



AAHS FLIGHTLINE

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Cal Aero Aviation Country Club at Chino Airport, Calif., was the focal point for the 2014 AAHS Annual Gathering. Attendees enjoyed complimentary tours of Planes of Fame and Yanks Air Museums during the all day event.

2014 AAHS Annual Gathering

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The American Aviation Historical Society held its first annual gathering in more than 30 years on February 1, 2014, with the intent of making this a regular event. More than 100 members, family members and friends attended the event that included a variety of activities for the attendees.

The event was staged at the Cal Aero Aviation Country Club located at Chino Airport, Calif., through the courtesy of AAHS board member Les Whittlesey, who kindly donated the use of his facility. Included in the activities for the day were special visits to the Yanks Air Museum and Planes of Fame Air Museum. We would also like to note the generosity of AAHS member Warner Hartmann who opened his hangar to attendees to view his Scalecraft models and to AAHS board member Carl Scholl who provided impromptu visits to his Aero Trader WWII aircraft restoration center. Ample photo opportunities of Golden Age, WWII warbirds, and classic aircraft on

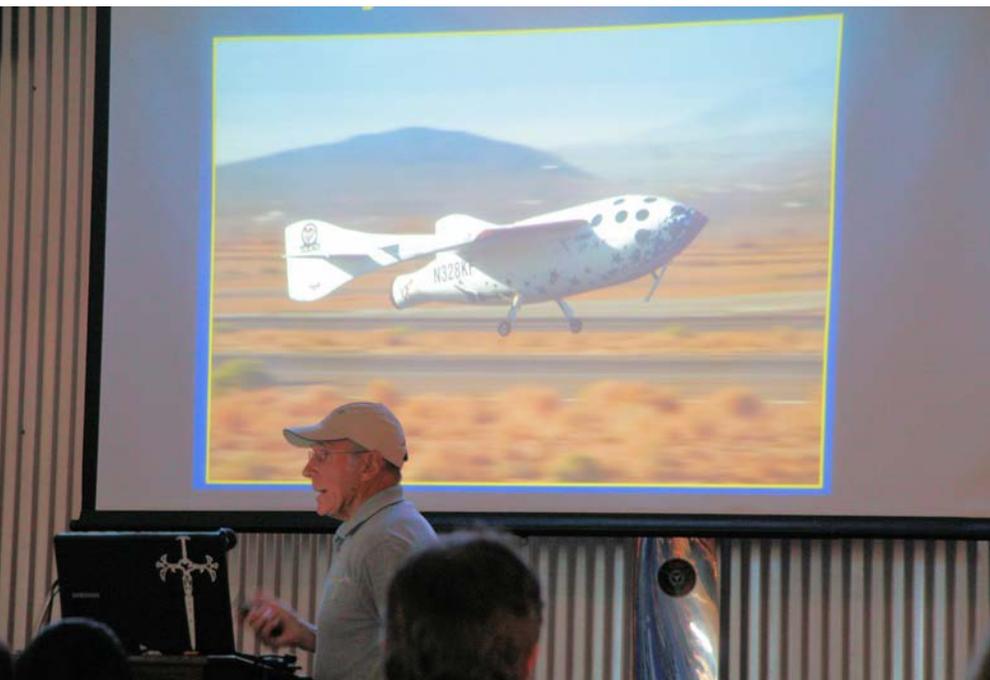
the flight line were available to attendees as well.

A catered lunch was provided for attendees with keynote speaker Mike Melvill providing an entertaining presentation of his experience of becoming the world's first civilian astronaut. Melvill was the first civilian to pilot a vehicle into space (defined by the record keepers of exceeding 50 miles in altitude) in a spaceship designed by Burt Rutan of Scaled Composites on September 29, 2004. Financed by entrepreneur Paul Allen and businessman Charles Branson, this team would go on to capture the Ansari X Prize of \$10 million. This was a "highly profitable" venture as the team only expended roughly \$26 million to achieve the results. Melvill took the audience through the design, development, testing and flight phases of the program with entertaining antidotes spread throughout.

The audience also heard briefly from Anthony Jones, Public Relations Officer



The meeting's luncheon was served in the Cal Aero Aviation Country Club's main hangar, providing a unique aeronautical theme to the event. Awards, recognitions and presentations all occurred during the luncheon and was attended by almost 100 members and guests.



Keynote speaker Mike Melvill took the attendees through an informative discussion of the development, testing and flight of SpaceShip One in which he became the first civilian astronaut.



Board member Tim Williams presents AAHS founder William T. Larkins (AAHS Member #1), as AAHS President Jerri Bergen looks on, with a special recognition plaque thanking him for his insight and organization in creating the AAHS almost 60 years ago. Through his efforts, the AAHS has continued to grow and evolve as one of the leading communities for American aviation history.





Left: Bill Larkins took a few moments to talk about the founding of the AAHS and its mission. Right: Tim Williams presents Albert Hansen with his special recognition award for years of service to the AAHS.

and former board member Air Britain, our sister organization in the UK.

The AAHS also took this opportunity to present several awards and recognitions. Among the most important was a special recognition award to William T. Larkins, AAHS member #1, who was responsible in 1956 for putting our Society together. Without his efforts (and those of many of the early founders) the Society would not be here today. Mr. Larkins took a few minutes to reflect on starting the Society and re-enforcing the goals and objectives that led to forming the organization and which remain today as part of the underlying charter of the group. Albert Hansen was also presented a lifetime achievement award for his many contributions to the Society. These include being the executive editor of the *Journal*, a regular contributor to the *Journal* and one of our “go-to” people on historical aviation questions. The Society also presented Michael Machat with the 2012 Best Artist award as selected by our members from the artwork published in the AAHS *Journal* during that year. [Voting for Best Article and Best Artwork for 2013 is currently ongoing. Members can still get their ballots in ASAP to register their selections (or go on line to www.aahs-online.org/ballot.php).]

The Society would like to thank Warner Hartmann for his contribution of a scale model of the Wright Flyer and to Michael Machat who donated a framed, signed copy of his award winning art, both of which were raffled off to attendees along with a number of other items.

Part of the event included a brief board of directors meeting that was attended by all board members. This meeting provided not only an opportunity for members to see their management team in action, but to also meet them on a personal level.

