

The Dragon and The Thunder

The new phase of the PAF



PAF JF-17 at the Paris Airshow (Photos: Vayu).

In recent years the Pakistan Air Force (PAF) has inducted two advanced fighter jets, enhancing their air operational capabilities: the Chinese-built J-10C and the JF-17 Block 3. The J-10 was inducted on 11 March 2022. China officially designates this platform as J-10CE, which was unveiled for the first time, as FC-20E, at the Dubai Air Show 2019. The PAF base Minhas houses the 15 Squadron, dubbed “Cobras,” which becomes the first PAF squadron to be equipped with these. As of 2024, there is an order of 36 of these. The JF-17 Block 3 joined the 16 Squadron, the Black Panther, of the same air base on 4 December 2023.

The J-10C is the most advanced single engine fighter jet in China, which conducted the first flight in December 2013. But its history dates back to early 80s when then Chairman of the Central Military Commission, Deng Xiaoping had announced development of a new generation indigenous combat aircraft. China was working on multiple projects simultaneously. While J-8 was being upgraded to J-8II, a newer platform for replacement of older J-6, J-7 and eventually J-8 was needed. The Soviet Union was flying MiG-23s, and the induction of the MiG-29 was imminent. On the other hand, the US introduced the F-16 and F-18 to the world. So it was necessary for China to counter the potential adversaries on its own. Soon three paramount aircraft design institutes of China—Chengdu, Shenyang and Xi’an—placed three different proposals, which they had been developing for some time. Chengdu proposed a new design that was an improvement to their earlier development—the J-9. Interestingly, J-9 will be improved further, leading to multiple other projects forming the base of modern Chinese aviation strength, including the fifth generation stealth aircraft, J-20! This

design would be further matured, and a prototype will conduct the first flight in 1996. Since then, the J-10 has seen continuous modifications leading to the current J-10C. Pakistan became the first export customer of this platform.

The Chinese origin JF-17 was selected by Pakistan to replace the aging Mirage and F-7 fleets as well as a cheaper alternative to American products, which come with no strings attached. JF-17 Block 3 is the latest iteration of the series, which retained the same earlier design but incorporated new upgrades. It has selected NRIET-developed KLJ-7A AESA radar. It is equipped with a wide Aurora EHUD-2 Head-Up Display (HUD) and a new Helmet Mounted Display and Sight (HMD/S). A new hybrid S740 Missile Approaching Warning System (MAWS) has been added, as well as the ALR-400 RWR (radar warning receiver) and a new electronic warfare (EW) system. The KG600 ECM (electronic countermeasure) pod will enhance its capability. Aselson ASELPOD will provide a robust electro-optical reconnaissance, surveillance and targeting capability. Better air-to-air and air-to-surface weapons have been integrated into Block III. It will have a new Beyond Visual Range air-to-air missile (BVRAAM), PL-15E and PL-10E for close-range engagement. For ground strike it will get a new HD-1A supersonic cruise missile. Besides, like its predecessors, it will continue to carry the CM-400AKG, C-802AK and Ra’ad. For a stand-off strike, Pakistan has a range extension kit (REK) enhancing the capability of its general purpose bombs. Additionally, it will carry Pakistan’s own developed H series stand-off weapons (SOW). Pakistan uses the Martin Baker developed PK16LE ejection seat for the safety of the pilot during an emergency.