How did the B-17 become the public's beloved favorite and the B-24 a respected runner-up?

The Making of an

Illustrations courtesy of Peter M. Bowers collection

There is no real point in challenging the revered status that the B-17 Flying Fortress enjoys among heavy bombers. At this late date, nothing is going to change that. Perhaps, though, the strangely secondary position handed down to the B-24 Liberator should be re-examined.

The icon-creation process over the years has cast some of the era's aircraft—notably the B-17—into permanent positions of great prominence. In the pantheon of World War II bombers, the B-17 unquestionably occupies the top position in the public mind.

The Army Air Forces, and some of its leaders, occasionally contributed overtly to the canonization of the Flying Fort. At other times, in an act of perhaps inadvertent fairness, the service mocked the B-17s before audiences of B-24 crews.

The two heavyweight contenders for the title of best World War II bomber were born nearly a half-decade apart. The sleek, streamlined B-17 had four engines jutting from its fat airfoil as evidence of Boeing's bold (by 1935 standards) engineering. The B-17 reposed on a conservative tailwheel and relied on split flaps to help slow its landing speeds. A strong circular fuselage cross section and low-mounted bridge-truss wing construction made it stout and strong, just right in the event of a ditching or belly landing.

Consolidated Aircraft's B-24 was a major rival. By 1939, Consolidated's design team had embraced the obvious advantages of four engines but shunned just about everything else in the B-17 design. The B-17's Wright Cyclone engine nacelles were split by the wing; the B-24, in a conscious effort to keep the Davis wing's upper surface undisturbed, slung its Pratt and Whitney engines nearly flush with the top of the airfoil.

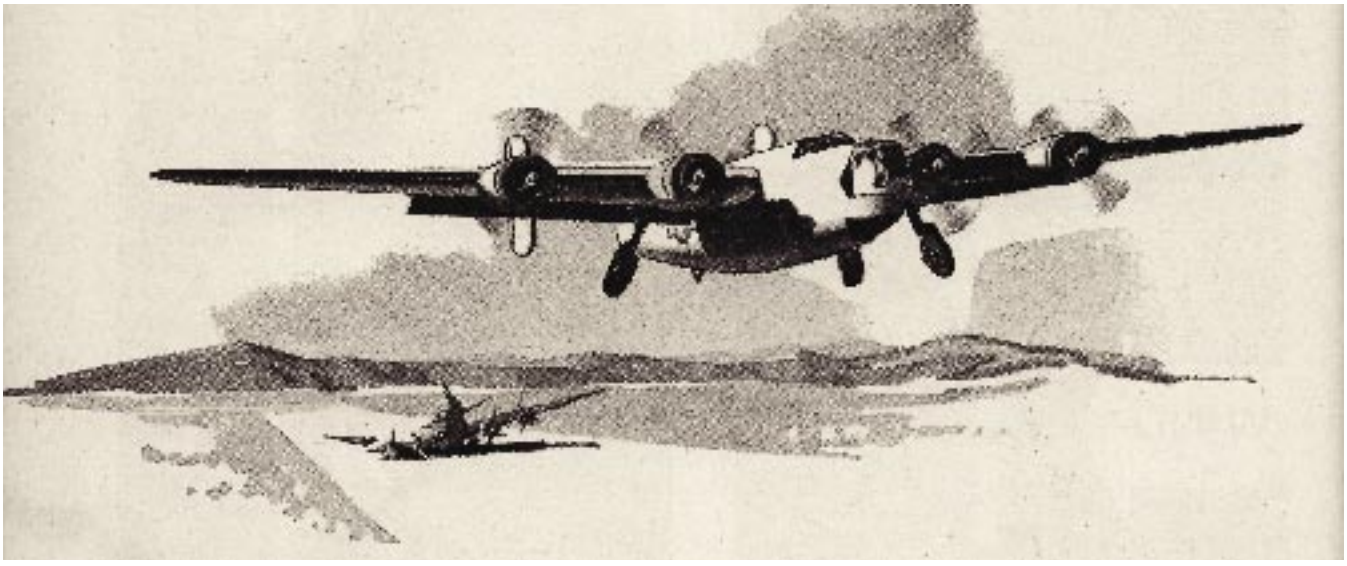
That high-speed wing carried with it the penalty of fast landing speeds. However, the Liberator's newer area-increasing flaps offered benefits superior to those of the Fortress' *passe* split flaps.

