

## **REQUEST FOR INFORMATION (RFI) FOR DESIGN, DEVELOPMENT, AND MANUFACTURE OF A VEHICLE SUPPORT POST**

### **INTRODUCTION**

National Aeronautics and Space Administration (NASA) invites potential offerors to submit a response to this RFI to find interested and qualified sources and planning information for the DESIGN, DEVELOPMENT, AND MANUFACTURE OF A VEHICLE SUPPORT POST CASTING. The Vehicle Support Posts (VSP) will be utilized on the Mobile Launcher (ML) Launch Mount (LM) for the Constellation Program to support the Ares 1 Launch Vehicle. Twelve cast post assemblies (each assembly consist of one post with two access doors) will be required. The delivery will be phased over a two year period, consisting of the delivery of the First Article and the first 4 Post assemblies in the first year, with the remaining 8 Post assemblies delivered in the second year.

The intent of this Request for Information (RFI) is to obtain information from industry to assist Kennedy Space Center (KSC) in its acquisition development. NASA reserves the right to share all information received in response to this RFI throughout NASA and to use all information submitted in response to this RFI in NASA's formulation of a solicitation seeking competitive proposals. However, any competition sensitive data should be clearly marked. Although information contained herein represents current program content and acquisition planning, it is subject to change. Response to this RFI is requested within the context of the general approach described in the following paragraphs.

### **DESCRIPTION**

The VSP assembly will consist of one large casting (the Post) and two Access Doors that are bolted to either side of the Post to cover the access holes on each side. The Post will be a hollow structure that is approximately 60 inches tall, and has a 42 inch square footprint that tapers to a 15 inch square footprint at an angle. In other words, the taper is swept forward. The front and back walls are approximately 5 inches thick, and the side wall are approximately 3 inches thick. However, the walls taper to a thick section at the bottom. There will be several protruding features for attaching additional hardware, and approximately 22 tapped holes of various sizes (the max is 2.25 inches). The total weight of the VSP will be approximately 9100 pounds (8900 for the Post, 90 per Access Door).

The VSP shall be capable of withstanding a vertical load of 1.1 million pounds, and a horizontal load (per drawing) of 500,000 pounds. The final product will be required to support the weight of the Ares 1 Launch Vehicle (4 VSPs per rocket), as well as the seaside environment and the direct blast environment. These constraints shall be considered when selection of material is considered. Final material selection will be a cooperative effort between the vendor and the government.

The Government will provide in its Request for Proposal a performance specification with Government Furnished Drawings. It will be incumbent upon each respondent to evaluate the

design for the casting process. Should minor changes to the drawings be recommended to improve the casting and avoid flaws, a cooperative effort between the vendor and the government will determine what modifications will be implemented to achieve a satisfactory casting.

### **SPECIFIC INFORMATION REQUESTED**

Responders to this RFI are encouraged to comment on any of the foregoing and to express their interest in this proposed acquisition by submitting the following information:

1. Organization name, address, describe principle activity, primary point of contact and business size.
2. Cost – Rough Order of Magnitude (ROM) for each prototype, each production unit and estimated total program cost.
3. Lead Times – Describe lead times required for prototypes and productions units.
4. Reliability – Provide reliability data for similar type of castings.
5. Experience – Describe your experience in developing and producing large, high quality (AMS 2175, Class 1, Grade C) castings, including modeling for castability and prediction of flaws.

### **RESPONSE INSTRUCTIONS**

The requested responses are for information and planning purposes only. NASA does not intend to post information or questions received to any website or public access location. NASA does not plan to respond to the individual responses. Feedback to this RFI may be utilized in formulating the Government's acquisition strategy and documents.

All responses should be provided in MS Word document format, both hard and electronic media. Font should be Times New Roman, size 12. Responses should not exceed 15 pages and should reference "RFI-KSC-VSP." Please submit responses no later than March 12, 2010 to NASA/KSC Procurement Office, ATTN: OP-ES/Erik Whitehill, Contracting Officer, Kennedy Space Flight Center, FL 32899, EMAIL [erik.c.whitehill@nasa.gov](mailto:erik.c.whitehill@nasa.gov).

This preliminary information is being made available for planning purposes only, subject to FAR Clause 52.215-3, entitled "Solicitation for Information and Planning Purposes". It does not constitute a Request for Proposal, Invitation for Bid, or Request for Quotation, and it is not to be construed as a commitment by the Government to enter into a contract. Moreover, the Government will not pay for the information submitted in response to this RFI, nor will the Government reimburse an offeror for costs incurred to prepare responses to this RFI.

No solicitation exists at this time; therefore, do not request a copy of the solicitation. If a solicitation is released it will be synopsized in the FedBizOpps and on the NASA Acquisition Internet Services (NAIS). Firms that respond to this RFI will be placed on any future mailing list for this acquisition. However, it is the potential offeror's responsibility to monitor these sites for the release of any solicitation or synopsis.