



A MONTHLY NEWSLETTER OF SIGNIFICANT REGIONAL AND WASHINGTON ACTIVITIES

CIVIL AERONAUTICS ADMINISTRATION, LOS ANGELES, CALIFORNIA

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A DAY OF FLIGHT TESTING ON A TRANSPORT CATEGORY AIRPLANE

A complete flight test certification program on a transport category airplane takes approximately a month or more of flight testing to finish and will eventually insure that the airplane meets all of the airworthiness requirements for transport type airplanes. It is necessary to determine what weights the airplane will be allowed to carry under various operating conditions, considering the loss of an engine at any time during takeoff or in flight. The airplane must be able to either safely stop on the runway or proceed with its takeoff, if an engine is lost during the takeoff run; and it must also be able to clear the highest terrain over which it flies by at least 1,000 feet, with one engine inoperative. In order to determine the weights that may be carried, it is necessary to consider the length of runways used at particular airports and the heights of the airports above sea level. The determining of these performance figures also involves many hours of climb tests with different configurations of the landing gear, flaps, and using different power settings. These data will then be worked up into "curves" to be included in the Airplane Flight Manual so that the airline pilot or dispatcher, by reference to these curves, can quickly determine the maximum allowable weight for takeoff at any airport and under any wind conditions.

In addition to determining the allowable gross weights of an airplane, there are certain requirements which must be met to insure that the airplane is completely satisfactory as far as stability, control, and general handling characteristics are concerned. The stability requirements will insure that the airplane can be flown without causing undue pilot effort or fatigue.

Airplane Pilot Bill Gray, Engineering Flight Test Branch, has written the following account of a flight test being conducted by an Airplane Pilot: - - -

Let's assume we are in the midst of a flight test certification program on a four-engine transport being built by Modern Aircraft Company, Inc. Since the weather in the Los Angeles area has been considerably overcast and unfavorable for flight testing, this particular series of tests is being conducted at an airport located on the desert near Los Angeles. The alarm clock rings at five o'clock and a typical day's flight testing has begun. After breakfast and making sure that the large thermos jug is filled with coffee which we'll need later on in the flight, the crew proceeds to the airplane where they discuss the day's flight and

what they expect to accomplish. The first part of the flight will be devoted to determining the stalling speeds of the airplane at the desired maximum gross weight. Then climb tests will be run with one engine inoperative, the other three engines using takeoff power, and with different positions of the landing gear and flaps. Further climbs will be run with maximum continuous power and with the airplane in the enroute configuration; that is, gear up, flaps up, as the airplane would be in a normal climb subsequent to takeoff. The maximum continuous power climbs will be done from sea level to 20,000 feet, which is the maximum allowable operating range of the airplane.

At six o'clock, with the sun just starting to rise over the mountains to the East, the engines are started, the airplane is taxied to the runway and a thorough run-up inspection is completed. Takeoff is uneventful and the flight proceeds to the area of the Salton Sea which usually is a good flight test area because the weather can be counted upon to be clear. The airplane is climbing to 10,000 feet and at 7,000 feet the airplane is depressurized, a hatch is opened in the floor and the "airspeed bomb" is put out. An airspeed bomb, as the word implies, is a gadget that looks like a bomb and is suspended on a long cable far enough below the airplane that it will not be subject to disturbances from the wake of the airplane. It thus is flying in smooth air and has been especially designed so that it will read correct airspeed. This airspeed reading is transmitted back into the airplane through a hose attached to the cable and the bomb airspeed reading is compared with the pilot's airspeed reading. In several minutes, the crew reports that the bomb is out and the instruments are working. Upon reaching 10,000 feet, the stalling speed tests begin, the gear is dropped, flaps are put down, power is pulled off, and a series of three stalls are made, carefully noting the speed each time the airplane stalls. It is necessary to do it at least three times in order to insure that consistent stalls are being made and that a true stall speed is obtained. An error of several miles an hour may later result in loss of many hundreds of pounds of gross weight, since the subsequent climbing airspeeds in the various tests depend on the appropriate stalling speed and affect the rate of climbs. After completing three stalls in each of the various configurations of the airplane, descent is begun over the Salton Sea to near sea level. During the initial part of the descent the airspeed is kept very low in order to allow the flight crew to pull the bomb in, which is a difficult task at even the slowest airspeed and is further complicated by the fact that the bomb usually starts moderate to violent whipping oscillations as it gets close to the airplane. When the bomb is safely in, the doors closed, and the cabin supercharged again, we descend to sea level which we can safely do since the Salton Sea is actually below sea level. The crew then gets ready to record the data in the climb tests which we are now about to do.

Each particular climb test is always run cross-wind to nullify any effect of wind gradient on the climb. The first run will be started at sea level with no power on the No. 1 engine and the propeller windmilling, gear down and flaps down to simulate the condition of the airplane just after it has broken ground after takeoff with an engine failure. Since the airplane must climb through a sufficient range of altitude in order to plot points on a curve for determination of the rate of climb, each run must be for two minutes, with takeoff power maintained on the remaining engines. In running such tests it is fairly common to accumulate as much as twenty minutes takeoff power operation in an hour's flight time. For obvious reasons, such abuse of engines is not conducive to the peace of mind of the pilot.

