent Princen has given much of his personal time to this venture.

The other noteworthy project of the Seattle Office is a Mobile Link Trainer Program. Mr. Harry Cramer, who operates a link trainer service in Seattle, has been in the process of making available to the public a mobile link trainer as an advertising medium and, in addition, to demonstrate to private pilots and other airmen, the dangers of continuing VFR flights into IFR conditions with inadequate skill and equipment. Our district office has been working with Mr. Cramer on this project. It is understood that local insurance companies are sponsoring and underwriting this project to the extent which will enable pilots to obtain three hours of link and ground instruction covering familiarization with instrument flying commensurate with the three hours of link time at a ridiculously low cost. Plans are under way to coordinate the itinerary of this mobile unit with our published itinerary, and to encourage private pilots to participate. Our chief interest is to convince these pilots of the hazards involved in attempting to fly in bad weather. Agent Robert Phelps has been assigned to handle this project.

Agent Carroll Doak reports an interesting item of a kindergarten school with a class in aviation. The teacher brought them to the Sky Haven Airport where they were taken through the ground school of the Phoenix Flying School. The children displayed intelligent understanding of aviation which surprised the flight instructor who conducted the tour. At one point, a five year old explained the reason a pilot receives instruction to fly five hundred feet over the top. The entire class was taken for a flight over Phoenix by Frontier Airlines. The children all appeared to enjoy the flight without excitement or fear. (Continued on next page)

Three aerial application short courses were attended and participated in by local agents during the month, as follows: The Montana State College, Bozeman, Montana, on February 9 and 10; Utah State Agricultural College, Logan, Utah, on February 15 and 16; Wyoming Aerial Applicators' Short Course at Casper, Wyoming, on February 16.

Agent Harold L. Grandy of the Cheyenne District Office informs us that Federal Pest Control officials have a tentative Grasshopper Baiting Program for the States of Wyoming, Colorado and Nebraska, consisting of 125,000 acres in the Cody area and 50,000 acres in the southeastern part of Wyoming; approximately 400,000 acres in western Nebraska, and 1,000,000 acres in southern Colorado. The size of all projects depends upon developments.

Our Billings office reports that they are concentrating on getting all of the agricultural aircraft in their district certificated before the end of March. Agent Vandewark attended the Montana State College Annual Crop Spraying School and met with college personnel to complete plans for another aircraft mechanic school and welding refresher course such as the one held last year, which was attended by the Section Chief. The program this year is to be of four days duration instead of two, and will have many representatives from industry and equipment supply companies.

The Palo Alto district reports that agents are working with the San Jose State College to assist them in preparing for a mechanic school certificate under the current regulations. A program of rigid inspection in this district of all aircraft in the area that are not kept hangared is being conducted with increased emphasis, since a Fairchild M62 lost a wing during acrobatics. Investigation revealed various stages of water damage in spite of better-than-average maintenance and inspection. The cause of failure was determined to be over-stressing of the aircraft in acrobatics performed at excessive speeds, and the water damage was not considered to be a contributing factor.

In the Boise district all shops are busy with agricultural aircraft maintenance work. Agent Smith attended an agricultural short course at Logan, Utah, and the film "An Ounce of Prevention" was shown at two meetings, with talks on maintenance which reached over 100 interested operators. Several operators in this area are looking for aircraft of the older types such as Fairchild 71's for mountain flying operations, and are building some from parts salvaged from all over the Northwest.

Albuquerque - Agent Darling accompanied the Supervising Agent to El Paso, Texas, to participate in a safety promotion program with a group of 75 private plane operators from all over the United States. Both agents considered the meeting very worthwhile. These agents also attended a meeting of 65 scientists, professional people and CAP members, who either own or anticipate purchasing aircraft for personal use. All in attendance indicated such meetings are valuable in promoting private flying and safety. Agent Darling represented CAA at a two-day Magnaflux educational course in Albuquerque, conducted by the Dallas, Texas branch of the Magnaflux Corporation. All phases of magnetic particle inspection, wet and dry, were widely discussed, as well as potential causes of failures. This course was attended by representatives of the U. S. Air Force, Atomic Energy installations and the general industry.

