



NEXTANT AEROSPACE

The new kid on the block

Benn Marks looks at the 'remanufactured' Nextant Aerospace 400XTi

The Nextant Aerospace 400XTi is one of the business aviation world's more recent, fascinating and impressive designs. Despite being billed as a "remanufactured" aircraft, the Nextant 400XTi is, for all intents and purposes, a brand new one.

This lean, mean and sleek looking business jet is getting well-deserved attention for its voluminous passenger cabin and impressive performance. The fact the aircraft belongs to the light jet category is all the more surprising, because it possesses a number of distinctive class-beating features a prospective owner/operator could be mistaken for believing belonged to a larger class of business jet.

Its hot ticket items include a flat-floor, spacious passenger cabin that can be configured in a variety of ways, with one option alone featuring a three-place divan, plus accompanying four-place club seat for longer duration flights; a full-service galley and large lavatory for increased comfort and privacy; a highly advanced Rockwell Collins Pro Line 21 avionics suite that includes four LCDs geared towards reducing the pilots' workloads; plus two powerful, extremely fuel-efficient Williams FJ44-3AP turbofan engines, each rated at 3,050lb, giving the jet its leading edge performance.

Throw in a few aerodynamic refinements and improvements to the aircraft's engine cowlings and pylons, thanks to computational fluid dynamics (CFD) analysis and raked winglets to reduce drag, and the end result is a swift and efficient little number; one that is capable of flying long distances, too.

For instance, the 400XTi has a range of 2,003nm, opening up a plethora of city-pair options for operators within the Asia Pacific region. The gold lining however, is that the 400XTi can be bought at a price fifty percent cheaper than comparable aircraft. Not surprisingly, the aircraft has attracted keen interest and subsequent sales from operators keen to exploit its strengths.

"The aircraft is very versatile and excels at most roles. Interestingly, it has a very wide door and a flat floor, which makes it stand out as an air ambulance aircraft. The 400XTi has a level of corporate interior fit out usually reserved for aircraft in the US\$20m range and therefore it has a great deal of appeal to corporate buyers," Nextant Pacific managing director, John Oppenheim says.

While light jets sales in the region have not been as robust when viewed alongside sales of jets in the larger categories of the BA market, the 400XTi has virtually gone against type in establishing a firm footing in specific high-value industry areas, as Oppenheim explains.

"The light jet market has not been a strong segment of the market place in our region since the GFC. We're seeing a trend towards government and aeromedical sales in this segment, although there is still healthy interest from private individuals. Fortunately, the 400XTi sits right at the top of the light jet category and offers near mid-size jet levels of performance, so we are still enjoying healthy demand," Oppenheim says.

"We'll be at 51 deliveries by the end of the month

... There are 100-plus orders taken already," he added.

But as with all notable aircraft that 'buck the trend' there is a story to Nextant's 'new kid on the block'. The company has advertised its highly advanced 400XTi as Reimagined, Rebuilt and Reborn – words that succinctly sum up the light business jet perfectly.

This also implies a degree of historical context - that the aircraft didn't originate from nothing. It didn't. The 400XTi can attribute its existence to successful predecessors that were created in the mid-80s; in this case, the Beechjet 400(A) and later model Hawker 400XP light corporate jets. Beech's initial creation of the 'Beechjet' series however, would not have occurred in the first place had it not acquired the production rights off Mitsubishi Heavy Industries to continue and develop the MU-300 Diamond series - better known as the Mitsubishi Diamond I/IA/II aircraft series. This design was conceived towards the end of the '70s. But that's another story!

Progressive updates and refinements to the Beechjet and following Hawker variants occurred, and were characterised by increases in overall performance, MTOWs, plus passenger cabin comfort and spaciousness. The cabins of these aircraft were relatively large for their class to begin with, but with a bit of internal reworking, passengers were able to enjoy increased levels of cabin volume and seating options. Many of these reliable and solidly built jets still fly today and are ideal for "remanufacturing".

"Essentially, the programme started because the owner of Directional Capital, which also owns Nextant, bought a lot of new aircraft for his fractional ownership business. He looked at the value equation of new aircraft and saw that most advances over the past 20 years were in Airframes and Avionics. With this in mind he formed a think tank to look for a smarter way to bring new technology to the market and the result was Nextant," Oppenheim says.



In the specific case of the Nextant 400XTi remanufacturing process, over 6,000 man-hours are required to complete the entire operation, with at least 80% of the aircraft rendered new. In a nutshell, an unlimited-life structure is integrated with new systems, as Oppenheim explains: "Remanufacturing is a comprehensive and rigorous industrial process in which previously sold equipment is returned to a like new or better than new condition and warranted in performance level and quality ..."

"We work the figure of 80% based on the value of components. Obviously the airframe itself which comprises a large part of the aircraft is remanufactured. However, on a US\$5 million aircraft, US\$4 million is spent on the remanufacture, engines, avionics etc. This is where we derive the 80% figure," he said.

He added that the final product was an incredibly reliable and capable platform that offered highly economical and cost-effective performance solutions to operators.

"Essentially the aircraft performs as well as the CJ4 and Phenom 300 whilst providing a better cabin and lower operating costs. I'm confident we have a better product price irrespective, however certainly with our aircraft costing just over half what the competition does, this is an important factor. You can buy a 400XTi and operate it for 5 years for less money than the acquisition cost alone of our competitors," Oppenheim said.

But those seeking to know how the 400XTi's numbers stack up on the 'performance front' are in for a treat, because the light jet is not one to disappoint.

The Nextant jet can zip through the sky at a solid high cruise speed of 460kt, and get up to FL 370 in as little as 16 minutes at MTOW, which is 16,300lb. Putting that into perspective, the 400XTi can comfortably seat up to a maximum of eight passengers, with two-crew upfront. The aircraft's maximum baggage capacity is 800lb, while its maximum certified ceiling of 45,000ft gives it the latitude to climb above nasty weather systems.

As for the inside story – and indeed outside one: the light jet's cabin is 15ft 6in long, its width is 5ft, while its height tapers in at 4ft 10in. These generous internal cabin dimensions are comfortably enclosed in an aesthetically-pleasing looking airframe that measures 48ft 5in long, 13ft 11in high, with a wingspan of 43ft 6in capping everything off.

The final judges however are the pilots and passengers who fly, and flew in, the aircraft who determine whether it is capable of cutting the mustard in the light jet segment. On both counts though, Oppenheim said the aircraft has garnered rave reviews.

"Quietness is normally the first thing that is commented on. It has a lower cabin noise level than any of its competitors and this stands out immediately on the take-off roll. The fit and finish of the interior is also something that delights our customers, who



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have often only experienced the pre-fab interiors of our competitors. We also get positive feedback on the 3-place divan which forms a comfortable bed on longer sectors, he said.

"Pilots speak highly of the aircraft. It has a swept wing and spoilers for role, so the comment we often get is just how quiet and stable it is. The efficiency of the engines are also a stand out feature. We recently demoed some pilots from Darwin direct to Bangkok and they were amazed at the low fuel burn," Oppenheim added.

While Oppenheim might appear incredibly biased in his praise of the 400XTi, there is no reason to question the validity of his comments. The old aircraft that is actually new, offers very strong performance, plus enviable operating economics. Throw in some added extras in the form of state-of-the-art avionics, powerplants, plus a cabin that comes with a number of seating options, and the light jet category has never looked better.

For a 'remanufactured jet', the Nextant 400XTi is certainly not one to be trifled with. ✈