The event was a great success with everyone having a great time socializing and talking about aviation. We were also able to add about 10 new members to the group as well. If you were not able to attend this year’s event, mark out your calendar for February 2015 and keep your eyes open for the specific announcement and location for next year’s event. →



LEFT: Anthony Jones of Air Britain took a few minutes to talk about the synergy between the two organizations and the challenges both organizations are facing as we move deeper into the 21st century. ABOVE RIGHT: Good food and excellent comradery was had by all of the attendees. LOWER RIGHT: Award winning aviation artist Michael Machat accepting his 2012 Best Artist of the Year award. Each year AAHS members vote for the best article and best artwork published in the *Journal* during the preceding year.



DOD to Preserve Historic Images

by Claudette Roulo, American Forces Press Service

The Defense Imagery Management Operations Center (DIMOC) recently signed a \$5 million agreement to digitize, store and provide access to hundreds of thousands of historical images.

DIMOC is the Defense Department's central repository for visual imagery. It exists to preserve visual records first for the DOD, and then for other agencies and members of the public, said Mike Edrington, DIMOC director. Those images are then made available via defenseimagery.mil.

But, in addition to its digital archive, the agency has a massive backlog of images on physical, analog media that ranges from photographic negatives and slides to films and VHS tapes.

"That material is deteriorating faster than we can offer it to the National Archives and we need to get it into a digital form" Edrington said. In addition, DIMOC's climate-controlled automated storage facility at March Air Base in Riverside, Calif., is running out of space, he said.

The Riverside facility is where analog visual imagery assets are shipped and processed. Those assets weren't always being stored in ideal conditions before they were sent to DIMOC, Edrington said.

The images are often found in obscure places on bases as they close down or as offices move, he said. "They've found it in corners of warehouses, and sometimes we don't know exactly where the stuff's found, but it comes delivered to us, it shows up on a pallet ... and sometimes the stuff says 'box of stuff.'"

Regardless of condition, images sent to Riverside are never simply destroyed, Edrington noted, "because they're federal records." Everything is assessed, barcoded and stored for later digitization.

"We want the material. If they find it, we want it," Edrington said, noting that DOD personnel can contact DIMOC customer service if they have images they want to accession. They can be reached by email at askdimoc@dma.mil or by phone at 1-888-PH-DIMOC (743-4662).

The images in DIMOC's digital holdings are also shared with the National Archives, he said.

"There's a lot of history," Edrington said. "It's not just celebrities such as Elvis Presley ... we've got that kind of stuff, but more importantly, we've got soldiers, sailors, airmen and Marines doing what they do."

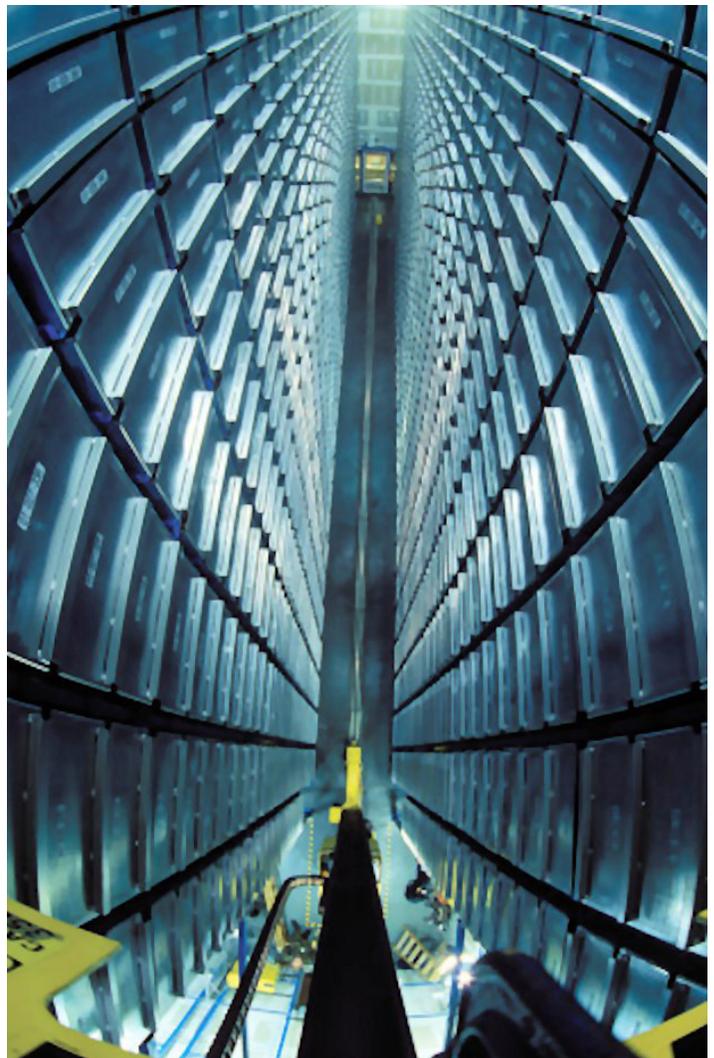
A digitization and storage study conducted in 2010 by the Defense Media Activity, DIMOC's parent organization, found it would take up to 50 years and at least \$25 million to digitize the current analog holdings with available government resources, Edrington said.

By taking a different approach, the new contract will shorten that period to five years at a fraction of the cost.

The contract is the first of its kind in the Defense Department, Edrington said. In exchange for digitizing the images, the contractor, T3Media, will be granted a limited period of exclusivity during which they will be able to charge non-DOD users a fair-market fee to use the images.

All DOD personnel will be able to access and download the images for free by accessing a secure website, Edrington said.

In this constrained budget environment, the department can no longer afford to subsidize the access of commercial media and non-government entities to DOD imagery. Changing



A view from the top rear of the Automated Storage and Retrieval System (ASRS) located at the Defense Visual Information Center, March Air Reserve Base, California. The DIMOC, which digitizes and stores existing media to preserve visual records from all services, is running out of storage space at the March location, despite its massive size. (DOD photo by Staff Sgt. Lance Cheung)



Three contract employees operate the Automated Storage and Retrieval System (ASRS) Pickstations at the Defense Visual Information Center. Motion media and still media from all the military services are stored here. The ASRS is an environmentally controlled, self-contained, state-of-the-art, robotics track guided system. It is four stories high and about half the size of a football field.. (DOD photo by Staff Sgt. Lance Cheung)

to a fee-based system will offset the cost of digitizing, storing and providing public access to the imagery.

“This is a true partnership,” Edrington said. “It’s really in our interest that T3 succeeds.”

The fees are essentially a convenience fee for making accessibility to the images a matter of simply going online and searching by keywords, rather than waiting 30-60 days for a response to a Freedom of Information Act Request for images that may or may not exist, Edrington said.