In the Ontario district, there is a noticeable increase in the interest of mechanics to obtain certificates due to the higher pay scale being offered. The Palo Alto district also reported considerable interest in this same area, shown by airline mechanics. Agent Outcen was made an honorary member of the "Experimental Aircraft Association" which is a national organization with headquarters in Milwaukee, Wisconsin, to promote building and flying of home-built and experimental aircraft. Agent Outcen serves as an advisor to the Riverside, California unit which meets monthly and is creating considerable enthusiasm among its members. (Continued on next page)

In Seattle Boeing Aircraft Company is preparing to make application for certification of their mechanic training facilities as a CAA certificated mechanic school to enable them to graduate apprentice mechanics with the qualifications for examination for CAA mechanic certificates. Some coordination between Edison Technical School and Boeing may be necessary to complete this program. Agent Galvin gave a talk to the trainees of Edison school relative to obtaining mechanic certificates, and distributed a copy of the Mechanic's Creed to each prospect.

Air Carrier Safety Branch:

Frontier Airlines is giving some consideration to the possibility of serving Moab, Utah, the present uranium-rush community (population increase from 600 to 7,000 during the past year).

The Convair 340 Dehmel has been accepted by the UAL Denver Training Center. Plans for its use in training and on six-month checks are being formulated.

UAL preparations for the DC-7 training program are in progress. The first two DC-7's received are to be used for training. They plan to start maintenance personnel training March 1 and flight training early in April.

The new proposed Long Beach passenger heliport was inspected by personnel from the Los Angeles Air Carrier District Office. It is located on a wide strip of beach about two miles north from the center of the downtown area. The City of Long Beach has topped a large rectangular area to be used in conjunction for automobile parking space, with one end being fenced off to form the new passenger heliport.

On February 1, Los Angeles Airways initiated an additional express trip on Segment A to take care of the rapidly growing express business. If there is space available, mail can also be carried on this additional express trip.

North American Airlines is continuing with plans for their new hangar for maintaining their own aircraft. Personnel from the Burbank Air Carrier and the Van Nuys General Safety District Offices are coordinating with them for planning their approval under C-52. Mr. Goldberg, present Superintendent of Maintenance for the Flying Tiger Line, has submitted his resignation and will go with North American in the same capacity.

North American Airlines is negotiating for a contract to transport Puerto Rican labor between New York and Puerto Rico. They propose to operate two round trips each week.

The CAM operations appear to be increasing for some air carriers based in Burbank. Caribbean American Lines are attempting to reactivate their operations for CAM movements. Their plans are to operate three C-46 aircraft if they do resume operations.

The Flying Tiger Line-Slick merger is progressing. They are now in the process of integrating the two companies' operations and maintenance manuals. This is being coordinated with the Operations, Maintenance and Radio personnel at the Burbank Air Carrier District Office. The pilots are still negotiating for a method of merging the seniority lists which will be satisfactory to all concerned. (Continued on next page)

On February 12, Johnson Airlines suspended operation under their Commercial Operating Certificate No. 6-20(C). Johnson Airlines had been conducting scheduled intra-state service between Seattle, Pasco, and Spokane. About one month previous to this date, they suffered a disastrous fire at their home base at Missoula, Montana. Considerable stock and supplies were destroyed as a result of the fire. The loss was not entirely covered by insurance.

Northwest Airlines is conducting a DC-6 training program to check out approximately eight more crews on DC-6's. They are also engaged in Boeing B-377 training course to qualify approximately six crews on the Boeing. They expect delivery of another DC-6 in the early part of April.

Northwest Airlines experienced a bird strike on their trip 610-28 of February 28 (a DC-3). The oddity about the bird strike was that it was on the side window, on the co-pilot's side.

United Air Lines is putting permanent type docks in its hangar for DC-6 operations at the Seattle-Tacoma Airport.

Irregular carriers from other regions are now pressing for information regarding requirements for type certification of radio equipment. In at least one instance, it appears that the carrier is attempting to by-pass the ASDO where his maintenance certificate is held and contacting the Seattle ASDO. All queries from carriers based outside this Region are answered by referring to CAR 42-8 and CAM 16 for requirements for CAATC.

