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WHY TURKISH T-129 IS THE PREFERRED CHOICE OVER CHINESE WZ-10 FOR PAKISTAN ATTACK HELICOPTER PROGRAMME

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THE KAMRA AVIATION CITY PROJECT

On July 06, 2017 the current Pakistan Air Force (PAF) chief Air Chief Marshal Sohail Aman along with the Pakistani Federal Minister for Planning, Development and Reforms inaugurated the Air University Aerospace and Aviation Campus as a part of Aviation city at Kamra.¹ The stated aim being the focus on indigenisation through industry-academia linkage and includes establishment of at least two institutes named Aviation Research, Indigenisation & Development (AvRID) and Aviation Design Institute (AvDI). This is an expansion of the Air University (AU) which PAF had formally established at Islamabad in 2002 which functions under the chairmanship of the PAF chief.² As a part of the university, over 33 research laboratories had also been established to support the various Graduate, Post Graduate and Ph.D

programs in aviation related fields which include Aerospace, Avionics, Electrical and Mechanical engineering.³

The AvDI appears to have been tasked with undertaking the phase-wise designing, production and evaluation of a proposed fifth generation fighter aircraft. Along with the AvDI an airworthiness certification agency has also been established for the purpose. This appears to have been a logical outcome of the expertise gained by Pakistan Aeronautical Complex (PAC) Kamra in co-producing the JF-17 with China. However, even with the PAF firmly in the driving seat in the aviation-manufacturing sector a significant capability gap for PAC Kamra exists in terms of manufacturing helicopters. This sector seems to have escaped attention as the Pakistan Army (PA) exercises control over the major

portion of the helicopter inventory through its Army Aviation Corps (AAC).

Significantly, recent reports indicate intent on part of Pakistan to cover this capability gap with help of Turkish Aerospace Industries (TAI) in preference to the Chinese. Pakistan appears to have chosen the TAI T-129 ATAK helicopter over the Chinese WZ-10. But are there any other reasons for this choice other than the basic performance criteria?

THE WZ-10, MI-35 & TAI T-129

Pakistan Army Aviation Corps (AAC) operates the entire attack helicopter fleet and is presently composed mainly of the American supplied AH-1F/S Cobra helicopters and an induction of its upgraded version AH-1Z Viper is expected. It uses these attack helicopters in a composite manner, along with other types assisting in scout/utility/armed support role, often in direct support of its land forces in operations directed against its own people

Further, having recognised the constraints imposed by the Americans in supplying the upgraded AH-1Z Viper helicopters under the Foreign Military Assistance (FMA) program Pakistan is now aiming to replicate the modus operandi adopted for coproducing the JF-17 with the Chinese, while continuing to operate the F-16s, which it had sourced mainly through the FMA route.

Additionally, in 2015, the Chinese had supplied their Kamov designed frontline attack helicopter designated as WZ-10 to Pakistan which is configured with twin WZ-9 turbo-shaft engines, ostensibly for evaluating its performance. The Pakistan AAC, which has always been operating the state of the art western technology has not been too happy with its performance possibly on account of its underperforming engine and has been on the lookout for suitable alternates.

Two helicopters appear to have met their requirements. The Russian MIL Mi-35 and the Turkish TAI T-129. Strictly speaking, the MIL Mi-35 comes under the category of an assault helicopter with its ability to carry additional troops and Pakistan has gone ahead and placed an order of four units, which it is likely to receive in 2017.⁴ Its limited orders for the Mi-35 may primarily be due to the cost considerations, as they are not supported by any aid program.

The PA AAC has carried out an extensive evaluation of the TAI T-129 in Jul 2016, which included trials in the most adverse hot and humid conditions.⁵ One of the stated intent of the PA has always been to utilise its attack helicopters as a part of operations against the militants in the FATA region where the topography necessitates the operations to be undertaken in rugged mountainous terrain and at altitudes exceeding four kilometres. The

topography and conditions in these areas match those existing on their eastern border with India.

THE TAI T-129 DEVELOPMENT⁶

For meeting the Turkish military requirement of an indigenous helicopter, TAI and Augusta-Westland had entered into a contract on July 24, 2008. The contract provisioned for extensive design assistance and technology transfer based on the existing Augusta-Westland AW-129 design. The helicopter was designated as T-129 ATAK (An Acronym for Turkish Attack and Reconnaissance Helicopter) and the contract provisioned for the transfer of all the intellectual property rights to TAI. Augusta-Westland also helped in integrating the TAI sourced sub-systems, setting up of the assembly line along with training of manpower. The CTS800 turboshaft engine on board the T-129 is supplied by the Light Helicopter Turbine Engine Company (LHTEC), which is a 50-50 partnership between Honeywell and Rolls-Royce.⁷ Nine units had already been delivered to the Turkish military by July 2015 and TAI was now looking for export options.

EXPECTED SPIN-OFF IN SELECTING THE T-129⁸

It is likely that Pakistan with its long standing ties with Turkey wants to exploit this opportunity and acquire the manufacturing rights to absorb the technical knowhow and fill the capability gap in helicopter manufacturing

and is intent on western sourced state of the art technology. The urgency in expanding the fleet may partly be due to India upgrading its attack helicopter fleet with the induction of AH-64D Apaches along with the planned induction of the indigenous Light Combat Helicopter (LCH), but it is more likely that this sourcing is a part of a strategy of fast tracking the setting up infrastructure and technical expertise for indigenous manufacturing of helicopters. It is also likely that it would continue to maintain its relationship with Chinese and would continue to operate additional numbers of WZ-10 and act as a conduit for passing key technologies to its “all weather friend ” which it may have an access to, through the T-129 contract with TAI.

(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])

Notes

¹ The News, “Ground breaking ceremony of Aviation City Held at Kamra”, www.thenews.com.pk/latest/214819-Groundbreaking-ceremony-of-Aviation-City-held-in-Kamra accessed on August 21,2017

² Air University, “Quick Facts”, www.au.edu.pk/facts.aspx accessed on August 21,2017

³ *ibid.*

⁴ Janes 360, “Pakistan to Receive four MI-35M helos from Russia in 2017,Report”, www.janes.com/article/66463/pakistan-to-receive-four-mi-35m-helos-from-russia-in-2017-says-report accessed on August 23 , 2017

⁵ Defense World.Net, “Pakistan Selects Turkish T-129 Attack Helicopter over Chinese Z-10?”, www.defenseworld.net/news/19681/Pakistan_Selects_Turkish_T129_Attack_Helicopter_Over_Chinese_Z_10_#.WZ1UXfgjFdg accessed on August 23,2017

⁶ Airframer.com, "Agusta Westland opens new dedicated T129 facility", http://www.airframer.com/news_story.html?release=4827, accessed July 18, 2017

⁷ Rolls-Royce, "TAI and LHTEC sign contract for CTS800 engine", <https://www.rolls-royce.com/media/press-releases/yr-2015/pr-10-12-2015-tai-and-lhtec-sign-contract-for-cts800.aspx> accessed on July 18, 2017

⁸ Quwa.org, "Pakistan to begin negotiations for T129 attack helicopters from Turkey", <http://quwa.org/2017/06/25/pakistan-begin-negotiation-s-t129-attack-helicopters-turkey/> accessed on July 17, 2017

