ORDER FOR SUPPLIES OR SERVICES

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER

2. CONTRACT NO. *(If any)*

3. ORDER NO.
NNG14042814Q

4. REQUISITION/REFERENCE NO.

5. ISSUING OFFICE *(Address correspondence to)*
NASA Goddard Space Flight Center

6. SHIP TO:
a. NAME OF CONSIGNEE
NASA Goddard Space Flight Center
b. STREET ADDRESS
8800 Greenbelt Road
c. CITY
Greenbelt
d. STATE
MD
e. ZIP CODE
20771
f. SHIP VIA

7. TO:
a. NAME OF CONTRACTOR
b. COMPANY NAME
c. STREET ADDRESS
d. CITY
e. STATE
f. ZIP CODE

8. TYPE OF ORDER
[X] a. PURCHASE
REFERENCE YOUR: _____
Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.

[ ] b. DELIVERY – Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.

9. ACCOUNTING AND APPROPRIATION DATA

10. REQUISITIONING OFFICE
NASA/Goddard Space Flight Center

11. BUSINESS CLASSIFICATION (*Check appropriate box(es)*)
[ ] a. SMALL [ ] b. OTHER THAN SMALL [ ] c. DISADVANTAGED [ ] d. WOMEN-OWNED [ ] e. HUBZone
[ ] f. SERVICE-DISABLED VETERAN-OWNED [ ] g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM [ ] h. EDWOSB

12. F.O.B. POINT
Various

13. PLACE OF
a. INSPECTION
Destination
b. ACCEPTANCE
Destination

14. GOVERNMENT B/L NO.

15. DELIVER TO F.O.B. POINT ON OR BEFORE *(Date)*
Multiple

16. DISCOUNT TERMS

17. SCHEDULE *(See reverse for Rejections)*

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	INCO TERMS 1: FOB INCO TERMS 2: DESTINATION					

SEE BILLING INSTRUCTIONS ON REVERSE

18. SHIPPING POINT

19. GROSS SHIPPING WEIGHT

20. INVOICE NO.

21. MAIL INVOICE TO:
a. NAME
NASA/Shared Services Center
b. STREET ADDRESS *(or P.O. Box)*
Financial Management Division (FMD) Accounts Payable Bldg 1111, C Road
c. CITY
Stennis Space Center
d. STATE
MS
e. ZIP CODE
39529-6000

17(h) TOT. *(Cont. pages)*

$

17(i) GRAND TOTAL

22. UNITED STATES OF AMERICA BY *(Signature)*

23. NAME *(Typed)*
Tamika R. Seaforth
TITLE: CONTRACTING/ORDERING OFFICER

INVOICING REQUIREMENTS

Invoice should include the following: Purchase Order #, your company's Taxpayer Identification # (TIN), your Cage Code #, your Bank ABA #, Account #, and for duty-free items include EIN #52-0734375. Without this information, payment will be delayed.

SUBMIT INVOICE TO:
NASA Shared Services Center (NSSC)
Financial Management Division (FMD) – Accounts Payable
Bldg 1111, C. Road
Stennis Space Center, MS 39529
Phone#: 1-877-677-2123
Fax: 1-866-209-5415
Email: NSSC-AccountsPayable@nasa.gov

NO CHANGES UNLESS AUTHORIZED

No changes are to be made to this purchase order without the proper authorization from GSFC Procurement

PERIOD OF PERFORMANCE

45 Days After Receipt of Order (ARO)

PRICE PER

Price per

PROCUREMENT POINT OF CONTACT

Contractual inquiries should be directed to:

Ashley McQueen, Code 210.8, GSFC, Greenbelt, MD 20771, Phone 301-286-1423, Fax 301-286-1773, email at: ashley.n.mcqueen@nasa.gov

Tammy Seidel, Code 210, GSFC, Greenbelt, MD 20771, Phone 301-286-8438, Fax 301-286-0237, email at: tammy.e.seidel@nasa.gov .

TECHNICAL POINT OF CONTACT:

TBA

SECTION 1 – SCOPE OF WORK

1.1 GSFC 52.211-91 SCOPE OF WORK (AUG 2013)

The Contractor shall provide the personnel, materials, and facilities, except as otherwise specified in this order, necessary to perform the work and to furnish the items specified in the SUPPLIES AND/OR SERVICES TO BE PROVIDED clause of this order in accordance with the Statement of Work, Attachment A.

(End of clause)

1.2 GSFC 52.211-90 SUPPLIES AND/OR SERVICES TO BE PROVIDED (MAR 2014)

The Contractor shall provide all resources (except as may be expressly stated in the order as furnished by the Government) necessary to deliver and/or perform the items below in accordance with the Statement of Work (SOW), incorporated as Attachment A.