The arrangement is similar to the one made by the National Archives with Ancestry.com, he said, which is permitted to charge a fee for access to certain federal records in exchange for digitizing, categorizing and storing those records.

Green Cross to Bear

Adapted from an article by Dave O’Malley that appeared on the [Vintage Wings of Canada](#) website.

During WWII, each nation’s aircraft were painted in layers that told a story about the plane, unit and pilot. The base layer was the “official” paint scheme applied to aircraft in a particular theater of conflict – desert camouflage in North Africa, bare metal in Europe, navy blues for U.S. Navy aircraft in the Pacific. On the side and wings of all aircraft, on all sides of the battle, were the most proud marking of all — the national roundels and symbols — markings that take their meaning from historic events and dynasties predating aviation — the crosses, roundels, cockades, Hinomarus and stars of nations engaged in warfare for centuries and even eons. To one side they are anathema, symbols of abject evil, treachery and or even of a nation of subhumans. To the other side they are glorious symbols of courage, honor, duty and historic importance.

The next layer of paint added the unit identification codes, generally a combination of letters and numbers that identified the specific unit the aircraft was assigned to and the specific aircraft within the unit. These codes helped aircrews identify aircraft from their unit in radio silence while assembling for a raid or, in the case of an aircraft that had lost their radios, to identify fellow squadron mates that they could form up on and follow home. These codes also helped witnesses identify under what circumstances a specific aircraft was lost – hit by flak and exploded, no chutes observed, etc.

The last layer of paint added to military aircraft was at the personal level. U.S. fighter pilots recorded their victories in the

form of Japanese flags or Swastikas painted on the flanks of their planes. Bomber pilots used bombs to represent the number of missions they had flown and markings to signify major mission successes – ships sunk, bridges and vehicles destroyed. Many were also personalized with names representing wives, sweethearts, origins of crewmembers, or simply messages to the enemy – *Memphis Belle*, *Glamorous Glennis*, *Oklahoma Miss*, *Arkansas Traveller*, *The Maine-iacs*.

For the Japanese their national marking — a simple red circle known as the Hinomaru — was a powerful, elegant symbol of bravery, pride and dominance over lesser humans. The Hinomaru became the official symbol of Japan in 1870, but dates back in Japanese history to the 8th century when Emperor Mommu used the device on his court flag. The red circle, the “circle of the sun,” carried messages of brightness, sincerity and warmth. But to the countries and islands that fell under the brutal militaristic rule of the Japanese Empire in the 1930s and 40s, they were symbols of abject evil, inhuman cruelty and utter domination.

The surprise attack on Pearl Harbor, while viewed by the Western Allies as abject treachery of the worst kind, represented to the young and incredibly skilled Japanese Imperial Navy pilots the pinnacle of a warped sense of bushido – the samurai way. This was not the bushido of the 12th century samurai, but a new kind, designed to present war as somehow purifying and death in battle an honor and a duty.

During the war one of the greatest honors a Japanese warrior could hope for was to be selected for training as an army or navy pilot. At the beginning of the war, these pilots were among the

best trained aviators flying. Their accomplishments, victories and courage were the talk of the home islands. As the tides of war changed against Japan, the courage, boldness and pride of the Japanese airmen never wavered. In large numbers the now poorly-trained remaining pilots willingly took to the skies to fly against the American enemy, with no thought of returning. Their aircraft were tired, battle-damaged and poorly-made, but this did not discourage them from making one last diving attack in aircraft emblazoned with a now faded Hinomaru. They swept to the deaths with a great sense of pride in their final glory. For those that remained, it was only a matter of time before they would drink the sake and fight the enemy to the death. While they no longer had the weapons, industry, or ability to win they still had immense pride in who they were.

Then they heard the voice of their Emperor for the first time.

He was asking them to do the single most dishonorable thing they could think of – surrender. Many Japanese officers would kill themselves rather than surrender. In light of this powerful sense of the Japanese aviator's pride in themselves, the very aircraft that would carry the delegations for peace talks would themselves become flying versions of the white flags of surrender – an almost unbearable indignity itself.

The onslaught of the kamikaze attacks, suicidal charges and mass suicides of both soldiers and civilians created a deep mistrust within the Allied camp. There were no assurances that the Japanese envoys might just immolate themselves rather than surrender. Gen. Douglas MacArthur requires, as proof of their peaceful intentions, that the aircraft ferrying the envoys from Japan be painted white all over and that the Hinomarus, that beloved, ancient and storied emblem, also be painted white and replaced with a green Christian cross.

Say all you want about Japanese cruelty and behavior during the war, there is no denying their pride, sense of duty and honor and their personal courage. There was a code, a warrior brotherhood, a history of truths, legends and myths, and it was all over-sprayed in the battle color of failure - white. The instructions to end the war immediately were clear, and the indignity was given to the aviators... the first to strike at the Americans on December 1941.

Two radio messages were sent to the Japanese on the morning of August 15, 1945, which set in motion the eventual unconditional surrender:

At 0930 hours:

I have been designated as the Supreme Commander for the Allied Powers, the United States, the Republic of China, the United Kingdom, and the Union of Soviet Socialist Republics, and empowered to arrange directly with the Japanese authorities for the cessation of hostilities at the earliest practicable date.

It is desired that a radio station in the Tokyo area be officially designated for continuous use in handling radio communications between this headquarters and your headquarters. Your reply to this message should give all signs, frequencies, and station designations.

It is desired that the radio communications with my headquarters in Manila be handled in English text. Pending designation by you of a station in the Tokyo area for use as above indicated, stations JUM, repeat JUM, on frequency 13,705, repeat 13,705, kilocycles, will be used for this purpose; and WTA, repeat WTA, Manila, will reply



The two Bettys (ironically and deliberately given the call signs Bataan 1 and Bataan 2 by the Americans) fly low over the East China Sea, inbound for Iejima wearing their hastily painted white surrender scheme and green crosses. These two Bettys would become the most photographed Green Cross surrender aircraft at the end of the war. (U.S. Navy photo)

on 15,965, repeat 15,965, kilocycles.

*Upon receipt of this message acknowledge.
MACARTHUR*

Just 22 minutes later, MacArthur gave the very specific instructions of how the Japanese were to prove their peaceful intentions.

