FAA HORIZONS

APRIL 1964

OFFICIAL EMPLOYEE PUBLICATION OF THE FEDERAL AVIATION AGENCY

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COVER: Come to the Fair, by land, sea and, of course, by air via 'copters like this one about to land atop the 120-foot high, $2,680,000 helipad built as a permanent part of the Queens County landscape. The structure features a two-level restaurant and lounge. For a Fair preview see page 4.

EDITORIAL: *Are You an "FAA Stockholder"?*

William F. Harrison
Manager, NAFEC

Economy in Government has become the National by-word. Possibly at no other time in our public careers have we viewed economy with such significance at every level.

There are those who contend that economy drives serve merely as a deterrent to progress and efficiency. I heartily disagree! I believe that attention to economy is a most valuable tool for enhancing progress, and as a consequence, promotes efficiency if properly employed. It simply means taking inventory of your operation, pouring acid on every facet of it and establishing the discipline needed to get the job done in the most efficient manner, and with savings where feasible.

Today's drive for economy is unique. It's not a cold and impersonal directive to cut here or cut there, but rather it's one of example. It's one in which each of us is counted on to do his level best to foster savings in every conceivable act that we are involved in. National leadership is setting the pace and example rather than simply exercising its prerogative and authority of direction.

Within the FAA we have several formal efforts which motivate economy through efficiency. Management training equips our key personnel with improved and new techniques for administering and directing their levels of responsibility. We afford training to operational personnel to upgrade and improve their skills. Further, we have an active Employee Suggestion Program which extends an open opportunity for in-house improvements and savings.

These are all excellent efforts, but it appears to me that a needed element is lacking. This element, I contend, is a common attitude among all Agency members, the effect of which would serve as a mutual linkage between the various echelons of management, staffs, and field operating levels. This common attitude is one under which each of us, regardless of grade, position, function, or location must assume joint and positive determination to effect and sustain economies in every instance where the opportunity presents itself. Until this air of concern prevails, we can not say we are doing our individual share.

What's the magic formula for instilling and fostering this philosophical attitude? There is no magic, and really no formula—it's simply a conceptual practice.

As a concept, let's pose ourselves as active "stockholders" in the "FAA Corporation." This puts us in a dual role, i.e., employee and stockholder. This makes us more concerned, not only officially but personally with the broad operations of the corporation. As employees, we are individually concerned with performance as affects our jobs and opportunities; as "stockholders" we are interested in the dividends that efficient, progressive, and economical operations will bring us.

From a daily practice point of view, are we protecting our investment in the "FAA Corporation" by ensuring that the ledger reflects a continuing profit? Are we utilizing "company" time to maximum benefit of production? Are those of us involved in planning, ensuring completeness, feasibility, coordination, so that implementation can be responsive and effective? Before making a toll 'phone call, do we determine that the call is necessary? Is the trip we are about to make necessary or can we accomplish the end result through some other means, say a letter or a phone call? Do we give proper care to equipment entrusted to us? Do we turn off the lights in our office or working area on departing at the end of the day?

We can not consider compromise in standards, nor can we accept reductions in efficiency or scope of production. As pretended but earnest "stockholders," we can individually and collectively effect economies without encroaching upon any of these vital factors. Try it. I think you'll find it works. Savings mean profits—profits mean dividends.

You know what—you don't have to pretend you are an "FAA Stockholder" for as a taxpayer, you really are.

This plan 59A switching system (left) is a key tool in Honolulu's IFSS. Above: The crater at Oahu showing the IFSS on one side, and right: The experimental "wire grid lens" that will pick up signals from all directions is on Molokai Island.

Exclusive Is the Word for IFSS

The IFSS (International Flight Service Station) is a Flight Service Station with a difference, operating exclusively for the benefit of international flight. There are only 11 of them—a minority among major FAA facilities. But their activities are known over a large part of the world, particularly those areas where there are neither visual aids nor radar. They are located in the vicinity of the great international airports at New York, Miami, San Francisco, San Juan, Honolulu, Balboa, and Anchorage; on the remote Pacific islands of Guam, Wake and Canton, and on one of the barren Aleutians. Some time later this year Guam will be phased out, to be replaced by a modern installation on American Samoa.

An International Flight Service Station comprises three separate components located several miles apart—a control station filled with batteries of complex multi-channel communications equipment, and two attendant stations for transmitting and receiving. At these latter points, 800 acres of ground are covered with directional high frequency antennas joined to the control station by landlines and UHF/VHF radio systems. The control station is also connected with local airline offices, military operations offices and weather bureau facilities. Every IFSS is manned around the clock by highly skilled flight service specialists and electronics technicians.

The IFSS chain is in direct point-to-point (radio teletype) communication with 24 foreign countries, maintaining a steady inflow and outflow of up-to-the-minute flight and weather reports. Every 24 hours they broadcast more than a quarter of a million groups of meteorological information; every month they relay close to 2½ million messages relating to flight plans, position reports, and associated data and contact approximately 13,000 aircraft in flight.

The first IFSS was commissioned in New York in 1940, at a time when the radio-telegraph was the last word, and messages were handled within the station by "hand-carry." Today's communications go by cable, landline, high frequency radio for contacting planes in mid-Atlantic or mid-Pacific; VHF and UHF for those closer to shore. Fully automated teletypewriter switching systems that handle incoming and outgoing tapes by themselves, are operating at Honolulu and Balboa and a third is scheduled for Anchorage by midsummer.

A single circuit connects Miami, New York and San Francisco, carrying International Civil Aviation Organization (ICAO) flight data and military airspace reservations. In the Caribbean a radio-teletypewriter circuit island-hops on a leased channel from San Juan to Trinidad, a distance of 600 miles, while across the world another runs for more than 5200 miles from Honolulu to Sydney, Australia.

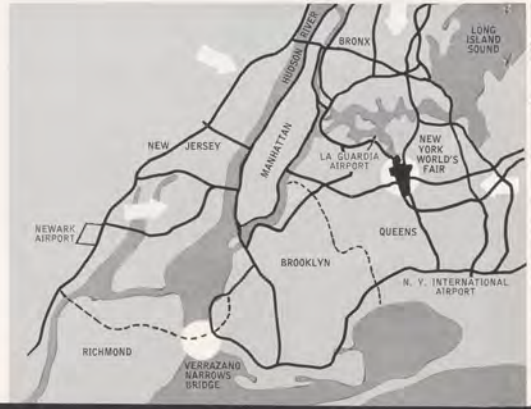
At Anchorage, San Francisco, Honolulu and New York, a type of voice broadcast known as "VOLMET" (the French contraction for flight weather) is conducted on multi-frequency channels shared by London, Paris, and Tokyo under the ICAO Air Navigation Plan for the North Atlantic and Pacific. International Notices to Airman (NOTAMS), another ICAO function, are handled from New York, Miami, San Francisco, Anchorage, Balboa, San Juan, and Honolulu. Special radioteletypewriter broadcasts, conducted under the World Meteorological Organization's plan for basic weather dissemination, are sent out of New York and Miami. Miami also operates a six-frequency radio-teletypewriter broadcast of operational aeronautical weather known as the "CARMET" that covers the Caribbean and some parts of South America.

FAA research is continually opening new approaches to advancement in the communications field. At this moment, at the Honolulu IFSS receiver station on the island of Molokai, a revolutionary type of antenna is being evaluated for long haul high frequency point-to-point communication. Known as the "wire-grid lens" it is the world's first application to long distance radio of a principle commonly employed to focus light.

The wire grid lens is of particular interest to the FAA in that it can pick up signals from any and all directions and can be set up on a span of 20 acres, while the arrays of conventional antennas presently required to receive from only eight directions require forty times as much ground and sometimes more. Perfection of a NAVAID such as this would add immeasurably to the safety of over ocean flying.

The 250-ton, 13-story Unisphere, built by U.S. Steel, is the Fair's symbol and will remain a permanent addition to Flushing Meadow Park. The Federal Pavilion's (below, l.) 150,000 feet of exhibit space will accommodate 40,000 visitors daily; will show visitors America's opportunities, its problems, its inspiration and its promise of freedom.

Unisphere® presented by United States Steel



HURRY! HURRY! HURRY!

The Last of the R-E-A-L-L-Y Big Time Fairs

As you read this the last of a vast army of some 8000 laborers, skilled craftsmen, engineers, architects and designers will be preparing to withdraw from a very special "battlefield" where they spent the past two years transforming 646 acres of Flushing Meadow into the spectacular New York World's Fair of 1964-1965.

With them will go their machines—the snorting bulldozers, the power shovels and the graders that lacerated, shaped, shoved and tamed some million cubic yards of soil to provide the Fair's topography; the giant cranes that swung steel girders a few inches from the ground to establish foundations and later lofted other girders to the height of a 13-story building to create the 250-ton stainless steel Unisphere, the Fair symbol.

And like a nagging conscience their time on the scene is being metered by an illuminated clock at the Fair's Administration building which inexorably ticks off the days, the hours, the minutes and seconds remaining until the Fair opens.

When the clock strikes 10 a.m., on Wednesday, April 22, the builders will have departed and the first of an estimated 70 million persons (the figure is based on two six-month runs —April to October in 1964 and 1965) will pass through the gate. Inside the mile-square area, the site of the N. Y. World's Fair of 1939-40, a dazzling spectacle awaits.

$1 Billion Price Tag

For one thing, the New York World's Fair will be about nine times the size of the Seattle Fair of 1962. More than 150 individual pavilions will display a variety of construction methods and materials, a circumstance which prodded designers and builders to experiment and display individuality and boldness.

A hint of the scope and grandeur of the Fair came in December, 1962, when the late President John F. Kennedy turned the first spadeful of earth for the $17 million Federal Pavilion. This sum is dwarfed by the more than $124 million spent by Federal and State governments to provide the finest possible access system for motorists visiting the Fair, (the road system is a permanent addition to the Flushing Meadow landscape) and completely engulfed by the total investment in the Fair of over $1 billion.

A determined visitor, sound of wind and blessed with stout legs and uncomplaining feet, can visit all of the exhibits and attractions if he devotes five hours a day, for 30 days, to the task. He might cut down on his time by boning up on the variety of public transportation available on the Fair grounds. Bus tours start at $3 and range downward to two 75 cent tours and two 25 cent bus rides that circle the Fair.

A loftier view is provided by the Monorail, a scenic ride around the perimeter of the Lake Amusement Area. Each train contains two cars, each with a capacity of 80 passengers. There are six trains in all, all air-conditioned.

While the Fair will be a feast for the eyes and a source of food for thought, the demands of the inner man have not been ignored. There are 113 restaurants with a total seating capacity of 30,552; for the vertical eater, the Fair has 25 snack bars scattered at strategic locations.

Transportation No Problem

Getting to the Fair grounds is no problem after the traveler reaches the New York area. Most of the major airlines in the world serve New York through John F. Kennedy, La-Guardia and Newark, N. J. Airports. Overseas, trunk and feeder carriers offer regular and charter service to the Fair from all U. S. and overseas airports.

Where to stay while visiting the Fair presents no problem. More than 350 hotels and motels in New York and vicinity have signed agreements not to raise rates during the Fair seasons. For specific and general hotel and motel information write: N. Y. World's Fair Housing Bureau, 30 Rockefeller Plaza, New York, N. Y., 10020.

If you are flying your own plane to the Fair there are 10 nearby fields offering tie-down space but limited hangar shelter, along with the usual goods and services.

Eastern Airlines has direct bus and air shuttle service from its pavilion at the Fair to and from Boston and Washington, via LaGuardia Airport.

Helicopters will land at the Fair's Helipad, a $2,680,000 structure topped by a 150-foot by 200-foot landing pad 120 feet above the ground. A two-level restaurant and lounge, suspended directly beneath the Heliport, provides a panoramic view of the entire Fair grounds as well as the New York City skyline.

Flights originate from Newark, Kennedy, and LaGuardia Airports, as well as from the Wall Street Terminal in New York City.

The New York Transit Authority recently ordered $50 million of ultra modern subway cars and improvements for the Flushing line. The new cars, 400 of them, whisk passengers directly from Grand Central Station (and points en route) to the Fair in about 20 minutes for a 15-cent fare. The system is geared to move as many as 150,000 people each way each day.

The Long Island Railroad has constructed a special World's Fair Station connected by ramp directly to the Main Gates of the Fair. This railroad provides fast, regular service directly from Pennsylvania Station—34th St. and 8th Ave.—to the Fairgrounds. Cost of the 12-minute trip is 50 cents each way; children under five free.

Most New York, New Jersey, and Connecticut bus companies have regular and frequent fast service directly to the Fair from major points in the City, Long Island, and surrounding areas.

America's "Seven League Boots," the family car, has been provided for; there are 20,000 parking spaces in the immediate vicinity of the Fairgrounds at all times, with an additional 9000 available when the New York Mets and Jets are not scheduled in adjacent Shea Stadium. The parking fee of $1.50 per day includes free shuttle service to the entrance gates; the Flushing Airport lot shuttle service costs 15 cents.

Fairgoers arriving by charter bus can park the rig for $8 per day—reservations for single days or the entire Fair season can be made by writing to: Mr. William Kraus, Security Building, New York World's Fair, Flushing 52, N. Y. Unreserved space for parking or loading and unloading is $1 per hour up to a maximum of $12 per day.

The nautical set has not been overlooked. The World's Fair Marina has docking facilities for 1000 boats.

Once inside the gates what can the visitor expect to see and how much will it cost him? After paying his entrance fee of $2 per adult, and $1 per child, Fair officials estimate the average visitor will spend about $7.50 a day, most of it for food, rides, and souvenirs. Most of the attractions and exhibits are free and many of them will pass out free samples of their wares and services. One exhibit will feature free beauty consultations by highly-trained beauticians who will feed individual beauty data into a computer which will advise women on suitable shades of cosmetics.

50 Nations On View

The atmosphere, regional flavor, and the products of more than 50 nations will be on view:

In the African Pavilion you can order a drink and a meal in an outdoor "tree house" bar and restaurant, looking down on an outdoor stage where African dancers will perform.

If your taste runs to barbequed beef, hot and steaming, the Argentine Pavilion will have at least one, and probably more, oxen turning on a spit in full view of the diner.

Austria, emphasizing its mountainous terrain and tourism, and its rich timber industry, has shaped its Pavilion in the letter "A."

Belgium is represented by a village of 124 houses, with restaurants and night clubs and featuring a huge beer cellar seating 1800.

Calypso singers, steel bands, and limbo dancers, performing against a background of handicraft displays typical of the islands of Jamaica, the Dominican Republic, the Bahamas, Trinidad, Tobago, Barbados, Bermuda and Virgin Islands, can be found in the Pavilion of the Caribbean.

A wine tasting cafe and a restaurant of distinction highlight the Pavilion of Paris and French Industry.

Like other extravaganzas of its sort, the New York World's Fair will have its share of sobersided, business-is-business, displays featuring the latest in industry and technology. But the planners have not neglected the "fun" side of going to a fair.

American and foreign giants of industry will be represented but in place of the "hard sell" or the "there it is, take it or leave it," characteristic of some state and world fairs, the New York World's Fair will brighten the commercial vista with liberal doses of entertainment and lively presentation of materials, products, and techniques.

Nine Fiberglass dinosaurs of various shapes and sizes, but all terrifying in spite of their obvious fraudulence, mingle easily in an atmosphere featuring the first public demonstration of nuclear fission. The dinosaurs will be indifferent too, to the City of New York's detailed scale model of the city including all of its 840,000 structures.

The variety is endless: the Hollywood-California, U.S.A. exhibit displays the glamour of the film capital. Visitors pass through a simulated entrance to Graumann's Chinese Theater to wander through sets and watch the making of an actual movie; a replica of the Spirit of St. Louis, the Mercury Space capsule and a simulated rendezvous in space will highlight the Missouri-First in Air, First in Space Pavilion.

Maryland will offer a film depicting the Battle of Ft. McHenry and the writing of the Star Spangled Banner; the magic of Walt Disney has been enlisted by Illinois which will have a "living, moving, breathing" (plastics and pneumatics do the trick) figure of the 16th President in its pavilion.

Night Clubs, Too

The Fair will have something of almost everything from almost everywhere—the "almost" does not include what seems to be built-in features of every carnival and country fair: a garish, gaudy, tinseltown, motheaten midway with cheap sideshows, freaks and conmen on the hustle.

But the Fair will have fun, lots of it, and in a wide variety to suit every taste. John Ringling North Circus will perform and parade around the Fair every day. Night clubs will abound in the Amusement Area bordering on Meadow Lake. While the exhibits will close at about 10 p.m., the wining and dining emporiums and showplaces will remain open 'till 2 a.m.

What's to become of it all, after the Fair is over in October 1965? Long-range plans envisioned the Fair site as eventually developing into Flushing Meadow Park and ultimately becoming the Central Park of Queens.

A major Fair structure, the 55,000-seat Shea Stadium, built by the City Department of Parks, will provide an anchor-point for the Queens County Park. Over 3000 trees have been planted in street malls and open-area ground has been covered with decorative evergreens and floral displays. Remaining will be the $1 million worth of improvements at the Queens Botanical Gardens, including children's gardens and educational displays.

Unisphere Will Remain

And dominating the scene will be the $3 million stainless steel Unisphere set in a reflecting pool. This, and four heroic-sized sculptures and several of the fountains will become permanent parts of the landscape.

The Hall of Science will serve as an important educational auxiliary facility. The amphitheatre, with such permanent improvements as a 250-foot revolving stage and an enlarged, modernized ice skating rink in the City Building will remain.

One thing is sure—whatever buildings come tumbling down and whatever are left standing, the Fair will always remain whole and intact in the minds of some 70 million who looked in on what has been described as the last of "the really, r-e-a-l-l-y, big Fairs."

(For ticket information and special price arrangements for groups write: World's Fair Tickets, Room 2762, Time & Life Building, New York 20, N. Y.)

QUESTION BOX

Q. If an employee dies, may his survivors continue his health benefits coverage?

A. Yes, if—

(a) The deceased employee was enrolled for self and family at time of his death:

(b) At least one family member is entitled to an annuity as the survivor of the deceased employee.

(c) The combined annuities of all survivors eligible for health benefits coverage is sufficient to pay the withholdings required for enrollment in a plan.

Q. How is the amount of a cash award determined under the provisions of the Recognition and Awards Program?

A. An award may be based on intangible benefits alone, tangible benefits alone, or a combination of intangible and tangible benefits. Special schedules are used to determine tangible or intangible benefits. Where the award is based on a combination of benefits, both schedules are used to determine the separate amounts and these are added together to determine the total amount. The cost of implementing a contribution affects the benefits obtained and is taken into consideration in computing the amount of the award.

More detailed information can be obtained by consulting FAA Handbook PT P 3450.2A, "Recognition and Awards Program."

Q. Do the new Position Classification Standards for the Air Traffic Control Series, GS-2152-0, preclude the classification of positions below GS-10 at high activity terminal (Tower) facilities?

A. No. Positions may be established at GS-6 and GS-8 in these Towers as well as lower category Towers and Centers. The new standards merely define the highest grade levels which may be assigned to particular kinds of work.

For example, when an employee is assigned to Flight Data duties at a Tower, the position is classifiable at GS-8 since the standards specify GS-8 as the highest grade level assignable to those duties. Similarly, if an employee is assigned to Military Flight Service duties at a Station, the position is classifiable to GS-7, and so on. In other words, the grade level of a position is determined by reference to the standard for the particular kind of work assigned to the position.

MANAGEMENT INSTITUTE IS HELD IN WILLIAMSBURG

EA's first Management Institute since decentralization of management institutes to the regions was held at the new conference center at the Williamsburg Lodge in Williamsburg, Va. The next management institute will be conducted in the Spring. In addition to EA's staff representatives and Washington management officials, three college professors were hired as consultants in the areas of work management, communications and people management. Above left to right: (first row) Culver Rausch, Al Klosek, Sam Englander, Irv Mentcher, Walt Sunden, Harry Brewer, Waldo Aldrich, Leo Marshall (second row) Fred Rochmis (Staff), Bob Brown, John Magin, Fred Liebe, Manny Nathanson, Jack Markowitz, Jack Redmond, Tom Baker, Bob Fletcher, Ozzie Villaume (Director) (third row) Jack Cayot, Jerry Pannek, Bill Bersch, Lloyd Boggs, Joe Zuewski, Frank Shaefer, George Hessler, Walt Buechler (fourth row) Harry Hubbard, Ben Scott, Ed Fitzpatrick, Harry Schellenberg, Don Capone, Dave Floyd, Clair Monroe (Staff).

Former EA Employee John Narciso Is Crowned Navy Wrestling Champ

John Narciso former FAA summer employee and son of Angelo J. Narciso (Chief, Communications Plant Unit I&M Division) won two championships as a representative of the Mare Island, California, Naval wrestling team.

John, a graduate of Rutgers won the Freshman Invitation Tournament, winning a total of ten straight matches.

Now a LTJG, John is stationed on a Destroyer Escort at San Diego.

TOASTMASTERS GROUP FORMED

From DIA: Left to right: Robert V. Kurtz, Treasurer (ATC Specialist, DIA ATCT); Edward Stoddart, Sergeant-at-arms (Supervisory Controller, Delta Airlines); John A. Curran, President (Chief, SMS 316); Walter Britton, Educational Vice-President, (Chief Controller, DIA ATCT); Calvin S. Fischer, Adm. V/P (Radar Section Chief, SMS 316).

Employee Recognition and Awards

WASHINGTON ARTCC HONORED BY LOUDOUN COUNTY

Frank Caldwell, (l) Manager, Chesapeake & Potomac Telephone Co., Leesburg, Va., presents Loudoun County Chamber of Commerce 1963 Certificate of Achievement Award to Washington's ARTCC Chief, C. C. Watson.

FAA's ability to become a vital and active part of community life was amply demonstrated recently when the Loudoun County Chamber of Commerce presented its 1963 Certificate of Achievement Award to the Center for "Outstanding Contribution to Better Business in Loudoun County." Washington Center was dedicated only last June by Administrator Halaby, Eastern Region officials, and a host of Loudoun county officials and guests. Since then, many ARTCC personnel have moved to Leesburg and Loudoun county, away from their hectic duties as FAA's air traffic control specialists, and have become absorbed in Virginia's business and social life. The award, made by Chamber of Commerce President Frank Raflo at the Chamber's 20th Annual Awards Banquet, echoes Raflo's statement that those in Washington ARTCC "have through their active work in the community become a vital part of the county in their short time here."

GOVERNOR SCRANTON PRESENTS AWARD TO DIEBLER

Dean Donald Diebler (fourth from left) receives State Aviation Mechanic Award from Governor William Scranton (second from left). Diebler designed and manufactured a new brake bleeding device. Present for the presentation (left to right) George Steadman, FAA; Governor Scranton, State of Pennsylvania; John MacFarlane, Director, Aeronautics Commission; Dean Donald Diebler; Robert Lyons, FAA; and Arthur Horst, Vice President of Reading Aviation.

Boston Flight Service Station Receives Special Service Awards

Boston Flight Service Specialists pose in group following presentation of a Special Act Award by EA's AT Chief W. T. Deason and Boston AC Sid Poe.

Air Traffic Division Chief, W. T. Deason, presents Special Service Award to Assistant Flight Service Specialist Donald E. O'Brien. Observing, Paul J. Burke, Ass't. Flt. Service Specialist; Vincent T. Kirkell, Watch Supervisor; Daniel W. McLaughlin, Flt. Service Specialist; Simon Griesdoff, Flt. Service Specialist, and George Lynn, Chief of the FSS.

Eastern Region's Air Traffic Division Chief, W. T. Deason, assisted by Boston Area Supervisor S. L. Poe and Boston FSS Chief George Lynn, presents Special Service Awards to members of the Boston Flight Service Station. Twenty-eight specialists received Special Act Certificates and cash awards. The specialists were commended for maintaining a high degree of morale and efficiency throughout a protracted period of extremely adverse working conditions and hardships during the reconstruction of the old terminal building at Logan Airport.

TWO RECEIVE SSP AWARD

Mr. T. F. Lynch, Acting Chief, Materiel Branch, presents Quality Performance Award to Mrs. E. Wine, (l), and Sustained Superior Performance Award to Mrs. N. Donnelly, (r).

Employee Recognition and Awards

EMERGENCY LET-DOWN PROCEDURE WINS AWARD

B. J. McClintock (l) receives check from M. Bortz.

On December 24, 1963, Reading Tower specialist B. James McClintock received a cash award for his suggestion that all Direction-Finder equipped facilities develop emergency let-down procedures and for developing such a procedure for the Reading, Pennsylvania, airport.

Intended for use in emergency situations (low fuel, navigation equipment inoperative, lost on top of clouds) the procedure defines headings and altitudes for the pilot to fly in order to locate the airport in the shortest possible time.

Since implementation, the let-down was put to good use twice. On one occasion, a Cessna en route from Cleveland to Newark, decided to land at Reading because of low fuel supply. The pilot was steered over Reading but was unable to find a hole in the clouds to descend VFR and was not familiar with the ILS approach. Coincidentally, McClintock was on duty at the time. He suggested a D/F let-down, the pilot accepted and was descended below the clouds and landed safely with about 15 minutes fuel remaining.

The award was made in a presentation ceremony at the control tower by Chief Controller Marvin K. Bortz.

Morgantown FSS Briefs Senator Randolph

Morgantown FSS personnel had a special treat recently when West Virginia Senator Jennings Randolph visited the Station for a briefing. Senator Randolph also discussed with aviation officials plans for airport improvement in the coming year. Left to right: Domenick Bellotte, FSS; Hulton Schuler, FSS; Fred Hinson, CSMS; Senator Jennings Randolph, and Harry Shaw, FSS.

Presentation of "Crew of Month" Awards Made at New York Center

New York Center's ATCS's pose following presentation of "Crew of the Month" awards for November and December. Left to right: D. Guempel, W. McFadden, J. Van Auken, S. Harvey, J. Drew, J. Frank, W. Schuldt, W. White, N. Walsh, B. Baker, H. Edwards and Crew Chief W. Sadowski.

PR IDEA PAYS OFF IN CASH

Sumner Loomis, left, Chief, Louisville FSS presents Francis Ratterman, right, with an award check for his beneficial suggestion which improved FAA handling of public relations information. The ceremony took place at the Louisville FSS.

D/F SUGGESTION NETS CHECK

In a ceremony which took place in the tower cab of the Mansfield CS/T, Chief Willard Lucas, left, presents ATCS William Byberg with an award check for beneficial suggestion which improved local D/F effectiveness.

FAA-ADC SPEED JOINT ATC PROGRAM

FAA's ATCOR J. Strnad of the NYADS is welcomed into the 26th Air Division by Maj. Gen. A. C. Agan, Jr. Other ATCOR's assigned are (l to r) V. Spivey, Washington Sec.; E. Davis, Bangor Sec.; R. Hurley, Boston Sec.; H. Barnes, DCA Sec.; and A. Stapf, Montgomery Sec.

Flight and operations officers from McGuire AFB (above) visit NY Center and exchange thoughts on mutual benefits of new operational procedures. (Below) Controllers J. Kontje and George Van Conas of NY Center shown with F-101-B prior to controller orientation flight.

In September 1963, Deputy Administrator Lt. General H. W. Grant signed an Order outlining the policy and objectives of the Agency, concerning the integration and improvement of air defense activities within the air traffic control system.

The basic objectives of the program are to (1) eliminate control of aircraft by two independent Agencies in the same airspace to the maximum extent possible; and (2) provide technical assistance. The Standards Branch of EA's Air Traffic Division, EA-580 is charged with the overall conduct of this important Agency program. Implementation is being accomplished in phases; however, the ultimate goal is complete control of all Air Defense Command operations by FAA's air traffic control, except for the actual intercept portion of an active air defense mission or planned air defense exercise.

Before the ink had dried on General Grant's signature, many wheels were set in motion to insure success of the project. Implementing an Agency Order requires much thought, effort, and diligent coordination. Recognizing the importance of the program, HORIZONS' representatives covered the story. A pictorial presentation of some of the people involved in this project follows.

New York Center's part is varied and detailed. Prior to the actual commencement date it was necessary to draw up a Letter of Agreement (operating rules). Many hours of thought and coordination went into the preparation of the agreement. The Letter of Agreement establishes procedures for the handling of ADC interceptor aircraft under all environments (radar and non-radar). The agreement provides for Air Traffic Control assigned airspace, flush operations, handling of interceptor aircraft by the Center during the departure phase, en route phase, and recover interceptor aircraft at other than the base of scramble origin.

ATC operations representatives meet at Eastern Division Headquarters. (l to r) C. Newpol, Assist. Division Chief, EA-500; J. Strnad, ATCOR McGuire AFB, N.J.; E. Davis, ATCOR Topsham AFB, Me.; O. Bakke, Dir., R. Hurley, ATCOR Hancock Field, N.Y.; V. Spivey, ATCOR Fort Lee, Va. and Harry Barnes, ATCOR Washington, D. C. ARTCC.

The agreement then had to be transformed into something tangible—among other things, hard items such as maps and charts depicting the geographic area covered and the wild blue yonder. This task fell to NYARTCC's cartographer.

A veritable mountain of paperwork followed. Part of this mountain included the actual typing of a Letter of Agreement between the military unit's operation in the New York Area airspace and the controllers responsible for providing the service.

The Center's training department fell heir to the unenviable task of providing controllers, through lectures and other formal training, with sufficient data to insure complete understanding of their vital role in this new operational procedure.

Historic Moment

When completed, the Letter of Agreement was accepted by Air Force Brig. Gen. Theron Coulter.

To fully understand the problems of our "business associates," exchange visits were arranged, the military coming to New York Center and Center controllers visiting the various Air Force Bases concerned.

Flight Familiarization

Another step in the Agency's effort to understand the problems of the "guy in the cockpit" involved the Flight portion of a mutual exchange tour. This tour consisted of a visit to the 2043 Air Force Communication Squadron control facilities and included the control tower and ground control approach (GCA) unit, where the controller was invited to "sit in" and monitor a radar position of operations. This was followed by a visit to the weather detachment, base operations, and one or both of the fighter interceptor squadrons where controllers were briefed on the performance and characteristics of the F101B. A cockpit checkout followed, terminated by an orientation ride.

Continuing Cooperation

In the interest of continuing cooperation between the Air Defense Command and the FAA, and to lend emphasis to the program, the Agency created permanent FAA positions known as Air Traffic Control Operations Representatives (ATCORs). EA has four such positions with assignments as follows: McGuire Air Force Base, N. J.—James Strnad; Ft. Lee, Va.—Victor Spivey; Hancock Field, N. Y.—Robert Hurley; Topsham Air Force Base, Me.—Earl Davis. In addition EA assigned Harold Barnes as an Assistant ATCOR, assigned to the Washington Air Route Traffic Control Center.

Historic moment when AF Brig. Gen. Theron Coulter signs Letter of Agreement. Looking on are T. LePore, NYARTCC, (left) and B. Anderson, ATD, Regional Hq.

Leo Tedesco, Chief Domestic Operations and Lou Imundo, Chief of Planning (standing l to r). Seated (l to r) J. Staut, Chief of Oceanic Operations, and Brave T. LePore discuss the Letter of Agreement.

Charting the course. "Chuck" Kowalski (left) and Maurice Black, New York Center cartographer verify accuracy of mapping concerning New York ADS Letter of Agreement.

Danger! Lady at work. Marylin Grispin, one of the NY Center lovelies, types master copy of NYADS Letter of Agreement.

Stan Andreichek, Chief of Proficiency and Development shown completing the final training procedures necessary for control personnel implementation. Over 1200 man-hours of training were necessary to prepare NY Center's controllers.

Control personnel visit McGuire AFB apropos of FAA/ADC agreement. Standing (l to r), S. Newman; H. Eisbrough, Watch Supervisor; J. Johnson; E. Freund and J. Zagami. Seated, Capt. Evanchow, intercept director, McGuire AFB.

