Flyweight Assault Machine Gun - (FAMG)

PROBLEM STATEMENT

USSOCOM through NSWC Crane is seeking a light weight, man portable, belt-fed weapon chambered in 5.56x45mm to act as the life cycle replacement for the aging MK46 series of weapons. The goal is to replace the weapon while integrating advancements in material, manufacturing, and technology to provide the operators with a technically superior weapon. This weapon system will allow an operator to effectively shoot, maneuver, and lay down suppressive fire. Improved recoil of the weapon system will allow the operator to effectively engage targets at all distance within its effective range. The system will be interoperable with USSOCOM's suite of Visual Augmentation Systems and Weapon Accessories (VASWA).

PROPOSED SOLUTION

A successful solution will be contingent on the completion of a virtual pitch day, Limited Safety, User Evaluation, Product Verification Testing (PVT), and Operational Testing (OT). Some of the technical attributes are listed below. A solution brief's Technical Merit and Relevance will be based on the ability to meet the primary attributes and the cumulative evaluation of the secondary solution attributes/capabilities:

Primary Attributes (KPP):

- The FAMG maximum weight with standard rail interface, carry handle, bipod attached, buttstock, and barrel shall be less than or equal to 11.5 lbs with a goal weight of 10 lbs. Sights and other accessories will not be included in the weight requirement.
- The FAMG shall have a maximum length of 39 inches, with a goal of reducing to 35 inches. Measurement will be taken with buttstock collapsed (not folded), to the muzzle device.
- The FAMG safety selector shall have firing mode of Safe/Automatic preferred, or Safe/Automatic/Semi-Automatic is acceptable.
- The FAMG shall have a Class I Mean Round Between Stoppages (MRBS) of 1,400 rounds, with a goal of increasing that to 2,000+ rounds.
- The FAMG shall have a Class I Mean Round Between Essential Function Failure (MRBF) of no less than 1,800 rounds.
- The FAMG shall have a Class II or III Mean Round Between Essential Function Failure (MRBF) of no less than 15,000 rounds.
- The FAMG shall have an effective range of no less than 500m for area targets.

Secondary Attributes (KSA):

- The FAMG should have a single-shot dispersion Average Extreme Spread (AES) not to exceed 10 Minute Of Angle (MOA) at 100m.
- The FAMG should have a burst dispersion Average Extreme Spread (AES) not to exceed 11 MOA at 100m.
- The FAMG should have zero stoppages when weapon and ammunition are exposed to extreme temperatures ranging from -20°F to +165°F upon completion of TOP 3-2-045 Extreme Temperatures.

- The FAMG should be capable of safely firing 5.56x45mm linked ammunition DODICS, and 5.56mmx45 high pressure ammunition.
- The FAMG should have a quick-change barrel with the ability to swap the barrel in 30 seconds or less.
- Manual of arms and barrel changes should not be significantly impeded by DVO-clip-on interface manipulation (T), should not be impeded (O).
- The FAMG should have 15 inches of total MIL-STD 1913 picatinny rail at the 12 o'clock position (T).
- The FAMG should have 7 inches of total MIL-STD 1913 picatinny rail at the 6 o'clock position (T).
- The FAMG should have no less than 4 useable M-LOK slots at the 3 and 9 o'clock positions of the handguard to allow for mounting of enablers and accessories (O).
- The FAMG should be capable of functioning with MAS Optics, Clip-on night vision devices, aiming lasers, and/or fire control systems in accordance with appropriate eye relief standards (T).
- The FAMG should demonstrate in Developmental Testing 100,000 mean round receiver life (T), 200,000 (O).
- The FAMG should demonstrate in Developmental Testing 15,000 mean round barrel life (T), 20,000 (O).
- The FAMG recoil impulse should be sufficiently low as to facilitate effective employment of the FAMG to its max effective range day or night (T).
- The FAMG bipod should be capable of being rapidly deployed and stowed, adjustable for height and stable enough to permit delivery of the firing rate throughout the effective range. Bipod should lock upon loading to eliminate pan and tilt (T).
- FAMG should be supplied with a training conversion kit to utilize the suite of 5.56mm training munitions (T).
- The FAMG should be capable of functioning while pulling the equivalent weight of 100 linked rounds of the selected caliber cartridge weight.
- The FAMG should include an ammunition storage mounting point (equivalent to MK46) and ammunition storage system that can secure a minimum of 100 linked 5.56mm rounds.
- The FAMG should have a minimum cyclic rate of 400 rpm and a maximum cyclic rate of 650 rpm.
- The FAMG should support left-hand feeding of belted ammunition.
- The FAMG receiver should display identification markings addressing weapon nomenclature and serial number.
- The FAMG should not present a safety hazard to the operator if fired with an obstructed bore.
- The FAMG should have a side folding, collapsible buttstock that locks into position and allows charging and firing of weapon.
- The FAMG should have a 2 position/folding charging handle.
- The FAMG should be capable of integrating into existing pintle and/or swing arm mounts.
- All flash hiders/muzzle devices should be removable at the organizational level with standard tools.
- The FAMG should have a system to positively retain ammunition on the feed tray while the top cover is open.
- Will not present an unintentional releasing of the bolt or movement of the safety when tested in general accordance with the TOP-2-3-045 Rough Handling – Drop Test.

