

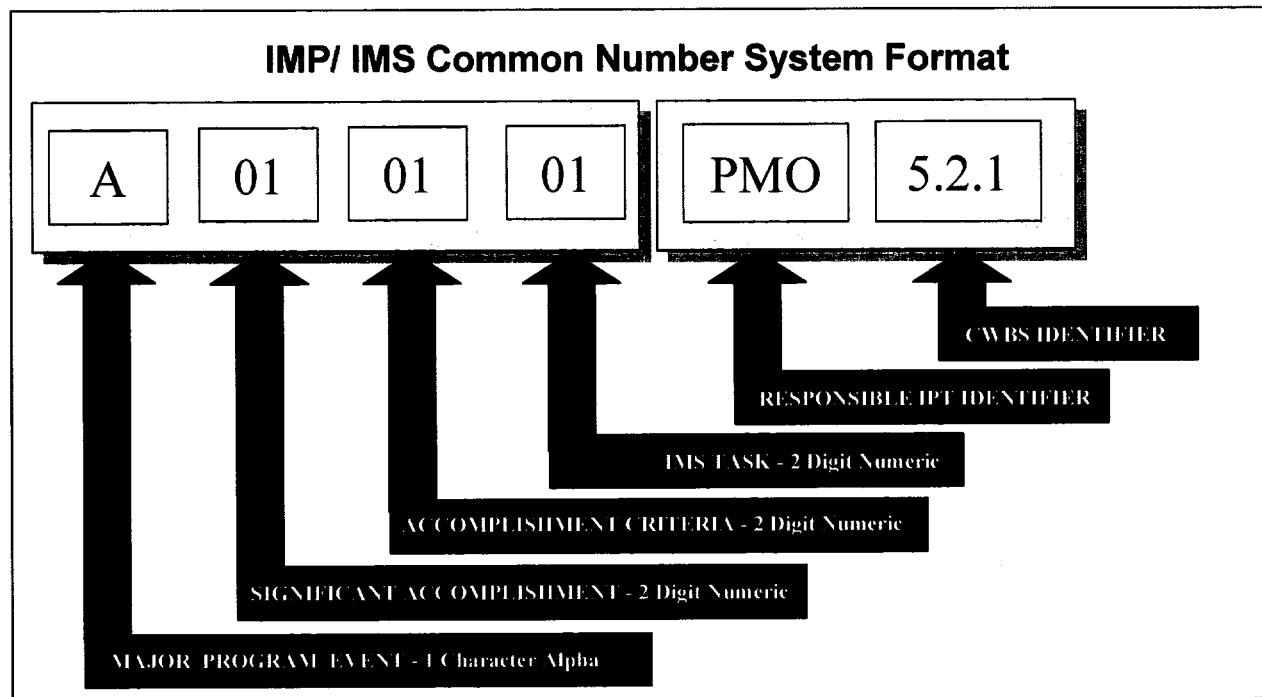
Integrated Master Plan (IMP) Description

E-10A (MC2A) Integrated Master Plan (IMP) Description**Integrated Master Plan Introduction**

The Northrop Grumman Integrated Master Plan (IMP) is an effective tool for both government and contractor management. The IMP and the supporting Integrated Master Schedule (IMS) is developed around the Integrated Product Teams (IPTs) responsible for the execution of the MC2A WSI Program. The IMP is an event oriented plan and is used to manage/minimize risk, accomplish up-front planning and commitment, instill balanced design discipline, accomplish program requirements and provide management with incremental verification for informed program decisions. The IMP measures program maturity by marking the initiation or conclusion of major intervals of program activity. The division of tasks and the representation of these in the Work Breakdown Structure (WBS), IMP, and IMS, will allow clear, concise roles and responsibilities for management visibility and control.

The IMP and its supporting IMS can be sorted by Major Program Event (MPE), Integrated Product Team, or any level of the WBS. Additional insight into program status may be gained with the application of customized filters to the IMS data repository, which can be adapted to other areas of management interest. The Program Manager and IPT status performance of all Product Teams and assess requisite accomplishments against program events or can status any Product Team's contribution in support of program events. The data elements are structured to convey maximum information to support and enhance decision-making.