Aircraft Engineering Branch:

1. Technical data on the Baumann Model B-290 are being evaluated. At the present time new ailerons are being tested on this airplane to determine their effect on control forces. The airplane is not yet ready for the issuance of a Type Inspection Authorization or the start of CAA type certification tests.
2. The basic data and wing analysis report on the Central-Lamson Model L-101 agricultural aircraft are being evaluated. Wing rib tests have been conducted and wing production parts are being fabricated at the Yakima factory. The Company plans to sub-contract wing production work at some future date.
3. Adverse weather conditions, as well as limitations of the test equipment, have hampered endurance testing on the Convair modified P&W 1830 engine. High humidity has caused plugging of the altitude compensator in the carburetor thus leaning the fuel mixture to such an extent that adequate cooling cannot be obtained. It is anticipated that the testing should be completed in the near future.

(Continued on next page)

4. An engineer from this office is participating in the investigation of the accident which occurred on the WAL Convair 240 near Wright, Wyoming. The cause of this accident has not yet been determined. Investigation of the cause is extremely difficult because of the almost complete disintegration of the aircraft.
5. A Curtiss-Wright C-46 airplane is being modified at the Flying Tiger Line facility to improve performance and engine cooling on this aircraft. This is part of the over-all program for improvement for this model under the jurisdiction of the Aircraft Engineering Foundation. Technical data are being submitted for evaluation of the changes to be made on this airplane. The present tentative plan is to conduct flight tests in this Region to determine the adequacy of the changes. After the flight tests are completed, it is understood that a meeting will take place between representatives of the Aircraft Engineering Foundation the CAB, and the CAA, at which time rationalized performance requirements will be agreed upon.
6. Flight tests presently are under way on a Douglas DC-7 to determine optimum flap settings from the performance standpoint. A number of malfunctions have been occurring in the Kidde continuous strip fire detector system in this airplane. AAL has experienced several false warnings because of breakage or shorts in the delicate detector installation. A circuit test switch is being installed to permit the pilot to isolate false warnings. Studies are under way to determine the feasibility of installing Edison type fire detectors in this model. Flight tests on the installation of the Pioneer PB-10 auto-pilot in the DC-7 have been completed.
7. Examination of the basic loads report on the Fletcher Model FU-24 airplane has been completed and comments have been forwarded to the manufacturer. Assembly of the prototype flight article is proceeding rapidly.
8. CAA certification tests on the Hiller ram-jet engine for the HJ-1 helicopter are being conducted on the whirl test stand at Palo Alto. Approximately 80 hours of testing has been accomplished to date without difficulty. A new "schnorkel" type re-light system has been tested on the static test stand and in flight with considerable success. The "schnorkel" re-light system is not installed in the engine presently undergoing CAA tests. Barring unforeseen developments, the certification test program on the engine should be completed within three weeks.
9. Technical data pertaining to the Weejet airplane are being received from the manufacturer. Parts for this aircraft are being manufactured and assembled at Tucson. It is anticipated that static tests will begin sometime this summer.

Facilities Division:

OFACS Receiver Station:

Pescadero, California: Working up a proposal for additional space for the Operating Quarters

Rome, Oregon: Working on plans and proposal for relocating and changing engine generators for the VOR facility.

San Francisco, California: Issuing a proposal for the installation of control cables and related construction for relocating the Tower in the new Administration Building. Opening date of bid April 13.

Blythe, California: Completed a short form proposal and drawings for installation of new power service and air conditioner.

VOR Facilities:

Pueblo and Kiowa, Colorado: Preliminary site selections have been made at these locations by Norman Byg, Civil Engineer.

San Francisco Gap and Los Gatos, California : Preliminary site selections for Mountain Top sites have been made at these locations by Wm. R. Frehse, Civil Engineer.

Williams, California : Plans and proposal have been completed.

Fillmore, California: Bids were opened and contract awarded. The resident engineer on this job will be James E. Crenshaw, Civil Engineer.

Long Beach (Los Alamitos): California: Installation work is scheduled for completion by March 29. Installation engineer is C. S. Daggy, Electronic Engineer, assisted by J. M. Shukal, Electronic Technician. Commissioning is being delayed until approximately April 15.

DME:

Miles City, Montana Installation completed March 2, "Mike" Domitrovich, Electronic Engineer.

Seattle, Washington DME at the ILS, Seattle/Tacoma Airport was completed March 3 by S. R. Gilbertson, Electronic Engineer.

Livingston, Montana Installation has been completed by "Mike" Domitrovich, assisted by G. D. Shoop, Electronic Technician.

