

Advance Notice to Industry of Next Generation Unmanned Aerial System (NG UAS) Inputs to UAS Concepts, System, Missions, Concepts in Jul 08

Solicitation Number: Special_Notice_XR_Next_Gen_UAS

Agency: Department of the Air Force

Office: Air Force Materiel Command

Location: ASC - Aeronautical Systems Center

Solicitation Number:

Special_Notice_XR_Next_Gen_UAS

Notice Type:

Special Notice

Synopsis:

Added: May 15, 2008 2:53 pm

15 May 08 - Advance Notice to Industry of Near Future RFI

Aeronautical Systems Center, Capabilities Integration Directorate (ASC/XR) wishes to give advance notice of an anticipated request for information announcement to gather information on system concepts for a Next Generation Unmanned Aerial System (NG UAS). Specifics on submittal date, time and location and content will be provided in the RFI announcement anticipated end-May 2008. Industry will be requested to provide inputs to the NG UAS concept, system, missions, and key features described in paragraph A) - D) below by mid-July 2008.

A. The Air Force Materiel Command (AFMC) in support of the Air Combat Command (ACC) is interested in reviewing concepts for a NG UAS. The capability to detect, track, and precisely engage Time Sensitive Targets (TSTs) has been acknowledged as a highly important military need in the current war on terror. The MQ-1 Predator has proven to be a versatile system: an unmanned, remotely piloted air vehicle able to carry a variety of weapons to prosecute ground targets. The need for greater speed, range, altitude, and payload has led to the latest version, the MQ-9 Reaper. Even with incremental improvements, however, specialized and demanding hunt and kill missions with support of troops on the ground push the MQ-9s beyond the limits of its capabilities and present serious effectiveness issues. This leaves room for significant improvement and innovation in system performance needed to address future advisory threats that will exist in 2015 and beyond timeframe.

B. The NG UAS is envisioned to be a synergistic system consisting of an airframe, mission control station, sensor suite, and weapon suite. Integrated system solutions that can achieve capabilities much greater than current MQ-9's while being supportable and remaining relatively affordable are of interest. Initial system concepts should include proven and emerging technologies with an anticipated TRL of 6 by 2010 for anticipated IOC of 2015. The next generation system should provide significantly enhanced capability in the following areas:

- Greatly reduced target prosecution timelines in increased assuredness of information for TST/Weapons of Mass Destruction and other high value targets
- Enhanced survivability in increased threat environments including jamming, and chemical and biological.

- Enhanced ISR with wider area persistent, all-weather multi-spectrum sensors, increased situational awareness
- Automation for reduced manpower tasking with the intent to provide increased situational awareness
- Integrated and multi-level secure sensor and communication network
- Multi-role reconfigurable mission control station providing maximum situation awareness from sensors
- Mission adaptable modular payload allowing various ISR/killer system configurations for maximum flexibility in single or multi-ship operations

C. Key missions the NG UAS should be capable of performing/supporting:

- Limited Interdiction (all low and some med threat environments)
- Close Air Support / Forward Air Control - Airborne (all low and some med threat environments)
- Combat Search and Rescue Support (all low and some med threat environments)
- Limited Suppression of Enemy Aircraft Defenses (all low and some med threat environments)
- Joint Maritime Operations Support (all low and some med threat environments)
- ISR (all low and some med threat environments)
- Force Protection (identifying, and neutralizing threats such as IEDs, mortar tubes, and rocket sites)

D. Key features of interest for the NG UAS:

- Affordable, reliable and supportable air vehicle with improved maneuverability and time on station than current MQ-1 and MQ-9 platforms
- High subsonic dash speed
- Ability to maintain operations and support in extreme climatic environments and adverse weather conditions
- Ability to maintain operations in GPS/SATCOM jammed/spoofed airspace
- Reduced susceptibility in low to medium threat environments
- Self-deployable
- Modular, adaptable, and upgradeable vehicle architecture integrated with modular, adaptable, and upgradeable mission control station architecture for multi-mission capability either in single or multiple ship formation
- Mission Specific Tailoring - Adaptable system (sensors, payload, C2)
- Improved payload capacity (up to twice as much) over the current MQ-9
- Internal and external carriage of weapons and sensors
- Weapons payload of mixed/modular weapons capable of precise and scalable weapon effects
- Modular sensor suite
- Fleet Compatible - Sense & Avoid, Terminal Area Operations, Airspace Management, Net Centricity and Interoperability (i.e. TCDL or equiv.)
- Adaptable for long term component development (upgradeable, spirals)
- Supportable by existing Air Force logistics infrastructure

E. The submitted documentation becomes the property of the U.S. Government and will not be returned. No solicitation documents exist at this time. This is NOT an Invitation for Bid or a Request for Proposal. The Government does not intend to award a contract on the basis of this advertisement. This is a request for information/market research announcement for planning purposes. The Government will not reimburse costs associated with the documentation submitted under this request except as an allowable cost under other contracts as provided in subpart 31.205-18, Independent Research and Development and Bid and Proposal Costs, of the Federal Acquisition Regulation. Although the "proposed" may be used in this inquiry, your response will be treated as information only and will not be used as a proposal.

Contracting Office Address:

2275 D Street

Wright-Patterson AFB, Ohio 45433-7218

Place of Performance:

N/A

United States

Primary Point of Contact.:

Ms. Lee Huntington,

Contracts:

lee.huntington@wpafb.af.mil

Phone: 937-255-5755

Secondary Point of Contact:

Mr. Patrick Fillingim,

Programmatic:

patrick.fillingim@wpafb.af.mil

Phone: 937-904-4417