At 0952 hours:

Pursuant to the acceptance of the terms of surrender of the Allied Powers by the Emperor of Japan, the Japanese Imperial Government, and the Japanese Imperial Headquarters, the Supreme Commander for the Allied Powers hereby directs the immediate cessation of hostilities by the Japanese forces. The Supreme Commander for the Allied Powers is to be notified at once of the effective date and hour of such cessation of hostilities, whereupon the Allied forces will be directed to cease hostilities.

The Supreme Commander of the Allied Powers further directs the Japanese Imperial Government to send to his headquarters at Manila, Philippine Islands, a competent representative empowered to receive in the name of the Emperor of Japan, the Japanese Imperial Government, and the Japanese Imperial General Headquarters certain requirements for carrying into effect the terms of surrender. The above representative will present to the Supreme Commander for the Allied Powers upon his arrival a document authenticated by the Emperor of Japan, empowering him to receive the requirements of the Supreme Commander for the Allied Powers.

The representative will be accompanied by competent advisers representing the Japanese Army, the Japanese Navy, and Japanese Air Forces. The latter adviser will be one thoroughly familiar with airdrome facilities in the Tokyo area.

Procedure for transport of the above party under safe-conduct is prescribed as follows: The party will travel in a Japanese airplane to an airdrome on the island of Ie Shima, from which point they will be transported to Manila, Philippine Islands, in a United States airplane. They will



From down in the gully alongside the Ie Shima airstrip, a photographer takes a color shot of Betty known as Bataan One.

be returned to Japan in the same manner. The party will employ an unarmed airplane, type Zero, model 22, L2, D3.

Such airplane will be painted all white and will bear upon the side of its fuselage and the top and bottom of each wing green crosses easily recognizable at 500 yards. The airplane will be capable of in-flight voice communications, in English, on a frequency of 6,970 kilocycles.

The airplane will proceed to an airdrome on the island of Ie Shima, identified by two white crosses prominently displayed in the center of the runway. The exact date and hour this airplane will depart from Sata Misaki, on the southern tip of Kyushu, the route and altitude of the flight, and estimated time of arrival in Ie Shima will be broadcast six hours in advance, in English, from Tokyo on a frequency of 16,125 kilocycles. Acknowledgment by radio from this headquarters of the receipt of such broadcast is required prior to take-off of the airplane. Weather permitting, the airplane will depart from Sata Misaki between the hours of 0800 and 1100 Tokyo time on the seventeenth day of August 1945. In communications regarding this flight, the code designation "Bataan" will be employed.

The airplane will approach Ie Shima on able course of 180 degrees and circle landing field at 1,000 feet or below the cloud layer until joined by an escort of United States Army P-38's which will lead it to able landing. Such escort may join the airplane prior to arrival at Ie Shima.

MACARTHUR



With his twin Kasei 14-cylinder engines thundering, the Japanese pilot guides the Betty through the crowded taxi strip. (Photo from Fred Hill, 17th Photo Recon Squadron)

Four days later, two all-white, twin-engined bombers took off from the Tokyo area — one a Mitsubishi G4M1-L2 (Betty) transport aircraft, and the other a bullet-holed Mitsubishi G4M1 (Betty) bomber stripped of its guns. They reached Sata Misaki on the southern tip of Kyushu at about 1100 hrs. They then proceeded on a course of 180 degrees to a point 36 miles north of Iejima Island, off the southwestern coast of Okinawa, and began to circle at 6,000 feet. They were soon joined by B-25 Mitchells from Iejima with a top cover of P-38 Lightnings, wary that some suicidal aviators may try to stop the peace talks.

On landing at the tiny island, called "Peanut" Island by Okinawans, weary warriors, both Allied and Japanese, who had spent three long years shooting, knifing, burning and slaughtering each other, wallowing in violence and bloodshed, convinced the other was subhuman, met for the very first time in peace and looked each other in the eye and touched each other. One can only imagine how the young Japanese pilots felt as they touched down amidst thousands of young American men, who just the day before would have killed them on sight. The young pilots wore brand new flight suits and flight boots for the trip, but their aircraft were, like the rest of Japan, just barely holding on to dignity. With their proud symbols banned from the meeting, whitewashed and over painted with the cruciform of defeat, a new story of peace was now written in the paint of their aircraft.

The flight of these two Bettys became known as the *Green Cross* flights and the technique became the standard operating procedure for Japanese aircraft carrying envoys for surrender across the remnants of the Japanese empire for the next month. The only Japanese aircraft flying unmolested had to be approved and had to cover their old markings with the approved *Green Cross* standards. Not every aircraft complied with every detail of the specified paint scheme; not every aircraft was painted white nor every cross painted green, but scores of these surrender aircraft brought about the end of the killing and suffering and the beginning of the healing. →



American soldiers and airmen, in daily working gear, gawk at the once-hated Mitsubishi G4M Betty painted white like a flag of surrender and no longer wearing her proud red rising sun roundels known as the Hinomaru. Instead they are required to wear green crosses — Christian symbols if there ever were any. With her RDF loop, this is clearly the first of the two Bettys. (Photo from the U.S. Naval Historical Center)

Folded Wings

Florene Miller Watson, 93, of Borger, Tex., died February 4, 2014. Celebration of Life services were held on February 10, 2014, at Faith Covenant Church in Borger.

Florene Miller Watson was born on December 7, 1920, in San Angelo, Tex., to Thomas L. and Flora Theis Miller. Her father was a watchmaker and owner of a jewelry store chain in the Odessa, Tex., area. Florene became fascinated with planes when at the age of eight she took her first airplane ride in a WWI Barnstormer's open-cockpit plane at Big Lake. "My father and I shared our exhilaration for airplanes." When she was a college sophomore, her father purchased a Luscombe airplane so his family could learn to fly. He anticipated the United States going to war with Germany and wanted his eldest children to contribute to the war effort as aviators.

By age 19, Florene had finished flight school and completed her first solo flight. During the next two years, Florene obtained her commercial license, trained in aerobatics, and earned ground-school and flight instructor ratings. She was teaching men enrolled in the government-sponsored Civilian Pilot Training Program to fly in Odessa, Tex., when the Japanese attacked Pearl Harbor on her 21st birthday. Soon afterward she and her younger brother volunteered for service in the Army Air Corps.

Florene was one of only 25 women who qualified for the original Women's Auxiliary Ferrying Squadron (WAFS), later known as the Women Air Force Service Pilots (WASP). In January 1943, Florene became Commanding Officer of the WASP stationed at Love Field, Dallas. In 1944, she served as a test pilot in a highly secretive program to develop radar equipment for planes. By the time the war was over, Florene had flown every type of training, cargo, fighter and twin and four-engine bomber that the Air Corps used including: Aeronca, Waco, Taylorcraft, Piper Cub, BT-13, PT-17, PT-19, AT-6, AT-9, AT-10, AT-11, AT-17, A-20, A-26, P-38, P-39, P-40, P-47, P-51, SB2C, C-47(DC-3), B-17, B-24, B-25, and her favorite, the North American P-51D Mustang.

