The F-35 Joint Strike Fighter program continues to reach new milestones.



The F-35 Lightning II is the world's most advanced multi-role fighter – providing unmatched capabilities to military forces around the world, securing high-tech, high-skill jobs for hundreds of thousands of people worldwide, and elevating international security by allowing for more integrated coalition operations.

Whether the F-35 is currently the most expensive airplane ever built (but it is not alone... Eurofighter Thyphoon costs resulted considerably higher than expected) and the target price per aircraft around 80 million \$ will be reached in a couple of years, the efforts to reduce the service life costs just reached a fundamental milestone.

The F-35 Joint Program Office and Lockheed Martin have completed static, drop test & durability testing and early results indicate a potential for an increased service life certification for the F-35A variant.

Ground testing included a full scale durability airframe of all three variants, which were loaded in unique test rigs and laboratories to simulate ground and flight load conditions during fleet operations. The F-35 aircraft's service lifetime is 8,000 hours, and each test airframe is required to complete two life-times of testing, or 16,000 hours. The F-35A vastly exceeded the requirement by completing three full life times of testing, or a simulated 24,000 hours, which gives the program confidence in a potential service-life increase.

As a comparison, the Eurofighter Typhoon is currently granted up to about 6,000 flying hours.

During September, an Italian Air Force operational F-35A (serial 32-09) participated for the first time to an european airshow.



costs 10 million \$; currently, more than 40 have been delivered to Lockheed Martin.

The Air Belgian Force Days at **Kleine** Brogel Airbase had as guest star at the static display the 5th generation fighter jet assembled F.A.C.O. Cameri, Italy (Final Assembly & Check-Out).

The italian plant is also assembling 29 F-35A for the Royal

Netherlands Air Force and is in discussions to deal assembly of the danish F-35's. The plant core work is the production of 835 center fuselages for the entire F-35 global program; each one

Italian Air Force has currently ordered 25 F-35 up to LRIP14 having commissioned all long term required materials and 10 F-35A and 1 F-35B have been already commissioned by Italian Defense.

A second F-35B, the *Short Take-Off and Vertical Landing* version, is expected to be rolled-out in the next weeks.

Belgium is the country that has to choose a new fighter jet shortly, the F-16 FALCON will gradually be replaced in the coming years by a newer fighter.

Having an operational F-35° at BAFD, it was clear the goal of Lockheed Martin to push its 5th generation (and already operational) stealth fighter jet.









Eurofighter Typhoon, with an ideal Tranche 4 strongly pushed by Airbus that is also looked by Germany as a candidate to replace its ageing Panavia Tornado fleet (but Luftwaffe is clearly in favour of the americanbuilt F-35...), and Dassault Rafàle supported by Fhe french government are the competitors to gain the deal with Belgium.





Belgium and Netherlands worked together with Lockheed Martin during the past decades, alreay. including the achievement and sustain of their in-service ageing fleet of F-16 Fighting Falcon in force with both air forces. First to make a choice was Netherlands entering in the JSF development program, now Belgium has to do its choice and the pressure against Government and Air Force could favorite many compensations for the local industry and at the end, a really best price.

"We are preparing ourselves for the tasks of tomorrow" said Colonel Geert De Decker, MSc Commander Air Base Kleine-Brogel.

Meanwhile, two american F-35A Lightning II came back to Europe this Summer participating at the Royal International Air Tattoo, at Duxford Air Show and at the Farnborough 2018 exhibition.

The flight demonstration and the heritage flights performed with WWII planes showed advance aerial



remains, for the time being, a concept.

performance. Compared to the debut in 2016, a really lot of work has been done.

In this current scenario, United Kingdom unveiled its future 5++/6th generation fighter concept with a really detailed mock-up, the Tempest; presented at Farnborough, it represents more than an idea about the aircraft that will substitute after 2030 decade the RAF Eurofighter Typhoon's fleet.

The agreement announced and signed by Germany and France in 2017 for a future fighter still



It is also clear that Airbus, one of the Eurofighter consortium partners, is pushing the european-built Typhoon fighter jet, but a T4 future line is still on the paper and for sure can't compete and have 100% of the capabilities now offered by the stealthy Joint Strike Fighter, including nuclear be deterrent.

F-35 has advanced stealth, exceptional agility and maneuverability, sensor and information fusion, networkenabled operations and advanced

sustainment. This technology provides pilots with unprecedented survivability and situational awareness.



We will see in the next months which cards the industries are able to play and how the politics will influence military decisions.

Facts are that in Europe only Israel, Italy, United Kingdom, Norway and Netherlands can deploy 5th generation fighter jets and Denmark will in the next decade as well.







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