Most noticeably, the XB-24 presaged the 1940s with its use of tricycle landing gear.

In the four-plus years when the B-17 was the only heavy bomber considered for production for the Army Air Corps, it faced attacks from members of Congress who were still infatuated with the false economy of twin-engine bombers. The Fortress also came under suspicion from admirals and generals not ready to embrace the upstart Air

Iconic Bomber

By Frederick A. Johnsen



A drawing from a B-17 training manual (left) presents an imagined "go-around" scenario—the runway crash of a twin-tailed B-24. In a parallel image from a B-24 manual (above), a Liberator maneuvers to avoid the hulk of a Flying Fortress.

Corps' emerging doctrine of strategic bombardment.

Hollywood Bombers

In the 1930s, airmen often protected the strategic bombardment concept by sidestepping the criticism. The Air Corps touted the Fortress as a coastal protection weapon even as it launched small groups of B-17s on promotional flights emphasizing its great range and navigational precision.

Yet Air Corps thinkers had a new and different conception about the next war. They envisioned long-range bombers bringing the battle to the enemy's rear areas, targeting its war-making capabilities.

The 1935 arrival of the B-17 galvanized the already coalescing concepts of strategic bombardment. The Flying Fortress became the Air Corps' symbol of its future, in an era when no other heavy bomber was on the horizon. This early importance would have far-reaching implications.

When the Air Corps managed to preserve an order for a dozen Fortresses in perilous fiscal times, those few aircraft carried the future of US strategic bombardment doctrine. Crews were carefully screened in an effort to avoid crashes.

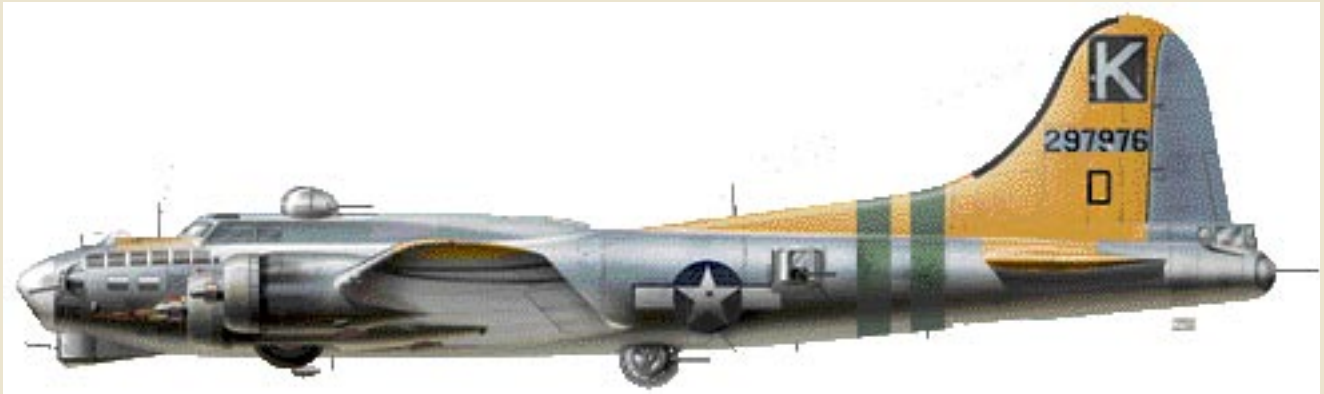
The B-17s were rapidly becoming icons as early as the late 1930s. They co-starred (with Clark Gable and Spencer Tracy) in the 1938 movie "Test Pilot" (thus beginning the derisive nickname "Hollywood Bomber" that some B-24 crews would apply to the Fortress in later years). By 1939, undeniable threats in Europe and Asia provided ample support for further procurement. That eliminated the need to publicize the heavy bombers.

Enter the B-24 Liberator, which made its first flight on Dec. 29, 1939. The B-24 owes its existence to a late 1938 query that the Air Corps sent to Consolidated. The corps wanted to know: Would Consolidated consider building the B-17 under license?

Consolidated's response was not long in coming. It sent back a design for a new bomber, featuring new technologies.

