

Task Order Plan (TOP)

Contract Number: NNM05AB50C
TO Title: *Systems Engineering Process Planning*
TO Number: 32-090407 **Revision:** 00

Period of Performance: 10/02/2010 to 12/31/2010

MSFC Initiator: *Scott Hutchins*

(b)(4)



Emergency: YES

Subelement CA – WBS 136905.02.01.08.03
Subelement AA – WBS 206518.02.20

Subelement CA of this task order is a continuation of work previously performed under task order 32-000001-CI which was closed effective 1 October 2010.

1.0 Task Order Description & Objectives

Subelement CA – Integrated Engineering Process Planning

This Task Order is to provide system engineering support to the Systems Planning Branch/EV94 in the Spacecraft and Vehicle SE&I Division and its customers such as the Constellation project offices. Provide direct support, expertise, and mentoring in the sound development, derivation, traceability, and management of System Engineering Products, Plans and Processes for their programs, projects and customers.

Subelement AA – Ares V Knowledge Management Support

This subelement, in direct support to EV94, Systems Planning Branch, will provide Knowledge Management support to the Risk Management and Assessment Group and its customers by providing direct support, expertise, and mentoring in the sound assessment and management of Knowledge for Ares V.

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

Subelement CA – Integrated Engineering Process Planning

Provide technical management advisory services to the Systems Planning Branch/EV94 and its customers, regarding technical and management questions/issues/risks affecting the performance and outcome of EV94's work products and services. Provide advice, studies, assessments, independent analysis and/or recommendations for EV94 and its customers in such areas systems engineering processes, systems engineering, and management processes. Functions include support to:

- Systems Engineering Management Plan (SEMP)
- Data Requirements List (DRL)
- Work Breakdown Structure (WBS)
- Technical Review Planning
- Generic instructions for projects

Subelement AA – Ares V Knowledge Management Support

This task will provide the collection, interpretation, and preparation of information for presentation to internal and external customers to meet program/project goals. This task also provides systems engineering support associated with the development and evaluation of Knowledge management processes and documentation and other system engineering functions.

Task personnel will work independently and collectively with the EV94 organization and Ares V to organize knowledge management activities, create, collect, interpret, archive and disseminate knowledge related data. Personnel will perform analysis of data and report periodically for each assigned customer. Other typical tasks planned to be performed are as follows:

- develop knowledge assessment/management processes, plans and other analyses.
- support and participate in program/project product review meetings.
- support and provide knowledge related information for trade studies, trade tree development, and the decision making processes.
- prepare and track knowledge traceability.
- mentor team members in knowledge management, and use of tools and databases.
- facilitate Knowledge Manager activities including: Communicating KM processes, practices, status, and current/archived information via the KM web site. Provide appropriate knowledge management documentation to the LaSSE administrator for storage in that eLibrary. Provide facilitation support for knowledge capture events. Identify candidate Knowledge Objects for knowledge capture and transfer. Facilitate Case Studies for training purposes and knowledge transfer.

3.0 Discussion of Skills Required

Subelement CA – Integrated Engineering Process Planning

Task personnel shall include senior level engineers with subject matter expertise in NASA systems management, systems engineering and project management. Additionally personnel shall have proven expertise in the support of NASA efforts in the use, adaptation and application of knowledge capture and management for documenting program and project lessons learned.

Subelement AA – Ares V Knowledge Management Support

Task personnel will be experienced in systems engineering, knowledge capture and process development for space vehicle systems and subsystems.

4.0 Special Tools Required

None.

5.0 Participating Subcontractors

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6.0 Milestones & Deliverables

Monthly reports of activity and accomplishments are required. Final documents will be delivered to meet schedule needs as negotiated by the task initiator or their designated representative. Monthly reporting will be provided by customer work package area support.

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

None.

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	s/e	Task Work Element	2010				2011										
			Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
32-090407	00	Systems Engineering Process Planning	▽														
32-090407	AA	Ares V Knowledge Management Support	▬														
32-090407	CA	Integrated Engineering Process Planning	▬														
32-090407	00	Monthly Activity Report															

ESTS Contract Task Order Request Performance Plan

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Category	Weighting Technical %	End of Period Technical Score
Technical Objectives	65%	X <u>65%</u> = Justification
<p>Provide technical management advisory services to the Systems Planning Branch/EV94 and its customers, regarding technical and management questions/issues/risks affecting the performance and outcome of EV94's work products and services. Provide recommendations, studies, assessments, independent analysis and/or recommendations for EV94 and its customers in such areas systems engineering processes, systems engineering, and management processes. Functions include support to:</p> <ul style="list-style-type: none"> • Systems Engineering Management Plan (SEMP) • Data Requirements List (DRL) • Work Breakdown Structure (WBS) • Technical Review Planning • Generic instructions for projects • Ares V Knowledge Capture 		
Schedule Objectives (Milestones)	Weighting Schedule % <u>10%</u> <i>(min 10%)</i>	Schedule Score X <u>10%</u> = Justification
<p>Documentation as required to meet systems planning products and program/project milestones</p>		
	Weighting Cost%	Cost Score

ESTS Contract Task Order Request Performance Plan

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<u>Cost (actual vs. negotiated)</u>	<u>25%</u> <i>(min.25%)</i>	X <u>25%</u> =
		Justification
		<div style="border: 1px solid black; height: 60px; width: 100%;"></div>
	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

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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 cost risks are identified for this task order.
Risk T1	Technical			No technical risks are identified for this task order
Risk S1	Schedule			No schedule risks are identified for this task order

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