Burley, Idaho Installation was completed on March 19 by W. A. Martyn, Electronic Engineer.

San Francisco OFACS Antenna: Relocation is progressing satisfactorily under the supervision of H. Mellen, Construction Supervisor and assisted by Construction Foreman T. N. Tarpo and H. L. Pedersen. The installation work for the OFACS combination is under the supervision of M. E. Zeigner, Electronic Engineer who is assisted by Ben F. Lobnow, Electronic Engineer and R. M. Lopez, Electronic Technician. (Continued on next Page)

IIS:

Albuquerque, New Mexico

Testing for the TUS Glide Slope is in progress under the supervision of George Kieffer, Electronic Engineer, and assisted by D. N. Hegland, General Mechanic.

Long Beach, California

The installation of the TUS Glide Path and Localizer Monitor was completed on March 3, by Electronic Communication Installation Supervisor E. L. Pardee, assisted by Electronic Technicians U. M. Larsen, G. Martin and A. C. Hatch, and Electronic Engineer R. B. Harris. The replacement of cable for this facility was completed on March 17 under the supervision of Gene Newman, Construction Supt. Installation work is underway by installation crew S. R. Gilbertson, D. L. Olson, and R. E. Jobe, Electronic Eng. The new localizer has been installed by ECIS Edwin L. Pardee, and U. M. Larsen, Electronic Technician. The completion date for this installation will be March 31.

Yakima, Washington

Fresno, California

ASR Facilities:

San Francisco, Oakland, Calif., and Portland, Ore.

Wave guides were installed during the month by V. O. Vick, Construction Supt. assisted by Const. Supv. M. L. Duncan.

SRA Range:

Spokane, Washington

The old range facility has been dismantled. Contract work completed March 25 under the supervision of M. L. Duncan, Const. Supv. and D. R. Evans, Civil Engineer.

Tucson, Arizona

An estimate for relocation, as requested by the Military, has been made and forwarded to Washington for approval.

TOWERS/TOWACS:

Burbank, California

Tower relocation installation work has been started by R. E. Harris, Electronic Engineer and A. C. Hatch, Electronic Technician.

Cheyenne, Wyoming

TOWAC installation was started on March 22 by J. G. Cheatham, Elec. Eng, and H. C. Scribner, Elec. Techn. Antenna structures and building modifications required are being accomplished under the supervision of V. O. Vick.

Colorado Springs, Colo.

Plans for this facility will be completed before March 31.

Pueblo, Colorado

Plans for this facility will be completed March 30.

San Francisco, Calif.

Plans for the relocation of the Tower to the new Administration Building is in progress.

Van Nuys, California

Plans are being modernized and will be completed by March 31.

MH Facilities:

Colorado Springs, Colo.

Improvement to the antenna structure at this facility is under the supervision of James E. Crenshaw, Civil Engineer.

INSACS:

Santa Barbara, California

Plans for modernization were completed during the month.

Blythe, California

Plans for dual console installation were started this month.

Thermal, California

Minor modifications at this facility were completed March 7.

Daggett, California

Minor modification is underway.

Yuma, Arizona

Minor modernizations were completed March 2.

VHF/ADF:

Los Angeles, California Testing of the site and the evaluation of equipment is in progress. Field work being conducted by R. A. Rath, Electronic Engineer.

Miscellaneous:

Pavement repairs to Intermediate Landing Fields at Battle Mountain, Winnemucca and Lovelock Nevada proposal issued for bids which are to be opened April 5.

Malad City, Idaho: VHF Line. Final inspection will be held March 29. Installation crew consists of James A. Carr and Boyd E. Preece, Electronic Engineers.

Huntley, Montana: Fan Marker. Electronic equipment removed from this discontinued Fan Marker by Glenn D. Shoop, Electronic Technician.

Belmont, California: Fan Marker. Modernized for the installation of the electronic modulator and power supply. Work being accomplished by Ben F. Lobnow, Elec. Eng. and R. M. Lopez, Elec. Tech.

Sandberg, California: Installation of the SECO at the Weather Bureau station was completed by R. B. Harris, Elec. Engineer and A. C. Hatch, Elec. Tech. on March 12.

MILITARY UHF PROGRAM:

Phase IV-A:

Installations have been completed at:

Phoenix TOWAC: James Collier and James L. Pace.

