





## ABOUT US

The business of General Atomics Aeronautical Systems, Inc. (GA-ASI) is the development of transformational technologies that deliver paradigm changing results. An affiliate of privately held General Atomics, GA-ASI is a world leader in proven, reliable Remotely Piloted Aircraft (RPA), tactical reconnaissance radars, and advanced high-resolution surveillance systems. The company produces long-endurance, mission-capable aircraft with the integrated sensor and data link systems required to deliver persistent situational awareness and rapid strike capabilities.

## PREDATOR

Predator, the most combat-proven RPA in the world, continues to excel in combat missions focusing on Intelligence, Surveillance and Reconnaissance (ISR), targeting, forward air control, laser designation, weapons delivery, and bomb damage assessment. Offering unprecedented reliability, Predator has the highest operational readiness rate in the U.S. Air Force and is operational with the U.S. Navy, U.S. Government, and the Italian Air Force.

## PREDATOR B

Developed on company funding and designed after the original Predator deployments, Predator B incorporates advanced EO/IR, Lynx Multi-mode Radar, electronic support measures, signals intelligence, and multiple weapon options. Predator B is engineered to exceed manned aircraft reliability standards, is equipped with redundant avionics and flight control systems, and can be equipped with a multi-mode maritime radar for long range maritime surveillance.

Predator B-series aircraft have been acquired by the U.S. Air Force, U.S. Navy, U.S. Department of Homeland Security (DHS), NASA, the U.K.'s Royal Air Force and the Italian Air Force.

## GRAY EAGLE

The Gray Eagle Unmanned Aircraft System (UAS) is an advanced derivative of the combat-proven Predator. Originally designed for the U.S. Army's Extended Range/Multi-Purpose (ER/MP) UAS program, the aircraft offers a reliable, affordable, low-risk, and compelling, next-generation tactical UAS solution for persistent Reconnaissance, Surveillance and Target Acquisition (RSTA) and attack operations.

Gray Eagle features the same avionics as Predator B and is engineered to exceed manned aircraft reliability standards.

The long-range, long-dwell UAS is dedicated to direct operational control by Army field commanders. Its expansive mission set includes wide-area ISR, convoy protection, Improvised Explosive Device (IED) detection and defeat, close air support, communications relay, and weapons delivery missions.

## PREDATOR C AVENGER

Also developed on company funding, Predator C Avenger combines reduced radar signature, increased speed and long endurance for wide-area surveillance and time-sensitive strike missions.

The multi-mission flexible Avenger operates at speeds up to 400 KTAS, a maximum altitude of over 50,000 ft, and has 18 hours endurance. Its internal weapons bay can house 3,500 lb of sensor and munitions payloads.

## SEA AVENGER

The carrier-based Sea Avenger RPA has been designed to provide the Navy with organic, long-endurance ISR and time-sensitive strike capabilities.

Evolved from land-based Predator C Avenger, the affordable and reliable Sea Avenger is designed for aircraft carrier operations. The design includes a highly fuel-efficient engine, inlet design, retractable EO/IR sensor, internal payload space for auxiliary fuel, retractable air refueling probe, folding wings, and deck tie downs.



Sea Avenger's structure is strengthened for catapult launch and arresting cable landing operations, and is equipped with reinforced landing gear, spoilers and tail hook.

Operationally proven Predator-series mission systems are transferrable to Sea Avenger and can accelerate its readiness for carrier deployment. Proven mission systems include a federated sensor suite (EO/IR and Lynx radar), redundant avionics, voice/data communications, automatic takeoff and landing, and a mature stores management.

## GROUND CONTROL STATIONS

GA-ASI manufactures digital Ground Control Stations (GCS) that are in operation around the world. Featuring high mobility and portability, these stations allow direct, real-time control of Predator-series aircraft and may be located on land, aircraft, or ship.

GA-ASI's next-generation Advanced Cockpit GCS provides additional features designed to enhance situational awareness and improve GCS operator efficiency.

## LYNX MULTI-MODE RADAR

The Lynx Multi-mode Radar is a state-of-the-art, lightweight, high-performance, multi-function radar that operates in Synthetic Aperture Radar (SAR) and Ground Moving Target Indicator (GMTI) modes on manned and unmanned aircraft deployed throughout the world. The all-weather Lynx provides photographic-quality images through clouds, rain, dust, smoke, and fog, in daylight or total darkness, for detecting time-sensitive targets and changes on the ground that may be undetectable by EO/IR sensors.

