



DEPARTMENT OF THE AIR FORCE
UNITED STATES SPACE FORCE
SPACE SYSTEMS COMMAND

18 Sept 2026

MEMORANDUM FOR A REQUEST FOR INFORMATION (RFI)

FROM: Space Systems Command

SUBJECT: Request for Information for future Rendezvous, Proximity Operations (RPO) Threat Response (RTR) VICTUS Responsive Launch Space Vehicle (SV)

1. Description

The purpose of this RFI is to conduct market research and identify capable industry partners, innovative approaches, and potential solutions for Rendezvous, Proximity Operations, and Docking (RPO-D) spacecraft designed for responsive launch and tasking in FY29 and beyond. Specifically, this RFI seeks to gather technical capabilities, clearance levels, and facility security parameters. The collected information will refine the Government's acquisition strategy and shape future program requirements.

1.1. Background

The Space Systems Command (SSC), System Delta 89 (SYD 89), Space Safari program rapidly acquires, integrates, and deploys space systems to address urgent combatant commander needs and emerging threats outside traditional programs of record. To achieve this, the office seeks innovative, cost-efficient solutions for unpredictable mission requirements.

2. Scope

This RFI seeks to identify payload-agnostic space vehicle architectures capable of seamlessly integrating and hosting diverse vendor-provided payloads and Government-Furnished Equipment (GFE).

2.1. Design Reference Missions (DRMs)

The anticipated DRMs may include but are not limited to the following operational profiles:

- 2.1.1. Maintain integration compatibility with the to be determined (TBD) designated launch interface control document (ICD) and sustain a continuous readiness posture (defined further Section 2.2.3) to execute rapid-response deployments in support of emergent, undefined mission profiles across diverse orbital regimes.
- 2.1.2. The mission concept targets a tasking-to-launch timeline of fourteen (14) calendar days, initiated directly from a storage posture at the space vehicle (SV) factory/storage site and/or at the launch site.
 - 2.1.2.1. If provided with a GFE launch solution and ground system, respondents should highlight any other critical dependencies on external segments needed to meet this timeline and support this sustained storage state.

- 2.1.3. Once on orbit, be capable of RPO-D with resident space objects (RSOs).
- 2.1.4. Once on orbit, be capable of moving within established orbital plane to access different RSOs.

2.2. Space Vehicle (SV) Requirements

The anticipated requirements detailed below, the following standard definitions apply:

- [T] = Threshold
- [O1] = Objective Level 1
- [O2] = Objective Level 2

Note 1: Objective levels are self-contained within requirement categories and are not intended to be linked (e.g., Orbit [O1] is not related to Payload Manifest [O1])

Note 2: Unless enveloped (e.g., increasing mass or power numbers), [O1] and [O2] within a single requirement category are not intended to be linked (e.g., Orbit [O1] is not related to Orbit [O2])

2.2.1. Operational Orbital Ranges

Orbit Requirement	Regime / Baseline	Altitude Range	Threshold Life	Objective Life
[T]	LEO (Low Earth Orbit)	500 – 1,500 km	1 year	3 years [O1] / 5 years [O2]
	MEO (Medium Earth Orbit) Low	1,500 – 4,000 km	4 months	6 months
	MEO High	4,000 – 10,000 km	1 year	3 years [O1] / 5 years [O2]
[O1]	LEO	500 – 1,500 km	1 year	3 years [O1] / 5 years [O2]
	MEO Low	1,500 – 4,000 km	4 months	6 months
	MEO High	4,000 – 10,000 km	1 year	3 years [O1] / 5 years [O2]
	MEO – GEO (Geostationary Orbit)	10,000 – 36,000 km	1 year	3 years [O1] / 5 years [O2]
[O2]	LEO	500 – 1,500 km	1 year	3 years [O1] / 5 years [O2]
	MEO Low	1,500 – 4,000 km	4 months	6 months

Orbit Requirement	Regime / Baseline	Altitude Range	Threshold Life	Objective Life
	MEO High	4,000 – 10,000 km	1 year	3 years [O1] / 5 years [O2]
	GTO (Geostationary Transfer Orbit)	GTO (500 x 35,786 km)	1 year	3 years [O1] / 5 years [O2]

2.2.2. Payloads & Interfaces

Modular Open System Architecture (MOSA) is intended to allow for earlier payload testing and late-stage payload swaps.

