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FLYING HISTORY

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Commemorative Air Force keeps World War II aircraft in the air **BY BARRY SCHIFF**

PHOTOGRAPHY BY JIM WILSON
AND BILL CRUMB



IN 1957 LLOYD NOLEN, A FORMER WORLD WAR II ARMY AIR CORPS FLIGHT INSTRUCTOR, and four friends purchased a war-surplus P-51 Mustang, *Red Nose*. They paid \$1,500, which included whatever fuel was in the tanks.

A few years later the group decided to obtain other World War II aircraft but was dismayed to learn that although America had produced almost 300,000 airplanes for the war effort, most were gone—stripped of armament and instruments, and then either abandoned or demolished. Only a few remained airworthy. What started as a hobby evolved into an urgent mission to preserve history.



CAF Hangar 57 with a group of CAF "Colonels" (left). Hangar 57 pilots travel to major aviation events in the United States spreading the word of the CAF.

One member of the group painted "Confederate Air Force" on one of their airplanes. This was not a political statement but rather a lighthearted attempt to poke fun at the group's humble beginnings. The appellation stuck, and in 1961 the group chartered the CAF as a nonprofit Texas corporation. By 2001, however, the organization's name aroused dissenting chords of political incorrectness. The CAF became the Commemorative Air Force, a name that better reflected its purpose.

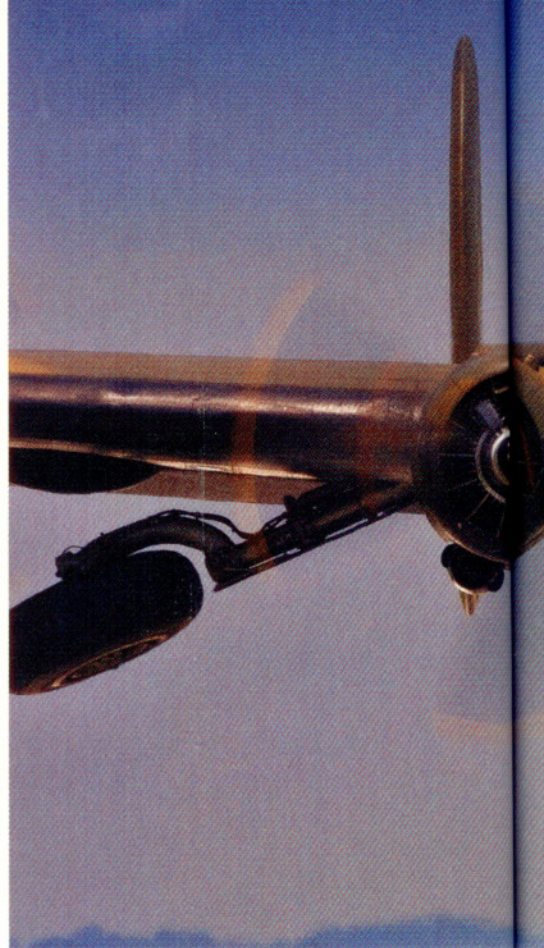
The CAF is dedicated to the acquisition, restoration, and preservation in flying condition of World War II aircraft flown by all U.S. military services—and some flown by other countries—to "honor American military aviation through flight, exhibition, and remembrance." The CAF has the world's largest fleet of flyable World War II aircraft. Thus far it has 156 warbirds representing 60 types. They range from liaison aircraft and trainers to the mammoth Boeing B-29, *FIFI*, the world's only flying Superfortress. The CAF has saved several aircraft models from extinction, the rarest being the Curtiss SB2C Helldiver, a restoration that took six years and tens of thousands of man-hours. It is the only flying Helldiver in the world.

The CAF also has a number of museums scattered about the country, including the Airpower Museum at the Midland (Texas) International Airport, where its headquarters is located. The CAF regularly flies its aircraft to airshows all over the country where they make fly-bys and are put on display.

CAF members who staff displayed aircraft tell poignant stories about visitors drawn to make close inspections of their aircraft. One, for example, tells of when he was "babysitting" a North American B-25 Mitchell at an airshow. He noticed an elderly man approaching slowly and with the help of a walker. He looked into the visitor's rheumy eyes and saw tears beginning to form rivulets on his cheeks. The man said that he had been a B-25 tail gunner and had not been near "an army bomber" for 60 years. The man cried unabashedly as he told of how he was wounded during his twenty-fourth mission, but he was the lucky one—the only one to bail out of the stricken airplane, the only survivor. Emotion poured from the man like water from a faucet. After gaining his composure, he laid a bony, weathered hand on a bomb-bay door and uttered a barely audible prayer for his fallen comrades.

