

**DEPARTMENT OF HOMELAND SECURITY
U.S. Customs and Border Protection**

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION

1. Agency and Contracting Activity.

Department of Homeland Security, Customs and Border Protection (CBP), Aviation, Maritime, and Border Technologies Contracting Division (AMBTCD), proposes to enter into a contract modification to increase the contract ceiling on a basis other than full and open competition.

2. Nature and/or description of the action being approved.

The purpose of this contract action is to establish a Class Justification and Approval (CJ&A) for other than full and open competition under the authority 41 U.S.C. 253(c)(1) and Federal Acquisition Regulation (FAR)6.303-1(d).

Approval of this CJ&A provides the necessary authorization to award an Indefinite Delivery Indefinite Quantity (IDIQ) contract for Unmanned Aircraft Systems (UAS) Hardware Equipment; and a Cost Plus Fixed Fee (CPFF) contract for engineering and logistics, and UAS operational and maintenance services, to General Atomics Aeronautical Systems, Inc. (GA-ASI), 14200 Kirkham Way, Poway CA 92064. The procurement of UAS aircraft equipment and support services maintains a common configuration baseline previously established by the MQ-9 Predator B and Guardian UAS presently in operation along the northern land, southern land, and maritime borders of the United States. This CJ&A is valid for a period of sixty-months (60) from approval date of this document. This CJ&A may cover up to an additional six-month (6) extension if CBP OAM exercises the Option to Extend Services clause.

3. Description of Supplies/Services.

The requirements associated with this CJ&A are for the procurement of up to fourteen (14) MQ-9 UAS, associated equipment, and operational and maintenance support services. This includes air vehicle pilots and mission payload operators; systems, airframe, and equipment repairs/modifications; system upgrades or engineering changes, software support services; air vehicle and mission equipment systems integration, training, material and support issues resolution and technical support services; maintaining support of ground station facilities, material and equipment procurement services, and data development and documentation. This CJ&A will not procure any services that are inherently governmental or personal in nature. The Estimated Total Value (Including Options) is \$443,090,000.00 in Tables 1 and 2 as follows:

Table 1: UAS Operational and Maintenance Services Estimated Total Value (Including Options)

PERIOD	PERFORMANCE PERIOD	LEVEL OF EFFORT	EST. COST
Base Period	12 Months		
Option Period 1	12 Months		
Option Period 2	12 Months		
Option Period 3	12 Months		
Option Period 4	12 Months		
		1,173,275 Hours	\$205,390,000

Table 2: UAS Hardware Equipment Estimated Total Value (Including Options)

PERIOD	DESCRIPTION	EST. COST
Base + 3 Options	Up to 14 UAS and associated components	\$237,700,000

4. Identification of Statutory Authority Permitting Other Than Full and Open Competition.

The statutory authority permitting other than full and open competition is 41 U.S.C. 253(c)(1) (for other Components) implemented by the Federal Acquisition Regulation (FAR) Subpart 6.302-1 entitled, "Only One Responsible Source and No Other Supplies or Services Will Satisfy Agency Requirements".

5. Demonstration That the Nature of the Acquisition Requires Use of the Authority Cited.

U.S. Customs and Border Protection (CBP), Office of Air and Marine (OAM), operates the MQ-9 UAS produced by GA-ASI. The MQ-9 UAS consists of one or more unmanned aircraft (UA), a ground control station (GCS), a C-band line-of-sight ground data terminal, a Ku-band beyond-line-of-sight broadband satellite system, a backup narrowband satellite communications terminal, and support equipment.

CBP OAM operates two (2) variants of UA: the baseline Predator B variant, and the Guardian multi-role variant, which possesses the ability to employ a land or maritime radar system. To date, CBP OAM procured from GA-ASI nine (9) MQ-9 UA (five (5) Predator B and four (4) Guardian aircraft), five (5) GCS's, associated support equipment, and maintenance and support services. One (1) additional Guardian UA and four (4) GCS's are on contract for future delivery.

On October 19, 2007, the DHS Chief Procurement Officer approved a Justification for Other than Full and Open Competition (JOFOC) for the procurement of additional UAS. OAM had assembled a fleet of four (4) Predator B aircraft with a strategic plan to procure a total of eighteen (18) UAS. Since the October 2007 JOFOC, OAM's requirement increased to 24 UAS, including a requirement for a maritime-capable UAS. To meet this maritime requirement, CBP OAM developed, in collaboration with GA-ASI and other sub-system vendors, the maritime-capable Guardian UAS that became operational in May 2010.