Parameter	Threshold [T]	Objective [O]
Payload Interface ¹	Utilize MOSA between bus and payloads	Handle-compliant interface
GFE Payload Mass ²	Accommodate NTE (Not to Exceed) 53 kg	Accommodate NTE 150 kg
GFE Payload Power ²	Accommodate NTE 100 W OAP (Orbit Averaged Power)	250 W OAP [O1] / 450 W OAP [O2]

¹: The Handle ICD is delivered as Government Furnished Information (GFI) with this RFI. Other MOSA systems are acceptable, but a Handle compliant interface must be considered

²: The GFE Payload Size, Weight, and Power (SWAP) values are in addition to vendor-supplied payloads addressing the Space Domain Awareness (SDA) and RPO requirements

2.2.3. Responsive Capabilities

Capability Area	Threshold [T]	Objective [O]
Payload Manifest Modifications ³	Integrate & ship within 60 calendar days	40 calendar days [O1] / 10 calendar days [O2]
Vehicle Readiness (Baseline/Payload Manifest Unmodified)	Ship to launch site within 7 calendar days	N/A
Vehicle Readiness (Non-Baseline/Payload Manifest Modified per ³)	Ship to launch site within 60 calendar days	45 calendar days [O1] / 14 calendar days [O2]

Capability Area	Threshold [T]	Objective [O]
SV Storage at Contractor Facility	2 years	4 years
Launch Callup (Readiness Level 1 (RL1)) ^{4,6}	Launch within 14 calendar days of Notice to Launch (NTL) (maintained through life of SV)	N/A
Launch Callup (RL2) ^{5,6}	Launch within 36 hours of Notice to Launch (NTL) (maintained for three months)	Launch within 36 hours of Notice to Launch (NTL) (maintained for six months)
Launch Callup (RL3) ^{5,6}	N/A	Launch within 12 hours of Notice to Launch (NTL) (maintained for one month)
Launch and Early Orbit phase (LEOP) Execution	Complete within 24 hours	Complete within 8 hours

³: Integrate a non-baseline payload and ship the SV to the launch site within the following timelines, provided the payload is compliant with the spacecraft-to-payload ICD, SWAP, other system constraints, and has been previously assessed for all required connections and load cases (e.g., Payloads A – D are provided as GFE options with Payload A being the baseline. Payload modifications would be limited to going from Payload A to one of Payloads B – D)

⁴: RL1 is intended to be actioned while the SV is in storage at the factory

⁵: RL2/3 SV starting location is To Be Refined (TBR) (factory storage or launch site storage)

⁶: Launch callup is known to be highly dependent on factors outside of the SV's control (ref 2.1.2.1), but the SV should be capable of the expressed timeline(s)

2.2.4. Space Vehicle Capabilities & Subsystems

Subsystem / Requirement	Threshold [T]	Objective [O]
Space Domain Awareness (SDA) ⁷	< 8 cm resolution at 10 km	< 4 cm resolution at 10 km [O1] < 2 cm resolution at 10 km [O2]
RPO-D Capability ^{7,8}	Capable of RPO-D (0-meter Point of Closest Approach (POCA)) of space debris and cooperative RSOs	N/A
Propulsion Delta Velocity (ΔV) ¹⁰	> 500 m/s (at full payload mass)	> 700 m/s [O1] / > 1,900 m/s [O2]

Subsystem / Requirement	Threshold [T]	Objective [O]
Launch ICD Compliance	Small Launch Interface Spec (SLIS)	SLIS and Port Launch Users Guide (PLUG)
Encryption Standards	NSA Type-1 Encryption (SV & Data)	N/A
Integration Space Clearance Level	Controlled Unclassified Info (CUI)	Sensitive Compartmented Information Facility (SCIF) [O1] / Special Access Program Facility (SAPF) [O2]
Telemetry, Tracking and Command (TT&C) Communications	S-band (Space-Ground Link System (SGLS) + Unified S-Band (USB))	N/A
Mission Downlink ⁹	X-band	N/A

⁷: Payload to be provided by vendor

⁸: Docking/connection hardware will be GFE and SWAP is encompassed within the provided GFE payload information

⁹: An example of mission data is images captured as part of the SDA mission

¹⁰: The propulsion system shall provide sufficient thrust to enable impulsive maneuvers. Specifically, the thrust level shall be high enough such that maneuver burn times are negligible compared to the orbital period, allowing maneuvers to be modeled as instantaneous velocity changes (Δv) rather than finite-burn, low-thrust trajectories.

2.2.5. Compliance Frameworks

Typical compliance documents not included in this RFI (e.g., Orbital Debris Mitigation Standard Practice (ODMSP)) will be formally applied to subsequent program acquisitions.

2.2.6. Commercial Off-the-Shelf (COTS) usage

Maximize the utilization of Commercial Off-the-Shelf (COTS) parts and assemblies to reduce the cost and schedule.