After the war, Florene married Chris Watson, her former flight-training student who was a Phillips Petroleum engineer. They raised two daughters while being frequently relocated by Phillips. Florene returned to college earning a BA at Lamar Tech University and a MBA at the University of Houston and then taught college for 30 years at the University of Houston, Howard College in Big Spring and Frank Phillips College in Borger. Florene was a member of Faith Covenant Church, belonged to many community organizations and did much volunteer work. She was also a National Flower judge, a swimming instructor, a real estate and insurance salesperson, a mutual fund representative and a test cook for Betty Crocker.

Florene maintained close ties to aviation with memberships in the Texas Aviation Historical Society, the Ninety-Nines, the Air Force Association, the Commemorative Air Force, the Women's Military Aviators and the Women's Air Force Service Pilots WWII and others. She was featured in numerous newspapers, magazines and books with photos and write-ups and frequently interviewed for television programs plus video and audio histories for university archives and aviation



Florene Miller Watson in her favorite aircraft, NAA P-51D.

museums. She was also featured in the nationally-broadcasted TV documentary *Women of Courage* explaining the role of WASP in WWII. Florene also served as national WASP chaplain for many years.

Some of her most cherished honors include the Distinguished Flying Corps Membership in the Kritser Aviation and Space Museum, Amarillo, Tex., 1988; induction into the Ninety-Nines International Forest of Friendship, Atchison, Kan., (Amelia Earhart's home) for exceptional contributions to aviation, 1995; first woman inductee into the Panhandle Veterans Hall of Fame, August 1996; "Distinguished Veteran" honoree at the Air Force Military Ball in Dallas, Tex., 1997; the Daughters of the American Revolution's highest honor -- their National Medal of Honor, 2002; designation as an Eagle four separate times at the Air Force's annual Gathering of Eagles celebration; the National Air Force Association's Lifetime Achievement Award, 2004; induction into the Galveston Aviation Hall of Fame, 2004; the renaming of the airport in her hometown of Big Lake, Tex., the Florene Miller Watson Airport, 2003; and most importantly in 2010 the Congressional Gold Medal, the highest award Congress can present to a civilian.

Florene was preceded in death by her husband of 68 years, G. Christie Watson, and two brothers, LaMonte Miller and Dolph Miller. She is survived by two daughters, four grandchildren, and two great grandchildren.

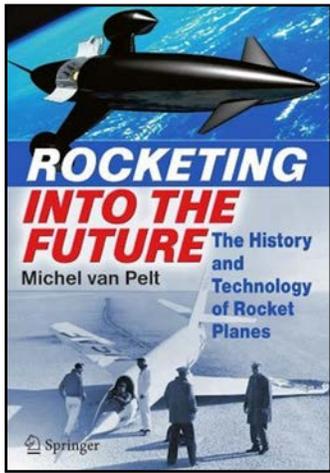
Florene lived her life cheerfully giving to others and always believing the best in everyone she met. She lived Mark 12:30, 31 . . . 'You shall love your neighbor as yourself.' . . .



Florene Miller Watson with AT-6 at Dallas Love Field in February 1943, and a more recent portrait.

Book Reviews

Rocketing into the Future: **The History and Technology of Rocket Planes**, by Michel van Pelt.



Springer-Praxis Books, UK, 2012. ISBN 978-1-4614-3199-2. Paperback, 6.5x9.2 inches, 366 pages, 162 illustrations, bibliography, and index. \$44.95.

It is rare to find a book that makes a highly technical subject understandable and interesting, but this is one. In this book, Dutch space author and engineer Michel van Pelt does this superbly, describing the technology, history and future of rocket planes. His

book is well-written, well-edited (I did not notice a single misspelling), with relevant photographs and 3-view drawings embedded in the text. This is not a weekend novel, but a robust compendium (with a 12-page bibliography) of the history of rocket planes, from the 1928 Opel rocket-powered glider to the latest hypersonic X-planes and civilian ventures such as Virgin Galactic's SpaceshipTwo. Mr. van Pelt writes in an engaging style that will please aviation historians and the general public. The narrative is well-organized and flows well, with more than enough technical details, little-known facts, and program histories to please both rocket engineers and aviation historians. This book is a solid paperback, with quality paper and sharp illustrations, some in color.

The book's introductory chapter begins with the story of early rockets in the 1920s and 30s, and their use in planes, trains, and automobiles. Chapter 2 is entitled, "Crash course in rocket plane design," and is devoted to the essential technologies of aerodynamics of airplanes, rocket engines, orbits, and design considerations for rocket planes. AAHS members may want to scan this chapter and move on to the two-thirds of the book devoted to the history of rocket planes from WWII to the present, covering not only the familiar ME-163, X-1 series, X-15, and Space Shuttle, but also the many little-known designs that did not make it past the drawing board. The book concludes with a look at current rocket planes and the future of space planes.

Mr. van Pelt describes Nazi Germany's development of rocket planes, with fully 20 pages devoted to development and operations of the ME-163 Komet. Japanese and Russian rocket planes are described as well as America's MX-234. Postwar fighter interceptors are described, including the Republic XF-91 Thunderceptor, the French Durandal, and the fascinating Zero Length Launch experiments. Over 70 pages are devoted to the progress in supersonic flight with the Bell X-1 and Douglas D-558 series, the Bell X-2, and North American X-15. The narrative includes the Air Force NF-104A rocket-assisted trainer and NASA's rocket-propelled lifting-body program. I was particularly intrigued to learn about the many rocket planes of which I had been unaware, such as France's Mirage III series, an operational fighter with strap-on rocket packs; Japan's J8M rocket interceptor, a futile effort to copy

Germany's ME-163 in the last days of the war; and the Soviets' SM-30, a successful Zero-Length-Launch version of the MiG-19 that did not become operational. I found it enjoyable to read Mr. van Pelt's refreshing European perspective, giving American rocket planes the same consideration as those of Germany, Japan, Russia, France, and the UK.