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REGIONAL ADMINISTRATOR'S COLUMN

Busy and interesting times are ahead of us. The new Regulations of the Administrator, #620, requiring flight plans within the Air Defense Identification Zones at altitudes above 4,000 feet above terrain have become effective. Agreements have been signed with the 27th and 28th Divisions of the Western Air Defense Force relative to additional flight restric-

tions, in progressive steps, which may become necessary if the military situation becomes increasingly critical.

The Aviation Civil Defense plans for the State of California are being perfected and are an essential part of the program to provide the means for disseminating information about any changes in flight restrictions through master control airports and control airports to every landing area upon which aircraft are based.

The Atomic Energy Commission has established a test base within the Tonopah Danger Area which it is expected will be designated an Airspace Reservation, and test operations have already been conducted within this area necessitating plans for the diversion of air traffic in the event of emergency.

All of these things have added to our workload, particularly in communications and traffic control. They also affect the operation and maintenance of the navigation facilities and communications systems utilized in performing the traffic control and communications functions. Aviation Safety is concerned with the effect of all of these changes on aircraft operational activities. The military is considering reactivating certain airports. This requires our Airports Division to participate in negotiations between the present airport owners and representatives of the military regarding joint or exclusive use.

The additional workload, plus the fact that some of our people who have reserve status in the Army, Navy, or Air Force, are being called to active duty, presents a recruitment problem. At the moment this is acute in Communications, and to a lesser degree in Traffic Control. It is likewise being felt in other Divisions. We are attempting to meet this problem by several approaches. We have requested authority to establish a number of trainee or relief positions in an effort to be in a position to place at least partially trained people in vacancies on short notice. We are arranging for the conduct of new examinations where Civil Service registers have been depleted. We have recommended that a waiver be granted permitting the entrance on duty of employees prior to completion of the loyalty check. This would probably require that steps be taken to insure that such employees do not have access to classified material prior to completion of their loyalty check. We may also find it necessary to recommend temporary reinstatement of the preference card system to speed up actual employment and prevent the extended overtime workload with which some of the stations are now faced. We will continue to work on satisfactory solutions to these recruitment problems.

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EXECUTIVE FLYING

One of the brighter aspects of private flying in the years following VJ-Day is the rapid and steady growth of the business and executive use of airplanes.

The greatest gain made by any branch of non-scheduled flying was made in business flying according to CAA figures. The 1947 figure for company or "industrial aid" flying was about one million hours. This increased to about 1.3 million hours in 1948, with an estimated 1.5 million hours in 1949.

Surveys indicate there are about 1,000 multi-engine and 6,000 single engine 4-place planes now flying the US executive airways. This amazing growth would not have been possible unless the use of the airplane paid off in dollars and cents.

The following story is representative of the extensive and sometimes novel use executives have made of aircraft. The story goes that CWC (Current Wives Club) members used to fly down to South Louisiana for their annual reunion and for crayfish bisque and boiled shrimp. When the source of supply ran out and the reunions were discontinued, the local distributor of Ryan Aircraft decided to go into the business himself. He prepared the frozen foodstuffs such as shrimp, crayfish, turtle stew, seafood loaf, etc. right at the airport and distributed his products via airplane from Atlanta to Dallas and from Houston to Little Rock.

The principal surprise is that all shipments were made by aircraft rather than by refrigerated truck. The cost per can by aircraft was 1.8¢ as against 2¢ for truck, not to mention the savings in time.

Over at Los Angeles International Airport, AirResearch Aviation Service Co. has specialized in creating fine aircraft interiors for executive aircraft. One of the more novel conversions consisted of modifying a war surplus B-17 to executive use for Colonel Robert McCormick, owner of the Chicago Tribune. This plane has been converted at an estimated cost of \$200,000 to a virtual "air yacht" with beds, an observation lounge in the plexiglass nose, folding executive desks, its own power plant, air-ground telephone and many other luxuries too numerous to mention.

B-17 BEFORE CONVERSION



Signal Oil's converted DC-3 features murals on the forward and aft bulkheads. Equipped for 14 working executives, the air-

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←B-17 AFTER CONVERSION

plane is finished in ribbon-cut paneling, hand rubbed American walnut, turquoise blue upholstery and beige curtains. Included is a two-way dial telephone.

The AiResearch Aviation Service Company has converted some 31 aircraft to



SIGNAL OIL'S CONVERTED DC-3

executive use since the end of World War II. The models range from Cessnas to B-24's and are owned and operated by such companies as Signal Oil, Armstrong Cork Company, La Brea Securities, Goodyear Tire and Rubber, Food Machinery Company, Morrison Knudsen Company, etc.

Southern California Aircraft Company is another company specializing in converting aircraft to executive use. Glen Odekirk, president of the company and assistant to Howard Hughes of Hughes Aircraft Company, converted a Consolidated PBY-5A, a two-engine

amphibian for his own use. It has the following features: a bedroom; complete galley, including sink, hot and cold water, three burner electric stove, ten cubic foot electric ice box; its own power plant system in the nose of the plane; a complete bar; two outboard motor boats attached to the wings equipped for emergency or fishing purposes; interior finished in bleached mahogany and richly upholstered in blue. It is truly a floating and/or flying yacht, and to prove his faith in the market for executive type aircraft, Mr. Odekirk is converting 42 more PBY-5A's for resale purposes.