Lynx's long-range, and wide-area surveillance capability includes high-resolution SAR imagery at slant ranges beyond effective EO/IR ranges. Additionally, its broad area GMTI scanning capability detects and tracks moving targets in real-time for cueing EO/IR sensors.

## CLAW PAYLOAD SOFTWARE

Mission-ready and combat-proven, Claw is a Windows-based integrated sensor payload control and analysis software package in use on both manned and unmanned aircraft for automatic or manual payload control and cross-cueing of multiple payloads, including radar and EO/IR sensors.

Claw provides image data integration, payload feedback and diagnostics, annotation, mensuration, and enables sensor data post-processing image analysis capabilities.

## ODIN EYE ISR SYSTEM

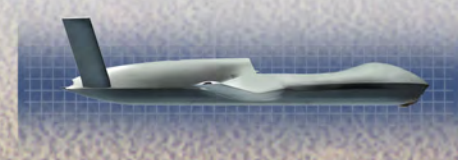
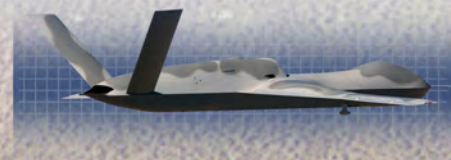
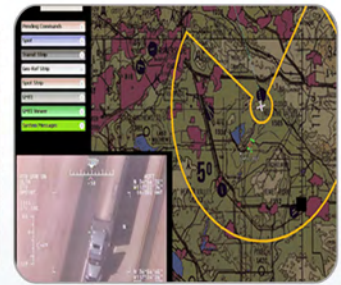
GA-ASI's Odin Eye manned ISR system provides situational awareness for troop protection, border monitoring, and vital infrastructure protection. The system consists of manned ISR aircraft (King Air-based platform) equipped with an Integrated Mission Sensor Payload (IMSP) sensor suite consisting of the Lynx radar, an EO/IR camera turret, high bandwidth Tactical Data Link (TDL), Sensor Operator Console (SOC), and the Claw integrated sensor payload control and analysis software package.

## SYSTEMS & SERVICES

Includes pilot training and support services for RPA field operations.

## TECHNOLOGY DEVELOPMENT

Incorporates solid-state lasers, electro-optical sensors, and Ultra-Wideband (UWB) data links.



## **PREDATOR-SERIES RPA**

- 2,000,000+ flight hours logged, with nearly 90% in combat
- Affordable and highly reliable
- Triple-redundant avionics and flight controls
- Redundant flight control surfaces
- Remotely piloted or fully autonomous
- Fire precision-guided weapons in combat
- Laser designate for other attack aircraft

## **PREDATOR B**

- Carries 3,000 lb of external stores (weapons, sensors, fuel pods, and more)
- Supports simultaneous operation of multiple payloads
- Provides multi-mission capabilities through modular, “plug-and-play” payload open architecture
- Engineered to exceed manned aircraft reliability standards
- Conducts both civil and military missions

## **GRAY EAGLE**

- Dedicated to direct operational control by U.S. Army field commanders
- Fielded two years early
- Carries four Hellfire missiles
- Common Data Link (CDL) line-of-sight communications/air data relay comms
- Automatic takeoff and landing reduces pilot workload
- Heavy-fuel engine offsets the need for special fuels on the battlefield
- De-icing system supports transit through weather
- Controlled by the U.S. Army One System GCS

## **PREDATOR C AVENGER**

- Jet performance and reliability
- 400 KTAS max air speed
- Internal stores carriage
- Multiple payload capacity
- Retractable EO/IR gimbal
- Reduced radar cross-section
- Six external hard points
- Flying today and available now

## **SEA AVENGER**

- Optimized for U.S. Navy carrier operations
- Capable of being fielded in advance of Navy requirements
- High technology readiness levels
- Mature surveillance and strike capabilities
- Autonomous launch and recovery
- Autonomous air-to-air refueling capability
- Survivable in contested air environments

## **ADVANCED COCKPIT GCS**

- Improved synthetic video with 3D graphics and moving maps
- 120° horizon Field-of-View (FoV) on multiple widescreen graphical overlays
- Touch-screen technology
- F-35/F-16 inspired Hands On Throttle And Stick (HOTAS) mechanization for greater ease of aircraft/sensor control
- Fused, multi-source data into a Common Operating Picture on a single display