

Task Order Plan (TOP)

Contract Number: NNM05AB50C
TO Title: ISS ECLSS Project Support
TO Number: 43-030402 **Revision:** 14

Period of Performance: 10/2/2010 to 9/30/2011

MSFC Initiator: Kevin Depew

(b)(4)
[Redacted]

Emergency: No

Revision -14: The purpose of revision -14 is to adjust estimated resources to accomplish the scope of work defined by the Customer; specifically:

1. Added subelement 43-030402-JC for labor hour resources for (b)(4) subcontract support. The period of performance for subelement 43-030402-JC is December 4, 2010 through September 3, 2011. Task Order 48-010405-00 will be closed and this work will be transferred to Task Order 43-030402-JC.
2. Increased (b)(4) for subelement -JC.

Program	Subelement	WBS	Status
Office of Strategic Analysis & Communication (OSAC) Project Planning & Analysis (PP&A)	00	132438.01.10.01	Mapped to 43-030402-JC and 48-010405-00 CLOSED
VP 34, ECLSS Project	JC	401769.06.08.02.04.05	Open

Revision -13: 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 support to the VP34 ISS ECLSS Project. Also this revision deletes Subelement -04.

Program	Subelement	WBS	Status
VP 34, ISS ECLSS Project Office	02	401769.06.03.03.02.07	Mapped to 43-030402-JA
VP 34, ISS ECLSS Project Office	JA	401769.06.03.03.02.07	Open

VP 34, ISS ECLSS Project Office	05	401769.06.08.02.04.05	Mapped to 43-030402-JB
VP 34, ISS ECLSS Project Office	JB	401769.06.08.02.04.05	Open

Revision -12: The purpose of revision -12 is to adjust estimated resources to accomplish the scope of work defined by the VP34 Customer; specifically:

3. Increase travel resources due to ECLSS Logistics/Shipping meeting at KSC for subelement -02.
4. Increase labor resources due to change of scope for a (b)(4) or subelement -05.
5. Delete subelement -03.

Funding for this task is provided per WBS:

- 401769.06.03.03.02.07 (43-030402-02)
- 401769.06.08.02.04.05 (43-030402-05)

Revision -11: 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 support to the VP34 ISS ECLSS Project.

Funding for this task is provided per WBS:

- 401769.06.03.03.02.07 (43-030402-02)
- 401769.06.08.02.04.02 (43-030402-03)
- 439906.04.01.06.06.01 (43-030402-04)
- 401769.06.08.02.04.05 (43-030402-05)

Revision -10: The purpose of revision -10 is to adjust estimated resources to accomplish the scope of work defined by the Customer; specifically:

6. Decrease travel resources due to change of scope for subelement -02 and -05.
7. Increase labor resources due to change of scope for subelement -02 and -05.

Revision -09: The purpose of revision -09 is to more accurately reflect the effort required to accomplish the additional scope of work defined by the Customer; specifically:

1. Add (b)(4) to subelement -05 with a corresponding increase in cost of (b)(4) for the budget planning and tracking of the ECLSS Project 2010 STaR spares.
2. Revise the Performance Plan.

Revision -08: The purpose of revision -08 is to more accurately reflect the effort required to accomplish the additional scope of work defined by the Customer; specifically:

2. Add (b)(4) to subelement -05 with a corresponding increase in cost of (b)(4) for ECLSS Project engineering support.
2. Revise the 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 adds subelement -05 and 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.

The purpose of revision -06 is to more accurately reflect the effort required to accomplish the additional scope of work defined by the Customer; specifically:

3. Add (b)(4) to subelement -02 with a corresponding increase in cost of (b)(4)

Funding for this task is provided per MSFC PR 4200187212.

The purpose of revision -05 is to add estimated resources to accomplish the additional scope of work defined by the Customer; specifically:

8. Add (b)(4)
9. Change the (b)(4)

The purpose of Revision -04 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.

The following changes to define actual task activities; specifically:

1. Change the (b)(4)
2. Change the (b)(4)

Funding for this task is provided per MSFC PR 4200187212.

The purpose of Revision 03 is to add a full time schedule/budget analyst at a (b)(4) in place of the (b)(4). This results in an increase of (b)(4). In addition, travel estimates were added for two trips to KSC in December and one trip to KSC in March for a total travel of (b)(4).

The purpose of 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 Revision 01 is to add (b)(4) travel dollars due to a change in scope requiring travel for four team members to KSC and to add (b)(4) due to an underestimate of hours for team members working multiple task orders.

This Task Order (TO) replaces TO 14-040101 due to the NASA/MSFC reorganization and the subsequent realignment of the NNM05AB50C ESTS contract. This TO defines and estimates work for the period 1 April 2006 through 29 September 2006. Funding for this task is provided per MSFC PR 4200150077. Additionally, the Schedule, Performance Plan and Risk Assessment have been revised to reflect changes in task activities for the new period of performance.

