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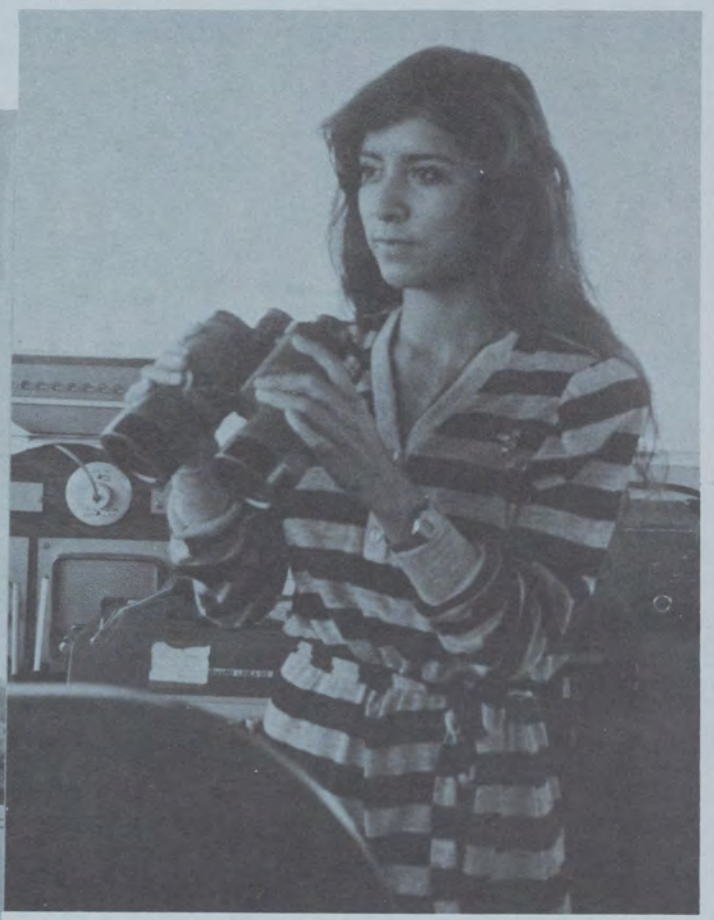

LAX Tower:

The People

Cover Story

A visit to Los Angeles Tower is an occasion to remember; this is how many visitors describe their reaction from a vantage point in the Los Angeles Tower Cab. This is similar to the perception of newly hired employees as well. Case in point; shown in upper right is Gloria Ibarra who reported for duty in March 1980. She progressed to the position of AT Administrative Services Clerk, passed the Air Traffic Controller Examination, and currently is in training at the FAA Academy in Oklahoma City. Upon completion, she will report to Hawthorne Tower.

Shown in the upper left photo is Robert Clark who entered the FAA in August 1981, passing the necessary qualifications to be hired as a GS-9. Bob has progressed to Full Performance Level status and currently performs journeyman duties. He enjoys remote control aircraft, has attended Cypress Community College and hopes to become a Manager with the FAA or an Accident/Incident Investigator.

Carde Hardy is shown in the lower cover photo. She is a Clerical Assistant who formerly worked in the Personnel Management Division. Carde transferred to Los Angeles Tower in January 1983. She resides in Los Angeles and dreams of going higher within the FAA.


A


B

A--Chandra Sargent transferred to Los Angeles Tower from Santa Monica and is the daughter of Channing Sargent, recently retired from Van Nuys GADO. Chandra is a resident of Van Nuys and has a Bachelor of Science in Biology. She hopes to advance to Facility Management within the FAA while practicing her hobby of training and showing Akita dogs.

B--Robert Steidley can be proud of his progress toward full certification. He was a controller for the U.S. Army in Germany for three years and has multi-engine commercial instrument and single engine instrument flight instructor ratings. He is a resident of Torrance with hobbies consisting of flying, theatre and sports.

More LAX Tower People.....

A

B

A--Bruce Gottsleben entered the FAA in August 1981 with prior air traffic control experience in the U.S. Air Force and two years of college. He has now progressed to Full Performance Level status and performs journeyman duties. Originally from Lincoln, Nebraska, he currently resides in Torrance and participates in softball activities whenever possible.

B--Elizabeth Froehler has achieved a long sought goal of becoming a controller at Los Angeles Tower. She graduated from the FAA Academy in Oklahoma City last year and is a resident of Los Angeles. Elizabeth hopes to become facility rated and in some way gain a status equal to her father, Robert Froehler, who is a controller at the Los Angeles Center.

Veteran Pilot Lauds ATC System

More than two years after the controllers strike, pilots still are writing the Administrator in praise of the ATC system and the people who run it.

Typical is a letter from a Philadelphian who writes: "I have been flying the Federal Aviation System for twenty-five years, and I would like to report that at the present time the quality of the service, the improvement in the speed with which the system functions, and the extraordinary cooperative spirit of the controllers themselves mark a giant leap forward in American aviation."

The writer, Vincent G. Kling, senior partner in an architectural and engineering firm that bears his name, concluded by asking the Administrator to convey to all air traffic control specialists that what they are doing "not only makes flying more pleasurable but infinitely safer and more efficient. I know I speak for thousands when I say many, many thanks and congratulations."

