NUMBER	QUESTION	ANSWER
1	**STRING REEL SYSTEM** What position accuracy is needed in the 40' x 40' x 25' volume?	1 inch in x,y,z. The model should move slowly enough that the pickup point can be controlled to within one inch. The more important issue is that there is no creep in time as described in the acceptance testing. See SOW paragraph III(a)(1).
2	**STRING REEL SYSTEM** Is the load cell system required to be connected to E-Stop circuit to automatically shut the system off in the event of excessive tension?	At this point in time the load cell system does not need to be connected to an E-Stop circuit. However, this requirement is being reviewed and an amendment to the RFQ will be issued should this change.
3	**STRING REEL SYSTEM** Does the current load cell system prevent overload automatically or manually through operator intervention?	The current load cell system prevents overload manually through operator intervention.
4	**STRING REEL SYSTEM** Where in the string system is the fifth load cell located and what does it monitor?	The fifth load cell is for the string reel user. Examples of use would be for overall weight feedback or line stretching. See SOW paragraph I(1).
5	**RCS OGIVE PYLON** Is the range height based on the 1500 pounds RCS rotator or the 500 pounds RCS rotator?	It is based on the 500 lb. rotator. See SOW paragraph I(2).
6	**ANTENNA POSITIONER** Will the 1000 pounds roll axis / mast / power slide (motorized offset arm) be mounted on top of a CFE Az/El Positioner?	It will be mounted onto the Government furnished Antenna Positioner as described paragraph (I)(3) of the statement of work.
7	**ANTENNA POSITIONER** Does the power slide (motorized offset arm) need to be controlled by the Orbit Position Controller?	No. the antenna slide assembly can be operated manually with a hand crank. See SOW paragraph I(3).
8	**ANTENNA POSITIONER** What is the travel requirement for the powered slide?	Four feet from the rotator face to the vertical axis of rotation. See SOW paragraph I(3).

NUMBER	QUESTION	ANSWER
9	**RAIL SYSTEM** Does the THK HCR Curved Rail System need to be motorized to direct the RPSCs?	No. The RPSCs can be turned manually if less than 50 pounds of pressure is required to move the RPSC. See SOW paragraph I(5).
10	**RAIL SYSTEM** Is a powered turntable drivetrain required?	No, a powered turntable drivetrain is not required. See SOW paragraph III.
11	**SOURCE SELECTION PROCESS** What organizations will evaluate which parts of the proposal? For example, will the technical team see the commercial as well as the technical sections of the proposal?	The organizations evaluating the proposals shall see all aspects of each proposal. Yes, the technical team will see the commercial as well as the technical aspect of every proposal submitted.
12	**SOURCE SELECTION PROCESS** How will the three evaluation criteria, technical merit, past performance and cost be weighed in the decision process?	As stated in the EVALUATION section of the RFQ, "Technical merit and past performance when combined are approximately equal to price."
13	Will the Government Furnished Equipment details be provided to the contracted vendor of this requirement at the time of project kickoff?	Yes, all details/specifications on the listed GFE will be provided to the contractor before installation begins.
14	Will NASA ship the string reel positioner to the contractor's factory during the contract for integration and upgrade?	Yes, NASA will ship the string reel positioners to the selected vendor's factory for integration and upgrade if necessary.
15	Can NASA provide the following details to support the creation of our proposal? (a) Civil drawings of the host building and chamber floor areas, specifically concrete depth and rebar layout. (b) Architectural drawings for the host building and chamber.	An architectural drawing is provided as attachment 5 to this RFQ and a foundation drawing is provided as attachment 6.

