

The Next Generation Bomber

Global reach, global power—the ability to yield strategic effects by striking targets anywhere in the world at anytime—is the core mission of the US Air Force’s long range strike fleet. Whether used as an element of deterrence or through actual employment, long range strike platforms have sufficient range to span the globe, can attack dozens of targets on a single sortie, are able to respond rapidly to fleeting targets, and require minimal forward-based logistical support. These attributes maximize the options available to combatant commanders far past what is afforded by tactical assets fleet. However, the current long range strike fleet averages over forty years in age and while elements of the force are still capable in certain threat environments, the proliferation of advanced anti-access weaponry is curtailing when and where many of the legacy assets can successfully operate. The next generation bomber, currently scheduled to be fielded by 2018, will be a critical step in ensuring that global reach and global power are sustainable tenants of US defense policy into the future.

Early air power theorists rapidly identified the potential of long range strike, but it took nearly 80 years for aerospace technology to mature to a point where aircraft possessed sufficient range, payload capacity, survivability, and precision weaponry to transform their theories into reality. While some rudimentary long range strikes did take place in WWI, aircraft of this period were too primitive to have a meaningful impact past the tactical realm. By WWII, the Army Air Force had developed heavy bombers like the B-17, B-24, and B-29 that took part in massive strategic bombing campaigns, which facilitated the destruction of vital enemy targets and hastened the end of the war. However, these platforms lacked precision strike capabilities and ended up destroying vast swaths of Europe and the Pacific through collateral damage. Additionally, enemy defenses took a dramatic toll on the bombers—with over 6,000 B-17s and B-24s lost in the European theater alone. During the Cold War the payload capacity of the strategic bombers increased markedly and aerial refueling transformed the fleet into a global force, but these aircraft remained vulnerable to enemy defenses and lacked the precision strike capabilities required for modern campaigns. By the end of the Cold War, developments in precision guided munitions and stealth technology finally transformed the long range strike fleet into the force envisioned by airpower theorists—systems that could mount a precise, sustainable, and effective bombing campaign anywhere in the world, at any time.

Despite these advancements in stealth, 87% of today’s bomber fleet is predates this technology. Twenty B-2s are the only long range strike assets in the Air Force inventory that can access high threat environments and survive. These aircraft have not been in production since 1997 and so there is there are no viable replacements to backfill losses. When a B-2 crashed in Guam in 2007, the Air Force lost 5% of its stealthy long range strike fleet. The B-52 and B-1 have been upgraded numerous times to take advantage of new technology such as precision strike, GPS, and targeting pods. However, stealth can never be incorporated into these aircraft and they will remain vulnerable to attacks by surface-to-air missiles and fighters. It is important to remember that in the final days of Vietnam the Air Force lost 15 B-52s in 12 days during Operation Linebacker II. Air defenses have advanced markedly since then but 47% of the long range strike fleet is comprised of these same B-52s.

Looking to the future, modern long range strike platforms are a fundamental pillar of conventional deterrence and power projection. Modern bombers can penetrate air defense systems, respond rapidly to strike fleeting targets, and operate over long distances without excessive logistical support. The tactical strike fleet, while capable, simply does not have the range and payload capabilities to fulfill many of these missions. The Air Force recognizes that it needs to recapitalize the long range strike fleet by 2018 and AFA strongly supports this goal.