

# Let's Talk About *B-24 Liberator*s



by **Ralph J. Ferrusi**

*Photos by Ralph J Ferrusi  
and the Collings Foundation.*

Get in touch with Ralph at:  
[rjferrusi@frontiernet.net](mailto:rjferrusi@frontiernet.net)

**I**n the 2016 Boating on the Hudson and Beyond Holiday issue I described my flight in the Collings Foundation B-17G NINE 0 NINE. After the flight I joined the Foundation, and in the May 2017 Boating...and Beyond I described the World War II stories of both the “real” NINE 0 NINE and the B-17G that eventually became the Collings’ NINE 0 NINE.

The B-24J Witchcraft is the Collings Foundation’s Wings of Freedom Tour sister ship of the NINE 0 NINE. 18,188 B-24’s were produced during World War II, more than any other American aircraft. The Witchcraft is the only true B-24 still flying: the last one...



I’ve read a lot of World War II aviation books, and several specifically about the B-24:

B-24 Combat Missions and Wings of Morning. In the book (and movie) Unbroken, Louis “Louie” Zamperini’s B-24 is on a Search and Rescue mission over the Pacific when the two left engines fail, and the plane snaps into an unrecoverable spin into the Pacific. Sometime afterward I read of a similar incident...

I engage World War II (and Korea, Vietnam, and middle East) veterans any chance I get, and, thank them for their service. I’ve talked to quite a few B-17 and B-24 jockeys: pilots and copilots, even ball turret gunners. Many have stories: Al, an IBM Electronics Apprentice School instructor, was a bombardier on a Liberator and claimed his pilot once flew the plane inverted!!! Overall, the B-17 guys loved their B-17’s, and the B-24 guys loved their B-24’s.

The B-24—thanks to its high-mounted, skinny, efficient Davis wing—could fly faster and farther, and could carry a bigger bomb load than the B-17. But, B-17’s—the “Queen of the Skies”—got all the glory: think the Memphis Belle, and 12 O’clock High. B-17 jockeys had nicknames for the B-24: “The crate the B-17 came in”, “the flying brick”, etc. The “whistling shit house” was considered a compliment.

I recently spoke to a World War II pilot who had flown both B-17’s and B-24’s, and I asked him which one he liked best. I was really surprised when he said the B-24. I asked him why. He said, “It was a more modern plane.” Thinking about this, the B-17’s controls are activated by cables; the B-24’s are hydraulic; smoother???. This pilot also told me that in combat, if fighters approached head-on, at closing speeds of around 700 miles-per-hour, it was impossible to tell a Mustang from a Messerschmitt: “We just opened fire”...

From my (pretty extensive) readings, the B-24 had its foibles, mostly due to the Davis wing. The B-17, with its low, very broad wing “presented no abnormal characteristics to deal with in close formations”. On the other hand, I’ve read that the B-24 was a handful in close formations, requiring constant corrections, particularly at high altitudes. The nose turret cob-jobbed onto B-24H’s “seriously impacted its already cumbersome handling characteristics”.

Statistically, crippled B-17’s were more apt to bring their air crews home, in spite of serious battle damage or the loss of an engine (or two), than crippled B-24’s. And, this is a real zinger: “combat squadrons greatly preferred the B-17...to the B-24 because ‘when we send the 17’s out on a mission, most of them return. But when we send the 24’s out, most of them don’t”.

A B-17 pilot once told me he had ditched his B-17. I asked how. He said it was pretty much the same as landing it, except you kept the landing gear up. You kept it above stalling speed, then at the last minute flared it and pancaked it in. The B-24’s more aerodynamically efficient bomb bay doors, that retracted up the sides of the fuselage, would rip off when ditched. Enough said...

B-17’s have entry/exit hatches both front and rear. The ‘24’s have a single hatch, in the rear. If a plane was mortally crippled this was not at all convenient to all five officers aboard—pilot, copilot, bombardier, navigator, radio operator—who were all in the front of the plane. In an emergency, the nearest way out was through the nose wheel doors, if you could get them open...

he B-24’s strengths. Early in WWII there was a “gap” in the middle of the Atlantic where German submarines could roam freely since existing anti-submarine patrol planes did



not have the range to reach this area. B-24's closed this gap. And longer-ranging (thanks to that Davis wing) B-24's, were the bomber in the vast Pacific, before the arrival of the B-29's.