Sacramento TOWAC: O. M. Heikkola and E. R. Marsden.

Roswell and Tucumcari, New Mexico INSACS - James G. Cheatham and H. C. Scribner

Installation started at Oakland INSAC (Remote) and Albuquerque INSAC and CENTER, and Seattle/Tacoma Tower.

Phase V:

Cheyenne, Wyoming TOWAC - Installation started as a joint project with an EANF relocation from the tower in the old Administration Building. O. O. McIntosh, Electronic Technician is assisting for the UHF.

TOWAC Program:

Burbank, California Tower: Installation work was started and is a joint project with an EANF relocation.

Palmdale, California Construction contract is under "Stop Order" for three weeks due to non-receipt of Washington Office furnished materials.

(Continued on next page)

Van Nuys, California	Construction contract of the building and antenna has been completed. Resident Engineer in charge was R. A. Dahms, Civil Engineer. It is planned that the electronic installation will start in May.
Tuscon, Arizona	Contract for the construction work of the cable installation has been awarded and Notice to Proceed for issuance of work to start April 7.
San Diego, Los Angeles, Santa Barbara, California Portland, Oregon	Plans are in preparation.
Oakland, California	Surveys for the remote site for INSAC and Center UHF and the remote transmitter Tower VHF/UHF have been started by N. C. Seewald and M. Garfinkel, Civil Engineers.

Airways Operations Division:

Service "C" circuit 35 was converted to 75 WPM March 16. The only circuits remaining to be converted are the schedule "B" circuits. It is expected that these circuits will be converted in June.

A study was made of air/ground console and auxiliary position requirements throughout the Fourth Region to evolve a formula based on workload potential at field stations. These criteria will be especially valuable in working up budget estimates and justifications to Facilities Division for additional console or auxiliary positions as need arises in the field. A request was made of the Facilities Division for a dual console installation at Daggett station.

An automatic weather station was commissioned at Sandberg, California (USWB) March 15. Equipment continuously observes weather and can be instantly interrogated by any station connected to its teletype circuit. For scheduled sequence reports station is triggered by Salt Lake City MEDIS. Equipment operates only during 16-hours station is unattended.

Action was taken to discontinue the Service "C" teletype drop 35 at Rock Springs, Wyoming, effective April 1, 1954.

The Akron, Colorado station experienced two severe blizzards the past month, March 11-13 and March 17-18. During the first, AOS C. J. Nehls was isolated for 42 hours before the Chief, M. J. Galard and AOS E. D. Eisele relieved him by riding out in a County maintainer. Mr. Nehls continued operation for 24 hours before resting during this period. During the second blizzard, March 17, AOS Nehls and M. J. Galard were marooned at the station until March 18th at which time, AOS E. D. Eisele relieved them.

Fresno Tower extended approach control service to 24 hours on March 1, 1954.

(Continued on next page)

Ontario Airport Traffic Control Tower extended service to 24 hours March 9, 1954.

For some time, Air Division (Defense) work has prevented ADLO visits to field facilities. Recently, in compliance with Division's program, at least annual visits were resumed. Reports indicate these are very beneficial to facilities and ADLO's alike.

The Technical Services and Planning Branch handled 14 frequency problems and processed twenty-nine projects for changes in interphone, remote control, telephone exchange and teletypewriter services during the month.

Airports Division:

The Acting Chief and the District Airport Engineer, San Francisco, attended an Oakland meeting with representatives of the Port of Oakland and the Airlines Technical Committee regarding the proposed master plan and the tentative report as submitted by the airport consulting firm employed by the Port.

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LENGTH OF SERVICE AWARDS DELAYED

We have been advised by the Washington Personnel Office that the ten year length of service pins will not be available until sometime in May. Presentation of the twenty, thirty and forty year pins will therefore be delayed until all presentations may be made at the same time.

* * * * *

CAA EVALUATING NEW METHOD OF
CALIBRATING OMNIRANGE STATIONS

A new method by which VHF Omnirange stations can be calibrated without flight tests and put back on the air in approximately 20 minutes following repair or replacement of components is under evaluation by the Civil Aeronautics Administration ...