FAA-USAF, CERTIFICATE SIKORSKY CH3C 'COPTER

Regional Director Oscar Bakke presents the S-61R/CH3C Type Certificate to Lee Johnson, President of the Sikorsky Aircraft Division, United Aircraft Corp. Others (l to r): EA's Flight Standards Division Chief, C. B. Walk; General Marcus Cooper who accepted the 'copter for the Air Force; and Capt. C. Fink, U. S. Navy representative at Sikorsky. (Below) This is the CH3C, turbo-powered, amphibious 'copter ready to go

An Agency milestone was passed recently with the issuance to Sikorsky Aircraft of the S-61R/CH3C Transport Helicopter Type Certificate. The type certification program was a coordinated effort by Sikorsky, the U.S. Air Force, and the FAA. A Memorandum of Understanding, signed by the Air Force and FAA paved the way for a program in which the Agency represents the Air Force to insure not only type certification but also fulfillment of additional contractual requirements beyond type certification. The CH3C is primarily designed for use as an amphibious transport for troops, cargo, and small wheeled vehicles.

EA Installs Directional Waveguide ILS Localizer

The new antenna array of Directional Waveguide ILS Localizer at the Greater Pittsburgh Airport, Pittsburgh, Pa. was commissioned in January 1964, making it the eighth such ILS in operation in the Eastern Region. The installation greatly improves the conventional Instrument Landing System in that it concentrates most of the radiated energy in a narrow sector along the runway centerline. The advantage, therefore, is that it minimizes the undesirable effects on facility performance due to reflecting objects. This improvement was accomplished in such a way that no change was required either in aircraft receiving equipment or in approach procedures.

In addition, similar installations are now in progress at the J. F. Kennedy International Airport and at La Guardia Airport.

Bedford Area's Condensed First Aid Class Graduates 12 in Week

Twelve employees of the Bedford areas "wrapped up" a concentrated one-week session to earn the area's first First Aid diplomas of 1964. Conducted by Sector Chief H. L. Kennedy (Bedford FIDO) at the request of the Bedford Area Occupational Safety Committee, the course saw personnel from Bedford Tower, FIDO, Norwood GADO, ATAO-BOS-20 and FSAO-BOS-50 participate. An advanced course exploring the more complex areas of First Aid treatment has already been scheduled, with a tentative enrollment set at 20.

Carol Anne Byrne, Bedford FIDO, demonstrates that first aid can be fun, as well as practical. Willing "patient" Woodworth Cleak has suffered a third degree burn (simulated), and under the expert care of 'nurse' Byrne and assistant Albert Fontaine (Bedford Tower) finds himself medically "wrapped up" in his work. Close scrutiny of instructor Harold Kennedy indicates a well done.

Albert Fontaine of the Bedford Tower examines the "wound" of Woodworth Cleak, Bedford FIDO, as Carol Byrne, also Bedford FIDO, applies a sterile dressing.

This practically "wraps up" the course in First Aid.

Instructor H. Kennedy (l.) adds finishing touches.

SABOTEURS - EXPERTS IN BOMBS, ARSON, RIOTS AND WORK SLOW-DOWNS

What is sabotage? Webster tells us that sabotage is the "commission by a civilian or enemy agent within a country of any destructive act designed to impede the armed forces, or any act or neglect that retards essential industry, public services, etc."

The word came into being in the nineteenth century when French Unionists, prevented from striking, put their "sabots" or wooden shoes into the gears, wheels, or loom of their machines. Consequently, the practice of hampering arms production, or the outright destruction of combat material by enemy sympathizers or agents dressed as civilians or military personnel, has come to be known as "sabotage."

There are some persons who would like us to believe that sabotage is something that takes place only during times of war. Nothing is further from the truth. The Germans first learned the importance of organized sabotage during World War I, when trained agents were sent to this country, long before we got into the conflict, to hamper industrial output and slow the supply of materials to Britain and France.

Soon after Hitler's rise to power in 1933, he established a school to train saboteurs. In this school, agents were taught to use explosives and incendiaries, and were instructed in methods of damaging machinery, power plants, fuel, storage tanks, and other installations vital to the enemy.

In order to combat the saboteurs, we must familiarize ourselves with the basic tactics they use to try to undermine our national security. Types of sabotage may be mechanical, fire, bacteriological and poison, labor, political, and psychological.

Mechanical sabotage refers to any purely physical action and covers everything from throwing water into a crankcase to blowing up a bridge. It could involve the placing of foreign matter into fuels or lubricants, such as sugar in gasoline, or sand, glass and emery dust in oil. The malfunctioning or destroying of machinery is frequently accomplished by partially cutting wires, driving nails into cables or cutting through bolts and rivets.

Delayed action incendiary bombs, and pencil and thermite bombs are often used by saboteurs to wreck installations or equipment by fire. Aircraft, trains, factories, ships, warehouses, barracks and ammunition storage areas are generally the chief targets of this type of sabotage.

Sometimes the saboteur will attempt to pollute water and poison food. Moisture often serves as well as poison to ruin food. The sabotage of refrigeration machinery is another effective method of ruining food.

The fomenting of strikes or disputes and the effecting of work stoppages in factories producing weapons or ammunition is another of a saboteur's favorite pasttimes. Slow-down movements are also incited by saboteurs using specious grievances. Another favorite maneuver of the trained saboteur is to work himself into a position of some responsibility where he will be in an excellent position to act as a strike provoker.

Saboteurs may try to encourage certain elements of the population to riot against the government's course of action. Political riots inspired by communist agitators against established Middle Eastern governments have been commonplace since the close of World War II.

Industrial sabotage is a basic doctrine of the Communist party and other revolutionary bodies. It is the most effective method that can be applied against a national defense emergency effort. The unquestionable existence of this doctrine and the known existence of many groups within this country available and willing to undertake such tasks, place this hazard higher up on the list of risks confronted by our industry than at any time in the history of this country.

Psychological sabotage is the systematic undermining of morale, the agitation of public opinion, the fomenting of doubt and obstructing a nation in carrying on a war. This sort of sabotage has already proved to be as effective and destructive as physical sabotage because when it is skillfully applied by enemy agents who use lies, rumors, and deception to instill fear, the will of the people or even armies can be so weakened that they will not resist hostile attack.

In addition to the trained saboteur we have the "nut" or psychopath, who for some imaginary grievance or even on a sudden impulse might attempt to knock out a tower or a center. Only extreme caution and vigilance on the part of security minded personnel can prevent enemy agents or psychotics from being successful.

Persons who do not belong in restricted areas or offices must be kept out. Care must be taken to guard against the possibility of enemy agents smuggling bombs and incendiary devices into centers, towers, aboard aircraft and other places vital to the security of the United States. The saboteur can be combated by a careful inspection of all equipment, frequent check up on physical safeguards and by watching for "kinks" all along the line.

By constantly guarding valuable equipment; providing foolproof storage for classified documents; denying admittance of unauthorized persons to restricted areas and by keeping an eye on every unidentified person can the saboteur be tied up and kept in close quarters. He can also be frustrated by moving quickly and decisively in reporting defects to authorities, reinforcing weak spots in all areas and challenging anyone about whom there is any doubt.

Boston ARTCC Awards

Waldo Aldrich, (left) Assistant Chief, Boston Center congratulates Thomas Gill, (right) and John Murphy, center, following presentation of Recognition and Award checks. Gill and Murphy, ARTC Specialist, improved Air Traffic efficiency at Boston Center by developing new SIGMET procedures.

Aviation Weather Research

William E. Eggert Aviation Weather Support Member of the System Design Team, SRDS, conducts session on Aviation Weather Research *in EA's Technical Alertness Program. His talk was part of a series of training conferences which included sessions in VTOL Aircraft.*

OTIS RAPCON NOW OPERATES FROM MOBILE VAN

EA's Mobile RAPCON at Otis AFB.

Last October, RAPCON operating quarters at Otis AF Base moved to a mobile van, where operations will continue until sometime this May. The reason for the mobile van—I & M technicians are modernizing the existing RAPCON with the latest communications and radar equipment.

The mobile RAPCON, believed to be the first of its kind used by the Agency, is housed in a semi-trailer van containing indicator positions, flight progress and communication consoles, voice recorders and auxiliary equipment such as an air conditioner and heater. The equipment groups are in a 35 foot semi-trailer van with expandable side sections which provides space comparable to existing fixed RAPCON installations.

The trailer includes lighting, air conditioning, power and signal distribution equipment as required in such a facility. There are three separate compartments for equipment within the van. The forward area, contains an air conditioner, heater, voltage regulator and power supplies. The center area, with expansible sides, provides the operations room, containing radar display consoles, flight progress and communication consoles and such navigational aids as radar beacon, telautograph receiver, video mapping equipment and data display boards.

The ASR and PAR indicator consoles, with the communication panels, are arranged in line in a manner familiar to present fixed RAPCON installations and allows existing flight control procedures to be used. The rear section at the entrance door contains voice recorders, audio amplifiers and a signal distribution center which terminates all cables from the radar sets.

Programming of the modernization, even for such a small facility, is involved. Radio and telephone lines are a major technical operation, requiring many miles of cable and wire connections.

All phases of this modernization program will be completed in May 1964. The ASR-5 radar will be installed and the operating quarters will be equipped with new overhead consoles.

EA points with pride to the diligent men who have spent many tedious hours and "who have encountered countless problems to accomplish the job on time. The I & M Team, headed by George Pope, are: John Tracey, Radar; Richard Ralph and Stanley Heiler, Communications, and William Anderson, Plant Engineer.

Otis RAPCON is under the direction of Chief Controller Raymond C. Knispel. Maintenance Chief of Systems Maintenance Sector #456 is Frank R. Warden, Jr. Sali J. Shaker, Supervisory Electronics Maintenance Technician, and the crew of SMS #456 deserve well-earned credit for the new program.

Erie SMDO SM Chief Carl Elser Began as Junior Radio Operator

L. J. Cardinali, (left) Assistant Chief, Systems Maintenance Division presents C. F. Elser with Retirement Certificate. J. Hanlon, Supervisor of the Cleveland Systems Maintenance Area Office, looks on.

Carl F. Elser, Chief, Systems Maintenance District Office at Erie, Pa. retired last December after accumulating more than 37 years of Government service.

Elser's interest in radio and electronics began in 1918 when he became an amateur radio operator. Three years later, he joined the U.S. Navy and was sent to the U.S. Naval Radio School at Great Lakes, Ill. He subsequently, served four years as a radioman on the Yangtze River Patrol Force while with the Asiatic Fleet. His interest in radio and electronics continued after his discharge from the Navy, and he later accepted employment with the Bureau of Lighthouses as a Junior Radio Operator.

After a brief tour of duty at Cleveland and Detroit, Elser returned to Erie, Pa. to assist with the installation, commissioning, and maintenance of an independent loop type low frequency radio range.

There he served in such capacities as Assistant Radio Operator, Principal Radio Electrician and Chief Radio Electrician in the Erie Sector. After a three year tour of duty as a Maintenance Inspector in radio and teletype at the Regional Office, he returned to Erie to assume sector duties as Maintenance Technician in-charge. From then on he was elevated to the positions of Zone Electronics Maintenance Inspector, Airways Technical District Supervisor and finally to Chief, Systems Maintenance District Office at Erie.

Administrative Support to European Region by EA

(Left to right) Lester Lord; Elwood Mundy, Chief FSD, EU Region; Irving Mark, EA's Executive Officer.

EA's efforts to provide administrative support to European personnel located at J. F. Kennedy International Airport without increasing costs has already paid the Agency rich dividends. EA's accounting division, under the tutelage of Accounting Chief, Lester Lord now provides payroll service, voucher audit, payment of employee travel voucher and use of the Imprest Fund Cashier facilities. EA's services to European Region expedites travel expense payments, reduces time lags in delivering salary checks, and services employees in leave, time and attendance reporting, and retirement.

CASSIDY LEAVES FOR PACIFIC

Jack Cassidy, Civil Engineer of the I & M Division, EA-760, has been accepted as Construction Management Engineer in the Pacific Region. Fellow workers gave Jack a "Bon Voyage" Party, amid cries of Aloha and Good Luck. Jack departed in February with his wife and infant daughter.

NAFEC'S GROWING LIBRARY

When librarians at the National Aviation Facilities Experimental Center speak of the population explosion they more than likely are talking about the booming birth rate of scientific journals, reports, and books.

Scientific and technical literature doubles its output approximately every ten years, a circumstance that obliges the modern researcher to confine his span of knowledge to focus on what is most pertinent.

To keep this torrent of scientific literature within reasonable bounds the NAFEC Library, Administrative Staff, underwent major reorganization and revitalization in the past year. The library staff was increased, budget expanded, and authority obtained to work actively on the information needs of NAFEC.

A major step was refurbishing the library itself. Periodicals are now displayed attractively on easy-to-reach shelving. Publications are organized and stored on modern, functional metal stacks. One-man study tables are provided for patrons who need privacy to concentrate on their work; comfortable lounge furniture is available for extended periods of reading.

While the external image of the library was being changed to make it an efficient, inviting study center, the content was not ignored.

The staff concentrated on collecting and organizing publications helpful to the patrons, informing the public of their availability, and finally getting them into the hands of the users. The book collection is up-to-date in the areas of most importance to NAFEC and is being extended into other subject areas.

The technical report material, so vital to a research and development operation, is being collected at the rate of 500 reports per month; the journal and periodical collection has been expanded to cover 350 current titles. Microfilms and the equipment to use them have been acquired for the storage of technical reports and journals.

The NAFEC Library does not attempt to collect all literature of possible interest to its users but relies in many subject areas on the collections and facilities of other organizations such as the Agency's Library in Washington, the Defense Documentation Center and the Technical Services Division of NASA. The channels of communications with these organizations and many others have been formalized and are used in the solution of NAFEC information problems.

In addition to the collection and loan of materials the library answers questions as diverse as "Where can I find the Koch altitude-temperature table?" and "Can you help me locate a report on evaluation of the AN/SPN-10?" These specific inquiries which may require a minute to a day, or longer, to answer intelligently, have increased 100 per cent within the past six months. The NAFEC library acts as a referral center for information on publications, their availability, acquisition and use, and offers advice on procedures or methods of approach involving the acquisition of information or documents.

In order to satisfy NAFEC's literature and information needs, an Advisory Committee was created to aid the library in establishing services, channels of communication, and guidelines for operation.

The NAFEC Library is now an alive, dynamic organization forming a vital part of NAFEC's total function.

Boeing's 733 features variable sweep arrow wing that can be moved in flight.

Fifty years ago, when the Wright Brothers created a mild ripple of world interest with the news of man's first powered flight, the clipity-clop of horses hoofs was the sound of dependable transportation; what's more, it was time-tested, down-to-earth and quiet. The Wright's flight, all of 120 feet, consumed 12 seconds—almost seven miles per hour, or about the pace of a man trotting along for exercise but determined not to overdo it.

The shadow of things to come was already visible before the end of that day, Dec. 17, 1903. On their fourth and final flight the Brothers Wright flew 852 feet in 59 seconds over the wind-whipped sand dunes of Kill Devil Hill, N. C. In one day they had increased the distance more than seven times; the flight-time, more than four times.

The race for farther, faster and higher was on. And it continues at a supersonic pace today. The United States and France and England are engaged in the development of supersonic transports that will rival in speed first-line fighter planes now in the inventories of the major powers.

Three aircraft and three powerplant makers have submitted designs to the FAA for the American supersonic airliner. These designs are now being evaluated by a team of aeronautical experts under the direction of Gordon M. Bain, FAA Deputy Administrator for Supersonic Transport Development.

He guides the efforts of a 210-member Supersonic Transport Evaluation Group composed of top technical personnel of the Agency, the National Aeronautics and Space Administration, the Air Force, the Navy, the Civil Aeronautics Board, and the Department of Commerce.

In addition, ten airlines will conduct independent evaluations. These are: American Airlines, Braniff Airways, Continental Air Lines, Delta Air Lines, Eastern Air Lines, National Airlines, Northwest Airlines, Pan American World Airways, Trans World Airlines, and United Air Lines.

What the final design will look like is still an open question. But one manufacturer's design proposes a canard wing, a stubby affair, just aft of the pilot's compartment and forward of the main wing—the Wright's first craft used the same flight surface pattern!

The specifications are more visible, having been spelled out last August in the FAA Request for Proposals. Speed would be in the Mach 2.2 range, or better. Administrator Halaby indicated this is the minimum desired; he expects the plane when delivered will fly even faster. Mach 2.2 is not exactly moping along—at its operational altitude of about 75,000 feet, the U. S. Supersonic Transport will be scorching along at more than 1500 miles per hour.

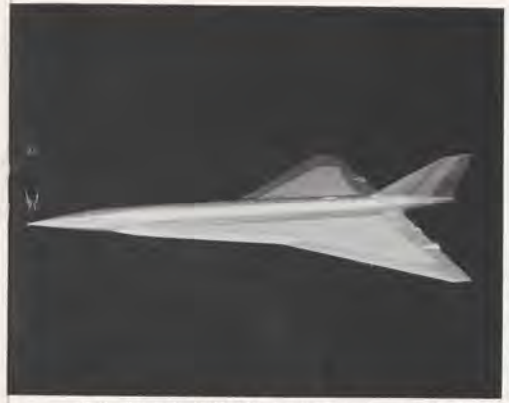
It will have a range of some 4000 miles. Noise levels will be comparable to today's big jets. It will be able to use all existing jet airports. Estimated costs may be about $750 million to $1 billion for development and about $25 million for early production models. Planning date for first flight is 1968, and for carrying passengers sometime after mid-1970.

Airframe companies which submitted design proposals are: The Boeing Company, Lockheed Aircraft, and North American Aviation. The engine makers are: Curtiss-Wright, General Electric, and the Pratt & Whitney Division of United Aircraft.

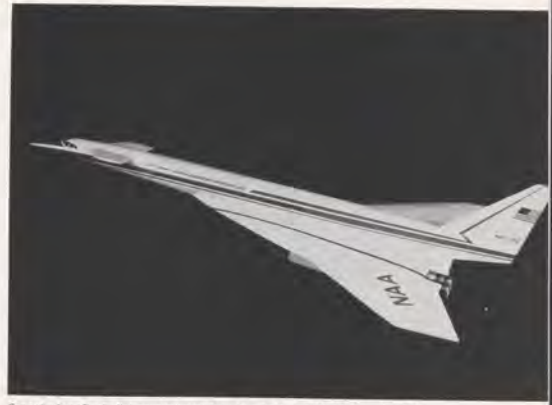
Boeing's supersonic transport features a variable sweep arrow wing which can be moved in flight. The wing is positioned at a moderate degree of sweepback—less than that of present subsonic jets—during takeoff and landing. According to the Boeing proposal this design provides a high degree of efficiency in both supersonic and subsonic flight.

The extended wing span will be 173 feet, four inches, and 86 feet, four inches with wing swept aft. Height of the vertical fin from the ground is 48 feet, four inches.

Boeing, which has designated its SST as Model 733, will have a gross weight of 430,000 pounds, carry 150 passengers, and have a non-stop range of more than 4000 statute miles at a cruising speed of Mach 2.7 (about 1800 mph). Boeing engineers say that by extending the fuselage, the 733 can accommodate 227 passengers.



Lockheed's entry has double delta wing plan for development of Mach 3 plane.



Canard wing aft of pilot compartment is unique feature of North American SST.

Boeing's tentative program calls for the first flight of the 733 in late 1967, and the first production plane in mid-1971.

Lockheed's entry is a Mach 3 design, capable of carrying 218 seated five abreast, based on an advanced "double delta" wing shape which permits a simplified fuel system and landing gear stowage. The forward delta, or triangle, of the double delta wing sweeps back sharply from a point just aft of the pilot compartment to about mid-point on the 222-foot-long fuselage. The wing then assumes a more conventional sweep angle to form the aft delta, which measures 116 feet along the trailing edge.

A notable feature of the Lockheed design is the "weather vision nose" which permits the nose section forward of the flight deck to be adjusted downward by as much as 15 degrees and provide uninterrupted vision for the pilot on takeoff and landing.

Lockheed expects its SST to cruise at 70,000 to 80,000 feet. Power will be supplied by four engines mounted under the wing in individual pods for easy maintenance.

North American proposes a Mach 2.65 design, capable of development into Mach 3. The aircraft will be propelled by four engines housed in single two-engine nacelles on the underside of each wing. It would have a range of 4000 statute miles with 35,000 pounds of payload, or a 40,000 pound payload on a non-stop New York-Paris flight.

The North American design includes a modified delta planform wing with a span of 121.4 feet, with a 65-degree sweep to the inboard panel, and a 50-degree sweep to the outboard panel. And, shades of the Brothers Wright, the design calls for a fixed canard surface, the trailing edge of which would have a maximum deflection of 40 degrees. Titanium would be the primary material for the wing, fuselage, canard and single vertical tail.

North American's plane would be 195.4 feet long, 48.4 feet high, and the fuselage would be 151 inches in outside diameter. This allows seating capacities ranging up to 187 passengers, seated four-five, or six abreast.

But who would want to travel at 1800 miles an hour? To find out, the Agency asked the people who would most likely have the best answers—the people who use the airlines for business and pleasure. When asked, 92 per cent of the passengers who pay an average of $300 for a round trip "coach flight" from coast-to-coast said they'd go supersonic if given the chance. Even if the ante was raised to $400, 67 per cent again chose to fly supersonically. Eight-two per cent of 1st class passengers interviewed liked the supersonic idea.

But what's the rush? For one thing, supersonic air travel is a natural growth development; for another, time is money. For businessmen, statesmen, and the military, hours shaved are hours saved for productive work.

With New York as a starting point, Buenos Aires will only be 3 hours, 46 minutes away instead of the present 12 hours, 40 minutes; London, 2 hours, 27 minutes, instead of 6 hours, 9 minutes; Tokyo 3 hours, 45 minutes, rather than 12 hours, 39 minutes; Anchorage, 1 hour, 49 minutes, instead of 6 hours, 37 minutes.

(Note: the above speeds are calculated in average non-stop jet speeds—such service does not exist—and future times on average speeds assumed for the SST.)

Will the U. S. be the first in the race for a commercially feasible SST? Administrator Halaby, in commenting on the stage of development of the French-English "Concorde" SST, looks at the future with confidence.

"We have 2000 hours of flight at Mach 2 or above. We have 100,000 hours of flight that's supersonic. We have large numbers of airplanes that are flying supersonically now. The British and French have almost none. And so we have the confidence born of a reservoir of talent and work and experience and facilities that, once the decision is made to go and the design is finalized, we'll catch up a great deal of time because of our know-how."

NAGE CONTRACT SIGNED

All ATC personnel at the Quonset RATCC/Providence CS/T are represented by the National Association of Government Employees under a contract signed recently. Here R. A. Forrell, Chief P&T EA reads the terms.

Silver Medal to Hulen

Allen D. Hulen, Deputy Assistant Administrator, EU (r) was awarded FAA's Silver Medal, the Meritorious Service Award, at a ceremony held recently in the London Office. George Prill, Ass't. Adm. EU, represented Mr. Halaby at presentation.

Starlifter Begins Takeoff Run

New C-141 fan jet here moves under its own power for the first time at Dobbins AFB Georgia. A fast freighter and troop carrier, the STARLIFTER will also be certificated by the Federal Aviation Agency to transport air freight commercially.

CIVIL AVIATION WINGING ALONG AT BRISK PACE

You don't have to be an astronaut to know that things are looking up in aeronautics. Project Gemini and supersonic transports may be way over the heads of most but thousands upon thousands of Americans have their heads in the clouds, too.

FAA forecasters speculate that civil air activity will step up its lively pace in the coming few years. Why is the outlook so good? The major contributing factors are an expanding economy, a growing population, the appearance of short range jet aircraft in the airline fleet, and continuing modernization of the airways and their ground supports.

The Agency experts foresee a number of prospects: a total of 62 billion revenue passenger miles for fiscal year 1968 compared with 45.9 billion for FY 63; international revenue passenger miles increasing at a greater rate than domestic traffic; an air carrier fleet that will be smaller in number as a result of increased aircraft capacity and a sizeable increase in the number of short and short-medium range jets.

General aviation activity is expected to expand considerably, too—both by hours and by aircraft. Sizeable boosts should be caused by the continuing rise in business flying. Already there are nearly 340,000 general aviation pilots who log over fourteen million flight hours in 80,000 general aviation aircraft.

Business flying now accounts for over 40 per cent of all GA activity and its continued expansion is expected to provide the major impetus for growth. Executives have become increasingly aware that the small airplane provides them with a fast and flexible means of transportation reasonably competitive with airline fares.

Although civil aviation activity will expand, military aviation in contrast is expected to show a gradual decline. This will be the result of the continuing shift from manned aircraft to missile systems and space projects. Active military aircraft (other than helicopters) operating within the continental United States are expected to decrease from approximately 19,500 at the beginning of 1963 to 16,300 in 1968. The number of military helicopters will show an increase during this period and many of the aircraft now in the fleet will be replaced by larger, faster aircraft.

In other areas of aviation activity, an over-all increase of about a billion gallons in the consumption of aviation fuels is expected by FY 68. The greatly increased consumption of jet fuel will more than compensate for the 50% drop expected in aviation gasoline.

A decline in the production of U. S. civil aircraft is anticipated. The peak of jet aircraft deliveries has passed and no significant production of turbo-prop engines is expected by American manufacturers during the next three years. Jet and turbo-prop aircraft will filter into the general aviation fleet during the forecast period, but their market will be limited by their relatively high sales prices. Production of general aviation aircraft, heavily dependent on the corporate and business flying market, will fluctuate with the cyclical changes in business.

FAA air activity and workload will be mutually related to the slowing rate of growth in air carrier flight activity, further expansion in general aviation flying, and a decline in military flights.

This means that controllers will have to handle about eight million more itinerant and local aircraft operations at airports with FAA/ATC service by 1968, and FAA air route traffic control centers, with IFR departures rising 33 per cent as more sophisticated aircraft enter both the commercial and general aviation fleets.

MARK MITCHELL SAYS THE "YAFTAS" HAFTA GO

If Mark F. Mitchell, Watch Supervisor in the St. Louis Flight Service Station has his way there wouldn't be a single blessed "Yafta" left alive in the country.

In a memo to his chief he draws a bead on the spreading "Yafta" menace and tells how he'd stamp it out.

What burns him up is to be told: "Yafta come back after five." Or: "Yafta pay before the first." Or: "Yafta get that from the Weather Bureau."

Mitchell admits his campaign to gun down "Yaftas" wherever and whenever they appear might seem like a small thing but he makes a good point when he says that one of the Agency's prime purposes is to give service. Too many "Yaftas" give the FAA a bad name.

He proposes Agency members revert to plain English to carry a commonsense, informative message like: "Our forecast for that area is valid only until 1300C with an outlook for another 12 hours. Perhaps the Weather Bureau can give you an opinion for a later date."

Yafta admit he has a point.

AIRPORT INDICATOR CHANGEOVER TAKES TIME

When New York's International Airport was renamed in memory of President John F. Kennedy last December, it followed logically that the indicator IDL for Idlewild should become JFK. The changeover was announced in January to become effective in April. Why the delay? Why not the next day? Because a great deal more was involved here than the simple matter of letters.

When the Federal Aviation Agency approves or changes an airport indicator it sets in motion a chain reaction that literally extends around the world. Hundreds of handbooks, particularly those pertaining to weather must be revised; the new sequence must be wired into the communications relay equipment (teletypewriters) that transmit weather reports and aircraft movements (arrivals, departures, etc.) over a national and international hookup; keyed into certain facilities that broadcast location information in Morse code, printed on en route charts, approach and landing charts, instrument approach and NAVAID charts used by the thousands in military and commercial flying; it must be programmed into computers in the electronic reservations, accounting and message switching systems used by most airlines, and into their teletypewriter routing systems; it must be printed in Post Office manuals, the FAA's Airman's Guide, various airline guides and publications of the Air Transport Association and the International Air Transport Association: on timetables, tickets, baggage tags, and forms.

While some of these things take more time than others to complete, from 60 to 90 days are needed to wrap the project in one neat package so that everything gets under way at once and not piecemeal.

On the subject of airport indicators, how many FAAers know that these letters—and they are used by all the airlines of the world—are taken from our air traffic control location identifiers? The practice goes back into ancient history (airline history, that is) into the middle twenties when the first NAVAIDS—low frequency radio ranges—were installed on the airways. In those days only two letters were needed to identify a position, but after World War II, when the airways and the airline business simultaneously expanded, we ran out of twoletter combos and raised it to three.

Even when it might not seem likely, the letters are always related to the locations they identify. For example: Detroit YIP—Willow Run Airport is located at Ypsilanti. Louisville SDF—that's for Standiford Field. O'Hare ORD—it used to be Orchard Airport. Saginaw—MBS it's a tri-city airport serving Midland-Bay City-Saginaw. Grand Canyon VLE—the airfield is at Valle, Ariz. Coffeyville, Kansas PPF—Airlines use Parsons (Kansas) Pep Field.

NAFEC SET TO WELCOME THE POWDER PUFF DERBY

Everyone is happy as FAA Administrator N. E. Halaby awards trophies to 1963 Powder Puff Derby winners, Virginia Winfield (left) and Mrs. Virginia Britt.

Finish line for the 1964 Powder Puff Derby will be the Atlantic City shoreline with contestants setting wheels down at NAFEC for the third consecutive year. A deadline of noon, July 8, has been set for completing the course. Some 80 aircraft will be flagged off at Fresno, Calif., on July Fourth, and already the local GADO is working with the race committee on arrangements for flight-planning this 18th annual classic known internationally as the All Woman Transcontinental Air Race.

The race is flown in contact weather under VFR conditions and is open to all qualified women flying stock model aircraft single or multi-engine, 145 to 400 hp. Winners are determined on a handicap basis computed from "par" speeds.

The five top winners will divide a purse of $3000.

Refueling and overnight stops are scheduled for Las Vegas, Nev., Winslow, Ariz., Albuquerque, N.M., Amarillo, Texas, Oklahoma City, Okla., Fayette, Ark., Cape Girardeau, Mo., Lexington, Ky., and Morgantown, W. Va. All flight service stations along the 2573-mile route will brief the racers and follow them with flight advisories. FAAers will stand ready with "assists" at every landing and there will be a big welcome at NAFEC for air contestants.

Certificate No. 5,000,000 Drawn In California by Former Sooner

NUMBER 5,000,000, Frank Hiawatha Chisum, "Tex" to his intimates, drew the five millionth medical certificate processed through the Aeromedical Certification Division in Oklahoma City. Chisum, 45, a building contractor in Garden Grove, California, received the "ticket" during the February FAA-University of California Aviation Medical Seminar held in San Francisco. Dr. Francis C. Hertzog, of Long Beach, Calif., long-time AME (1929) who examined Chisum, is shown making the presentation. Chisum, born in Oklahoma City in 1919 is of Indian ancestry and a great grandson of one of the brothers for whom the famous Chisholm trail was named.

Jack Frost Is Foiled Again by a Super-Duper Flying Salt-Shaker

"More snow?" wailed the snowbound of Van Buren County, Michigan, as they watched white flakes pouring from the skies.

To their relief, it was no mo' snow. It was salt flowing earthward from an airage salt-shaker. The idea, sure to be followed in other parts of the country, is one way of reducing the hazards of icy highways and intersections.

Trying to figure out a way to salt his county roads perplexed highway engineer Paul Kaiser. His solution has made truck salting methods obsolete in his part of the country.

Kaiser called on Bob Mueller, who operates a crop-dusting service from the South Haven Airport, where he is airport manager. In his maiden salting mission, Mueller was able to salt seventy highways and roads plus ten overpasses in three hours. In the next operation, time was halved after Bob had made several mechanical adjustments.

Van Burenites, who now have access to safe roads in the blizzard season, agree that the new method is worth its salt.

DROPOUTS—VOLUNTEER GROUPS CAN HELP THEM

Americans often complain—perhaps more as an excuse than a reason—that by themselves and without an Act of Congress they cannot change the course of American life. In one area, at least, these skeptics have been proved wrong.