Panel Established For NAS Implementation

The agency has established a high level advisory committee to monitor its program for modernizing the nation's air traffic control and air navigation system.

Known as the Federal Aviation Advisory Committee, the panel will provide independent system progress analysis and expert advice on implementation of the National Airspace System Plan and will help assure continuity of purpose throughout the implementation period.

According to the committee's charter, members of the panel always will include the current FAA Administrator and one former Administrator to help put past decision-making in perspective. The past Administrator selected for the committee is Najeeb Halaby, who headed the agency from 1961-65 during the period of initial modernization.

Other committee members, all from the private sector, are: Dr. William Louis Firestone, vice president and general manager of the Cablevision Systems Division of the RCA Corp.; Dr. Christopher C. Kraft, Jr., former director of NASA's Johnson Space Flight Center; and Dr. William H. Pickering, director of the Jet Propulsion Laboratory from 1954-1976 and now head of Pickering Research Corp; and Henry A. Duffy a Delta Airlines captain and president of the Air Line Pilots Association.

FAA's Associate Administrator for Development and Logistics, Albert Albrecht, will serve as the panel's Executive Secretary. Although no date has been set for the committee's first meeting, it is expected to occur some time in October. FAA's modernization program includes the replacement of the present air traffic control computers and controller work stations with the latest state-of-the-art equipment and the evolution of the traffic control function to higher levels of automation.

Agency Gets Kudos At Fifth NAR Excom

During the fifth National Airspace Review Excom held in Washington on Aug. 9, the agency was commended by industry for coming up with a specific plan to implement 320 NAR recommendations.

The ten-member Excom is made up of seven representatives from industry and user groups and three FAA employees: Kenneth S. Hunt, Director, Office of Flight Operations; Raymond J. Van Vuren, Director, Air Traffic Service and Excom's executive director; and Michael J. Fenello, Deputy Administrator and Excom's chairman.

The five studies and 52 recommendations reviewed and readied for submission to the Administrator bring the totals to 39 studies reviewed by the group and 377 recommendations made.

Studies reviewed included additional services within the terminal airspace, departure and arrival structures, beacon code allocation, application portion of airspace reclassification proposals, and separation standards relating to helicopter operations.

Among the recommendations made by the group were such things as the stipulation that pilot reports (PIREPS) be obtained for light icing conditions, which is a modification of the current rule which requires pilots to report moderate to severe icing conditions.

The next NAR Excom is scheduled to be held in the FAA headquarters building Nov. 1.

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Articles and black and white photographs should be sent to Barbara Abels, Editor, AWP-5, 213/536-6431 or FTS 966-6431.

Paul Beckmen Named In Airport Services Management Magazine

There is no question that airport lighting is a high-budget item states Paul Beckmen, airport electrical engineer and lighting expert for the FAA Airports Division. Paul's energy saving ideas in reducing lighting costs at general aviation airports impressed editors at Airport Services Management magazine, a monthly publication for airport and aviation professionals. The article appeared in the July issue entitled "Ways to Reduce Energy Costs at GA Airports" by Frank Burnham and is a comprehensive study providing airport operators advice on conserving electricity at general aviation airfields.

Paul's contributions to the article informs readers that series circuits are more advantageous than parallel circuits in terms of reliability, maintenance, longevity, and energy consumption for runway and taxiway lighting. On the subject of apron flood lighting, Paul suggests that high-pressure sodium vapor or mercury vapor lights may be a better choice than low-pressure sodium vapor lights, and recommends that an average of two foot-candles of light over the apron surface is sufficient for illumination. The article includes a chart that shows typical nightly and annual energy costs for airport lighting, and provides a form which can be used as a worksheet to complete the electrical operating costs for a particular airfield; both devised by Paul. Paul also recognizes the important role radio-controlled lights will play in the future for reducing operating costs at general aviation airfields.

In his efforts to share his knowledge and expertise on airfield lighting, Paul has portrayed a positive image for the FAA in the eyes of the public, the airport operators and the aviation field.

Swearing in Ceremony Held at Oakland FSS

Facility Manager Marty Landers recently performed the swearing in ceremony for four new Flight Data Specialists at the Oakland Flight Service Station. These four were part of the first group to go to Flight Service. They came on board on June 6 and are now well into their training. Pictured left to right--Marty Landers, Fletcher Houston, Bonnie MacDonald, Jack Goldsberry and Bill Drennan.

Accidents and Midairs Down in 1983

So far, it looks like a good year for aviation. Preliminary FAA statistics for the first six months show that both general aviation and the air carriers had fewer total accidents, fatal accidents and fatalities than the same period last year.

Midair collisions also recorded a dramatic drop, going from 12 last year to two this year. Fatalities were down from 27 to 10.

In the air-carrier category, which includes commuters and air taxis, there were 74 total accidents, 13 fatal accidents and 19 fatalities during the first six months of 1983. This compares with 89 total, 20 fatal and 114 fatalities for the first six months of 1982. The FAR Part 121 airline operators showed the most improvement, with two fatal accidents and four fatalities as opposed to two fatals with 80 fatalities last year.

