

Task Order Plan (TOP)

Contract Number: NNM05AB50C
TO Title: Ares Project Office & Systems Management
TO Number: 45-010006 **Revision:** 16
Period of Performance: 10/02/2010 to 09/30/2011

MSFC Initiator: Leland Dutro

(b)(4)

Emergency: No

<u>Subelement</u>	<u>WBS</u>
45-010006-AA	206518.01.20 (MSFC-PM – Ares V)

Revision History

Revision 16: 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. This revision affects the following APO elements; the Vehicle Integration Office (JP10) and the Ares V Office (JP40). The total estimated cost of this revision is (b)(4)

1. Subelement AA – This subelement includes an estimate of subcontract cost to provide specialized software and information management support as well as an estimate for the labor cost to perform subelement and subcontractor management. Total estimated cost associated with this subelement is (b)(4)
2. Subelements 45-010006 CB and CF were administratively closed in contract year 5 as a result of the Constellation/Ares replan effort. The work under these closed subelements was transferred to Task Order 45-000001.

Revision 15: The primary purpose of this revision is to modify Subelement CF to add “Systems Engineering” support and to remove a portion of the scope of work of the Ares I Specialized Software Support from the (b)(4) subcontractor based on a re-evaluation of support needs by the Task Initiator. The Task Initiator defined a new set of procedural and process documentation for inclusion in this task that is indicative of Systems Engineering and Integration (SE&I) activities, but not of Specialized Software Support. The development and maturation of these documents is not within the scope of the (b)(4) (b)(4) Statement of Work (SOW); consequently, the (b)(4) (b)(4) was deleted from this TO and replaced with the “Systems Engineering” effort that encompasses the goals and objectives of the Ares Projects Office (APO). Sections 1.0, 2.0, and 3.0 of the TO were updated to reflect these changes.

The secondary purpose of this revision is to change the WBS numbers for Subelement CB and for Subelement CF in order to sufficiently track the Earned Value Management (EVM) variances associated with the Vehicle Integration (VI) office funding allocations. The WBS for Subelement CB was changed from 136905.02.01.08 to 136905.02.01.08.01. The WBS for Subelement CF was changed from 136905.02.01.08 to 136905.02.01.08.05. Also, the Task Order Lead was changed from Dwayne Pittman to Renaeé Gregory. This revision affects the Vehicle Integration Office (JP10) and the Ares V Office (JP40). The total decrease in the estimated cost for this revision is (b)(4)

1. Subelement AA was modified to reduce the subcontract cost estimate by (b)(4) in FY10 and (b)(4) in FY11 since the original estimate included hours that are not expected to be required based on the APO redirection in FY10 following the proposed FY11 NASA budget. The total net decrease in cost associated with this Subelement is (b)(4)
2. Subelement CF was modified to increase the labor cost estimate by adding (b)(4) (b)(4) hours in FY11 for Systems Engineering support since the Task Initiator has re-evaluated the scope of this effort based on the need to have more insight and flexibility between the tool developers and the end-users. Consequently, the subcontract cost estimate was reduced by (b)(4) in FY10 and (b)(4) in FY11 to accommodate this new effort while remaining within the current funding profile. There were no modifications to add travel or ODC estimates for this subelement. The total net increase in cost associated with this Subelement is (b)(4)

There were no deltas to the estimated cost in Subelement CB for this revision. The Schedule, Performance Plan, and Risk Assessment have been reviewed but have not been revised since the new scope of effort remains consistent with the expected task activities and objectives for this period of performance. No additional budget is required.

Revision 14: The purpose of this revision is to transition the work of the Specialized Software Support from subelement *CE (WBS 136905.01.01.08.20)* to subelement *CF (WBS 136905.02.01.08)*. Estimates for subelement CE remain for October and November to capture charges for work that occurred in CY4 that were not estimated in CY4. Subelement CF began in October and is a continuation of the work from subelement CE for CY5 under a different WBS. Also, the (b)(4) (b)(4) This revision affects the Vehicle Integration Office (JP10), and the Ares V Office (JP40). There are no changes to the total estimated cost resulting from this revision.

The Schedule, Performance Plan, and Risk Assessment have not been revised since there are no expected changes in task activities for this period of performance. No additional budget is required.

Revision 13: 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 from 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 Ares Projects Office (JP02), the Vehicle Integration Office (JP10), and the Ares V Office (JP40). The total estimated cost associated with this revision is (b)(4)

3. Subelement AA - This revision adds a new subelement for the specialized software and Information Management support to Ares V that was previously included in subelement CE. It includes an estimate of subcontract cost as well as an estimate for the labor cost

- to perform subelement and subcontractor management. Total estimated cost associated with this subelement is (b)(4).
4. Subelement CB – This subelement includes an estimate of labor cost travel cost, and training cost. Labor estimate (b)(4) Travel estimate at one trip (b)(4) Total estimated cost associated with this subelement is (b)(4)
 5. Subelement CE – This subelement includes an estimate of subcontract cost to provide specialized software and information management support as well as an estimate for the labor cost to perform subelement and subcontractor management. Total estimated cost associated with this subelement is (b)(4)

