



Air Wing of the

Future Supercarrier

Aviation element of the US Navy's new 'Gerald R Ford'-class carriers

At the *Euronaval* show in October 2016, this *Vayu* correspondent came across a model of the United States Navy's new generation *Gerald R Ford*-class aircraft carrier, proudly displaying the futuristic General Atomics Electro-Magnetic Aircraft Launch System (EMALS), capable of launching all types of carrier assets from Airborne Early Warning & Control (AEW&C) platforms through multi-role fighters to Unmanned Combat Aerial Vehicles (UCAVs). Not surprisingly to this writer, the air wing of the lead warship *Gerald R Ford* (CVN-78) displayed models of combat proven aviation assets, namely the Boeing F/A-18E/F Super Hornet multi-role strike fighter and the Northrop Grumman E-2C/D Hawkeye/Advanced Hawkeye Airborne Early Warning & Control System (AEW&C) platform for assured protection and strategic plus tactical power projection. Newer platforms are likely to complement

the combat proven ones in the foreseeable future.

The 'strike-oriented heavy duty' multi-mission F/A-18E/F Block II Super Hornet is an upgrade of the combat-proven night-strike F/A-18C/D that provided the US Navy with a platform that has range, endurance, and ordnance carriage capabilities comparable to the A-6 Intruder 'heavy-duty' strike platform and, as per manufacturer claims, incorporates lower Radar Cross Section (RCS) technology and other survivability enhancements from the outset. Still it is reasonable to deduce that survivability of the Super Hornet platform chiefly rests on excellent combat proven AN/ALQ-124 Integrated Defensive Countermeasures system (IDECM) system that includes the ALE-47 countermeasures dispenser, the ALE-55 towed decoy (which can transmit jamming signals based on data received from the IDECM) and the

AN/ALR-67(V)3 Radar Warning Receiver (RWR) providing coordinated situation awareness and managing the on-board and off-board deception countermeasures, expendable decoys, plus signal and frequency control of emissions.

The US Navy inducted the first operational F/A-18E/F squadron (VFA-115) in September 2001, with Super Hornets deployed on board the USS *Abraham Lincoln* (CVN-72) in July 2002. 'Baptism by fire' followed shortly thereafter when, in November 2002, the aircraft made its combat entry, striking at air defence installations in Southern Iraq with the Global Positioning System GPS-guided JDAM. Subsequently the aircraft was also deployed as part of *Operation Iraqi Freedom* in March 2003, and has seen extensive combat employment since.

F/A-18E/F aircraft are of larger size than earlier Hornets, with bigger wing