

# MQ-4C TRITON VIGILANCE FOR A CHANGING WORLD

THE VALUE OF PERFORMANCE.

**NORTHROP GRUMMAN**

[www.northropgrumman.com/triton](http://www.northropgrumman.com/triton)

## Why Triton?

The MQ-4C Triton is a high-altitude, long-endurance unmanned aircraft system that provides a comprehensive surveillance capability. It works as the eye in the sky for missions including maritime surveillance, security, signals intelligence, oil field monitoring, fisheries protection, shipping lane security and scientific study support.

Able to fly missions of more than 24 hours duration at altitudes greater than 55,000 feet, Triton provides global reach to military and civil organizations. Based on the U.S. Air Force's RQ-4 Global Hawk, Triton was developed by the U.S. Navy to provide maritime surveillance over vast distances. Taking advantage of these mature technologies provides efficient and affordable networked surveillance capabilities while being able to operate them with similar U.S. and allied systems.



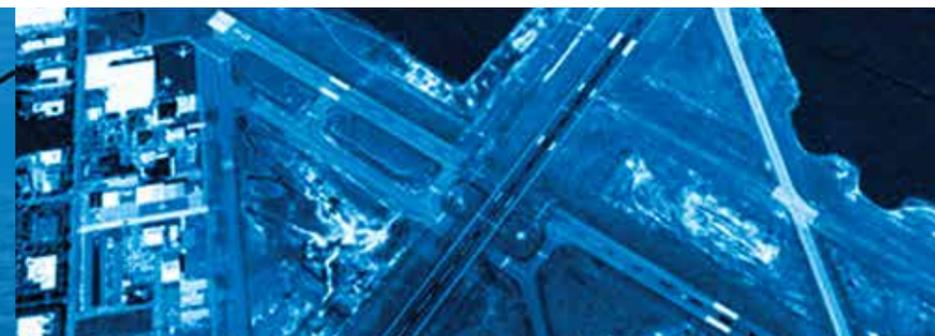
## Multiple Mission Types

### Maritime Surveillance

Triton is optimised to provide multiple types of surveillance data over vast tracks of ocean and littoral areas.

### Overland ISR and Target Acquisition

High-altitude, long-endurance unmanned aircraft systems provide flexible overland ISR, signals intelligence and target acquisition capabilities.



### Fisheries Protection and Oil Field Monitoring

Triton can maintain awareness of vital fishing areas, as well as offshore oil and gas fields.

### Disaster Response

High-altitude, long-endurance unmanned aircraft have assisted first responders around the world during humanitarian disasters and civil emergencies to safely identify where support is needed.



# SPECIFICATIONS

## KEY FEATURES

- Provides persistent maritime ISR at a mission radius of 2,000 nm; 24 hours/7 days per week with 80% Effective Time on Station (ETOS)
- Land-based air vehicle and sensor command and control
- Afloat Level II payload sensor data via line-of-sight
- Dual redundant flight controls and surfaces
- 51,000-hour airframe life
- Due regard radar for safe separation
- Anti/de-ice, bird strike, and lightning protection
- Able to descend to lower altitudes for positive identification
- Communications bandwidth management
- Commercial off-the-shelf open architecture mission control system
- Net-ready interoperability solution

## PAYLOAD (360-DEGREE FIELD OF REGARD)

- Multi-Function Active Sensor Active Electronically Steered Array (MFAS AESA) radar
  - 2D AESA
  - Maritime and air-to-ground modes
  - Long-range detection and classification of targets
- MTS-B multi-spectral targeting system
  - Electro-optical/infrared
  - Auto-target tracking
  - High resolution at multiple field-of-views
  - Full motion video
- AN/ZLQ-1 Electronic Support Measures
  - All digital
  - Specific Emitter Identification
- Automatic Identification System
  - Provides information received from VHF broadcasts on maritime vessel movements

## SPECIFICATIONS

Propulsion..... Rolls-Royce AE3007H  
 Endurance ..... 24+ hours  
 Length ..... 14.5 metres (47.6 feet)  
 Wingspan ..... 39.9 metres (130.9 feet)  
 Height ..... 4.7 metres (15.3 feet)  
 Weight ..... Max design gross take-off: 14,628.4 kilograms (32,250 pounds)  
 Airspeed ..... 320 knots (approx. 357 miles per hour)  
 Ceiling ..... 18,288 metres (60,000 feet)  
 Range ..... 8,200 nautical miles (15,186.4 kilometres); max un-refuelled range  
 Crew ..... 4 per ground station (Air Vehicle Operator, Mission Commander/Comms., 2 Sensor Operators)

# MQ-4C TRITON SYSTEM CAPABILITIES

## ENGINE

Triton is powered by a Rolls-Royce AE 3007 turbofan engine that features 8,500 lbs of thrust and 23+ million hours of demonstrated reliability.

## ESM

Triton's Electronic Support Measures (ESM) identify and locate signals emitted from maritime vessels.

## MFAS RADAR

Triton's multifunction active sensor radar provides unprecedented 360° views for detecting and identifying targets at sea.

## ENGINE INLET

Marginal weather isn't a problem for Triton, thanks to a heated engine inlet that prevents ice build up.

## WINGSPAN

Triton's 131 ft. wingspan helps it fly long distances and 24+ hours without refueling.

## MTS-B

The electro-optical/infrared MTS-B multi-spectral targeting system captures both hi-res images and full-motion video with multiple field of view.

## AIS

Triton's Automatic Identification System (AIS) tracks ships while identifying those that have turned their AIS off - a tactic commonly employed by criminals.

## WING INTERIOR

Located on the leading edge of the wings and v-tail, Triton's thermal/mechanical devices prevent ice build up.

# MANNED AND UNMANNED AIRCRAFT TEAMING



MQ-4C Triton

360° Sensor Suite  
 Long-Endurance Surveillance  
 Tactical Support to Operational Commanders  
 Surveillance Data Easily Shared



P-8A Poseidon

Robust Sensor Suite  
 Cue to Kill  
 Onboard Fusion  
 Large Weapons Payload

Surface Warfare  
 Detect  
 Classify/Identify  
 Track

For more information, please contact:

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Sensor Suite 360-Degree Field of Regard



Operational Range of 8,200 Nautical Miles



Monitors 1 Million mi<sup>2</sup> of Ocean in a Single Flight



Max Altitude: Above 55,000 ft

## Complementary Capabilities for Maritime Patrol

- Triton conducts wide-area surveillance mission to identify potential targets and allows manned aircrews to focus on prosecution missions
- Significant savings to manned airframes by leaving the dull, dirty and repetitive work to Triton
- The manned and unmanned mix allows assets to be used more efficiently and effectively, taking advantage of mature technology to conduct persistent wide-area surveillance