The popularity of the B-17 benefited Consolidated and helped the B-24 gain approval for production. Riding on the coattails of the Fort meant the B-24 also did not require the same level of promotion that was needed by the earlier program. The downside was that the Flying Fortress was already fixed in the public mind as the ideal of what a heavy bomber was supposed to be. That being the case, the B-24 would have little opportunity to upstage it.

Staff illustrations by Zaur Eylanbekov



Pain of Obscurity

The B-17's recognition advantage with the American public was painfully brought home to Consolidated in 1943. The company commissioned a public relations firm to ascertain "to what degree the public is familiar with the names of the Liberator and the Flying Fortress."

The poll surveyed nearly 2,500 men in six cities where Consolidated had previously run newspaper advertisements touting the Liberator. The survey reported: "The Flying Fortress is better known than the Liberator." Only 73 percent of interviewees had heard of the Liberator. The figure for the Flying Fortress was 90 percent.

The B-17's worst showing—"only" 86 percent recognition in Boston—was better than the B-24's best—82 percent recognition in Pittsburgh.

The identity battle went beyond the man in the street. In World War II, the mighty Eighth Air Force—the standard bearer of Army Air Forces strategic bombardment doctrine—was run by top officers who openly preferred the B-17.

One well-known joke stemmed from AAF pilot training manuals that used B-17 and B-24 artwork and text explaining how to carry out a "go-around." The B-17 manual presented the image of a crashed B-24 on the runway, its twin tails unmistakable, as the reason for a B-17 go-around. Meanwhile, the B-24 manual showed a crumpled B-17 blocking the runway.

Not all official AAF actions treated the two bombers equally, however. The B-17 came out the winner in a series of studies, conducted by Eighth Air Force statisticians, purportedly showing that Fortresses had utility and survivability much greater than that of the B-24.

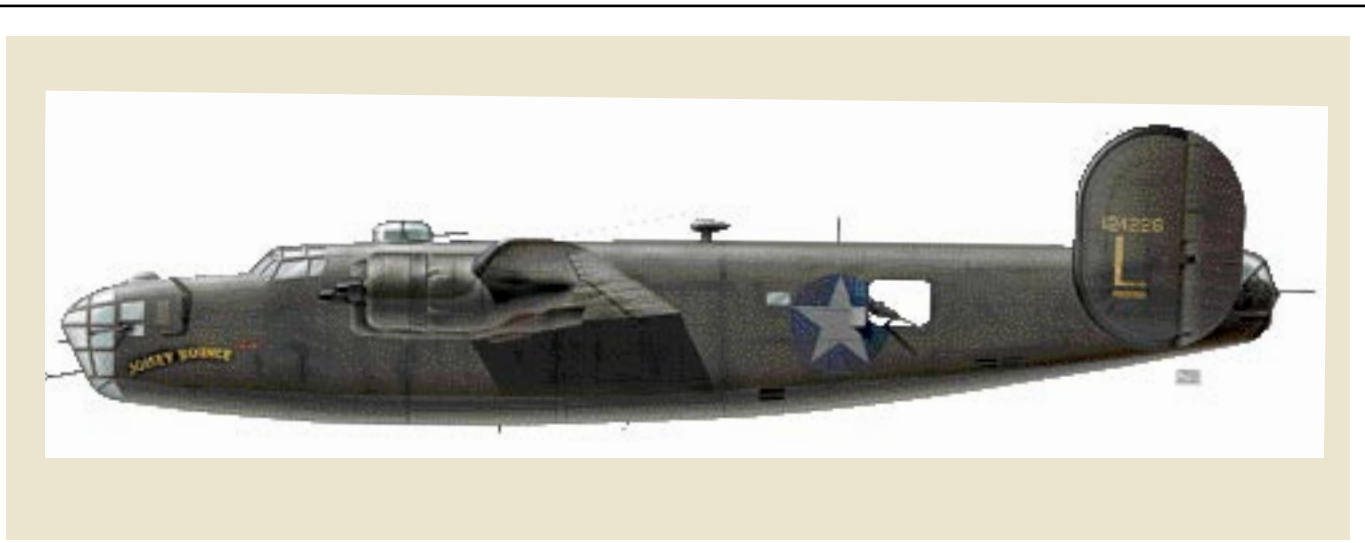
Meanwhile, Lt. Gen. Jimmy Doolittle wrote about his preference for equipping the Eighth with B-17s. There is a logistical advantage in keeping fielded forces down to a minimum number of aircraft types with their unique servicing and spares. Doolittle wanted B-17 bombers and P-51 fighters for the Eighth.