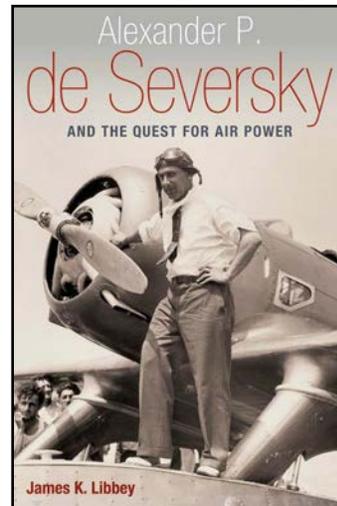
This is not a dry, technical work but an engaging narrative that puts the various rocket planes in perspective, describing not only the what, but the how and the why of each. This book is highly recommended for those who want to learn about rocket planes on an international scale. It's also a very good aviation read.

by John Ball

Alexander P. de Seversky and the Quest for Air Power, James K. Libbey. Potomac Books, Washington, D.C., 2013. ISBN 978-1-61234-179-8. Hardback, 9.1x6.1x1.3 inches, photos, illustrations, map. 349 pp. \$39.95.

Although Alexander P. de Seversky was a prominent aeronautical engineer and preacher of the gospel of air power from WWI until his death in 1974, only now has his feats, failures and foresight been encapsulated in a one volume work. The author of two other biographies and an expert in Russian-American relations, James Libbey uses his experience and skills to write the definitive biography of a Russian-émigré who made considerable contributions to United States military aviation.

De Seversky's feats were considerable. During WWI, he flew as naval aviator, becoming an ace, losing a leg and earning the Russian equivalent of the U.S. Medal of Honor in the process. After barely escaping Bolshevik Russia with his life for the United States, de Seversky became a consultant and test pilot for airplane companies Curtiss and Hannevig; helped Inglis Uppercu redesign a military flying boat into Aeromarine 75 for service in Uppercu's Aeromarine West Indies Airways; invented in-flight fueling techniques and a bombsight that



prompted Billy Mitchell to enlist his services in carrying out his famous bombing tests against warships and other targets in 1921 and 1923; collaborated with Elmer Sperry on a bombsight and invented a calculator that told the bombardier when to release the bomb.

After forming the Seversky Aircraft Corp. in 1931, de Seversky designed the SEV-3, an all-metal monoplane, that was one of the most advanced amphibian aircraft in world, complete with airbrake or flap as well as a sea anchor and pontoons patented and designed by de Seversky himself. The SEV-3 led to the BT-8, the Army Air Corps' "first modern, all-metal monowing trainer with cantilever wing and monocoque fuselage." De Seversky then designed the SEV-1XP that Jackie Cochran not only used to win the Bendix Race in 1937 but became the P-35, the U.S. military's first modern pursuit or fighter.

Unfortunately for de Seversky, with strength came weakness and with gains, setbacks. In 1924, he developed the C-1 bombsight that he called the most accurate in the world only to have the army contract with his competitor for cheaper, less accurate bombsights. Although his corporation achieved fame in the 1930s, de Seversky made promises he could never keep and could be slow to deliver a product on time. It not only cost him another contract with the army that caused the company stock to plummet, but it made a mortal enemy out of Gen. Henry "Hap" Arnold who deemed him unreliable. In 1939, the company board removed de Seversky as president and, in time, de Seversky blamed General Arnold.

As a prophet of air power, de Seversky showed considerable foresight. He correctly predicted that Nazi Germany would invade Poland on September 1, 1939; believed that Britain escaped from Dunkirk and could survive the Battle of Britain through air supremacy. In 1940, de Seversky believed that within five years, the U.S. could have aircraft that would fly across the ocean, deliver a bomb and return home (his prediction was off by three years). In 1941, he argued that the country needed an independent air force. Pearl Harbor and the Battle of Midway validated de Seversky's criticism of the army's reliance on the B-17, B-24 and P-40, designs he considered "obsolescent" in 1940. (These criticisms prompted General Arnold to launch a failed anti-de Seversky campaign.) His *Victory Through Air Power*, published in 1942, predicted that air power would bring about the 'massive destruction' of Japan and, to the navy's chagrin, argued that the battleship's days were numbered. In 1945, as a consultant to the Strategic Bombing Survey, he was the first to suggest that while air supremacy brought about victory, U.S. precision bombing was imprecise. As for Japan, he criticized the U.S. military for focusing on building the atomic bomb and not long-range bombers that could have reduced U.S. casualties and costs. A visit to Japan led him to conclude that the atomic bomb's impact in bringing about its defeat had been exaggerated.

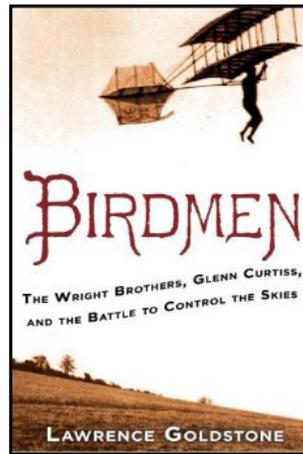
Not surprisingly, during the Cold War, he opposed building a vast military machine to stand up to the Soviet Union for fear it would bankrupt America, and preferred relying upon air power and stockpiling strategic resources. He opposed wars in places like Korea and Vietnam where there were no strategic targets to bomb and the country expended American lives and billions of dollars.

In short, this is a wonderfully written book about an extraordinary man's life and contribution to aviation, and the controversy that came with being a prophet of air power.

by Stephen Craft

Birdmen: The Wright Brothers, Glenn Curtiss, and the Battle to Control the Skies, by Lawrence Goldstone, Ballantine Books, 1745 Broadway, New York City, NY 10019. May 2014, ISBN: 9780345538031, Hardcover 9x6 inches, 404 pages, approximately 24 B&W photos. \$28.00.

Though this book is by a noted, award winning author and historian, I approached it with reservations having previously had the unpleasant experience of reviewing an aviation history work by a well published author with no aviation experience or background. I was pleasantly surprised to my delight. Goldstone has done impeccable research on his topic and it is clear that



he did not rely on secondary resources in compiling his story, which is amply referenced throughout. If one has a criticism about the book, it would have to be that it is too well written in that sentence constructs and word selection would be a challenge to the average reader. But, that is a part of learning, so dig out your dictionary if you want to delve into some of the subtleties.