The new procedure was perfected at CAA's Technical Development and Evaluation Center at Indianapolis, where it was tested for six months. It consists of moving a small lightweight detector around the counterpoise of the VOR and recording the monitor readings at desired intervals and the data plotted to produce a calibration curve. This method of calibration has made it possible to adjust a VOR to much closer tolerances than previously possible. Accuracies of plus or minus 3/4 degree have been achieved without difficulty by use of the new method, thereby reducing the need for an immediate flight check of the facility.

A further safety feature of the new procedure is that it makes possible routine and special ground checks of a VOR facility without interrupting omnirange service. To further evaluate the procedure, the CAA will test it at 12 existing omniranges located on all types of terrain in various sections of the country. These tests will be for a six-month period.



LOVELOCK, NEVADA:

SES: I have nothing sensational to report, only normal progress. Electronics Specialists are very scarce, first there were two, and now there is one. The SES office is located in the INSAC building, ten miles from the City of Lovelock. All our water must be hauled in by truck, with the water valve on the truck freezing each trip in the winter. The INSAC building is located at the edge of Humboldt Lake or sink. The surrounding ground is highly alkaline with very little vegetation. The desert winds pick up the silt loam and drive it through every crack, saturating the INSAC building with dust. Radio receiving conditions at the INSAC are very good, but not so in the City of Lovelock, apparently due to local interference. 255.4mc is being used more and more and seems to work very well in our location. The BMRLZ is located 38 miles from the INSAC, the last 21 miles of which is gravel and dirt. Travel time one way is about 1½ hours. Thirteen miles of the dirt road is used by large iron ore trucks which create huge dust clouds. This creates a dangerous situation where one cannot see or be seen. One iron ore truck driver was killed in such a situation. The control line to the BMRLZ has been knocked down many times by trucks, graders and trucks carrying high equipment. Control of the BMRLZ is then lost. I have made many a trip to the BMRLZ only to find that our equipment was okay and that the control line was out of service.

The DME was placed in operation at the VOR January 8 of this year. The DME is a piece of Electronics Gear that does everything except turn the electrons loose. Actually it does turn them loose, but not until it has performed many many functions. It is amazing that so many functions can be performed by the DME and still operate as intended. The DME model DTB contains 200 electron tubes, many of which are actually two tubes in a single envelope. There is one thing I can say about my job with no uncertainty, and that is that I will never become bored. The Superintendent of the local high school brought a group of boys to the DME recently. This was in conjunction with an Electronics Class being offered. They were quite interested and impressed with the DME.

INSAC:

Definite signs that winter is almost past here in the Banana Belt of Nevada is shown by the Commercial Spray operators' overhaul of aircraft and the stockpiling of materials for the coming spray season.

(Continued on next page)

Communication activity also shows a definite upswing in the number of aircraft contacted in our remote location, the UHF taking over most of the workload. Aircraft on the UHF band being worked as far North as Pendleton, Oregon, South to Las Vegas, Nevada, West to San Francisco, California and East to Wendover, Utah.

Upon completion of our new hoist system, it is no longer necessary to carry the materials needed for operation to the tower or to carry the wastepaper baskets up or down.

GOODING, IDAHO:

INSAC: This news item, if it can be considered as such, can be classified as the Swan Song of the Gooding Station. Over a period of four years rumors, unfounded perhaps, have been current regarding the closing or removal of this station to Twin Falls. Our Omnirange was installed there and has been operating for a few weeks. The main consideration as to why we are scheduled to close is not because we do so little at this station. Current activity report shows 36 stations doing less than Gooding. But change of policy, modernization and budget troubles have all worked against us. But no matter where those of us affected finally land, we shall take it all in our stride and make the best of it and do just as good a job. When this station closes, it will mean this airport is practically devoid of activity. This will give the Jack Rabbits and sage brush a chance to take over completely.

We are just about closing out our season for large aircraft on this airport. This winter, we have had many landings here bringing ski parties for Sun Valley. Ford Motor DC-3 from Detroit came in twice; General Mills DC-3 in three times; Weyerhauser Lumber twin Beech from Seattle; a twin Beech from Texas, a B-26 with Airforce personnel for skiing and a Grumman Mallard. Last winter, believe it or not, a chartered C-46 came in from Anchorage, Alaska with a large ski party for Sun Valley. Last fall we had several out-of-state hunters in for pheasants. Some of them got the limit without hardly leaving the airport. Several motion picture companies have been working at Sun Valley on and off the past few months and they availed themselves of our forecast service very frequently.