CBP OAM's intent is to field a fleet of 24 standardized UA with common GCSs, provide common support to minimize total life-cycle costs, provide equivalent capabilities regardless

of aircraft stationing, standardize training requirements, and reduce operator training and proficiency burdens in the interest of safety. The MQ-9 UAS design allows the baseline UA configuration as the Predator B UAS to support overland operations or as a Guardian multi-role UAS to support maritime operations. This capability provides CBP OAM the ability to surge UAS operations in land- or maritime-focused domains in response to natural or man-made disasters, such as hurricanes, forest fires, or other events of national security significance.

GA-ASI is the only manufacturer of the MQ-9 UAS and the majority of its sub-systems, and is the only company capable of modifying a baseline MQ-9 Predator B into a Guardian UAS. At this time, there is no maritime-capable UAS in existence comparable to the Guardian UAS. Because GA-ASI maintains proprietary ownership of MQ-9 design artifacts, engineering drawings, Engineering Data for Provisioning (EDFP), manufacturing, and special tooling, procuring additional MQ-9's from GA-ASI is the only way to maintain UAS fleet commonality. GA-ASI's knowledge of the production, operation, and maintenance of the MQ-9 is so unique that a transition of OAM UAS equipment to a UAS other than the MQ-9, or support services to a company other than GA-ASI would notably impact the CBP UAS program as follows:

- significantly reduced system availability due to unfamiliarity with the MQ-9 system, including lack of specialized tooling to maintain or repair UAS components
- inability to meet necessary flight hour rates, appreciably impacting national security through decreased interdictions of contraband (e.g., illegal narcotics, undocumented migrants)
- increased risk to CBP ground units, e.g., Border Patrol agents, due to lack of overhead reconnaissance, surveillance, and target acquisition (RSTA) support
- unacceptable delays in acquiring required UAS assets, potentially leaving major areas of U.S. land and maritime borders unprotected
- increased training, personnel, and life-cycle costs associated with operating an alternative or additional UAS type
- inability to procure a maritime-capable UAS in the performance class and with the capability of the Guardian UAS, as no other UAS exists at this time that will meet approved requirements
- inability to leverage infrastructure and trained personnel of other government agencies (OGAs) (e.g., Air National Guard, U.S. Air Force) that have made significant investment in the MQ-9 UAS
- inability to surge or focus operations in land- or maritime-domains as required to meet National Security and disaster response requirements; and
- inability to quickly and efficiently develop, test, and integrate critical software revisions

CBP OAM's UAS program continuously monitors the evolving, worldwide UAS market. This continuous market assessment (refer to [Section 8](#)) has reconfirmed that GA-ASI remains the sole practical source for additional OAM UAS equipment and support services as the MQ-9 UAS is the only system that meets all of CBP's documented and approved operational requirements.

The MQ-9 UAS provides:

- Long-range, persistent Intelligence, Surveillance, and Reconnaissance (ISR)
- Configuration flexibility; Predator B for overland operations, Guardian for maritime operations
- Flexible RSTA with multiple passive and active sensors
- 3750 lb payload capacity (combined internal and external)
- High transit speed (240 kts) and efficient loiter speed (120 kts)
- 20+ hour endurance
- Altitude flexibility; surface to 40,000 feet
- Pilot in the loop; full controllability for air and ground maneuvering
- Rapid deployment capability to down-range (e.g., Source & Transit Zones) Forward Operating Locations (FOLs)
- Direct support to ground agents for interdiction
- Ability to meet stringent Federal Aviation Administration (FAA) requirements for a Certificate of Waiver or Authorization (COA)
- Proven performance; extensive ground and flight testing included successful completion of Operational Test and Evaluation (OT&E)
- System architecture and payload capacity that allows growth for new sensor technology and component upgrades
- Ability to leverage inter-agency training, logistics, and maintenance support from U.S. military MQ-9 operators

To operate in the National Airspace System (NAS), public (e.g., CBP OAM) UAS are required to obtain an FAA COA. The COA approval process requires a stringent review of UAS systems, procedures for normal and emergency operations, training, and other factors. To date, the FAA granted the OAM MQ-9 system multiple COAs for operations in the southwest border region, northern border region, southeast coastal border region, and other areas. These COA approvals are due in large part to the MQ-9's impressive safety record while operating in the NAS. The MQ-9 has more operational flight hours in the NAS outside of Restricted Airspace than any other UAS. The introduction of a new type of UAS requires the re-submission of air space risk analyses to the FAA and proof of compliance with FAA COA requirements. This will increase program costs, delay the FAA authorization to employ the new aircraft along the nation's borders by as much as 2 years, and may result in an FAA refusal to authorize the employment of the new aircraft. For comparison purposes, the air space risk analysis that CBP was required to perform in order to secure the current COA's cost over \$163K and required 10 months of effort. CBP currently has 12 active COA's and 1 pending for approval.