The executive aircraft has proven that it is here to stay, and the multiplicity of recent uses it has been put to indicates that the field is still in the embryo stage and that it is the brightest spot in today's non-scheduled aviation picture.

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TIME

Without me, you can do nothing.

If I work for you, I'll pay you handsomely in achievement and in leisure; but if you work for me, you'll have little of the first and none of the last.

With me, you can do anything.

When you waste me, you rob yourself.

When you have me, you help yourself.

I want to be your friend and servant, but you must keep pace with me, for as someone has wisely said, I "wait for no man."

You must be either my master or my slave.

If you are my master, you can have no better servant.

I am TIME!

If you are my slave, I'll drive you without mercy

(Region Five Newsletter)

A Day of Flight Testing on a Transport Category Airplane: (Con't. from page 2)

However, amazing as it may seem, very few engine failures are encountered during flight tests.

The first climb is started and after the two minutes required time has elapsed, we find it is necessary to repeat that run since the pilot was not able to hold the airspeed sufficiently close to permit analyzing the data. The airspeed should be held to within plus or minus one mile an hour for completely satisfactory results. It always takes a little practice to do this, especially at the very low speeds associated with the end of a takeoff and with one engine out. With the one engine out and the gear and flaps down, there is usually some rudder buffeting to further complicate the holding of a constant airspeed. So the run is repeated, turning out satisfactorily this time and we proceed to the second run in this configuration.

The next climb tests are the same as the first set except that the No. 1 engine is feathered; that is, the propeller is rotated to such a position that the engine stops windmilling. This condition simulates the condition of the airplane after the pilot has broken ground and has just feathered the engine. During the next set of climbs, the gear will be pulled up, then the flaps will be pulled up, and finally the power will be reduced from takeoff power to maximum continuous power. Thus, all the conditions the airplane will be in during a takeoff in which an engine has failed will have been tested and the corresponding rates of climb will be known. However, during our second set of climbs we noted a slight turbulence beginning. This turbulence affects the rate of climb of the airplane due to the presence of up drafts or down drafts and also makes it very difficult to hold a satisfactory airspeed. Therefore, it is necessary to abandon any further tests in this area.

Thermal radio station is immediately contacted and weather is requested for all points between San Diego and San Francisco. This being a long range airplane, the flight test crew is able to fly to any reasonable distance from the base area if necessary to do so to find the type of weather condition. Thermal radio reports that there are extremely low ceilings and fog all along the coast, which sounds bad as far as running climb tests in clear, smooth air near sea level is concerned. However, through past experience, we gamble on the weather being good out to sea approximately 100 miles West of Los Angeles. The airplane is headed west and a climb commenced in order to clear a mountain range between us and Los Angeles, the automatic pilot is turned on, everybody relaxes and gets out the thermos jug full of coffee. Approximately a half hour later, well out to sea, we find that the layer of fog has completely dissipated and there is clear, smooth air all the way down to sea level. So the climb tests are continued. Approximately three hours of steady climb tests are required to complete all the test points planned.

The constant struggle to get all the data in a short time in order to reduce the cost of expensive flight testing, running head temperatures near the maximum limit, drawing takeoff power for long periods on three engines with one engine feathered low over the water, and trying to keep ATC constantly informed of our position creates tension in the whole crew. We stop briefly around 10:00 a.m. and put on the autopilot while we finish the coffee. Then back to work. Without such a break in the routine someone is bound to make a mistake. The mistake probably won't be serious except that we will have to repeat some runs and short tempers don't appreciate repeating runs. (Continued on next page)

Now you will note that so far in this flight, there hasn't been anything exciting occur. In fact, after sitting there for five hours, running one climb after another all in the same vicinity, it has been tiresome and monotonous. This is a typical picture of flight testing and it is especially brought out to show that such a job is not extremely hair-raising, as is often thought by the uninitiated, but often is simply a matter of long tedious hours. Of course, there are times when some excitement occurs, but in general the business is one of routine though exacting tests.

Finally we are finished with our climbs and head for home. The engineers in the airplane, of course, are still very busy making a preliminary analysis of the data which we have taken during the flight. Many corrections have to be made to the climb data to show what the airplane would have done under standard temperature and pressure conditions. As we are letting down for landing six hours after takeoff, the Flight Analyst comes up front and tells us that practically all of the data we have taken are no good. The data do not compare with previous climb tests we had run and apparently, although the air was clear and smooth, the air mass as a whole may have been descending or the presence of a slight temperature inversion may have thrown the data out. We, of course, have known about these possibilities throughout the flight; however, since it takes so long to analyze the data, there is not much choice but to go ahead and collect several hours of climb data and analyze it later. So it looks as though tomorrow we will have to go back and do the same thing over again. But we aren't finished yet today. The weather, of course, is not suitable for running further climb tests, but we have prepared for this eventuality by being ready to run takeoff and landing tests, which are scheduled immediately after lunch. Fortunately we don't have to hurry our lunch because there are considerable pre-flight preparations necessary before the airplane is ready to fly again. The oil strainers on all engines must be checked before another flight since they were subjected to several hours of takeoff power operation.

