

REQUEST FOR INFORMATION (RFI) FOR GANG MATED CONNECTOR

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 6 in 1 gang mated connector assembly. The connector assembly will be used as a flight to ground interface for the Constellation Program to provide power and instrumentation commodities from the ground to the vehicle.

Approximately 2 prototypes will be needed over the next year.

The Government will provide in its Request for Proposal a performance specification with Government Furnished Drawings. It will be incumbent upon each offeror to determine the drawings suitability for use.

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.

Overall Description

The connector assembly shall consist of ground and flight halves. The ground half of the connector shall not weigh greater than 40 lbs. The connector assembly shall have a diameter of less than 12 inches. The connector assembly shall have an overall length of less than 12 inches when the ground half is mated to the flight half. The flight half shall mount to the vehicle structure and maintain a water tight seal.

The ground half connector assembly will house a total of six connectors that interface in a scoop proof and non-locking fashion with the flight half connector assembly. These connectors shall be compliant with MIL-DTL-38999 environmental specifications. The pins shall be housed in the ground half and the sockets housed in the flight half. The connectors in the assembly shall be keyed to prevent incorrect mating of the connectors. The connectors in the assembly shall be dead faced. The connector assembly shall be capable of using the following pin sizes: #4 through #22 AWG, Coax, Twinax, Triax, and Quadax contacts.

The ground half of the connector assembly shall be designed to survive a total 4 psi (blast or acoustic) launch environment. The ground half of the connector assembly shall provide a single fault tolerant release mechanism. It shall also provide a separation force

to assist separation of the ground half from the flight half. The ground half connector assembly shall provide an attach point(s) to attach a 0.25 inch wire rope which carries the load due to the draped electrical cables. This load applies 350 lbs of tension to the wire rope attach point(s). The ground half of the connector assembly shall provide an attach point(s) to attach a 0.25 inch retract lanyard that will retract the ground plate at launch count T-0. The maximum load applied to the retract lanyard during retract is 500 lbs. This retract lanyard may be attached to the release mechanism and be used to generate a release mode provided the lanyard pull to release the ground half of the connector assembly does not exceed 50 lbs.

The electrical cables shall be easily mated to and removed from the ground half of the connector assembly.

The connector assembly should be designed to facilitate mating by a single technician.

Specific Information Solicited

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 production units.
4. Reliability – Provide reliability data for similar type of devices.
5. Experience – Describe your experience in developing and producing connectors and connector assemblies.

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-GMC." Please submit responses no later than

June 30, 2008 to NASA/KSC Procurement Office, ATTN: OP-ES/Erik Whitehill,
Contracting Officer, Kennedy Space Flight Center, FL 32899, EMAIL
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.