Since 2006, GA-ASI UAS aircraft and equipment have had to meet CBP UAS performance measures (e.g., system availability rates) and its support services have had to meet service contract performance metrics. At present, GA-ASI successfully and satisfactorily supports OAM UAS operations. Contracting with a maintenance and support service provider other than GA-ASI would result in lengthy operational downtime, as the new service provider would be unfamiliar with the MQ-9 system, would lack engineering drawings and EDFP, and would have to "reverse-engineer" maintenance and support procedures from government owned manuals. This strategy is very high risk, and the government would still remain dependent on GA-ASI for proprietary MQ-9 parts. In addition, modernization plans would be impossible without purchasing product-level engineering data and software source code.

Since delivery of the first GA-ASI MQ-9 in September 2006, the MQ-9 has been a force multiplier for DHS. Since 2006, OAM MQ-9's have flown over 10,000 hours in support of

CBP southwest, northern, and southeast coastal border security missions, contributing to the seizure of more than 33,000 lbs. of illegal drugs and the interdiction of approximately 4900 undocumented migrants. This flexible and responsive system also allows CBP to coordinate with OGAs that share similar missions, including the U.S. Coast Guard (USCG), the Federal Emergency Management Agency (FEMA), the National Oceanic and Atmospheric Administration (NOAA), and the Department of Defense (DOD). CBP OAM works with the National Guard and DOD to gain efficiencies in acquisition, testing, training, and deployment of the MQ-9 UAS.

To meet its Homeland Security requirements, CBP UAS operations must continue uninterrupted; this is only possible with MQ 9 UAS equipment and support services from GA-ASI.

6. Description of efforts made to ensure that offers are solicited from as many potential sources as is practicable.

CBP Procurement issued a Request for Information (RFI) on October 5, 2011 to conduct Market Research to identify and determine if there are potential sources, which have the capabilities to provide Contractor Maintenance and Repair Services for the GA-ASI MQ-9 Predator B Unmanned Aircraft System. This market research evaluated potential UAS candidates against technical and programmatic criteria, explained in Section 8 of this document. As a result of this market research and CBP's investment in the Predator B platform, it was determined that other sources would not be able to provide the required services in their entirety and could be a potential risk to mission accomplishment due to lack of proprietary technical, maintenance, and software data owned by GA-ASI.

Therefore, CBP Procurement will publish a Notice of Proposed Contract Action specifying CBP's intent to procure additional MQ-9 UAS equipment and support services on a Sole Source Basis from GA-ASI in accordance with FAR 5.201.

7. Determination by the Contracting Officer that the Anticipated Cost to the Government will be Fair and Reasonable.

The Contracting Officer has determined that the anticipated price(s) will be fair and reasonable based on a recent UAS Life-Cycle Cost Estimate (LCCE) and the effective use of negotiations. As required by the Truth in Negotiations Act, the offeror will provide certified cost and pricing data. OAM will perform an audit of that data to support negotiation of a fair and reasonable price. Since OAM's last MQ-9 procurement, OAM conducted a formal UAS LCCE. This LCCE utilized Government pricing data and escalation factors from six (6) prior GA-ASI contracts. This provides the government with significant insight into MQ-9 costs and is available for future contract negotiations.

8. Description of Market Research.

In accordance with FAR 5.2, CBP Procurement posted to Federal Business Opportunities solicitation #2012RFIUASOPS. This Request for Information (RFI) sought to obtain market research and identify potential sources for MQ-9 contractor maintenance in addition to the original equipment manufacturer (OEM). Potential vendors were required, at a minimum, to respond with their demonstrated capability in critical areas necessary to support the MQ-9. The following list highlights important capabilities identified in the RFI.

