



# RHUMB LINES

*Straight Lines to Navigate By*



December 11, 2009

## Navy Unmanned Aircraft Systems and Unmanned Aerial Vehicles

*"We are standing at the beginning of the Navy's unmanned journey. As we introduce remotely piloted technologies we will immediately enjoy significant gains in persistence and battlespace awareness. The lessons we are learning from our current UAV lineup will help us address the future challenges of shipboard integration, autonomy, and information dissemination."*

– Rear Adm. Terry Kraft, Director, ISR Capabilities, OPNAV N2/N6,

Unmanned Aerial Vehicles provide alternative solutions to addressing warfighter capability gaps. They provide capabilities such as persistent surveillance over an area of interest, improved over-the-horizon communications and enhanced carrier night operations. With advances in technology and changes to military doctrine, UAVs will play an integral role in how the Navy operates across the seas and littorals.

### Broad Area Maritime Surveillance (BAMS) Unmanned Aircraft System (UAS)

BAMS UAS is a high altitude, long endurance system that will provide persistent maritime and littoral intelligence, surveillance and reconnaissance (ISR) to fleet and combatant commanders.

- BAMS UAS will operate around the clock, 365 days a year with a mission radius of 2,000 nautical miles, covering much of the world's oceans, seas and strategic maritime chokepoints.
- BAMS UAS is in the system development and demonstration phase and will begin testing in 2013. Navy plans to introduce the first increment into the fleet in 2016 and have all five orbiting positions operational by 2020.

### MQ-8B Fire Scout Vertical Take-off Unmanned Aerial Vehicle (VTUAV)

VTUAV supports a vital requirement to sustain and improve maritime ISR capabilities for naval forces in traditional, joint and coalition operations.

- Fire Scout is completing a military utility assessment aboard the USS McInerney (FFG 8) that will be immediately followed by operational testing in January 2010.

### Small Tactical UAS (STUAS)

STUAS will provide tactical ISR capability for Naval Special Warfare, LSD-41 class ships, Naval Expeditionary Combat Command and Marine Corps squad and platoon size units.

- STUAS is in the source selection process for vehicle/system selection from industry proposals.

### MQ-9 Reaper - Saber Focus

The MQ-9 provides a multiple-sensor system integrated on a single platform that can remain on station for a long period of time. Systems enable rapid and flexible integration on joint and naval platforms for command and control and direct downlink of collected data.

- An operational demonstration is being conducted in fiscal year 2010 to provide a robust capability in response to combatant commander requests for enhanced ISR from the littorals.
- This capability deployed Oct. 1 in support of Ocean Look, an anti-piracy operational demonstration.

### Navy Unmanned Combat Air System (N-UCAS)

N-UCAS is an experimental demonstration of a large UAV in the aircraft carrier environment.

- N-UCAS will conduct catapult launches, arrested landings and flight deck operations. Additional tests will include air-to-air refueling using both Navy and the U.S. Air Force methods.
- First flight is scheduled for Spring 2010, with carrier operations planned for early 2012.

### Key Messages

- Unmanned Aerial Vehicles will play an integral role in how the Navy operates across the seas and littorals.
- The Navy currently uses Unmanned Aircraft Systems to support Operations Iraqi and Enduring Freedom.
- All Navy Unmanned Aircraft Systems and Unmanned Aerial Vehicles programs will be introduced to the fleet by 2013.

### Facts & Figures

- BAMS is Navy's largest UAS program of record.
- The MQ-8B Fire Scout UAV has a range of 110 nautical miles with five-plus hours on station.
- The Navy currently maintains UAS, ISR service contracts to fill capability gaps in Operations Iraqi Freedom and Enduring Freedom.