

Task Order Plan (TOP)

Contract Number: NNM05AB50C

TO Title: *Environmental Control, Testing and Development*

TO Number: 34-010001 **Revision:** 10

Period of Performance: 10/02/2010 to 09/30/2011

MSFC Initiator: *Jimmy Perkins*

(b)(4)

Emergency: *No*

Revision 10: 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. Subelement-CC was administratively closed in CY5 as part of the Constellation labor re-plan.

Revision 09: The purpose of this revision is to extend this task into Contract Year 5 of the NNM05AB50C ESTS contract. This revision defines and estimates work for the period October 3, 2009 through October 14, 2010. Additionally, the Schedule, Performance Plan and Risk Assessment have been revised to reflect changes in task activities for the new period of performance. This revision affects the APO element Upper Stage subelement-CC.

The purpose of revision (08) is to adjust the labor and travel estimates. For subelement-00, labor resources were reduced by (b)(4) due to changes in an accounting period and travel costs were removed in the amount of (b)(4) for training classes that cannot be attended. For subelement-01 labor resources were reduced by (b)(4) due to less work coming in than was originally estimated. For subelement-CC labor resources in the amount of (b)(4) were added to provide chemical analysis support of Thermal Protection System (TPS) materials for Ares I Upper Stage. No changes were made to the Risk Assessment or Performance Plan.

Revision 07; the purpose of this revision is to extend this task into Contract Year 4 of the NNM05AB50C ESTS contract. This revision defines and estimates work for the period September 27, 2008 through October 2, 2009. Additionally, the Schedule, Performance Plan and Risk Assessment have been revised to reflect changes in task activities for the new period of performance. This revision affects the APO Ares I Element Upper Stage, subelement CC.

The purpose of this revision (06) is to adjust the materials, training and travel estimate. In addition, administrative support was added to subelement-00 and a new subelement-CC was added to provide chemical analysis support of candidate TPS materials for the Ares Upper Stage. Resources were reallocated to support the new CC subelement in the amount of (b)(4). Funding was added to subelement-01 in the amount of (b)(4) to purchase five new pieces of laboratory equipment. Two planned trips to Pittcon were unable to be used and two training seminars were added to subelement-00. Funding was added to subelement-00 in the amount of (b)(4) to cover National Environmental Laboratory Accreditation Program (NELAP) certification. In addition, labor resources were reduced for sub-

element-00 due to work being accomplished using less resources than originally estimated. No changes were made to the Risk Assessment or Performance Plan.

The purpose of revision (05) is to extend this task into Contract Year 3 of the NNM05AB50C ESTS contract. This revision defines and estimates work for the period 29 September 2007 through 26 September 2008. Additionally, the Schedule, Performance Plan and Risk Assessment have been revised to reflect any changes in task activities for the new period of performance.

The purpose of this revision (04) is to lower the labor and training/travel estimate. Planned training classes will not be attended due to possible conflict with impending National Environmental Laboratory Accreditation Program audit.

The purpose of this revision (03) is to adjust the training/travel estimate and adjust the labor estimate to account for work on Subelement-01 and NELAP certification visit preparation. One planned training class will not be attended and one has been moved back to later in the fiscal year. In addition, two trips to (b)(4) have been added to the month of April. No changes were made to the Risk Assessment or Performance Plan.

The purpose of this revision (02) is to extend this task into Contract Year 2 of the NNM05AB50C ESTS contract. This revision defines and estimates work for the period 30 September 2006 through 28 September 2007. Additionally, the Schedule, Performance Plan and Risk Assessment have been revised to reflect changes in task activities for the new period of performance

The purpose of this revision (01) is to adjust the travel and labor estimate. One planned training class was cancelled. Labor was reduced due to one member transitioning to another Task. No changes were made to the Risk Assessment or Performance Plan.

1.0 Task Order Description & Objectives

This TO defines and estimates work for the period 02 October 2010 through 30 September 2011. Funding for this task is provided per MSFC PR 4200173425. Additionally, the Schedule, Performance Plan and Risk Assessment have been revised to reflect changes in task activities for the new period of performance.

Subelement 00:

The objective of this Subelement is to perform routine and non-routine analyses of environmental samples and assist in the analysis of potentially hazardous waste by sampling, collecting, and testing water, soil, and other compounds. ESTS personnel will assist in the development and research in chemical processes and methods. In addition, support will be provided under this task order for non-environmental sample analyses exceeding the normal workload of the Chemistry Team in order to reduce or eliminate testing back logs. Task personnel will also be available as part of a response team in the event of accidental release of hazardous materials at MSFC.

Subelement 01:

The objective of this Subelement is to perform routine and non-routine analyses of non-environmental samples received from sources outside of MSFC or that are related to a particular project. Similar types of analyses will be performed on these samples as in Subelement 00.

Subelement CC: (administratively closed in CY5 due to Constellation labor re-plan)

The objective of this Subelement is to provide materials analysis for Ares I Upper Stage Thermal Protection System. This work will be performed under WBS 136905.08.05.12.07.08.

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

Subelement 00: The Environmental Chemistry Laboratory will monitor surface and ground water discharge for environmental pollution at MSFC and conduct analyses on non-environmental samples.