NUMBER	QUESTION	ANSWER
16	Can NASA provide a consolidated list of all GFE that is available for use in the project prior to proposal submission?	All Government Furnished Equipment has been identified in the GFE tables in the Statement of Work (SOW).
17	Once under contract will NASA be able to provide complete technical information on the GFE including but not limited to design drawings, specifications, ICDs, and test reports?	When the contract has been awarded, NASA will provide all necessary specifications on the GFE that is required for the contractor to successfully perform the installation of the positioning system.
18	Will NASA assure that the design and operating condition of all GFE is sufficient to meet system level performance and safety requirements? Can the contractor's price be contingent on this assumption?	NASA will insure that the operating condition of all GFE is sufficient to meet system level performance and all safety requirements. NASA will not address a contractor's pricing contingencies. Any assumptions should be identified in your proposal.
19	Can the contractor assume that the conceptual use model of the string system meets NASA safety requirements and that NASA safety requirements relating to the GFE portion of the string system will be NASA responsibility?	Yes
20	Where do the existing load cell cables terminate?	The existing load cell and string reel control cables are long enough to reach the old control room which is the same distance from the chamber as the new control room. See SOW paragraph I(1).
21	Do the existing load cell cables need to be replaced?	No
22	Do the string reel control cables need to be replaced?	No
23	If the decision is made to provide new test software what additional measurement equipment must be controlled?	Any new software must control NASA's Agilent PNA measurement system.

NUMBER	QUESTION	ANSWER
24	Will the software specific acceptance be modified to allow use of new test software?	In the case with the string reel control software the objective is stated in the SOW. The software must be capable of lifting targets and move them with stated precision in the handling volume. See SOW paragraph I(1).
25	If a new RCS pylon and rotator is proposed, is a shaft drive still required?	No
26	Use of GFE is at the contractor's discretion and is only offered by NASA to reduce cost?	Yes. All GFE is offered to potentially reduce cost.
27	Will NASA remove the existing string reels and ship them to the factory for integration?	Yes, NASA will remove and ship the string reel positioners to the selected vendor's factory for integration and upgrade if necessary.
28	Will NASA remove the rail system currently installed in the chamber and mark references as suitable to reestablish the centerline of the range?	Yes
29	Will NASA remove the shielding under the planned location of the rail extension, will this shielding be re-installed as part of the project?	NASA will remove the shielding under the planned location of the rail extension. The reinstallation of the shielding is NOT part of this project.
30	Can the mezzanine bridge crane be used for this project?	Yes, the bridge crane can be used for this project and will be operated by NASA in-house personnel.
31	Can methods other than curved rails be used to manage RSPCs?	Yes, as long as the method meets all specificstions stated in the SOW
32	Can the concrete floors inside the chamber and in the staging area be drilled and anchors installed to support the rail system?	Yes, the floor may be drilled for rail fasteners.

NUMBER	QUESTION	ANSWER
33	The concrete thickness under the chamber and in the staging area is 14 inches?	No, the thickness is eight (8) inches.
34	The turntable for managing the RSPCs may be either manually driven or motorized under local control. If manually driven no more than 50 lbs. of force is required to move the cart. Is this correct?	Yes, see SOW paragraph III.
35	Can the carts be driven under local interactive control up to the precision measurement region?	Yes, see SOW paragraph III.
36	Is the required safety factor for the new pylon "3"?	Yes, see SOW paragraph I(2).
37	The 18 foot pylon measurement is referenced to the shorter 1500 pound rotator?	No, it is based on the 500 lb. rotator. See SOW paragraph I(2).
38	There are no special finish requirements for the RCS pylon?	Correct
39	The antenna positioner needs four (4) feet of travel from the AUT mounting plate to the center of rotation of the azimuth positioner?	Correct, four feet from the rotator face to the vertical axis of rotation. See SOW paragraph I(3).
40	The AUT positioner offset may be manual?	The antenna positioner slide assembly may be operated manually. See SOW paragraph I(3).
41	The azimuth rotators and man lift may use the same cart and these units can be interchanged using a forklift? No precision alignment pins will be required?	Correct on both questions. See SOW paragraph I(4)(d).

NUMBER	QUESTION	ANSWER
42	Control cables required for the RSPC carts must be in a cable management system?	Yes, they will need to be managed as the RSPC moves to avoid binding and damage to the cables. See SOW paragraph I(4)(d).
43	Control cables for the pylon rotators, AUT positioner, and azimuth positioners may be connected once the positioners are in the quiet zone?	Yes, they do not need to move with the RSPCs. See SOW paragraph I(4)(d).
44	Are the user manuals or the factory operator's manuals available for the pinouts on the GFE motor devices?	User's manuals for this GFE if available will be furnished upon request.