In general aviation, the most impressive figure was a 27 percent drop in fatalities which went from 683 in 1982 to 499 this year. Total accidents were down from 1,628 to 1,482 and fatal accidents from 291 to 264.

Civilair News

Dreams Come True.....At least, we try our best on Wednesdays from 9 a.m. - 3 p.m. at the Civilair desk on the fourth floor of the Regional Office!!! Sue Watson, travel consultant from Westchester Travel Service, is at your service to plan your leisure time. From weekends to Las Vegas, to vacations to Hawaii, to cruises around the world, your escape is just a call away. Sue may be reached on Wednesdays at 644-8525 or Mondays, Tuesdays, Thursdays, Fridays at 670-1180. Don't be shy... make your dreams become a reality!!!

Latest-State-of-Art Inspection Units Bought

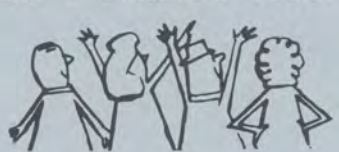
As part of the overall conversion of the FAA flight inspection fleet, the agency is purchasing 38 new technology flight-inspection units from Gull Airborne Instruments, Inc. of Smithtown, N.Y. Under the $2.3 million contract, the agency also has an option to buy an additional four units.

The flight-inspection packages are new generation, upgraded versions of the equipment currently in use. Besides providing increased reliability and accuracy, the equipment will have growth capabilities that will allow it to be used for checking microwave landing systems and other new equipment envisioned in the National Airspace System Plan. Additionally, the units will contain a built-in inertial navigation system which will tell the flight crew where they are at all times.

The equipment will be installed in new flight-inspection aircraft which are to be purchased under a separate procurement. The NAS plan calls for the replacement of the present flight inspection fleet with new fuel-efficient turboprop aircraft.

Logistics Division Awards

Congratulations to the following who recently received Career Service Emblems and Letters of Appreciation: Career Service Emblems - 35 years: Mary Zywicke, Contracting & Acquisition Management Branch; 15 years: Barbara Bennett, Contracting & Acquisition Management Branch and Mary Ann Presson, Real Estate & Utilities Branch; 3 years: Kelvin Waddis, Materiel Management Branch and Bill Burkhardt, Real Estate & Utilities Branch; Letters of Appreciation - Gwennolyn Shelton, Materiel Management Branch, from Dick Gilbert, President, Arizona Communications Corporation; Joan Zubarik, Real Estate & Utilities Branch, from Michael Benson, New England Public Affairs Office; Beth Rollins, Janell Gallagher, Real Estate & Utilities Branch, and Adrian Guy, Materiel Management Branch, from John Tompkins, San Diego Sector Manager; Cheryl Petersen, Contracting & Acquisition Management Branch, from Richard Muckle, Maintenance Operations Branch Manager; Dorothy Gragg, Contracting & Acquisition Management Branch, David Houser, Real Estate & Utilities Branch, and Joe Picon, Materiel Management Branch, from Jerry Chavkin, Director, Rotorcraft Program Office and cover letter from Regional Director, H. C. McClure; Amy Chalekian, Materiel Management Branch, from Don Issacs, Lancaster Airway Facilities Sector Manager; Kenneth Yuen and Ralph Miller, Jr., Logistics Field Office, Honolulu, from Francis Baker, Employment Branch.....Welcome aboard to our CETA employees: Materiel Management Branch - Rocio Blanco, Loc Vinh, Aor Mazariegos; Contracting & Acquisition Management Branch - Donna Cola; Real Estate & Utilities Branch - Demetra Cola.



"Letters We Like To Receive"

Jim Welton, Chino Tower Manager, recently received the following letter from Roderick MacDonald, President, MacDonald Interests, Inc.

"It is with great pleasure that I would like to compliment you and your staff at the Chino Tower for the courtesy and professionalism displayed during the testing of our experimental aircraft this month. All of you were both helpful and encouraging and made our visit to Chino a memorable experience. It is a great credit to your particular branch of the Federal Government that these people can do both a good job, as well as develop the good public relations that they do."

Aerospace Education Day In Los Angeles - Sept. 29

The Los Angeles Air and Space Bicentennial celebration at the Los Angeles Airport Hilton Hotel and Towers on Sept. 27-30 will feature a special AEROSPACE EDUCATION DAY on Thursday, Sept. 29. The exhibits at the Pavilion, located at 5711 W. Century Blvd., Los Angeles, CA 90045, will be staffed by personnel to answer questions from students, educators, parents and the interested public from the hours of 3 to 8 p.m. The Exhibits will also be open to the general public on Sept. 27 from 1 to 10 p.m.; Sept. 29, from 10 a.m. to 10 p.m.; and Sept. 30 from 10 a.m. to 6 p.m. FAAers in Los Angeles and Orange Counties are urged to "spread the word" to schools in their communities and plan to attend this aviation extravaganza. For further information, please contact Barbara Abels, x6431.