In order to show continuity between events, accomplishments and their respective criteria, they are defined in the IMP and in the IMS using a logical numbering scheme, referred to as the "IMP Ref. No." The structure of the numbering scheme shows traceability back to the program WBS and the IPT structure.



E-10A (MC2A) Integrated Master Plan (IMP) Description

Major Program Events (MPEs)

The MPEs in the IMP highlight the achievement of a major program objective. The IMP events are structured to chart the maturity of the program. They represent essential decision points to accurately measure the success of the proceeding phase of work or an entry point of control for a subsequent phase of work. Specific IMP Events selected for the MC2A WSI Program are (Pre-SDD events are highlighted):



- D. Final Design Review (FDR)
- E. System Integration Lab Initial Capability Available
- F. A/C Mission Mods Completed
- G. A/C Subsystem Air Worthiness Test (AWT) Completed
- H. System First Flight Completed
- I. Development Test Completed
- J. System Verification Testing Completed
- K. Spiral 1 SDD Completed

Additional customer-contractor coordination will be supported through the use of Program Management Reviews (PMRs), which provide opportunities for collaboration and / or performance review at critical points during program execution.

Significant Accomplishment (SA)

The Significant Accomplishments (SA) are activities that support a Major Program Event. IMP Significant Accomplishments work products that characterize the total program effort to define, design, develop, modify, fabricate, install, integrate, test and deliver the weapon system. Accomplishments associated with an MPE must be completed before the MPE can be considered complete. Accomplishments also supplement the dependencies for products / integration between performing IPTs. These product "hand offs" are integral to program execution and a coherent management process.

Accomplishment Criteria (AC)

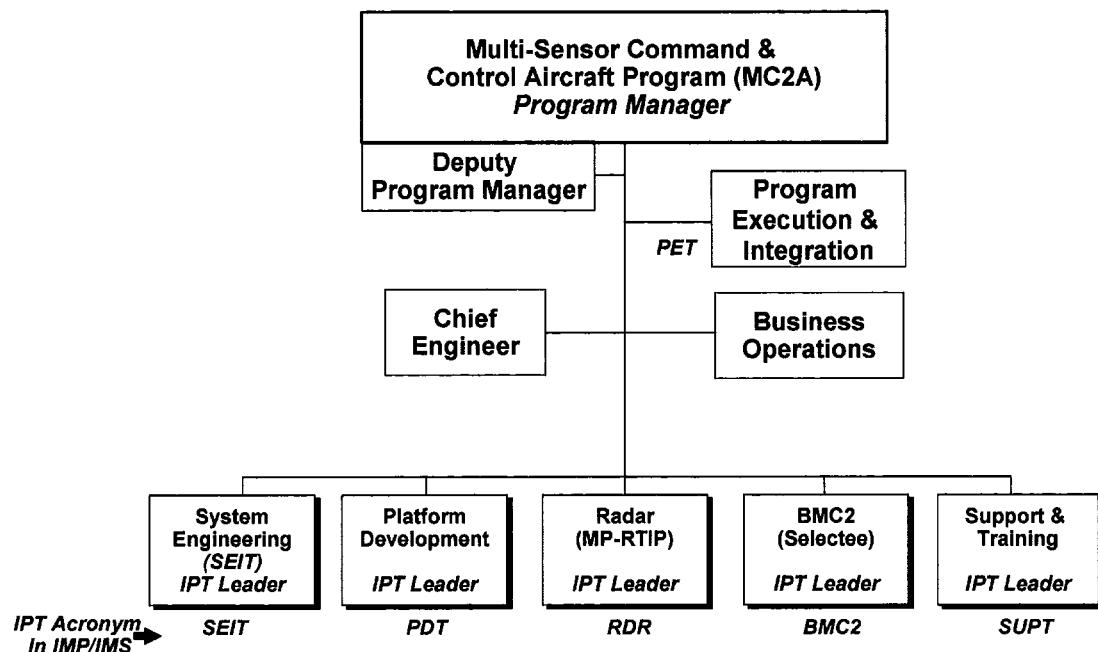
The Accomplishment Criteria (AC) describes definitive measures or indicators of the required level of effort, maturity or progress. They describe the work plans of all tasks (work process that lead to work products) required to complete each SA. All subordinate AC's must be largely completed before their associated SA is considered complete.