Minimum required potential vendor capability:

- Provide GA-ASI MQ-9 UAS maintenance and repair services (except factory conversion, factory overhaul, factory refurbishing) in accordance with OEM maintenance plans and procedures, as amended by the Government
- Provide aircraft line maintenance
- Perform launch and recovery services
- Perform scheduled and/or unscheduled maintenance
- Perform power plant and component repair and inspection
- Conduct Aircraft Conditional Inspection
- Provide Quality Assurance
- Conduct operations in accordance with proscribed safety practices
- Perform on-site and off-site/detachment maintenance
- Perform Daily/Turnaround inspections during aircraft recovery/rescue.
- Perform structural repairs and modifications
- Provide written documentation of all work performed and submit all documentation in both electronic and hard copy format in accordance with applicable requirements from OEM and Government agencies

Responding vendors were also required to respond to the following questions:

- Will additional data be required in support of MQ-9 maintenance and repair services?
 - If so, what would be the associated cost, if known?
- Do you currently provide MQ-9 maintenance and repair services?
 - If so, how many locations, number of UAS, and model UA do you support?
- Has your company had experience (in the last five years) providing UAS maintenance and repair services to a fleet of UAS in excess of twenty (20) UA in multiple locations?
- Has your company had experience (in the past five years) providing UAS maintenance and repair services for Government UAS operators?
 - Did you face any challenges?
 - If so, what challenges did you face and how did you overcome them?
- Assuming the scope of work does not change how long of a period of performance can you accurately project your costs?
- How long is your typical contractual arrangement established with vendors and subcontractors?
- What limitations of maintenance and repair services support would you have?
- Does your company have previous experience with Government contracts?
- Is your company familiar with the Government processes of contracting, billing, engineering, etc.?
- If you have previous contracts with the Government, what types of pricing arrangement did you use?
- What type of pricing arrangements would you recommend for the contract?
- In what areas does your company specialize?
- What recommendations/approaches can you offer that would provide CPB OAM insight that would result in successful Contractor maintenance and repair support for the MQ-9 UAS?

Additionally, the RFI indicated that the contract support could in no way significantly reduce system availability due to unfamiliarity with the GA-ASI MQ-9 system. This includes lack of specialized tooling to maintain or repair MQ-9 UAS components, as an inability to meet necessary flight hour rates would appreciably impact national security through decreased interdictions of contraband and increased risk to CBP ground units (e.g., Border Patrol agents), due to lack of overhead RSTA support. Additionally, the contract support must be able to surge to support focus operations in land or maritime domains as required to meet national security and disaster response requirements. The contract support must also comply with COA requirements and not jeopardize current OAM COAs.

Results of Market Research

CBP Procurement received four responses to the Sources Sought Solicitation, to include the current OEM. Of the four responses received, only GA-ASI displayed the required experience, past performance, and access to technical data that is necessary to support OAM's MQ-9 fleet without unsustainable investments in spare parts and technical documentation. Although OAM lacks a specific breakout for technical data cost, OAM is familiar with what the U.S. Air Force is paying the OEM to obtain their maintenance, and technical data package and those costs are well beyond available resources. Additionally, the USAF flies a single MQ-9 configuration that is significantly different from the four aircraft configurations that OAM employs. Lastly, OAM's five GCS configurations are dissimilar to what the USAF utilizes in hardware (HW) and software (SW).

OAM currently supports an exclusive version of the MQ-9 system SW that requires an extensive SW integration facility that OAM has procured and operates at GA-ASI's Poway facility to support the constantly evolving system SW. Due to the complexity and proprietary nature of the MQ-9 system operating SW, OAM is required to maintain a technical and contractual relationship with GA-ASI as long as we operate the MQ-9.

Two of the three non-OEM respondents have claimed experience in field maintenance of MQ-9 aircraft in very small numbers with significant material support (Government Furnished Equipment/Government Furnished Information) at government's expense. OAM cannot afford this level of investment, and currently operates by leveraging the OEM's expertise and ability to adjust production and distribution to meet OAM's unique needs. Government customers are also required to maintain a contractual relationship with GA-ASI for engineering and repairs beyond the field activity level.

Based on the stated and demonstrated capabilities of the four respondents, GA-ASI remains the only contractor with the infrastructure, personnel, and technical expertise to support CBP's fleet of 10 aircraft (nine in service with one additional UA in production).

9. Any Other Facts Supporting the Use of Other Than Full and Open Competition.

GA-ASI presently supports the CBP OAM UAS Program under contract HSBP1010C00071 that is set to expire September 30, 2012, with the projected number of UAS outlined in the CBP OAM National Strategic Plan not yet achieved.