The much-more glamorous B-29 (see a recurring theme here???) got the job done over the Japanese mainland islands, but the '29 had a dark side. The pilot's worst enemy was not fighters or flak, it was the B-29. I don't imagine this was public knowledge in 1945, but the B-29 had much too many serious "teething problems", not the least of which were much-too-common engine fires. The Wright Cyclone R-3350 "twin bank" radials were "notoriously unreliable" at first, and, maybe later on. "Twin banked" meant the back row was behind the front row. It doesn't take an Einstein to suspect this might reduce the cool air reaching the back row. But, this is a whole other story...

As described in Thomas Childer's *WINGS OF MORNING: THE STORY OF THE LAST AMERICAN BOMBER SHOT DOWN OVER GERMANY IN WORLD WAR II*, a B-24, the Black Cat, was shot down on April 21, 1945 (VE Day was May 8, 1945), "... its left wing fold[ing] and break[ing] away in an enormous, fluttering fireball": the last 8th Air Force bomber shot down in World War II.

B-24H serial number 44-44052, that ultimately became the Collings Foundation Witchcraft, was built in August 1944 at the Consolidated Aircraft Company's Fort Worth, Texas plant. In October '44 it was transferred to the Royal Air Force, and saw combat in the Pacific. After the war it was abandoned in a bomber graveyard in Khanpur, India, with the assumption it would not fly again. It was one of 36 B-24's restored by the Indian Air Force and utilized until 1968, then again abandoned.

It was purchased by a collector in 1981, then by Dr. Robert

F. Collings in 1984, who intended to restore it for static display only. Persuaded to restore it to flying status, the restoration involved complete disassembly of the plane and work on 80% of its 1.2 million parts, including replacing more than 420,000 rivets!!!

After more than five years of hard work, and over 97,000 hours of labor, it flew on September 10, 1989 as the 15th Air Force All American, then in 1998 was repainted as the 5th Air Force Dragon and His Tail, and finally in 2005 as the 8th Air Force Witchcraft.

The Witchcraft is powered by four 14-cylinder 1200 horsepower Pratt & Whitney R-1830-65 radial engines. Each engine has 28 spark plugs: imagine a 112 spark plug change! A Collings video says each engine is lubricated by 26 gallons of oil, and can "legally consume" two gallons of oil per hour! And, each engine burns 50 gallons of fuel per hour!!!

The original Witchcraft was produced as a B-24H in Ford Motor Company's Willow Run, Michigan plant. This 3,500,000 square foot plant—"thought to be the largest factory under one roof anywhere in the world"—had an assembly line over a mile long, that featured a large turntable two-thirds of the way along the line that allowed it to make a 90° turn before continuing to final assembly. By 1944, Ford was rolling a Liberator off the Willow Run production line every 63 minutes, 24 hours a day, 7 days a week. Ford produced half of the 18,188 total B-24s at Willow Run.

The Witchcraft was assigned to the 467th Bomb Group, and arrived in Rackheath, England on March 19, 1944. In the following year it flew 130 combat missions with various crews, and never once turned back while on a mission, and never had a crewman killed or injured. Remarkable!!! Its final mission—and the 467th's final mission—was April 25, 1945.



In the foreground: *Dragon and His Tail*, a previous "incarnation" of the Witchcraft.



*Witchcraft* was built in August 1944 at the Consolidated Aircraft Company's Fort Worth, Texas.



Returned to the US after the war, the Witchcraft was scrapped October 3, 1945 at the surplus depot in Altus, Oklahoma.....

On Friday, August 21, 2015, I stood on the side of Route 376 between Hopewell Junction and Red Oaks Mills, and watched the Collings Witchcraft—gear and flaps down—coming in to land on Dutchess County Airport's east/west runway. I'll never forget the sight—and sound—of it, thundering about 20-30 feet over my head. Never.....



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5<sup>th</sup> Anniversary of the  
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