Takeoff and landing tests are photographed with a camera located well off to the side of the runway, which photographs the entire takeoff or landing run. From analysis of the photographs it is possible to tell the exact speed of the airplane at any point on the runway to measure the total takeoff and landing distances.

When the camera crew is ready and the pre-flight meeting is completed, the airplane is started up and again taxied out for takeoff. The first test will be a takeoff at maximum gross weight with No. 1 engine cut out at the critical engine failure speed. The critical engine failure speed is more or less a point of no return speed; that is, if an engine fails below that speed, the airplane can be stopped by use of brakes in the remaining distance of the runway; above that speed, the airplane cannot be stopped. It must be flown out and should clear the end of the runway by at least 50 feet. We have already conducted this test at a lighter weight and this particular test will be the most severe condition encountered with the high gross weight and no wind, which would help reduce the takeoff distances. Critical engine failure speed on this particular engine is 125 miles an hour, at which point the No. 1 engine is immediately cut out by pulling the throttle back, and the takeoff is continued with the remaining three engines. The gear, of course, is brought up as soon as possible. However, during test conditions we do not actually feather the engine, and as soon as we are sure the camera has determined
(continued on next page)

our flight path, we open the throttle of No. 1 engine and continue our flight with four engines. This test also has to be repeated several times in order to make sure we are obtaining consistent results; then we proceed to the landing tests.

Landing tests are made by approaching at not less than 1.3 times the stall speed and using only enough power to prevent an excessive rate of descent of the airplane. Immediately after contact, brakes are applied with the idea in mind to obtain the shortest possible braking distance. However, brakes cannot be applied excessively or a blow-out will be encountered. At least five landings must be made without damage to the tires or brakes before the landing distance is considered acceptable. On the third run we blow out one of the tires on the starboard side, thus making it necessary to repeat five more runs. But before the tire could be changed and the landing test completed, the sun had progressed far enough to the West that it is sinking behind the mountains and further photography is impossible.

The day's work is over, and not many of our crew will stay up late tonight.

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BAIN TRANSFERS

Gordon M. Bain, Region 6 Executive Assistant for the past four years, has transferred to the Washington Office of the Civil Aeronautics Board, where he becomes the Director of the Bureau of Air Operations.

The new Bureau, which in the CAB reorganization underway, absorbed the old Bureau of Economic Regulation, will have primary responsibility for all presently designated economic operating activities, including rates, routes carrier agreements, reports and statistics and related accounting data. The complete development, analysis and presentation of cases to be presented to the Board will be handled by specialist teams from the Bureau.

Bain, who is 42, served as a Budget Examiner with the Bureau of the Budget, Washington, D. C., during the war years and before that was City Manager of the City of Alhambra, California. He is a University of California graduate and is well known in public administration circles throughout the State.

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NATIONAL PROMOTION PLAN ANALYSIS

A study of the operation of the National Promotion Plan for the period September, 1948 to August, 1950 has been recently completed. During this period there were a total of 256 positions that were opened for bids and a total of 3,147 persons placed bids for these positions.

The table below offers an opportunity to compare this Region's activities with the National picture:

	Region VI		National	
	No.	%	No.	%
Vacancies	14		224	
Bidders	217		3147	
Bidders Qualified	143		2210	
Bidders Not Qualified	74	34.1	937	29.7
Source of Candidate Selected:				
From register of less than 3	1	7.14	54	24.10
From one of 1st 3 on register	7	50.00	117	52.23
From 4th or 5th on register	1	7.14	30	13.39
From In-Grade candidates	5	35.72	23	10.27
Total Selections	14		224	
Sixth Region Vacancies:				
Employees in Sixth Region selected	10	71.4	180	80.4
Employees from Other Regions selected	4	28.6	44	19.6

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SUMMARY OF REGIONAL ADMINISTRATOR'S STAFF MEETING
January 15, 1951

The Report of the Regional Administrators' Conference was reviewed and those items which require action were discussed as follows:

Page 5. Item 6. Security

The Report requests Regional Security Control Officers to ascertain the volume, by category, of classified material being handled both at Regional Headquarters and at field locations. It was reported that Mr. Dettman is working on this at present. Mr. Cole was requested to follow up.

Page 8. Item 10. Pre-employment Investigations

Personnel Officers have been instructed to make certain that no one comes on the rolls without a thorough pre-employment check. The Acting Executive Assistant was requested to issue an Administrative Notice reminding the field, as well as Regional Office personnel, of the required procedures.

Page 19. Item A. Physical Security of CAA Facilities

While no specific action was required of this Region, the Facilities Division was requested to make an investigation of the desirability of providing guard service or other protection at the Overseas Station (both the transmitter and receiver sites).

Page 20. Item C. Authorizations for Use of Government Vehicles Between Points of Duty and Domiciles

A memorandum from the Office of General Services has been received giving a decision relative the subject use of Government cars. This has been cleared with the General Accounting Office. It is no longer necessary for any employee to keep a Government car at home for emergency purposes. Mileage or taxi fare can be paid for such emergency travel. Business Administration was instructed to prepare an Administrative Order on this subject.



