1) Per H.11 the contract requires full time supervision. Will there be a requirement for a full time onsite SSHO for work described in G.8 or shall the GC have, on staff, a person meeting those qualifications and make him/her available as the needs arise to specific safety criteria noted/needed OSHA 1926 and NASA GRC Safety Manual?

NASA Response: The Contractor shall identify the Safety Professional in writing to the Contracting Officer's Technical representative (COTR) prior to the preconstruction conference. This Safety Professional shall be dedicated solely to this contract and shall be on site full time whenever work is being performed under this contract.

2) A material substitution request was made for Refrigerant Leak Detection, which is described and specified in project specification section 23 64 10, paragraph 2.6.1. The request was made to substitute an AST-IRT Refrigerant Transmitter manufactured by Critical Environmental in place of what is specified by the project documents.

NASA Response: Not enough information was provided with this request for NASA to fully evaluate this substitution request. NASA does allow material substitutions, in many instances, if the product meets the criteria described within the project drawings and specifications for that particular material/product. When material substitution requests are made, they should present the proper salient features of the product, along with a description as to how the product meets NASA specifications and drawings.

3) A material substitution request was made for Chillers 3 and 4, which are listed on drawing M-607. The request was made to substitute Carrier water cooled screw compressor chillers for CH-3 and CH-4 in place of McQuay Magnetic Bearing Chillers.

NASA Response: Not enough information was provided with this request for NASA to fully evaluate this substitution request. NASA does allow material substitutions, in many instances, if the product meets the criteria described within the project drawings and specifications for that particular material. When material substitution requests are made, they should present the proper salient features of the product, along with a description as to how the product meets NASA specifications and drawings.

4) It has come to our attention that there are no specs given for the vinyl curtain at airlock door 8A, or for the vinyl curtain door across the exterior entrance to the assembly high bay area. Clarification would greatly assist in the bid process.

NASA Response: The curtains are detailed on Drawing A-504 for both openings, and the curtain for door 8A is further described on the door schedule on Drawing A-601. Specifications for the vinyl curtains are attached herein.

5) Will personnel be performing any testing using facility equipment during the course of the project? If so, will the project be suspended during the course of said testing?

NASA Response: SPF will be occupied during this project. There will be periods during the construction period when the facility will be conducting tests using facility equipment. During testing, most equipment associated with the test chamber will need to be operational. However, the project will not

be suspended during this testing, as there may be other project work that does not affect the testing activities that can occur. The SPF test schedule is attached for reference. Please note that this schedule is for reference only at this time, and is subject to change. The schedule is color coded to show the following: downtimes (green highlight), tests that are more limited in scope (acoustic, vibration, separation tests or test setup periods) highlighted in yellow, and tests that are vacuum tests (highlighted in fuscia). Green periods would be ideal for construction and restrictions would be relatively minimal and issues would not create test problems. Yellow periods means tests are more restrictive and utilize a smaller set of infrastructure, so construction could occur with close coordination with SPF Operations. Fuscia means it would be a difficult time period to do much construction unless it were highly-coordinated and did not isolate very many systems.

6) SOW version 2 states that doors 58, 144 and 155 are to be included in the bid. However, drawing A601 does not include specs for door 58. Can the missing specs be given or the correct door number listed?

NASA Response: Door 58 is incorrect. The correct door should be door 68. Please refer to the project door schedule on drawing A-601 for doors associated with Option 3.

7) Some portions of the lighting and lighting controls have been removed. What portions of the lighting and lighting controls are still to be included in the bid?

NASA Response: Emergency and exit lighting is still within project scope, and any lighting associated with Option 3 is also included. There should be no other lighting included in the project, but contractors should cross check the Scope of Work document and the project drawings for the entire project scope to confirm included scope.

8) Can there be an additional walk thru for subs and vendors scheduled?