Item	Description	Reference	Schedule	Delivery Method/Addressee(s)
1	Face to Face Meetings (at Contractor's site)	As Defined in Attachment A, SOW	15 Calendar Days After Contract Award (ACA)	As Defined in Attachment A, SOW
2	Face to Face Meetings (at NASA GSFC's site)	As Defined in Attachment A, SOW	30 Days After Contract Award (ACA)	As Defined in Attachment A, SOW
3	Study Package	As Defined in Attachment A, SOW	45 Days ACA	As Defined in Attachment A, SOW
4	Cost Data	As Defined in Attachment A, SOW	45 Days ACA	As Defined in Attachment A, SOW

(End of clause)

SECTION 2 - TERMS AND CONDITIONS OF ORDER

2.1 GENERAL - OTHER THAN COMMERCIAL ITEMS

Open Market Supply or Service: This is an order for a non-commercial item or service subject to the terms and conditions of FAR 52.213-4, Terms and Conditions - Simplified Acquisitions (Other Than Commercial Items), incorporated by reference, and any additional terms and conditions incorporated by reference or included in full text.

This order incorporates the following FAR and NASA FAR Supplement (NFS) clauses by reference. See paragraph (c) of FAR 52.213-4.

SECTION 2.1 - FAR, NASA FAR SUPPLEMENT (NFS), AND OTHER CLAUSES APPLICABLE TO ORDER

2.1.1 52.213-4 TERMS AND CONDITIONS - SIMPLIFIED ACQUISITIONS (OTHER THAN COMMERCIAL ITEMS) (JAN 2014)

(c) *FAR 52.252-2, Clauses Incorporated by Reference (FEB 1998)*. This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es): see https://www.acquisition.gov/far/index.html.
For NASA FAR Supplement (NFS) clauses, see

http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm.

(End of clause)

2.1.2 52.227-14 RIGHTS IN DATA-GENERAL. (DEC 2007) - ALTERNATE II (DEC 2007)

(a) These data are submitted with limited rights under Government Contract No. _____ (and subcontract _____, if appropriate). These data may be reproduced and used by the Government with the express limitation that they will not, without written permission of the Contractor, be used for purposes of manufacture nor disclosed outside the Government; except that the Government may disclose these data outside the Government for the following purposes, if any; provided that the Government makes such disclosure subject to prohibition against further use and disclosure: **[use (except for manufacture) by support service contractors]**

(End of clause)

2.1.3 52.243-1 CHANGES - FIXED-PRICE. (AUG 1987) - ALTERNATE I (APR 1984)

2.1.4 1852.215-84 OMBUDSMAN. (NOV 2011)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and contractors during the preaward and postaward phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the contracting officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the contracting officer for resolution.

(b) If resolution cannot be made by the contracting officer, interested parties may contact the installation ombudsman, whose name, address, telephone number, facsimile number, and email address may be found at: http://prod.nais.nasa.gov/pub/pub_library/Omb.html . Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the Agency ombudsman identified at the above URL. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Contracting Officer or as specified elsewhere in this document.

(End of clause)

2.1.5 1852.223-72 SAFETY AND HEALTH (SHORT FORM). (APR 2002)

2.1.6 1852.237-73 RELEASE OF SENSITIVE INFORMATION. (JUN 2005)

(a) As used in this clause, "Sensitive information" refers to information, not currently in the public domain, that the Contractor has developed at private expense, that may embody trade secrets or commercial or financial information, and that may be sensitive or privileged.

(b) In accomplishing management activities and administrative functions, NASA relies heavily on the support of various service providers. To support NASA activities and functions, these service providers, as well as their subcontractors and their individual employees, may need access to sensitive information submitted by the Contractor under this contract. By submitting this proposal or performing this contract,

the Contractor agrees that NASA may release to its service providers, their subcontractors, and their individual employees, sensitive information submitted during the course of this procurement, subject to the enumerated protections mandated by the clause at 1852.237-72, Access to Sensitive Information.

(c) (1) The Contractor shall identify any sensitive information submitted in support of this proposal or in performing this contract. For purposes of identifying sensitive information, the Contractor may, in addition to any other notice or legend otherwise required, use a notice similar to the following:

Mark the title page with the following legend:

This proposal or document includes sensitive information that NASA shall not disclose outside the Agency and its service providers that support management activities and administrative functions. To gain access to this sensitive information, a service provider's contract must contain the clause at NFS 1852.237-72, Access to Sensitive Information. Consistent with this clause, the service provider shall not duplicate, use, or disclose the information in whole or in part for any purpose other than to perform the services specified in its contract. This restriction does not limit the Government's right to use this information if it is obtained from another source without restriction. The information subject to this restriction is contained in pages [*insert page numbers or other identification of pages*]. Mark each page of sensitive information the Contractor wishes to restrict with the following legend:

Use or disclosure of sensitive information contained on this page is subject to the restriction on the title page of this proposal or document.