The late President Kennedy's emergency program to reduce the number of school dropouts was conducted not by politicians but by sympathetic and patient citizens in 63 communities throughout the country. Churches, volunteer councils, parent-teacher associations and individuals working alone made the program so successful that President Johnson has said that the results are "far better than expected."

51.1 per cent of the high school dropouts and potential dropouts contacted during last summer's campaign returned to school in September. Further, of those who returned, 92.4 per cent were still in school months later.

The 63 localities that took part in the pilot project were alloted $250,000 from the Administration. However, there are no plans for the Federal Government to finance the program again.

As a result, the burden of responsibility is now on states, localities and private church or community groups. The idea behind the program is to contact dropouts and potential dropouts during the summer and get them back in school. After persuading the young people to continue their education, volunteers in the dropout program stay on the job during the winter.

The task is not one of sermonizing and lecturing. Volunteers, in fact, say that the most effective way of dealing with the youngsters is to reassure them of their own intrinsic worth. This can be done on a basketball court, at a picnic, in a movie theatre as well as in a lecture hall.

All across the country, Americans are urged to take part in stimulating back-to-school-for-dropouts programs. How can citizens help? By actively participating in P.T.A. groups. By impressing upon their own children the need to stay in school. By establishing volunteer corps or church groups to work with potential dropouts.

There are hundreds of steps that can be taken by responsible adults. All they have to do is to take the time to find out where they can pitch in. If no program exists in a given community, what better place to start than forming one?

Problem Figuring Your State Tax? Maybe the Answer Is Shown Here

This information is for employees who work in one state but live and are taxed in one of the following:

Alabama	2%
Alaska	3%
Colorado	2½%
District of Columbia	2%
Georgia	2½%
Hawaii	3½%
Louisiana	1%
Maryland	2½%
Massachusetts	1½%
Minnesota	3%
Missouri	1%
New York	2½%
Oklahoma	1%
South Carolina	2½%
Virginia	2½%
West Virginia	1%
Wisconsin	3½%

Adjusted gross wages are computed as follows:

Gross earnings, less number of exemptions ($26.00 for each exemption), are multiplied by the applicable percentage to arrive at the State income tax deduction.

Example: A person claiming four exemptions with $300.00 gross earnings per pay period in Virginia.

$300—($26.00 X 4) == $196 adjusted gross wages

$196 X 2½% == $4.90 deduction for State income tax

HEALTH FOR ALL

OFFICE OF AVIATION MEDICINE

TB OR NOT TB . . .

In Italy, twenty-four nursery school children caught active TB from their teacher. In Canada, one woman with active TB infected twenty-two others with active disease, some of them in no more than a week of contact. While both these instances are a little unusual, it is a fact that a case of infectious tuberculosis in a community is a great hazard.

Those who have never before come in contact with TB bacteria are particularly vulnerable. Someone in poor general health, exposed just once or twice to an overwhelming dose of TB bacteria, can come down with active disease. However, active tuberculosis is more likely to result from repeated exposure.

Because a case of active TB can do a great deal of damage in a short time, it is important to examine everyone who has been living or working closely with a person who has contracted active TB. Sometimes these examinations pinpoint the person who was the original source of infection, but didn't know he had the disease. Once found he can be treated before others catch his illness. At other times, the check up finds those who have just caught the illness from the original case. The earliest treatment is the surest.

- *Anyone can catch TB.* Older people tend to be at greater risk, whereas, not too long ago, TB was essentially a disease of young people.
- *TB is not inherited.* TB is an infectious disease and when one member of a family gets it he can pass the germs on to the others.
- *Special climate is not important in the treatment of TB.* With good medical care you can get well in any climate, from Alaska to Florida.
- *You can have TB and still feel well.* You may have TB and show no symptoms until the disease is advanced. A regular TB check-up-tuberculin test or chest X-ray—is a smart idea.
- *TB can be cured.* With early and proper medical care, a person can recover from tuberculosis and live a normal life. That's the good news in tuberculosis today.

FAA'ER "MISS AMERICA?"

Alaskan Region's Karol Hommon, secretary stenographer in the Program Control Section of the I&M Division, is "Miss Alaska" and will represent that State in the coming "Miss America" contest. Miss Hommon, a 5-foot 5½-inch 120-pounder was earlier elected "Miss Anchorage."

NOTES FROM THE DIRECTOR, SOUTHERN REGION

During the past decade, and especially in the last five years since the creation of the Federal Aviation Agency, great strides have been made . . . in fact, a "Paul Bunyan" step forward has been made in bringing the Federal Airways System up to a high standard.

The Congress has been most understanding, appreciative, and generous in providing the Agency with the necessary funds and personnel to modernize the Airways System.

Today, there is more than a billion dollars invested in equipment, and thousands of new people have been added to the Agency's work force. We are convinced that this capital investment of funds and the investment in people were most necessary and have, in fact, accomplished the goals set forth.

The modernization of the airways with the present generation of equipment is now approaching the completion stage. Our work force has been trained to operate and maintain the system, and our productivity quotient is steadily increasing.

But what about the immediate tomorrow? Where do we go from here?

During the past few years, we have had a tremendously accelerated Research and Development Program to find new equipment and new methods.

In the very near future, we will begin to reap the harvest of the research and development seeds that have been sown . . . we will shortly see new, highly-sophisticated, complex, "computerized," and automated equipment. This equipment is basically designed to reduce manual operations and free our controllers from this workload, giving them more time for vital air-safety decision-making.

Where does the individual fit into this sophisticated "black-box world" of tomorrow?

First and emphatically . . . he will be more important!

However, if our specialists rest on their laurels . . . are content with their present state of knowledge and abilities, in the automated world of the future, we will see a great dip in our productivity.

Individuals in this environment of tomorrow can benefit from now taking an inventory of himself and his knowledge level. He may then make the determination as to where he needs to apply himself in the furtherance of his training and be responsive to Agency opportunities for advanced training.

The specialist employee of FAA that intelligently and effectively gains the necessary knowledge of sophisticated components need have absolutely no fear of the future. For if a person can ever be considered indispensable, it will be the knowledgeable electronics specialist of the scientific tomorrow.

Jeff Cochran, Systems Maintenance Division Chief (l) and Bill Rucker, Installations and Materiel Division Chief (r) discuss with Director Basnight the new technical "know-how" that will be required to install and maintain automated and computerized equipment such as the Advanced Radar Traffic Control Service System (ARTS) now going into the tower at Atlanta airport.

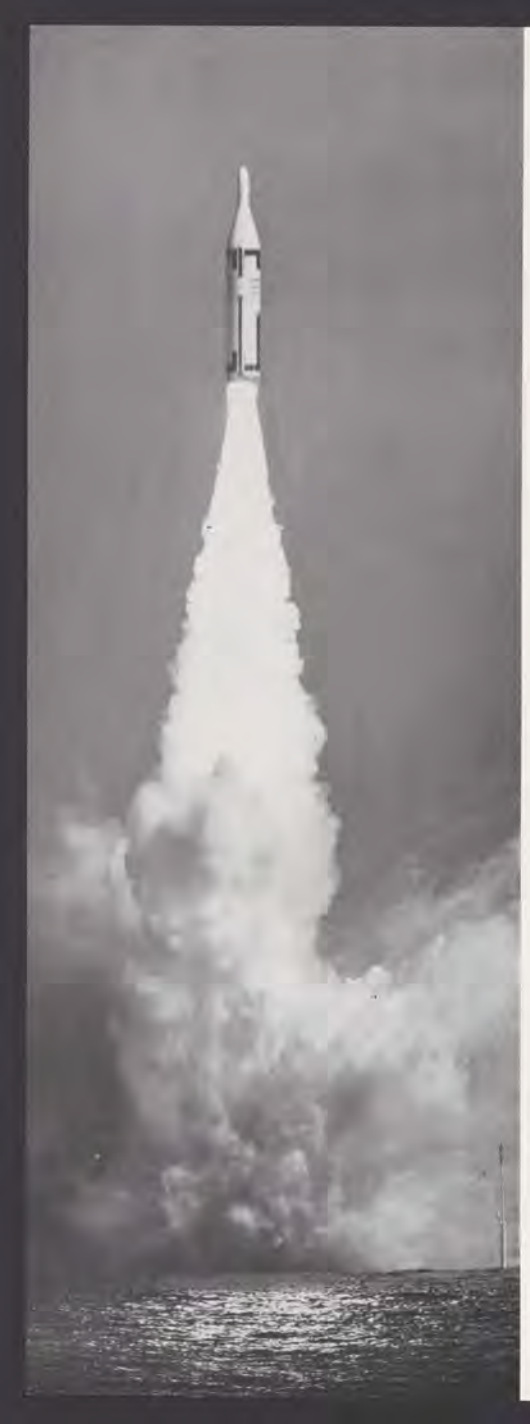
As the Agency moves to improve our services, equipment and help our people advance, will you, *individually*, help and do what you can to "stay ahead of the machine?"

Arvin O. Basnight

Director, Southern Region

WHO'S WHO IN STATE AVIATION

Here they are . . . the gentlemen who represent the Aviation Department in each of the seven Southeastern States and Puerto Rico, and who lend so much valuable assistance to us in the Southern Region in coordinating federal-state aviation programs. Shown from left to right as they assembled during the week of February 11th for their annual meeting at Southern Region headquarters are: Frank Stoutamire, John Bennett, Bud Moore, G. C. Merchant, Southern Region Director Arvin Basnight, C. E. Murray, John Dempsey, Buddy Martin, Artemis Segarra, Asa Rountree, and Ruben Sanchez.



CAPE KENNEDY / ATC COMPLEX

The POLARIS . . . the THOR . . . the MATADOR . . . the TITAN . . . the SATURN. Instantly, these names summon to our minds a kaleidoscope of pictures . . . astronauts . . . space capsules . . . bullet-shaped missiles blasting-off their launching pads into the blue sky and streaking out of sight in the "wink of an eye."

Synonymous with these awesome names is Cape Kennedy . . . the Air Force Missile Test Center and prime launching site for the nation's missile and space program. Cape Kennedy is located in the Southern Region near Melbourne, Florida.

All of us are acquainted in varying degrees with this important program. However, "FAA HORIZONS" will spotlight briefly the important role that our own Agency plays in this gigantic scientific venture which is being carried out jointly by the military and related civilian agencies in support of our nation's national defense and space programs. Here again, the Federal Aviation Agency is responsible for the positive and unerring safe separation between all aircraft, both civil and military and between all aircraft and missiles, whether guided, unmanned missiles or astronaut-bearing spacecraft.

Whether they are launched from the land, the air, or from far below the surface of the ocean, separating missiles from known air traffic in this huge "laboratory" is a prime and continuing responsibility of the FAA.

The vast airspace encompassed in this globe-girdling "proving ground" includes the immediate area surrounding the Cape and the Atlantic Missile Range (AMR) which extends for more than 10,000 miles "down range," finally terminating in the vast Indian Ocean. The Atlantic Missile Range includes the airspace over the island tracking stations at Grand Bahama Islands, San Salvadore, Grand Turk, Antigua, Puerto Rico, Trinidad, and Ascension, which points fall within the flight advisory areas of Southern Region's Miami and San Juan Air Route Traffic Control Centers.

The safe separation of air traffic throughout this test area is accomplished through close coordination between the Air Force Missile Test Center at Cape Kennedy and the two air route traffic control centers.

During the critical phases of a missile launching, it is the duty of the FAA in the Southern Region to see that all air traffic is rerouted away from the affected airways to alternate routes to provide the maximum safety margin. Normal routes of flight between Miami and northeastern United States are just east of the launching site, so air traffic must be rerouted inland to the west of the site.

Diversion of the dense air traffic in this area commences when the "countdown" begins and continues until the "all clear" is declared to the Miami Center by Cape Kennedy's Superintendent of Range Operations. As a missile streaks "down range" from the Cape, the critical "fallout" areas for booster rocket engine stages and instrumented packages are also a primary cause of concern to oceanic air routes as far south as San Juan, Puerto Rico. Here too, the air traffic must be rerouted or delayed for safety's sake.

As the nation's space exploration program accelerates, the FAA's highly-trained, vigilant, and dedicated people will continue to be responsive to the FAA's primary role . . . Guardian of Safety in Flight.

Successful Lady Controller Says:

"I Have the Most Fascinating Job!"

Radiating quiet dignity and poise, striking Margaret Jenkins, each day, seems to reflect an unassuming confidence and dedication to air traffic control that almost belies description.

As she bubbly and lightly told our "FAA HORIZONS" reporter one afternoon recently, "I have been fortunate to have a most interesting, fascinating, and challenging job in the field of air traffic control. There is never the feeling of sameness. Each day and hour is new and changing. You are playing an active role in the growth and progress of aviation."

This zest for her work unquestionably has been a great contributing factor to her successful career in air traffic control. Margaret Jenkins (known by hundreds as "Peggy Lorenzen" before her marriage to Mack Jenkins, who also is a career FAA employee) began as an air traffic control trainee with the CAA at Fort Worth in the Spring of 1943.

Margaret has progressed steadily and today is an Air Traffic Control Specialist (GS-14) in the Training and Management Group, Operations Branch of the Southern Region Air Traffic Division in Atlanta.

"FAA HORIZONS" discovered that Margaret is the highest-graded woman employee in the Southern Region following a recent survey which revealed that out of the 5504 FAA employees in this Region, there are 559 women employees. Interestingly enough, this same survey pointed out that in the Southern Region—among the ladies—79 are considered to effectively perform functions of leadership in these numbers and grade levels: GS-7—41; GS-8—3; GS-9—18; GS-10—2; GS-11—6; GS-12—3; GS-13—5 and GS-14—1.

Tracing Margaret's career after graduating with a Bachelor of Science Degree from North Texas State University at Denton, Texas, she joined the CAA at Fort Worth in 1943 as an Air Traffic Control Trainee (CAF-4). Incidentally, she was first hired by none other than Southern Region Deputy Director, Paul Boatman!

After completing her initial training, she was promoted to grade CAF-5 and became an Assistant Airport Traffic Controller in sunny El Paso. In '45, she became a fully-rated Air Traffic Controller (CAF-7).

During the summer of '47, she began work as an Airport Traffic Controller at Moisant International Tower in New Orleans. Here, she became a full-fledged convert to the gay New Orleans life; she lived in the quaint and artistic "French Quarter." Between "breakfasts at Brennans and dinners at Antoines . . ." she progressed in the Moisant Tower to the position of Watch Supervisor.

Then in 1959, with some understandable sadness at leaving New Orleans, but with a sparkle of challenge in her eyes, Margaret joined FAA's Southwest Regional Office at Fort Worth in the Manpower Utilization and Training Section (GS-12). From this point, in 1961, she was selected for promotion to GS-14 and reassigned to the Southern Region's new headquarters in Atlanta.

Margaret's career has been unique both as to the level of success and the unusual aspect of achievement in the air traffic control field—a field which principally is comprised of men.

When the Southern Regional Office was established, personnel with past experience in key areas were selected to form a nucleus around which to develop a full and seasoned staff. It was a difficult but rewarding experience. The members of this nucleus were challenged to support our new "venture in management" with a completely "open mind" and a "questioning attitude." Margaret has met this challenge in the field of air traffic management and has made invaluable contributions to its success.

Without a doubt, Margaret is not only considered by her associates to be extremely competent in air traffic control, but her concern for people, her intense interest in life, and lighthearted wit make her popular as well as proficient.

As an example of her sense of humor—in concluding the interview with our "FAA HORIZONS" reporter—Margaret jokingly said, with a wink:

"Just so there is no doubt as to whether or not I started with the Wright Brothers please tell everyone I began my career as an air traffic controller at the tender *age of 12*, 'the world's youngest' air traffic controller. Ha!"

A DAY IN THE SOUTHERN REGION'S MAIL ROOM

4:55

8:15

8:45

4:00

9:15

3:00

10:00

2:00

10:30

If you think your mail box is full and running over each morning, consider what it must be like in the Southern Region's mail room!

With only five people, including Supervisor Charles Preston, the volume of mail, incoming and outgoing, which passes through this busy office is so overwhelming it staggers the imagination.

"FAA HORIZONS" thought it might be fun and interesting to visit the mail room in pictures and words so that you can see the superb job that these employees do, and so that you might, through gaining understanding and appreciation of what they face each day, more carefully and considerately address our daily mail. So, here we go. A typical day in the life of the Southern Region mail room, beginning at 8:15 (at top) . . .

12:00

11:00

8:15 Mail Clerks B. J. Watts (L) and A. Rosser make the first of two mail pickups of the huge mail sacks at the Atlanta Airport Post Office. In addition to a special delivery of mail from the East Point Branch of the Post Office, an average of ten of these heavily-laden mail sacks are picked up each morning with numerous large boxes of parcel post and express.

8:45 After the first delivery arrives at the Regional Headquarters, Mail Clerks L. L. Collins and A. C. Davis begin dumping out sack after sack of mail until the carts and tables are overflowing. After sorting the properly-addressed pieces of mail into their appropriate boxes from which it will go directly to the offices to which it is addressed, those questionably-marked pieces of mail must be opened . . . studied . . . and an intelligent decision made as to where each piece should go. With the thousands of subjects involved in the FAA, one can easily see the difficulty the mail room personnel have in making determinations of the proper addressees if mail is thoughtlessly or incompletely addressed. For instance, an envelope marked "Maintenance, Southern Region Headquarters" might go to Air Carrier Maintenance, General Aviation Maintenance, Office Building Maintenance, or Facilities Maintenance . . . thus you see the problem. Please address your mail carefully and completely.

9:15 All of the mail sorting . . . done with precision teamwork . . . must be accomplished with "lightning" speed . . . quickly and accurately . . . because the first mail delivery through the Regional Office is scheduled promptly at 9:15 a.m. Mail deliveries are made to 58 stops throughout the Regional Office and must be completed by 10:00 a.m. Secretary Gloria Bush, on the sixth floor in Flight Standards Division's Air Carrier Branch, smilingly receives her morning's mail from Mail Clerk Collins and Clerk Trainee Arthur Davis ponders the location of the next stop. At the time this mail is delivered, outgoing correspondence is picked up.

10:00 After completing their early morning run, at 10:00 am., comes the task of sorting the mail that has been picked up and "Pitching" it into boxes. This mail involves such things as interoffice correspondence, mail from other Agencies, mail going to other Regions, Washington Headquarters, and field facilities. Incidentally, more than 100,000 pieces of merely routine correspondence incoming and outgoing, are handled each month in this mail room. This figure does not include parcel post, T&A Cards, bonds, or Washington and Regional directives, charts, maps, etc.

10:30 At this time, a special "mail pitch" is made to the various Regional offices and field facilities of Washington and Regional Office directives and other printed materials. Each month . . . more than 65,000 individual pieces of Southern Region directives alone are distributed. Incidentally, each Regional Headquarters office and field office or facility has its own mail box, and the mail which is accumulated in these boxes is pulled and enveloped twice each day and either hand-carried within the regional offices or mailed to field facilities. Mail Clerks Collins, Davis, and Rosser are busily engaged in this massive distribution.

11:00 While the second interoffice mail delivery is being made at this time . . . Publishing and Graphics Branch Chief M. E. Foor (L) and Secretary Brenda Walker listen attentively as Mail Room Supervisor Charles Preston explains how he goes about maintaining a complete file of extra copies of all handbooks, orders and notices . . . another chore of the mail room.

12:00 After taking a 30-minute break for lunch, the mail room personnel stuff envelopes for the mid-day pickup by the U. S. Post Office. Mail Clerk Rosser seals the last bit of mail for U. S. Postman Joe Cannon to be included with the mail sacks in his truck.

2:00 After mail room employees have been to the Atlanta Airport Post Office again at 1:00 p.m., to pick up the noon batch of mail sacks . . . have sorted this mail and begun the 2:00 p.m., interoffice run . . . Supervisor Preston describes the Routing Symbol System to petite Suzanne Wimpy, a new employee in the Administrative Services Division.

3:00 At 3:00 p.m., the mail that has been picked up from the interoffice run is sorted and "pitched" into the field facility and Washington Office boxes and into outgoing mail sacks. While the other mail clerks are readying all of the mail to be sent out of the Regional Office at the end of the day, Accounting Division's Barbara Simmons registers an important letter with Certified Mail Clerk B. J. Watts.

4:00 Mail Clerk Collins smiles as he picks up last-minute "rush" mail from Air Traffic Division's Carolyn Walker on the last mail pickup of the day. This last pickup is reserved for special, registered, and other urgent mail only.

4:55 "WHEW-W-W-W!" . . . exclaim the "Fearless Four" in the mail room as they end another successful day with full mail sacks on their way to the Post Office.

Beautiful Asheville, N. C., "Land of the Sky", is considered one of the perfect places to live because of its temperate climate, scenery, and friendly populace.

Nestling in the breathtakingly beautiful Southern Appalachian Mountain Range in North Carolina—called by Cherokees "The Land of the Sky" because of its winding mountain ranges, rocky gorges, gentle valleys, quiet streams, angry rapids, and beautiful waterfalls—Asheville glistens in a luxurious setting.

This month "FAA Horizons" takes our readers on a visit to this intriguing resort city in the Southern Region.

Asheville, today a typically modern, thriving, progressive, 20th-Century city, also is a very historic city, rich in mythical background and Indian folklore.

This city was originally founded in 1787, when William Davidson, an early settler, was granted 640 acres of land (now contained within the present city limits). Here, he established his home and built a small store. Soon, he was joined by other pioneering families. In 1797, the little mountain village was incorporated by the State Legislature and officially renamed Asheville in honor of Governor Samuel Ashe.

In succeeding years, this tiny village, nestled in virgin forests, watered by lifegiving, crystal-clear mountain streams, its woodlands rich with hardwood and filled with bountiful wildlife, quickly attracted more and more hardy settlers.

Asheville continued to grow and prosper until the Civil War. Like many other Southern cities, its economy drained by the ravages of war, floundered for a time. The post-Civil War years were poverty-stricken until a new era of progress was born with the introduction and widespread culture of the golden, bright-leaf tobacco.

Asheville soon became the principal tobacco producer in this area and rapidly developed into a main terminus for railroads which, in turn, brought more and more commerce to the city. Today, its river banks teem with busy industry and trade. Aviation, agriculture, lumber, mining, handicrafts, and manufacturing are now her chief industries.

Besides the great wealth of natural resources to be found here, Asheville also is endowed with a temperate climate.

The summers in "The Land of the Sky" are mild, with sunny days, delightfully cool nights, brief summer storms, and abundant rainfall. The winters are not severe, though there are frequent snowfalls, luring many tourists who enjoy the winter sports.

The jewel-like mountain environment has helped to foster the creative genius of the Indian and the early settlers. This genius continues to flower in the craftsmanship of these hearty mountain people.

Because of the early remoteness of this rugged country, good roads and communications developed somewhat later than in other regions. Because of this, these people had little access to factory-processed goods, and rather limited income.

For these reasons, the now world-famous handicrafts developed and perfected by these people, have continued almost unchanged since the pioneer days. However, with the advent of 20th-Century mechanization, several far-sighted civic organizations in Asheville and the surrounding area have taken positive steps to preserve and continue for posterity these varied crafts.

Today, there are still more than 6000 people in the locality who earn their livelihood from these ancient crafts: basket-weaving, pottery-making, leathercrafts, handmade silver and pewter, and chairmaking, an old and time-honored art among these people. So durable are these chairs that they are known to stand in good use for more than 100 years.

Steeped in Indian lore, this area was first the home of the Shawnee Indian Tribe and later the more powerful Cherokee Indian Nation. The Cherokee Nation at one time occupied over 40,000 square miles of this mountain area until finally forced west by the influx of white settlers seeking the newly-discovered gold and rich homesteads.

Perhaps the most famous of the Cherokees was Sequoyah, a fearless warrior and brilliant chief, who invented the first written Indian alphabet.

HORIZONS Visits Asheville

"Land of the Sky"

Asheville's new Municipal Airport, built under FAA's Federal Aid to Airports Program, opened Jan. 1961, offers 29 regularly scheduled flights daily, provided by three airlines.

At Oconaluftee Indian Village, a full-size replica of an 18th Century Cherokee community, two Cherokee Indian women practice their ancient art of intricate painting of pottery.

With modern-day progress, the aviation industry also has become a vital part of the community life in Asheville. Full-time, regularly-scheduled airline operations were commenced by Penn-Central Airlines in 1940, followed by Delta Airlines next, then Piedmont Airlines and finally United Airlines.

By 1946, aviation had grown so in this area that our Agency recognized the urgent need for positive air safety procedures and established the first of many navigational aids now to be found in the area—an Interstate Airways Communication Station (INSAC) which performed 24-hour weather observation and communication functions, similar to today's Flight Service Stations. Later, a Visual Aural Radio Range was constructed southwest of the Asheville Hendersonville Airport.

This was followed by a non-directional radio beacon, which permitted limited instrument approaches to the airport, though still restricted to a ceiling of at least 2000 feet or better and a minimum of two miles daylight visibility. On August 15, 1950, the first Visual Flight Rule (VFR) airport traffic control tower was commissioned.

By 1954, the VAR was outmoded and was replaced by a Very High Frequency Omni-Directional Radio Range (VOR) placed atop the 4-thousand-foot-high Sugar Loaf Mountain, 10 miles southeast of the airport. However, night operations were still somewhat restricted.

In August of 1954, the control tower and communications station functions were joined as a Combined Station/Tower. At this time, the hours of operation were increased from 16 hours a day to round-the-clock.

By 1960, aviation had made such forward strides in the Asheville area, that FAA and city officials recognized the immediate need for a new, modern airport, capable of efficiently and safely handling the increasing air-carrier operations into and out of this thriving city.

Thus, with the assistance of FAA's Federal-aid Airport Program, on January 15, 1961, the new Asheville Municipal Airport was completed and commissioned. All air-carrier operations were then moved to the new, larger airport.

In addition to the new Control Tower/FSS facilities, more navigational aids were introduced to permit full instrument approaches to the new airport: an Instrument Landing System (ILS); High Intensity Approach Lights with Sequenced Flashers (ALS/SF); Visual Glide Slope Indicators (VASI); Very High Frequency Omni-Directional Radio Range with Tactical Air Navigation (VORTAC), and another Non-directional Radio Beacon.

Thus, aviation and FAA advances with Asheville's forward march of progress.

Standing at the helm of FAA air traffic service at the Asheville Municipal Airport is Harold Roberts, Area Coordinator, and Chief of the Combined Station/Tower. He is ably assisted by ten highly-trained Air Traffic Control Specialists.

FAA also has a Systems Maintenance Sector office here. The personnel in this office have contributed greatly to the growth and safety of aviation in Asheville for it is the primary duty of the Electronics Maintenance Technicians to assure that all of the extremely complex electronic equipments used in this area function perfectly at all times. Supervising the important activities of the Systems Maintenance Office is Tolon E. Clanton, who also is ably supported by five well-qualified Electronics Technicians.

FAA thus has a total personnel staffing of 17 people (small in numbers but large in capabilities) whose combined payroll annually contributes approximately $140,000 to the local economy.

Asheville, no doubt, with her bountiful assets, will continue to flourish and progress. The FAA takes pride in the fact that our Agency is making a worthwhile contribution to this progress by encouraging and fostering the growth and development of aviation . . . the key to future economic growth in a community.

ASHEVILLE . . . "FAA Horizons" SALUTES YOU!

"VFR" AIRPORTS HELP AVIATION AND COMMUNITY

The VFR Airport. What is it, and why is it so important in today's world of aviation?

Simply stated, the VFR Airport is an airport designed to accommodate the needs of the small, privately-owned airplane, operating under Visual Flight Rules (VFR).

The VFR airport is important for several reasons. Today, because of the high standards of living, the high level of individual income, and the increasing demands for more efficient use of time, general aviation has grown into a "giant." This "giant" has evolved because thousands of men and women are now able to learn to fly, and are in a financial position to purchase their own aircraft. Just as they have been able to purchase their own automobiles, they learn to operate them, and to use them for pleasure and profit.

Because of this mushrooming fleet of small aircraft and corps of pilots, the need for more airfields has increased proportionately.

Where should these airports be developed?

Experience has shown that rural America is the most logical place. Small airports, located near hundreds of small communities and recreation areas across the nation, would have a tremendous effect in stimulating activity and economic growth in these communities.

Who should develop these VFR airports?

To insure the perpetuity of an airport, it should be developed and maintained by some level of government—town, city, county or state. Private enterprise is somewhat nebulous because many private airports have had to close due to failure of business, excessive taxation, or airport property becoming more valuable for industrial or residential development.

What are the important considerations in developing a VFR Airport?

Accessibility is probably the most important factor. An airport should be convenient to community developments. Many times, an airport is too remotely located to be convenient to prospective users. An excellent example of the proper location of a VFR airport is the "First Flight Airport," recently constructed at Kill Devil Hills, North Carolina. This airport is within easy walking distance of that historic spot which annually attracts thousands of visitors—the Wright Brothers Memorial—site of man's first powered flight. Other important factors that must also be considered are wind, noise, obstructions, land values, and construction costs.

Where does the Federal Aviation Agency enter the VFR Airport "picture?"

Through FAA's Airports Service, particularly Airport District Offices (in the Southern Region, District Offices are located in Atlanta, Charlotte, Jackson, and Miami), FAA provides general guidance, technical advice, and Federal funds to aid in airport development. FAA's assistance takes many forms: location investigation for the best airport sites; recommendations of a technical nature; pavement design; types of turf; runway marking materials; obstruction light locations; master planning and building area layouts.

Under the Federal-aid Airports Program (FAAP), our Agency provides financial assistance to local governments, up to 50 per cent, to cover the cost of land acquisition, engineering, clearing, grading, drainage, paving, marking, and lighting. This program encompasses all land, administrative, and construction costs necessary for an airport and its aerial approaches as well as access roads.

FAA's Southern Region Airports Division has dedicated all its combined efforts to the development of VFR Airports and to the fostering and encouragement of civil aviation—The "Golden Key" to the Economic Growth of Any Community.

First Airport "Reactivated"

The welcome mat is out at "First Flight Airport", at Kill Devil Hill, N. C., site of the Wright's first flight. Built under FAA's Federal Aid to Airports Program, the VFR field was commissioned on Dec. 17, 1963, the 60th Anniversary of man's first powered flight. The field is close to the Wright Brothers Memorial.

Miami's Maintenance Personnel Shows ILS Model to SMS Director

During a recent Airways Engineering Society meeting in Miami, FAA Electronics Maintenance Technician James B. Pader, Miami SMS, (R), points out the features of an Instrument Landing System model, built by Miami Maintenance personnel, to AES Executive Director N. B. Wilson, (L), and Barney Vierling, Director of Systems Maintenance Service. Vierling was the featured speaker at a State Conference of the Airways Engineering Society in Orlando.

Knoxville Going All Out to Get New Radar Tower Ready for Work

To keep pace with the rapidly increasing aviation activity at Knoxville Municipal Airport, work is progressing "full speed ahead" on the new radar facility being constructed on the new Knoxville Highway near the airport. The present radar tower (far left) will be dismantled as soon as the new tower and facilities are completed in early fall or winter of this year. The tower itself will cost approximately $75,000, with the entire operation to cost about $300,000.

REGIONAL DIRECTOR PRAISES WORK OF JOINT RADAR PLANNING GROUP

These FAA and USAF representatives attended the 37th JRPG meeting at Carswell AFB, Ft. Worth, in February to map further joint use of military/FAA radars.

Planning economical and efficient operations has been one of the principal preoccupations of all FAA managers in recent years. One of their endeavors has been the joint use of radar facilities of the FAA and the Armed Forces, a cooperative venture which has been paying and will continue to pay great dividends.

This February the men who have played the most important roles in this effort, members of the Joint Radar Planning Group, held their 37th quarterly meeting since they organized into a planning body in 1956. These men, FAA and USAF officials, stand on the firm ground of accomplishment when they meet to explore greater cooperation in the future.