2.3. RFI Specific Questions

Responses to the RFI must include answers to the following technical and organizational questions (2.3.1 – 2.3.5) within their submission:

2.3.1. Security Posture

To evaluate industry's capacity to meet the stringent security demands of this program and establish baseline capabilities, please detail (UNCLASSIFIED ONLY) your organization's current security posture and facility infrastructure by addressing the following questions:

- 2.3.1.1. Describe your organization's current capability to receive and execute a DD Form 254. What is the highest classification level your company is currently authorized to support under an active DD Form 254?

- 2.3.1.2. State your organization's current Facility Clearance level. What safeguarding level (e.g., Secret, Top Secret, or None) is your facility currently approved for?
 - 2.3.1.3. If relevant, identify and detail all secure, classified, or controlled networks your organization currently operates, maintains, or has authorized access that are relevant to the space environment and/or business unit.
 - 2.3.1.4. If relevant, provide the total number of cleared personnel within your organization that are relevant to the space environment and/or business unit. Please break down these numbers by cleared level (e.g., Secret, TS, TS/SCI) and indicate how many currently possess active Special Access Program (SAP) eligibility.
 - 2.3.1.5. Identify the specific government agency, department, or program that currently sponsor your organization's clearances and/or SAP accesses that are relevant to the space environment and/or business unit.
 - 2.3.1.6. If relevant, detail your accredited cleared facilities applicable to space vehicle design, analysis, manufacturing, and/or integration. What is the square footage, location, utilization (office/assembly area), and specific accreditation type (e.g., SCIF, SAPF) of your current physical secure spaces?
- 2.3.2. Digital Engineering (DE) and Model Based Systems Engineering (MBSE)
- 2.3.2.1. Can your organization support a Digital Engineering (DE) and Model-Based Systems Engineering (MBSE) approach as defined in DoDI 5000.97 for any subsequent formal solicitation?
 - 2.3.2.2. Describe your ability to fully utilize GFI provided as Digital Models/Artifacts, and other data sets that use DE and MBSE methods and software tools to document the Government Reference Architecture (GRA)?
 - 2.3.2.3. Identify any technical hurdles or tool incompatibilities regarding interpreting GFI models within your proprietary DE ecosystem and MBSE tools and methods?
- 2.3.3. Flight Heritage & Timeline Feasibility
- 2.3.3.1. Detail your organization's current and future flight heritage (orbits, payloads, ground segments, frequencies, and government clients).
 - Past: Since 1 Jan 2021
 - Future: Planned events through 1 Jan 2028
 - 2.3.3.2. Address your ability to meet the company flight heritage requirement: having at least two (2) LEO vehicles or one (1) GEO vehicle successfully operating by 1 Jan 2027 ([O1]) or 1 Oct 2027 ([O2]).
 - 2.3.3.3. Address your ability to meet the FY29 timeline for SV delivery.
- 2.3.4. Requirements & Feasibility Feedback
- 2.3.4.1. Provide detailed feedback on the feasibility of the requirements listed in Section 2.2. Highlight specific requirements that drive extreme schedule, risk, or technical difficulty.

- 2.3.4.2. Suggest industry best practices, innovative approaches, commercially available solutions, or alternative architectures outside these requirements that can successfully close the DRMs.

2.3.5. SV Architecture

- 2.3.5.1. Specifically provide an explanation of how your vehicle would function and survive in all orbits (e.g., low MEO's radiation environment).
- 2.3.5.2. Provide an SV Block Diagram (including planned components architectures).

Respondents are requested to address the following technical and organizational questions within their submission:

2.3.6. DE and MBSE

- 2.3.6.1. Describe your current DE and MBSE ecosystem tools and software which you would use, or are currently using, to support design and engineering activities to support future contracts?
- 2.3.6.2. Do you possess internal DE or MBSE plan and documentation and/or style guides that you use to assist in the exchange of models, digital artifacts, or digitally formatted information for the exchange of data between the government/subcontractors?

