

Dan Gillian, Boeing Vice President, F/A-18 and EA-18 programmes, on the

# Super Hornet and the Indian Navy's quest for a carrier borne fighter

**A**s the Indian Navy continues its ongoing progress towards becoming a blue-water navy, it will need a carrier borne fighter fleet that is not only mobile but also easy to maintain with low operational costs. The future naval carrier borne fighter will also need to be compatible with current and upcoming aircraft carriers of the Indian Navy.

## Attributes of a Future Carrier Air Wing

The importance of carrier aviation cannot be understated – in particular for a country like India with a large coastline covering more than half its borders. The Indian Air Force is focused on protecting the north and east,

but with coastlines covering much of India's south, and west, the need for a strong carrier air wing is obvious.

Mobility is key for both the current and future fighters, which is likely to grow only more complex in this region.

The carrier air wing of today and tomorrow has become a mobile network that houses aircraft that can serve as extended nodes on an integrated network. The future fight is about who is best networked to gather and share the intelligence to carry out the most effective mission quickly, efficiently, and effectively.

The future carrier air wing will need to do it all: find–target–track–engage–and assess in a kinetic and non-kinetic manner.

As such, when I think about next generation carrier aircraft that operate off US or Indian Navy carriers, I think about two key attributes: “networked and survivable.”

The next generation of aircraft, will need to connect into a network, plugging into an information stream shared across its fleet. This means integrated and varied sensors, large computers, big data networks, and advanced displays to help aircrew manage all of the available information.

Survivability is often confused with stealth, but stealth is just one element. Next generation aircraft will need to balance stealth with lethality. Future fights will require increased magazine depth and sophisticated air-to-air sensors to deal with advanced

threats. Survivability means that future fighters need to have increased range to push the threat further away.

Another aspect of survivability is reliability, especially in a shipboard environment. Carrier aircraft need to be tough, easy to launch, easy to land, and easy to maintain. This is increasingly important at a time when deployments are longer and farther away than ever before. Ease of maintenance will only become more important as sensors and systems continue to grow in sophistication and complexity.

With multi-role capabilities, advanced technologies with room to grow and low acquisition and sustainment costs, the Boeing F/A-18 Super Hornet is most suitable for India. With designed-in stealth, an AESA radar and many other advanced technologies that are required for mission requirements of the naval aviator, the F/A-18 Super Hornet is the most advanced aircraft of its kind in operation today and will provide operational benefits to the existing and future force structure of the Indian armed forces.

## Evolution of the Super Hornet

Boeing's Super Hornet offers the best of those attributes: it is combat proven, but defined to meet the US Navy's flight plan so that it continues to evolve to outpace future threats. The Super Hornet will remain on US Navy carrier decks well into the 2040s – being three-fourths of the Navy's strike fighter capacity into the 2030s and no less than half the carriers striking force into the 2040s.

On 23 May 2017, the President of the United States sent his 2018 fiscal year budget to Congress, and included in that budget was a requirement for 80 Super Hornets over the next 5 years to address its strike fighter shortfall. Also in that budget request was funding for Block 3 capabilities to ensure the air wing has the capabilities needed to win in the 2020s and beyond.

The next generation of Super Hornet aircraft comes into the US Navy and potentially international customers to fulfil its role as the next-gen airplane in a complementary way with the F-35. Those two aircraft are going to work together on

the carrier decks for the US Navy, well into the 2040s.

That gives Boeing great opportunity to continue the programme, which is evolutionary capability development from a risk perspective of low risk change that delivers revolutionary performance. We are excited to be building airplanes at a current production rate based on the US Navy demand and some other international customers, which takes us into the 2020s. Boeing's current production rate is two per month but have built and can build up to four aircraft per month.

Introduced in 2007, the F/A-18 Super Hornet Block II is the world's preeminent carrier capable aircraft. The F/A-18 Super Hornet was designed for carrier operations and is the world's preeminent carrier capable aircraft, is combat proven, supersonic, an all weather multirole fighter with a defined US Navy flight plan to outpace threats into the 2040s.

The Super Hornet's benefits of being a twin-engine aircraft help provide the warfighter a margin of safety that does not

