TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO./TASK NO.			JOB ORDER NUMBER	APPROP. FY
	NAS5-	TASK NO.	AMENDMENT		
QSS Group, Inc.	99124	88		415-616-33-91-89	99

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

GOES Project Mission Operations Services -- GOES I-M

APPROVALS: (Type or print name and sign)

	DATE	ORG CODE	MAIL CODE	PHONE
ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR) William Lebair	9/13/99	415	415	301-286-3004
BRANCH HEAD Martin A. Davis	9/24/99	CODE 415		PHONE 301-286-8998
CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) for Robert S. Lebair, Jr.	9/29/99	CODE 568		PHONE 301-286-6588

FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE? *(IF YES, NEED CODE 303 CONCURRENCE NEXT BLOCK)*	CONTRACTING OFFICER'S QUALITY REP.	DESIGNATED FAM:
[X] NO [ ] YES	Larry Moore	

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 Reps and Certs.

(To be completed by Contracting Officer)
C.O. Requested Quote on:
Date: MAY 17 1999

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

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

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

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

Surveillance Plan Attached: [X] 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 May 17, 1999.

INCENTIVE FEE STRUCTURE (check one)
(See Contract NAS5-99124, Attachment K, Incentive Fee Plan)

	_X_ No. 1	__ No. 2	__ No. 3	__ No. 4	__ 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 $ 2,504,901 .
The target fee of this task order is $ 80,233 .
The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is $ 2,585,134 .

The maximum fee is $ 117,264 .
The minimum fee is $0.

AUTHORIZED SIGNATURE:

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

SIGNATURE OF CONTRACTING OFFICER	DATE	TYPED NAME OF CONTRACTING OFFICER
Lorrie L. Eakin	1/19/00	Lorrie L. Eakin Contracting Officer

CONTRACTOR'S ACCEPTANCE:

AUTHORIZED SIGNATURE DATE

GSFC FORM 703-1845 12/98 (OLDER VERSIONS ARE OBSOLETE)

DISTRIBUTION: CONTRACTOR, CONTRACTING OFFICER, COTR, CODE 303, RESOURCES ANALYST, ASSISTANT TECHNICAL REPRESENTATIVE

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Applicable paragraphs from contract Statement of Work: Function 2 I

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

The contractor shall establish a Mission Operations Support Team (MOST) at an offsite facility to provide services to the GOES Project at the NASA/Goddard Space Flight Center in conducting the GOES I-M Missions. The MOST shall provide expertise to perform systems engineering services and shall use the computing resources of the Satellite Operations Control Center at NOAA in Suitland, Maryland, to support mission operations. The task activities are described below:

a. **Systems Engineering Services** -- The MOST shall provide personnel and facilities to perform the following systems engineering functions. Some travel is required to the spacecraft contractor's plant for conducting/participating in reviews, tests, etc.

- Provide engineering services on the I&T of the Telemetry and Command subsystem and the Communication Subsystem at the spacecraft manufacturer's plant.
- Provide engineering services on mechanical/vibration tests, thermal vacuum chamber tests and radio frequency interference tests at the spacecraft manufacturer's plant.
- Provide engineering services on the spacecraft/launch vehicle integration and test at the launch site at the NASA/Kennedy Space Center.

APPLICABLE DOCUMENTS:
None.

TASK END DATE: 4/30/00

MILESTONES/DELIVERABLES AND DATES:

Launch Team Transition Plan: Preliminary ~~XX/XX/XX~~ 8/3/99
Final ~~XX/XX/XX~~ 11/30/99

End-to-End #1:	ETE Pre-Test Planning/Scheduling	~~XX/XX/XX~~ 10/11/99
	ETE Test Conduct	~~XX/XX/XX~~ 10/25/99
	ETE Test Report	Test + 30 days
End-to-End #2:	ETE Pre-Test Planning/Scheduling	12/1/99
	ETE Test Conduct	12/21/99
	ETE Test Report	Test +30 days
End-to-End #3:	ETE Pre-Test Planning/Scheduling	1/16/00
	ETE Test Conduct	1/28/00
	ETE Test Report	Test +30 days
End-to-End #4:	ETE Pre-Test Planning/Scheduling	3/1/00
	ETE Test Conduct	3/15/00
	ETE Test Report	Test + 30 days

Launch Team Training/Certification Plan: Draft 2/1/00
Final 4/3/00

Monthly Status Reports: Last working day of month

Travel/Trip Status Reports: 5 days after completion of trip

PERFORMANCE STANDARDS:
Schedule: On-time delivery/completion of the above
Technical: ATR's acceptance of the above

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):
William Lebair, building 6, room W2229

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STATEMENT OF WORK: (Continued)

b. Mission Operations Services -- The MOST shall provide personnel and facilities to perform the following functions. Some travel is required to the spacecraft contractor's plant for conducting/participating in reviews, tests, etc.