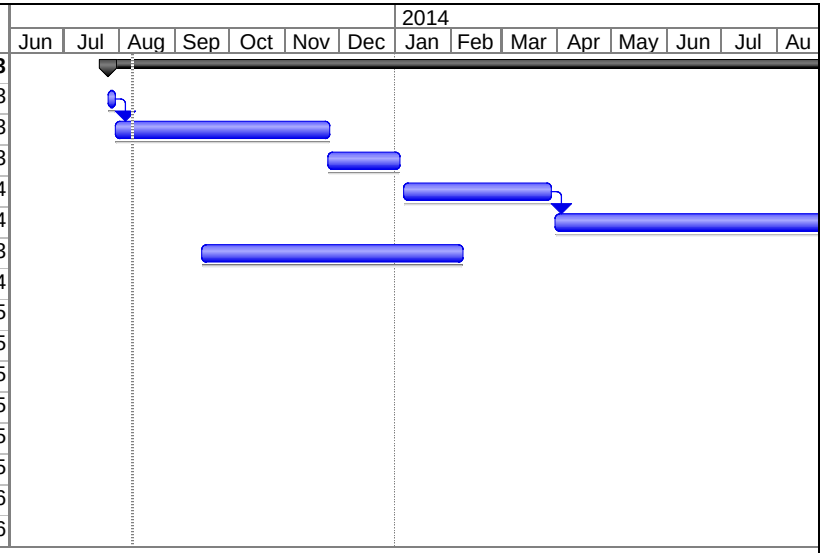
NASA Response: The SPF Site will not be open for additional site showings.

9) Specifications call for apparent low bidder upon request by Contracting Officer shall submit a detailed HASP. Is done after the bid but before award? Or do we need to submit one with the bid?

NASA Response: Submission of a detailed project HASP will only be required by the contractor doing the work. Thus, this will be a post-award activity, so a HASP is not required to be submitted with the bid.

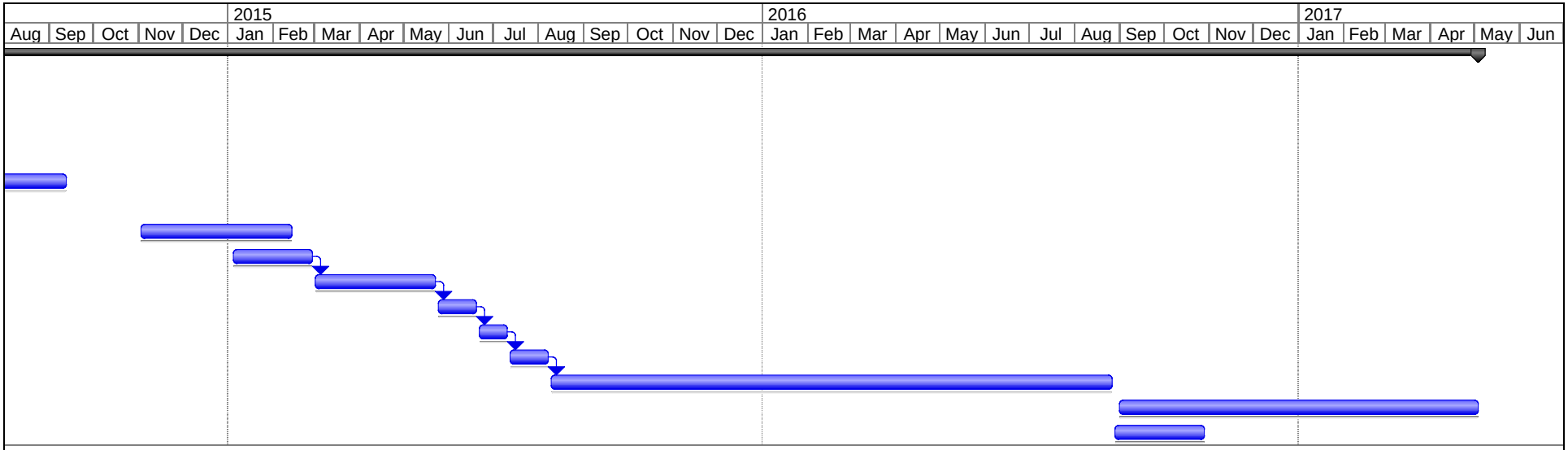
Clarification: Please refer to Specification section 40 90 00 paragraphs 1.3.1 and 1.6. These sections highlight quality, qualification and experience requirements that will be necessary for the contractor performing the door controls work.