Tasks

E-10A (MC2A) Integrated Master Plan (IMP) Description

The tasks are unique to the IMS. Tasks are activities and work processes, which constitute the work plans necessary to complete each AC. The Tasks are directly traceable to the WBS, their detailed description are defined and documented in the WBS Dictionary. The tasks work and processes are managed by the IPTs, which address the work by system and functional services. The IMS Tasks are the basis for earned value planning.

The IMP is aligned with the IPT that has primary responsibility for the closure of each criterion. The following is the IPT structure supporting the execution of the program.



E-10A (MC2A) Integrated Master Plan (IMP) Description**Definitions of IMP Terms**

Definition of IMP Terms	
Allocated	The subject parameter has been subdivided or apportioned into parts and designated to a product or process. A document that shows the allocation has been prepared and is available electronically or other media as required for timely access to the information.
Available	The subject item is in place or the subject process is operational. The subject data or document has been added to the Data Accession List or other media and is accessible electronically as required for timely and complete access to the information.
Approved	The subject item, document, or process has been submitted to the Government, and the Government has notified the contractor that the subject item or process as documented is acceptable.
Completed	The subject item, data, document, or process has been prepared or concluded and reviewed and accepted by the IPT or responsible team. Supporting documentation is available electronically as required for timely and complete access to the information.
Defined	The subject item data, document, or process has been described in an appropriate description document which is available electronically as required for timely and complete access to information.
Demonstrated	The subject configuration item, data, or document has been shown to comply with requirements through performance of a test requiring only simple quantitative measures, where success-or failure is determined by observation.
Developed	The subject product (e.g., configuration item, data document, or process has been produced using a sequence of activities which may include planning, design, test, and verification.
Established	The subject item has been created and set in place in a manner consistent with its intended use (e.g., procedures baseline established) after review and acceptance by the IPT or responsible team.
Evaluated	A measured comparison of the subject with requirements has been completed, and results are available electronically or other media as required for timely and complete access to the information.
Identified	The characteristics of a configuration item process or function have been made known for the first time.
Implemented	The subject policy approach, or procedure is being regularly executed.
Initiated	The subject policy, approach, or procedure has been started.
Installed	The subject item (hardware or software) has been put in place and is determined to be functional.
Integrated	The subject has been consolidated into an entity (data requirement, document, configuration item) by appropriately combining separate requirements, functional disciplines, and Configuration item considerations.
Operational	The successful introduction, integration, and initial checkout of required equipment to support the development integration efforts.
Refined	The subjects item, process, data, or document has been improved from a previous use.
Released	The subject data or document has received contractor approvals, has been distributed, and is available electronically as required for timely and complete access to the information.
Reviewed	The subject data item, document, or process has been examined and critiqued.
Tested	The subject configuration item, element or process has been exercised under appropriate conditions in accordance with applicable test plans, procedures and measurements with an analysis of the data generated.
Updated	The subject item, process, data, or document has been re-evaluated using later information, and adjustments have been incorporated.
Validated	The subject configuration item, data, or document has been tested for technical accuracy by the contractor or, where appropriate, by the Government using existing approved procedures, instructions, or checklists.

E-10A (MC2A) Integrated Master Plan (IMP) Description

MPE Summary

Marks the completion of the Spiral 1 Contract Award and the establishment of the Program Processes and tools, including Systems Engineering and the Cost As an Independent Variable processes. Architecture for measuring the program's health and contractor teaming will be established at this point.

Program Management Plan, IMP/IMS, EVMS Plan, CAIV Plan, Risk Management Plan.

Marks the establishment of the System Requirements Baseline. Reviews the contractor's interpretation and understanding of the system level requirements as specified in the TRD. Specific elements will be the identification of subsystem requirements, Modeling and Simulation baseline establishment, and System Verification Baseline establishment. Initial design for each of the subsystems will be introduced at this event.