Palms To Pines At SMO

On July 22, Santa Monica Municipal Airport hosted the start of the annual "Palms to Pines Air Race". This event is sponsored yearly by the international organization of woman pilots known as the "Ninety-Nines". Susan Oliver, actress/aviator, was on hand to wave the starting flag for each of the 63 aircraft entered. Susan holds numerous aviation world records and recently crossed the Atlantic Ocean in a single engine Aero-Commander.

Over 130 women participated as either pilot or crewmember of an aircraft. Our own Liz Hawn was on local control and Jeri [illegible]rson on ground control to round [illegible]t the all woman event. Of the 63 [illegible]ircraft entered, 60 finished the race at Sun River, Oregon, the next day. To those 60, congratulations; to the other three, better luck next year. Photo: From left--Ken Hall, controller; Susan Oliver, actress/aviator; Clair Walters, FBO operator; and Ron Gerber, Area Supervisor.

San Carlos Tower News

San Carlos Tower bids farewell to James Tokarski, transferring from Manager, San Carlos Tower to Manager, Grand Canyon Tower. Our best wishes go with him.....Welcome aboard to Jack Ryan, Manager, San Francisco and San Carlos Towers; Christopher Overmoe, Area Supervisor, from San Francisco Tower; and Barbara Trujillo, Secretary..... With Palo Alto, we co-hosted a meeting of the Northern California Human Relations Committee (HRC) on Aug. 5 with 35 people attending. A follow-up article will be coming in a future INTERCOM.....Congratulations to Mark Mammini, Rick Carlton and Gus Guzman for reaching Full Performance Level; and to Ray Riotte for qualifying on Flight Data and Ground Control.

Reno Tower "High Rollers"

Facility Manager, Ed Arri, recently had the privilege of presenting John Skinner, Evaluation and Proficiency Development Specialist, with his 30-year pin and letter of appreciation for his dedication to service. Congratulations, John.....On May 25, we said "Goodbye" to our three U.S. Army controllers, Cathy Smith, Robert Johnson, and Robyn Porath. After each of the controllers was presented with a Letter of Commendation by Ed Arri, "MUSTER" was held at Jimmy Shaw's house for a farewell barbeque.....Congratulations to Pete Marcuzzo and Lee Pals for attaining full performance level status at Reno Tower/TRACON..... Welcome aboard to our new secretary, Teri Sandoval.

More Bicentennial Information

COMMENTARY

Bruce Callander

It All Started With the Montgolfiers

Following is the first of a two-part feature on the bicentennial of flight.

THIS FALL (November 21) will be the 200th anniversary of flight, and the date doubtless will be marked by reenactments of the event in hot-air balloons not greatly different from the original.

From the balloon ascension witnessed by Marie Antoinette to the flights of the space shuttle seems a great distance. But the two are linked by the long, steady stream of technological developments that advanced man's knowledge and gave him new tools with which to cope with his environment.

The link may appear more visible between the Wright flyer and the shuttle because both are winged, powered, heavier-than-air machines. But before the Wrights left the earth in their first glider, other men had applied engines and propellers to balloons and added fins and rudders so they could cover great distances and maneuver at their will.

On Dec. 17, 1903, Orville Wright made the world's first powered, controlled flight in a heavier-than-air machine. He rose to about eight or ten feet, stayed aloft for about 12 seconds and landed about 120 feet from where he had taken off. The speed was about seven miles per hour. The flight has been called a miracle.

[redacted]at date, however, men in balloons had flown more than 1100 miles [redacted]ched altitudes above 35,000 feet. By [redacted]00, Count Ferdinand Adolph Heinrich von Zeppelin already had flown his first dirigible, a rigid airship that carried several men at more than 17 mph. That first 420-foot Zeppelin was more than three times the length of Orville's first flight.

In time, of course, heavier-than-air machines eclipsed most of the feats accomplished by balloons. But they could not have done so if they had not drawn on some of the same technology that had fostered 120 years of development in lighter-than-air craft and if they had not profited from the flying experiences gained by hundreds of men in hundreds of balloons.

Following are some of the the developments in ballooning before and since the Wrights' first flight. Listed with them are some of the world events and other inventions, related and unrelated, that occurred during those 200 years. Those who like to think that flying began with the Wrights may be surprised to find how far aviation and technology progressed during periods we tend to think of as ancient history. They may even be surprised at how far lighter-than-air development was carried even after we had the ultimate flying machine, the airplane.

1783 — Man's first recorded flight was made in a balloon built by the Montgolfier brothers in France. Louis XVI and Marie Antoinette would keep their heads for several more years. George III still ruled England and America still had no constitution or president. But science already had given us a crude adding machine and typewriter, the barometer, chronometer, hydrometer, thermometer and micrometer, to say nothing of the microscope, the telescope, the steam engine and lightning rod. We had the steel pen, piano, circular saw, spinning jenny, knitting machine, diving bell, submarine and bifocal lens.

1785 — Jean-Pierre Blanchard and American balloon enthusiast Dr. John Jeffries crossed the English Channel from Dover to Calais, lightening the load en route by shedding their clothes and by other imaginative methods. Blanchard later was arrested during the French Revolution and came to the United States, where he flew his balloon in the presence of George Washington. By then, John Fitch had begun to experiment with his steamboat and we had the iron plowshare, the shrapnel shell and embossed printing for the blind.

