'A' is for Aatmanirbhar



(Photo: Vayu)

Ithough in military history, the French had first begun working on armoured fighting vehicles, it was the British who actually built what was called a 'tank'. When this debuted on the battlefield of Flers-Courcelette in World War I, it shocked the Germans. Tanks have thereafter dominated the battlefield through World War II, the Korean War, the 1965 and 1971 India-Pakistan Wars, the Six Day War of 1967 and Yom Kippur War of 1973, the Iraq-Iran War, the Gulf War and other battles.

Since independence in 1947, the Indian Army has operated British, French and Soviet-origin tanks. After the 1971 war, the Government of India took a decision to develop an indigenous main battle tank. India had already been producing UK-designed *Vijayanta* tanks at the Heavy Vehicles Factory, Avadi which was a customised variant of the Vickers Mk.1A. For the next generation of MBTs, an entirely in-house design was then envisaged to meet the Army's requirements. This was to be a contemporary of the German Leopard 2, American M1 Abrams and British Challenger 1 main battle tanks as also the Russian T-90s which were being inducted by their respective armies during the 1980-90s.

However, the Indian MBT programme faced several hurdles but the first significant success was achieved by the Defence Metallurgical Research Laboratory which had developed the *Kanchan* armour, an advanced composite armour equivalent of Burlington armour (a variant of Chobham armour) developed by Army Research Laboratory, UK. Like the Chobham, Kanchan too saw new variants over the decades. Meanwhile, the Armament Research and Development Establishment (ARDE) developed an indigenous gun, firstly a 105 mm rifled-gun but later the bigger and powerful 120 mm rifledgun. However, the failure to develop an indigenous engine led to procurement of MTU engines to power the tank, called the Arjun. Although the prototypes were ready by the late 80s, it was not until 2010 when, after extensive trials, the Indian Army placed an initial order, the 43rd Armoured Regiment receiving the first Arjun tanks in limited numbers in the late 90s. It was in 2012 when an improved variant, the Arjun Mk.2 was conceived.

The Arjun Mk.2 has since been renamed as the 'Mk.1A', and after extensive trials it was 'cleared' for induction, the Prime Minister Narendra Modi handing over the first Arjun Mk.1A to the Indian Army at Chennai on 14 February 2021. According to reports, the Mk.1A has 54.3 per cent indigenous content and features 93 improvements over its predecessor.