QUESTION BOX?



In the Question Box of last month's issue the question was raised concerning allowing credit for Military or Naval Service toward retirement under the Civil Service Retirement System.

The general statement was made that if an employee received retired pay on account of Military or Naval Service, the period on which retired pay was based shall be excluded from service credit under the Civil Service system if otherwise claimed for retirement under the Military Retirement System. Under special circumstances simultaneous credit is permissible if the individual is receiving retired pay under Title III of the Act of June 29, 1948 (Public Law 810, 80th Congress).

In addition, other individuals who are receiving retired pay based on a service-connected disability incurred in combat with an enemy of the United States or resulting from an explosion of an instrument of war may also receive simultaneous credit under both retirement systems.

The above statement has the effect of authorizing the counting of the same period of service for purposes of determining eligibility for retirement pay as a Civil Service employee or an employee in Military Service under the above special circumstances.

Q. What is the significance of the statement now being carried on position advertisements "Must have served six months from date of last promotion"?

A. A new Civil Service regulation governing promotion has been issued which states:

"If the employee is serving in a position in grade GS-5 or in an equivalent or higher level, he must have served at least six months in such grade before he may be given a promotion to a position of higher grade (or salary level equivalent to that of a higher grade)".

To illustrate:

1. John Doe was appointed to a position of Aircraft Communicator, GS-5 on January 1, 1951. He must serve six months in grade GS-5 before he can be promoted to grade GS-6 or GS-7. After he has accepted promotion to a higher grade, he must serve six months in each higher grade level before being eligible for subsequent promotion.

Q. What is the status of the new efficiency rating system:

- A. This much is known. (1) The same supervisory officials will be responsible for the evaluations, (2) three levels of official periodic ratings will be made - outstanding, unsatisfactory and satisfactory, (3) the form itself will be greatly remodeled, (4) no unsatisfactory rating can be assigned without a ninety day prior warning and a reasonable opportunity to demonstrate satisfactory performance, and (5) "outstanding" ratings must be supported by written statements setting forth in detail the reasons for considering each aspect of the employee's performance so commendable.



FIELD NEWS

EL CENTRO

INSAC: The El Centro INSAC was indirectly involved in the search for the now infamous William Cook. The FBI and Sheriffs Aero Squadron, flying search missions in the San Felipe area of Mexico, filed flightplans with El Centro and also relayed search instructions from the FBI through our facilities to searching aircraft. The two kidnapped El Centro men Damron and Burke were flown by FBI aircraft from Tijuana to the El Centro NAAS where they holed up in the CACOM and MTIC office with FBI agents to escape publicity hounds. Communicator Kempton on duty at the time received first hand information regarding the trials and tribulations of being kidnapped.

The Navy department has requested approximately four million dollars for field and building improvement at the El Centro NAAS. We hope this will include refrigeration cooling for our facility during the summer months.

There has been a considerable increase in communications activity resulting from the operation of carrier jet and conventional aircraft squadrons on the El Centro NAAS. This increase is expected to continue.

For information of CAA pilots, the Commanding Officer of the El Centro NAAS has authorized the use of the field by all government owned or operated aircraft.

DELTA

MTIC: The station has been operating in the new quarters for a year with the console being installed at the time operation was begun in the building. All operating room equipment is finished with gray-green, including teletype equipment.

The Delta VOR was formally commissioned July 20, 1950 after lowering the counterpoise to sixteen feet, and burying power and control cables for a distance of 750 feet from the building.

If things progress as planned, all personnel of the communications maintenance will be flying shortly. MTIC workman has held a private ticket for a year, while MT Morley and RMT Mijares have both made application for GI flight training.

INSAC: Field news from Delta is definitely an anti-climax after the Hairbreadth Harry story from Daggett. In the entire existence of the Delta INSAC we have had only one pilot fatality on the field, burned down one INSAC building, moved the INSAC to a new airport, suffered through the most severe winter that this country has ever seen, helped many pilots in mild to serious difficulty, helped fly hay to

sheep during the severe winter and more recently emerged from the longest siege of fog ever experienced here.

The Delta INSAC moved into the new quarters on December 1, 1949, which is a 16 x 44 foot building with a 12 x 16 foot basement, oil furnace, electric hot water supply, electric cooler drinking fountain, etc. It is the nicest CAA owned INSAC building any of us have ever seen.

The type "A" console was commissioned at the same time we occupied our new quarters — we like both of them.

Delta claims some sort of a record (at one time, at least) in aviation safety and enthusiasm, as 17% of our community have soloed in conventional aircraft during the past six years with solo hours ranging from 1/2 hour to in excess of 900 hours, and to date not a single injury to a local pilot.

All of Delta's ACCOM personnel are pilots - ranging from one student pilot, three private pilots and one commercial pilot with instructor rating. Our MTIC is a private pilot also.

Last fall the CAP held a two day practice search and rescue problem with Delta as the base for the operation. On December 2, 3, 4, 5, and 6 it was the real McCoy with the CAP and Military Search and Rescue moving into Delta for an extended search for an AF C45 enroute ABQ to HIF. There were more than 50 CAP pilots and members swamping Delta requesting everything from a cup of coffee to maps and transportation. The aircraft was subsequently found south of Hanksville by a sheep herder or rancher.

