



## Challenges Ahead for Turkish Air Force

**OE Watch Commentary:** The accompanying report from *edam.org.tr*, an independent Turkish think tank based in Istanbul, evaluates Turkey's removal from the F-35 fighter jet program and how this will impact Turkey's airpower over the next decade. Specifically, the report discusses how Turkey's loss of the F-35 will leave it without a next-generation fighter jet and curtail the fighting capabilities of the Turkish Air Force (TAF).

The report's main finding is that TAF will face serious military-technological challenges well beyond the next decade if Turkey does not acquire a next-generation stealth fighter jet. To mitigate these challenges, the report makes several observations for decision-makers to consider.

First, a return to the F-35 program seems to be essential to maintain TAF air superiority in coming years and Turkey should try to find a way to rejoin the program.

Second, TAF relies on fourth-generation F-16s and unmanned aerial vehicles (UAVs) in its cross-border operations. Considering the trends among regional players in acquiring more technologically advanced fighter jets, Turkey should also look for interim solutions and alternatives to the F-35 so that TAF continues to maintain its advanced fighting capabilities.

Third, the F-35 fighter jet has the potential to play an important role in detecting enemy ballistic missile activity with its ability to infiltrate enemy airspace and its powerful detection sensors. Exclusion from the F-35 fighter jet program and inability to acquire next-generation fighter jets immediately from elsewhere will create defense challenges for Turkey against the ballistic missile capabilities of regional rivals.

Fourth, the idea that Turkey will be able to replace fifth-generation fighter jet capabilities with UAVs is not well-founded because UAVs will not be able to replace or replicate these capabilities.

Fifth, Turkey's plan to develop its first indigenous stealth fighter jet (TF-X National Combat Aircraft) is unlikely to show any significant technological progress in the next two decades because it has not moved beyond the preliminary design phase, with no engine options to power the aircraft. Turkish decision-makers should keep this reality in mind while assessing Turkey's airpower capabilities.

Sixth, Turkey's indigenous amphibious assault ship TCG Anadolu has been configured as a light aircraft carrier capable of operating the F-35B aircraft, so decision-makers should consider the implications of being removed from the F-35 program on other defense projects when considering their options.

Finally, the article argues that the political-military decision-makers should pay attention to the deficiencies in air defenses of Turkish military bases abroad in the context of advanced technological capabilities in new fighter jets. **End OE Watch Commentary (Gündüz)**



*General Dynamics F-16 Fighting Falcon Turkish.*

Source: Robert Sullivan, via Wikimedia, [https://commons.wikimedia.org/wiki/File:General\\_Dynamics\\_F-16\\_Fighting\\_Falcon\\_Turkish\\_\(remix\).jpg](https://commons.wikimedia.org/wiki/File:General_Dynamics_F-16_Fighting_Falcon_Turkish_(remix).jpg), Attribution: Public Domain, US Air Force

***“Turkey’s fifth generation National Combat Aircraft will not be entering the inventory or creating a meaningful deterrence over the next two decades... if no interim solution is found, Turkish air power will fall behind trends in the world.”***



## Continued: Challenges Ahead for Turkish Air Force

**Source:** “Dr. Can Kasapoğlu, “Türk Hava Gücünün En Zor On Yılı: Hava Harp Trendleri, Tehdit Ortamı Analizi ve Türk Hava Kuvvetleri’nin 5. Nesil Geleceği (The Hardest Decade of Turkish Air Force: Air Warfare Trends, Threat Environment Analysis and the 5th Generation Future of the Turkish Air Force),” *edam.org.tr* (an independent Turkish think tank based in Istanbul), 18 January 2020. <https://edam.org.tr/turk-hava-gucunun-en-zor-on-yili-hava-harp-trendleri-tehdit-ortami-analizi-ve-turk-hava-kuvvetlerinin-5-nesil-gelecegi/>

*The Turkish Air Force and Turkey’s air warfare capabilities face a serious test over the next 10-20 year. At the heart of this test is advanced technological problems... when regional armament trends are taken into consideration, for the Turkish Air Force to survive the critical geopolitical challenges with a 4th generation [fighter jet] will not be easy.*

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*...the Turkish Air Force currently relies heavily on 4th generation F-16s as a fixed-wing combat platform... the 5th generation F-35 Joint Strike Aircraft was going to be included in the inventory, but now it is not possible due to the purchase of the S-400 ... from the Russian Federation. Turkey’s fifth generation National Combat Aircraft will not be entering the inventory or creating a meaningful deterrence in the next two decades... In summary, if no interim solution is found, Turkish air power will fall behind trends in the world.*

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*Regional armament patterns need to be carefully examined...*

*Another source of threat to the Turkish Forces is from ballistic missiles... especially... in the Middle East. Besides Iran, which is traditionally a source of ballistic missile threat, there are intelligence indications that the Syrian Arab Armed Forces are ... strengthening their ballistic missile capabilities.*

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*In addition to the ballistic missile threat, the deployed Turkish Armed Forces and military bases abroad increasingly require a serious air defense system...*

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*A return to the F-35 project...is essential. Although we have analyzed the ‘why’ of the said return..., the solution on ‘how’ to make the return requires a diplomatic assessment...*

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