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# South Korea Drops 5th Generation Fighter Plan

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South Korea will refocus its KF-X fighter-development program, which aimed to create a fifth-generation stealth fighter, and instead solicit foreign firms' help in producing about 250 F-16-class fighter jets after 2010, according to a research institute [in South Korea].

The Weapon Systems Concept Development and Application Research Center of Konkuk University was ordered in April by the government to look at the feasibility of the controversial KF-X effort, which originally aimed to produce and market about 120 aircraft stealthier than Dassault's Rafale or the Eurofighter Typhoon, but not as stealthy as Lockheed Martin's F-35 Lightning II.

On May 18, 2009, the center told major foreign aircraft manufacturers that the South Korean military wants to replace older F-4s and F-5s with a lesser fighter, one on par with the F-16 Block 50. In a letter, the center sent detailed operational requirements for the new jet, which is to have basic stealth technology and domestically built active electronically scanned array (AESA) radar.

Korea has been evaluated with the capacity of 63 percent of necessary technology if the total technology is assumed 100 percent, the letter said. That . . . means that self-development of aircraft is possible with joint development of core technology . . . and technology transfer from abroad."

On May 29, 2009, the center asked Boeing, Eurofighter, Lockheed Martin, and Saab about their views on the per-plane cost estimate of \$50 million, as well as budget-sharing ideas and technology transfer. The center will wrap up the feasibility study by October 2009. The Ministry of National Defense will issue a decision on the KF-X initiative by year's end.

## **Requirements**

The new jet is to have a combat radius about 1.5 times that of the F-16, an airframe life span 1.34 times longer than that of the F-16, better avionics than that of the F-16 Block 50, an electronic warfare suite, an infrared search-and-track system, and data link systems fit for a network-centric environment, the document says.

South Korea's LIG Nex1 is likely to build the AESA radar using technology provided by Israel's Elta Systems. Among other required capabilities are thrust of 50,000 pounds, provided by either one or two engines; super-velocity intercept and super-cruise capabilities; and the ability to hit targets in the air, on land, and at sea.

In the first eleven years of exploratory and full-scale development, about 120 KF-Xs would be built to replace F-4s and F-5s; and more than 130 aircraft would be produced after the first-phase models reach initial operational capability.

An industry source [in South Korea] said Boeing might be the front-runner with its F/A-18 Super Hornet and other 4.5-generation fighter technologies. Sweden's Saab aerospace group might

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take part as a systems integrator with Korea Aerospace Industries, South Korea's only aircraft maker, he said.

Greg Lexton, Vice President of Boeing Korea, said July 23, Boeing is looking at South Korea's KF-X proposal and called an F/A-18 green aircraft a "possible idea."

A Lockheed Martin executive noted that his firm had worked with South Korea to produce KF-16s under license and develop the T-50 Golden Eagle supersonic trainer jet. He also noted Lockheed's co-development work with European nations, Japan, and Taiwan.

We'll look at what South Korea wants carefully and discuss what Lockheed Martin will be able to do or not be able to do for the KF-X in the coming months, he said.

Defense analysts [in South Korea] remain skeptical about the effectiveness of the KF-X program. One chief researcher at the state-funded Korea Institute for Defense Analyses (KIDA) recalled an earlier study by a local economic policy think tank that concluded that the program would cost at least \$10 billion but would reap only \$3 billion in economic benefits.

I believe there have been no major changes in the content of the KF-X program since the 2007 feasibility study, he said. There is almost no persuasion in the rationale behind the costly program. Do you want to acquire sophisticated stealth aircraft technologies through the KF-X partnership? Or do you believe indigenous KF-16+ aircraft could be operationally feasible and sold to other nations after 2020?

State-of-the-art fifth-generation combat aircraft, such as the F-35 and Typhoon, are expected to dominate the global market between 2020 and 2050; so developing an indigenous KF-16+-level fighter could never be sound economically and technically, the researcher said.