SUBMISSION GUIDANCE

PHASE I – White Papers

White papers shall include information on the estimated cost per weapon, an estimated timeline to deliver the prototypes, and any risk proposers foresee with the development of the weapon (to include concerns with the above

technical aspects). All white papers must contain images of the proposed weapon and speak to the attributes above. A minimum technical readiness level (TRL) of 7 is required.

White papers will consist of:

Coversheet
5 pages 12-point font OR 15 slides in power point
Requested pictures as exhibitions or attachments

Pictures and coversheets do not count towards the total page count mentioned above

All white papers will be retained by the Government for a period of 24 months, and proposers may be contacted by the Government to gauge interest within that time to continue with the proposer's solution. Proposers are not guaranteed to be contacted if not chosen after down-selection nor are they beholden to perform if they no longer wish to carry forward with their original proposal.

All other procedures will follow the originally posted CSO N0016425SC0001.

Phase II – Pitch Day

If selected to move forward from the white paper evaluation, then proposers will be asked to participate in a virtual pitch day. The pitch day will consist of a virtual meeting between the proposer and the GOV.

Pitch duration will not exceed 30 minutes to include questions and answers.

Location: Virtual.

Phase III – Request for Prototype Proposal (RPP)

RPP process will remain in alignment with the original CSO N0016425SC0001.

An individual proposer's or team of proposer's should not submit multiple solution briefs to the AOI, unless each individual solution is substantively unique. If submitted as a team, the first page of the solution brief should list each company on the team and a primary point of contact for each company on the team as well as the lead proposer's and point of contact for the overall team.

NOTE: In accordance with NSWC, Crane CSO N0016425SC0001: The government reserves the right and ability to facilitate introductions of proposer's with complementary capabilities. If teaming introductions by the government are provided, a proposer's is not obligated to act on the recommendation. If a proposer's elects to move forward in accordance with a government recommended teaming arrangement, a Phase II pitch deck will be requested by NSWC, Crane in order to facilitate a complete evaluation of the jointly proposed solution.

FOLLOW-ON PRODUCTION

Companies are advised that any prototype Other Transactions (OT) agreement awarded in response to this Area of Interest may result in the award of a follow-on production contract or transaction without the use of further competitive procedures. The follow-on production contract or transaction will be available for use by one or more organizations in the Department of Defense and, as a result, the magnitude of the follow-on production contract or

transaction could be significantly larger than that of the prototype OT. As such, any prototype OT will include the following statement relative to the potential for follow-on production: "In
accordance with 10 U.S.C. 4022(f), and upon a determination that the prototype project for this transaction has been successfully completed, this competitively awarded prototype OT may result in the award of a follow-on production contract or transaction without the use of competitive procedures."

ELIGIBILITY REQUIREMENTS

This solicitation will be awarded in accordance with the Commercial Solutions Opening (CSO) process detailed within N0016425SC0001 Naval Surface Warfare Center, Crane's Commercial Solutions Opening posted to SAM.gov. In accordance with 10 U.S.C. 4022(d), at least one of the following conditions must be satisfied to enter into a prototype OT agreement: (A) at least one nontraditional defense contractor or nonprofit research institution participating to a significant extent, (B) all significant participants are small businesses or nontraditional defense contractors, or (C) at least one third of the total cost of the prototype project is to be paid out of funds provided by sources other than the Federal Government.

White papers must be submitted electronically in PDF format to POC's listed below via email by June 18th, 2026, 12:00 PM EDT.

Questions or clarifications may be directed to NSWC, Crane POC for Q&C at email by Q&A Deadline, June 14th, 2026.

Late submissions will not be considered.

Confidentiality

All information provided in this RFS and subsequent proposals will be treated as confidential and used solely for the purpose of this evaluation. Vendors are expected to maintain confidentiality regarding proprietary information shared during the process.

Other information

Contractors form the following company, or companies, will be advising the Assessment Team

Frontier Technology Inc. Defense (FTI Defense)
4141 Colonel Glenn Hwy, STE 140
Beavercreek, OH, 45431

IQ SIG
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Bethesda, MD 20814

Contact Information

For inquiries or submissions, please contact:
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NOTE: Please navigate to the NSWC Crane CSO N0016425SC001 and read in full before submitting against this AOI.

Link:

To ensure you are reading the most up to date version, navigate to the top right of the posting and in the drop down ensure that the drop down says, “Current Version.”