2.3.7. SV Architecture

Provide high-level architectural definitions and engineering estimates for the proposed SV:

- 2.3.7.1. SV Mass Equipment List (MEL)
- 2.3.7.2. SV Power Equipment List (PEL)
- 2.3.7.3. SV Bill of Materials (BoM)
 - Include specific callouts for availability and if an item is long lead

3. Government Furnished Information

To facilitate responses to this RFI, three sets of Government Furnished Information may be provided upon request via DoD SAFE. Those documents are:

- Handle 2.0 Interface Control Document (CUI - Distro C)
- Small Launch Interface Specification (SLIS) (CUI - Distro C)
- Port Launch User's Guide (PLUG) (CUI – Distro C)

To receive a copy of these files, reach out to SSC.SYD89.SpaceSafari@spaceforce.mil with your company name, Commercial and Government Entity (CAGE) code (Facility Clearance Level (FCL) associated CAGE code if applicable), and statement affirming that (1) your company is eligible to receive CUI – Distro C documents and (2) that your company's Information Technology (IT) system is capable of receiving and holding the documents appropriately. After confirming eligibility, a copy will be provided via DoD SAFE.

4. Submission Instructions

The Government is seeking high-level technical and security insights, capability briefs, and feedback. To be evaluated, respondents must address all Section 2 information and mandatory questions (Sections 2.3) in their entirety. Submissions must include a Rough Order of Magnitude (ROM) estimate broken down by major cost drivers (Non-Recurring Engineering (NRE), software, hardware, integration, testing, and recurring support) along with all technical, schedule, and program assumptions, specifically identifying any Government Furnished Property (GFP) or GFI dependencies. Incomplete responses will not be evaluated.

4.1.1. Company Information

Administrative Field	Respondent Input
Company Name	[Insert Company Name]
Corporate Address	[Insert Street Address, City, State, Zip]
CAGE Code / Unique Entity Identifier (UEI)	[Insert CAGE and Data Universal Numbering System (DUNS)/UEI]
Primary Point of Contact (POC)	[Insert Full Name (First, Middle Initial, Last), Title]
POC Info	[Insert Phone Number and Email]
Business Size & North American Industry Classification System (NAICS)	[Insert Business Size, NAICS Code]
Socioeconomic Status	[e.g., Service-Disabled Veteran-Owned Small Business (SDVOSB), 8(a), HubZone, etc.]

4.1.2. Capability Statement

Detail relevant experience, technical capabilities, past performance, and any existing products that address the requirements in Section 2.2 and questions in Section 2.3.

4.1.3. Schedule, Format, and Contacts

4.1.3.1. Deadline: Submission is required no later than 19 October 2026 at 1200 PDT.

4.1.3.2. Format (Choose one):

- White Paper: Maximum of 15-pages, minimum 11 pt font, and 1” margins; PDF format
- Slide Deck: Maximum of 20-pages; PDF format
- If applicable: MBSE file(s) to support your submission

4.1.3.3. Primary Submission & Technical POCs Responses: Submit responses electronically directly to the PCO, Mr. Brandon Villalpando, at brandon.villalpando@spaceforce.mil. Additionally, carbon copy (CC) the

technical POC, Mr. Michael Allen, at michael.allen.119@spaceforce.mil, and the Space Safari team at SSC.SYD89.SpaceSafari@spaceforce.mil.

- If required, DoD SAFE will be used to transfer submissions. Reach out to SSC.SYD89.SpaceSafari@spaceforce.mil when ready to submit to receive a dropoff link.

4.1.3.4. Classified Annexes: If classified information would enhance your response (e.g., to support Section 2.3.1), you can submit via authorized channels (CORE preferred) to both Mr. Brandon Villalpando and Mr. Michael Allen. Classified submissions must be accompanied by an unclassified email notification to the addresses above.

4.1.3.5. All technical questions may be directed to the SSC SYD 89 Space Safari program, at SSC.SYD89.SpaceSafari@spaceforce.mil.

- If deemed necessary, clarification and non-proprietary questions sent may be supplied to this SAM.gov posting

4.1.4. Disclaimer:

This RFI, to include all requested ROM estimates, is issued solely for information and planning purposes and does not constitute a Request for Proposal (RFP) or a promise to issue an RFP in the future. This RFI and any submitted ROMs do not commit the US Government to contract for any supply or service whatsoever, nor do they constitute a binding contract offer. All costs associated with responding to this RFI, including the development of ROM estimates, will be solely at the interested party's expense. Not responding to this RFI does not preclude participation in any future RFP, if any is issued. All submissions will become Government property and will not be returned.

Proprietary Information: The Government acknowledges that information provided in response to this RFI may contain proprietary data. Respondents must clearly mark each page containing proprietary, trade secret, or business-sensitive data. The Government will safeguard proprietary information in accordance with applicable laws and regulations. Submissions may be reviewed by Government support contractors (Advisory & Assistance Services / SETA / FFRDC) bound by appropriate non-disclosure agreements. If a respondent objects to review by support contractors, written notice must accompany the response.

BRANDON M. VILLALPANDO, CIV, DAF
Contracting Officer
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System Delta 89