Delta reported FOG or GROUND-FOG on 19 days of December 1950. This is a record that we hope is not soon repeated. The fog reduced ceilings and visibility to below IFR minimums on many of those days.

During this extended period of fog the temperature remained below freezing causing extremely heavy deposits of hoar frost - telephone lines and power lines attained a diameter of as much as five inches. Several power lines were broken as well as telephone lines. The heavy frost deposits caused a breakdown of A. T. & T's carrier circuits in this and the Salt Lake City area (except East-West circuits out of Salt Lake City which are underground circuits) and this caused A. T. & T. to resort to a new use for aircraft - that of blowing hoar frost off the telephone lines between Tooele and Delta. A. T. & T. hired an Intermountain Aviation aircraft and pilot to do this job. Mr. W. E. Magie flew a BT-13 down the lines from Tooele, past Delta, to Bloom, some thirty miles SW of Delta, maintaining 6 to 10 feet above the telephone lines while using 40 degrees of flap on the BT. This action shook and/or blew off a considerable amount of the frost and as the pilot passed Delta he requested, via radio, that we contact A. T. & T. personnel at Milford to find out if the frost removal was showing any improvement in circuit operation - A. T. & T's reply - We're getting a big improvement. Thus a new use for aircraft was born, necessity is, truly, the Mother of Invention.

On the night of January 13, 1950 Delta took part in assisting an AF B-25 to a safe landing. This was a particularly hazardous situation for the aircraft, due to the stormy weather, high gusty surface winds, dark runways covered with snow and only part of the lights visible on one side of the runway; the lights on the other side being completely obscured by drifted snow. The newspaper reporter who writes

"WINGOVERS" in our local paper was in the INSAC that night and listened to the exchange of communications with the aircraft and heard the praises offered by the AF personnel to all those assisting them. The news reporter, Dick Morrison, wrote such a laudable report that we, although no shrinking violets, were a little embarrassed by the high praises contained in Dick's column -- now almost a year later, Dick makes reference to the incident again with his praises somewhat tempered so we take pride in quoting a portion of his column "WINGOVERS - ALL THE NEWS THAT'S FIT TO PRINT FROM THE DELTA AIRPORT" as it appeared in the Millard County Chronicle December 21, 1950.

"It isn't usual that anything exciting happens on such a night, but it can. Buffington hasn't forgotten the night last January 13 when he and Nate Ward heard the radio of an air force B-25 which was lost in a storm, almost out of gas, and trying desperately to reach Delta airport. The storm was playing hob with the radio range, but by constant checking with the ship's radio man the Delta communicators were able to determine which quadrant of the range the ship was in, and they talked it down to a safe landing at Delta. There's no doubt that Ward and Buffington saved the lives of five men that night, as well as a valuable ship."

We, at Delta, are very proud of the excellent local press relations we enjoy here and the many favorable references to this facility during the past several years.

LONG BEACH

Airport Traffic Control Tower: On November 9, 1950, the Long Beach tower changed frequency from 347 kc. to 242 kc. with the transmitter located at the Middle Marker of the ILS.

The Long Beach tower personnel aided in the completion of the Special Report requested from Task Force "D" of the National Security Resources Board on airport facilities.

SPARKS

MT: The AMT at Sparks, Nevada submitted a 660 for wrecker service at Site 19A with the following justification: "Some Cows (BULLS too) decided that the grass was greener on the other side of the fence, so through it they went. Truck No. C-2862, carrying posts to repair said fence, bogged down in a filled trench." (Ed. Note: The 660 was approved for payment.)

REGIONAL ADMINISTRATOR'S COLUMN (continued from page 3)

With respect to the agency's Deferment-Release Policy, it is anticipated that, as a result of the stepped up mobilization program, the CAA may modify, to some degree, its present policy to conform more nearly to the already modified military deferment policy. As some of you may know, the military services have recently stated that deferments for reserve personnel will hereafter be only temporary delays and not any continuing exemptions. This means that we will have to plan for recruitment in those cases where our people having reserve status are granted only such temporary (delay) deferments. In the case of personnel subject to the draft we will maintain our policy of requesting continuing deferment for those people in key positions. Strengthening this policy is the fact that we have been declared a Defense Agency and that all of our key positions have been listed on the Department of Labor's list of critical positions. Truly these are busy and interesting times.

DIVISION HI-LITES

AIRPORTS DIVISION

A meeting of all District Airport Engineers was held in the Regional Office January 9 through 12. Richard T. Puckey, Chief, Airports Division, Region 7, and J. V. Fryberger, District Airport Engineer for Oregon, and C. L. Willis, Jr., Chief, Airport Planning Branch, Region 4, attended this meeting. A number of policy and procedural matters were discussed and minutes are being prepared for dissemination to all interested personnel. The minutes will set forth the decisions reached on each item. While the District Airport Engineers were in the Regional Office, the tentative Federal-aid Airport Program for Fiscal Year 1952 was developed and this Program was coordinated with the Regional Administrator and the Chiefs of the operating Divisions at a meeting of the Regional Facilities Clearance Committee on January 11. The tentative Program has been forwarded to the Washington Office.