Statistical analysis of the program directed by the group reveals that approximately $225 million has been saved or will be saved by the joint use of air route surveillance radars and those programmed for Fiscal Year 1965. These savings in federal funds are based on initial land acquisition, equipment, and installation costs and include additional savings through the elimination of duplicate maintenance, power, spare parts and personnel. By the end of FY '65 joint use equipment will include 48 military, 20 FAA, and seven jet advisory radars.

When the first air route traffic control centers were established in 1936 no one could predict the future technicalities of air traffic—in numbers or in speed of today's aircraft or the equipment it takes to get the job done. "Blind flying" was in its infancy, but World War II accelerated instrument flying and the use of radar—and slowed the progress of the CAA. In the immediate postwar era the CAA was pressed to provide the service designed for it in the Civil Aeronautics Act of 1938.

A congressional report advocated the integration of military and civilian systems as early as 1947. After a similar recommendation in 1950, initial tests of integrating military radar into the CAA system was made in the Washington area. Some radar had specific advantages to the CAA, while others were doubtful. Tests continued and during 1955 an agreement was reached by the CAA, USAF, and the Air Defense Command for the evaluation of the Rockville, Ind., ADC site. These operations formed the "initially acceptable ground rules" for joint CAA/ADC use. An orderly program of agreements and joint use has continued.

JRPG was formed in 1956 with a permanent committee of equal FAA and USAF personnel whose responsibilities include the authority to commit their respective agencies for planning and program purposes. Its success in meeting assigned tasks is reflected in a record of achievements that is unmatched in any other joint use area.

In addition to the joint use of radar there is further allied cooperation in the fields of joint use in the RAPCON program, joint use flight check program, and FAA absorption of military flight service. Another direct outgrowth of maximum joint use of radar is the recent integration of the air traffic functions with the air defense operations (NOTIP) in the Great Falls SAGE Center.

Additionally, group planning has not only saved money, but is conserving one of our natural resources. By use of a single radar instead of duplication of equipment, the radio frequency spectrum is being conserved.

Cooperation between the military and the FAA was recognized in the Federal Aviation Act of 1958 which provides for and seeks the active participation of the military in FAA operations. Likewise, the FAA has an air traffic representative at many of the military aviation facilities.

The future of the joint use program, so ably guided by JRPG, is a bright spot in future governmental cooperative efforts. This is confirmed in a recently completed Continental Air Defense Command study which recommended an even greater degree of integration than has been experienced in the past. It is entirely within the realm of possibility, the recommendation continued, that the next few years will see the involvement of a common surveillance and identification system that will serve both ADC requirements and those of FAA's air traffic control service.

The prospect is brightened by the planning, cooperation, and dedication of purpose which has characterized the JRPG.

Archie W. Sprague

Southwest Region Director

SOUTHWEST SNOW STAGGERS TEXAS PANHANDLE

Ingenuity was the keyword at Dalhart FSS when near blizzard conditions hit the Texas Panhandle in early February. It was work as usual for the FSS personnel, plus a rescue mission.

Specialists Frank Berry and Byron Shook, along with EMT Bill Wenzel, stood a 30-hour watch when their reliefs were "snowed out" of the building. Chief Oren A. Norwood had anticipated such a situation and had provided food and bedding. The men suffered nothing worse than a mild case of claustrophobia.

Specialist Don Eiland and fellow airport worker George Sechrist rescued three very cold persons from a half-buried automobile. They dug away four feet of snow to open the car door. Drifts all but isolated the FSS building.

An official 12 inches of snow fell in the area, but drifts, pushed by 50-mile-an-hour winds, piled as high as six feet. Traffic came to a stand-still and the Air Force airlifted feed to stranded cattle.

Tire chains and four-wheel drive vehicles were popular in other sections of the Panhandle and New Mexico during the storm. In some areas airports were closed temporarily.

Fort Worth staggered under more than a foot of snow during an earlier storm. The Weather Bureau reported the snowfall was the heaviest on record. Fort Worth often has a snowless winter.

Director Receives Commemorative Key

Regional Director Archie W. League displays to A. L. Coulter, Chief of Flight Standards Division, a commemorative key given to the Southwest Region for its Flight Standards Personnel's participation in the testing and type inspection authorization for the Bell Model 206 light observation helicopter (U.S. Army OH-4A). The helicopter was turned over to the Army for accelerated evaluation tests January 23 at Fort Worth, following two years of cooperation by FAA personnel and Bell engineers. In addition to basic certification, the FAA evaluated four special requirements: electronics, overload gross weight, rotor folding and interchangeability, and armament. The craft will compete against the Hiller and Hughes models, with an order of approximately 4000 'copters awaiting the winning model.

First Aid Is Top Topic for Zuni FSS Personnel Disaster Planning

Zuni planners are (l to r) William Thorn, SMS Chief; Dr. William Austin; and Harold Chadwick, FSS Chief.

Personnel of the Zuni FSS and SMS-110 learned the latest first aid techniques in February during a presentation, "First-Aid Today," by Dr. William Austin of the U.S. Public Health Service. The presentation was part of the regular monthly fire prevention and safety meeting in Zuni.

In addition to his instructions on the application of present day first-aid, Dr. Austin discussed problems encountered at the scene of major mishaps and told how volunteer workers could assist if a major disaster struck the Zuni area which is often isolated by inaccessible roads during the winter months. Cooperation of the government agencies would be necessary to give effective aid to victims.

Zuni FAA personnel have displayed an active interest in disaster planning and more than 100 hours of volunteer training were spent in fire drills during the preceding three months. Agreements and cooperation between the FAA personnel and the Bureau of Indian Affairs assure area residents of efficient planning for any future emergency.

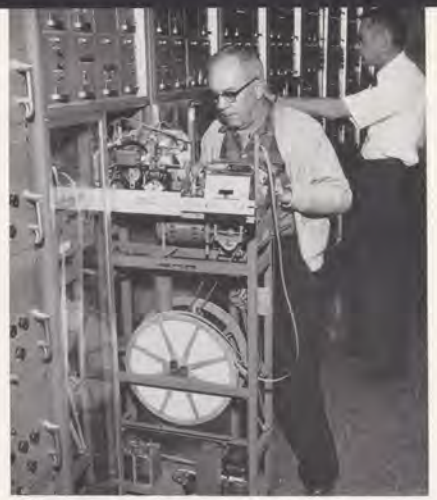
Pilot Easily Finds Lost Plane: Praises FAA Radio Instructions

A pilot with his fuel tanks registering empty passed over the Otto (N. Mex.) Airport three times without seeing it. He was "found" by an unknown pilot who guided him to a safe landing, possibly averting a crash landing.

Donald F. Norman, Albuquerque FSS Chief, later identified the "unknown" pilot as C. A. Benheimer of Deming. He said he heard the radio conversation between the pilot and Deming FSS while enroute from Las Vegas and flew directly to the "lost" aircraft.

Benheimer passed off thanks with the remark, "The incident assures me of the efficiency of the FAA—I was able to follow the FAA instructions perfectly."

NEW HIGH-SPEED TELETYPE BELTS OUT 1071 WPM



Pat Warren makes last minute adjustments before teletype becomes operational. In the background is Dan Hegar, leadman in the electronics maintenance sector.

A new high speed "B" circuit of the Teletype System went into operation at the Fort Worth Flight Service Station in early February, completing another link encompassing more than 300 Flight Service Stations and Air Route Traffic Control Centers throughout the United States.

This commissioning was part of the final phase of a modernization program of the "Service B System," the first step of which was taken in 1954. With use of the new Model 28 Teletype equipment, data is collected and distributed on the low speed circuits at 100 words a minute and on the high speed circuit at 1071 wpm, 750 band, using five-level (7-unit) start-stop code. Provisions have been made for future expansion to eight-level code.

In 1959 a national program to install Model 28 equipment at all locations in the United States began and cost $2.5 million in what was then Region 2. Also at this time the national weather circuit "A" was rearranged in the first major change in 27 years. A new high speed system called ADIS (Automatic Data Interchange System) was installed and commissioned in March 1961, which enables the collection of weather information from all parts of the United States at a speed of 857 wpm.

Known as BDIS, the improved Service B Data Interchange System is a high speed data-handling network for the transcontinental distribution of flight movement messages. A number of standard speed teletypewriter circuits (known as area circuits) serve designated localities throughout the United States. Low speed circuits terminate at BDIS area centers located in major cities. These area centers, ten in number, plus one spare, are connected by high speed lines.

Serving a specific geographical area, each area center can accommodate two or three low speed area circuits for a total of 60 low speed send-receive stations in any distribution within its associated loop. Initially, five area centers will contain two area circuits and the other five will have three. Fort Worth, designed for three area circuits, will use two for the present time.

A low speed reperforator at each center records on paper tape information originated on its associated area circuit designated for the high speed line. Physically coupled to the reperforator by means of a tape loop, a high speed transmitter retransmits information collected on the associated low speed circuit to the high speed circuit. A reverse procedure receives the high speed messages and retransmits them at low speed over the area circuits. Messages are received and transmitted selectively, depending on the code punched by the originator.

EIT Pat Warren, who is often called FAA's "Mr. Teletype," supervised the installation of the Fort Worth BDIS System. Associated with the National Teletype Improvement Program since 1958 when it was still in the planning stage, he assembled and wired the first FAA mockup teletype station using the new Model 28 equipment. The mockup was assembled at the Southwest Region's panel shop.

Warren tested and evaluated the first system in coordination with the Regional and Washington offices, and many of his suggestions were adopted for use on a national scale. During the installation program he became the trouble shooter for Region 2 (and later the Southwest Region), working out all problems to a successful conclusion.

His ingenious knowledge of the teletype equipment and systems is recognized nationally. He checked out and made operational the first APULS (Automatic Program Unit, Low Speed), a fully transistorized scanning unit that monitors stations on the low speed teletype circuit. Schools, experiments, tests and work problems have added greatly to his reservoir of knowledge.

Snow-clearing machine (below) cuts a swath as it moves away from radar site after a new winter storm. Shown at right is Gallup Radar and crew's quarters.

ELMT Prentis Vise (c) eavesdrops on EMTs William Debrie (l) and Ed Smith as they complete checking out the functions of the radar.

Off-duty technician skates on makeshift rink.

William Debrie (left) and Prentis Vise have informal chat in quarters' kitchen; (shown below) Ed Smith joins them before the comfortable fireplace.

Gallup Radar Is Challenge In Indian World

Fed up and want a change? Are you willing to accept a challenge? If so, the Totah Basin in the northwest corner of New Mexico may be the answer. If anyone is interested, there is a radar terminal on the Navajo Indian Reservation and an access road to a microwave repeater that crosses one corner of the Jicarilla-Apache Indian Reservation. During the winter the temperature seldom ventures above the freezing mark and access roads require snow plows, snow cats, and four-wheel drive vehicles with chains.

If anyone is still interested, here are the pertinent facts: the Gallup Radar, an ARSR-2, is 90 miles by road south by southwest of Farmington and 60 miles north of Gallup at an elevation of nearly 9500 feet. It is equipped with elaborate crews' quarters which are known as the "Country Club" in some circles. The radar services the Denver ARTC Center 513 miles and 16 hops away by microwave link. On the far end of the Southwest Region's maintenance sector (Southwest Region maintains eight of the stations) is a microwave relay at an elevation of 7450 feet and, unfortunately, it is on the edge of the Continental Divide. This means if there is snow, sleet, or any type of storm in the area, this relay station receives its share.

Gallup Radar is located on the eastern third of the Navajo Reservation which adds up to 14,450,369 acres in New Mexico, Utah, Arizona, and Colorado. Technicians who maintain the facility say Gallup Radar is the only major facility operated by the FAA that doesn't have a fence around it.

Amos Johnson, a Navajo, has the longest service record at the radar site. He operated heavy equipment and was labor foreman during the construction and is also a welder, carpenter, and general mechanic. When the facility was commissioned, Johnson obtained the minor maintenance labor contract.

If firewood runs low, Johnson has a chain saw and delivers wood at reasonable rates. If someone wants to hold a dance, he will bring his five-man dance band. And if there is a special problem on the reservation such as placing a Diesel fuel tank along the access road to the radar site, he will call on his brother-in-law who is secretary to the Sheep Springs Chapter of the Tribal Council. (Sheep Springs is a trading post on U.S. Highway 666 from which the access road starts its climb to the radar site).

An illustration of the problems brought by the climate would be the commercial power failures caused by a series of summer storms. Lightning destroyed the commercial power line to the radar site in three places, and the rain washed out two power poles. Lightning struck again the next day, knocking a power transformer off the pole at one of the microwave facilities.

The standby generator ran a full 36 hours before any repairs could be made.

When things are routine the technicians assigned to the site on a rotating basis can relax in the crews quarters. The Gallup Radar quarters consists of six bedrooms, each with private bath. The quarters includes kitchen and dining room, and a large living room with fireplace. Automatic laundry facilities are also provided.

Personnel assigned to the site are from SMS-105, Farmington. Those assigned to ARSR maintenance include SEMT James F. Trigg and EMTS Don L. Anderson, David MacDonald, Robert Pieper, Earl J. Bangert, William Debrie, and Edward A. Smith. Also assigned are ELMTS Arviad Ludwick and Prentis Vise.

Above: William M. Jenkins, tool and stock supply technician, checks some avionics equipment at the Aircraft Maintenance Base, Fort Worth. At right: Lavarno Grider, an assistant controller learns the air traffic procedures at the Albuquerque Flight Service Station; others have progressed to the GS-12 grade.

SW's Minority Employment Program

"It is the plain and positive obligation of the United States Government to promote and ensure equal opportunity for all qualified persons, without regard to race, creed, color, or national origin, employed or seeking employment with the Federal Government."

These are the words spoken by then Vice President Lyndon B. Johnson to a group of Civil Service managers and directors in January 1963. Executive Order 10925, promulgated by President Kennedy March 6, 1961, had spurred all agencies to greater employment opportunities for minority groups, especially those of the Negro race.

Minority group employees have made many contributions to the Southwest Region's operations for a number of years. Although the Region has traditionally sought applicants from all races, the Personnel and Training Division recently initiated new steps to inform minority groups of the educational and employment requirements of the FAA.

Since 1955 the Southwest Region has recruited in accredited engineering colleges. Within the past year this college recruitment program has been expanded to include all types of minority group institutions.

Additionally, the Region is now holding more meetings with interested minorities—small and large groups, and in conferences—in the education field and with representatives of social-economic organizations. Recognizing the primary problem in most instances was the lack of education, Personnel makes a positive effort to show prospective employees what it takes to qualify for Civil Service employment.

At the start of the current information program, several departments and agencies cooperated with the Department of Labor in a two-day conference held at Texas Southern University. Purpose of the meeting, which served to reaffirm the government's stand on minority group employment, was to motivate the individual with a desire to improve himself and to inform educators of the type of training that is necessary for applicants to compete successfully for federal jobs. Negro educators from Texas, Louisiana, Oklahoma and Arkansas attended.

By early 1964 Southwest Region representatives had met four times with the President's Committee on Equal Opportunity and are continuing to meet periodically with group leaders in several larger cities of the region to discuss opportunities and preparation for employment. The latter meetings emphasize the functions of the FAA and its work and needs.

With the minority group indoctrinations has come orientation for all supervisors in the fields of employment and upgrading training. Concern for minority group employees does not end when they enter on duty; a person is hired at a grade level based on his knowledge and skills and additional training must be afforded these persons, as it is for all employees, to qualify them for advancement. The standards of the merit promotion system are to be upheld at all times.

However, the FAA is doing all it can to insure prospective employees of all races and creeds that the sole requirement for federal employment is the possession of the knowledge and skills to do the job that is to be filled. Those who are not qualified for certain desired positions are advised of the training requirements and where such training can be obtained. Opportunity and benefits for both the individual and the Agency are obtained when the applicant recognizes the professionalism of each position and prepares to meet the challenges it offers.

CONTROLLER'S KNOWLEDGE RESCUES PILOT

A few days before the following incident took place, Controller Jack C. Fahy participated in preflight briefings and supersonic familiarization flights at Randolph Air Force Base. Included in the orientation were different aspects of high altitude flying and the effects of hyperventilation, hypoxia, and other physical ailments. When a pilot flying a Navy T1A (Sea Star) from Chase Naval Air Station, Texas, to Pensacola, experienced difficulty, Fahy was on duty at the San Antonia ARTC Center. He recognized the symptoms of hypoxia in the pilot's speech and kept him conscious of the necessity of following instructions until he was out of trouble.

Pilot: San Antonio Center, Navy Jet 42541, I'd like to change my clearance to Navy New Orleans, please. (Clearance is issued followed by silence.)

Center: Navy Jet 541, did you copy clearance. . . .?

Pilot: Ah . . . this is Navy 541, estimating New Orleans at zero two . . . ah, correction . . . ah . . . that would be two one . . . ah . . . could you give me a vector to Lake Charles? (Pilot's speech has become heavy, and words are mumbled. The controller realizes the pilot is experiencing difficulty.)

Center: Navy Jet 42541, what is your present heading?

Pilot: Ah . . . present heading zero niner zero. . . . (The controller notes that heading does not correspond with radar track.)

Center: Navy Jet 42541, turn left heading zero eight five.

Pilot: Ah . . . correction, my present heading zero seven zero. . . . I'm having difficulty . . . either severe vertigo or hyperventilation . . . do you have a military base in my range that has a jet starting unit? . . . I need something to shut down or I'll set myself on fire.

Center: Navy 42541, San Antonio Center, descend and maintain two three thousand now. *Descend* and maintain two three thousand. You're cleared for a one eighty. We'll bring you back to Ellington, over.

Pilot: Ah . . . I don't think Ellington has the equipment to handle me . . . ah . . . would you check and see . . . if they could . . . I need an M 1 . . . ah . . . starting unit and I really don't want to ruin my aircraft. . . .

Center: Roger, we'll check. *Descend.* Descend and maintain two three thousand, now, please.

Pilot: Ah, roger, leaving three niner zero at this time. . . .

Center: Roger, and you may start your turn. Reverse course one eighty degrees when ready.

Pilot: Ah . . . roger. . . .I'll be heading, ah, two four five degrees . . . ah . . . I'm leaving three niner zero. . . .

Center: Roger, have you gone to 100 per cent oxygen?

Pilot: Ah . . . dizzy. . . I don't think it is vertigo. . . . I know I'm right side up . . . but I'm dizzy.

Center: Roger, have you gone to 100 per cent oxygen? Set your oxygen on 100 per cent, please.

Pilot: I've . . . been on a hundred . . . and I've been on normal and . . . neither one helped.

Center: Roger, are you descending? Are you descending? What is your altitude? Over.

Pilot: Roger, passing three seven zero.

Center: Roger, continue descent and continue talking. (Pilot has set up a very slow rate of descent.) Navy 42541, what is your cabin pressure holding right now?

Pilot: Been holding about two five zero . . . now two two thousand . . . and still experiencing trouble. . . .

Center: Roger, continue your descent and maintain eight thousand.

Pilot: Roger, descend to eight thousand. . . .

Center: Navy 541, continue descent to eight thousand, *eight* thousand. Set your altimeter, now. The Houston altimeter three zero four seven.

Pilot: Roger . . . three zero four seven . . . ah . . . I'm flight level three three zero at this time.

Center: Navy 541, what's your present air speed?

Pilot: I'm . . . point six five mach . . . ah . . . two two zero indicated . . . you cleared me down to eight thousand . . . is that correct?

Center: Navy 42541, that's affirmative, eight thousand . . . suggest you increase that rate of descent if you will, please.

Pilot: Ah . . . roger. . . . I'm not too anxious to waste my fuel. . . . I guess it would be better . . . wasting it, though. . . . I'll be . . .I'll drop boards and go. . . .

Center: Navy 541, what's your present altitude?

Pilot: Ah . . . three one zero. . . .

Center: Roger, suggest you increase that descent. We can take you into Ellington.

Pilot: Ah . . . roger. . . . I've got about five thousand feet a minute now. . . . I'm still on 100 per cent . . . and that doesn't help. . . . I've probably hyperventilated. . . . I'm not sure. . . . I don't . . . ah. . . . I've been holding my breath and that doesn't help. . . .

Center: Roger, and you're leaving what altitude now?

Pilot: two four zero . . . at this time. . . .

Center: Roger.

Pilot: Tell you what . . . let's go to Ellington.

Center: Roger, let's go to Ellington. You are now on course for Ellington. Continue that descent to eight thousand. Give me a call when you're through fifteen thousand and we'll start slowing that descent.

Pilot: Ah . . . roger. . . . I've got . . . static electricity . . . bouncing all over my aircraft . . . here. . . .

Center: Roger, we'll give you a surveillance approach at Ellington.

Pilot: Ah . . . roger. . . . I'm at one niner thousand and I'm . . . breaking out of the overcast. . . . I see a city. . . . I suppose . . . it's Houston. . . . It's not vertigo. . . . I know I'm . . . right side up. . . . I'm getting dizzy spells . . . and . . . blacking out— . .

Center: Navy 541, what's your altimeter reading now?

Pilot: Ah . . . fifteen thousand . . . nine hundred . . . see . . . I've got my altimeter set . . . three zero four seven. . . .

Center: Roger, three zero four seven is correct on altimeter. That is correct.

Pilot: I've got my cabin altitude down to nine thousand. (Pilot's speech rate and clarity begins to improve.) I shouldn't be having any trouble breathing, but, ah, there's something wrong here.

(From this point on contacts became routine.)

Pilot: I certainly appreciate you nursing me home like this. I don't think I'd have made it otherwise.

CONTROLLER TRIES SQUARE DANCING; BECOMES 'IN-DEMAND' DANCE CALLER

Although Thomas (Toby) Dove, a 135-pound New Orleans Center Controller, is slight of build, he is a big man in square dance circles. Quadrille enthusiasts from Oklahoma across the South to western Florida have danced to his expert calling.

Known as the "Caller in the Red Boots" because of his affinity to red footwear, Dove has built up a reputation which has old and new square dancers asking for his services. Often new dance groups who ask for him prefix their request with "Is this the caller who wears the red boots?"

Toby Dove learned to dance in 1956. Reluctant at first, he attended square dances sponsored by the Elysian Fields Methodist Church after much urging by his wife. At his third dance he began to enjoy this new entertainment and, due to the dearth of callers, he learned calling and square dancing at the same time. Within two years he became a proficient caller, but it wasn't by accident.

Dove and his wife practiced six to eight hours each day, using records and tape recordings to develop better timing, mike technique and enunciation. At first he memorized basic steps, but carefully detoured around "memory" calling into a finished "visual" or "sight" caller. When calling a square dance he thinks at least two steps ahead of the dancers and plans the dance to make flowing geometrical figures and to ensure that the dancers are correctly placed at the end of the dance.

Toby Dove, Square Dance Caller.

Dove says that square dancing is among the best forms of "couple entertainment," with the exhilaration and challenge drawing dancers varied backgrounds. For example, a college professor and his wife may be closely associated during the dance with a gas station attendant and his wife. After the dance the couples go separate ways, but during the dance the challenge to perform is a common bond.

Dancers challenge the caller to call figures for them that require concentration to execute—ones which enable them to be at the right position at the end of the dance. The caller, in turn, challenges the dancers to perform the figures he is calling in such a manner that they end up in the correct positions.

With 27 square dance clubs in the New Orleans metropolitan area alone, it is readily seen why good square dance callers are in demand. A caller receives his advertising by the quality of his performance, and this is especially true when festivals are held. Square dance festivals attract people from great distances, such as at Miami when 25,000 dancers assembled. When novice dancers hear an expert caller, they usually bombard him with requests for instructions. So it is with Dove—a considerable amount of his spare time is devoted to teaching interested groups.

Dove's wife has been his loyal helper and ardent fan. They still practice together to avoid the pitfall of his becoming stale and out-dated. The four Dove children—the oldest is 16—are not particularly sold on square dancing. "Oh, it's all right," they say.

Somehow, one gets the impression that they may think that square dancing is just a little "square." The only time they are impressed is when Daddy goes to the studio in Houston to make a record. LORE Records apparently is impressed, for Dove's records are in demand. The "Caller in the Red Boots" who reluctantly learned to square dance is apparently on his way.

AIR TRAFFIC CONTROL CHIEFS FILL TWO TEXAS AREA COORDINATOR JOBS

Gerald B. Fox

John Blair

Gerald B. Fox, who started his career in aviation communications as a radio operator for the National Parks Air Lines in 1935, is area coordinator in San Antonio. He is also chief of the San Antonio ARTC Center.

A native of Eureka, Utah, Fox progressed from his radio operator's job to station manager and dispatcher for Western Air Lines, a position he held until 1940 when he became an airway TFC control operator in St. Louis in 1940. He then served as airways traffic controller in Jacksonville and as senior controller in Atlanta.

After serving as assistant chief of the Atlanta ARTC Center he went to Memphis as Center chief in 1956. Two years later he moved to his present position in San Antonio.

Other FAA activities in the San Antonio area include the ATC Towers at International Airport and Stinson Field, ACDO-31, EMDO-43, FSS, GADO-10, SMDO-5, SMS-510, SMS-511, and the Field Personnel Representative.

John Blair, ATC Tower chief and area coordinator for Houston, began his CAA/FAA career as an assistant controller and trainee in the Tulsa Tower in 1942. During 1944-46 he served in the Navy in air traffic control duties at the Naval Air Stations in Atlanta and Dallas.

Following his release from active duty he served as a controller at the Dallas Tower and then went to New Orleans as tower chief for a brief period. In late 1947 he assumed his present duties in Houston.

Blair, a native of Handley, Texas, attended Texas A&M University, studying aeronautical engineering. He started his pilot training in the civilian program while in college and received his commercial, instrument and instructor licenses after additional study in Tulsa and Dallas flight schools. He has logged 2500 hours in single and multi-engines and has attended the Senior Officers Jet Instrument School sponsored by the Air Force.

Houston activities include ACDO-34, FIDO-3, GADO-5, FSS, SMS-506, and the ATC Tower, all located at the Houston International Airport.

WESTERN REGION ROUNDUP

A Message from Joseph H. Tippets

Recently, in one of our facilities I observed that newly-issued copies of "HORIZONS" were lying on a shelf unread and undelivered. I also discovered that Telecoms of considerable urgency were resting in a supervisor's incoming basket, not posted for the reading of his associates. I also found "extraneous" printed matter neatly placed "on top" of the Intercom which was appropriately placed on our attractive display—intended for the Agency's vital and important "employee's news media." Admittedly, these are rare exceptions and not the rule. Your attention is called to the spirit and need for proper handling of our "new" and urgently needed information service. HORIZONS is a monthly magazine carefully and thoughtfully put together *for all employees* AND THEIR FAMILIES.

Intercom is the weekly need-to-know blue sheet—*for all employees*—to be posted promptly for the reading of each of us.

Telecom is issued infrequently *for all employees* with information which cannot await later and regular publication in Intercom and HORIZONS. All of these publications provide a direct channel to employees for information from Mr. Halaby and General Grant and for other key officials on the national and regional levels.

These releases are not for supervisors only—they are for all. HORIZONS is for each employee *and his family* and we encourage all hands to take it home so that their families will have an opportunity to know more about our work and programs.

Your thoughtful treatment of these issuances will yield improved results for

us all in terms of greater understanding and better relationships throughout the Agency. This, in turn, will increase output and efficiency in all aspects of the Region's operations.

• **IN THE PUBLIC EYE**—In a *Portland Oregonian* column, LEVERETT RICHARDS poses the question: Why doesn't the FAA take the initiative in fog control? He cites studies to indicate the matter bears looking into on a national level. . . . The illustrated folder published by the Long Beach, Calif., Chamber of Commerce carries a picture of the FAA control tower on its cover. . . . JOSEPH J. TYMCZYSZYN was picked for a writeup and photo in the "People" column of *American Aviation Magazine* —a section the magazine reserves for aviation's "men of distinction." . . . *Pacific Powerland Magazine,* published by the Pacific Power and Light Co., has a front-page picture and story on the service rendered by the firm to the Lovell Radar station on Medicine Mountain. . . . *Skyways Magazine* cover shows the FAA tower at Troutdale, Ore. . . . *Rudder Flutter,* the magazine issued by the Idaho Department of Aeronautics, carried an excellent article on Mullan Pass FSS with photos of personnel. . . . Santa Monica tower personnel are featured in an article in that community's paper headed: "Cloverfield Ranks First in Safety." . . . TOM BAXTER in *General Aviation News* urges pilots to contact the FAA when they have comments and suggestions.

• **KUDOS**—To the staff at the Gillespie Field tower for the excellent handling of the "White Friday" extra-heavy traffic occasioned by the sale of airplane rides by the El Cajon 99's, the women's pilot organization, in a fund-raising drive. JAMES F. BURKHARDT, tower chief, received many phone calls from pilots and representatives of flying groups commending tower personnel for the excellent service received. During a 10-hour period, a total of 1504 operations were handled, with a maximum staffing of three controllers. . . . To the Hill RAPCON crew for making a $100 contribution to the family of an Ogden policeman killed in the line of duty while apprehending a 17-year-old delinquent. They also gave an assist to the family of ARTHUR E. FEHR, a pilot lost between Denver and Hill Air Force Base on December 7, 1963—and still undiscovered. . . . To L. S. YATES, Portland, for being named an advisor to the Aviation Committee, Portland Chamber of Commerce. . . . To RALPH E. CALKINS, chief of the Pocatello CS/T for acting as a judge in Idaho's 1964 Junior Miss Pageant contest. . . . To JOHN T. PALMER, SMS-440 employee at Klamath Falls for being promoted to senior chief petty officer in the Kingsley Field Naval Reserve Division. . . . To the Seattle Area Coordinator Group—and to those in Portland and San Diego for outstanding recent meetings on Equal Employment Opportunity. . . . To C. R. (TED) KING for receiving the Silver Beaver award for outstanding leadership in the Boy Scout movement. He is an electro-mechanic stationed at Arcata. . . . To MILAN RADOVICH, ATCS at the Oakland FSS, for commendable courtesy and thoughtfulness in handling calls from relatives seeking information on an overdue light aircraft. RADOVICH was commended by JOSEPH C. HILL, chief of the station, who received a commendatory letter from the wife of one of the men involved in the accident. (The aircraft crash-landed in the mountains, and both occupants escaped injury and were able to walk out.) . . . To WARREN HOIT, chief, Yakima CS/T; GEORGE RAWSKI, SEA-TAC Tower; and WILSON GILLIS, Spokane GADO, for participation in a pilot's seminar sponsored by the 99's and the Yakima Chamber of Commerce. . . . To the Compliance and Security Division for an excellent Activity Report. . . . To JIM DEWEY and PAT SCHIFFMAN for their excellent talks to the Las Vegas Aero Society. . . . FRAN JOHNSON, president of the Aero Society, sent W. A. STEPHENS, LAX Area Manager, a commendatory letter on the talks. . . . The LAX Tower crew received Kudos from Pacific South-West Airlines in a letter to A. B. BUSH, chief. PSA sent a similar letter to personnel of the Burbank tower through LES SONGSTAD, chief. . . . To the crew at Bryce Canyon FSS who got a distress "stork" call from a pilot whose passenger was a young mother expecting her fifth child. They arranged to get medical help and converted the Chief's office into a make-shift maternity ward. It all turned out to be a "false alarm," but the incident demonstrated their ability.

AME SEMINARS FORGE UNDERSTANDING

When is a pilot "old?" What effect does noise, vibration, fatigue, and stress have on the human body? What are the latest advances in aviation medicine?

At intervals throughout the year, the 1365 Aviation Medical Examiners in the Western Region are invited to FAA seminars at which topics such as the above are discussed by experts.

The photos on this page show activity at recent seminars—held at Pasadena, and in San Francisco, both in coordination with the University of California. Another recent AME seminar was held by FAA in connection with the University of Utah College of Medicine in Salt Lake City.

The objective of the seminars is to keep participants up-to-date on rapid advances being made in aviation medicine.

The seminars also provide a forum at which AME's can discuss with FAA officials any problems or questions they may have.

