



# NEWS RELEASE

Visit <http://www.mindef.gov.sg> for more news and information about MINDEF and the SAF

---

## Factsheet – The Joint Strike Fighter

### Background

The Joint Strike Fighter (JSF) programme originated from two separate programmes - the United States Air Force/Navy Joint Advanced Strike Technology (JAST), and the Defense Advanced Research Project Agency (DARPA) Common Affordable Lightweight Fighter (CALF) projects of early 1990s. The projects merged in 1994 and the programme was renamed Joint Strike Fighter (JSF) in 1995. In Oct 2001, Lockheed Martin was awarded the contract to build the JSF, also designated as the F-35.

The JSF is a stealthy, supersonic multi-role fighter designed to meet the US military's requirement for a new generation of advanced weapons. It has a fully integrated weapon system that allows the JSF pilots to locate, identify and precisely strike mobile targets in any kind of environment. It is also designed to ensure enhanced combat survivability through radio frequency/infrared signature reduction and on-board countermeasures. The JSF will be the world's most advanced multi-role fighter.

The JSF is also designed to minimise costs of production, operation and maintenance. The JSF will cost 40%-50% less to operate than the current generation advanced fighter aircraft.

There are 3 main variants: the Conventional Takeoff and Landing (CTOL) F-35A for the US Air Force, the Short Takeoff and Vertical Landing (STOVL) F-35B for the US Marine Corps and the United Kingdom Royal Air Force/Navy, and the Carrier Based (CV) F-35C for US Navy.

The F-35 is designed to replace ageing fighter inventories in the US Armed Forces, such as the US Air Force F-16s and US Navy F/A-18s. Currently, production of more than 3000 F-35s are being planned for the US and UK.

The JSF specifications are as follows:

	<b>Wing Span (m)</b>	<b>Length (m)</b>	<b>Wing Area (m<sup>2</sup>)</b>	<b>Combat Radius (km)</b>
<b>F35A (CTOL)</b>	10.7	15.6	42.7	>1092
<b>F35B (STOVL)</b>	10.7	15.6	42.7	>833
<b>F35C (CV)</b>	13.1	15.7	57.6	>1111

Engine: Pratt & Whitney F135 or General Electric F136

Thrust: 40,000 lbs

Maximum Speed: Mach 1.8

### **JSF Development Program**

The JSF will be developed through collaboration between the US and several countries, including UK, Australia, Canada, Denmark, Italy, Norway, the Netherlands and Turkey. Each partnering country has an integrated office staff within the JSF Program.

The JSF programme is currently at the System Development and Demonstration phase. This involves the development and testing of the entire aircraft system, including its manufacture, and will span about 10 years. The initial flight of the first pre-production JSF, the conventional takeoff and landing variant, is scheduled for the third quarter of 2005. The US Air Force plans to take delivery of its first batch of F-35s in 2008.

National Archives of Singapore