The CAF has grown into an international organization with almost 9,000 members—all are assigned the rank of colonel—dedicated to the preservation of World War II aviation history. All members who work on and fly the CAF's airplanes are volunteers and the only payment they receive is the pride and gratification associated with keeping these historic icons in the air. They regard themselves as stewards of the aircraft.

The CAF has 74 units known as wings, squadrons, and detachments that carry out the organization's objectives. There are 70 in the United States, including one in Alaska, and one each in Australia, France, New Zealand, and Switzerland.



Flying a B-24

MY GOOD FRIEND, Tom Travis, a retired airline captain and member of the Texas-based B-29/B-24 Squadron, called last year to ask an absurd question, "Hey, Barry. I hear you're going to write an article about the CAF. How would you like to fly and include a write-up about *Ol' 927*, our B-24A?" A reply was unnecessary, and I had made airline reservations to Dallas on my computer before the conversation had ended.

More than 18,000 Consolidated B-24 Liberators were manufactured during the war, more than any other American warbird, but only two remain airworthy: *Ol' 927* and *Witchcraft*, a B-24J that belongs to the Collings Foundation of Stow, Massachusetts.



Singing spokesman

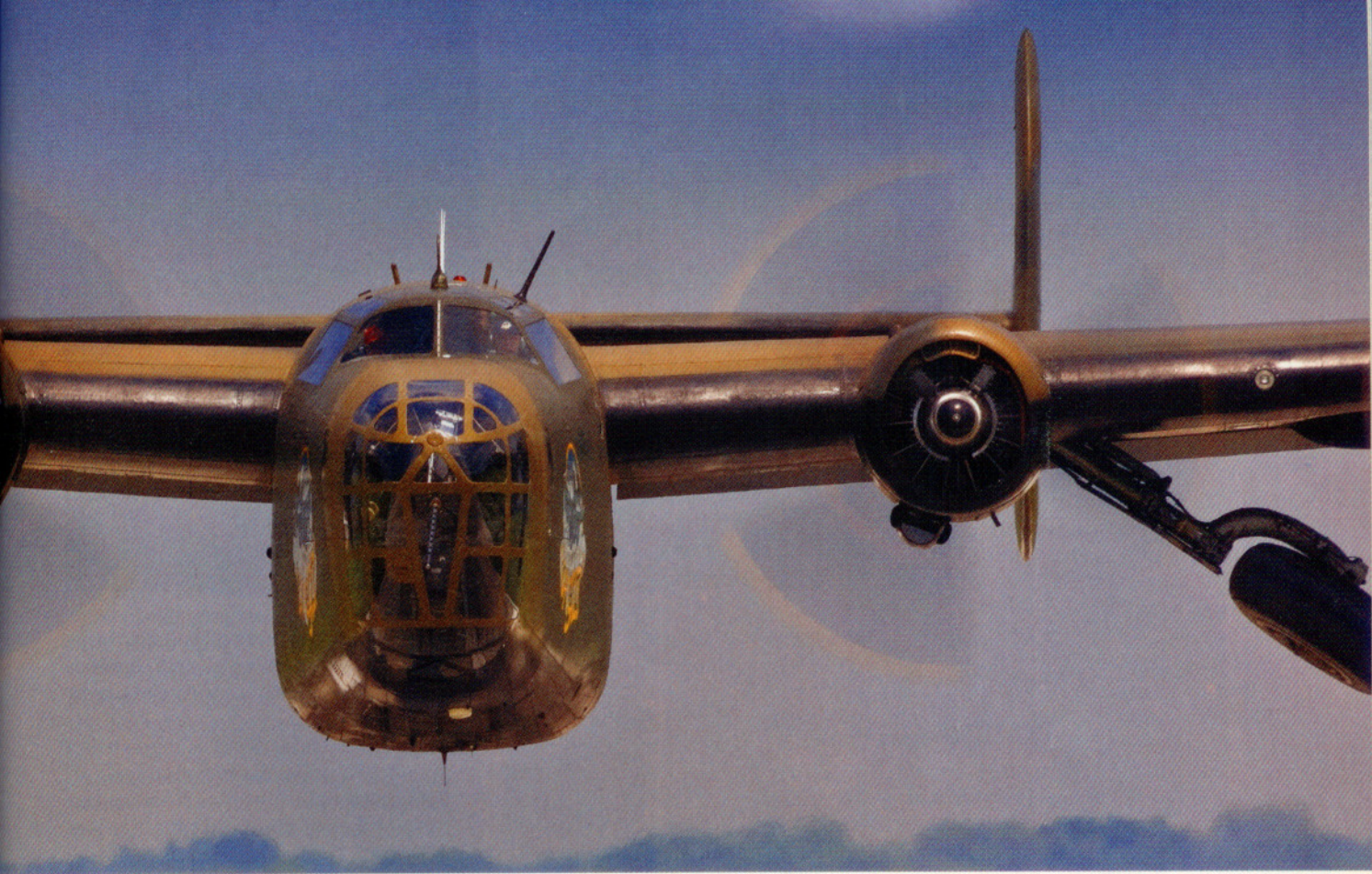
Country music singer Aaron Tippin, a commercial multi-engine instrument-rated pilot and ATP, will serve as the 2010 Commemorative Air Force celebrity spokesman, appearing at special events for the CAF and recording public service announcements honoring American military aviation.