Dr. Frank K. Raymond, Regional Flight Surgeon, works closely with medical schools in the Western Region and with the Aeromedical Center in setting up the seminars.

Mr. Tippets discusses San Francisco AME Seminar with Dr. M. S. White, Federal Air Surgeon, right, and Dr. Frank K. Raymond, Western Region Flight Surgeon.

Above: Mr. Tippets addresses AME Seminar conducted by Region in Pasadena. Below: Five millionth medical certificate is presented to Frank H. Chisum, pilot from Garden Grove, Calif., right, by Dr. F. C. Hertzog, AME, at San Francisco.

Typical AME Seminar group photographed at AME get together at Pasadena.

The STORM

Francis Peak, one of two radar sites where dramatic storm "battle" took place.

At Francis Peak heavy snow was falling. Drifts were piling up along the twisting five-mile road to the site. This, however, caused no alarm—such conditions could be expected in the high Wasatch Mountains in mid-winter, and the Francis Peak site is at an elevation of 9515 feet.

At Battle Mountain, 230 miles to the west, conditions were much the same: routine snow, wind, and some drifting.

The next day, however, Monday, January 20, conditions took an ominous turn at both FAA mountaintop radar sites. Richard Barthuly and F. T. Messick, on duty at Battle Mountain, noted that the wind was beginning to pick up and drifts were deepening. At Francis Peak, Jack Shurtliff and Jim Shaw were beginning to wonder whether they'd be able to carry out the crew change scheduled for Tuesday.

At both sites, winds picked up momentum and began blowing thick sheets of snow horizontally across the peaks. These were mere zephyrs compared to blasts to come. Both Francis Peak and Battle Mountain were warned that a bad weather front was approaching.

At Battle Mountain, Barthuly and Messick waited for the worst. The wind's howl grew shriller. Its force intensified. Buildings, rooted in solid rock, began to shudder under the heavy bludgeoning. They creaked and groaned alarmingly. Outside, there was eerie whiteness, cutting the site off from the world below. FAA crews felt suspended inside the turbulent heart of the grand-daddy of all blizzards.

So far, the big bubble was withstanding the heavy impact of screaming gusts. Icy blasts relentlessly attacked every inch of the site. At every corner and cranny, the blizzard sought entrance.

By 1 a.m., both Barthuly and Messick were deeply concerned. Could the buildings continue to take this brutal pounding? As winds continued to intensify, wiping out all microwave link service with Salt Lake City, the men began to feel the storm was some destructive force seeking them.

Suddenly the building vibrated and shuddered as if seized by a giant hand. A grating, tearing noise filled the site, as though huge fingers were attempting to pry their way into the building. The sound of metal being wrenched from the roof was followed by loud, crashing noises, and a louder, more furious moan of the wind.

"Hey! The roof's going!" Barthuly yelled.

The equipment room started to fill with a spray of dust mixed with snow as the outer section of the roof was ripped off. Now, only the thin, inner shell remained to protect personnel and equipment.

Methodically, the wind ripped away the last shreds of the upper roof. Both men wondered: How long can this go on?

On Francis Peak, meanwhile, the little cluster of buildings were taking just as bad a beating. But so far, these structures remained fully intact.

Wind forced open a ventilator shutter in the engine-generator room, and snow more than 2 inches deep piled up on the floor. Shurtliff forced the shutters closed. Then a new danger confronted the men. The site was plunged into darkness when commercial power failed. Emergency power was switched on temporarily. After commercial power failed for the fourth time, Shurtliff decided it was best to stay on power generated at the site.

Tuesday morning, during a break in the weather, Shaw and Shurtliff tried to get through to the equipment garage where the relief crew was waiting.

Their Sno-Cat crept down the mountain. Gusts pounded the vehicle. It shuddered and rocked. Drifts built up behind and ahead of it. Visibility diminished. Ahead, a swirling drift 12 feet high barred the way. Behind, wind-whipped snow packed in rapidly, finally burying the Sno-Cat.

Stranded! This numbing thought came to both men. They put the tractor into reverse. Slowly it moved back up the mountain. In three hours they traveled only two perilous miles—but they were safe.

At Battle Mountain, the worst was over. Imperceptibly the wind's fury slackened. By Wednesday noon, Barthuly and Messick were able to go outside to survey the damage and make minor repairs. It was bitterly cold and they could work no longer than 15 minutes at a time.

The antenna had whipped free, like a sail in the wind. Using a 150-foot rope and a Sno-Cat, the two men were able to support the antenna, reassemble loose parts, and reorient equipment.

Francis Peak was still snowbound. The crew on top could not get down. At the equipment garage, other crews were "sweating it out" until they could fight their way up.

On Wednesday morning, a road crew with a bulldozer began to push up the Francis Peak road. A relief crew and a Utah Air National Guard crew followed. Four hours later, wind and snow forced all crews back. All three crews spent the night in the equipment garage. Nine men crowded in emergency quarters equipped for four. Some slept in beds, others in Sno-Cats and others on the floor.

That night heavy snows fell again. More strong winds pounded the site. By 8 a.m. Thursday, however, gusts died down to a gentle 15 miles per hour.

Road crews with bulldozers began pushing through enormous drifts, some as deep as 30 feet. Finally, after more than a week on the mountain, Shurtliff and Shaw were able to drive a Sno-Cat down the mountain through canyons of snow, to civilization at last.

At Battle Mountain, microwave link service had already been restored and the road up the mountain was in good shape. There was much work to be done—but the storm was past, and a new crew in place.

After the worst storm in the history of both Battle Mountain and Francis Peak, things were, at long last, back to normal.

HORIZONS Visits Portland

By Sanford Yates

Portland, Oregon, located near the head of the river used for deep-sea vessels, is the Columbia Empire's gateway to the world's seven seas. It is a thriving industrial and seaport city of some 402,300 people, a transportation hub of rails, steamship and airplane routes. Majestic Mt. Hood is clearly visible from the city.

Raymond C. Hollemon, ATCS, GS-11, works Local Control Position in Tower Cab.

Jill McCleave, airport hostess, ponders the booklets she studied for her job.

Portland is a good place to live and work, as was discovered by Bill Moore, airman-aircraft inspector, when he was assigned to the Swan Island airport in 1927 as the sole representative of the first predecessor agency of the FAA.

Portland Radio, the first facility on the scene, a point-to-point radio telegraph station with voice broadcast capability, was commissioned in 1929, at an off-airport location, in the southeastern section of Portland. Relocation to Swan Island airport occurred in 1930. Subsequently, a new airport, originally Portland Columbia, now Portland International, was established in 1940, on the south bank of the Columbia. Portland Radio moved to this location. Concurrently, a new facility, the Portland Tower, was established. This same year saw the birth of another new entity—Maintenance. Until that time operations personnel performed their own equipment trouble shooting.

The disastrous flood of 1948 forced evacuation of the airport. Post-flood rebuilding provided the Flight Service Station, Systems Maintenance, and GADO with their present quarters. The Portland tower returned to its old location, a wartime military structure in the Air Base area. The present airport terminal was completed in 1958. Systems Maintenance established a District Office in July 1953. In November 1961, Troutdale Tower was commissioned.

At present, the FAA has 135 employees in the Portland area. The facility, facility chief, and number of employees follow: GADO-10, John Gebelin, 10; SMDO-4, Claude Barrett, 25; SMS-410, Lorin DeMerritt, 35; Troutdale Tower, Joe Burris, 7; Portland Tower, Claude Thompson, 40; and Portland FSS, Sanford Yates, 18.

During 1963, the FAA installed approach lights and an instrument landing system on the new 8000-foot runway, and the Air Force spent half of a $4,000,000 budget for improvements.

Approximately 748 aircraft are based at 15 Portland metropolitan area airports.

FAA personnel at Portland participated in three aviation workshops, two seminars, and many pilot group meetings in 1963.

For the first time, FAA representation was secured during 1963 on the Aviation Committee of the Portland Chamber of Commerce and the Oregon Aerospace Education Council.

And that is Portland—an area bounded by snow-covered mountains and ocean beaches; a city of splendid schools, excellent hotels, fine restaurants and beautiful homes; a city that honors its past and preserves its old trees and old buildings; a city that has become a modern aviation hub, and a key FAA center in the Western Region.

This photo, taken from the roof of the main building, shows the Portland Tower.

In Portland IFR Room: Richard A. Banks, William R. Gibson, Robert K. Wallin, George D. Dicey, John H. Evans.

PERSONNEL PIPELINE

(For this issue, we are departing again from the traditional narrative approach to this column and instead are answering questions submitted to the Personnel and Training Office.)

Q. How many people are there in the various divisions throughout the Western Region?

A. The following figures are taken from the December 1963 compilation:

Office of the Regional Director	16
Regional Counsel	10
Audit Division	11
Management Analysis Division	8
Administrative Services Division	67
Accounting Division	58
Personnel and Training Division	64
Budget Division	9
Flight Standards Division	668
Airports Division	79
Compliance and Security Division	6
Installation & Materiel Division	540
Systems Maintenance Division	2378
Air Traffic Division	3474
Aviation Medical Division	14
Public Affairs/Info. Services	3
Regional Total	7405

Q. When I came to the Agency, I waived Federal Life Insurance coverage. I am now under age 50 and would like to know if and how I can obtain this coverage now?

A. This is a conditional *yes*. Two other conditions must be met before you may become insured. They are (1) at least one year must have elapsed since the waiver was signed, and (2) you must furnish satisfactory evidence of insurability. A written request for reinstatement of insurance should be made to the Personnel Office, Attn: WE-16, who will furnish you with a partially completed SF-51, Request for Insurance, and instructions for full completion of the form.

Q. Under the new Merit Promotion Program, the employee's rating is discussed with him. Is there a review procedure established in the event that the employee does not agree with the rating?

A. Yes. The employee may request review of the rating. This review takes place at the next higher level of supervision not involved in the original rating. Both the employee and the rater would furnish information justifying their views. The determination of the reviewing official and is not appealable under the grievance procedure.

Q. Since the Merit Promotion Program allows a supervisor to place names on the promotion list, isn't it possible to use this method to transfer a mediocre employee out of his organization?

A. Yes, it is possible, but highly unlikely. Deliberate misuse of the program would grossly violate Agency and ethical standards and sound management practice. Certain elements would need to come into play. The mediocre employee would need to be placed in the Outstanding or Well-Qualified group which would be a misrepresentation by the supervisor. This fact alone would not assure selection by the selecting official, even though it would improve his opportunity. If, by some chance, the employee is selected and later is found deficient, this would reflect adversely on the judgment of the previous evaluator.

Q. Changes in organization and talk of economy in government operations makes me feel somewhat uncertain of my future. What degree of job security and promotional opportunity can I expect?

A. Obviously, a direct answer cannot be made. Our employment has leveled off, consequently promotional opportunities and the rate of advancements is not nearly so rapid as in the past four years. On the matter of job security, FAA has made every possible effort in its planning to avert reduction-in-force or reducing employees in grade. Wherever possible, this policy will continue. (Examples are the recent Washington redeployment plan and the discontinuance of Control Centers.) Often, the best interests of the Federal service and the individual employee may not always coincide, but as much as possible the best interests of employees are always considered in carrying out the Agency's mission.

Q. My position requires that I qualify for a Second Class Medical Certificate. What employment opportunities would I have if I could no longer qualify?

A. The Disability Retirement Program requires that a concerted effort be made to place such employees in positions where their remaining qualifications can be utilized. This is intended to work to the advantage of the employee's earning capacity as well as the efficiency of the Federal service in retaining needed skills. Placement efforts may extend to other agencies if necessary.

Q. A Personnel representative is now situated to service the San Francisco-Oakland Bay area. Are other personnel representatives to be located at other hub locations to service those areas?

A. No definite decision has yet been made until the results of present tests can be evaluated. Certainly, the trend is toward this objective as we are trying to bring this type of service as close to the "grass-roots" employee as good judgment dictates.

Q. What are the basic provisions of the Hatch Act which prohibit Federal employees from actively participating in politics?

A. Employees have the right to vote and to express their political opinions but cannot take any active part in *partisan* political management or in *partisan* political campaigns. Federal employees cannot run for public office on any partisan public ticket. They cannot be candidates for any public office (national, state, county or municipal) filled in partisan elections. They can run for local office in elections which are non-partisan, that is where all the candidates on the ballot appear without a party designation such as Democrat or Republican.

Q. May a Federal employee serve in an unofficial capacity at the polls as a checker, challenger, distributor of watcher or in any post in a partisan political election?

A. No. He may not aid any candidate or party in any way at or near the polls.

Q. May a Federal employee use his automobile to take voters to the polls on election day or lend it or rent it for use?

A. Generally, no. An employee's automobile may be used to transport himself or members of his immediate family and, depending upon circumstances, members of a car pool may stop at a polling place to cast votes on the way to or from their post of duty.

Q. May a Government employee's wife, who is not a Government employee, help a friend campaign for political office?

A. Yes. The Act does not restrict the activities of an employee's wife or other members of his family.

FAA, STATE, LOCAL OFFICIALS JOIN IN RESCUE OF CRASH SURVIVORS

The light plane circling Francis Peak suddenly pancaked to earth at the 8000-foot level.

The pilot, Donald C. Phillips of Morgan, Utah, was hurtled through the windshield. He landed in four feet of snow which was cloaking the desolate peak. His passenger, Virgil Barnes of Stoddard, Utah, suffered severe facial cuts and bruises.

Though seriously hurt, Phillips siphoned gas from the plane and started a fire, using his last match. The two men huddled near the fire on the brush-strewn slope awaiting rescue.

At the Ogden airport, meanwhile, Tower Chief Ernest Durbano received a phone call from John Young, a reporter for the *Ogden Standard-Examiner*, who reported that families of Phillips and Barnes were worried over their failure to return from a flight to Francis Peak.

Durbano called Ed Rich, owner of the Thunderbird Flying Service. In a few minutes, Durbano and Rich were in a light plane heading for Francis Peak.

Meanwhile, Harlon W. Bement, Director of the Utah Aeronautics Commission, had been alerted and was flying to the scene in a state-owned Queen Air. Rich and Bement spotted the wreckage almost simultaneously. Near the wreckage they saw Phillips standing, waving his arms.

The Salt Lake City control tower, the Ogden tower, and the Salt Lake City FSS went into action on relaying information and assisting in the rescue operation.

Art Romaine, supervising inspector at the Salt Lake City GADO, decided, after conferring with Bement, that a helicopter would be the best way to rescue the survivors. Romaine alerted Bob Hoskins, a skilled helicopter pilot, and arranged for the use of a helicopter. Awaiting Hoskins' arrival, Romaine went to the hangar, preflighted the helicopter and warmed it so Hoskins could take off immediately.

Bement arranged to secure a second helicopter at Ogden, with Jack DeVore as pilot. Durbano accompanied DeVore to direct him to the crash scene.

Less than four hours after the crash, two rescue helicopters landed in a snowy clearing about 100 yards from the wrecked plane.

Rescuers plowed through deep drifts to reach survivors. Phillips was carried to the helicopter and flown off the mountain, but it was decided not to move Barnes because of his injuries.

Durbano stayed with Barnes, keeping a fire going and keeping him warm with blankets and top coats.

Though night had fallen, Hoskins was able to return and land his helicopter, bringing a doctor and another assistant to help carry Barnes to the helicopter. Seven horsemen from Morgan arrived on the scene and helped carry Barnes to the clearing. Even with eight men, deep snow and thick brush made this difficult.

Barnes and the doctor were flown from the mountain and Durbano remained on the peak with the doctor's assistant.

Though it was snowing and dark, the helicopter pilot returned once more and was guided to a landing by flashlights. Finally, the last two men were taken from the peak and the rescue operation was successfully completed.

In a note to Paul K. DeVries, Area Coordinator at Salt Lake City, Bement declared:

"Just a note of thanks for the tremendous effort put forth by the Salt Lake City and Ogden FAA. I don't know of anyone more interested in providing help and assistance than the Salt Lake and Ogden FAA personnel. Many of the participants in this rescue mission were not given the public credit they deserved; nevertheless, the mission was successful and two lives were saved."

For Fast Action in Portland "Call 'San' the Man"

L. S. Yates, Area Coordinator, Portland, Oregon

(This is the first of a series of brief articles on Western Region Area Coordinators. Others will appear from time to time.)

An Area Coordinator is called on to do many things in serving as the pivotal FAA official in key areas throughout the region.

Making arrangements for visits of Regional Office and Washington Headquarters personnel, acting as the contact between FAA and the public, arranging seminars and pilot meetings—all are part of the day's work for area coordinators.

An outstanding coordinator in the Western Region is L. S. Yates, Chief of the Portland Flight Service Station. Yates, known as "San" because of his middle name, Sanford, has worked closely with the Regional Director and other RO officials in carrying out vital programs in the Portland area.

He began his aviation career with the U. S. Navy as a radio operator. After several years in communications, he accepted an appointment with the CAA in 1937.

Since that time, Yates has held a series of important air traffic control and communications positions in the FAA.

His reputation for getting things done is well-nigh legendary.

Officials have found that the answer to many a thorny problem in the Portland area can be summarized in two words: "Call San!"

LEFEVRE 'MAN OF YEAR'

Supervising Inspector Al LeFevre, of GADO-6, Santa Monica, recently was named "Man of the Year" by the Santa Monica Chamber of Commerce. Angus McLeod, right, Chamber president, made presentation to LeFevre. Robert Gunnell (center) is chairman of the Chamber's Aviation Committee. The award was the city's way of thanking FAA and LeFevre for service rendered during the past year.

AIR FORCE PILOT EXPRESSES THANKS; "OWES LIFE" TO FAA CONTROLLER

Coolness and quick thinking on the part of an FAA controller prevented a military pilot's death with only seconds to spare, in California recently. The pilot, an Air Force officer, officially commended the FAA employee.

Col. Paul P. Douglas, Jr., Deputy Director of Aerospace Safety at Norton Air Force Base, wrote Mr. Halaby to commend the controller, Harold D. Garman of March RAPCON.

Col. Douglas' letter, which details his brush with death—and the manner in which he was "saved" by Garman, follows:

"I wish to commend to you Mr. Harold D. Garman, a March RAPCON Controller, whose mental alertness and prompt corrective instructions recently averted a fatal aircraft accident. I am able to state this fact with a high degree of confidence because I was the pilot of the aircraft in question.

"I departed Norton AFB, California, in a T-33 aircraft on the morning of 15 November 1963, on an IFR flight plan to Biggs AFB, Texas. The weather was approximately 400 feet ceiling and one-half mile visibility in light rain with cloud tops reported at 12,000 feet. I used the Riverside Nr 2 S.I.D. on runway 05 which requires a right turn within one mile after takeoff to intercept the 015 degree radial of the March VOR.

"Almost immediately after takeoff the aircraft entered the overcast and I began a turn to 120 degrees to execute the assigned departure. At 3000 feet I contacted March Departure Control as instructed and shortly thereafter was told by the controller to execute an immediate right turn to 180 degrees. A quick cross-check with the standby magnetic compass revealed that the electrically powered J-2 slaved compass system was malfunctioning. Quickly recognizing that I was experiencing difficulties, this controller promptly and coolly issued the necessary instructions to bring me safely back to course. He then, in spite of the heavy IFR traffic in the area, placed me on course, clear of all obstructions and above the weather.

"A further check of the aircraft instruments at this time revealed a 50 degree discrepancy in the primary compass system which indicated that I had in actuality been steering 070 degrees instead of 120 degrees, as intended. When the controller issued the fire emergency turn, he informed me I was seven miles east of Norton AFB which placed me at the 3500-foot level of the mountains. At this time, I had barely reported climbing through 3000 feet and was on a heading which would have taken me into the higher mountains almost immediately. Almost surely, the aircraft would have struck one of these mountains since I was under an 8000-foot altitude restriction and in clouds.

"In my position as Deputy Director of Aerospace Safety, Headquarters, USAF, I have had many occasions to read and analyze reports of accidents which are listed as "Undetermined Cause" but, in all likelihood, resulted from situations such as I have described and could have been prevented by a highly qualified, quick-thinking controller of Mr. Garman's caliber, if one had been available.

"I would appreciate it very much if you would convey my personal thanks to Mr. Garman for his splendid work. The high degree of professionalism displayed by him reflects most favorably upon himself and the Federal Aviation Agency."

PILOT'S DILEMMA: '80 MILES OUT-AND GOING DOWN'

The Oakland Air Route Traffic Control Center recently participated in the rescue of a Navy pilot some 80 miles west of the San Francisco coast. In carrying out the rescue, outstanding jobs were performed by personnel at the center, including Lee Stracner, radar controller, and Roland Cerny, watch supervisor.

"An unsung hero in the affairs was radar controller Marvin Mahrt who was working as radar hand-off man at the sector with Stracner," said Fred M. Marks, center chief. "In order that Stracner could devote his entire attention to the emergency, Mahrt took over the control of all other aircraft in the busy sector."

Two Navy A4's—LC-102 and LC-102A—were on a VFR round-robin flight from Lemore NAS and were about 80 miles west of the coast when the pilot of LC-102 advised the Center that he was losing oil pressure. The Oakland Center responded to the emergency call, establishing immediate radar identification. A Center supervisor alerted the Coast Guard at San Francisco, and a Coast Guard plane was sent to the scene.

Minutes later, the pilot of the disabled Navy plane advised the Center that he was ejecting and that his wingman would remain in the area. Stracner acknowledged the transmission and marked the spot of ejection on his radar scope. He then vectored the approaching Coast Guard pilot to the scene.

Meanwhile, Cerny coordinated between the Center controller and the Coast Guard, relaying data on the rescue operation. He also kept Lemore operations posted on the progress of the rescue.

The Coast Guard pilot reported he had spotted the downed pilot in his life raft. However, due to heavy seas, pickup was not posisble. A Coast Guard helicopter was dispatched to the scene while the Coast Guard fixed wing plane circled the area. The helicopter made the rescue and took the uninjured pilot to Alameda Naval Air Station.

"I certainly want to extend my appreciation to you for tremendous assistance, said the pilot of LC-102A as he left the rescue scene.

Official recognition was given the Oakland ARTCC by Western Region headquarters for outstanding achievement in coordinating rescue operations under difficult conditions and at a time when delay or indecision could have cost a life.

High Perch at Tahoe

Tom Hall, Western Region airways engineer, perches high above the Lake Tahoe Airport on ladder extension truck to make sightings for the new FAA control tower at the site. Completion is expected by late summer or early fall. Hall and Dick Fisher conducted some of the initial surveys.

—(Photo Courtesy Tahoe Tribune)

SCHULTE DEDICATES NEW GADO/FSS BUILDING AT WILEY POST AIRPORT

William J. Schulte, Assistant Administrator, Office of General Aviation Affairs, was the featured speaker at FAA building dedication, Wiley Post Airport.

New modern building at Aero Center houses the General Aviation District Office and Flight Service Station.

William J. Schulte, Assistant Administrator, Office of General Aviation Affairs of the FAA in Washington, was the key speaker at the dedication of FAA's new building at Wiley Post Airport.

The new structure provides facilities for the FAA's General Airport District Office and a new Flight Service Station for civilian pilots.

Also there, are the FAA Air Traffic Control Tower, Engineering and Manufacturing District Office and the Systems Maintenance Section.

The Putnam City High School Band played before the dedication activities.

Schulte spoke of the outstanding advancements in Southwestern aviation in the general aviation field.

Following the talk, there was a fly-by of T-38 Air Force planes from Vance Air Force Base at Enid.

A static display of a number of light aircraft was also held on the ramp in front of the new building.

The Sailplane Club of Oklahoma put on an aerobatic exhibition at the end of the program.

"We are very pleased with the new location," Ernest G. Igo, Chief of the Flight Service Station said.

"We now have the opportunity to talk to the pilots personally. Before we moved into this office," he added, "we did about 85% of our contact work with pilots by phone."

The students from the FAA Safety Office often come down to the Flight Service Station for information.

"All in all," Igo commented, "we are quite pleased with the set up. It is most practical for our general aviation use and the 200 or so aircraft based here."

Left: Part of crowd that stood beside the new building. They were doing their best to stay out of a cold north wind. Right: Ramp area with Aero Commander and Lear Jet on display, Wiley Post runways in background.

Leon Spyshalski, staff member of the Flight Service Station shown at console in new Wiley Post Building.

Giant, bulging dome of Moscow, Mississippi's "eye in the sky" dominates terrain . . . dubbed the "Big Eye," it scans 251,000 square miles of airspace.

THE BIG EYE

A MILLION-WATT ELECTRONIC MARVEL IN MOSCOW, MISSISSIPPI

The "Big Eye" . . . one would be hard-pressed to find a more descriptive term to describe the Federal Aviation Agency's radar installation near Meridian, Mississippi. This monster, a 16-ton plastic alloy bulbous radome, sparks the imagination to compare it to a Paul Bunyan-size eye.

The "Big Eye" radar site is a very important part of the joint Federal Aviation Agency—U. S. Navy Radar Air Traffic Control Center, located in North Lauderdale County's old Moscow community. This installation actually functions as an all-seeing electronic "eye," monitoring all air traffic passing across the state of Mississippi above 25,000 feet.

The maximum output of this electronic marvel is rather overwhelming—a million watts. The maximum wattage of any commercial radio station in the United States is a mere 50,000 watts! This radar scans approximately 251,000 square miles of airspace, transmitting 360 electric impulses per second. It is difficult for the human mind to comprehend the tremendous speed at which a transmission of an energized radar beam from this "eye" scurries into space until it strikes an airborne object—possibly as far away as 200 miles—until it returns, less than a quarter of a second later (2460 microseconds to be exact).

"There can be no margin for error," says Andrew Petrisin, engineer in charge of FAA's System Maintenance Sector Office at McCain Field.

An interesting feature of this radar installation is "electronic dualization" throughout this radar facility. If one system fails, a standby system automatically takes over to provide uninterrupted service.

Electronics Technicians Petrisin (left) and Jesse Ponds watch a radar scope which monitors microwave pictures for Station personnel. Right, Electronics Technician Don Tingle uses an old-fashioned vise and rat-tail file to make minor adjustment on electronic equipment—a little of "old" needed to maintain the "new."

While Meridian is historically a railroad junction town, it is also a major sky highway intersection. However, a large percentage of the air traffic handled by the Meridian RATCC is transcontinental commercial and military traffic, flying so high that there is little audible or visible evidence of the great number of aircraft passing over. For this reason, the residents are not usually aware of the dense volume of air traffic over this area.

The Systems Maintenance personnel at McCain Field are responsible for servicing and manning, 24 hours a day, this electronic system which provides surveillance capability over this heavy air traffic flow.

Systems Maintenance technicians, working quietly and usually with little fanfare, are vital team members in FAA's overall air safety mission. In their own words, they provide the "system"—Air Traffic Control provides the "service."

While the "Big Eye's" talented guardians may not qualify as television and movie material, this huge "eye in the sky" looks like something straight out of science fiction.

This radar site may also be remotely controlled from the Meridian RATCC at McCain Field, where the movement of aircraft is channeled as swiftly as the giant rotating radar's "sail reflectors" under the ball-shaped radome receives it.

This data is fed simultaneously along a parellel microwave link to the FAA's Memphis Air Route Traffic Control Center by eight relay stations. Memphis, in turn, further disseminates this data over an even greater airspace area.

In addition to the Radar Air Traffic Control Center and the Systems Maintenance Office at the Naval Station, there are several other FAA offices at Meridian—a new Flight Inspection District Office which maintains aerial surveillance of electronic navigational and landing aids over approximately the same territory scanned by Moscow's "Big Eye,"—a separate Systems Maintenance Section Office—and a Flight Service Station at Key Field.

Because of the highly technical and complex nature of the work performed at this radar site, the average television or radio repairman need not apply for a job here. Before an Electronics Technician is even permitted to stand a radar watch for FAA, he is required to have a minimum of three and a half years of basic electronics training, plus six months' intensive FAA advance radar engineering study at our Aeronautical Center at Oklahoma City.

The job is certainly no snap—even some of FAA's veteran technicians who baby this maze of equipment are still somewhat awed by the complexities and capabilities of it.

The "Big Eye," while located in a field on the side of a barren clay hill, would look equally at home on the moon. The first sight of it immediately gives one the impression that it could very well be something from outer space. Regardless of its weird appearance, the "Big Eye" is one of the most vital links in the nation's Airspace Utilization System.

Mr. Edward Kjelshus, Chief of the Airman Certification Branch, stops at the desk of one of his key assistants, Lucile Dutweiler, to discuss the day's work.

Patty Anderson, Vonda Robbins, and Cecelia Fornaresio, Aircraft Registration Branch, researching aircraft titles in the Branch's Public Documents Room.

Operating Data Branch Chief Johnny Griffin (standing), with Telex Operator Wendell Aiken. Telex net picks up special aircraft reports from 14 cities.

Jay Moody (left), and Bill Dickey study a report derived from one of the Divisions 32 computer systems. The computers work a minimum of 16 hours a day.

CONTROL SYSTEMS UNDER ONE ROOF

The Flight Standards' Control Systems Division will be the primary occupant of the new records building that is nearing completion at the Aeronautical Center. Four of the Division's six branches are now located at Oklahoma City, and are temporarily housed at the Staging Facilities.

Jay Moody is Assistant Division Chief and Manager of the Control Systems Data establishment. The four branches that operate under Moody are the Computer Services Branch, Airman Certification Branch, Aircraft Registration Branch, and Operating Data Branch.

The Computer Services Branch, under Bill Dickey, provides for the Flight Standards Service (and other FAA elements as required) all automatic data processing services to meet the data collection, processing and retrieval needs of the Service.

These services include system design, programming, mathematical, and operation of data processing equipment. To accomplish this mission the Branch operates an IBM 7040 large-scale electronic computer, and an IBM 1401 medium-scale computer. More recently the Branch's functions have been expanded to provide for the data processing needs of all Aeronautical Center organizations except the I&M Depot.

The FAA Automation needs have been so great that the Computer Services Branch has been asked to gear to rapid expansion, and even more computer-oriented workload is expected within the next two years. At this time, the Branch is maintaining and developing a total of 32 computer systems and 18 PCAM systems, with nearly 425 computer programs running on the larger computers.

Over 40 computer programmers and a dozen systems analysts and mathematicians provide the professional staff for this rapid conversion to automation. In similar fashion a dozen computer operators are needed to keep the computers humming at a minimum level of 16 hours per day.

The many computer systems include both scientific applications and more straightforward data processing applications. For example, scientific applications range from computer support and consulting services for the Flight Standards Service flight inspection program to the statistical programs which support the research efforts of the Civil Aeromedical Research Institute. An example of a large-scale data processing system of FAA-wide dimension would be represented by the Medical Records System. This system, processed on a daily basis, is used to administer over a half-million records containing medical data for the airman population.

More recent computer systems are concerned with the development of managerial controls, and the production of meaningful statistics, for the various programs of the Flight Standards Service. These computer systems include Mechanical Interruption Summary, Mechanical Reliability Reporting, Violation Statistics Reporting, and Accident Reporting.

Three other new major systems affecting the Aeronautical Center will be the Federal Payroll System, the Aircraft Registration System, and the Airman Certification and Information System. These are typical examples of how the Agency is moving ahead with automation to provide improved services to the public, to upgrade internal procedures and methods, to generate needed savings, and to provide FAA's management with new statistical and reporting information.

The Operating Data Branch, FS-967, is one of the newer branches of Control Systems Division having originated with the transfer of certain functions and personnel from Washington, D. C. The Branch is headed by Johnny Griffin, an experienced administrator with 21 years in the CAA/FAA.

The two prime functions of the branch are gathering of data for the Mechanical Reliability Reports and the analysis of General Aviation Accidents. The Mechanical Reliability Reports, most often referred to as MRRs, are received daily via telex from air carriers throughout the United States. These reports describe mechanical malfunctions experienced by the air carrier which is then coded for automatic data processing. Analytical studies are then made to determine trends and areas within aircraft maintenance where emphasis should be placed. General aviation accidents (those other than air carrier) also are coded for automatic data processing. Analytical studies are made that provide information which is beneficial in producing a more effective accident prevention program.

