FRCV- India's future battle tank and concerns: Part 1



KF51 Panther (Rheinmetall/Wikimedia)

'ndia's Future Ready Combat Vehicle (FRCV) is a highly ambitious project aiming to have a main battle tank (MBT) capable of withstanding emerging and future threats of the mid to late twenty first century. Since the commencement of the project, many have raised their eyebrows concerning the feasibility of the desired requirements. The technical parameters published with the RFI for the project have appeared impractical for the critic. Besides, many have expressed fear of the discontinuation of the Arjun series main battle tank in favour of a platform with yet unproven technologies, which might be a grave mistake! We will try to analyse all these main concerns. To have an in-depth yet easier understanding, we will split the series into two parts. In this issue, we will focus on what some analysts believe is the biggest concern regarding the FRCV: will the lighter platform compromise crew protection?

FRCV parameter

The FRCV requirement caps the combat weight (CW) at $55\pm5\%$ tons. It means the mass of the tank with all of the whistles and bells, including ammunition, fuel and fluids, equipment for optical and acoustic situational awareness, and defensive aid, should not cross 58 tonnes. Clearly, the dry weight of the platform will be even lighter.

In comparison, the current Arjun Mk.1A has an all—up weight of 68 tonnes and is likely to go further with the possible future integration of an Active Protection System (APS).

The Arjun Mk.1A has improved protection and enhanced crew safety compared to its predecessor. The criticism vis—a—vis insufficient protection for FRCV in the absence of thicker armour!

■ III/2024 ■ 55