Revision 12: The purpose of this task revision is to more accurately reflect the effort required during this period of performance. Fewer resources were required to accomplish the work than were originally estimated. The total estimated cost **decrease** associated with this revision is (b)(4)

1. Subelement CA: No change.
2. Subelement CB: Due to a personnel labor category change that occurred in April 2009, the (b)(4) resulting in an increased estimated direct labor cost. This revision reduces the direct labor hours by (b)(4) but due to the labor category change from a (b)(4) it results in an increase in labor cost of (b)(4) between this revision and the previous revision. Reduced estimated travel cost by (b)(4) and reduced estimated training cost by (b)(4) The total net decrease associated with these changes to this Subelement is (b)(4)
3. Subelement CE: Added (b)(4) resulting in an increase of (b)(4) Decreased subcontractor estimate by (b)(4) The total net decrease associated with this Subelement is (b)(4) This Subelement is funded by APO JP02.
 - i. Subelement CE defines contractor support which will be performed in September 2009, but not invoiced until October 2009. The subcontractor support to Subelement CE for September is being deleted from this Task Order in this revision. The estimated subcontractor costs for effort performed in September 2009 will be included in a Contract Year 5/10 Task Order revision.

The Schedule, Performance Plan, and Risk Assessment have not been revised since there are no expected changes in task activities for this period of performance. No additional budget is required.

Revision 11: The purpose of this revision is to reallocate direct labor estimates, realign planned ODC costs with actual costs, and increase the scope of this task by adding Subelement CE which will provide Specialize Software and Information Management support. The total estimated cost **increase** associated with this revision is (b)(4) This Task Order revision affects the Ares Projects Office.

1. Subelement CA: Reduced the direct labor estimate by deleting (b)(4) (b)(4) The total decrease associated with this reduction in direct labor hours is (b)(4)
2. Subelement CB: Reduced the direct labor estimate by deleting (b)(4) (b)(4) for a total reduction of (b)(4) Estimated ODC costs were re-aligned with actual costs. The total decrease associated with this reduction in direct labor hours is (b)(4)

3. Subelement CE: Per customer direction, increased the scope of this Task Order to include the Specialize Software and Information Management support previously provided under ESTS Task Order 45-000102-CC. The transfer of support is effective as of February 1, 2009 and is being funded by APO JP02. The total *increase* to this Task Order associated with the addition of this transfer of support is (b)(4)

The Schedule, Performance Plan, and Risk Assessment were each evaluated and revised, as needed, due to the changes defined in this Task Order revision.

Revision 10: 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. Total estimated cost is (b)(4). This revision affects the APO Vehicle Integration Element.

1. Subelement CA – Labor estimate of (b)(4)
2. Subelement CB – Labor estimate of (b)(4) Travel estimate at 6 trips (b)(4)
3. Subelement CC – This subelement is closed at the end of CY03.
4. Subelement CD – This subelement is closed at the end of CY03.

Revision 09: The purpose of this Task Order revision is to modify labor, travel and ODC estimates due to reduced work scope and the fact that fewer resources are required than originally estimated.

1. Subelement CA – Decreased labor estimate (b)(4)
2. Subelement CB – Decreased labor estimate (b)(4)
3. Subelement CC – Decreased labor estimate (b)(4) (b)(4)
4. This task revision results in an overall cost impact **reduction** of (b)(4)
5. The Schedule, Performance Plan, and Risk Assessment have been revised to reflect the current task order revision.

Revision 08: The purpose of this revision is to reduce May and June sub-element CC labor estimate and reallocate estimate to September 2008. This results in a (b)(4)

Revisions 07: The purpose of this revision:

1. Adds Subelement CD to add scope of Product Breakdown Structure (PBS) using subcontractor labor for a limited period of 2 months (January through February) resulting in a cost impact of (b)(4)
2. Reduced Subelement CC labor hours due to customer reorganization resulting in a cost impact reduction of (b)(4)
3. This task revision results an overall cost impact reduction of (b)(4)
4. The Schedule, Performance Plan, and Risk Assessment have been revised to reflect the current task order revision.

Revision 06: The purpose of this revision 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 changes in task activities for the new period of performance.

Revision 05: This revision amends the Subelement CA labor hours, Subelement CB task description and adds a new subelement, Subelement CC, to provide systems management engineering support to the 5.2.1 WBS. The overall cost impact resulting from this revision is an increase in estimated cost of (b)(4)

Subelement CA: A decrease of (b)(4) resulting in a net reduction of (b)(4)

Subelement CB: The Task Description was modified to incorporate data analyst activities supporting WBS 5.2.1. This modification increased (b)(4) (b)(4) decreased by (b)(4) due to a deletion of unneeded training estimate. The overall cost impact to this subelement is an increase of (b)(4)

Subelement CC: The addition of this subelement increases the scope of this task support to include systems management engineering. The total estimated cost associated with this new subelement is (b)(4) and includes labor hours to support the 5.2.1 WBS for August through the end of September.