1. Launch Preparation and Operations:
   - Develop and maintain Telemetry and Command database
   - Develop and maintain Command procedures
   - Develop and maintain Operations Scripts
   - Develop and maintain Contingency Operations Procedures
   - Develop Post-Launch Test (PLT) plan and test procedures
   - Plan and conduct mission simulations, rehearsals and training
   - Provide engineering services in conducting orbit raising operations
   - Provide around-the-clock engineering services in monitoring spacecraft health and safety
   - Provide engineering services in conducting PLT and test data analysis

2. Spacecraft and Ground System Testing:
   - Plan and conduct ground system End-to-end (ETE) tests with the spacecraft using the NOAA SOCC to send commands and process telemetry
   - Provide services to the Mission Readiness Manager in the coordination of resources (I.e., Ground Network (GN), NOAA ground systems, and SOCC) and tests required for Integration Testing (I&T), network interface, testing, compatibility testing, network proficiency testing and ETE testing
   - Provide ground system requirements, assist in validating changes to the NOAA SOCC ground systems

3. On-Orbit Engineering Services
   - Participate with NOAA on special event operations, such as yaw-flip maneuver, station keeping, and battery reconditioning
   - Participate in real-time anomaly investigation and resolution on operational GOES spacecraft
   - Analyze engineering trending data and document analysis results as well as any anomalous phenomena

4. System Maintenance and Configuration Management
   - Provide enhancement and maintenance effort on the GOES High-fidelity Operations Simulator Tool (GHOST), High-fidelity Flight Software Simulator, Telemetry and Command Database Tool, Script Generator, Graphic Timeline Tool and other mission planning tools
   - Provide enhancement and maintenance effort on the MOST Local Area Network (LAN), servers and nodes
   - Provide CM effort on all systems, LAN, databases, command procedures and scripts.

5. Operations Reviews and Working Groups Services/Coordination
   - Participate in and coordinate MOST inputs to Mission Readiness Working Group (MRWG)
   - Participate in and coordinate MOST inputs to Flight Operations Review (FOR)
   - Participate in and coordinate MOST inputs to Operations Readiness Review (ORR)
   - Participate in and coordinate MOST inputs to External Independent Readiness Review (EIRR)
   - Participate in and coordinate MOST inputs to Network Operations Working Groups (NOWG)
   - Participate in and coordinate MOST inputs to Mission Operations Working Groups (MOWG)
   - Participate in and coordinate MOST inputs for all other reviews/working groups as needed.

6. Documentation Services
   - Produce and deliver PLT Plan and PLT Report
   - Produce and deliver mission operations procedures
   - Produce and deliver operations review packages
   - Produce and deliver change pages, as needed, to the user's guides and programmer's maintenance manuals

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PERFORMANCE SPECIFICATIONS:

Launch Team Transition Plan: Establish CSC to QSS transition approach and associated deliverables/milestones.

End-to-End #1: ETE Pre-Test Planning/Scheduling:
Establish test objectives/requirements to be met
Establish schedule for meeting objectives/requirements
Establish verification criteria

ETE Test Conduct: Conduct test in accordance with test plan.

ETE Test Report:
Report detailing test results, discrepancies noted, and recommended action for resolution of noted discrepancies including schedule

End-to-End #2: ETE Pre-Test Planning/Scheduling:
Establish test objectives/requirements to be met
Establish schedule for meeting objectives/requirements
Establish verification criteria

ETE Test Conduct: Conduct test in accordance with test plan.

ETE Test Report:
Report detailing test results, discrepancies noted, and recommended action for resolution of noted discrepancies including schedule

End-to-End #3: ETE Pre-Test Planning/Scheduling:
Establish test objectives/requirements to be met
Establish schedule for meeting objectives/requirements
Establish verification criteria

ETE Test Conduct: Conduct test in accordance with test plan.

ETE Test Report:
Report detailing test results, discrepancies noted, and recommended action for resolution of noted discrepancies including schedule

End-to-End #4: ETE Pre-Test Planning/Scheduling:
Establish test objectives/requirements to be met
Establish schedule for meeting objectives/requirements
Establish verification criteria

ETE Test Conduct: Conduct test in accordance with test plan.

ETE Test Report:
Report detailing test results, discrepancies noted, and recommended action for resolution of noted discrepancies including schedule

Launch Team Training/Certification Plan: Establish QSS training/certification plan and associated milestones, including a formal process for qualification and certification of Mission Operations Team Members

Monthly Status Reports: Monthly reports shall contain summary of activities completed during month, planned activities for the next month, problems/issues and recommended action(s).

Travel/Trip Status Reports: Travel/Trip reports shall contain summary of activities completed during travel item, problems/issues, and recommended action(s).