ID	Task Name	Duration	Start
1	**SPF Construction Integration Schedule**	**984 days**	**Fri 7/26/13**
2	BBC / Cooling Tower Test	2 days	Fri 7/26/13
3	Down Period 1	17 wks	Tue 7/30/13
4	Cryoshroud Integrated Systems Testing (Thermal Vacuum)	6 wks	Mon 11/25/13
5	ATK Megaflex Testing (Thermal Vacuum)	12 wks	Mon 1/6/14
6	Down Period 2	24 wks	Mon 3/31/14
7	MVF Facility Commissioning (Vibration Table)	21 wks	Mon 9/16/13
8	ESA STA Facility Setup (Assembly Highbay - No Test)	15 wks	Mon 11/3/14
9	ESA STA Acoustic Test (Acoustic Chamber)	8 wks	Mon 1/5/15
10	ESA STA Vibration Testing	12 wks	Mon 3/2/15
11	ESA Fairing Separation / Vacuum Test	4 wks	Mon 5/25/15
12	ESA SA Separation Test	3 wks	Mon 6/22/15
13	ESA SGS Deployment Test	4 wks	Mon 7/13/15
14	Down Period 3	55 wks	Mon 8/10/15
15	MPCV EM-1 Test	35 wks	Thu 9/1/16
16	CPST Test	9 wks	Mon 8/29/16



Project: Construction_Integration
Date: Thu 8/8/13

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline



Project: Construction_Integration
Date: Thu 8/8/13

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	

SECTION 08 38 00
FLEXIBLE STRIP DOOR & DIVIDER CURTAIN

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Flexible Strip Door
2. Industrial Divider Curtain

1.2 SUBMITTALS

A. Reference Section 01 33 00–Submittal Procedures; submit the following items:
   1. Product Data.
   2. Shop Drawings: Show fabrication details and anchorage.
   3. Quality Assurance/Control Submittals:
      a. Manufacturer’s Installation Instructions.
      b. Manufacturer’s storage and handling instructions.
   4. Closeout Submittals:
      a. Cleaning and Maintenance instructions.

1.3 QUALITY ASSURANCE

A. Qualifications:
   1. Manufacturer Qualifications: Regular manufacturer of flexible strip doors and industrial curtains for at least five years.

B. Warranty:
   1. Provide Manufacturer’s warranty for materials of minimum five years.
   2. Provide Installer’s warranty of minimum one year.

1.4 DELIVERY STORAGE AND HANDLING

A. Reference Section 01 66 00–Product Storage and Handling Requirements.

B. Store per manufacturer’s recommendations until ready for use.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Manufacturer: Subject to compliance with requirements, provide products by one of the following or approved equal:

1. Akon Curtain and Divider; P.O. Box 511286, Livonia, MI 48151. Telephone: (989) 414-1209. Fax: (888) 501-5865. Website: www.curtain-and-divider.com

2. Aleco Division E.S. Robbins Corp.; 2720 E. Avalon Ave.; Muscle Shoals, AL. Telephone: (800) 633-3120, (256) 248-2402. Fax: (800) 750-9616. Website: www.aleco.com

2.2 COMPONENTS

A. Flexible Strips:

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1. Formulation: Anti-Static PVC
2. Type: Smooth
3. Color: Clear
4. Size/Overlap: 12” x .120 / 33%
5. Mounting Hardware:
   a. Universal Mounting System, aluminum
   b. Walk-in Mount

B. Divider Curtain:

1. Material: 22 oz. Vinyl, Fire Retardant, Poly Reinforced
2. Color: Selected by Architect from Manufacturer’s standard colors
3. Sections: Velcro together to form complete width per drawings
4. Vision Panel: Clear
5. Chain Weight Pocket at bottom
6. Mounting Hardware:
   a. Grommets at 12” o.c. at top of curtain

   b. Floor Tie Down Straps at 48” o.c. at bottom of curtain

2.3 ACCESSORIES

A. Divider Curtain:

1. Aircraft Cable: 3/8” diameter with eye hooks as required
2. Mounting brackets: As required for complete installation
3. Electric Winch:
   a. Warn 3000ACI Utility Winch

   b. Minimum 3000 pound pulling capacity

   c. Power: 115 or 230 V field verify source

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine opening in which door will be installed.

B. Coordinate with responsible entity to perform corrective work on unsatisfactory conditions.
C. Coordinate installation of mounting steel with erection contractor. Commencement of work by installer is acceptance of opening conditions.

3.2 INSTALLATION

A. Follow manufacturer's instructions.

3.3 ADJUSTING

A. Follow manufacturer's instructions as required to:
1. Align strips to ensure most effective seal; field adjust and modify as required for proper fit.
2. Curtain to be level and ensure most effective seal; field adjust and modify as required for proper fit.

3.4 CLEANING

A. Clean surfaces soiled by work as recommended by manufacturer.

B. Remove surplus materials and debris from the site.

-- End of Section --