The book is really a chronology of the development of aviation into a science and business. While the underlying story revolves around the Wright brothers and their efforts to protect their perceived rights by patent, in particularly their issues and law suit against Glenn Curtiss, Goldstone leads the reader through the mitigating factors surrounding the central theme. These factors include the legal issues with patents in at the turn of the century, background on the personalities of the individuals involved, and the other players (and non-players) and events that shaped the central theme. What Goldstone made clear to this reader is that the legal dispute between the Wrights and Curtiss essentially revolved around whether one could legally patent an idea or concept, versus being restricted to being able to only patent physical inventions. At the beginning of the 1900s, it was not clear legally where this issue would fall in patent law, with decisions and opinions having been resolved in the courts both ways. Fundamentally, the Wright patent was for the idea of coordinated control. Glenn Curtiss's camp believed from the beginning that one could only patent actual inventions (like ailerons or wing warping mechanisms) and not what resulted from their application.

The author goes into character development of the principals (Wrights and Curtiss), as well as a number of the important side players in the story (Octave Chanute, Lilienthal, Samuel Langley, August Herring, Thomas Baldwin, Santos-Dumont, Bleriot, Beachey, Knabenshue, among them). And he weaves this information into a story line that is interesting to read as well as being informative. One point of interest that this reviewer noted is that there is no mention of Gustave Whitehead, while a number of others that made "flights," or hops, are covered. The result is a book giving a detailed account of aviation from the late 1800s up to the beginning of WWI, with extra-ordinary coverage of the trials and tribulations of the Wright brothers to protect their patent claims against primarily Curtiss, but all others as well.

This reviewer recommends the book for, if nothing else, its excellent coverage of the history of early powered flight and the development and promotion of aviation during its infancy. It is also an excellent reference as to why the Wrights acted the way they did with respect to publicity about their flights as well as the steps they took to protect their interest in what they truly believed they had discovered and proved in making powered flight practical. A definite read when the book becomes available this May.

by Hayden Hamilton



Boeing 737-301, N302AU, of Western Pacific Airlines. Western Pacific was one of the first modern airlines to sell advertising space on their fuselages. (From the Kase Dekker collection, AAHS-P005990)



Douglas B-66B Destroyer, 53-0488, in an undated photo. (AAHS photo archives, AAHS-59147)



Republic P-47D-30-RA Thunderbolt, 44-32691, at Republic Aviation May 2, 1961, to commemorate the 20th anniversary of the first flight of the P-47. This aircraft is now at the NASM Udvar-Hazy facility in Washington, D.C. (AAHS photo archives, AAHS-S003674)



McDonnell Douglas F-4C Phantom II, 63-7440, c/n 401, assigned to the 163 TFS 122 TFW of the Indiana ANG when this photo was taken in September 1983. (Photo by Michael Grove from the Stephen Miller collection, AAHS-P016236)

Want to help your Society?

How about reviewing a book? Just let Hayden Hamilton (webmaster@aahs-online.org) know and he'll send you a book. The only catch is that you have to write a short book review (as shown in this *FLIGHTLINE*) and send it back to us. Hayden will let you know what titles are available.

Or, if you have read a good book lately, let other members know about it by writing a short book review of it. Again, contact Hayden for details and titles - don't want to have you writing a review of a book that has already been reviewed.

The Answer Man

The AAHS has long been a source for individuals and researchers looking for information about American aviation history. The person that is interested in identifying that old airplane in the picture of their father or grandfather. The researcher looking for information about a specific military unit or aircraft. The movie executive looking for background information or photos of specific planes and people. The list goes on.



In the past, the Society has handled these ad hoc requests in an informal way. Whoever took the call, or more recently the email, would either answer the question, ask a few of their fellow members for help, and/or pass the question along to someone they were pretty sure could answer the question. Not a reliable process to responding to requests for help. Additionally, it left the Society with no way to measure the degree to which we were providing support.

To address this aspect of Society services, management is putting in place a more focused approach. Member Job Conger, curator of the AeroKnow Museum in Springfield, Ill., has agreed to serve as a focal point for information requested. We have built a link on the AAHS website under "Contact Us" for directing requests information to "The Answer Man" (email: TAM@aahs-online.org). Job will either answer the question or track down a source that can, while following up to assure that the requestor has gotten the information they were seeking (or at least a response that we are unable to help). He will also be logging requests so that at the end of the year, we have some idea as to who we have assisted and how. →

President's Message

Beautiful weather, good friends and excellent aviation history combined to give us a great first (in a long while!) AAHS Annual Gathering, on February 1, 2014, (see included article on all the doings). The best part was re-connecting with old aviation friends and meeting new ones, the downside was I wished we'd had more time so that we could swap stories, compare notes and catch up on news. A few AAHS members and friends met on Friday night at the Ayres hotel (Paul and Virginia Greene, all the way from New York, Job Conger from Illinois, Tony and Pauline Jones, from Air Britain (UK), Bert and Jean Ann Zimmerly, from Oregon, as well as Phoenix members Randy and Ryan Reeves and Harry Border, along with Moose Peterson and his wife Sharon). Over wine and munchies we laughed over goofs, and shared histories (a few found they'd flown on the same aircraft). We all had different backgrounds, yet we thoroughly enjoyed each other's company.

AAHS has provided a venue for sharing aviation histories for nearly 60 years, but we still face basic issues for our future, similar issues that are facing most other historical publication organizations, including Air Britain, our sister organization in the UK. These issues reflect the changing, electronic environment we live in, the different interests of the younger generation, and the difficulty we all have in finding the time (and money) to support our aviation interests. Our Annual Gathering reaffirmed that AAHS is a valued aviation resource, and we should spend the effort to ensure our future is successful for tomorrow's aviation enthusiasts. We extend a special thank you to all the volunteers that helped make this a successful meeting.

That's not to say that AAHS can continue on its current trajectory; print mediums like the *AAHS Journal*, the staple of AAHS' documentation effort, is used less in today's environment, while electronic information usage is skyrocketing. Our goal, and our challenge, is to transition successfully to an electronic environment to stay relevant for future readers while continuing to service the needs of our traditional members.

By the time another Annual Gathering comes around, I am confident we'll have a better idea of how we'll move forward and gain further momentum to meeting these challenges.

Jerri Bergen
President

AAHS FLIGHTLINE Sign-Up Reminder

For those that want to be notified by email when the next issue of the *AAHS FLIGHTLINE* is posted, please register your email address online. You can do this by going to the AAHS website "home page." At the bottom of this Web page is a link and instructions that will allow you to register your email address. This is an "opt in" program. Only those that request notification will receive one. The AAHS will not use your email address registered here for any other purpose than to notify you of a *FLIGHTLINE* posting. You have control and may remove or change your email address at any time. Remember that the electronic version of the *AAHS FLIGHTLINE* is in color.

