



READY FOR DISPLAY The Boeing B-17F *Memphis Belle*, fresh from its restoration. Below: Museum specialist Roger Brigner works on the Norden bombsight mount.

MEMPHIS BELLE REBORN AGAIN

AFTER YEARS OF EXPOSURE TO THE ELEMENTS, THE MOST ICONIC BOMBER OF WORLD WAR II HAS BEEN METICULOUSLY RESTORED AND DISPLAYED AT ITS PERMANENT NEW HOME

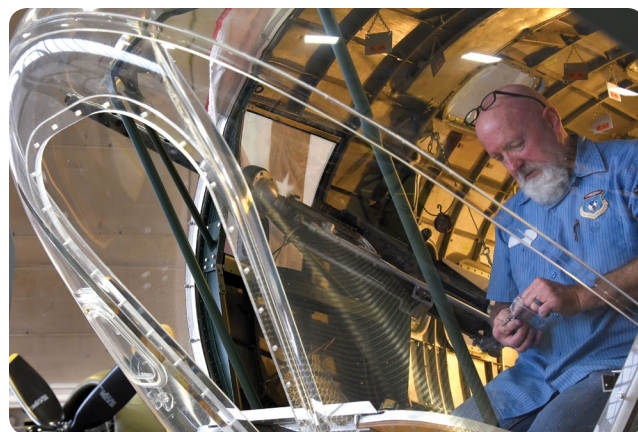
BY FREDERICK A. JOHNSEN

Some aircraft are restored once-and-done. The famed B-17F Flying Fortress *Memphis Belle* has undergone several treatments over the years, ranging from quick facelifts to an earnest refurbishing in Memphis in the 1980s. In its latest and likely last debut, the celebrated bomber emerged fresh from the well-equipped shops at the National Museum of the U.S. Air Force in Dayton, Ohio.

Memphis Belle might easily have joined thousands of surplus warplanes that were unceremoniously scrapped at war's end. Delivered to Oklahoma's Altus Army Airfield in August 1945, the bomber was parked with rows of B-17s and B-24s, the vast majority of which were quickly salvaged. But when *Belle* came to the attention of the mayor of its namesake city in Tennessee, a \$350 transfer title gained Memphis possession of the combat veteran Fortress.

Flown to the Memphis airport in 1946, *Belle* remained parked there until 1950, when a huge concrete plinth was made for the B-17 at the city's Army National Guard armory. *Belle* stood proud, if increasingly ragged, over the next two and a half decades of exposure to the elements until that armory was vacated in 1977.

Meanwhile, in 1967 booster Frank Donofrio had organized



the Memphis Belle Memorial Committee to care for the famed bomber. In the 1970s and into the 1980s, the renamed Memphis Belle Memorial Association (MBMA) did everything from cosmetic touch-ups to beginning an earnest refurbishing of the old airframe. But *Belle* remained outdoors, again at the Memphis airport. The MBMA's members, especially Memphis surgeon Harry Friedman, scoured the countryside for parts to make the B-17 authentic and complete.

By 1987, the MBMA and the city had raised enough money and poured in enough work to dedicate a new

Memphis Belle display on Mud Island in the Mississippi River in downtown Memphis. A grand dedication ceremony on May 17 of that year included a flyover of seven B-17s as well as modern Air Force bombers.

A giant umbrella-like canopy kept the rain off the bomber, but not the pigeons or general humidity. Aluminum corrosion slowly took its toll. The MBMA knew better accommodations had to be found.

In 2002 *Belle* traveled by truck to a hangar at the former Memphis Naval Air Station. By the following year, a team of professional aircraft mechanics



was a very big help to us," said museum restoration specialist Casey Simmons.

Simmons figures the bomber today has about 90 to 95 percent of its original wartime metal. Working on the B-17 was far more than just another job for him. Simmons said he sometimes had to take a couple steps back during the restoration process and look at the storied bomber just to let it sink in that this was the famous *Memphis Belle*.

Today *Belle* features rubber de-icer boots on the leading edges of the wings and tail, just as it had in 1943. Those aren't available anymore, but original manufacturer BFGoodrich made a brand-new set—not airworthy, but a dead ringer.

Simmons fabricated a missing glycol heater, using some original fittings and replicating the rest, just so it could be installed inside the structure, where it will never

from locally based Federal Express was probing the B-17's structure and replacing corroded metal with new aluminum. It was, by local accounts, the best restoration *Belle* had received in its half-century existence.

But all those professional airframe and engine specialists, and all the MBMA supporters, were not enough to keep *Belle* in Memphis. Efforts to raise funds for an enclosed museum fell short.

The relationship between *Memphis Belle's* Tennessee backers and the National Museum of the U.S. Air Force has ranged from cordial to contentious. By 2005, when it was apparent

funding for the Memphis museum would fall short, the B-17 was transported to the Air Force museum at the MBMA's request. It's worth remembering that the only reason *Belle* exists today is the enduring efforts of a handful of Memphis citizens going back to 1946.

Building on the work completed at Memphis, the museum's restoration team continued the search for corrosion, replacing more structure before reassembling and painting *Belle*. Some of the Memphis supporters worked with museum staff to locate parts and assist the team with information on previous restorations. "Harry Friedman

SOME ASSEMBLY REQUIRED Clockwise from left: The B-17 is readied for restoration; a control wheel center cap; *Belle's* nose art was modeled after a George Petty pinup.

be seen by most museum visitors. It's that level of detail—a hallmark of this latest restoration—that elevates *Memphis Belle* as an iconic artifact from World War II.

Thanks to William Wyler's wartime documentary about the bomber, shot using color Kodachrome film, a wealth of contemporary color imagery of *Belle* survives. Using many photos and film clips, the museum team labored over the correct placement and color of all the bomber's markings. Once the B-17 was stripped down to bare metal, Simmons found a faint scribe line that exactly matched the outline of the pin-up art on the nose.

To get it just right, the repainting of *Memphis Belle* in Dayton was much more arduous, deliberate and time-consuming than it had been during the war. The museum team pondered a complicated reconciliation of wartime wear and tear with aesthetic considerations as they prepared to paint the bomber. *Belle* is logically displayed with all its mission symbols and markings, as it appeared at the end of its combat tour in May 1943.

By that time, however, the aircraft had small but visible nicks and gaps in its camouflage, as well as fading from hours in the sun. The paint and markings applied to *Belle* in Dayton represent an earnest effort to replicate the right colors, but without the bare spots and oil stains of 1943. The fabric color on the rudder is deliberately lighter than the rest of the olive drab, in keeping with photos of *Memphis Belle* at the end of its combat tour. The finished product is a respectful take on a national icon of WWII. ✚