1794 — Capt. Jean Marie Joseph Coutelle and Gen. Moriot stayed aloft 10 hours to observe the Austrians and direct the French army in first use of balloons for aerial reconnaissance. Not five years earlier, the revolution had begun in France and the Whiskey Rebellion in America. The crew of the Bounty had mutinied and Gen. Anthony Wayne was fighting Indians in the Midwest. By now, however, inventors had thought up the power loom, threshing machine, steamboat, cotton gin, gas lamp and, just in time for the daring aeronauts, the parachute.

1797 — With the last-mentioned invention, Frenchman A. J. Garnerin parachuted from a balloon, discovered that it was more of a crowd pleaser than the routine balloon ascent and went on to become a European celebrity. Later, his wife also made some jumps. A young soldier named Bonaparte also was making a name for himself, Thomas Jefferson was president in America and the frigate *USS Consellation* had been launched in Baltimore. And science had added the hydraulic press and lithography to the list of useful items.

1808 — Johan Peter Colding, the first Danish aeronaut, was commanded to experiment with delivering mail by air. He sent a number of letters by unmanned balloon. Later, during a period of political tensions, he dispatched propaganda pamphlets to land in Sweden and influence the people to side with Denmark. Napoleon was in power in France, Jefferson was in his second term as U.S president and old George III still reigned in Britain. But the inventors already had given us the electric battery, the card machine for "programmed" weaving, the screw propeller, the steam locomotive, canned foods, life preserves and gas meters.

1852 — Henri Giffard flew his 144-foot non-rigid airship over Paris under steam power. In America, Millard Fillmore was finishing his term as President and Harriet Beecher Stowe had published "Uncle Tom's Cabin." And science had discovered polarization of light and produced the storage battery, steam printing press, percussion cap, calculating machine, automatic typesetter, friction matches, sewing machine, chloroform, revolver, electric telegraph, photography, pneumatic tires, guncotton, nitroglycerin, electric locomotive, and refrigerating machine.

1861 — Thaddeus S.C. Lowe, frustrated in his attempts to cross the Atlantic by balloon, offered his services to President Lincoln. Made chief of the Army's aeronautical division, he built a number of observation balloons and equipped some with telegraph to report back to the ground forces. America was at war. Victoria had been queen in England for 24 years and would be for another 40 years. And technology had enriched our lives with the gyroscope, condensed milk, safety matches, refrigerators, cable cars, gas engines, cylinder locks, linoleum and carbon filament electric lamps.

1870 — With Paris under siege by the Germans, Jules Duruof carried mail out of the city by balloon and reported back via carrier pigeon. The French began to manufacture balloons and train sailors to pilot them. In all, 66 balloons made it out of the city, switching to night operations when the Germans perfected anti-aircraft fire. In America, Andrew Johnson had survived his impeachment, the United States had bought Alaska from the Russians, the transcontinental railroad was completed, the Atlantic cable was laid and Wyoming Territory had appproved woman's suffrage. By now, we had the steam passenger elevator, the Gatling gun, sleeping car, bicycle, dynamite, torpedo, reinforced concrete and celluloid.

1883 — One hundred years after the first balloon flight, two French brothers, Gaston and Albert Tissandier, put a battery-powered electric motor on their cigar-shaped balloon. It did not go very fast or far but two years later a larger dirigible, made by Charles Renard and Arthur Krebs, made numerous successful flights with electric power, often returning to its takeoff point. On one, it carried the first woman aboard an airship, an actress who operated the motor. Chicago had survived the fire, Custer had not survived his last stand. Wild Bill Hickok had been gunned down in Deadwood and President Garfield in Washington. F.W. Woolworth had opened his first five-and-ten store and New York its Brooklyn Bridge. And the world's inventors had produced compressed-air rock drills, electric searchlights, cathode ray tubes, cash registers, incandescent lamps, color photography and steam turbines.

1897 — The widow of Austrian engineer David Schwartz completed the rigid aluminum airship begun by her husband. An inept pilot mishandled it and it crashed on its maiden flight, but it paved the way for other metal dirigibles. Baltimore had opened the country's first electric street railway and Geronimo had surrendered. The last big Indian battle was fought at Wounded Knee and the Eiffel tower was opened in Paris. The scientific community had come up with the modern bicycle, linotype, fountain pen, automobile, roll film, diesel engine, vacuum bottle, motion pictures, X-rays and wireless telegraphy.

1901 — Brazilian-born Alberto Santos-Dumont won a major prize by circling the Eiffel Tower in an airship powered by a gasolene engine. He also flew a midget airship around Paris, often "parking" to have lunch at a reastaurant. Within four years, however, he would give up ballooning to build heavier-than-air craft. The Spanish-American War was over but the Boer War and Boxer Rebellion were not. Carrie Nation was raiding saloons in Kansas and doctors were battling yellow fever in Cuba. By now, we had high-speed steels, the quantum theory and cellophane.

Continued Next Week.