AAHS FLIGHTLINE

American Aviation Historical Society

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Wants & Disposals

WANTED: 3-view drawings and/or data for any of the following 1950s American fighter and bomber project proposals.

- A. Designs to specification MX1554 of 1950/51 for a supersonic interceptor (the competition won by the Convair F-102 Delta Dagger).

1. Two designs from North American Aviation - essentially the same airframe with one or two engines.
2. Republic AP-54 and AP-55.

- B. Weapon System WS-202A for a supersonic long-range interceptor of 1954 (won by the North American F-108 Rapier - later cancelled).

1. The original design proposal from North American Aviation.
2. Martin Model 302 (I have nothing on this).
3. Republic AP-75.

- C. The North American Advanced Piloted Interceptor or API of about 1953/54 that preceded the Long Range Interceptor

- D. Weapon System WS-300A for a supersonic fighter-bomber - early to mid-1950s.

1. The North American proposal that looked like a cross between the F-15 Eagle and Soviet MiG-25. It may have been designated NA-237.

- E. Weapon System WS-302A for a supersonic tactical bomber of 1952-55 (won by the Martin XB-68, also cancelled). A North American proposal that looked like the Navy's Vigilante carrier aircraft.

- F. The original North American NAGPAW proposal which, when scaled up, became the A3J Vigilante. This has never been seen in any publication.

If anyone can help with any of these projects please contact me. Thank you very much.

Tony Buttler
t.buttler@btinternet.com

WANTED: I recently became involved in the restoration of a rare Travel Air 5000 (one of two believed in existence). Formerly operated by National Air Transport, NC3002, it was presented to Amon G. Carter in 1931 in recognition of his efforts to advance commercial air travel in the north Texas area.

We are looking for photos of any Travel Air 5000s (not necessarily the Dole racer, "Woolaroc"). I would like to obtain high-resolution scans of them to aid in our restoration of NC3002.

Gerald Asher
Email: gmasher@netzero.net

WANTED: I am seeking historical information on NC2072, a Lockheed Electra Jr 12A that my friend Joe Shepherd restored (www.electrajr.com). We have information that Orville Wright, Charles Lindbergh and Howard Hughes all flew NC2072 and are seeking to document that. We are also seeking all the history we can locate about the plane. So if you have any suggestions about research (if you have published any "how to" best do aviation research for instance). Please pass them along [Editor's comment: Might be a good article for the *Journal*]. H.E. Talbott was the original owner of NC2072, which lends credence to the notion that the three giants all flew the airplane, as Talbott was a big player in the development of American aviation, was very close to Wright and Lindbergh, and was also on the board of TWA. Of course his high profile pilot friends would no doubt want to fly the newest and hottest aircraft of its time.

Thanks,

Richard Speer
Email: mem747400@msn.com

DISPOSAL: My father, Herm Schreiner, was an AAHS director and article contributor many years ago. He also authored *Aviation's Great Recruiter*. Since his passing two years ago I have been organizing his large collection of aviation related items for sale. I created a website, www.flyboy45.com, to assist with this monumental task. I am sure that some AAHS members would want to know about this. I hope that after browsing the site you will agree and alert AAHS members via your newsletter or other appropriate means. My father's collection is extensive and currently I have been posting the aviation pulps from about 1,500 collected issues from the 1920s, 30s, and 40s. I just finished auctioning the "Air Stories" and next is *Flying Aces and War Birds*.

Carlton Schreiner

DISPOSAL: *The Speed Seekers* by Thomas G. Foxworth, 1974 First Edition. \$25.00 plus postage. *A Picture Postcard History of U.S. Aviation* by Jack W. Lengenfelder, 1989 First Edition. This is an autographed presentation copy to aerial photographer Al Bachmann. \$10.00 plus postage.

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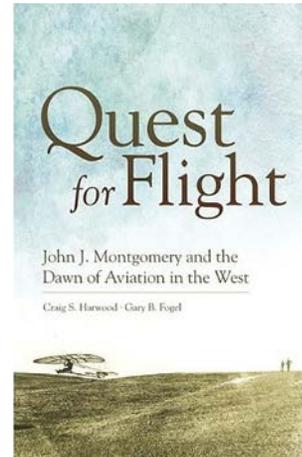
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AAHS Photo Archive CDs Series

The Society has recently started development of a series of photo CDs. These CDs contain high-resolution scans of negatives, slides and prints from the AAHS Image Library. The resolution of these scanned images is sufficient to make an 8"x10" photographic quality print. Each CD focuses on a particular aspect of American aviation history - be that a particular manufacturer, type or class of aircraft.

As of this date, the following CDs are available. Each CD contains between 70 and 140 images depending on content.

- 1001 Douglas Propeller-Driven Commercial Transports
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- 1007 Lockheed Connies in Color
- 1009 Lockheed P-38/F-5
- 1011 Curtiss Transports
- 1021 Boeing Propeller-Driven Commercial Transports
- 1031 Golden Age Commercial Flying Boats

These CDs are available to members for \$19.95 (\$29.95 non-members) each plus shipping (\$2.50 U.S., \$10.00 International - add \$1.00 for each additional CD). Order forms are available online and on request, but a note along with your donation specifying your particular interest is sufficient.

Proceeds go to support the preservation of the photo archives. Do you have a particular interest or suggestion for a CD in this series? Drop us a line or email the webmaster (webmaster@aahs-online.org). We are currently researching the possibilities of offerings covering the following areas: Connies Part II, XP-56, Northrop X-4, Bell Aircraft, and Early Lockheeds.





American Aviation Historical Society

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Please enroll me as a member of the AAHS. Enclosed is my check (money order or bank draft) for dues as checked below. I understand that I will receive all issues of the *AAHS Journal* published to date during my membership year, plus all issues of the *AAHS FLIGHTLINE* (Downloadable from the AAHS website). Individuals joining after October 1, will have their membership begin the following year, but will receive the Winter issue of the *Journal* as a bonus. I also understand that renewal is due at the end of the calendar year in which membership will expire. (Valid through 2014)

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NEW MEMBER DRIVE

The AAHS is entering its sixth decade of operation and continues to face the challenge of sustaining its membership.

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Did you know that more than **50 percent of all new members** learned about the AAHS from a friend?

Do you have friends who are interested in aviation history?

Pass them a copy of the Membership Application above and encourage them to join!

If each member enlists one new member, we would double our membership. Then we will be able to reduce membership rates - tangible "payback" for your efforts to help expand the Society's membership.

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