SUPER HORNET a true multi-role combat aircraft



HE POTENTIAL PURCHASE OF 126 BOEING F/A-18E/F Super Hornets would give India the most advanced multi-role combat aircraft in the skies. The battle-tested aircraft is truly multirole, having demonstrated its exceptional air defence, strike, reconnaissance, and maritime capabilities in combat. The Super Hornet's airframe and systems provide the rugged durability and ease of maintenance that makes it ideal for long-life operations with a low cost of ownership, including operating from forward airbases and austere airfields. Considered a "model acquisition" programme by the US government, the Super Hornet has delivered on every promise. From the beginning of the programme, the Super Hornet has been ahead of schedule, on cost, and under weight. It is in production and will remain in production for the US Navy well into the next decade. Because the Super Hornet delivers superior capability, affordability, and maintainability, the US Navy continues to invest in new technology and new capability for the longterm.

The F/A-18E/F was designed with a spiral development strategy that assures it will remain a potent multi-role combat aircraft well into the 21st century. An example was the integration of the advanced Active **Electronically Scanned Array** (AESA) radar for the US Navy. This advanced radar system puts the Super Hornet's lethality and survivability well beyond that of any of its competitors.

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INDIAN DEFENCE REVIEW MONITOF

Advanced systems will keep the Super Hornet effective

Other fully integrated weapons systems that give the Super Hornet superior combat capability include an advanced Forward Looking Infrared (FLIR) for exceptional air-to-ground performance and a Joint Helmet Mounted Cueing System (JHMCS) for enhanced aircrew situational awareness and combat lethality. The Advanced Crew Station (ACS) in the two-place version of the Super Hornet includes a large (8" x 10"), full color, high-resolution (1024 x 1280 pixel) liquid crystal display, which enhances the weapons system officer's (WSO) ability to track, precisely designate, and effectively attack airborne threats and surface targets. The front and rear cockpits in the two-seat

Super Hornet can be operated independently by the pilot and the WSO to maximise aircrew effectiveness and situational awareness in high threat and demanding mission environments.

The Super Hornet's spectrum of missions includes its ability to serve as an in-flight refueling tanker for other Super Hornets, or any aircraft in the IAF inventory that use the hose-probe refueling method. No longer will a strike force need to loiter at altitude, waiting for tanker assets to be available. Once the other fighters have been refueled, the

"tanker" can add its multi-role strike fighter capabilities to the strike force.

PART OF A LONG-TERM BOEING/INDIA STRATEGY

"We're very bullish on the Indian market," said Chris Chadwick, Boeing Vice President and General Manager for Global Strike Systems. "We already have relationships with a variety of companies in aviation-related software development. With the changed relationship between India and the US, we are in a position to respond to defence opportunities in India and create long-term business relationships."

Boeing landed a 68-aircraft contract with Air India (AI) that requires a 30 percent industrial participation (also known as counter trade or offset) obligation. The Super Hornet programme will have the opportunity to provide a comparable industrial participation offer.

BENEFITS ABOUND FOR BOTH SIDES, A CLASSIC WIN-WIN

The Hornet Industry Team (HIT) comprises Boeing, Northrop Grumman, Raytheon, and General Electric. The HIT has a combined revenue of \$230 billion with more than 675,000 employees located in more than 70 countries, offering valuable partnership potential to Indian industry.

Industrial participation benefits are delivered to customer country industries by leveraging the HIT's broad industrial base. Industrial participation programmes can cover a wide range of activities including: co-production, final assembly, commercial joint ventures, software development, component manufacturing, systems integration, export development, direct investment, technology transfer, training opportunities, and aircraft support. Boeing has successfully performed many billions of dollars of industrial participation programmes for customer countries around the world, and without exception, obligations have been achieved on or ahead of schedule.

An equally important long-term benefit to both Boeing and India will be the experience of working with diverse worldwide partners, a capability becoming increasingly important in a globalising world. The ability to integrate such a diverse base to design and manufacture a single product is another Boeing core competency. For that matter, India, with its 16 official languages, already has lessons in integration it can teach Boeing – and that Boeing is eager to learn.

INNOVATION

The F/A-18 E/F Super Hornet is the direct result of the US Navy's desire to increase its overall combat capability while reducing its aviationrelated operating costs. The Super Hornet was designed with room for new technologies to be added as necessary, even if those technologies weren't available when the aircraft was being developed. At the same time, it was designed to be cost-effective. The operating and engineering communities at both the US Navy and Boeing are focused on delivering the "ilities" – not only capability, but also reliability, maintainability, supportability and producibility.

The result is that Boeing is able to help its customer gradually insert new technology and, at the same time, make the Super Hornet less costly to the customer.

Impressive Results: In the late 1990s, each Super Hornet cost the US Navy about \$83 million. Today, each new Super Hornet costs the US Navy about \$54 million. That's a 35 percent reduction in cost – yet today's Super Hornets contain much more capable technologies.

That's called innovation – on both the affordability and growth sides – and it's the way Boeing does business.

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16