The Airman Certification Branch, FS-960, headed by Eddie Kjelshus, operates a system for the final review and issuance of certificates and ratings to airmen, and maintains public records of all official airman actions. A system for scoring and reporting written examination results also is a function of the Branch. The extent of the Airman Certification Program is world-wide. United States airman certificates are issued to persons of all nationalities as well as U.S. citizens.

Correspondence from airmen provides an occasional chuckle to brighten the day. The specificity of airmen in relating incidents relative to the loss of their "tickets" is most interesting. Boating and skiing upsets prevail in the summer months. Babies or playful puppies devour the valuable cards, and innocent wives "run them through the washer." One pilot related that he valued his certificate above his wife; he was living with wife #6 but still had his original certificate. These incidents result in an average of 1000 duplicate certificates being issued per month.

Certification starts with the written examination, regardless of the type of rating sought by an applicant—Private Pilot, Commercial Pilot, Airline Transport Pilot, Flight Engineer, Control Tower Operator, Airframe Mechanic, Parachute Rigger, etc.

These written examinations are administered by Supervising Inspectors at FAA District Offices and related Service Stations, and International Field Offices around the world. They are channeled to FS-960.5, the Examination Section of the Branch, where over 100,000 examinations per year (involving 74 different examinations in about 34 categories) are processed, scored, and score slips issued to applicants within a period of three days after receipt in the Oklahoma City office. A score of 70 constitutes a passing grade.

Approximately 1,800,000 certificates have been issued since the certification program was initiated in 1927. The present system no longer serves the needs of the public and the Agency, so the Computer Services Branch is designing and programming a computer system which will produce certificates, record airman information on magnetic tape, and prepare statistics.

A proposed revalidation program is expected to become effective in July of this year. As a result of this program, a consolidated certificate card will be issued, listing all the airman certificates and privileges due the holder. Medical certificates also would be shown on the card.

The Aircraft Registration Branch, FS-965, headed by Lester Robinson, provides a central registry for recording information for all civil aircraft in the United States, and administers the FAA program providing for recertification of aircraft.

In the process of its daily business with this complete civil aircraft file the Branch provides public title search facilities, processes mortgages, applies recorder fees, codes all pertinent documents, microfilms all historical files, and provides an extensive service to the public in answering thousands of inquiries and requests every year. The Branch also maintains a Central Records Unit for the assignment of special serial numbers to aircraft.

The Public Documents Room is involved in title searches of aircraft records ranging from routine searches regarding a single aircraft to the complex searches involving hundreds of aircraft in multi-million dollar closings. This office is utilized by both individuals and companies, with some company representatives flying here to handle personally matters pertaining to their aircraft. Many request information in regard to aircraft ownership, legal advice on registration and recordation affecting aircraft, aircraft engines, propellers, and spare parts. The Public Documents program is a self-sustaining one since over $400,000 in fees are collected each year.

The Central Records Unit controls the assignment of special numbers for aircraft, and the rush season is again upon that office. When persons have a particular number they do not like, they may contact this office for a desired number. If the number is available, it may be obtained for a fee of $10. Some very interesting letters are received as to why some numbers are requested, such as telephone numbers, street addresses, etc. A file is maintained on all civil aircraft by registration number, make, model, and serial number. Records are maintained on all exported planes and on all cancellations of registration numbers.

In coordination with the Computer Services Branch, a number of different aircraft listings are prepared for public use. These listings range from special listings for county and state use to the U.S. Civil Aircraft Register which is available from the Superintendent of Public Documents for $5.25.

As an interesting sidelight, 20 per cent of the employees in the Aircraft Registration Branch are enrolled for credit or audit in university or adult education courses. These employees feel they owe this effort at self-improvement to themselves and to the Agency. This is one way they can express their appreciation to Uncle Sam while also becoming more efficient in their job performance.

POSITIVE AIR PRESSURE CHAMBER ADDED AT CARI

An additional piece of equipment has been added to the building at the Civil Aeromedical Research Institute.

The newest chamber is a Positive Air Pressure Chamber. It is the only one of its kind in the "midlands." The Gulf coast and both the eastern and west areas have these, but it is the only one within several hundred miles.

It has many uses, and will be used primarily in CARI research. Probably the best known facility of the chamber is an aid for swimmers after they have contacted the "bends" in swimming in one of Oklahoma's lakes.

CARI Director Dr. Stanley Mohler shows the chamber to Mrs. Betty Spears of the CARI staff.

Dr. Tang Marries Formosan Sweetheart

Dr. P. C. Tang, Chief of the Neurophysiology Branch, of the Civil Aeromedical Research Institute was recently married to Miss Mei-Hsien Wang in Taiwan, Formosa. Miss Wang came to Oklahoma City in March on her first U.S. trip.

KC-197 AF Plane To Be Utilized By CARI for Evacuation Studies

This Air Force KC-197, on loan to the Aeronautical Center, will be used in emergency evacuation studies by the Civil Aeromedical Research Institute. Dr. Stanley Mohler, Director of CARI, explained that CARI scientists will use the aircraft to perform further investigations to determine improved emergency escape procedures.

Portugal's CA Director General Is Aeronautical Center Visitor

The Aeronautical Center often plays host to many well-known visitors from foreign lands.

One of the more recent visitors was Vitor Veres, Director General Civil Aviation, Portugal. He is on the left in the front row with Enar B. Olson, Director of the FAA Academy.

Second row is Lewis N. Bayne, Manager of the Aeronautical Center and Jose de A. Theriaga, District Traffic and Sales Manager, Pan American World Airways Overseas Division, Lisbon.

In the back row is William Godfrey, of the I&M Depot and Carl Drumiller of the Aircraft Services Base.

SMALL AEROMEDICAL RESEARCH BUDGET PAYS OFF IN GREATER SAFETY

Medical research for the 70-million air travelers every year costs about three cents per passenger. So estimates Dr. Stanley Mohler, Director of the Civil Aeromedical Research Institute at the Aeronautical Center.

The budget for CARI the last 12 months was $2 million. "There is no better life insurance," Dr. Mohler said. "Our aim is to get each passenger to his destination intact—even though the plane crashes."

Some of the penny-per-passenger research carried out by CARI has direct benefit to air travelers. Passengers range from babies to infirm oldsters. Some are in the peak of health, others may have a cronic heart condition, high blood pressure or lung insufficiencies.

Dr. Mohler says that medical research must gear its pace to engineering advances, which permit planes to climb higher and faster, to be sure air travel is safe for the consumer.

Design and arrangement of aircraft interiors is under constant scrutiny to diminish or eliminate impact injuries.

New methods of evacuating passengers of all ages and with varying disabilities are frequently reviewed.

The efforts of physiologists, biologists, engineers, accident investigators, test pilots, physical anthropologists and flight surgeons are joined in this research.

The drop-down adhesive oxygen mask, which hostesses now demonstrate, was perfected at CARI by John Swearingen and his associates in the protection and survival branch.

Jet windows were likewise designed by the same division for passenger safety to prevent rapid decompression.

The windows are actually three panes of glass, with tiny holes in the inner and middle sections to bleed air out slowly in case of a pressure failure.

"We are here to serve the entire aviation community," Dr. Mohler says, "all aircraft manufacturers have access to our findings and are making use of them."

Health of pilots also is a major concern for CARI. Drug studies were recently completed to determine pilot efficiency under common medication prescribed by doctors.

One research project for which the important cost-result relationship can be established is a battery of psychological tests prepared by CARI for screening air traffic controllers.

Tests are designed to rate abstract reasoning ability and the capacity of applicants to visualize space in three dimensions.

Dr. David K. Trites of the selection section of the psychology area said that between May, 1963, through July, 1963, approximately 2700 persons applied for employment as air traffic controllers.

Over 300 were selected for this type of training.

The FAA which hires all traffic controllers for civilian purposes, found that tests accurately disclose the type of person best suited for nerve-wracking jobs. This eliminates unqualified persons undergoing a year of Government-paid training. Studies that provide the tests cost $40,000.

"This includes salaries, equipment, and computers," Dr. Mohler said. "It is estimated that within 10 years this phase of our research will save the taxpayers $2 million."

Art Directors Pay Visit to CARI

There are often visitors to the Civil Aeromedical Research Institute building. However, probably the most artistic group in recent months was the Oklahoma City Art Directors Club. CARI medical artists Betty Gatliff and Bill Flores, who are members of the club, served as hosts for the visit. J. D. Allred, also of the CARI staff, gave the artists a top floor to basement guided tour of the building. Sheila Mueller, a Center employee, also was a guest during the tour.

HEALTH LECTURES FEATURED

One feature of the FAA's Management Institute held at the University of Oklahoma campus in Norman, is the evening executive health lecture given by Dr. Stanley Mohler, Director of CARI. The two-week Management Institutes are attended by personnel of the Southwest and Central regions and the Aero Center. Each participant is provided a copy of the Executive Health Guide. The cartoon was drawn by CARI's Bill Flores.

MANY AGENCY AIRCRAFT ARE SERVICED BY AIRCRAFT SERVICES BASE

This is the second in a series of articles about the many functions of the Aeronautical Center.

In the last issue, the Civil Aeromedical Research Institute was featured, and now you are invited to visit the large Aircraft Services Base.

This area of operation is responsible for managing the Agency's fleet of over 130 aircraft.

The ASB originally was a part of the I&M Depot operations but now carries out a day-to-day operation and maintenance on the 25 or so aircraft based at the Center. Also it has the maintenance and modification responsibility for all FAA aircraft and offers engineering services and technical support to all maintenance bases for special avionics-airborne-equipment.

Among the types of aircraft maintained at the base are the Douglas DC-3, Lockheed Electra, Convair 880, Boeing 720, DC-6, Allison Prop-Jet Convairs, Boeing C-135 and a Lockheed TV-2 among other planes.

In addition to the aircraft, the Aircraft Services Base modifies, repairs and installs aircraft and airborne equipment for all seven regions of the FAA, as well as NAFEC (FAA's National Aviation Facilities Experimental Center) at Atlantic City, N. J. They also perform Flight Inspection for the Air Force, other agencies and for some foreign countries. This work is done on such planes as the Lockheed Constellation, Douglas DC-4, Lockheed JetStar, Beechcraft C-45, Grumman Gulfstream, Convair T-29, Fairchild C-123 and others.

The latter three aircraft are used for in-flight inspection of electronic ground aids that make up the remote facilities in such areas as Alaska and the Pacific.

The FAA operates a fleet of "Flying Laboratories" to check air navigation aids.

These aircraft are equipped with highly specialized electronic devices that determine the accuracy of the air navigational aids on the ground.

The Base is continually engaged in developing, modernizing, standardizing, inspecting and installing more complex equipment in the "flying labs."

It is interesting to note that the FAA is the only governmental agency conducting this type of program.

Flight Inspection Program

The Base also calibrates, installs as well as assembles, airborne equipment used in the flight inspection program.

The first darkness of night surrounds the Aeronautical Center's spacious hangar. In the foreground are two of the enormous jet engines on the sleek Boeing 720. Nestled in the hangar is FAA's Convair 880. Both aircraft are maintained in top flying condition at the Aeronautical Center by the Aircraft Services Base.

The renowned DC-3 still is a popular aircraft with the FAA. Shown are several Agency "Gooney Birds" and some others being prepared for flights overseas.

Ramp area of the Aircraft Services Base shows a DC-3 (left), the huge C-135 (center) and the Convair Turboprop 440. Men in front represent aircraft crews.

Technological changes and advances used in the flying labs are a never-ending challenge and workload. With improvements in radio ranges and other gear, the avionic equipment used for inspection work of this caliber must be changed to keep pace.

Periodic inspections, standardization and modernization of aircraft is accomplished on the aircraft during the time that work is in progress on the avionic equipment.

Part of the job carried out by the Aircraft Services Base is that of developing detailed standards, procedures, techniques and processes for aircraft operation, maintenance, inspection and calibration. Also a responsibility is the revision of all manuals relating to these operations.

The Base is the major overhaul center for all FAA aircraft and also provides all the needed technical direction to all FAA aircraft maintenance bases. These are located in 16 cities around the world and span the United States and such foreign cities as Frankfurt, Germany, and Beirut, Lebanon.

The ASB also has the responsibility of scheduling all FAA aircraft for periodic overhaul at appropriate time intervals.

The Base constructs and installs prototype systems and produces modification kits for installation by other areas of the Agency.

In addition to all of this the ASB makes emergency engine changes for the regions and provides them with engines and equipment on a repair and exchange basis.

One example of complete overhaul is the Alaska Region's Fairchild C-135. On a recent inspection, a complete design and installation of a thermal anti-icing system was installed.

Even X-ray is frequently used during the work process on several areas of the aircraft.

CENTRAL REGION NEWS

COMMUNICATION IS THE BRIDGE THAT UNITES US

One of the principal differences between man and the other primates is his ability to communicate intelligently with his peers. A few of the other members of the animal kingdom reportedly communicate with each other through audible signals of some sort, but none are blessed with the ability to express complete thought as is man.

In spite of this great talent, however, man can be guilty, frequently of a decided lack of communication, especially when he is a member of an organization as large as the Federal Aviation Agency.

A complete understanding between all levels of responsibility is imperative in so large a group; something impossible without ideal and unbroken lines of communication between all echelons of activity. And that word "between" is the key word. Communication is a *two-way* proposition.

In the Government Service there have been developed over the years several standard procedures and forms for use in communicating with others both inside and outside the Federal service. We in the FAA utilize these methods whether in written or spoken form.

Each has its proper place in our daily routine, but sometimes the use of one method over another is predicated upon urgency, economy, or both. It is up to the employee to see that the correct and most prudent means of communications are used at all times. Supervisors are held responsible.

Usually, the most effective means of conveying a message to another person is by word of mouth. This is accomplished easily when the other person is within sight or within the realm of a toll-free call. Only when distance places a premium on the spoken word do we normally consider the written word.

Then, we must weigh the importance of the matter to decide whether a short "buck slip," a full-length memorandum or if somewhat urgent, a teletype message should be prepared. Through the prudent use of the correct medium of communication, we can not only perform our duties effectively, but also perform them in the most economical manner.

I know I can count on the employees of the Central Region to budget their time to the point where it is necessary to require a costly long-distance telephone call only on the rarest occasion.

However, figures for the past two fiscal years show an increase in the cost of long-distance telephone services in the Regional Office even though we are now tied into the Federal Telecommunications System. This indicates the need for strong corrective action. In FY-62 when FTS calls were still in the future, the total Regional Headquarters long-distance phone bill was $43,639. In FY-63 when FTS was available part of the time the total cost was $54,140, an increase of over $10,000. During the first five months of FY-64 the total billing amounted to $24,505 which, if carried through to the end of the fiscal year, could amount to nearly $60,000 for one year. Remembering that our Administrator, Mr. Halaby, has endorsed President Johnson's pledge of frugal operation in the nation's Government, it behooves each of us to take the necessary steps to ensure that we do not break that pledge by faulty practices in any phase of our operation. We can begin by taking stock of our methods of utilizing our lines of communication.

In his message to Federal managers through the Civil Service Journal, the President stated, "Many people outside Government think we are daring spenders. Let's show by our record that we are, in fact, sparing do-ers." These words were carefully chosen for they say a great deal in two short sentences. Let us not handicap our Agency by not paying heed to these words.

J. W. Beardslee

Director, Central Region

INSIDE JOB

Monitoring all phases of air carrier activity, the men of the Air Carrier District Offices become acquainted at places like the giant TWA overhaul base at Mid-Continent airport in Kansas City. Here Principal Maintenance Inspector Bill Murphy from CE-ACDO-33, checks compartment dividers in a refurbished Constellation with J. F. Roche, left, director of aircraft structures engineering for TWA. The company is completely remodeling a number of the aircraft.

INCENTIVE AWARDS ACT CELEBRATES TEN YEARS

Since the year 1964 is being heralded as the Tenth Anniversary of the Incentives Award Act, it seems fitting and proper that some effort be given to an analysis of the merits of a good suggestion. President Johnson has said that each Government employee is responsible, not only for doing his assigned job but also for devising and proposing ways to improve his performance.

To help you respond to President Johnson's challenge here are eight tips on making beneficial suggestions.

1. *Concentrate on what you know best.* Stick to your own "shop" when you are considering a suggestion, to things with which you are familiar, even though you are on the trail of a glaring abuse of economy next door. If it is that obvious, someone else is sure to be submitting a suggestion anyway.

2. *Pick a situation which needs improvement.* A good suggestion can pertain to ideas both large and small, but the successful one will always show definite ways to improve a condition or situation. If you have only a vague idea that your solution is what is needed, forget it.

3. *Pinpoint the problem.* After deciding on your subject, narrow down the topic or idea to a specific problem needing attention or change. To use a gross exaggeration for a sample, it is not enough to say that the Directive System is inefficient, you must pinpoint the problem by telling what part of the Directive System needs attention.

4. *Get all the facts.* No explanation necessary here, since without all the facts your suggestion won't stand a chance against one submitted by a person who has dug out all the pertinent details. Facts are the main ingredient of a good suggestion.

5. *Analyze all the facts—ask why.* After you have assembled all the information both for and against your idea, ask yourself why, after listing each one. Get to both sides of the problem. Actually try to see the end result of putting your suggestion to use.

6. *Turn loose your imagination.* Go after ideas, lots of ideas, all you can think up. Your only guarantee that you will eventually pick the best solution is to think of as wide a range of solutions as possible.

7. *Now evaluate each idea.* After gathering all your ideas consider such factors as: Is the solution practical? Will it accomplish the desired result? Can it improve the service now offered? Will it save time, money, or material? How will it effect other operations? What is the cost of installing the idea?

8. *Sell your suggestion.* A well-organized, clear and complete presentation of your idea and its expected benefits is the best insurance for getting your idea accepted. In writing up your suggestion, first identify the problem as to current practices and background. Next, explain your proposed solution, showing how it will achieve the benefits you expect.

Then, point out the expected benefits, in dollars if possible, from your proposal, specifying those that can be measured in time, labor, equipment, materials, space, etc. Also identify benefits that cannot be measured, such as better service, improved quality, safer working conditions. Be sure to point out *who* will benefit and how.

Above all, remember you can't *force* acceptance of your idea—you have to *sell* it. This means convincing the evaluator that your suggestion is worthwhile.

Following these steps is not guaranteed to bring forth rich fruits of reward for your efforts, but careful preparation of your case will insure that by the time you forward your idea to the Incentive Awards Committee for evaluation, it will stand as good a chance of being acted upon favorably as any other, with perhaps the weight of approval leaning toward your side.

Salting the Highways Keeps the Dusters Busy in the Wintertime

What happens when a crop duster laments the slack season during the winter months? He spreads salt on highways if his name is Robert Mueller and he owns a crop dusting company in South Haven, Michigan.

The idea came to Mueller originally when he was a Marine flight instructor in World War II,-but it didn't get off the ground until the winter of 1963 when he convinced the Van Buren County road commission to try the experiment. It worked so successfully that the commission built the idea into this year's budget and the planes have been salting the highways as the need arises.

Mueller and his five pilots fly single-engine Piper Cubs with regular crop dusting equipment to spread a 20-foot wide path of salt with extreme accuracy. When asked about the "fallout" hazard to cars or pedestrians Mueller explained that the salt is no more dangerous than a light sleet. When forced to salt a road when cars are present, Mueller has instructed his men to make their runs "with the traffic,, to minimize shock on the driver.

The county highway superintendent in a newspaper article stated that the new procedure is "a highway maintenance tool which reduces traffic accidents."

Use of Barometric Altimeter Down to 100-Foot Level Discussed in KC

District, Regional and Washington Flight Standards personnel met in Kansas City in February to discuss a proposal from Trans World Airlines for the use of the barometric altimeter down to the 100-foot level. The meeting, led by J. A. Ferranese, FS-400, together with J. S. Szymkowicz, FS-120 and F. C. Rock, FS-305, was held preliminary to the development of a test program to be conducted by the carrier to determine the accuracy and feasibility of the barometric altimeter. Shown at table facing camera are: (from left) M. E. Baldwin, CE-216, Ferranese, F. D. Mackenzie, Chief, Air Carrier Branch; R. A. Browne, CE-ACDO-33; Rock. From left with back to camera: G. A. Williams, CE-ACDO-33; L. J. Powers, CE-266; R. G. Nay, CE-ACDO-33; M. X. Crouse, CE-264 (shoulder).

WHEN A BRIDGE NEEDS BUILDING, I&M BUILDS IT

When a bridge needs building, I&M builds one. This is part of the approach light system at Minneapolis.

Designed and engineered by Central Region I&M personnel, the arch-type bridge shown here will be the first structure of its type to be built by the FAA. The bridge is being constructed to extend the Approach Light System on Runway 29L at the Minneapolis-St. Paul International Airport to the full 3000 feet.

Although designed primarily to hold the ALS, the necessary catwalk connecting the light bars would seem to qualify as the highest, longest and at five feet in width, the narrowest foot bridge ever conceived.

The bridge extends east-southeast from the approach end of the runway across a dual highway and the Minnesota River to a bluff on the east bank. Crossing the river will require a span of 400 feet from one bank to the other. And since the river is a navigable stream, the arch will rise approximately 125 feet above mean water level.

The artist has shown the power lines of the Northern States Power Company's Black Dog Plant passing beneath the arch. A comparison will give the reader an idea of the height of the new span.

Notice: Have You Checked Your Beneficiary Lately?

The designation of beneficiary provision in the Civil Service Retirement Act and applicable only to lump sum payments, gives each employee the right to make a choice of the person to whom the money will be paid. The designation of beneficiary applies only to lump sum payments and does not affect the right of any person who qualifies to receive survivor annuity benefits. No action on the employee's part is necessary, however, if he is satisfied to have the lump sum paid in the following order of precedence:

1. To the widow or widower.
2. If neither of the above, to a child or children in equal shares, with the share of any deceased child distributed among the descendants of that child.
3. If none of the above, to the employee's parents in equal shares, or the entire amount to the surviving parent.
4. If none of the above, to the executor or administrator of the estate.
5. If none of the above, to the next of kin.

Standard Form 2808, Designation of Beneficiary, may be filed by the employee if he *does not* wish to have this order of precedence apply in paying his lump sum death benefit. Forms and information may be obtained from any personnel office.

A change or cancellation of a previous beneficiary designation may be made by executing a new Standard Form 2808, and may be made without the knowledge or consent of those previously named.

The same general procedure applies in a designation of beneficiary under the Federal Employees Group Life Insurance Act, EXCEPT that this designation (Standard Form 54) is automatically cancelled on the day the employee transfers to another agency or 31 days after he ceases to be insured. A new designation must be made in the agency to which a transfer is made.

Slides and Tape Used to Help Controllers Find Lost Aircraft

Central Region's Air Traffic Division has developed a new training aid for instructing FSS and Tower personnel in the art of "finding" a lost pilot and guiding him safely to an airport.

The presentation consists of 35mm color slides and a tape recorded narration. Slightly over an hour in length, it tells four basic ways of locating the pilot and what to do with him when you find him: (1) Close-In Procedures (VOR), (2) Time and Distance Procedures (Bearing Changes), (3) Fixing Position (With Cross Bearings), (4) ADF Procedures.

The project was initiated and directed by E. B. Johnson, CE-506.4, with an assist in the script and editing portions by J. B. Tate, CE-526. R. W. Fogarty of the Mason City FSS took the color slides. Artwork and cartoons were the work of Loreta Feeback, Regional Illustrator. Norris Davis, CE-511.5 did the cartography.

Present plans call for the distribution of the production to each FSS and CS/T in the Central Region.

Delbert Jones Named Controller Of the Year for Evansville CS/T

Delbert "Del" Jones, right, was named Evansville CS/T "Controller of the Year" by his fellow workers in January. The award given for ability, individual character, knowledge of air traffic control procedures, and services rendered to the flying public, was presented by Chief Donald W. Jones.

STORIES WANTED

What's going on in your general vicinity? We are interested in printing articles about your facility. Send items through your HORIZONS representative or to the Regional Public Affairs Office.

FSS quarters (above) are on the second floor of this building now vacant because of the move to the new airport. This "little America" view (below) of the new building now under construction shows the past winter's snow depth.

HORIZONS Visits GRAND FORKS FSS

Grand Forks, North Dakota, lies on the banks of the Red River of the North approximately half-way between that river's source at Lake Traverse in South Dakota and its Canadian terminus where it empties into Lake Winnipeg more than 300 air miles to the North.

The broad flat valley is noted for its rich black soil which provides abundant crops of potatoes, sugar beets and small grains each year. In the summer the area abounds in beauty and warm, healthful fresh air. During the winter months, however, the same broad flat valley funnels the wintry winds from the north and west through the city.

The hardy men of the Flight Service Station brave the worst winter has to offer for they know that spring will herald a new season of fishing and other outdoor activities in one of the finest recreation areas of the country.

Although situated far to the north, seemingly in the winter, the FSS at Grand Forks, nevertheless plays an important part in the total Air Traffic system of the Central Region and the FAA. Both a training facility for the region and a "destination" station for all flight plans relayed to Canada within a certain area, the Station also coordinates with Customs officials and U.S. Border Patrol officers in the city.

Groups of trainees sent to the station from the Oklahoma City Aeronautical Center are trained in pilot briefing, weather observation, and other on-the-job duties up through the Assistant level. Guiding the instruction of these men is a Proficiency Development Officer in well-equipped training quarters.

Because of their location in the "snow belt" during the winter and their preoccupation with crops and sports during the summer, the 40,000 plus inhabitants of Grand Forks are extremely weather conscious. Therefore, because no office of the Weather Bureau exists there, the people rely on the men of the Flight Service Station to give them the latest weather information. Weather observations taken by FSS personnel are made available to the four radio and TV stations in the area as well as through the usual public and aviation channels.

Proximity to the U.S.-Canadian border makes the station a trans-border relay station, between FAA and Canada's Department of Transportation, for message traffic on all flights operating across the border from Western Michigan to Eastern Montana.

Due to the different systems used by each country, however, this relay accounts for some TTY equipment, procedures, and functions quite strange to other stations in the Central Region. NOTAMS and Flight Plans from Canada, for instance, carry a different format and must be readdressed, edited and reassembled before relay is accomplished to domestic circuits. Approximately 25% of the total U.S.-Canadian relay traffic goes through this station.

Since the airport is a Customs port of entry for aircraft clearing between the two countries a large seasonal influx of tourist traffic is experienced during the summer months. Specialists asked for pilot briefings for flights entering Canada frequently exhibit their knowledge of DOT regulations.

There are 52 airports in the Grand Forks Flight Plan and Search and Rescue Area. The local airport has 16 airline operations daily which along with some 50 local aircraft keeps the Airport Advisory Service quite busy.

The city of Grand Forks is now completing a new airport approximately four miles west of the present one. Most of the activity has now moved to the new field but the Flight Service Station will remain in the present quarters until a new building has been constructed. The new quarters are the first of this type in the Central Region built and paid for by the FAA expressly for a Flight Service Station. It is expected that the new Station will be operational sometime during the coming fall.

Station Chief Lon Daharsh briefs local pilot Lester Jolly. Personnel also must be acquainted with many Canadian rules due to number of trans-border flights through Grand Forks.

Because of the proximity of Grand Forks Air Force Base and also the Air Force Base at Minot, North Dakota, a special Flight Data Position (FLIDAP) is necessary. There are 52 airports in the Grand Forks Flight Plan and Search and Rescue Area. Here Specialist Lyle Wicken mans the board.

The dual air-ground position (above) is being manned by Specs. J. McLaughlin (l) and H. Olson. Below left, Lead Tech. P. Bussoletti (r) explains maintenance problems to Techs. E. Nelson and B. Ellis (l). Below right is pilot John Evangelist and a U.S. Border Patrol "Beaver." The Patrol works closely with the FSS.

Proficiency Development Officer Jim Henderson has a well-equipped training set-up. Each year he trains many students sent from Oklahoma City.

Removing a flight plan (above) from the TTY printer is Spec. H. Olsen. U.S. Customs Off. Don Porter (below) is well-known around the airport.

HOBBY CORNER

Meet

CHARLIE BAKER,

Rockhound!

Charles M. Baker, rockhound, surrounded by the tools of his hobby. The slab of shale on the table holds examples of crinoids about 250 million years old.

The hobby spotlight shines this month on a man who pursues one of the more unusual hobbies among FAA employees. Charles M. Baker, Chief, Data Control Group, Commercial Systems Staff, I&M Division, is a rockhound. More specifically, Baker is an amateur paleontologist, or collector of fossils, who also happens to collect minerals, semi-precious stones and other evidence of the past as it pertains to the history of the earth's geology.

In a well-equipped laboratory in his garage where display cases, workbench and equipment have evicted the usual automobile, Baker spends some 30-40 hours a week in the wintertime cleaning, restoring, classifying and mounting for display the fossils and other items he has dug out of the ground during the warmer months of the year.

One who doesn't know the meaning of doing things halfway, Baker has an extraordinary grasp of his hobby due to constant research and study necessary to identify and classify the thousands of objects he has gathered. He is well-known in the "rockhound" field and is in demand as a speaker and lecturer among the many clubs in the several states surrounding the Kansas City locality.

He leads many clubs on field trips into Missouri, Kansas, and Oklahoma each year and ventures further into Colorado, Illinois, and other states for specific specimens from time to time.

His particular interest is Micro-paleontology or the study of microscopic fossils which he finds with the aid of a binocular microscope after pulverizing likely looking specimens of rocks picked up on his travels. The minute fossils are then mounted between glass and classified. Recently he has begun to photograph his specimens for possible use in illustrating a series of papers he plans to write.

Baker hopes to do research in this field when he retires and is even now building a research collection.

In addition to his fossils he has also gathered an excellent mineral collection which he has displayed many times at shows around the country. Some of the more unusual agates and other semi-precious stones he has made into jewelry for himself and his family. His equipment includes the stone-cutter's diamond saw and lapidary wheels.

Baker is a past president of the Independence Gem and Mineral Society and presently heads the Kaw Valley Rock Club which he helped form a short time ago. He was show chairman in 1962 and holds the same position for 1964 for the annual rock show which will be held in September at the National Guard Armory in Kansas City, Kansas. More than 200 people in over seven clubs will display their best specimens.

Baker is a 16-year veteran of the Federal Aviation Agency having entered on duty in Alaska in the spring of 1948 as an aircraft communicator. He spent tours of duty in Texas, Idaho, Kentucky, another in Alaska, when he changed from communications to electronic maintenance, then to Illinois before coming to the Kansas City area in 1956 as relief technician at the Kansas City Station. During the latter part of 1957 he was transferred to the Regional Office as an Electronic Technician in the Electronic Engineering Branch of I&M.

Baker is married and has one daughter, 12 years old.

This is only a small part of Baker's extensive collection; all items are neatly mounted and classified.

When he is out digging, Baker identifies the strata he is working by signs he designed and made himself.

Baker (r.), is not eating a sandwich but examining a piece of "rock." Photo was shot at Rock/Swap Auction.

Hank Nauert with transducers and oscilloscope shows how signal phasing is used to test aircraft parts.

Nauert and Boyce demonstrate FAA vibration equipment. Note miniature accelerometer held by Nauert.

Using a strain-gaged aluminum beam Nauert demonstrates structural vibration of aircraft being tested.

FLUTTERBUG CHASERS

Shake, Rattle and Roll—and do the Twist too!! Strangely enough these dance craze terms and motions are included in the certification tests of civil aircraft. Our FAA dynamics engineers fancy these terms up a little and call them flutter, torsion, bending, frequencies, harmonics, etc. Newly-designed or modified airplanes are actually gyrated through these various motions during ground vibration tests prior to certification.

One of many tests conducted by the Agency and by industry is that of testing for evidence of "flutter" a combination of movements between the wing, fuselage, tail and control surfaces. Essentially, flutter is undesired motion in two axis. Once it begins, large deflections of the wing or tail occur so rapidly that destruction of the part takes place before the pilot can effect corrective action. All certificated aircraft must be free from flutter throughout their approved speed ranges.