1.0 Task Order Description & Objectives

43-030402-JA Sustaining Engineering Project Management Support

The ISS Regenerative ECLSS Sustaining Engineering effort consists of Water Recovery System (WRS) Urine Processor Assembly (UPA) rebuild and integration into the rack, WRS acceptance test and delivery, delivery of the Water Delivery System, post delivery and on-orbit support of the WRS and the Oxygen Generation System (OGS), as well as the post acceptance review phase of the WRS. Areas of support include budget planning and tracking, scheduling, ALERT tracking, procurement and

transportation coordination, website maintenance, action item tracking, presentation and meeting support, and other project support as needed. Coordination will be required between the ECLSS Project Office at MSFC, performing MSFC organizations, the WPA/OGA contractor, and the ISS Project Office at JSC.

43-030402-03 ECLSS Spares Project Management Support(Deleted rev 12)

The ISS ECLSS Spares effort consists of the manufacturing, test, and delivery of UPA, WPA, OGA, and PSM flight spares. Areas of support include budget planning and tracking, earned value management, scheduling, procurement and transportation coordination, website maintenance, action item tracking, drawing master list maintenance, presentation and meeting support, and other project support as needed. Coordination support will be required between the ECLSS Project Office at MSFC, performing MSFC organizations, the WPA/OGA contractor, and the ISS Project Office at JSC.

43-030402-04 Exploration Life Support Project Management Support (Deleted rev 13)

The Exploration Life Support (ELS) effort consists of advanced ECLSS technology research, development, and testing. Areas of support include procurement and transportation coordination, presentation and meeting support, and other project support as needed.

43-030402-JB 2010 STaR Spares Project Management Support

The ISS ECLSS Spares effort consists of the manufacturing, test, and delivery of UPA, WPA, OGA, and PSM flight spares. Areas of support include budget planning and tracking, earned value management, scheduling, procurement and transportation coordination, website maintenance, action item tracking, drawing master list maintenance, presentation and meeting support, and other project support as needed. Coordination support will be required between the ECLSS Project Office at MSFC, performing MSFC organizations, the WPA/OGA contractor, and the ISS Project Office at JSC.

43-030402-JC 2010 STaR Spares Project Schedule Support

Support ECLSS Project Management with Schedule, Earn Value Management (EVM), and Risk Assessment support.

2.0 Technical Approach

43-030402-JA Sustaining Engineering Project Management Support

Provide project management support for the sustaining phase of WRS and OGS. Provide support in budget and earned value planning and tracking. Develop and maintain overview schedules.

Monitor the procurement of sustaining related hardware or equipment and facilitate the process to minimize impact to the schedule. Coordinate transportation of any sustaining related hardware. Facilitate the movement of any sustaining related paperwork and hardware among MSFC performing organizations to minimize impact to the schedule.

Support the ECLSS Project Office, specifically with respect to the ECLSS Hardware Missions. Serve as a liaison between the ECLSS Project Office, MSFC Engineering, JSC Engineering, International partners, and vendors. Activities include but are not limited to: Deport Activities, Organization of ECLSS Hardware transportation from Vendors, Manifests Requests, Integrated Product Team Lead Meeting Logistics, Assisting in the selection and implementation of design and technical approaches to meet packaging requirements, Attending Bench Reviews at KSC/JSC, Prepositioning Spares, Operations, On-Orbit Activities as required, Panel Presentations support as required and assisting in Weekly and Monthly Status Report preparation.

Maintain project websites, provide action item tracking, monitor ALERTs, maintain drawing master lists, and provide presentation and meeting support.

43-030402-03 ECLSS Spares Project Management Support (Deleted rev 12)

Provide project management support for the manufacturing and acceptance testing of ECLSS flight spares. Provide support in budget planning and tracking and earned value management. Develop and maintain detailed and overview schedules.

Facilitate the procurement of hardware to support manufacturing. Facilitate the movement of paperwork and hardware to minimize schedule impact. Coordinate the transportation of hardware shipments.

Maintain project websites, provide action item tracking, monitor ALERTs, maintain drawing master lists, and provide presentation and meeting support.

43-030402-04 Exploration Life Support Project Management Support (Deleted rev 13)

Facilitate the procurement of hardware. Facilitate the movement of paperwork and hardware to minimize schedule impact. Coordinate the transportation of hardware shipments.

43-030402-JB 2010 STaR Spares Project Management Support

Provide project management support for the manufacturing and acceptance testing of ECLSS flight spares. Provide support in budget planning and tracking and earned value management. Develop and maintain detailed and overview schedules as required.

Facilitate the procurement of hardware to support manufacturing. Facilitate the movement of paperwork and hardware to minimize schedule impact. Coordinate the transportation of hardware shipments.

Maintain project websites, provide action item tracking, monitor ALERTs, maintain drawing master lists, and provide presentation and meeting support.

43-030402-JC 2010 STaR Spares Project Schedule Support

In support of the ECLSS Project, efforts to promote good program planning and control functions at MSFC, and to support a critical need at MSFC in this area, the Contractor will provide a Subject Matter Expert (SME) capable of performing the following related functions.