Tippin soloed on his sixteenth birthday and earned his ratings by the time he was 18. He is also rated in helicopters and owns a 1941 Stearman, a 1946 J-3 Cub, and 1959 Helio Courier, all of which he flies. He has performed

for U.S. troops in Iraq and Afghanistan during the Thanksgiving holiday for the past six years.

"As the son of a pilot, a pilot myself, and a patriot, the mission of the CAF is especially important to me," said Tippin. "Acknowledging the history of this great nation and the servicemen and women who make our freedoms possible is stellar and I'm happy to champion the organization's efforts."

For more information about Tippin, visit the Web site (www.aarontippin.com).



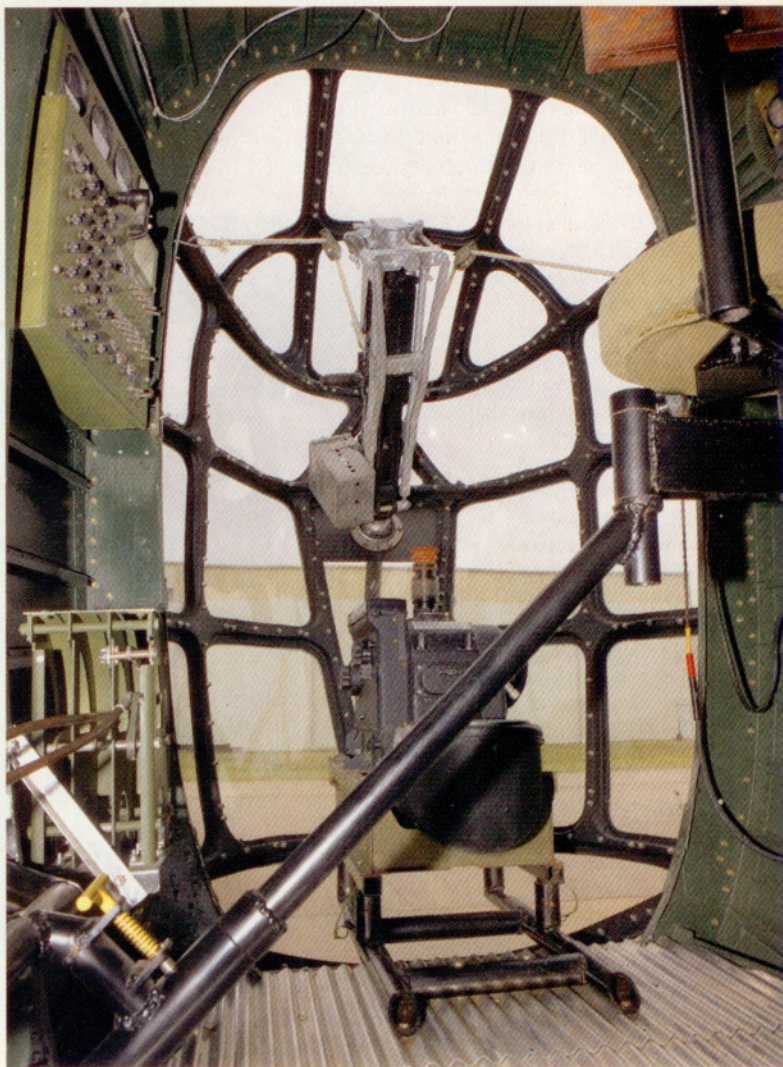
The distinctive nose section of the B-24 housed the Norden bombsight—the bombardier sat here (right) and operated one of the most closely guarded secrets of World War II.