Marks the transition from the Pre-SDD Design activity to the detail design activity for SDD. This early design activity is focused at the subsystem analysis and studies along configuration item level design required for critical path items. Incremental technical reviews will be conducted, each focusing on a different subsystem culminating in a technical review for the Weapon System

D- Final Design Review (FDR)

Final design milestones mark the transition in focus from design to development and system integration and test. System Requirement analysis will and detail designs will be finalized during this event. Other activities addressed include the updates to CAIV, Risk and Test Management Plans and the continuing development of the system support concept. Incremental FDR's will be conducted each focusing on a different subsystem with the final one covering the entire system

E- SIL Initial Capability Available

Marks the completion of all SIL modifications needed to integrate and checkout the initial set of BMC4I and Radar Subsystems elements. Initial Capability is established by proving that the SIL element is ready for initial testing and integration of the MC2A system and it's subsystems.

E-10A (MC2A) Integrated Master Plan (IMP) Description

F- A/C Mission Mods Completed

Marks the completion of all A/C modifications needed for Air Worthiness Testing and system integration. Includes all major Electrical, Power, ECS and Structure Modifications. Testing of these modifications will be conducted for each modified element. Completion of these events marks the beginning of the Airworthiness Certification Test Program.

G- A/C Subsystem Air Worthiness Test (AWT) Completed

Marks the completion of the A/C Subsystem / Airframe Airworthiness Test Program and clears the MC2A Air Vehicle for flight. AW Certification will be achieved based on the criteria set forth by the approving governing entity. Initial FRR will conducted during this event.

H- System First Flight Completed

Marks start of Contractor Development Test and Evaluation (CDT&E). System Flight Test Program objectives will be determined, including the flight requirements and nominal number of flights, performance parameters and system functionality to be tested. All required integration and checkout activities leading up to Flight Testing will be completed. All essential lab, ground and flight test support infrastructure will be in place and available. DT&E FRR, TRB and TRR will be conducted during this event.

J- Development Test Completed

Marks the completion of Contractor Development Test and Evaluation (CDT&E). Includes all Ground and Flight Development Testing as agreed to by the contractor and the government. Also includes support documentation and training necessary to complete the ground and flight-testing.

K- System Performance Testing Completed

Marks the completion System Level Performance Verification and Government Development Test and Evaluation (GDT&E). This event closes with the delivery of a System Level Test Report and system readiness to commence IOT&E. SLPV TRB/TRR will be conducted during this review.

L- Spiral 1 SDD Completed

This event marks the completion of the MC2A Spiral 1 SDD Program. Completion of this event is marked by the execution of DD250 for the development MC2A system.



One Team Working Together

**MC2A Spiral 1 Pre-SDD/SDD
Integrated Master Plan (IMP)
Revision 0.1 Draft
4/4/03**

MC2A Spiral 1 Pre-SDD & SDD Major Program Events Version 0 Draft IMP/IMS

CY2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	2	3	4	1	2	3	4	1	2	3	4
1	2	3	4	1	2	3	4	1	2	3	4
1	2	3	4	1	2	3	4	1	2	3	4
1	2	3	4	1	2	3	4	1	2	3	4
PRE SDD PHASE											
<i>Apr 03 ↗ NTE LETTER OF CONTRACT (NOT MPE)</i>											
<i>Sep 03 ↗ A- SPIRAL 1 PRE-SDD DEFINITIZATION</i>											
<i> ↗ BMC2 SELECTION (NOT MPE)</i>											
<i>Dec 03 ↗ B- SYSTEM REQUIREMENTS REVIEW</i>											
<i>Jul 04 ↗ MILESTONE B (NOT MPE)</i>											
<i>Sep 04 ↗ C- INITIAL DESIGN REVIEW</i>											
SDD PHASE											
<i>Feb 06 ↗ D- FINAL DESIGN REVIEW</i>											
<i>Jan 07 ↗ E- SIL INITIAL CAPABILITY AVAILABLE</i>											
<i>Sep 07 ↗ F- A/C MISSION MODS COMPLETED</i>											
<i>May 08 ↗ G- A/C SUBSYSTEM AIR WORTHINESS TESTING COMP</i>											
<i>Jan 09 ↗ H- SYSTEM FIRST FLIGHT COMPLETED</i>											
<i>Sept 09 ↗ J- DEVELOPMENT TEST COMPLETED</i>											
<i>Jul 10 ↗ K- SYSTEM VERIFICATION TESTING COMPLETED</i>											
<i>Sep 10 ↗ L- SPIRAL 1 SDD COMPLETED</i>											