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UHF PROGRAM

The military requirements for UHF communications have grown greatly in the past few months and as a result field stations have been directing numerous requests for equipment, service, and information. A partial review of the program is presented here which may answer some of the questions.

There follows a list of facilities in this region, in order of priority of installation which will be equipped with UHF this year and next. Other stations will follow in later years so that all facilities will have complete UHF coverage by fiscal year 1957.

(Continued on next page)

The priority has been established by Headquarters Air Force and can be changed only by that command. Such changes are made through military channels based upon recommendations and justification of local commands.

This is a military program financed by the Air Force and Navy, and we must be guided by the directives of their Headquarters and not by the desires of local commanders. As we have only a limited number of installation crews and a time of two and one-half years for completion, it is easily seen that some stations will have to wait. Any "Hot Spots" that develop will be given special treatment, but only with full support of local commanders through military channels.

Initial funds and equipment are being furnished by the military. UHF then becomes part of the CAA program and the maintenance and operation will be included in regular funds and staffing.

UHF PROGRAM - FISCAL YEARS 1954 AND 1955

PRIORITY	LOCATION	FACILITY	DATE START		NUMBER OF ACTIVE UHF CHANNELS
			QUARTER	FISCAL YEAR	
1	Portland	Tower	3	54	7
2	Portland	Insac	3	54	1
3	Long Beach	Tower	1	55	4
4	Palmdale	Tower	3	54	3
5	Palmdale	Insac	3	54	2
6	Van Nuys	Tower	3	54	3
7	Los Angeles	Tower	3	54	7
8	Los Angeles	Center	3	54	7
9	Los Angeles	Insac	3	54	1
10	San Diego	Tower	2	54	4
11	San Diego	Insac	2	54	1
12	Tucson	Tower	2	54	3
13	Tucson	Insac	2	54	1
14	Oakland	Tower	3	54	7
15	Oakland	Center	3	54	8
16	Oakland	Insac	3	54	1
17	(Deleted)				
18	Santa Barbara	Insac	4	54	2
19	Tucumcari	Insac	4	54	2
20	Albuquerque	Tower	1	55	4
21	Albuquerque	Center	1	55	4
22	Albuquerque	Insac	1	55	1
23	Sacramento	C/ST	1	55	5
24	(Deleted)				
25	Seattle-Tacoma	Tower	1	55	6
26	Seattle-Tacoma	Insac	1	55	1
27	Seattle-Tacoma	Center	1	55	5
28	Seattle-Boeing	Tower	1	55	3
29	Spokane	Tower	1	55	3
30	Spokane	Insac	1	55	2
31	Great Falls	Tower	1	55	3

(Continued on next page)

PRIORITY	LOCATION	FACILITY	DATE START			NUMBER OF ACTIVE UHF CHANNELS
			QUARTER	FISCAL	YEAR	
32	Great Falls	Insac	1	55		1
33	Great Falls	Center	1	55		3
34	Phoenix	C/ST	1	55		4
35	(Deleted)					
36	Roswell	Insac	2	55		2
37	Boise	C/ST	2	55		4
38	Denver	Tower	2	55		7
39	Denver	Insac	2	55		1
40	Denver	Center	2	55		4
41	Salt Lake City	Tower	2	55		4
42	Salt Lake City	Insac	2	55		1
43	Salt Lake City	Center	2	55		3
44	Colo. Springs	C/ST	4	54		4
45	Las Vegas, Nev.	C/ST	2	55		5
46	Battle Mtn.	Insac	2	55		3
47	Klamath Falls	Insac	2	55		2
48	Prescott	Insac	2	55		3
49	Baker, Oregon	Insac	2	55		3
50	Hanksville	Insac	3	55		2
51	Burbank	Tower	3	54		4
52	(Deleted)					
53	Cheyenne	C/ST	3	54		4
54	(Deleted)					
55	Hobbs	Insac	3	55		2
56	The Dalles	Insac	3	55		2
57	Eugene	Insac	3	55		2
58	Fresno	C/ST	3	55		4
59	(Deleted)					
60	Ontario, Cal.	C/ST	3	55		4
61	Yuma	Insac	3	55		2
62	Bellingham	Insac	3	55		2
63	Medford	C/ST	3	55		4
64	(Deleted)					
65	San Francisco	Tower	3	55		7
66	Yakima	C/ST	3	55		4
67	Bakersfield	Tower	3	55		4
68	Billings	Tower	3	55		3
69	Billings	Insac	3	55		1
70	Missoula	Insac	3	55		2
71	Pendleton	C/ST	4	55		4
72	(Deleted)					
73	Pueblo	C/ST	4	54		4
74	(Deleted)					
75	(Deleted)					
76	Reno	C/ST	4	55		4
77	Santa Monica	Tower	4	55		3
78	(Deleted)					
79	Red Bluff	Insac	4	55		2