The Big Hangar

[redacted]AN AVIATION art exhibit will [redacted] September 15 at the Smithsonian's [redacted]tional Air and Space Museum, featuring Frank Wootton's retrospective show entitled "At Home in the Sky." It will contain 57 paintings and sketches of civil and military aircraft.

A LITTLE-KNOWN service that has been active for 35 years dedicated a plaque at Arlington Cemetery recently. Members of the USAF Arlington Committee, better known as the Arlington Ladies, met to commemorate their anniversary with a plaque and newly planted magnolia tree. A bouquet of flowers was also placed on the graves of Gen. and Mrs. Hoyt S. Vandenberg Sr., founders of the organization. Arlington Ladies are volunteers from the USAF Officers' Wives Club of Washington, D.C., who assist family members of AF personnel who elect burial at the National Cemetery.

THE WHITE HOUSE Fellowship program is receiving applications for the 1984-85 fellowship year. This is designed to provide "gifted and highly motivated Americans" with first-hand experience in the process of government. Career military personnel are eligible, particularly those of demonstrated excellence in their professional roles as well as significant breadth of interests and community involvement. Call (202) 395-4522 for more information.

COMMENTARY

Bruce Callander

The Wrights Usher In a New Age

Following is the second of a two-part feature on the bicentennial of flight.

ON DEC. 14, 1903, Wilbur Wright rose under power in a flying machine from the ground at Kill Devil Hill on the Outer Banks of North Carolina, remained airborne for about three and one-half seconds, stalled and landed hard. The machine was slightly damaged. Some people credit this as man's first powered flight. The Wright Brothers did not.

Three days later, on December 17, they had repaired the damage. Wilbur having piloted earlier by luck of the draw, Orville made the flight. It lasted approximately 12 seconds and covered some 120 feet.

The same day, Wilbur made two flights and Orville made another. Their best time in the air was just under one minute, during which Wilbur covered some 850 feet. With a headwind of 27 mph, they figured they made approximately half a mile through the air.

The machine was slightly damaged on this fourth flight. While the brothers debated whether to repair it and try again or give up their experiments for the year, a gust of wind caught the flimsy flyer and sent it rolling over the sand. It was damaged beyond immediate repair and the Wrights packed the wreckage into boxes, which they shipped home to Dayton, Ohio. The pieces remained crated for years, were damaged further by the Dayton flood of 1913 but eventually were reassembled. The restored flying machine now hangs in the National Air and Space Museum in Washington.

In the 12 seconds that Orville Wright remained aloft under the machine's own power, the future of flight took two separate paths. For a time, lighter-than-air machines continued to fly higher, faster and farther than powered flyers. Inevitably, however, heavier-than-air machines were to catch up and pass the balloons and airships. Improvements in airplane design were partially responsible, but the principal credit probably goes to the revolutionary development of sheer power.

As it did in the years before 1903, however, the development of lighter-than-air craft continued after that date and so, too, did the progress of science in other fields.

1906 — Count Ferdinand Adolph Heinrich von Zeppelin, after 10 years of developing airships, made a 20-hour endurance flight to impress upon German military authorities that the dirigible was a practical flying machine. In August of the same year, Capt. Thomas S. Baldwin presented his 20 mph airship for trials with the U.S. Army in Washington and flew it with Glenn Curtiss, who built the engine. The next month, at the same place, Orville Wright demonstrated the flyer the Wright Brothers were offering the Army. The first series of tests resulted in a crash that injured Orville and killed his passenger/observer, Lt. Thomas Selfridge. That summer, Wilbur Wright was flying in Europe, where he made flights of as much as 50 miles. Rough Rider Theodore Roosevelt was President, the New York subway was open and San Francisco was recovering from its earthquake. Our technology now included the electron tube, wireless photo transmission, bakelite plastics and the theory of relativity.

"Freedom," the giant hot-air balloon symbolizing the U.S. Air and Space Bicentennial.

1918 — More than 100 Zeppelin airships were built during World War I. Many flew on bombing, supply and reconnaissance missions and more than half were lost to combat or other causes. In the last raid of the war, the giant, seven-engine L-70 and other airships headed for England but were jumped by pursuit planes. The L-70 went down in flames and the other ships went home. Britain and other allies used some non-rigid balloons in the war and built a few dirigibles that flew some patrols but saw little combat. By now, we had the flying boat, radio receiver, talking pictures, Geiger counter, ramjet engine and air conditioning.

1924 — The United States, which did not receive any German Zeppelins as war prizes, had one like the L-70 built for it by Germany. Named the *Los Angeles*, it was delivered to the U.S. Navy at Lakehurst, N.J., from which it made 331 flights before being laid up in the 1930s for lack of funds to maintain it. By then, numerous dirigibles had crossed and recrossed the Atlantic, which had been challenged by only a handful of heavier-than-air machines. The first licensed radio broadcasting had begun, the *Reader's Digest* had been launched, Congress had made all Indians U. S. citizens and the World Powers had ratified an arms limitation agreement. Recent developments had provided the quantum theory, the Wilson cloud chamber, the arc tube and insulin for treating diabetes.

