



NRQ-21



AT A GLANCE

WHAT IT IS:

The NRQ-21 is a catapult launched, arrested recovery unmanned aerial vehicle. It is designed to be a modular, flexible and versatile solution for tasks on land or at sea. The aircraft's payload can be reconfigured with cameras, communication capabilities and other technologies to meet mission needs.

HOW IT WORKS:

The NRQ-21 Unmanned Aerial System (UAS) consists of the air vehicle, a ground control station, command and control data links, a launcher, and a recovery system.

Following launch, the AV is flown by the air vehicle operator to the mission area via waypoint navigation. On station the AVs payloads are engaged as required.

WHY IT IS IMPORTANT:

NRQ-21 provides a land or sea-based airborne reconnaissance capability that can support a variety of missions:

- Search and Rescue
- Disaster Response
- Force Protection
- Target Following
- Battle Damage Assessment
- Communications Relay
- Anti-Piracy

**Unmanned Warrior is part of exercise Joint Warrior 2016, hosted by the United Kingdom off the North-West coast of Scotland.*



The NRQ-21 system provides persistent maritime and land-based tactical reconnaissance, surveillance, and target acquisition (RSTA) data collection and dissemination capabilities. The air vehicle's open-architecture configuration can integrate new payloads quickly and can carry sensor payloads as heavy as 25 pounds. Payloads could include day/night full-motion video cameras, infrared markers, laser range finders, communications relay packages and automatic identification system receivers.

The NRQ-21 system was designed and manufactured by Insitu, which designed, developed and produced the ScanEagle UAV. These technologies have been applied to intelligence, surveillance and reconnaissance (ISR) efforts, as well as civil and commercial industries for environmental monitoring, precision agriculture, search-and-rescue, disaster relief, and even mining operations.

Unmanned Warrior 2016, allows the U.S. Navy, the British Royal Navy and allies to test UAS's in real operating environments with coalition forces. UAS's will be deployed from shore-based facilities and operate in varying locations along the North-West Scottish coast line.

Research Objectives for US in Unmanned Warrior 2016:

- Joint Operations with US-UK equipment
- Explore employment concepts and technology capabilities
 - Low-cost, multi-mission, persistent ISR
 - Expansion of battlespace surveillance capability
 - Autonomous combat identification at sea