

**TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL**

NASA/GODDARD SPACE FLIGHT CENTER

**REQUEST FOR TASK PLAN / TASK ORDER**

<b>CONTRACTOR</b>	<b>CONTRACT NO./TASK NO.</b>	<b>JOB ORDER NUMBER</b>	<b>APPROP. FY</b>
QSS Group, Inc.	NAS5- <b>99124</b> TASK NO. <b>319</b> AMENDMENT	564-860-10-40-89	00

**TASK TITLE:** (NTE 80 characters; include Project name)

**IRAC Flight Warm Electronics Assembly (WEA) Integration and Test**

**APPROVALS:** (Type or print name and sign)

<b>ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR)</b>	<b>DATE</b>	<b>ORG CODE</b>	<b>MAIL CODE</b>	<b>PHONE</b>
Jose M. Florez <i>Jose M. Florez</i>	7/24/00	564	564	301-286-2789
<b>BRANCH HEAD</b>	<b>DATE</b>	<b>CODE</b>	<b>PHONE</b>	
Robert L. Kasa <i>Robert L. Kasa</i>	7/24/00	564	301-286-8043	
<b>CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR)</b>	<b>DATE</b>	<b>CODE</b>	<b>PHONE</b>	
Robert S. Lebair, Jr. <i>Robert S. Lebair, Jr.</i>	7/28/00	560	301-286-6588	

<b>FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE?</b> <small>(IF YES, NEED CODE 303 CONCURRENCE NEXT BLOCK)</small>	<b>CONTRACTING OFFICER'S QUALITY REP.</b>	<b>DESIGNATED FAM:</b>
<input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	<i>Sic for L. Moore</i> Larry Moore	Ted Ackerson

The contractor shall identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to this Task Order or to any of the technical requirements of the Task Order Statement of Work and related specifications. The contractor shall complete and submit the required Reqs and Certs.

*(To be completed by Contracting Officer)*  
**C.O. Requested Quote on:**  
Date: **AUG 1 2000**

Contractor will develop specification or statement of work under this task for a future procurement.       NO     YES

Flight hardware will be shipped to GSFC for testing prior to final delivery.       NO       YES       N/A

Government Furnished Property/Facilities:     NO       YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only)

Onsite Performance:       NO       YES      If yes:       TOTAL       PARTIAL  
If partial, indicate onsite work in SOW by asterisk (\*)

Surveillance Plan Attached:       NO       YES

Highlighted Contract Clauses:      *(to be completed by Contracting Officer)*

Per Clause H.14, Task Ordering Procedure, subparagraph (f), the effective date of this task order shall be 8/1/00.

**INCENTIVE FEE STRUCTURE** (check one)

*(See Contract NAS5-99124, Attachment K, Incentive Fee Plan)*

	<input type="checkbox"/> No. 1	<input type="checkbox"/> No. 2	<input type="checkbox"/> No. 3	<input checked="" type="checkbox"/> No. 4	<input type="checkbox"/> No. 5
Cost	10%	50%	25%	25%	%
Schedule	15%	25%	25%	50%	%
Technical	75%	25%	50%	25%	%

*(To be completed by Contracting Officer)*

The target cost of this task order is \$ 262,809.

The target fee of this task order is \$ 16,724.

The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is \$ 279,533.

The maximum fee is \$ 24,443.

The minimum fee is \$0.

**AUTHORIZED SIGNATURE:**

THIS TASK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE "TASK ASSIGNMENTS AND REPORTS"

*Theresa J. Becker*  
SIGNATURE OF CONTRACTING OFFICER

11/20/00  
DATE

Theresa J. Becker  
TYPED NAME OF CONTRACTING OFFICER

**CONTRACTOR'S ACCEPTANCE:**

AUTHORIZED SIGNATURE

DATE

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QSS Group, Inc.	NAS5- 99124	319	

Applicable paragraphs from contract Statement of Work:

**STATEMENT OF WORK:** (Continue on blank paper if additional space is required)

*This is a follow-on to Task 232; uninterrupted transition is required.*

See page 3

**PERFORMANCE SPECIFICATIONS:**

See page 3

**APPLICABLE DOCUMENTS:**

See page 3

**TASK END DATE:** December 31, 2001

**MILESTONES/DELIVERABLES AND DATES:**

- |  |                            |
|--|----------------------------|
| 1. Updated Design Documentation            | 11/15/00                   |
| 2. Flight WEA ready for Ball Delivery      | 11/30/00                   |
| 3. Spare Flight WEA with one board of each | 9/15/00                    |
| 4. Residual Unused Partsd                  | 12/31/01                   |
| 5. Progress Report                         | Monthly, 15th of the month |

**PERFORMANCE STANDARDS:**

**Schedule:** On-time delivery of flight WEA and acceptance data package

**Technical:** ATR's acceptance of the above

**FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):**

Jose M. Florez, building 11, E224

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## REQUEST FOR TASK PLAN / TASK ORDER

Contract NAS5-99124

Task#: **319**

### STATEMENT OF WORK:

**Infrared Array Camera (IRAC) Instrument  
Flight Warm Electronics Assembly (WEA) SOW  
July 24, 2000**

#### 1.0 SCOPE

This task provides continuation of support to the IRAC Warm Electronics Assembly (WEA) priorly covered under Task 232.

The primary requirement of this task is to provide integration and test support for the IRAC Warm Electronics Assembly (WEA) during testing at GSFC, and Post-delivery at Ball Aerospace, Lockheed Martin, and ultimately at the launch site. This task also requires integration and test support for the IRAC Spare Flight WEA with one control board of each type and four FPE channels.