1937 — The Hindenberg dirigible, an airborne luxury liner with the symbol of the Olympics on its side and the Nazi swastika on its tail, had crossed the Atlantic safely several times, but on its last flight it caught fire and burned just short of mooring. It was the last of a series of disasters to big airships. The French Zeppelin *Dixmude* had disappeared in 1923. Navy's *Shenandoah* had crashed in a storm in 1925. Italy's *Italia* had collided with the ice en route to the North Pole in 1928. Britain's *R-101* had hit the ground and burned the same year. And Navy's *Akron* had gone down at sea with 73 aboard in 1933. The cause of the *Hindenberg* fire never was pinpointed, but it effectively ended the era of the big dirigibles. Lindbergh had crossed the Atlantic, Byrd had flown over both poles. Wiley Post had circled the earth solo and Billy Mitchell, out of the Army, had warned of a possible attack on Pearl Harbor. And the world's inventors had come up with talking pictures, television, phototelegraphy, the liquid-propelled rocket, penicillin and neoprene.

1960 — With commercial lighter-than-air flight dead and dirigibles impractical for bombing, balloons still saw some service in World War II — flying Navy patrols, holding up nets to protect cities from low-flying aircraft, carrying Japanese bombs across the Pacific against U.S. targets. In the 1960s, high-altitude balloons also carried on research like that begun in the 1930s. On Aug. 16, 1960, AF Capt. Joseph W. Kittinger climbed to almost 103,000 feet aboard a balloon, jumped and fell free for almost 14 minutes before his parachute opened automatically. These and similar experiments took men higher than they ever had been and provided important information for future astronauts on how the body functions in space. The United States had survived a depression and World War II, would be faced with a blockade in Berlin and an undeclared war in Korea. Stalin had died, Mt. Everest had been climbed, Elizabeth had been crowned and the first unmanned satellite and atomic submarine had been launched. We now had jet propulsion in both military and commercial aircraft, the practical helicopter, the radar rangefinder and, for good or ill, the atomic bomb.

1983 — As we celebrate the bicentennial of the Montgolfiers' first success, some people dream of the return of the giant gas bags as a practical answer to heavy cargo hauling and luxury travel. If technology can overcome the hazards of wind and weather as helium has overcome that of fire, we yet may see a return of the ocean-spanning dirigibles and find components of spacecraft delivered to their launch sites with one of our oldest forms of transportation. Science has given us the computer, moon landings, shuttle flights, plastic substitutes for countless materials, smart bombs and the promise of genetic engineering to produce smart people. Interestingly, however, crowds at a county fair or a space exposition still gape as they did 200 years ago at a hot-air balloon soaring overhead with its crew waving from a flimsy wicker basket.

The Big Hangar

BAD WEATHER is part of the reason for the Winston Recovery Team's presence on a Greenland ice cap. The 15-member team is searching for the remains of six P-38s and two B-17s which crash-landed there on July 15, 1942, the largest such emergency landing of World War II. On that day 25 men were forced down by bad weather and misleading enemy signals which drew them off course. They made their way to safety later, but bad weather prevented recovery of their craft. The Winston team has had positive readings of large metal objects some 40 feet below the snow, but rough weather has slowed the retrieval.

OUR STRIKING front page photo two weeks ago (July 25th issue) neglected to credit the Air National Guard, we learn. The tactical microwave radio dish (TRC-97) depicted, it turns out, was part of the equipment of the 201st Combat Communications Group, Hawaii ANG.

THE AF IS GOING to considerable pains to let its more than 18,000 officer and enlisted "retired reservists" who are not yet drawing retired pay know that they are nonetheless welcome as members of its retired community.

Regulations and other official publications are being revised to recognize their status as full-fledged members of the Total Force, AF Manpower and Personel Center officials have said.

They are entitled to receive the retiree newsletter *(The Afterburner)*, and they and their family members or survivors may volunteer to serve the AF in family services, medical clinics, recruiting and other base activities and service organizations. They also may take advantage of toll free telephone numbers listed in the newsletter that put them in touch with experts who can explain policies and benefits affecting military retirees, the officials said.

The estimated 12,300 officers and 6220 enlisted members of the Retired Reserve must turn 60 years of age before being eligible to receive retired pay.

THE ARMY is building airstrips for the AF Academy. The two strips will handle training flights and powered glider aircraft and are being designed by the Corps of Engineers. It seems the AF isn't geared up to build them, while the Army sees the opportunity to exercise its 52d Engineer Battalion. Costs will be split between the two services.