The Schedule, Performance Plan, and Risk Assessment were evaluated for possible impacts as a result of this additional scope.

Revision 04: The primary purpose of this revision is to add project coordinator support that is being transferred from matrixed engineering support to direct project support. Specific changes include:

Subelement CA: Labor hours were reduced by (b)(4)

Subelement CB: The distribution of labor hours and labor categories was changed to reflect:

(b)(4)

3. The transfer of project coordinator scope from an Engineering Directorate task order to this task order.
4. The elimination of unneeded travel and training resources.

The net impact of this revision was an **increase** of (b)(4)

Revision 03: The purpose of this revision is shift resources to later in the contract year to better reflect the expected resource loading. Specific changes include:

Subelement CA: No changes.

Subelement CB: Labor hours in February and March 2007 were shifted to June and July 2007. Travel and training costs were reduced.

The net impact of this revision was a **reduction** of (b)(4)

Revision 02: The purpose of this revision 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.

Revision 01: The level of effort required for task management was higher than originally projected, requiring an increase of (b)(4) for the labor loading on subelement 00. The level

of effort required for task management was slightly lower than originally projected, requiring a decrease of (b)(4) for the labor loading on subelement 01. Additionally for subelement 01, material and logistics support for Technical Interchange Meetings required the addition of (b)(4). Elimination of unused training reduced (b)(4) for subelement 01 for a net reduction of (b)(4) for subelement 01. For this revision, the total task order cost was **reduced** by (b)(4).

Task Order Description & Objectives

Subelement AA: Ares V Specialized Software and Information Management Support

This subelement (WBS 206518.01.20) will provide specialized software integration support to the Ares V project; including management of NASA's Integrated Collaborative Environment (ICE) Windchill™ Web application program.

Technical Approach (Including required input, guidelines & assumptions)

Subelement AA: Ares V Specialized Software and Information Management Support

Support shall include may not be limited to the following:

- Work within assigned customer areas to provide specialized software integration support.
- Support assignments which may include multiple assignments to NASA customer requests and/or projects.
- Provide support for all program/project areas as assigned to efficiently and effectively meet project and Exploration Systems Mission Directorate (ESMD) needs.
- Work directly to perform scoped tasks in a timely manner with minimal direction by the Jacobs Technical Manager.
- Perform APO software integration support.
- Perform activities that support the efficient application of software packages to facilitate large project reviews of technical and programmatic data.
- Work to integrate processes with software tools such that task objectives can be met and the efficiency of the tool will be maximized to support project objectives.
- Use the provided NASA's ICE Windchill™ Web application program and shall integrate the required specialty software program(s) with this environment in order to implement the required processes and policies of the assigned project.
- Provide suggestions, comments, presentations, educational materials, etc. that are required to facilitate the most efficient use of software products to achieve the customer objectives.
- Utilize off-the-shelf or government provided software packages and shall refrain from the development of a unique software capability unless the joint approval to do is given.

Discussion of Skills Required

Subelement AA: Ares V Specialized Software and Information Management Support

Personnel shall have proven experience in the support of major NASA or other government and industry system management and project development efforts. Personnel shall provide the proper balance of experienced analysts and information technologists with necessary programming capabilities to support the needs of the assigned project teams.

Personnel shall have broad experience in providing Information Technology support (i.e. knowledge of databases and programming languages) and shall possess excellent organizational and analytical skills.

- Information Management Engineer/Analyst II personnel shall have (b)(4)

ESTS Contract Task Order Request Performance Plan

Task Order Title: [Ares Project Office & Systems Management](#)

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Category	Weighting Technical %	End of Period Technical Score
Technical Objectives	60%	X 60% = Justification
1) Provide project engineering and integration support. 2) Provide technical/programmatic reviews and evaluations. 3) Provide data analyst support for the 5.2.1 WBS. 4) Perform software/information mgt. integration support for APO and Element Office teams to assist in the achievement of accurate project integration activities.		
Schedule Objectives (Milestones)	Weighting Schedule % 15% (min 10%)	Schedule Score X 15% = Justification
1) Monthly Activity Report 2) Project products (presentations, reports, plans, white papers, recommendations, assessments, summary documentation, etc.) 3) Project Management Assessments, as required. 4) 5.2.1 products (data and tool analysis with recommendation, presentations, strategic planning and implementation documents, technical review planning and products, 5.2.1 task/product tracking, etc.)		
Cost (actual vs. negotiated)	Weighting Cost% 25% (min.25%)	Cost Score X 25% = Justification
	Weighting Total % 100.00%	Total Score

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

Task Order Number: [Ares Project Office & Systems Management](#)

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Comments:

Risk Assessment

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TO Number: 45-010006 **Revision:** 16

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

MSFC Initiator: Leland Dutro

(b)(4)

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	2	2	Increase in scope of support activities.
Risk T1	Technical	-	-	None.
Risk S1	Schedule	2	2	Increase in scope of support activities.

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