To fulfill this requirement the contractor shall provide onsite services necessary to support I&T, analyze and modify the design as required, rework, test, and support delivery of the WEA. This task also requires travel to Ball Aerospace, Lockheed Martin, and Cape Kennedy to support I&T activities. The contractor shall provide flight parts storage at their location.

#### 1.1.0 REQUIREMENTS

##### 1.1.1 DESIGN

Electrical - The contractor shall provide electrical circuit support services to the IRAC Electronics Product Team Lead for all elements of the WEA for the remainder of the project as needed.

##### 1.2.0 QUANTITIES

The contractor provides support for one (1) Flight Model WEA, one (1) Spare Flight Model WEA, one Bench Test Equipment (BTE) Spacecraft Simulator (software services only), one BTE Focal Plane Electronics (FPE) Simulator, and one BTE Command and Telemetry Simulator.

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Contract NAS5-99124

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### 1.3.0 TESTING

#### 1.3.1 Electrical Testing

The contractor shall provide onsite assembly and electrical test services during the IRAC electronics test phase at GSFC. The contractor shall provide electrical test support services at Ball Aerospace after delivery of the IRAC instrument as needed.

#### 1.3.2 Environmental Testing

Environmental testing shall be performed by the GSFC.

#### 1.4.0 APPLICABLE DOCUMENTS (Partial List)

- 1.4.1 GSFC Engineering Drawing Standards Manual, Doc. No. X673-64-IE
- 1.4.2 Applicable GSFC Approved Contractor Procedures
- 1.4.3 IRAC Approved Parts List
- 1.4.4 NASA Workmanship Standards NASA-STD 8739.3 thru NASA-STD 8739.7, NAS5300(3J-1) and NAS5300(3M).
- 1.4.5 System and subsystem requirements identified in the Critical Design Review (CDR) Package
- 1.4.6 IRAC and SIRTF Requirements Documents listed on IRAC WEB Page (<http://instra1.gsfc.nasa.gov:9001>)

#### 1.5.0 STATUS REPORTING REQUIREMENTS

The contractor is required to conduct weekly meetings with the task Technical Monitor and all other relevant GSFC and subcontractor personnel. This meeting shall cover the status of all ongoing activities related to the task including schedule, cost and potential or unresolved problem areas.

#### 1.6.0 QUALITY REQUIREMENTS

QA Requirement for flight hardware:

Appropriate records must be kept at all times with all flight hardware. Work Order Assignments (WOA) shall be issued prior to the performance of flight related work. Documentation shall be kept in accordance with the Configuration Management (CM) system established by the IRAC Project. All fabricated hardware shall meet the requirements of the NASA workmanship Standards in Paragraph 1.4.4.

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QA Requirement for non-flight hardware:

Government inspection is not required for non-flight hardware unless hardware is used for verification of flight requirements. Quality Assurance workmanship inspections of all non-flight hardware shall be performed by the contractor to the best commercial practice. All WOAs for non-flight hardware shall be stamped NOT FOR FLIGHT USE OR FLIGHT VERIFICATION. All simulators shall have documented verification before connection to or use with flight hardware. All nonconformances shall be documented on the WOA.

### 1.7.0 GOVERNMENT FURNISHED EQUIPMENT (GFE)

- 1.7.1 Applicable documents as requested
- 1.7.2 Computers for BTE
- 1.7.3 Equipment, Material, Parts

The GSFC will provide Parts Lists of all parts to be provided.

### 1.8.0 DELIVERABLES

#### 1.8.1 DESIGN DOCUMENTATION

A complete design package shall be delivered to the IRAC Configuration Manager for each element in the WEA. The package shall consist of the following:

Disk copy of final board and piece part application design drawings.

One hard copy of final board and piece part application design drawings.

Electronic and hard copy documentation of all analyses conducted and the results.

Final End Item Acceptance Data Package including the as-built Configuration List, the as built Materials and Processes List, the Test Procedure, the WOA Logs and a list of any open items.

Performance Assurance documentation as required.

As built parts list shall be constructed as the hardware is fabricated and shall be delivered to the IRAC parts engineer in electronic format (Excel) at the time of electrical integration at the box level and shall be updated as needed with the parts engineer. (Note: Parts engineer puts this in EPIMS)

Updated Design Documentation is due November 15, 2000.

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### **1.8.2 HARDWARE**

The contractor shall deliver to the Task Monitor according to Section 1.9.0:

- One (1) Flight WEA ready for delivery to Ball Aerospace

Any spare residual unused parts, hardware and equipment shall also be returned to the Task Monitor December 31, 2001. All deliverables related to this task shall be made in person to the Task Monitor or his duly appointed representative. This shall be the method of delivery unless explicitly otherwise specified by the Task Monitor.

### **1.8.3 PARTS**

All flight parts will be GFE.

### **1.9.0 DELIVERABLES SCHEDULE**

#### **1.9.1 DESIGN DOCUMENTATION**

A complete documentation package for each of the items identified in Section 1.9.2, as defined in Section 1.8.1, must be delivered to the Task Monitor at the time of final delivery of the Flight WEA to the Ball Aerospace.

#### **1.9.2 HARDWARE**

##### **Deliverable**

Flight Qualified WEA ready For delivery to Ball Aerospace	November 30, 2000
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Spare Flight WEA with one board of each	September 15, 2000
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