Airport Management Consultant Hicks and the Chief of the Division met with representatives of the City of Nogales, Arizona, and the Santa Cruz County Board of Supervisors, representatives of the Arizona State Aviation Authority, and Frontier Airlines and discussed ways and means of accomplishing improvement of the Nogales International Airport. It appears that the City and County jointly may sponsor a project for resealing runways and taxiways and for constructing an administration building, which will properly provide for activities and space for the various Government agencies.

The Chief of the Division met with Navy representatives at the Alameda Naval Air Station and discussed joint operations at the Fallon, Nevada, Airport. The Navy has agreed to permit commercial operations of either scheduled or non-scheduled carriers or other generally similar commercial operations at this Navy controlled airport.

The President signed Public Law 912 which provides that land costs under the Federal Airport Act will be eligible for the same Federal share as all other construction costs, except instrument runway high intensity lighting for which the Federal share is 75 percent.

The Chief, Airport Operations Branch and the Airport Management Consultant conferred with the officials of San Mateo County, the District Airport Engineer, and the Lessee, of the Half Moon Bay Flight Strip, pertaining to leasing arrangements and future operations of this facility. Also a number of problems were discussed with the District Airport Engineer and his personnel relative to the Federal Airport Act and management consultant activities.

Airport Management Consultant Hicks and Nevada District Airport Engineer conferred with officials of the City of Hawthorne, Nevada, pertaining to rates and charges for the Hawthorne Municipal Airport. Information was furnished to the City relative to charges and operating procedures at similar airports.

FEDERAL AID AIRPORT PROGRAM

Grant Offers Accepted:

Los Angeles International Airport in the amount of \$30,000 covering the erection of a new traffic control tower, and construction is now underway.

Ontario International Airport in the amount of \$2,707 for paving of light aircraft taxiway and apron.

Fort Bidwell in the amount of \$600 for land acquisition.

Work Completed:

Monterey administration building.

AIRWAYS OPERATIONS DIVISION

The airport traffic control tower at Van Nuys was relocated to the new tower structure, January 17, 1951.

The San Francisco Tower modernization project began about the middle of December, which will include removing receivers to the floor below, installing new control desk and new radio equipment, as well as installing surveillance radar gear as it arrives.

A meeting of all Chief Aircraft Communicators in Area I was held in Oakland on January 9 through 11. Area II meeting, scheduled for January 29 through February 2, has been postponed due to personnel shortage and increased workload at several stations. This meeting has been rescheduled to convene at Ontario on February 27 through March 2. The Oakland conference was the first area conference to be held in this Region. This is a departure from the plan followed in previous years.

After several meetings, agreement was reached January 12 between the Air Defense Commanders in California and the Regional Administrator regarding the manner in which CAA will cooperate with Air Defense Commanders in emergency. Airways Operations did the staff work in this agreement.

SAFETY OPERATIONS DIVISION

Safety Operations Division area conferences have been scheduled as follows:

At the Regional Office on February 8, 1951, with Burbank, Los Angeles, Los Angeles (Air Carrier) and Santa Maria District Offices participating,

At Palo Alto on February 15, 1951, with San Francisco, Oakland, Fresno, Sacramento, Reno and Salt Lake City District Offices attending, and

At San Diego on March 1, 1951, with Phoenix, Las Vegas, Ontario and Long Beach District Offices included.

Western Air Lines departed January 17, 1951, from Travis Air Force Base with one DC-4 aircraft on Pacific air lift. This is the first flight on the air lift for Western and the operation involves five crews.

Western Air Lines has requested take-off minimum reduction on Convair aircraft from 300-1 to 200- $\frac{1}{2}$ during stratus conditions when an adjacent airport (e.g., Los Angeles to Long Beach) has adequate landing minimums. The proposal has been approved by this office and forwarded to the Chief, Flight Operations Division, Washington, for final action, inasmuch as present instructions do not authorize twin-engine take-off minimums below 300-1.

Additional tests of battery-operated emergency runway lights have been observed by Flight Operations Agents. These tests were conducted at Lindbergh Field, San Diego, January 3, Ream Field, San Diego, January 10, and Los Angeles International Airport January 11, 1951. The Los Angeles tests were also observed by Mr. Marriott and Mr. F. B. Lee, Deputy Administrator, in a helicopter furnished by Los Angeles Airways. Results of these tests continue to indicate their adaptability for emergency runway lighting.

On January 11, the Chief, Airman Standards Branch, conducted a joint inspection of Cal-Aero Technical Institute with Agent Brewster of the Burbank Office. This school has progressed to a point where it is now considered outstanding. They have eight complete jet engines, four of which are British and four German, also adequate parts. This is in addition to the regular mechanic school equipment and exceeds our requirements many times over. In discussing enrollments with the management, it was brought out that there has been a notable increase in civilian enrollments. There are approximately 250 Army trainees with more in the offing.

On January 21, the Chief, Airman Standards Branch, represented the Regional Office in attending the Air Education Day at Palm Springs, sponsored by the Palm Springs Chamber of Commerce. There were approximately 450 aircraft flown in for the Meet. The 450 airplanes included the latest type of military aircraft.