On August 13, 2010, the President signed the Southwest Border Security Bill (H.R. 6080) into law. This Public Law 111-230 includes "Air and Marine Interdiction, Operations,

Maintenance, and Procurement', \$32,000,000, to remain available until September 30, 2012, for costs of acquisition and deployment of unmanned aircraft systems."Although this law does not specify the MQ-9 UAS, it directs CBP OAM to procure additional UAS within two years, which would most likely not have been achievable if CBP OAM were required to conduct a new Full and Open Competitive Procurement.

Additionally, the Government will incur significant duplicative cost if OAM procures an alternative "UAS-X" in lieu of the current operational fleet of MQ-9 Predator B / Guardian MRV UAS. Procurement of an additional UAS-X will add the following general Program Life Cycle Costs, currently unplanned in any CBP strategic plan and unfunded in any OAM budget:

- Research and development costs associated with the Need, Analyze/Select, and Obtain phases
- Investment costs associated with the Produce/Deploy/Support phase
- Operating and support costs associated with the Produce/Deploy/Support phase
- Disposal costs occurring after initiation of system phase out or retirement

Unique, specific costs associated with procuring an additional "UAS-X" include the following cost (other costs likely exist):

- Cost to compete and select UAS-X
- Cost to generate a Contract Specification and additional acquisition documentation for UAS-X
- Cost to procure UAS-X, including "relearning" costs associated with the production learning curve
- Cost to test, certify, and obtain approvals to operate UAS-X
- Cost to procure a unique Ground Control System for UAS-X
- Cost to procure unique support equipment for UAS-X
- Cost to procure initial spares for UAS-X
- Cost to obtain engineering data, technical drawings, and data rights for UAS-X
- Cost to operate unique facilities for UAS-X, including site activation, construction, basing agreements, etc.

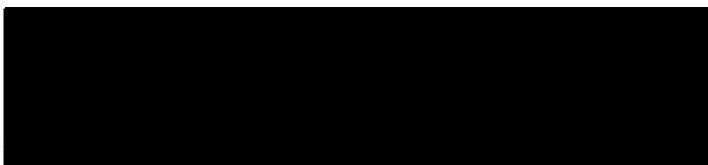
OAM incurs the following duplicative cost for the Produce/Deploy/Support phase costs for the MQ-9 and UAS-X:

- Training costs for two UAS
- Sustaining engineer costs to two Prime contractors
- Program Management costs to two Prime Contractors
- Manpower costs for two UAS
- Support services for two UAS
- Software maintenance, upgrades, and diminishing manufacturing source costs for two UAS

In summary, the Procurement and Produce/Deploy/Support phase costs place a significant burden on the Government. Moreover, these costs do not take into account the cost of the additional time required to bring another UAS-X operationally "on-line," which is likely to

exceed 18-24 months; this will jeopardize the OAM mission by triggering critical mission shortfalls highlighted in Section 5 of this CJ&A, and may jeopardize meeting statutory mandates in Public Law 111-230.

10. **A Listing of the Sources, if Any That Expressed, in Writing, an Interest in the Acquisition.**



11. **A Statement of the Actions, if Any, the Agency May Take to Remove or Overcome Any Barriers to Competition Before Any Subsequent Acquisition for Supplies or Services Required.**

The UAS market remains limited and specialized in nature, and since the initial 2005 competitive procurement, the UAS Program Office has monitored the evolving, worldwide UAS market. As an example, when CBP's maritime UAS requirement emerged in 2007, it was determined that no maritime-capable UAS existed, therefore CBP OAM developed the Guardian UAS from the Predator B. OAM will continue to monitor the UAS market for competitive systems that meet approved requirements.

12. **Planning and Funding Statement.**

This requirement does not result from a lack of planning or the expiration of funds; rather, it is in support of the CBP Commissioner's Acquisition Decision Memorandum signed June 17, 2008, and the CBP Strategic Air and Marine Plan (STAMP) update submitted July 1, 2010, both of which document OAM's plans for a fleet of 24 UA and supporting systems. The GA-ASI MQ-9 UAS provides the best value solution to OAM's documented and approved operational requirements and programmatic constraints. With thirty-eight percent (38%) (9/24) of planned systems on-line, MQ-9 operations are mature, well understood, and a critical component of DHS's daily Homeland Security campaign. The operational capability and flexibility provided by the Predator B / Guardian MRV UAS combination is unmatched by any other UAS currently available. To procure an alternative system and transition to a UAS other than the MQ-9, or support services to a company other than GA-ASI would significantly increase UAS program costs and detrimentally impact national security.