The Central Region, Flight Standards Division, has acquired complex, electronic equipment that can be used to conduct both ground and in-flight flutter tests. Because of the need, and due to the efforts of Aerospace Engineer Henry Nauert, in the Airframe and Equipment Section, E & M Branch, the Region has accumulated test and backup equipment valued at over $50,000. Acquisition cost was only $150—$200 because of purchase through Government surplus stock. An additional $3000 was spent for supplemental equipment, cabling, calibration and placing the gear in operation.

The equipment includes pieces with such improbable names as: high gain, integrating amplifiers, accelerometers, strain gages, velocity transducers, oscillographs and scopes, wave form analyzers and others equally mystifying—mystifying to the layman, perhaps, but certainly not to the engineer.

H. Nauert and W. Boyce of CE-212 recently demonstrated the use of some of the flutter equipment to members of the Directors' Office, Management Analysis, Personnel, Budget, and Flight Standards (including Maintenance and Inspection personnel from the field). Using a strain gaged aluminum beam, they demonstrated the equipment and methods for measuring aircraft deflections, stresses and strains (wiggly lines on special paper), phasing (lines bouncing on an oscilloscope), frequencies and damping (the manner in which the wiggly lines diminish) in structures. During vibration tests of an airplane, virbrators are attached to the wings, fuselage, tail and control surfaces and cause the airplane to shake and twist. Actual motions and amplitudes of the airplane are held to a minimum to prevent structural damage and thus require sensitive electronic measuring equipment.

Included with the maze of electronic equipment is a set of miniaturized instruments that are used when conducting flight flutter tests. During these flight tests the pilot vibrates the control surfaces by striking the control wheel and rubber pedals abruptly, while recordings are made with instrumentation aboard the airplane.

The engineer analyzes the records after each flight. If the data shows a tendency towards an unsafe flight condition the tests are halted and the deficiency is corrected. If the data is satisfactory, the tests are continued.

Photographs on this page show a number of scenes photographed during the flutter equipment demonstration. Also shown are some of the scenes at Lear-Jet in Wichita where aerospace engineers of the Central Region have been busy in recent months performing the gamut of tests necessary for certification of the new Lear-Jet aircraft.

As this goes to press, our flutter engineers are preparing to conduct vibration tests on a modified twin-engine airplane with extra wing tanks. So start the music, its Twist time.

Woody Boyce (l.) and Hank Nauert record vibration during the Lear-Jet tests. Vibrations are kept to minimum amplitude to prevent damage to the aircraft.

J. Grandfield and D. Ramirez of Lear-Jet, and G. Larson, McDonnell Aircraft, using FAA electronic equipment in ground vibration tests of new aircraft.

TOWER CONTROLLERS AT EPPLEY FIELD, OMAHA, HELP AVERT A TRAGEDY

Tower controllers at Eppley Field, Omaha, Nebraska, averted a possible tragedy by their alertness and quick action December 30, 1963. The incident did not come to light until the pilot of the aircraft wrote to Administrator Halaby commending the four controllers involved.

Controllers Kenneth Christensen and Delvin Lynch and Assistants James Hedgecock and Howard Taggart were on duty in the tower when Major Roscoe E. Sprinkel, USAF, and his three children, entered the traffic pattern in a Mooney Mark 20 aircraft. As the aircraft continued on final approach it was noticed that the right gear was not extended. A quick radio call to "go around" resulted in a fast pull up by Sprinkel.

A pass by the tower confirmed the malfunction and a Mooney mechanic was called to the tower to discuss with the pilot any possible means of lowering the gear as well as the safest recommended "belly landing" procedures.

When it had been determined that the gear would not extend properly, Major Sprinkel accomplished a power-off belly landing, the end of which is shown in the accompanying photograph. Airport Authority Crash vehicles had been prepositioned and seconds after the aircraft came to a halt a preventive covering of foam was spread over the aircraft to preclude any danger from fire. The children were assisted from the vehicle.

U.S. Air Force Major Roscoe E. Sprinkle checks over the wheels-up Mooney Mark 20. Seconds after the belly landing an Airport Authority crash vehicle quickly sprayed foam on the aircraft to minimize fire hazard.

Major Sprinkel, in his letter to Mr. Halaby stated, "I wish to highly commend the . . . FAA personnel who by their alertness and professional excellence averted a serious incident." HORIZONS adds its commendation.

Lockheed Constellation Standards Developed

Air Carrier Operations Inspectors gathered in Kansas City on February 19-20, to further develop Lockheed Constellation standards within the Federal Aviation Agency. The group discussed issues varying from emergency procedures to the standardization of the oral and practical examinations. Leading the group was John Brotbeck, CE-ACDO-33. Shown in the photo are, from the left: R. P. Jones, FS-426; C. Cairl, Southern Region; R. Hanna, Western; Brotbeck; T. Ray, Southwest; V. Holloway, ACDO-33; R. Tacy, Eastern Region.

GENERAL AVIATION REPORT SYSTEM MEETING HELD

Mechanization of the Malfunction and Defects Reporting System pertinent to the General Aviation industry came under discussion at the Regional Office recently when the Regional Director, Mr. George Weitz, FS-300, and key personnel of the Regional Flight Standards Division, Administrative Services Division, and Management Analysis Division, were briefed on operating the new system using Automatic Data Processing by Roy P. Williams, CE-250. Previous methods of handling reports were outmoded. ADP equipment made a possible change workable. The photo shows Williams pointing to part of read-out to Director Beardslee. Others, from left are: D. F. Randolph, Chief, ASD; Leon House; Weitz; Marvin Judgens, Chief, Data Processing Branch; Williams; and Sam Corso, CE-250.1. Not shown George Ireland; L. R. Eichen; Lloyd Young; and J. J. Manning.

EDWARD M. WARNER IS GUAM'S NEW AREA MANAGER

Edward M. Warner

Edward M. Warner has been named FAA Area Manager at Guam. Mr. Warner succeeds Lloyd V. Richmond, who has been the FAA Station Manager for the past six years, and who recently transferred to the Regional Office in Honolulu.

The new title—Area Manager—better describes Mr. Warner's responsibilities under the Agency's recent decentralization concept. With his office in FAA's new building at Finegayan, he will be responsible for the supervision of all FAA activities in the Guam area.

Mr. Warner has been with the Agency and predecessor agencies for the past 21 years. Among the high-level positions he has held with the FAA is the post of Latin American Area Supervisor, in the Washington Office of the International Region. He has also served as Chief of the International Field Offices in Buenos Aires, Argentina. He was Chief of International District Offices in the Panama Canal Zone; Fort Worth, Texas; and Miami, Florida. Prior to his government employment he was successively a pilot, a Chief Flight Instructor (Shreveport, Louisiana) and a Pilot-in-Command for Pan American Airways-Africa, flying in Africa and the Middle East.

In addition to holding an Airline Transport Rating, he is a certificated Aircraft and Power-Plant Mechanic, and Ground Instructor. He also holds a Free-Balloon Certificate.

He and his wife, Marion, arrived at Guam on February 1.

Dan Ward to PC as International Affairs Officer

Daniel A. Ward, former facility chief in the Pacific, has returned to the Pacific Region as the International Aviation Affairs Officer. Dan was formerly (1950-55) Chief of the Wake Center/Tower and, as the second ranking employee on the Island, acted as Island Manager for various periods during his tour there.

As a member of the regional staff, Ward will act as advisor to the Director on programs relating to international airline operations, flight inspection, certification of foreign-made aircraft for use by U. S. international airlines, and other aviation matters. Ward has been associated with FAA international programs for the past 14 years.

He has served at a number of locations on the mainland in centers and towers. Between his various air traffic control duties he did a stint in the Navy, where he received his wings. Following his Navy duty he served in San Francisco and Japan, and transferred to Washington in 1959, where he served as Chief of the Air Navigation Branch, International Organizations Division, Office of International Aviation Affairs.

Daniel A. Ward

Dan and his wife, Florence, and children, Pamela, Valerie, Daniel III, and Kimberly, have taken up residence in the Kailua area.

Bob Reed New Chief of Materiel Management Branch in the Region

Robert M. Reed

Rounding out 27 years of Federal service, fifteen and one-half with the Agency, Robert M. Reed has been named Chief, Materiel Management Branch, Installation and Materiel Division. Until his promotion, Bob was a Materiel Evaluations Specialist.

Bob hails from Fayetteville, Tennessee. He started his Agency career in 1948, after having spent ten years in the Navy. He came to Hawaii in 1941.

The Reeds have three children: Robert, Jr., 22, who is in the U. S. Army; Louise, 20, who has attended the University of Hawaii and is now at Honolulu Business College; and Lunette, 12, a seventh grader at the Kailua Elementary School. Incidentally, Lunette is a good twister.

In his new position (as successor to John Abernathy, who has transferred to Washington), Reed will be the principal advisor to regional program officials in all materiel matters, except those assigned to the Procurement Branch. He will make determination of regional materiel requirements for operations, modification, modernization, and establishment of facilities and equipment. He will be involved in development and negotiations of various inter-agency support agreements.

Since 1957, Bob has had five Outstanding and Superior Performance ratings. When not otherwise occupied, Bob likes to fish and dabble in electronics.

He was once interested in golf; however, he hasn't had time for golf since he linked up with a real estate agent who sold him a home.

MAINLY ABOUT PEOPLE IN THE PACIFIC REGION

TRANSFERRED. Into Region: *Gerald R. Cowles,* Air Carrier Electronics Inspector, from Fort Worth, Texas, to ACDO, Honolulu. Out of Region: *Robert J. Kazragis,* SATCS, Canton Island to ATCS (Station), Bakersfield, California; *Dewitt L. Stubbs,* Electronics Technician, Flight Standards, Honolulu, to CE.

EMPLOYED. *Russell E. Crain,* Machinist; *Harry Y. Akiyama, Sr.,* Painter; *Satoru Nakae,* Painter; *Herschel E. Clark,* Powerhouse Operator; all with Systems Maintenance, Wake Island; *James T. Nakata,* Engineering Draftsman, Administrative Services, Honolulu; *Seichi Yogi,* Carpenter Foreman, Systems Maintenance, Honolulu.

PROMOTED. *Edwin St. J. Griffith,* to Civil Engineer, I&M Division, Honolulu; *Eliseo Ramos,* to Cook, Canton Island; *Gerado N. Daguio,* Electronics Maintenance Technician (Radio), SMDO 1, to Relief Force-at-Large; *Paul Moy,* General Supply Officer, to Provisioning and Contracting Officer, Flight Standards, Honolulu; *Irene N. Arakaki,* Secretary, I&M Division; *Takeo Inokuchi,* Supervisory Electronic Installation Technician, SMDO, Honolulu, to Electronics Maintenance Technician (Radio); *Warren Y. Sato,* Teletypewriter Repairer, SMDO, Honolulu, to Electronics Maintenance Technician (General); *Joseph E. Roberts,* ATCS, to SATCS, FSS, Honolulu; *Walter K. L. Lau,* Electronics Maintenance Technician (General), SMDO, Guam; *Charles M. Unten,* Electrical Lineman Mechanic, SMDO, Guam, to Engineering Equipment Mechanic; *Gladys H. Lau,* Clerk Typist, I&M Division, to Procurement Clerk; *Gilbert T. Kawamae,* ATCS, IFSS, Honolulu, to SATCS: *James L. Parr,* ATCS, Assistant Controller, to Controller, CERAP, Guam; *Wesley S. Greene,* ATCS, Assistant Controller, to Controller, CERAP, Guam; *Robert M. Reed,* Materiel Evaluation Specialist, I&M Division, Honolulu, to Chief, Materiel Management Branch, I&M Division, Hono.

MARRIED. *Captain (USN) Hugh K. Laing,* Deputy Director, Pacific Region, to *Betty Jane Darling,* March 1 at Makalapa Chapel, Pearl Harbor.

REASSIGNED. *Richard G. Morrison,* Electronic Technician (General), FIDO, Tachikawa, to FIDO, Honolulu; *James S. Kuwabara, Jr.,* Honolulu Center, to IFSS, Wake Island.

DIED. *Minoru Takahashi,* Electrical Lineman, Systems Maintenance, Wake Island, February 2, 1964. Started with FAA in 1956, had served on Guam and Canton, also; *Clyde L. Smith,* 60, January 25, 1964, SATCS, Honolulu Center; with CAA/FAA since 1940; served in Washington, Bermuda, New York, Wake Island, Alaska. Retired because of ill health January 12, 1964.

FKS GETS HIS SSP

Floyd K. Sellers, Illustrator, Administrative Services Division, receives Sustained Superior Performance award from Pacific Region Director Robert I. Gale. Sellers joined the Agency in 1958 as an Illustrator in the Honolulu Center, transferring to Regional Headquarters a year ago. His work covers a wide variety of artistic assignments and he receives high praise.

Notes, Comments, and Activities Around the Busy Honolulu Center

Clyde L. Smith passed away quietly on Saturday afternoon, January 25, 1964, at Kaiser Hospital.

Although this was not an unexpected blow to us at the Honolulu Center, nevertheless many of us felt that this marked the end of an era, or cut our link with the history of the industry.

With his previous association with United Airlines, and his long service with CAA and FAA, to many of us Clyde represented the days of the wind-blown open cockpit, the mysterious "radio beam," and the talking of pilots down to safe landings.

His presence has been missed here since his retirement and our most sincere condolences are extended to his wife and children. Interment was at Punchbowl on January 29.

And now, a little police work: Bob Suits, recognizing that the description of the getaway car used in the Morales-Mahiko murders fitted that of a vehicle he'd turned in on trade some time before, called the Police Department in an effort to help locate the cop-killers. Bob gave them full information, and was later advised (with many thanks) that the description was correct, but the car was not the same.

Nice try, though, Bob.

Marv Burrier has trekked to Guam—on a transfer. Best of luck in your new assignment. And, rumors of impending promotions again, after a long lull, does wonders for morale, too.

Day and evening watches were plenty busy during the large-scale search conducted for the C-124 that disappeared on a flight from Wake to Honolulu.

Up to 20 aircraft were in the search area all day, going to Honolulu or Midway, as dusk closed in in the afternoon. Knowing how important this was to these people and how tough it was to scan the seas all day long, all controllers did a wonderful job moving these aircraft.

Amusing sidelight—HIK OPS called one evening to ask if we would relay a message to one of the search aircraft. Seems they wanted the scanners to report to a certain hangar at Hickam where an Air Force taxi would take them to Schofield.

Some idle conversation elicited the information that they were borrowing scanners from all over Oahu.

The Commander of the Search and Rescue Center sent a letter of appreciation to the Air Traffic Division thanking all controllers for a wonderful job.

H. C. Maaske (far l), Pacific Area Supply Director, Jean Carder, Secretary (above) tests living room furniture. Robyn White (above r), Procurement Clerk, examines laundry. J. Leighton (below), Store Manager, "collects" from I. Oshiba, Army Quartermaster Supply Maintenance. R. Sprang (below r), Contracting Officer.

THE COUNTRY STORE

The more mature members of FAA will well remember when a Montgomery Ward catalog proved to be a most useful household item—even in urban homes. Then came Sears; Sebastin Kresge; and J. C. Penney. Now there's a new one, proving just as popular; it is, however, restricted to U. S. Government agency use. It's the General Services Administration's Self-Service Store and Customer Service Facility, nineteen of which are in existence today, including one in Europe, at Sembach Air Force Base, Germany.

The largest of the GSA stores was opened in January at Hickam Air Force Base, Hawaii. The new store has row after row of counters, displaying items from "soup" to "nuts." At one end, items like deepfreezes, home laundries, clothes dryers, bedroom, living room, and dining room furniture are on display, including table settings. About the only small items not stocked at the store are items which are subject to humidity damage, such as photo supplies and medical items.

The Customer Service Center, according to Harlan Maaske, GSA's Supply Director for the Pacific Area, can provide all Federal military and civilian agencies with administrative-type supplies required for normal operations. Over 5000 items are stocked in the Hickam store, while as many as 700,000 are available from GSA Federal Supply Schedules. Customer purchases are made through both appropriated and non-appropriated funds, using GSA shopping plates for either "charge" or "cash" purchases.

Stocks range literally from paper clips to refrigerators. The store has office supplies and equipment, hand tools, sanitary supplies, paints, and hardware. Also on display are non-appropriated fund items, such as athletic equipment and dinnerware. Several rooms of office and household furniture and appliances are exhibited, including rattan furniture. The wide variety of items is attracting much interest; of especial interest is a display of Blind-Made Shop articles.

The shopping-plate concept facilitates purchasing and reduces paperwork by eliminating typed purchase orders. Charges are made to the proper funds, as directed by the customer agency. Shopping plates may be obtained for all civilian and military agencies and non-appropriated fund activities through official application to the GSA Center.

Since the opening of the Hickam store, the Air Force has made available an additional warehouse building for the Supply Center. This will increase the Depot Annex and Self-Service Store area to approximately 150,000 square feet. At present the items carried include about 5000 office supply and related items, over 460 U. S. Government standard printed forms, and 810 bulk-storage type supplies. In addition, approximately 500 Federal Supply Schedule items are on display for examination and ordering only. The current inventory of about $800,000 is soon to be increased to over $1 million.

The customer service area for the Hawaii GSA Supply Center is intended for the Hawaiian Islands only. Requirements beyond Hawaii will continue to be ordered by customer agencies directly from, and supplied by, San Francisco and Seattle Regional Depots, as heretofore. Free delivery service to any destination within the Hawaiian Islands is provided by the GSA Center. Mail orders are also accepted and filled, based upon the Center's being previously authorized to retain the customers' shopping plate. These two features are proving very popular with Hawaiian customers.

The key officials of the Hawaii GSA Supply Center are: H. C. Maaske, Supply Director, Pacific Area; Jack Bauer, Director, GSA Supply Center; Roger Sprang, Contracting Officer; John Leighton, Manager, Self-Service Store and Bill Akiona, Chief, Stores Depot Annex. The staff currently consists of 18 persons.

PanAm Dispatcher Betty King checks flight plan for crew (l-r): 1st Officer P. W. Johnson, Navigator E. L. Lemon, Capt E. F. Sloan, D. Shand, ACDO. Below: R. Woodward (l) Chief Flight Standards. W. Benning (r) S&T Sect.

Walter L. Grasser, GADO, inspects helicopter.

Alfred E. Anthony, ACDO, and PanAm flight engineer.

Harry Troxell, GADO, administers private pilot examination to Dick Wong. Unidentified student studies about altimeters.

Flight Standards interest run the gamut from the inspection of crop dusters to the certification of sleek jets.

FS - WATCHDOG OF AVIATION

Flight Standards (the initials "FS" also stand for "Fly Safely") is really a broader segment of the FAA than the name implies. The organizational title is somewhat restrictive and misleading, since much of FS's duty and performance is on the ground, involving practically every facet of aviation.

The activities of the FS organization in the Pacific Region extend over millions of square miles. The geographic area—which actually exceeds the entire land mass of the world—is "briefly" described as follows: the State of Hawaii, Pacific Ocean area west of continental United States (except Anchorage, Seattle, and Oakland Flight Advisory areas), and east of East Pakistan and India, including all free nations south and east of China.

Flight Standards Division, Pacific Region, has flight inspection district offices in Honolulu, Tokyo, and Manila; a general aviation district office in Honolulu, international field offices in Tokyo, Manila, and San Francisco, and an air carrier district office in Honolulu.

Flight Standards administers tests or checks to approximately 2,500 pilots and mechanics, giving approximately 850 written examinations and over 100 flight tests a year. The FS people deal with a half a hundred aviation organizations, and in one year the Air Carrier Inspectors, alone, accomplished 2,000 inspections.

That Flight Standards checks navigation facilities, pilots, and mechanics, is common knowledge. Not generally known, however, is the fact that the Tokyo IFO is responsible for the certification of two airlines, and for monitoring eight transiting U. S. air carriers; two foreign flag carriers; eight flying clubs; and three certificated repair stations. The Flight Inspection District Office in Tokyo has responsibility for checking a total of 147 facilities. Some of these facilities are owned and operated by U. S. forces; others are foreign-owned and operated, but are utilized by U. S. civil and military aircraft. These facility checks require approximately eighteen hundred flying hours a year.

Also, not generally known is the fact that the Pacific Region has an IFO in San Francisco. This office is the coordinating office for Pan-American operations throughout the Pacific.

In Manila, the IFO monitors seven transiting U. S. air carriers, two flying clubs, and one repair station; while the FIDO, with a Douglas "Skymaster" flies about eleven hundred hours a year checking 104 facilities from Taiwan to Singapore.

The Honolulu FIDO, with four aircraft, flight checks 175 facilities, and flies almost 3700 hours a year. Ten of these facilities are located in the U. S. Trust Territories. The GADO located at Honolulu has responsibility for 19 air taxi operators; two agricultural operators; five schools; 11 repair stations; nine flying clubs; and four sport parachute clubs in the Hawaiian Islands. In addition there are three air taxi operators and one flying club on Guam, plus one flying club on Kwajalein and one on Canton Island.

In addition to performing the required flight checks with the Region's aircraft, Flight Standards utilizes these aircraft to provide logistic support to isolated stations in the Pacific where FAA personnel are located. This service, performed mostly by utilizing space on aircraft en route to accomplish flight checks, proved a salvation to personnel on Wake and Guam when these areas were hit by typhoons. Guam, still short of garden goods, is being given needed support to augment the local supply.

The Flight Standards people—actually the watchdogs of the airlanes—have received undeserved blame on numerous occasions, characteristic of most regulatory activities; also, they have not always been given due credit. But they go right on doing their job, with the knowledge that those really informed members of the flying public are conscious that they are, perhaps, the unsung heroes.

GETTMAN

PC Employee of the Year

Thirty years ago a New York youth attending a Scout Jamboree stood on the banks of the Potomac River and gazed with admiration at Washington, D. C. This inspiring sight provided him with the motivation—or rudder—that was to steer him toward a career of public service.

Louis Burlington Gettman was then only sixteen years old, and the Scout Jamboree was held on the site where the Pentagon was later to rise. From his vantage point overlooking the city, he vowed to return. Seven years and a B.S. Degree later, with majors in both business and public administration, and, as he put it, "seasoned with a double-fisted determination that any task can be accomplished if worked at hard enough," Gettman did return—to begin the career that has led him steadily upward to his eventual appointment as Chief, Personnel and Training Division, Pacific Region, FAA.

During his 22 years of government service, Gettman has made invaluable contributions toward improved personnel-management relations. Repeatedly during this time his exceptional leadership and unremitting energy have been cited. His first government appointment was with the War Assets Administration in 1942, and in 1948 he joined the Atomic Energy Commission. Consistently moving ahead to positions of greater responsibility, he joined the General Services Administration in 1950 to serve as Assistant to the Comptroller. From there, in 1958, he transferred to the FAA.

Gettman believes that no person should aspire to a job of responsibility in the Federal government if he is not ready to make personal sacrifices. This premise he soon put to test, for his arrival in Honolulu in 1962 found him at the helm of the Region's personnel program about the time the FAA began to undertake decentralization of major management control from headquarters to the regions. Because there was just not enough time during regular working hours to accomplish his mammoth assignments by target date, Gettman soon found himself working far into the night, and most Saturdays and Sundays found him and his dedicated staff at their desks plugging doggedly away at their out-sized task. In tribute, it is a matter of record that one of the Personnel Division's outstanding accomplishments during this period, in connection with FAA assumption of responsibility for flight inspecting certain navigational aids in the Far East under Project Friendship—the staffing of the newly established Flight Inspection District Offices and secondary aircraft maintenance bases in Manila and Tokyo—was accomplished in record time. Speaking of this, Pacific Region Director Robert I. Gale praised the excellent manner in which staffing was provided to enable the region to assume flight inspection responsibility in the Far East on schedule, calling it the region's most noteworthy achievement of the year. The devotion and dedication shown in the face of such a herculean task, Mr. Gale said, "makes me extremely proud to have each and every one of you as part of the 'team' in this region." Two commendations were made to Gettman, in behalf of the Division, for the facility and speed with which he and his staff saw an extremely difficult assignment through to a successful finish.

Gettman believes that the margin of success hinges on "that little extra"—the willingness to move a little bit further, a little bit faster, a little bit longer. And he readily admits that any successes in the P&T area are the result of the Division's having functioned as a team—a statement characteristic of modesty—the hallmark of a leader.

Gettman and his wife, Betty, make their home in Waialae-Kahala, with daughters Patricia, 9, and son Jon B., 6—who are justly proud of their dad's accomplishments.

The region, reflecting its own pride in Mr. Gettman's contribution to the FAA, selected him as its nominee for the Eighth Annual "Federal Employee of the Year" award, sponsored by the Honolulu Federal Business Association.

Twin Falls, at Wailua

KAUAI

Favorite Camping Spot!

The sands are white on the beach at Wailua.

City-dwellers! Is the ever-increasing press of humanity giving you that hemmed-in feeling? Are the highways becoming too congested and traffic bottlenecks causing your blood pressure to rise? Would you like to spend a quiet vacation on one of the Hawaiian Islands, but feel you can't afford it? Well, then, perhaps a low-cost camping vacation in one of Kauai's State or County parks is the answer.

Camping is permitted in twelve of Kauai's parks. A wide range of locations is available. If one has a preference for the windward side, "Lydgate State Park," located one quarter mile from the Coco Palms Hotel, is a real beauty. Picnic tables are nestled among the ironwood and coconut trees, and each table is located for maximum privacy. Cooking grills serve each picnic area. Rest room and shower facilities are immaculate. A children's playground is located in a clearing near the center of the park. The park is situated on the crescent-shaped beach that serves Coco Palms Hotel.

More isolated locations are available on the windward side of the Island: "Haena County Park" is a good spot. This park is located near the end of the road, just a few miles beyond Hanalei Valley. A small mountain stream flows parallel to the park's eastern perimeter and empties into the ocean. Shade trees line the banks of the stream and provide an excellent camping area. For fresh water swimming, there's a mountain pool near the side of the road about a mile beyond the park. This is an ideal spot for a picnic. For sheer beauty, the Hanalei-Haena area is hard to beat. A favorite saying among Kauai's kamaainas is "See Hanalei Valley and die." Provisions can be purchased in the town of Hanalei, a five-minute drive from Haena. For those hardy folks who prefer campsites in the high country, "Kokee State Park" fills the bill. This park is located in a mountain meadow at an altitude of approximately 3500 feet. It's cold up there! A sweater provides sufficient warmth during the daytime, but a warm jacket is more comfortable for nighttime. A light raincoat, just to be on the safe side, is recommended.

Kauai's trout streams are located in the Kokee area. The season usually opens on August 1. The Kokee Lodge, located within the park, operates a restaurant and bar. A museum displays samples of local flora and fauna.

On the way up to the park is the Waimea Canyon lookout, which affords a spectacular view of the Canyon. The Kalalau Valley Lookout is a scant five-minute drive beyond the park. Kalalau is the valley made famous by "Koolau the Leper." Koolau, it seems, refused deportation to Kalaupapa Leper settlement on Molokai, and holed up in the valley. He fought a sheriff's posse and an army unit, using a field piece, to a stalemate. A tacit agreement ceded the valley to Koolau during his lifetime. For the past five years, Doctor Weatley, a Jamaican, has been the sole inhabitant of the valley.

Now, back to the camping trip. Be sure to have all the necessary supplies before starting up the Kokee mountain road.. It's a long drive back to the store.

Campsites are available in the following parks: County parks (windward side) at Niumalu, Hanamaulu, Kapaa, Anahola, Anini, Hanalei Valley, and Haena; and (leeward side) Poipu Beach, Hanapepe, and Salt Pond. State parks (windward side), Lydgate; (mountain), Kokee. A map showing the location of these parks can be obtained at the information desk in the Lihue Airport Terminal Building.

How does the cost of a camping trip compare with one spent in a hotel? Well, sleeping accommodations for a family of five for one week at a popular Kauai hotel would cost about $294.00. With all meals at the hotel the total cost of food and lodgings would be approximately $609.00. The cost for camping at a nearby park would be only for food. Food prices on Kauai are slightly higher than Honolulu prices.

A permit must be obtained for camping in Kauai's parks. One can write for a permit and confirm a space, but it really isn't necessary. Most residents of Kauai live in the country and, consequently, the campsites are seldom used. Permits for camping in the county parks can be obtained at the Chairman's office, County Building, Lihue, Kauai (Phone 2781). State Park permits can be obtained from the State Department of Parks, located in the old Lihue School building (Phone 23385). Permits can be obtained by telephone.

The best period for camping on Kauai is May through October.

Anyone who has taken a vacation with children knows that most of the vacationing is done by the children. However, a family camping vacation can also be enjoyed by the parents. Since it isn't necessary to keep a tight rein on the children, the atmosphere is more relaxed. After a hardy meal, Mom and Dad can break out the camp chairs and enjoy a cool drink or a smoke, while the children burn off their excess energy.

A good vacation should consist of a change of pace, some recreation, a little amusement, and lots of relaxation. A family camping vacation on Kauai will do all this and more—and, economically.

PROFILE OF DAVID S. SUGIMOTO, FLIGHT SERVICE STATION SPECIALIST

Sugimoto at console, smiles happily.

Since Administrator Halaby had "profiled" the typical flight service specialist at the NAATS annual convention in Oklahoma City, the Honolulu Flight Service Station has advanced David S. Sugimoto as an outstanding "typical" flight service specialist.

From the November 1963 NAATS Report—

Mr. Halaby: ". . . a GS-9, aged about 43."

Dave is a GS-9, Step 6, and is 41 years old, born and raised at Honokaa, Hawaii.

Mr. Halaby: ". . . the overall total salary of this GS-9 is $8,624."

Dave's salary at GS-9, Step 6, is about $9,368 (not including COLA). He has been a full Professional Specialist (formerly journeyman) somewhat longer than the "average."

Mr. Halaby: ". . . who weighs about 150 pounds and is about 5 feet 7 inches high."

At 5 feet 5½ inches, and 155 pounds, David fills the "about" category pretty well.

Mr. Halaby: ". . . he is of high school education or better, or the equivalent."

David did not finish high school. Studious, and with the help of an alert inquiring intelligence, he has consistently bettered his education through self-study.

Mr. Halaby: ". . . has military service."

Three years of World War II service with the famed 442nd Combat Team in Italy, France, and Germany qualifies Dave on this one. He served as a communications operator with an artillery unit.

Mr. Halaby: ". . . has attended the FAA Academy."

Dave received his basic certification through the Pacific Region's equivalent of the Academy's course. This marks him as an oldtimer, and opportunities for the specialist level to attend advanced or related courses at the Academy are admittedly rare.

Mr. Halaby: ". . . and he has moved from one facility to another at least once."

Dave started as a communicator at KVM in 1948, transferred to the Wake Island station, returned to Honolulu, and EOD with the Honolulu FSS in 1958.

Mr. Halaby: ". . . and happily he's married."

A longtime resident of Aina Haina, Dave is a solid family man with a charming wife and two active youngsters. His wife is employed at the University of Hawaii in the College of Arts and Sciences. Dave is an active amateur radio Ham, "KH6JX," operating both fixed and mobile stations.

Mr. Halaby: ". . . he is intensely proud of his recently-gained knowledge in responsibility in three broad areas—airport advisory service, work performed for the military, and as a weather briefer."

Airport advisory service is not applicable at the Honolulu FSS. In work performed for the military, Dave was well experienced long before his mainland counterparts in handling military flight services. In addition, he brings professional standards and highly qualified skills to his job of providing special flight-following services to Navy and Marine aircraft operating in the Hawaiian area. In 1961 Dave completed a four-month course in Pilot Weather Briefing and was certified by the USWB as a Pilot Weather Briefer. He is a consummate professional in this aspect of his work, recognized by his fellow workers and the pilots he serves as one of the best.

Mr. Halaby: ". . . this gallant, capable, skillful, professional man. . . ."

Dave Sugimoto is our choice for the embodiment of all these traits. The flying public knows it well, for he serves them daily.

