

CENTRE FOR JOINT WARFARE STUDIES



CENJOWS

CHINESE AVIATION TECHNOLOGY

1. **China's Modernization of Military Aviation Arsenal.** China has plans to develop and produce modern, advanced aviation equipment in the next five years, and the debut of China's first long-range, stealth-capable strategic bomber, the country's third and electromagnetic catapults-equipped aircraft carrier alongwith FC-31 aircraft are likely to be fielded¹.
2. During the last five years, a large number of impressive weapon systems have been developed for the services. Some of these systems are: *J-20 stealth fighter aircraft, Y-20 large transport aircraft, Z-20 utility helicopter, H-6N strategic bomber, Type 055 large destroyer, Shandong aircraft carrier, Type 15 light tank, PCL-181 truck-based howitzer, DF-26 anti-ship ballistic missile, DF-17 hypersonic missile and DF-41 intercontinental ballistic missile*².
3. The 14th Five Year Plan period is likely to be a very fruitful period for the PLA Air Force (PLAAF), as the long-range, stealth-capable strategic bomber will likely make its long-expected public debut³. China has been reportedly *developing the new bomber, the Xi'an H-20*, for many years, and its maker, the state-owned Aviation Industry Corporation of China, has been hinting its development since 2018.

¹Liu Xuanzun and Leng Shumei; <https://www.globaltimes.cn/content/1205446.shtml>

² *ibid*

³ *ibid*



(Weibo/Handout)

4. The aircraft is expected to be a fourth-generation bomber, compared to China's current H-6 bomber platform as it will come out with world-leading design and technologies. Its stealth capability and range are expected to be as good as the US' B-2 Spirit stealth bomber.

5. The Xi'an H-20, is believed to be a large, stealthy bomber which would supplement and eventually replace the H-6, a 1950s-era design that China has steadily upgraded over the decades. The H-20, is expected to be showcased sometime in the next two years. The H-20 is depicted as having a flying wing design that trades speed for range and stealth and is likely to carry a bomb load of 45 tons, far more than the B-52H Stratofortress's 35 tons and the B-2 Spirit's 20 tons⁴. The bomber is expected to have a range of at least 12,000 km that would put Hawaii within reach of the H-20. It would also put all 50 U.S. states within striking distance if the H-20 took an Arctic flight route⁵.

6. In other warplane developments, China is expected to mass-produce and improve the J-20 fighter jet, with its engines replaced with more powerful ones; drones and artificial intelligence will also see advanced developments.

7. A type of aircraft carrier-based stealth fighter jet, believed to be developed based on China's second type of stealth fighter jet the FC-31, could also make its debut in the coming years, along with the aircraft carrier-based early warning aircraft the KJ-600.



⁴Kyle Mizokami; <https://www.popularmechanics.com/military/aviation/a34908283/china-new-h-20-stealth-bomber-powerful/>

⁵ *ibid*

(https://en.wikipedia.org/wiki/Shenyang_FC-31)

8. China's **civil aviation future reportedly, rests with the Comac C-919** aircraft: China's challenge to Boeing and Airbus is off to a slow start, but the country has long-term goals in mind⁶. The plane is part of the country's long-term goal to become a leader in technology and heavy manufacturing. Exporting these aircraft to the world is one part of this effort; it would also allow the country to become more self-sufficient in everything from telecom equipment to transportation. By building its own civil aircraft industry, an area where the country remains dependent on Western suppliers, China will save billions of dollars and achieve more strategic autonomy.

⁶ *Kent German; <https://www.cnet.com/features/chinas-aviation-future-rests-with-the-comac-c919-aircraft/>*