

Task Order Plan (TOP)

Contract Number: NNM05AB50C
TO Title: *Structural Strength and Environmental Test Branch*
TO Number: 36-030001 **Revision:** 11

Period of Performance: 10/02/2010 to 9/30/2011

MSFC Initiator: Kevin Burks

(b)(4)

Emergency: No

The purpose of this revision is to extend this task into Contract Year 6 of the NNM05AB50C ESTS contract. This revision defines and estimates work for the period October 2, 2010 through September 30, 2011. Additionally the Schedule, Performance Plan and Risk Assessment have been revised to reflect changes in task activities for the new period of performance.

Revision History:

Revision -10 reduced the staffing level from (b)(4) for the remainder of the contract year as a result of the decision by the customer to assume the responsibility for controls system upgrades.

Revision -09 increased staffing level (b)(4) for the remainder of the contract year to support test facility control systems upgrades.

Revision -08 extended this task into Contract Year 5 of the NNM05AB50C ESTS contract.

Revision -07 added (b)(4) to support test facility control systems upgrades.

Revision -06 increased the scope of work to support initial reactivation of the Single Leg Facility through an Intersegment Work Authorization with the Jacobs Technology, Inc.

Revision -05 added (b)(4) to support test facility control systems upgrade

Revision -04 extended this task into Contract Year 4 of the NNM05AB50C ESTS contract.

Revision -03 extended this task into Contract Year 3 of the NNM05AB50C ESTS contract.

Revision -02 adds (b)(4) and changed the MSFC Initiator.

Revision -01 Extended the Task into Contract Year two (CY2) of the NNM05AB50C ESTS contract.

Revision -00 Initial release - continued work previously performed under TO 26-020401-00. This revision is effective in April 2006 with funding provided through MSFC PR 137676.

1.0 Task Order Description & Objectives

Experimental Fluids and Environmental Test Facility (ET20) support. The Task provides engineering support for ET20 test preparations and operations. It supports mechanical design, installation, checkout, troubleshooting, maintenance and operation of mechanical, electrical, electro-mechanical, and associated wiring, tubing, valves and pumps. Support also includes preparation of Standard Operating Procedures (SOPs), Facility Operation Procedures (FOPs), Facility Activation Plans (FAPs), data analyses, Organizational Work Instructions (OWIs) and reports for the ET20 and associated test articles. Also, the Task supports maintenance of data acquisition and control computers, used for testing, by periodic updates of operating system software. This Task supports safety by annually updating the Inventory of Hazardous Operations (IHOPS).

2.0 Technical Approach (Including required input, guidelines & assumptions)

Detailed Task flow and schedule will be coordinated with NASA task initiator. The Task will support test facility improvements and modifications as follows:

1. Determine new facility requirements for thermal vacuum testing, by meeting and corresponding with project and technical discipline personnel and others involved in the test.
2. Analyze the requirements, review facility drawings and other documentation, and gather information from vendors.
3. Modify existing specifications, plans, OWIs, SOPs, FOPs, and FAPs, and/or generate new ones to meet new requirements. Technical support will be provided during implementation of the facility modifications, test preparations, and test operations.
4. Maintain/generate ISO 9000 certification documentation and recommend resolutions to audit findings and non-conformance.
5. Perform engineering calculations to determine suitability of equipment for vacuum service.
6. Assist with administration of the ET20 data acquisition and control computers.
7. Perform Inventory of Hazardous Operations per check list and coordinate with ET20 assistant building managers and safety representatives to implement changes.

Required input includes (1) Required documents (2) Drawings and schematics of ET20 systems and components under test, and (3) Applicable technical documentation including contractor-furnished reports, data and briefings for the specific project being developed. Also requires review and approval of procedures and work instruction by ET20 Branch Chief and

MSFC Safety prior to issue. Requires review and approval of data packages and technical documents by ET20 Branch Chief.

3.0 Discussion of Skills Required

(b)(4) engineer with training and experience in test planning, mechanical design and test documentation.

4.0 Special Tools Required

None

5.0 Participating Subcontractors

None

6.0 Milestones & Deliverables

Milestones include Monthly Activity Report, SOPs, FOPs, FAPs, OWIs, ET20 capability documents, test data evaluation, and technical bulletins as needed.

7.0 Special Considerations (Recruiting, Special Equipment / Material, Safety, etc.)

None.

8.0 Work Shelf

None

9.0 Schedule

Subtask #	SubElem.	Name	Qtr 1, 2011			Qtr 2, 2011			Qtr 3, 2011			Qtr 4, 2011			Qtr 1, 2012		
			Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
36-030001	00	Environmental Test Support															
36-030001	00	Review and Revise Organizational Work Instructions FAPs, FOPs and SOPs															

ESTS Contract Task Order Request Performance Plan

Task Order Title: [Structural Strength and Environmental Test Branch](#)

Task Order Number: [36-030001](#) Revision: 11

Category	Weighting Technical %	End of Period Technical Score
Technical Objectives	65%	X <u>65%</u> = <u>0.00</u> Justification
a) Provide engineering support for test preparation and operation of the Environmental Test Facility (ETF). b) Maintain/generate ISO certification documentation for ETF. c) Support environmental testing of hardware. d) Support production of ETF capabilities literature.		
Schedule Objectives (Milestones)	Weighting Schedule % <u>10%</u> (min 10%)	Schedule Score X <u>10%</u> = <u>0.00</u> Justification
Monthly Activity Reports. Facility operation procedures, facility activation plans, organizational instructions and test data evaluation commensurate with MSFC ETF tests and scheduling. Facility brochures, information packages, and bulletins as needed.		
Cost (actual vs. negotiated)	Weighting Cost% <u>25%</u> (min.25%)	Cost Score X <u>25%</u> = <u>0.00</u> Justification
	Weighting Total % <u>100.00%</u>	Total Score 0.00

Technical, Schedule, and Cost Grading Scale

Score	Description
9.0-10.0	Exceeded TO Performance Plan objectives resulting in major benefit(s)
8.0-8.9	Exceeded TO Performance Plan objectives resulting in modest benefit(s)
7.0-7.9	Met TO Performance Plan objectives
3.0-6.9	Did not meet all TO Performance Plan objectives resulting in minimal impact or requiring additional agency funds
0.0-2.9	Did not meet TO Performance Plan objectives resulting in substantial impact and/or requiring additional agency funds

ESTS Contract Task Order Request Performance Plan

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Comments:

Risk Assessment

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Task Order Risk Assessment to Cost, Technical, and Schedule

List identified risk associated with Task Order performance as related to task cost, technical, and schedule. Classify the risk(s) according to probability of occurrence and impact as defined below and enter the risk into risk matrix.

Risk	Risk Type	Probability (1-4)	Impact (1-4)	Risk Description
Risk C1	Cost			No risk to cost
Risk C2	Cost			
Risk T1	Technical			No risk to technical
Risk T2	Technical			
Risk S1	Schedule			No risk to schedule
Risk S2	Schedule			

*Note: See page 2 for risk mitigation plan for those risks which are Primary Risk Drivers.