Environmental monitoring will be accomplished by collecting samples or requesting samples from sites required by MSFC Office of Environmental Engineering and Occupation Health (EEOH) in order to comply with Alabama Department of Environmental Management (ADEM) and the United States Environmental Protection Agency (EPA) regulations.

Environmental sampling will be done using state-of-the-art equipment. Currently available field equipment will be used to produce accurate, reliable and reproducible samples. Improvements in the quality of the field sampling methodology will be continuously explored to improve the reliability of sample acquisition.

Environmental analysis of water, air and soil samples will be performed by trained personnel on precision instrumentation currently available at MSFC. Analysis of environmentally significant inorganics will be performed by Inductively Coupled Plasma (ICP) Spectroscopy, Atomic Absorption Spectrophotometry (AA), Inductively Coupled Plasma-Mass Spectroscopy (ICP – MS), and Ion Chromatography (IC). Analysis of organic pollutants will be performed by Gas Chromatography (GC), Gas Chromatography – Mass Spectrometry (GC-MS), High Pressure Liquid Chromatography (HPLC) and Fourier Transform Infrared (FTIR) analysis. The use of this analytical instrumentation will meet or exceed all current regulatory requirements and will provide reliable information for MSFC to effectively maintain their pollution abatement and control programs.

Subelement 01: Similar types of analyses will be performed on samples using much of the same scientific instrumentation used in Subelement 00. Additional instrumentation that may be utilized includes X-ray Fluorescence (XRF) and combustion analyses instrumentation to make quick determinations of metal and other inorganic constituents in alloy samples.

Subelement CC: Materials analysis of Ares I Upper Stage Thermal Protection System will be performed by trained personnel on instrumentation currently available at MSFC. Organic analysis will be performed by GC-MS and HPLC. Inorganic analysis will be performed by AA, ICP and X-ray Fluorescence (XRF). Material properties analysis will be performed by Karl Fisher moisture analyzer, density/specific gravity meters and various wet chemistry techniques.

3.0 Discussion of Skills Required

Personnel performing this subtask must be proficient with one or more of the analytical instrumentation listed above as well as knowledge and experience in chemistry and analytical chemical methodology and calculation of results. Personnel must also be knowledgeable in current local, state and federal environmental discharge regulations and field sampling procedures.

4.0 Special Tools Required

None.

5.0 Participating Subcontractors

None.

6.0 Milestones & Deliverables

All deliverables will be delivered to the task initiator within ten (10) working days after the end of the month.

1. Monthly Activity Reports
2. Environmental Sample Data Reports (monthly, quarterly, semi-annual)
3. Non-Environmental Sample Data Reports.

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

Personal Protective Equipment (PPE) appropriate to the performance of the various operations described in this Task Order is required.

Material estimate is included under subelement 00 to cover the cost of lab coats and their cleaning.

Other estimate is included under subelement 00 to cover the National Environmental Laboratory Accreditation Program (NELAP) annual certification fee.

8.0 Work Shelf

The following activities could be accomplished as part of the Task Order performance by personnel that are temporarily available due to program or funding delays on other Tasks. Specific assignments will be coordinated with the Task Initiator to ensure appropriate skills and experience.

TO/Subelement	Description	Due Date	Skill
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9.0 Schedule

Task Order #	Subelement	Task Work Element	2011											
			Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
34-010001	00	Environmental Control, Testing and Development	-----											
34-010001	00	Monthly Activity Reports	-----											
34-010001	00	Environmental Sample Data Reports	-----											
34-010001	00	Non-Environmental Sample Data Reports	-----											
34-010001	01	Project Specific Sample Analyses	-----											

ESTS Contract Task Order Request Performance Plan

Task Order Title: [Environmental Control, Testing and Development](#)

Task Order Number: [34-010001](#) Revision: 10

Category	Weighting Technical %	End of Period Technical Score
Technical Objectives	65%	X <u>65%</u> = Justification
<p>The objective of this task directive is to perform routine and non-routine analyses of environmental samples and assist in the analysis of potentially hazardous waste by sampling, collecting, and testing water, soil, and other compounds. Assist in the development and research in chemical processes and methods. In addition, support will be provided under this task directive for non-environmental sample analyses exceeding the normal workload of the Chemistry Team in order to reduce or eliminate testing back logs. Task personnel will also be available as part of a response team in the event of accidental release of hazardous materials at MSFC.</p>		
Schedule Objectives (Milestones)	Weighting Schedule % <u>10%</u> (min 10%)	Schedule Score X <u>10%</u> = Justification

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1. Monthly Activity Reports		
2. Environmental Sample Data Reports (Monthly, Quarterly, Semi-Annual)		
3. Non-Environmental Sample Data Reports		

	Weighting		
	Cost%	Cost Score	
	<u>25%</u>		X <u>25%</u> =
<u>Cost (actual vs. negotiated)</u>	(min.25%)		Justification
	Weighting		Total Score
	Total %		
	100.00%		

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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MSFC Initiator: Jimmy Perkins

(b)(4)
[Redacted]
[Redacted]
[Redacted]

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	1	1	Work sent out that is unable to be performed with current equipment
Risk C2	Cost			
Risk T1	Technical	1	1	Loss of personnel on task
Risk T2	Technical	1	2	Error in analytical results.
Risk S1	Schedule	2	1	Results from work sent to outside lab not received within allotted time
Risk S2	Schedule			

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



