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NEXTANT 400XT

by Jim Gregory



EXPERIMENTAL

A COMPREHENSIVE UPGRADE PACKAGE FOR A POPULAR AND PROVEN DESIGN







# OPPOSITE PAGE

A luxurious handcrafted interior and customised paint work completes the remanufacturing package

Launched in 2007, the remanufacturing process pioneered by Nextant Aerospace was conceived in response to evolving market trends and customer needs

# THIS PAGE

Expect exceptional passenger comfort in the 400XT with its unique flat-floor design. and "squared oval" cabin configuration

he Hawker 400 line of twin jets is one of the business jet industry's most recognised designs. Originally built in 1978 by Mitsubishi as their MU-300 Diamond jet, its production rights were later acquired by Beechcraft, now part of Hawker Beechcraft. The company further improved the design and introduced several variants over the years, including a military version called the T-1 Jayhawk. Over 700 of the jets were built, the majority of

which still fly today.

Now, aviation technology group Nextant Aerospace has developed a package comprising several upgrades and improvements, to allow the aircraft to fly quieter, faster, and further with less fuel than the standard variants. The result is the Nextant 400XT, based on used Hawker 400 jets with sufficient cycles left in their life, and which the company expects to bring to market shortly. International interest, especially at the EBACE air show in May held in Geneva,

Switzerland, was high, says Nextant's founder and Chairman Kenneth Ricci. "The attention that the airplane is getting, from everywhere in Europe, Africa and Asia, has been explosive. The efficiency of the airplane is very attractive in a lot of those markets, as is the range capability and performance."

The redesign process started with Nextant's engineers identifying three key areas for improvement on the Hawker 400 — avionics, aerodynamics and engines. As a result, the Nextant 400XT now comes with an upgraded crew flight deck, the Rockwell Collins Pro Line 21, with Garmin Pro Line 21 avionics, next generation cockpit and passenger cabin technology, and thrifty engines. The benefits are an approximately 50 per cent increased range of 2,000 nautical miles, reduced climb time to cruising altitude, a stated 30-35 per cent decrease in fuel consumption, and hopefully 30 per cent less greenhouse emissions. Not only do these benefits reduce pilot and crew workload, they are also expected to translate into lower operating costs. >>





### RIGHT

The Rockwell Collins Pro Line 21 avionics system was designed with an eye on future NextGen airspace requirements

# BELOW

The Rockwell Collins Venue Cabin Management System gives passengers control of cabin ambience and entertainment choices through an iPhone, iPod Touch or iPad

>> The Nextant 400XT was designed to operate in mountainous terrain. Its new Williams engines exhibit a lower 'thrust lapse' with altitude, enabling the airplane to maintain higher thrust when taking off from elevated airports, which also allows better performance on hot days. Nextant's new 400XT has the same cabin size of the base aircraft, but can fly more than 2,000 nautical miles with four passengers and a crew of two. It climbs to 10,668 metres (35,000 feet) in a mere 13 minutes, and hits a top cruise speed of 460 knots. Nextant also offers optional winglets which further enhance performance. The latest in aerodynamics gives new life to the jet that was designed over a generation ago. Computational fluid dynamics helped redevelop the engine pylons and cowlings. The improved design helped reduce aerodynamic drag for better performance.

Inside, Nextant offers a number of seating options. The most popular is a three-place divan and a legroom-friendly four-place club seating with retractable work tables and individual workstation amenities. Each custom cabin is crafted to match the owner's preferences down to the paint scheme.

Passengers can also avail of the latest in high-definition cabin management systems that allow them to control lighting and temperature. Options include electronic window shades, LED lighting and Internet access.

Low development costs, with savings passed on to customers, and comparatively short delivery schedules are key to the aircraft's future success. It appears there is something worthy in the old yet — so much so that Hawker Beechcraft announced it will offer its own upgrade package as well. We will be watching.





# A MAKEOVER PRIMER

Certified by the US Federal Aviation Administration,
Nextant's remanufacturing procedure involves more than 6,000 labour hours for each airplane. The Ohio-based company strips the old paint and dismantles the aircraft down to the component level to inspect for any damage or corrosion, and perform necessary repairs or replacements. This includes removing and replacing all wiring to accommodate the new electronic systems, and installing new quieter, more fuel-efficient engines from Williams International, in place of older Pratt & Whitney

The interiors are gutted and refitted with all-new accommodation for passenger comfort and the latest in cabin technology. New cockpit avionics are installed. Each plane then gets a customised paint job and is test-flown before delivery to customers. Nextant hopes to deliver up to four aircraft a month.