PRIORITY	LOCATION	FACILITY	DATE START		NUMBER OF ACTIVE UHF CHANNELS
			QUARTER	FISCAL YEAR	
80	Blythe	Insac	4	55	2
81	(Deleted)				
82	Bakersfield	Insac	3	55	1
83	Mullan Pass	Insac	4	55	2
84	Toledo, Wash.	Insac	4	55	2
85	Ephrata	Insac	4	55	2
86	Grants	Insac	4	55	2
87	Burley	Insac	4	55	2

Active channels are single frequency equipment. One set of multi-channel standby equipment for each five or fraction active channels.

Emergency frequency normally included in full time Towers, will be shared with Insac and Center. When sharing not feasible separate emergency channel will be installed at Insac or Center.

HOW TO BE PERFECTLY MISERABLE

Think about yourself.	Insist on consideration and respect.
Talk about yourself.	Demand agreement with your own views on everything.
Use "I" as often as possible.	Sulk if people are not grateful to you for favors shown them.
Mirror yourself continually in the opinion of others.	Never forget a service you may have rendered.
Listen greedily to what people say about you.	Be on the lookout for a good time for yourself.
Expect to be appreciated.	Shirk your duties if you can.
Be suspicious.	Do as little as possible for others.
Be jealous and envious.	Love yourself supremely.
Be sensitive to slights.	Be selfish.
Never forget a criticism.	
Trust nobody but yourself.	

This recipe is guaranteed infallible!

-From Gaylord's Triangle.

CREDIT UNION NEWS

At the last regular monthly meeting of the CAA Region 4 Federal Credit Union Board of Directors, it was voted to increase interest rates 1/10th of 1% per month on certain types of loans. Effective March 15, 1954, the following interest rates were put into effect:

Loans secured by cars not previously registered.....	8/10ths of 1% per month
Loans of \$2,000 or over.....	8/10ths of 1% per month
Loans fully secured by shares	8/10ths of 1% per month
All other loans	1% per month

This very small increase in interest rates was necessary to offset our increasing costs of operation, mainly consisting of insurance premiums on loan and saving accounts and increasing postage expense. At the present time, our Life Insurance Premiums alone are taking approximately \$1,000 per month of our gross income. Since organization of the Credit Union, we have paid Cuna Mutual Insurance Society \$19,727.38 in premiums. There have been seventeen Credit Union member Death or Permanent and Total Disability claims since organization and the Insurance Company has returned a total of \$13,418.99 in insurance benefits for these accounts. It is obvious that the Life Insurance benefits carried by the Credit Union on members' Loans and Savings Accounts are of vital importance.

We take a great deal of pride in servicing the accounts of our members whether it be a savings account or a loan account, or both. Credit Union savings accounts not only earn a very good dividend but provide you with a savings insurance feature whereby, in the event of the death of a member, the Insurance Company will place a like amount to a savings account and, of course, pay any loan balance existing at the time. This insurance feature will double a savings account from \$1.00 to \$1,000 if the funds are deposited before the age of 55 and to a lesser proportion after age 55 according to the age at the time funds are deposited.

We invite small savings accounts as well as large ones and extend the same courteous service to all.

Do not forget the Credit Union when you are in need of financial assistance. Here are some of the common purposes for which members borrow from the Credit Union:

- To pay doctor, dentist and hospital bills
- To pay cash (and save) for household goods and automobiles.
- To consolidate and pay up outstanding old bills.
- To pay vacation and travel expense.
- To pay taxes and insurance.
- To meet any useful need.

Security in the form of a co-maker or chattel mortgage on an automobile or personal property is necessary on any loan over \$300.

We cordially invite our members and potential members to write or call the Credit Union office if we can be of service.