United Air Lines has completed a thorough investigation of possible power losses in their R-2800 engines. As a result of this investigation, a number of measures have been taken to assure that the rated power will be available. Western Air Lines is in the process of conducting a similar investigation. Preliminary results indicate that rated power is being obtained by both "high" and "low" time engines.

The Maintenance Inspection Branch is processing a questionnaire, at the request of the Washington Office, to determine the future airworthiness status of over 4,000 aircraft in this Region. These aircraft are registered, but Washington records indicate that their airworthiness requirements have not been maintained.

BUSINESS ADMINISTRATION DIVISION

Preprinted requisitions have been distributed to all INSAC's for indication of their estimated nine-month's requirements for teletype paper and perforator tape. This order, ordinarily placed with GSA on March 1st, will be forwarded on February 15th due to the increased consumption of these items during the past six months.

A plan for the protection of Regional Headquarters employees in the event of enemy attack has been submitted for review.

The Acting Chief of the Project Audit Branch is conducting the following final audits:

Salt Lake City Municipal Airport	- Project 9-42-018-002	-
Salt Lake City Municipal Airport	- Project 9-42-018-003	-
Moab Airport	- Project 9-42-006-003	
Carbon County Airport	- Project 9-42-002-002	
Lander County Airport	- Section 17 - Claims	

The annual leave statements for calendar year 1950 were mailed to all employees on January 26. The annual retirement report was mailed to the Washington Office during this week.

A request for more expeditious action was made to the regional office of the Civil Service Commission for FBI pre-employment checks of personnel proposed for "sensitive" positions. In our letter we pointed out the rather long delays that we have encountered. This delay has had a serious effect on filling aircraft communicator positions. Even though we are not listed as a defense agency, we emphasized the importance of our agency to the defense effort. It is hoped that we can receive the same type of action on this type of FBI check now accorded to the defense agencies.

CONSTRUCTION: Contract documents were forwarded January 23, 1951 to J. H. Hedrick & Co., of San Gabriel, low bidder on Proposal 6-51-179 for installation of Localizer Facility and enlargement of ILS at the Los Angeles International Airport.

Contract documents for construction of a VOR Radio Range Facility under Proposal 6-51-186 were forwarded January 24, 1951 to J. H. Hedrick & Co. of San Gabriel, California.

Proposal 6-51-219 for additional work required to complete ASR System at the San Francisco International Airport was mailed to prospective bidders on January 24th. Bids are scheduled for opening February 5, 1951.

Proposal 6-51-206 for installation of a duct and conduit system over and through the Lockheed Air Terminal Administration Building at Burbank, California was mailed to prospective bidders January 23rd. Bids will be opened February 7, 1951 at 10:00 a.m.

Proposal 6-51-154 for installation of an Engine Generator Automatic Transfer Panel and related work in the Air Route Traffic Control Center at Los Angeles was mailed to prospective bidders January 25th. Bids will be opened February 6th at 2:00 p.m.

CAPITAL GLEANINGS

The President has proposed thousands of new Federal jobs in his record seventy one billion dollar budget. It is anticipated that Congress will attempt to cut his recommendations for non-defense agencies.

Retirement:

Under the Civil Service system for retirement, the employee must pay 6% of his total salary into the retirement fund. Under the Social Security system he pays only $1\frac{1}{2}\%$ of the first \$3,600 in salary into social security and receives more benefits and financial protection for his family. A number of plans have been drafted to liberalize the Civil Service system. One of them is to delete the present provision requiring the Government to pay 3% interest, compounded annually, on retirement fund refunds to employees who leave the Federal service. Instead it is proposed to provide larger survivorship benefits to the families of employees who die after they have been under Civil Service only 18 months; to increase benefits to employees who, at any age, must retire because of physical disability and to increase annuities for those who have already retired.

There is no known plan under consideration to eliminate the Civil Service Retirement system entirely and place all government employees under Social Security. If you're close to retirement and worried over this possibility, forget it.

Miscellaneous:

A bill has been introduced to Congress to repeal the Whitten rider requiring most government personnel actions to be on a temporary basis. Under this bill, permanent employees could be given permanent grade promotions and inter-agency transfers; however, most appointments would be on indefinite basis as at present.

Another bill has been introduced to repeal the rider requiring federal employees to take annual leave earned during 1950 by next June 30 or lose it.

Chances for approval of both these bills are good.

CREDIT UNION NEWS

The Annual Meeting of the CAA Region Six Federal Credit Union was held Monday, January 29, 1951, in the Regional Cafeteria. After the usual business proceedings, the most interesting item, that of declaring the rate of Annual Dividend, was voted upon. The membership accepted the Board of Director's proposal of dividend at the rate of 4.8%.

New officers were also elected to replace those whose terms expired. The Directors elected are: Clarence W. Butler, Dorothy McDonald, D'Estaing Newton and Harold C. Orville. The new Supervisory Committee member is Ford Wark, and the two members elected to the Credit Committee are Eleanor Main and Frank A. DeAndrea.

Dividends will be credited to the accounts as of January 29, 1951, and it is requested that all passbooks be sent in as soon as possible so the dividend entry can be made.

The Federal Examiner has made an audit of the books and found them to be in excellent condition and commended the Credit Union on its phenomenal growth.