While acknowledging the Liberator's early performance advantages over the Fortress, Doolittle said modifications required to keep B-24s survivable over Europe resulted in extra weight and thus degradation of its handling qualities.

It has often escaped notice that the AAF's first heavy bomber mission over Europe was flown by B-24 Liberators, not B-17 Flying Fortresses. The June 11, 1942 mission featured a dozen B-24Ds flying from North Africa in a precursor raid on Romania's Ploesti oil fields. The

Photo courtesy of NARA

Star turn. ***The crew of B-17F*** **Memphis Belle** ***being reviewed by Lt. Gen. Ira Eaker, Eighth Air Force commander, before the start of their US publicity tour. Note (bottom left corner) the presence of a motion picture camera.***



Heavyweight contenders. *Left, B-17G named* **A Bit O' Lace,** *as it looked in 1945, and, above, the B-24D* **Joisey Bounce** *as it looked in 1943. The two great bomber types are forever linked.*

attack came a full two months before the first US B-17E foray over Europe.

When US Fortresses arrived in Britain in the summer of 1942, press portrayals of gallant B-17 crews in England continued the positive drumbeat of coverage that had began for the Forts so many years earlier. It would be October 1942 before Eighth Air Force sent B-24s into combat from England.

Belle of the Ball

One of the first B-17s to complete 25 missions over Europe was highly honored and publicized. This celebrated 25-mission bomber, *Memphis Belle,* was a B-17F that was featured in a color 1944 documentary film and which toured the United States with its crew for purposes of national morale. *Memphis Belle* and its crew received a hero's welcome in 32 cities.

As American production grew, the B-24 was assembled at five aircraft plants and the B-17 at three. By war's end, the United States arsenal of democracy had churned out more than 18,000 B-24 variants, compared with 12,731 B-17s.

When Fifteenth Air Force swung into battle in November 1943, B-17 production was feeding the operational needs of two numbered Air Forces, Eighth and Fifteenth. B-24s, by that time, were spread out and flying operational sorties with nine different numbered Air Forces. A substantial number of Liberators served the US Navy and the Royal Air Force as well.

The AAF realized its highest in-service B-17 strength in August 1944, with 4,574 B-17s on the books. The following month, the AAF's peak B-24 strength topped out at 6,043 Liberators. Although there were nearly 1,500 more B-24s than B-17s in service at their peaks, the greater number did not move the B-24 to the front of the icon line or even to equal status.

Both of these bombers had their share of famous fliers—recipients of the Medal of Honor, movie stars, famous musicians, and so forth. (See "Airpower Classics: B-17 Flying Fortress," February, p. 96, and "Airpower Classics: B-24 Liberator," June, p. 96.)

There's another kink in the B-17-vs.-B-24 popularity contest that suggests a lack of subtlety in the way Americans create and treat icons. The durability of the B-17, especially in belly landings and ditchings, soon took on mythical proportions. The hydraulically dependent B-24, perhaps initially built with a structure more suited to capacity than combat, seemed less robust. Popular opinion endowed the B-17 with an aura of invincibility beyond even its great prowess.

In the postwar era, it became formulaic to see published photos depicting B-17s surviving battle damage and B-24 Liberators down on their luck. Passionate latter-day defenders of the B-24 Liberator face what appears to be an impossible task. Americans love the simplicity of icons.

It hasn't helped that the Air Force quickly got rid of its B-24s at war's end. The Air Force opted instead to keep a smattering of stripped-down B-17s on hand as VIP transports and drone directors. Similarly, the Navy and Coast Guard flew some B-17s on over-water patrols well into the postwar years.

Many of these Fortresses survived subsequent civilian careers to enter museums and "Warbird" inventories. Therefore, the iconization of the B-17 that began before World War II, and was burnished in combat publicity, only became greater with time. Postwar recognition was improved by easier access to a larger number of Flying Fortresses still in existence. Only one flying B-24 exists today, however.

Perceptions of the relative importance of the two bombers have become self-perpetuating. The eyes of popular history may one day only be able to discern the boldest of shapes in what has passed, and on a pinnacle in the distance, the shape of the World War II era's bomber icon will most likely rest on a tailwheel. ■

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