Consolidated chose to use a high wing on its “heavy bombardment airplane” because of its experience building high-wing PBY Catalinas. There is a strong family resemblance between the Liberator and its four-engine sibling, the PB2Y Coronado, a flying boat used as a patrol bomber.

The B-24 squats close to the ground, causing some to describe it as somewhat of an ugly duckling. Its long, slender, high-aspect-ratio wings, though, give it a look of capability. It was the first bomber that could carry 8,000 pounds of bombs, have a range of 3,000 miles, or cruise at 300 mph. Because of its long legs, it prowled the mid-Atlantic to protect convoys against the German wolf packs (submarines). Eventually, the B-24 spread its wings over every theater of the war.

Walking toward the airplane, however, evokes more emotion than appraisal. I was awed by thoughts of those who flew this instrument of war to battle tyranny and defend freedom. Just running one's fingertips along the skin of this historic aircraft is a privilege, an honor, a gesture of respect for those who sacrificed all to defeat an earlier Axis of Evil.

OI' 927 left the production line in May 1941 and was used by TWA to train Royal Air Force pilots to fly four-engine airplanes and as a corporate transport by Consolidated. It was never called upon to drop a bomb. Following the war it was used as a corporate aircraft by the Continental Can Corporation. The CAF acquired the aircraft in May 1968 and embarked on an ambitious program to restore the airplane to its original configuration. Today it is displayed at various



airshows; rides are sold to help defray the cost of keeping this piece of flying history in airworthy condition.

Each 1,200-horsepower, 14-cylinder Pratt and Whitney R-1830 94 radial engine is supplied by a 68-gallon oil tank. The oil tanks on *OI' 927* still bear the signatures of many who built the aircraft in San Diego. The aircraft also is equipped with what was one of the war's most closely guarded secret weapons, a Norden bombsight.

After crawling aboard the aircraft, my instructor, Bill Goeken, motioned for me to take the left seat. I did so with excitement and hesitation. I initially felt as though I were trespassing on hallowed ground, that the seat belonged only to those who had earned the right under fire to be there.

The most difficult part of flying a B-24 is taxiing the 58,000-pound beast. It does not have nosewheel steering, and directional control is maintained using asymmetric power and differential braking. This is no big deal on other aircraft, but it is on the Liberator. The brakes are so extremely sensitive that it is initially difficult not to overcontrol and cause the aircraft to lurch right and left down the taxiway, the telltale sign of a new Liberator pilot. It takes a pair of well-practiced feet to keep the aircraft heading in one direction, especially in a crosswind when the aircraft wants to weathervane. The ultimate embarrassment is causing the nosewheel to caster 90 degrees right or



left. There is no way to recover from the cockpit; crewmembers must exit the airplane, attach a tow bar, and muscle the nosewheel back into position.

As I taxied onto the runway, I could only imagine what it was like for a 200-hour, 21-year-old command pilot and his young crew to be embarking on a bombing mission over enemy territory. I could only imagine the anxiety they felt in anticipation of encountering Me-109s and intense anti-aircraft fire focused on their demise. I could only imagine what it was like to penetrate hostile airspace and make a low-level bombing run at night over heavily defended Ploesti, Romania, in an attempt to destroy one

of the "Hun's" primary oil sources. I was reminded of the advice given to bomber pilots: "If you get shot up, fly the largest piece home."

The initial takeoff roll is made using asymmetric power to prevent straying off the runway as the throttles are advanced to 45 inches of manifold pressure and 2,700 rpm. The rudder becomes effective at 60 knots. There is no formal V_1 speed; you play by ear the decision to abort or continue in the event of an engine failure. You then apply gentle backpressure on the control wheel at 80 knots so that the "Lib" unsticks in only a slightly nose-high attitude at 100 to 110 knots. You then accelerate to the 140-knot climb speed.