1. Program Planning & Control – Expert technical support for the development, maintenance, and analysis of multiple integrated project schedules with resource loaded tasks that will accurately model the baseline execution plan and reflect changes to the plan as the project matures.
2. Management Systems – Participate in management systems assessment and implementation, Integrated Baseline Review process updates, and validation of those processes.

3.0 Discussion of Skills Required

(b)(4)



4.0 Special Tools Required

None.

5.0 Participating Subcontractors **Subelement -JC**

6.0 Milestones & Deliverables

The following is a listing of Deliverables and Milestones identified to date. Other deliverables and/or milestones may be identified as the task work matures:

1. Schedule updates will be provided for the weekly tag-up meetings and to support weekly reporting. Logic diagrams and analysis will be provided to support reviews and planning/replanning exercises.
2. Earned value metrics will be provided to support the monthly presentation to management.
3. Budget tracking data will be provided monthly to support year end analysis.
4. Verification packages will be processed in a timely manner to facilitate closures and to support reviews.
5. Shipments will be coordinated in a manner to reduce/minimize schedule impact.
6. A Monthly Activity Report will be provided documenting activities performed, including a summary of verification activity and ALERTS tracking.
7. Develop procurement data for the 2010 STaR Spares ECLSS Project.

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

Subelement –JA and -JB

Travel: 1 person x 2 trips x 5 days x JSC/KSC

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 Order #	Task Work Element	2011											
				Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
43-030402	00	43-030402	ISS ECLSS Project Support	[Gantt bar spanning Sep to Oct]											
43-030402	JA	43-030402	Sustaining Engineering Project Management Support	[Gantt bar spanning Sep to Oct]											
43-030402	JB	43-030402	2010 STaR Spares Project Management Support	[Gantt bar spanning Sep to Oct]											
43-030402	JC	43-030402	2010 STaR Spares Project Schedule Support	[Gantt bar spanning Dec to Oct]											

ESTS Contract Task Order Request Performance Plan

Task Order Title: [ISS ECLSS Project Support](#)

Task Order Number: [43-030402](#) Revision: 14

Category	Weighting Technical %	End of Period Technical Score
Technical Objectives	50%	X <u>50%</u> = Justification
<p>Provide project support for the International Space Station (ISS) Regenerative Environmental Control and Life Support Systems (ECLSS) and to the Exploration Life Support (ELS) Project.</p> <p>Project support will include scheduling, materials and procurements tracking, data management, verification process support, budget planning and tracking, earned value management, paper and hardware facilitation, shipping assistance, participation in ECLSS meetings, ALERT tracking, ECLSS Project Engineering and other functions as needed to support project management tasks.</p> <ol style="list-style-type: none"> 1. Program Planning & Control – Expert technical support for the development, maintenance, and analysis of multiple integrated project schedules with resource loaded tasks that will accurately model the baseline execution plan and reflect changes to the plan as the project matures. 2. Management Systems – Participate in management systems assessment and implementation, Integrated Baseline Review process updates, and validation of those processes. 		
Schedule Objectives (Milestones)	Weighting Schedule % <u>25%</u> (min 10%)	Schedule Score X <u>25%</u> = Justification

ESTS Contract Task Order Request Performance Plan

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<ol style="list-style-type: none"> 1. Schedule updates will be provided for the weekly tag-up meetings and to support weekly reporting. Logic diagrams and analysis will be provided to support reviews and planning/replanning exercises. 2. Earned value metrics will be provided to support the monthly presentation to management. 3. Budget tracking data will be provided monthly to support year end analysis. 4. Verification packages will be processed in a timely manner to facilitate closures and to support reviews. 5. Shipments will be coordinated in a manner to reduce/minimize schedule impact. 6. A Monthly Activity Report will be provided documenting activities performed, including a summary of verification activity and ALERTS tracking. 7. Develop procurement data for the 2010 STaR Spares ECLSS Project. 		
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	Weighting Cost% <div style="background-color: #cccccc; padding: 2px; text-align: center;">25%</div> <i>(min.25%)</i>	Cost Score X 25% =	
<u>Cost (actual vs. negotiated)</u>			Justification <div style="border: 1px solid black; height: 60px; width: 100%;"></div>
	Weighting Total % <div style="background-color: #cccccc; padding: 2px; text-align: center;">100.00%</div>	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: [ISS ECLSS Project Support](#)

Task Order Number: [43-030402](#) Revision: [14](#)

Comments:

Risk Assessment

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Period of Performance: 10/2/2010 to 9/30/2011

MSFC Initiator: Kevin Depew

(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	1	1	Cost is at risk if excessive travel is required.
Risk C2	Cost	1	1	Cost is at risk if problems arise which require extensive overtime
Risk T1	Technical			No technical risks have been identified
Risk T2	Technical			
Risk S1	Schedule	1	2	Schedule slips could occur if drawings are not released on time.
Risk S2	Schedule			

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