(2) The Contracting Officer shall evaluate the facts supporting any claim that particular information is "sensitive." This evaluation shall consider the time and resources necessary to protect the information in accordance with the detailed safeguards mandated by the clause at 1852.237-72, Access to Sensitive Information. However, unless the Contracting Officer decides, with the advice of Center counsel, that reasonable grounds exist to challenge the Contractor's claim that particular information is sensitive, NASA and its service providers and their employees shall comply with all of the safeguards contained in paragraph (d) of this clause.

(d) To receive access to sensitive information needed to assist NASA in accomplishing management activities and administrative functions, the service provider must be operating under a contract that contains the clause at 1852.237-72, Access to Sensitive Information. This clause obligates the service provider to do the following:

(1) Comply with all specified procedures and obligations, including the Organizational Conflicts of Interest Avoidance Plan, which the contract has incorporated as a compliance document.

(2) Utilize any sensitive information coming into its possession only for the purpose of performing the services specified in its contract.

(3) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.

(4) Allow access to sensitive information only to those employees that need it to perform services under its contract.

(5) Preclude access and disclosure of sensitive information to persons and entities outside of the service provider's organization.

(6) Train employees who may require access to sensitive information about their obligations to utilize it

only to perform the services specified in its contract and to safeguard it from unauthorized use and disclosure.

(7) Obtain a written affirmation from each employee that he/she has received and will comply with training on the authorized uses and mandatory protections of sensitive information needed in performing this contract.

(8) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to the Contracting Officer, and implement any necessary corrective actions.

(e) When the service provider will have primary responsibility for operating an information technology system for NASA that contains sensitive information, the service provider's contract shall include the clause at 1852.204-76, Security Requirements for Unclassified Information Technology Resources. The Security Requirements clause requires the service provider to implement an Information Technology Security Plan to protect information processed, stored, or transmitted from unauthorized access, alteration, disclosure, or use. Service provider personnel requiring privileged access or limited privileged access to these information technology systems are subject to screening using the standard National Agency Check (NAC) forms appropriate to the level of risk for adverse impact to NASA missions. The Contracting Officer may allow the service provider to conduct its own screening, provided the service provider employs substantially equivalent screening procedures.

(f) This clause does not affect NASA's responsibilities under the Freedom of Information Act.

(g) The Contractor shall insert this clause, including this paragraph (g), suitably modified to reflect the relationship of the parties, in all subcontracts that may require the furnishing of sensitive information.

(End of clause)

2.1.7 REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFEROR (SIMPLIFIED ACQUISITIONS)

The completed provision 52.204-8, Annual Representations and Certifications, including any amended representation(s) made at paragraph (b) of the provision submitted as part of the quote are hereby incorporated by reference in this resulting order.

(End of clause)

2.1.8 1852.225-71 RESTRICTION ON FUNDING ACTIVITY WITH CHINA (FEB 2012)

(a) Definition - "China" or "Chinese-owned company" means the People's Republic of China, any company owned by the People's Republic of China or any company incorporated under the laws of the People's Republic of China.

(b) Public Laws 112-10, Section 1340(a) and 112-55, Section 539, restrict NASA from contracting to participate, collaborate, coordinate bilaterally in any way with China or a Chinese-owned company using funds appropriated on or after April 25, 2011. Contracts for commercial and non developmental items are exempted from the prohibition because they constitute purchase of goods or services that would not involve participation, collaboration, or coordination between the parties.

(c) This contract may use restricted funding that was appropriated on or after April 25, 2011. The

contractor shall not contract with China or Chinese-owned companies for any effort related to this contract except for acquisition of commercial and non-developmental items. If the contractor anticipates making an award to China or Chinese-owned companies, the contractor must contact the contracting officer to determine if funding on this contract can be used for that purpose.

(d) Subcontracts - The contractor shall include the substance of this clause in all subcontracts made hereunder.

(End of clause)

2.1.9 52.232-99 PROVIDING ACCELERATED PAYMENT TO SMALL BUSINESS SUBCONTRACTORS (AUG 2012) (DEVIATION)

This clause implements the temporary policy provided by OMB Policy Memorandum M-12-16, Providing Prompt Payment to Small Business Subcontractors, dated July 11, 2012.

(a) Upon receipt of accelerated payments from the Government, the contractor is required to make accelerated payments to small business subcontractors to the maximum extent practicable after receipt of a proper invoice and all proper documentation from the small business subcontractor.

(b) Include the substance of this clause, including this paragraph (b), in all subcontracts with small business concerns.

(c) The acceleration of payments under this clause does not provide any new rights under the Prompt Payment Act.