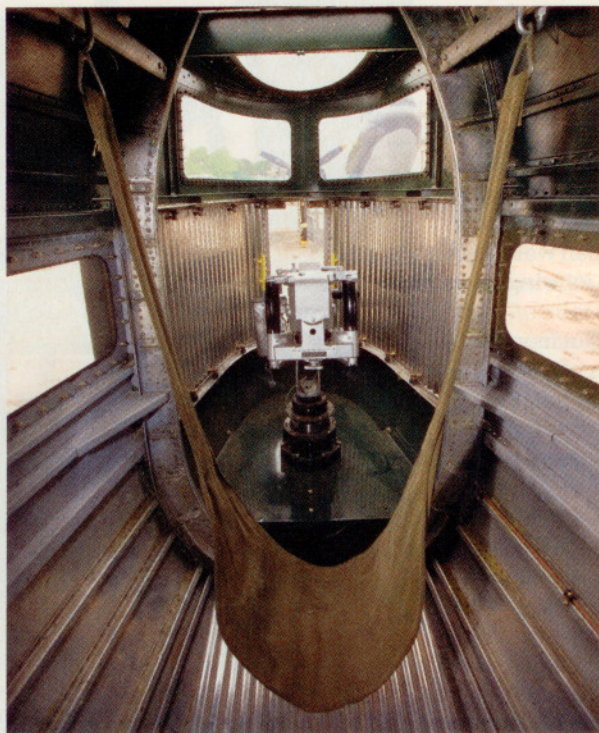
The CAF cruises its B-24A conservatively, using only 30 inches and 2,000 rpm, which result in a true airspeed of 165 knots. The airplane can go much faster but the engines then have a voracious thirst for fuel.

The B-24 has very heavy flight controls that could never be described as harmonized. Rolling and pitching the bomber take great effort. The ailerons generate substantial adverse yaw and require lots of countering rudder input. The rudder pedals have tremendous travel and when flying in turbulence, you feel as though your legs are powering an exercise machine. In other words, the Liberator is a truck, albeit a very good truck.

The airplane has a narrow center-of-gravity envelope (only 11 inches) and exhibits an annoying instability in pitch; you are constantly engaged in a battle to maintain altitude.

Watch out for "aileron snatch" during a stall. This is when the ailerons suddenly and rapidly move on their own so as to cause a strong-willed roll one way

The B-24 Liberator still holds the record for the most-produced American military aircraft. It earned its nickname "Flying Boxcar" because of its slab-sided fuselage and its other more disparaging nickname "Flying Coffin" because of the narrow catwalk between the flight deck and the rear of the aircraft (right) where the tail gunner sat in a sling—crew members wearing parachutes could barely fit through the narrow passageway. The B-24's cockpit (above), however, was somewhat roomy and was designed to be job-specific.



or the other. Flying a Liberator is work-intensive, and those who flew them did not need to work out in a gym. Muscling the aircraft in turbulence is more than enough exercise to remain fit.

You cross the threshold for landing at 95 knots and gradually retard power to idle. I tried to land with my left hand on the control wheel and my right on the throttles, but I was not strong enough to make a one-handed flare. The flare for a proper nose-high touchdown on the mains requires both hands pulling on the control wheel. The most difficult part of landing, though, is when the Liberator slows below 60 knots, and the rudder loses effectiveness. You then return to the dreaded chore of differential braking to stay on the runway, and this might be the most challenging part of flying a peacetime Liberator.

I was invited to sit in the tail gunner's position during our return flight to Addison Airport in Dallas. The seat—if you can call it that—is a canvas sling suspended from the ceiling that moves pendulously in response to every aircraft movement. You have to hang onto the .50-caliber machine gun handles just to keep from being flung into the aluminum sidewalls of the tail structure. Sitting there you feel isolated, vulnerable to an attacking Messerschmitt. This is where the expression, “don't get your ass in a sling,” originated.

