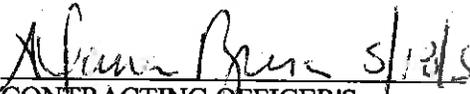


GODDARD SPACE FLIGHT CENTER		TASK ORDER (Instructions and Distribution on Reverse)		PAGE 1 OF 1
1. CONTRACTOR: SSAI	2. CONTRACT NO.: NNG12HP08C	3. TASK/REVISION NO.: Task Order #066		
4. JOB ORDER NO./PROJECT:	5. FLIGHT HARDWARE /SOFTWARE; CRITICAL GSA (IF, YES, OBTAIN BLOCK 16 CONCURRENCE): YES <input checked="" type="checkbox"/> NO	6. DESIGNATED FLIGHT ASSURANCE MGR.:		
7. DESCRIPTION OF WORK TO BE PERFORMED (OBJECTIVES OR RESULTS DESIRED): Far-Infrared Instrumentation Data Acquisition Support Task				
8. TASK DOCUMENTATION REQUIREMENTS/DELIVERABLE ITEMS: (See Attached Task Order)				
9. PERFORMANCE/MILESTONE SCHEDULE: May 1, 2015 – April 30, 2016				
10. QUALITY ASSURANCE REQUIREMENTS: N/A				
11. TRAVEL, MATERIALS, ETC., KNOWN TO BE REQUIRED: (See Attached Task Order)				
12. OTHER (FUNDING, NTE, HOURS, ETC.): Total Cost: Fee: Total Price: \$116,914				
13. TASK ORIGINATOR/MONITOR/CODE/PHONE: Stephen Rinehart/665.0/6-4591		18. THIS TASK ORDER IS ISSUED PURSUANT TO THE TERMS OF THE CONTRACT.		
14. BRANCH APPROVAL:	15. DIVISION CONCURRENCE:	 CONTRACTING OFFICER'S SIGNATURE/ DATE Ayana A. Briscoe		
16. CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE: Joel Susskind		Ayana A. Briscoe TYPED OR PRINTED NAME Contracting Officer		
17. CONTRACTOR SIGNATURE:				

Science Systems and Applications, Inc.
NNG12HP08C
Task Order Statement of Work

Task Order Number: CY4_066_Rev0

Task Order Title: Far-Infrared Instrumentation Data Acquisition Support Task

1.0 Task Monitor (TM):

Name: Stephen Rinehart
Organization: 665: Observational Cosmology Laboratory
Email Address: stephen.a.rinehart@nasa.gov

2.0 Description of Work to be Performed

This task directly supports related far-infrared superconducting detector array instrumentation for suborbital experiments. Staff will implement software solutions using existing Instrument Remote Control framework to perform sensor data acquisition, instrument control, data visualization, and limited automated data processing. The software will be documented for end user applications, and reports/presentations prepared as needed to support reviews, conferences, etc. Broad work areas include:

- Support MCE-based detector acquisition electronics software for control, readout, and visualization;
- Support ground-based observations using far-infrared detector arrays, including field deployment, and to analyze the resulting data for instrument performance, calibration on atmospheric emission or local sources, and similar instrument operational data;
- Support the development of an autonomous MCE-based detector and optics systems acquisition and control software suite for BETTII, including the in-atmosphere closed-loop optical stabilization system;
- Document all software sufficiently for non-expert users to understand commands, GUIs and functionality; and
- Interface with vendors to ascertain requirements for acquired hardware control/readout.

The task will advance digital system technologies and architectures that can be used in Earth Science detector data acquisition on ground-based, airborne, and balloon systems. Technologies include high pixel/high throughput systems (time and code division multiplexing); advanced real-time displays and interfaces using state-of-the art standards (WebGL, websockets); dynamic telemetry designs; flexible, reusable, and high performance balloon control systems. Many of the advancements will be fed back into the Instrument Remote Control (IRC) project which has supported many Earth science projects such as the Ocean-Atmosphere Sensor Integration System (OASIS).

3.0 Special Requirements

None

4.0 Performance/Milestone Schedule

The SAS Contract Year 4 POP is May 01, 2015 - April 30, 2016

5.0 Deliverables/Reporting Requirements

- Delivery and availability of quality-controlled datasets and web-based material.
- Software and hardware documentation.
- Brief weekly highlight reports and annual reports.
- Contributions to scientific publications, workshops/conferences/symposia, both oral presentations and written contributions.

6.0 Other Information Needed for Performance of Task

Travel may be required to attend project workshops, scientific meetings or to support field campaigns. This may require domestic or foreign travel, which will be determined on a case by case basis.

7.0 Data Rights

N/A

8.0 Safety

Staff on this task shall comply with federal, state, local, and center safety regulations. This shall be accomplished through management emphasis, technical training, and personal responsibility. Staff shall participate in safety orientation and training in accordance with the contract Safety and Health Plan, and work within the requirements of that plan.

9.0 Risk

Contractor shall provide ongoing risk assessment and mitigation in performance of the Task Order. Priorities shall be re-evaluated as appropriate with the TM. Cost and schedule performance shall be assessed on a regular basis (no less frequently than monthly) and significant variations discussed and acted on in consultation with the TM and COR.

10.0 Proposed Cost and Fixed Fee

In accordance with Paragraph B.8 of the contract, propose the Cost and Fixed Fee amount.