(End of clause)

SECTION 3 LIST OF ATTACHMENTS

3.1 GSFC 52.211-101 LIST OF ATTACHMENTS (SEP 2013)

The following documents are attached hereto and made a part of this contract:

Attachment	Description	Date	No. of Pages
A	LEO Satellite Servicing Spacecraft Bus Study Statement of Work	5/2/2014	3

(End of clause)

LEO Satellite Servicing Spacecraft Bus Study SOW

The Contractor shall conduct a detailed study of the technical compatibility and interfaces between its already available spacecraft bus and the Satellite Servicing Capabilities Office (SSCO) robotic servicing payload that may be used to conduct a refueling mission for an Earth Science satellite in low Earth Orbit (LEO), such as Landsat-7, Terra, Aqua, EO-1, Aura, or TRMM. For reference to external appendages, a client satellite model(s) (envelope drawings) will be provided. The contactor shall define modifications and additions needed to carry the robotic servicing payload and replacement propellant to orbit using its existing spacecraft bus and provide cost and schedule data to support a mission to be launched by 10/1/17. NASA will provide the following items in support of this study when the study contract is issued:

- Mission level 1 requirements
- Draft of mission level 2 requirements
- Servicing Payload mass and power estimates
- Concept of operations
- Basic dimensions of satellites to be considered for refueling

The contractor shall complete the attached table and provide the following items in support of this study:

- Detailed cost estimate, including supporting cost data:
  - Estimated price to deliver spacecraft bus (assume Firm-Fixed-Price basis)
  - Estimated cost of modifications/changes to be incorporated to meet mission requirements
  - Estimate of the systems engineering and integration and test support to be provided by the bus provider based upon the changes needed to meet the interface requirements of the servicing payload
- Schedule (contract award to delivery, including needed modifications)
- Bus to servicing payload Interface Control Document (draft version)
- Assessment of changes/modifications required to spacecraft bus to perform mission
- Dimensional CAD model
- Spacecraft bus mass, power estimates, and volume
- Launch vehicle compatibility, including mass performance margin
- Spacecraft bus system engineering manual
- The quality assurance (processes/techniques) that the offered spacecraft bus and its major subsystem have undergone. This is to determine the highest mission category and classification for NASA payloads that the proposed spacecraft bus can support. (See NPR 7120.5E, *NASA Space Flight Program and Project Management Requirements,* for guidelines for categorizing NASA missions and NPR 8705.4, *Risk Classification for NASA Payloads,* for risk classification levels for NASA payloads.)

For purposes of this study, the contractor should assume "bus" delivery to Goddard Space Flight Center (GSFC) for mission integration by late calendar year 2015 for an expected launch date of 10/1/17.

Note that the government will need to provide these data to its support contractors in order to finalize the government's feasibility assessment into which the contractor's study data will be incorporated.

Deliverables:

Face-to-Face Meetings • Contractor's site: One-hour presentation of bus capabilities and heritage; one-hour to clarify servicing payload interfaces and requirements • NASA/GSFC: One-hour presentation of bus design changes to accommodate payload interfaces; one hour to propose modifications to government concept of operations and payload interfaces to simplify mission, reduce cost, increase mission assurance.	• 15 Days ACA • 30 Days ACA
Study Package in a standard presentation format compatible with Microsoft PowerPoint , with cost information in separate spreadsheet format Supporting documents such as ICDs, CAD Models, Engineering Manuals supporting the study in appropriate electronic format.	45 Days ACA
Cost Data from the study in a format compatible with Microsoft Excel to allow the government to understand the thoroughness of the estimate for the work needed to make the changes needed to the bus	45 days ACA

Final presentation packages shall be received by 5pm EST, <<award+45 days>>.

Attachment: Spacecraft Bus Parameters

Spacecraft Bus Questionnaire

	Spacecraft Bus Specifications													
Spacecraft Bus Name	Manufacturer	Spacecraft Classification	Cost ($M)	Flight Heritage (missions or days in orbit)	Planned Launch Date (for new systems)	Spacecraft Dry Mass (kg)	Payload Mass to Polar LEO (kg)	Return Mass (if applicable) (kg)	Design Life (years)	Human Rating (if applicable) (crew size)	Propellant System Type	Propellant Capacity (kg)			Delta -V Available for Servicing Operations * (m/s)
Notes															

Spacecraft Bus Name	Launch Vehicle Compatibility	Polar Orbit Launch Site Availability	Faring Size Range (m)	Payload Envelope (m)	Operating Orbit(s)	Communication Band	Communication Up-link / Down-link Data Rate	Bus Power (V)	Pointing Accuracy (degrees)	Payload Peak / Continuous Power (W)	Payload Heat Rejection Capability (W)	On-board Data Storage (MB)	Contract Award to Delivery (months)
Notes													

* Does not include delta-v required for orbit insertion and disposal