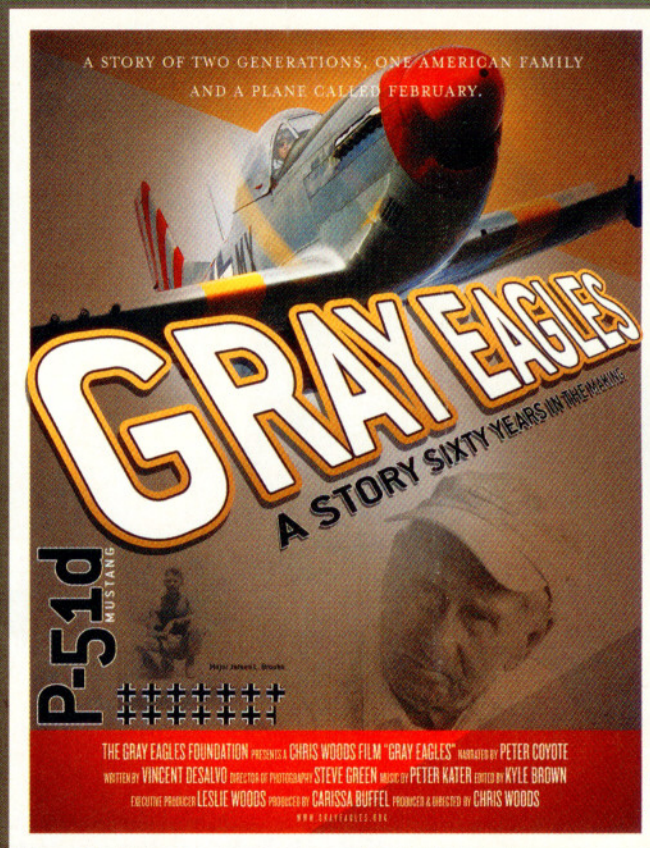
Living symbols

“The CAF's historic warbirds are more than rare aircraft,” states the CAF's monthly magazine, *The Dispatch*. “They are living symbols of what the United States and its allies accomplished during World War II. They are indelible reminders that America must never again be unprepared, a lesson that seemingly must be relearned by every generation.”

According to its president, Stephan C. Brown, “The CAF is all about honoring military aviation by continuing to fly and display the aircraft that demonstrate what we accomplished as a nation. These aircraft help us to remember the lessons of World War II and how we became such a powerful world leader. It also is about honoring the Greatest Generation and ensuring that their sacrifices will never be forgotten.”

ACFA

The author is a member of CAF's Southern California Wing in Camarillo (www.barryschiff.com). Learn more about the Commemorative Air Force online (www.commemorativeairforce.org).



Gray Eagles

ONE OF THE MOST incorrectly and overused words in the English language is “hero.” If someone calls 911 and reports someone in danger, that person is called a hero. To me, a hero is someone who voluntarily puts himself in harm’s way for the purpose of saving or protecting others. Using that definition, there were an extraordinary number of heroes during World War II. Stories detailing their brave and courageous exploits are legion. Many of them, of course, were pilots, and one of those pilots was Maj. James L. “Jim” Brooks, a hero by any definition.

When pilot Chris Woods purchased a P-51D Mustang in need of restoration, he wanted his airplane to have historical significance beyond being what many describe as the best fighter aircraft of World War II. It happens that Jim Brooks had been a neighbor, so Woods decided to paint his aircraft in honor of the P-51D that Brooks flew when he became an ace while engaging the Luftwaffe over Germany, an airplane named *February*. (Brooks’ first airplane, a P-51B, was called *January*, his birth month, because he did not have a girlfriend after whom to name his airplane).

Because Woods also is a talented filmmaker, he decided to produce a video that shows in heartwarming fashion the reunion between Jim Brooks and the Mustang that he had flown more than 60 years earlier. Woods says that the film, *Gray Eagles*, “was inspired by the flood of memories triggered by this unimaginable encounter with a long-lost friend. The modest, 88-year-old pilot breaks his silence to share stories and experiences of war with the grandchildren who never thought they’d hear them.”

This not-to-be missed motion picture is available on DVD and incorporates thrilling and vibrant aerial photography guaranteed to stir the emotions of all who fly. It can be ordered online (www.grayeagles.org).

Woods’ video also can be viewed (at least through March 2010) without charge online (www.asb.tv/videos; scroll down to “Most Popular”). Woods prefers, however, that pilots purchase the movie to help fund his Gray Eagles Foundation, a nonprofit organization “dedicated to keeping World War II aviation history alive through dynamic audio-visual media created to educate and inspire those of all generations.”

—BJS