GA-ASI Completes Initial Testing of New UAS Open Payload Architecture

SAN DIEGO – 14 September 2011 – General Atomics Aeronautical Systems, Inc. (GA?ASI), a leading manufacturer of Unmanned Aircraft Systems (UAS), tactical reconnaissance radars, and electro-optic surveillance systems, today announced that it has completed initial testing of a new UAS open payload architecture in its Poway, Calif., System Integration Lab (SIL).

The testing demonstrated the ability to host third party-developed payload control software on existing airborne and Ground Control Station (GCS) processors and was conducted in partnership with SELEX Galileo in support of the integration of SELEX Galileo's SeaSpray 7500E radar into GA-ASI's Predator B UAS.

"GA-ASI's implementation of the UAS open payload architecture greatly reduces integration complexity by allowing payload providers and mission systems integrators to develop their own payload control software and ultimately integrate their own payloads," said Frank Pace, president, Aircraft Systems Group, GA-ASI.

The new open payload architecture supports sovereign payload integration capability by enabling integrators to perform the mission management, sensor integration, sensor control, and sensor fusion tasks. Due to the aircraft's segmented avionics and open payload architectures, payloads can be integrated without the need to modify UAS or GCS software, yet integrators can access aircraft data links and communication buses, control certain aircraft power switching, and receive vehicle and sensor data feeds. The architecture also provides the framework to support networked-sensor control. GA-ASI will continue to offer payload integration services as requested by the customer.

The integration and open payload architecture demonstration are part of a joint Independent Research and Development (IRAD) effort between GA-ASI and SELEX Galileo. GA-ASI is performing the software and hardware modifications to the Predator B system to implement the open payload architecture, while SELEX Galileo is developing the airborne payload control software and delivering the radar for integration. Known as the Sovereign Payload Capability (SPC) Demonstration, the project's conclusion will feature a live flight demonstration from GA-ASI's Gray Butte Flight Operations Center in Palmdale, Calif., over the Pacific Ocean in early

December.

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