Wake Islanders Remember Families of Two Policemen Killed by Gangsters

Police Chief Dan Liu, is shown (left) as he received checks totaling $290.50 from Cyril Amerling, Wake Island Manager (center) and William A. Gaspar, Chief, Compliance and Security, Honolulu office, for the families of Andrew Morales and Abraham Mahiko, Honolulu policemen killed by gangsters on December 16. Amerling brought a check from Wake Island for $100, representing contributions from the FAA personnel there. The balance was donated by FAA personnel in Honolulu, and was in addition to many individual contributions from Pacific Region headquarters. Chief Liu recalled that Ted Awana, Chief of Protective Services on Wake Island, spent many years as a detective in the Honolulu Police Department prior to leaving for the Wake position in October 1962.

COOK AND WISNER GUIDE C-119 TO SAFE LANDING

Robert E. Wisner, left, and Robert W. Cook, Jr., at DF equipment in Annette facility.

"Annette radio—my navigation equipment has failed and I am having communications difficulty," radioed Air Force Lt. Col. William Longa on the emergency frequency. This call started the ball rolling which resulted in another "save" for the Air Traffic Division on Jan. 17.

Colonel Longa was piloting a C-119 with eight passengers to Annette. He was flying on instruments in icing conditions. His ADF was working intermittently—not good enough to trust for an instrument approach to Annette. He asked Specialists Robert E. Wisner and Robert W. Cook, Jr. for a hand.

Wisner and Cook located the C-119 with their DF equipment and guided it to the Annette Low Frequency Range. After station passage, they directed the aircraft into position for an ILS approach.

Throughout the ILS descent and approach to a landing, the C-119 remained on course and was able to establish a safe glide slope to the runway, thanks to the continuous course information given by Wisner and Cook.

Rogers, Emerson Sign Up in Civilair Club Drive

Civilair Club President Albert "Whitey" Machin of ATD delivers tickets Nos. 1 and 2 to the Regional Directors of the U. S. Weather Bureau, Mac Emerson, center, and of the Federal Aviation Agency, James G. Rogers, right.

The Civilair Club, made up of FAA and Weather Bureau employees, sponsors and conducts social programs for its members which include picnics, dances, tours to foreign countries, and sporting events.

"We now have 650 members, and we're looking for more", advises Whitey. "It's the biggest value for a dollar you'll see, so how about coming aboard."

FAA, Air Force Team Up to Get Firestack Back on Terra Firma

G. Handy, Anchorage ARTC, locates plane by radar.

Dale Firestack of Yakutat might have a few gray hairs, but he's happier thanks to a team effort in his behalf by the FAA and the Air Force.

While flying over a solid cloud layer, Firestack radioed Anchorage that he was lost and running out of fuel. He had departed Yakutat at 10:00 A.M. on January 18 for Merrill Field with five hour's fuel aboard his Cessna 180.

Specialist Hugh Huff alerted the Anchorage ARTC of Firestack's predicament. Controller Gerald Handy located the aircraft 55 miles southeast of Anchorage by radar and directed it to Kenai, the closest airport.

Anchorage Center contacted Captain A. L. Throckmorton of Elmendorf AFB who was piloting a T-33 in the Kenai area to enlist his help.

The two pilots established visual contact. Firestack was led to an area where there was a break in the overcast where he let down. With less than nine minutes of fuel remaining, Firestack landed at Kenai at 3:11 P.M. in light snow with less than one mile of visibility.

W-h-o-o-s-h Hits Farewell

High winds up to 90 mph at Farewell raised havoc with aircraft parked on air field. This one suffered major damage with a torn wing.

"HOME MADE" PREHEATER FIRES UP THE ENGINE

With lots of imagination and an investment of 51 dollars, Lewis D. Harman has solved a problem which has plagued pilots flying in cold weather country. The problem: How to preheat a small airplane engine for easy starts without spending a lot of money for commercial heaters made for larger aircraft?

Harman, an Air Traffic Control Specialist at Big Delta, adapted a car heater for this purpose and mounted it on his daughter's play wagon. A six foot long flexible asbestos hose carries the heat from the wagon unit to the engine. Power to the unit is supplied by a jumper wire connected to an automobile battery. A two gallon fuel tank is attached to the rear of the unit.

Harman first tested his homemade heater on his Cherokee 160 in minus 20 degree weather. After covering the engine cowling with a heavy blanket, he directed the hot air on the bottom of the crankcase. The 20,000 BTU heat flowed up and around the engine warming it evenly. Twenty minutes of pre-heating and Presto —the engine started instantly on battery power.

What to do about cold weather starts has always been a problem for Alaska's pilots. Each winter usually sees a great number of small aircraft put into "hibernation" when the mercury falls. Private flying drops off, and hardship is caused isolated villages which rely on the bush pilots for their supplies and contact with the outside.

Lew Harman's inexpensive rig could be the answer to many pilots' cold weather problems and he's willing to share his idea with others.

"Cold weather starts causing you problems? Get in touch with Lewis Harman at Big Delta."

FACE LIFT AND NEW ADDRESS FOR THE FEDAIR IV

The only FAA boat based outside of Southeastern Alaska recently changed her mooring space. After twelve years of tying up at a commercial dock at the edge of Kodiak, the Fedair IV now docks at the Kodiak small boat harbor.

Besides its change of address, the Fedair IV has had a change of appearance. Alterations and necessary repairs have considerably changed her profile, for her bulwark was redesigned last summer to provide additional passenger safety. To further increase safety in operation, radar and a radio telephone with a longer range were installed.

To the people living on Woody Island, the Fedair IV is a very important and necessary part of their lives. She brings them their food, freight and all their supplies. She transports them to the hospital in case of sickness or accident, and has yet to lose a race with the stork.

The Fedair IV also services our satellite radio beacon facility on Shuyak Island. During the summer months she makes unscheduled runs loaded with supplies for this isolated island located sixty miles north of Kodiak.

Seminar for Area Pilots Held at Merrill Field by GADO Inspector

Paul J. Neiman, Electronics Inspector for the Flight Standards General Aviation District Office at Merrill Field, uses an illustration to show proper and improper aircraft electronic wiring methods at a pilot meeting held at the Agency's Administration Building at Merrill Field on February 1. More than 100 Anchorage area fliers turned out for the two sessions held at 10:00 a.m. and 2:00 p.m.

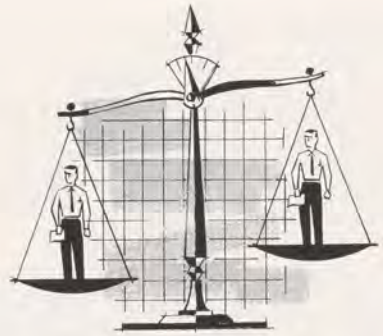
ONE SHOT POLLOCK BAGS BEAR

Fast on the trigger: Wes Pollock brought down this tough old grizzly before he could start any trouble.

Wesley Pollock and Charles Miller, electronic maintenance technicians at Cold Bay couldn't believe their eyes when they encountered and shot a big Grizzly bear near the station.

What was a bear doing prowling the countryside in late January, they wondered.

Close inspection revealed that it had lost all of its teeth, perhaps in battles with other bears or through disease. He also had festering gunshot wounds. He would have been a rough customer if he had reached the quarters area.



MEN WITH IDEAS CAN TIP THE SCALES

When the late President Kennedy signed the 1962 Pay Act giving sizable salary increases to Federal employees, he noted that the Act called upon the agencies to absorb the cost of the increases without impairing essential functions. He called upon them to give more attention toward utilizing manpower more effectively. President Kennedy's exhortation has been reinforced by President Johnson.

Following this lead, Administrator Halaby has elaborated that: "Although our record in the utilization of manpower and the improvement in productivity has frequently been good, it is not good enough and must be improved."

Since then, the Alaskan Region has been giving a hard look at manpower utilization and productivity. "While considerable progress has been made, we can still do better," counselled James G. Rogers, the Director.

The issue is this: "What can each of us do to help promote and reach the goals set for us by the President and our Agency?"

First, let's define Manpower Utilization and Productivity. The former is the term we use when we are considering resources in terms of manpower: How many people or man-hours are needed for given work at a given place? Productivity is the relationship of output to input not only in terms of manpower but in relation to the cost of all resources used in getting the job done.

In the economy as a whole—especially in governmental operations—labor accounts for 75 per cent of the total input costs. Management's job is to try to shave this figure. To this end, work measurement systems are continually being devised and revised to measure output. For example: in the Administrative Services Division at Regional Headquarters, a system has been installed measuring 37 different "housekeeping" operations in terms of man-hours per work unit. Another example is a maintenance Cost Accounting System, utilizing data processing machines to measure man-hour costs of maintaining the vast array of operational facilities which provide air traffic assistance and controls to the nation.

A special case is the Systems Maintenance Service which has been serving as one of five national pilot studies under Bureau of the Budget auspices to apply more refined and advanced productivity measurement techniques to Government operations.

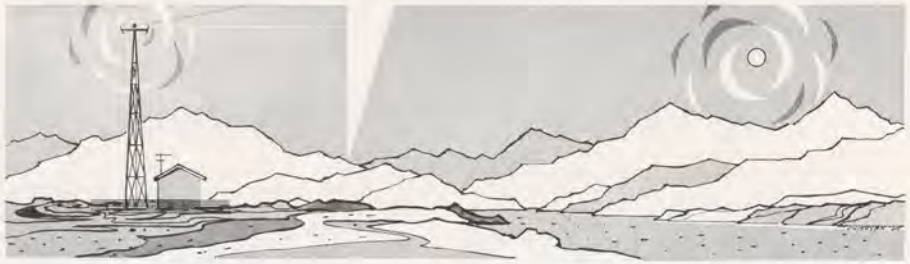
The Director reminds us that there are many areas for improvement in manpower utilization and increased productivity that can be exploited by employees at the grass root, first line, and middle management levels. Manpower utilization and productivity are enhanced, for example, when a materiel specialist at a station develops a better way to handle supplies, or when a station manager convenes a brain session of his facility chiefs and they come up with a plan to reduce the use of station vehicles. Better MPU was dramatized when AT, I&M, and SM specialists devised a method, as they did recently at Fort Yukon, to expedite the transmission of radio communications by remote control from Fairbanks. The accomplishment of this effort meant that specialists formerly occupied in the Fort Yukon low activity station are now providing more service from their remoted location. Fort Yukon is now on the air serving the flying public 24 hours a day out of Fairbanks instead of only nine hours daily when it was operating as a staffed facility.

There are many areas where small, less significant, but meaningful achievements are being made or await exploitation, top management feels. One of the best means to bring them to flower is through employee suggestions.

Because the effort toward better MPU is receiving so much attention, a system of reporting and evaluating its application has been established. Achievement reports used by supervisors to report accomplishments within their organizational areas, and employee suggestions are two items of raw data that go into a quarterly assessment of manpower utilization submitted by the Region to Washington. Other elements in the report include: inventory of filled and unfilled positions, review of vacancies for elimination, summary of major achievements and manpower trends, and discussion of manpower problems.

"We suspect that achievements are being made that are not being reported," Colonel Ralph C. Taylor, Deputy Director, comments in urging supervisors to identify and report achievements. "We know that there are many opportunities for improvement in productivity and manpower utilization going unchallenged in the Region. If we are to maintain the same rate of productivity growth as the nation as a whole—3 to 5% each year—we must put forth this extra effort."

FAA SUPPORTS MARS EFFORT



Systems Maintenance Division Chief Richard Young, right, locates MARS network station for G. West.

Michael J. Forrester works on his radio's antenna, Fire Island.

Robert F. Noel of Juneau tunes MARS radio receiver.

Goldman Bandy keeps radio log at Northway station.

MARS is a family affair for the Paul E. Desautels'.

Amateur radio is a wonderful hobby, but this fact alone would not merit the wholehearted support given it by our Government. There are other reasons. One of these is a thorough appreciation by the military, civil defense authorities and the Federal Aviation Agency, of the value of the amateur as a source of skilled radio personnel in time of war and for providing emergency backup to existing communications systems. Other assets are amateur-originated technical developments. Another asset is best described as "public service."

Recognizing these accomplishments, and the capacity for even greater achievements, amateurs the world over are licensed by their governments and are allocated their own frequency assignments by international agreements. There are over 263,000 amateurs in the United States alone, and over 111,000 more scattered over the rest of the globe.

In Alaska there are over 100 amateurs who are employees, or dependents of employees, in the ranks of the FAA and the U. S. Weather Bureau. Members include a division chief, engineers and technicians, station managers, mechanics, air traffic communications specialists, and housewives. Emergency communications, expedition contacts, and countless other forms of public service are rendered without thought of material gain. They have made amateur radio an integral part of our peacetime life.

The Military Affiliate Radio System is jointly sponsored by the Army, Air Force, and Navy. The system operates on a joint basis for determination of overall policy, but separately for operational control down through the several levels of the commands. The primary mission of MARS is to supplement normal military communications channels, provide emergency backup communications for each command's communications circuits, and provide communications for use in implementing each command's domestic emergency plans. The secondary mission of MARS is to create interest and training in military communications, promote study and experimentation in military communications, and provide an additional source of trained communications personnel. Individual membership in MARS is open to civilians, reservists, and active military personnel who meet certain requirements, including holding a current FCC amateur radio license.

With the increasing emphasis on defense readiness, together with the FAA's and the military's cooperative efforts to this end, Alaskan Region officials recognized the role the region's amateur radio population might play. Accordingly, they met with Air Force officials in a series of policy conferences, which culminated in the formation of separate and discrete MARS networks and the sharing of Air Force MARS frequencies. A MARS advisory committee was established by the former Regional Director, Allen D. Hulen, in August 1962. The present members of the committee are Colonel Ralph G. Taylor, Jr., the Deputy Director, who serves as Chairman; Richard C. Young, Chief, Systems Maintenance Division; Donald S. Wolfe, Chief, Air Traffic Division; and Ralph F. Westover, Defense Readiness Officer. Gene A. West, Planning and Special Projects Officer, Systems Maintenance Division, was appointed Director of FAA MARS affairs in Alaska.

The program figures importantly in the Alaskan Region's defense readiness plans. It provides emergency backup communications for all FAA and Air Force circuits. The program also generates employee interest in communication modes and procedures, and it provides an additional source of trained personnel.

FAAers participating in the MARS program are stationed in every corner of Alaska. At Minchumina, Station Manager Richard H. Collins is considered one of the state's outstanding amateurs. He is one of the pioneers in Alaska in long distance two meter, line of sight, communications and two meter transmission of teletypewriter communications utilizing his amateur radio station. He continually experiments with new techniques. He is perhaps best known to the amateur fraternity for "bouncing" his normally short distance two meter signals against Mt. McKinley and reflecting them into Anchorage. Transmission and reception—Minchumina to Anchorage and return—by this method is now commonplace thanks to the efforts of Dick and other amateurs who developed this technique.

Air Traffic Communications Specialist Goldman B. Bandy at Northway not only operates his own station but builds most of his equipment. Bandy is one of the most faithful and dedicated MARS operators, never permitting personal interests to interfere with his net operations. A lot of his enthusiasm has rubbed off on his boss, Station Manager Ormond O. Robbins, and Foreman Mechanic Wesley A. Welsh, both of whom are new amateurs.

Michael J. Forrester, an Electronic Maintenance Technician at Fire Island, is from the "do it yourself school" when it comes to providing equipment. Not one to waste his money on a lot of fancy looking gear, Mike builds most of his from military surplus items he has purchased, modifying and adapting these surplus items to his own standards of excellence and performance.

In the state capital, Juneau, Bob F. Noel, a radio technician has his station in his home. Bob and Station Manager William Johnson are big boosters of the FAA program.

A husband and wife team in Anchorage carry the idea of togetherness further than most couples. Gisele L. Desautels operates her own station in her home in company with her husband Ed, who is Chief of Systems Maintenance District Office No. 3. Even their family car is radio equipped. Both are active in the two meter net. Gisele is the mother of six and still finds time for amateur radio, social and community interests.

William R. McGahan, a general mechanic, operates his amateur radio station in his quarters at Galena. Mac has been in MARS from the start. He conducted net operations while stationed at Moses Point. Since transferring to Galena, Mac finds it hard to "get out" via amateur radio. Nevertheless, he and his boss, Station Manager Larry Smith, are resolved to put Galena on the map. Mac is experimenting extensively with different antenna systems. With Larry's well-known supervisory "push" and Mac's technical know-how, the signal should soon be coming in loud and clear from Galena.

With no thought of material gain, over fifty of the Alaskan Region's amateur radio population are rendering this vital service. They own and operate their equipment, receiving no recompense or reward for their long vigils monitoring the frequency bands. If there is a reward it is the personal knowledge that each of them shares that they have the capability to help their agency and their country if ever called upon in an emergency.

-S-T-A-T-I-O-N- -N-E-W-S-

ANIAK

Station-wise our new Chief Bob Thomas was selected for a watch Supervisor's position in Anchorage, and ATCS Robert Bevans of Anchorage joined us to complete our complement on January 23rd.

The Health and Safety film received by FAA was shown for two nights at the local theater as a special community feature after the regular shows. It was also shown again at the monthly meeting of the Aniak Health and Civic Council.

A community and village project is now under way to have all the dogs vaccinated against rabies. This is sponsored by the Aniak Health and Civic Council, the FAA personnel and the Village Council. It is hoped by the second week in April a clinic will be held and the mission completed.

Albert Burnham

ANNETTE

Mayor-Elect Henry Littlefield and six new councilmen of Metlakatla took the oath of office at the annual inaugural ceremonies on January 7. FAA Annette was represented by Station Manager Carl E. Fundeen, Station Mechanic Foreman Donald R. Fuller, and Public Affairs Representative Nathan B. Newcomb, Jr. Other dignitaries were also in attendance from state offices of the U.S. Coast Guard and Ketchikan.

Annette Cub Scouts have grown in number from ten to the present twenty members, necessitating the addition of two new dens which was accomplished in February. The January pack meeting was highlighted by the rocket contest in which Richard and James Newcomb, sons of Mr. and Mrs. Nathan Newcomb, Jr., and Gary Smith, son of Lt. Comdr. and Mrs. Paul Smith were the top performers.

The interior of the Annette School has recently been completely redecorated and minor repairs were made by Dick Dykstra of the State Division of Buildings.

The seventh grade students at Metlakatla were recently given a tour of the FAA tower, and shown the facilities at Pan American Airways, Pacific Northern Airlines, Weather Bureau and U. S. Coast Guard. They were also given a tour of a Pan American jet.

Nathan B. Newcomb, Jr.

COLD BAY

Winter is hovering over Cold Bay sometimes tightening its grip and then relaxing as the wind blows from the north with its snow and cold winds and then from the south. It makes a lot of hard work for the men on the snow plows.

We will miss Dan Roller who resigned to return to work with the Air Force. We welcomed aboard our new ATCS Leland Adams and family.

Bells have been ringing all over Cold Bay as Bill Bordeau and his boys have been installing the new fire alarm system. This system is now about completed.

The Volcano Club pizza party was a huge success and everyone looked forward to dancing away a few hours on St. Valentine's Day.

Fred E. Barnett

FAIRBANKS

ATCS Henry Spillar was detailed to Big Delta for 30 days to assist personnel in the "Polar Siege" military exercises.

Several meetings were held with Air Force representatives on the new AF10 procedures. ATCS Gabriel J. Wessby and ATCS Major W. Grotts travel to Kotzebue and Indian Mountain for technical assistance training to AC&W personnel.

A pilot/specialist briefing with pilots of 55th Weather Squadron at Eielson AFB was conducted by ATCS Ronald Wood and ATCS William Schuster.

S. Peterson

FAREWELL

Farewell was hit with high winds in February with gusts noted in excess of 90 MPH. A great amount of property damage was suffered and the cleanup and repair crews are busy.

A rock or piece of ice went through a window of the Snow-Trac while the operators were changing watch at midnight. Several airfield lights were blown loose from their bases and the power line to the MRL range had several cross arms blown loose. Also the control cable was pulled from two poles and the lashing wire on several spans of control cable were loosened.

Occupants of all housing quarters had a big job of cleaning out the dirt and snow that sifted in the walls. A window was blown out of the transit quarters and dirt and snow piled up on the floor and over beds and furniture.

Raymond F. Harry

GUSTAVUS

Wein Alaska Airlines sent their John Eubank down to Gustavus with twenty barrels of fuel for their projects. A 1600 gallon tank is to be used for storage and pumping facilities.

The ILS facility here was removed from service. This includes the glide slope, the localizer and the middle marker. The outer marker is also down, leaving the outer compass locater operating with the identifier GAV.

The National Park Service hosted a party at the home of Dave Butts in beautiful Bartlett Cove, Glacier Bay National Monument. A wonderful time was had by all.

R. Melander

HOMER

For the third or fourth time in recent years, Homer is about to have another election for incorporation as a city of the first class. Little, if any opposition has been voiced against incorporation this time, so it seems likely that it may succeed.

Construction of our new grade school is nearing completion and will be ready for occupancy within a week or so. Housing about 300 pupils, it is of the latest design and is a welcome addition to the expanding community.

Uncle Sam's recent drive against cigarette smoking has taken its toll at the station. Some have switched to cigars or pipes and others have cut down drastically on cigarettes. Clarence "Coke" Nelson, a veteran cigarette smoker of 27 years who has consumed 2 to 3 packages daily, saw the light and decided to quit. So far he has gone nine days without so much as a puff.

Joe Frost

LIAMNA

Winter time is fun time in Alaska. Fairbanks has its winter carnival, Anchorage the Fur Rendezvous, and Cordova the Ice Worn Festival. This little spot on the west side of the largest lake in the state is not to be outdone by these larger places.

Our dog races started on January 24 with eighteen teams entered from the various villages. The race was over a 25-mile course each day for three days. The starting date was a bit delayed due to the late arrival of enough snow to make a track. This reporter does not have the individual times. However, first place was secured by Gus Evan, second place Sam Alexie, and third place Paul Cusma, all of Nondalton. Nondalton is the village about twenty miles to the north of Iliamna. Two racers, Steven Wassillie and Sava Anelon, from the village of Newhalen, near the station, took fourth and fifth places.

At last the big lake is frozen over and fishing through the ice is in season. The results to date are a bit disappointing. However, the hardy souls that suffer the wind and cold for several hours have been rewarded with some nice large trout.

Iliamna lost a large portion of its operation staff with the departure of smiling Jack Williams, who is 6 feet 4 inches in height. This leaves a large vacant place in the BQ. Well, anyway Anchorage FSS gained a lot of operator when they received Smiley. Jo Chaney, General Mechanic from Big Delta, is with us now. So, we still have three bachelors in the BQ.

Big things are taking place inside of the housing units at Iliamna. Mr. Bagley is here with his crew of carpenters. They are hard at work re-doing the kitchens and bathrooms in each unit. This is going to be just like up-town when they are finished. These boys sure know how to make some nice things out of a few pieces of plywood and other lumber.

SEMT John Ritter has his ham rig on the air now, so any of you ham operators that read this give Al (KL7CHT) a blast when you are on the net. All of us would like to hear from YOU.

Now that we have enough snow on the ground to use the snow scooters, the children on the station are keeping them busy. Needless to say we have many student pilots and some solo pilots. A little trouble in the traffic pattern now and then but no accidents.

ATCS Mike Feser has been caught spending much time looking over the notices of airplanes for sale. Looks like we might just have another bird located here in the near future. Scotty Heter is a bit frustrated at this writing because he had to leave his PA12 in Fairbanks last month while up there on a visit. He was looking forward to installing his skis and doing a little caribou hunting, and maybe shooting a wolf or two.

E. W. Scotty Heter

JUNEAU

Plant personnel participated in closing the Lena Point and Thone locations.

Duane C. Durand and family, formerly of Sisters Island, left for duty at Talkeetna Station, and Ronald Garland is acting as relief EMT at Sisters Island.

A heart attack was suffered by Lloyd Tolbert, and he is on extended leave to recuperate from this illness. We all hope he makes a quick recovery.

Another station employee, Charles Osgood, is on annual leave for a three-week vacation in the southern regions of the U. S. He hopes to soak up a bit of sunshine and enjoy the warm weather.

Les Holmes, formerly of Farewell, attended joint Fedstrip orientation classes held by GSA.

William J. Johnson

KENAI

EMT Mac Mannring finally returned to Kenai. We thought Mac had decided to keep moving south, but after schooling in Oklahoma City, radiological school in Denver, and a siege in the hospital in Spokane, Mac decided it was time to return to the Far North.

STIC Frank Hall will be on his way to Juneau in March to the Alaska Bowling Proprietors Association tournament, having placed first in the semi-finals at Kenai in early February. Frank's winning series were a 1301 and a 1195. Good luck at Juneau Frank, and bring back the championship for Kenai.

The "no-smoking" bug has hit the FSS personnel at Kenai. Now all except one are non-smokers. We predict that Mr. Spillers will weaken under the pressure from the non-smokers, especially since he has been finding it difficult to find an ashtray lately. He also wonders whether those dirty windows are actually caused by Jit's smoking.

Ralph Matukonis and carpenter crew are in Kenai periodically moving people out of their bathrooms, but the inconveniences will be forgotten, we predict, after all the newly remodeled bathrooms are finished.

J. C. Lawton

KING SALMON

ATCS William E. Schofield completed the Flight Assistance Service course and all phases of the King Salmon FSS Facility Area examination and passed both successfully.

ATCS Philip F. Chatlain received a Quality Within Grade Pay Increase award in recognition of his performance which was substantially above standards for acceptable level of accomplishment.

During the month we lost familiar faces and welcomed new ones. Mechanic Sidney L. Nally transferred to his new assignment at Annette Island. While Cable Splicer Francis J. Garvin was selected for the position of Electrician Lineman at this station.

The Anchorage Center personnel took over Radar Jet advisory service at the local AC&W site during the month of January.

Familiarization trips were taken by ATCS Richard B. Newton and James A. Wojnas on a local commercial airline.

Carl Mellon

KOTZEBUE

Mr. Miller, FSDO/2, conducted an Airman's Meeting in the Recreation Hall on January 10 and 16 people from the local area were in attendance. Discussions centered around the maintenance of aircraft and the problems involved, particularly at isolated locations. Following the discussion, FAA movies were shown for about one hour.

After many delays caused by remodeling during November, stormy weather during early December and the holiday season, an Open House was held at the FSS building on the afternoon of January 12. Conducted tours were made of the facility, including the Weather Bureau. These were followed by an hour of FAA movies depicting the part that FAA plays in regulating commercial and private flying, particularly the development of air corridors, flight separation and radar tracking. About 100 people attended and everyone seemed to thoroughly enjoy the program including the coffee and snacks served by our high school girls.

The same program was repeated on January 15 for all high school students in the community. About 50 students were in attendance.

-S-T-A-T-I-O-N- -N-E-W-S-

On January 11, two FAA employees, Foreman Mechanic Leo Schaeffer and ATCS Warren Thompson, using their own and CAP planes, participated in a search in the vicinity of Point Hope for a missing Eskimo man and his dog team. The latter was located out on the floe ice and a search of the area failed to reveal any trace of the man. It was shortly concluded that the minus 35 degree temperature and 50 to 60 knot winds precluded any possibility of survival, and the search was called off.

Joseph E. Walsh

MCGRATH

On January 14 McGrath became involved in the search for N5792D pilot Bob Vanderpool, on a round-robin out of Red Devil. The aircraft was located on the 15th, 36 miles southeast of McGrath. It was reported that the aircraft was substantially damaged, but that the pilot sustained no injuries.

Gas and smoke masks have been added to the fire fighting equipment. We feel these very valuable. Training for the month included use of the masks and of the oxygen and respirator equipment.

Marion J. Figley

NENANA

SATCS Archie Frye and Foreman Mechanic Arthur J. Schmuck have both been active in the Nenana Chamber of Commerce affairs. Arthur Schmuck will be installed as president of the organization during this month.

Student flying activity will be increasing in the near future due to numerous ground school graduates at Clear AFB and Fairbanks.

Jack Forness arrived at the station on February 3 and is the new mechanic.

Arthur J. Schmuck.

NOME

On January 22, 1964, our Flight Service Station Chief, Arley R. Evans, completed thirty years of devoted federal service. His work with the FAA and its predecessor organizations has included control center as well as station duties. His initial assignment in this region was at Nome in 1941 as a communicator. During WWII he served as Flight Service Chief at Nenana, Biorka Island and Haines.

Ray Caudle experienced a mishap while on a Sunday trip to Teller with his wife in their Cessna 140. He struck a snow drift while rolling out a landing and nosed the aircraft over onto its back. Villagers asked if he would like an assist to "right up" his plane. They flipped the aircraft onto its wheels, but prop and wing strut damage necessitated a flight back to town with Wein.

Blanche O. Walters

NORTHWAY

Winter plunged from shirtsleeve temperatures down to a low of minus 53.

Pilot-concessionaire Floyd Miller suffered a damaging financial loss, but no physical injuries, when his Cessna 185 burned on the ramp of the Northway airfield January 8. Our station fire crew manned the International fire truck and succeeded in extinguishing the blaze before it could jeopardize Mr. Miller's gasoline reservoir or other parts of the concession area.

Ormond C. Robbins

SHEMYA

The end of January brought the return of ATCS Elmo V. Murray, who was on extended annual leave in sunny but cold southern California. While on leave ATCS Murray married Miss Mary Wright of Los Angeles, California. The newlyweds spent their honeymoon enjoying the many sights of Los Angeles and the surrounding areas.

This month also found FAA N82, our flight check aircraft, flight checking the Shemya GCA unit. As I've mentioned in the past, it is a real pleasure to see the crew. But this time we were honored with a visit by the Regional Photographer, Mr. Herman N. Kurriger. Since everyone here at Shemya Radio and Base Operations have cameras, we had plenty to talk about.

With the departure of N82's guest and crew, the "Islanders" settled down to face one of the most severe winters to hit the island in many a year, with wind and snow lowering temperatures and visibility to near zero daily. The coming of the summer fog will be a welcome sight.

Elmo V. Murray

YAKATAGA

January's social calendar at Cape Yakataga was dominated by a coffee party honoring Terry Williams on her birthday. Guests brought amusing "white elephants" and signed fictitious names.

When two visiting ministers were weathered in for a number of days, there were occasions for several more religious services than usual.

A number of traveling personnel stopped at Cape Yakataga in performance of their duties during January. Ernest McCullough (SMDO#4) made his inspection. Then came Chet Kriner and Larry Byrd from AL-822.

"Operation Watchdog" brought us Fred Allnutt, and at the month's end Glenn Payne and Charles Goshorn (AL-738.5) were completing certain modifications.

Three of the younger set who ran trap lines this season are Doyle Shaw and Spike and Norman Hoyt. They report satisfaction with their number of pelts, which include mink, martin and ermine. Of particular interest is the trapping of several lighter-colored "stone" martin. These pelts are expected to bring a bit fancier prices.

Gene Zumwalt

YAKUTAT

The Yakutat FAA/WB Flying Club, organized June 3, 1963, hereby boasts: the fastest growing flying club in Alaska, and certainly the most enthusiastic; an excellent ground school, taught by experts; the best aircraft mechanic in Alaska, with aircraft inspection authorization certificate (Rex Teig); a staff of supreme flight instructors (Ashworth, Helfrich, Lockard and Teig); an unsurpassed home base station (Yakutat FSS); and money in the bank, with everything paid for. Now with the basic facts out of the way—four students have soloed and seven more are in training. Flying rates are only $5.00 hourly, instructor included. Also a very modest entrance fee of $150.00 is necessary, but which is refundable if member transfers.

Throughout the winter months, with good flying days at a premium, student pilots have been busy with ground school. One night each week instruction is given in navigation by Jan Helfrich, or weather by Doug Armstrong and Keith Thomas. Harold Griffith will teach Civil Air Regulations and Rex Teig will give orientation on aircraft engines. Then it's every man for himself when the examiner comes to Yakutat in March.

Marjorie B. Helfrich