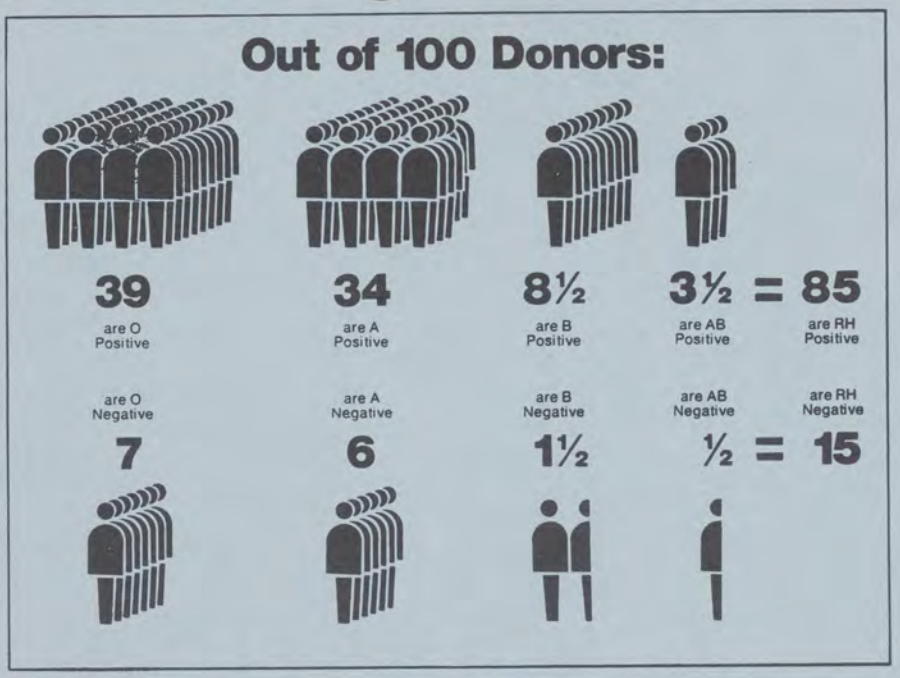
THERE'S OIL in them thar bases and the AF has collected some $75 million in royalties and rent payments from private companies that have tapped them. Private oil and gas wells are producing at Barksdale AFB, La.; Columbus AFB, Miss.; Vance AFB, Okla.; Dyess AFB, Texas. Exploration leases at five other bases have been granted, and lease offers are pending for more than 100 other locations on AF properties.

Los Angeles To Salute Air And Space Bicentennial

The two hundred years of man's first flight will be celebrated by an aerospace exhibition from Sept. 27-30 at the new Los Angeles Airport Hilton Hotel and Towers. The Los Angeles Salute to the Air and Space Bicentennial Exhibition will be free to the public and will feature two displays from the FAA -- part of the display which was featured at the Paris Air Show, and a special Aviation Education "Careers in Aviation" display. Other exhibitors will be NASA, U. S. Air Force Auxiliary, members of the military community, air museums and the nation's leading manufacturers of aircraft and other space vehicles. Over 35,000 square feet of indoor exhibit space is being donated by the Los Angeles Airport Hilton and Towers. Los Angeles Mayor Tom Bradley, the Los Angeles City Council and the Los Angeles County Board of Supervisors have all issued proclamations to draw extra attention to the Los Angeles celebration.

Above photo: Regional Director Mac McClure was among the honored guests at the Los Angeles Press Conference kicking off the celebration. From left--Earl McDonough, Senior Vice President, Hilton Hotel Corporation; Major General Raldolph, U. S. Air Force; Lynn Montjoy, Jr., General Manager, Los Angeles Airport Hilton Hotel and Towers; Los Angeles Mayor Tom Bradley; Councilwoman Pat Russel, President Los Angeles City Council; Larry Mihlon, Chairman, U. S. Air and Space Bicentennial Committee; Regional Director "Mac" McClure; Greg LeBrache, Corporate Director, Public Affairs, Northrop Corporation.

It Takes All Types ... Including Yours!



Sign Up Now To Donate Blood!

AMERICAN RED CROSS BLOODMOBILE WILL BE AT REGIONAL OFFICE SEPTEMBER 27

When you are contacted by your Blood Donor Coordinator, say yes and give the gift of life. As a blood donor, you perform a life-saving service to someone each time you give blood.

Fill out your donor card and get your appointment to come to the FAA Regional Office, 3rd Floor, Room 3E26, at a given time between 8:15 and 1 p.m., on Tuesday, Sept. 27.

Travel Obligation Documents

The fiscal year (FY) 1984 limited open authorization (LOA) travel orders should be prepared and submitted to AWP-26 not later than Sept. 30. Any facility/office that qualifies for using LOA travel orders should refer to paragraph 216-WP1 (WP SUP 78/NM SUP73) in the Travel Manual, DOT 1500.6, which gives full particulars, including an example (Figure 2-4), on how to accurately complete the travel authorization form. FY-83 was the first year for use of the LOA travel orders, and a number of those documents were incorrectly prepared. Please assure that FY-84 LOAs are prepared in accordance with the above reference.

Red Bluff Sector Awards

Congratulations to the following employees who recently received awards: Quality Increase Award - Phillip Southern, Technician-In-Charge, Montague AFSFOU; Group Special Achievement Award - Robert Cross, Paul Golden, Robert Jury, Lawrence Orson, Emerson Schenck, Harland Swetland, and Clifton Novinger all from the Red Bluff Sector and Michael Merrill who is currently assigned to AWP-460; Career Service Emblems - 30 years: Charles Crouter, Electronics Technician, Red Bluff AFSFO (N/C) and Willard Galbraith, Engineering Technician, Red Bluff Sector; 25 years: Dwaine Shedd, Technician-In-Depth (Nav/Comm).