All MPE's completion is planned within the window of the schedule Month,

MC2A Spiral 1 Pre-SDD/SDD Integrated Master Plan (IMP) Major Program Events (MPE's) Definitions

MC2A Spiral 1 Pre-SDD - MPE

- A- Spiral 1 Pre-SDD Definitization
 - Marks the Completion of the Spiral 1 Contract Award and the Establishment of the Program Processes and Tools, Including Systems Engineering and the Cost As an Independent Variable Processes. Architecture for Measuring the Program's Health and Contractor Teaming Will Be Established at This Point.
 - Significant Accomplishments
 - Letter of Contract Award Received
 - Program Processes Established

Sept 2003



MC2A Spiral 1 Pre-SDD - MPE

- B- Systems Requirements Review (**SRR**)
 - Marks the Establishment of the System Requirements Baseline.
 - Reviews the Contractors Interpretation and Understanding of the System Level Requirements As Specified in the TRD. Specific Elements Will Be the Identification of Subsystem Requirements, Modeling and Simulation Baseline Establishment, System Verification Baseline Establishment. Initial Design for Each of the Subsystems Will Be Introduced at This Event.
 - Significant Accomplishments
 - System Requirements Completed
 - Initial System Analysis and Design Available
 - Initial Modeling and Simulation Plan Available
 - A/C Subsystem Trades Studies / ICD Development / Requirements Allocations and Design Initiated
 - Radar Subsystem Design Updated (GFE)
 - Initial System Verification Baseline Established
 - System Requirements Review (**SRR**) Conducted



MC2A Spiral 1 Pre-SDD - MPE

- C- Initial Design Review (IDR)

- Marks the Transition From the Pre-SDD Design Activity to the Detail Design Activity for SDD. This Early Design Activity Is Focused at the Subsystem Analysis and Studies Along With Configuration Item Level Design Required for Critical Path Items. Incremental Technical Reviews Will Be Conducted, Each Focusing on a Different Subsystem Culminating in a Technical Review for the Weapon System
- Significant Accomplishments
 - Integrated Baseline Review (IBR) Completed
 - BMC2 Contractor Integration Completed
 - Initial Subsystem Requirements Allocation Completed
 - Radar Sensor Subsystem Preliminary Design Updated (GFE-MP RTIP Program)
 - Aircraft Subsystem Initial Trade Studies / Preliminary ICDs / Requirements Allocations Completed for the Critical Path Subsystems
 - System Preliminary Analysis and Design Completed
 - Initial Modeling and Simulation Plan and Development Completed
 - Preliminary Test and Evaluation Master Plan Available
 - Initial Design Review (IDR) Conducted



MC2A Spiral 1 SDD – MPE (For Reference Only)

- D- Final Design Review (FDR)
 - Final Design Milestones Marks the Transition in Focus From Design to Development and System Integration and Test . System Requirement Analysis Will and Detail Designs Will Be Finalized During This Event. Other Activities Addressed Include the Updates to CAIV, Risk and Test Management Plans and the Continuing Development of the System Support Concept. Incremental FDR's Will Be Conducted Each Focusing on a Different Subsystem With the Final One Covering the Entire System
 - Significant Accomplishments.
 - Radar Sensor Subsystem Final Design Completed (GFE - MP RTIP Program)
 - BMC2 Design Completed
 - A/C Subsystem Design Completed
 - System Final Analysis and Design Completed
 - Modelling and Simulation Models Updated
 - Preliminary Test and Evaluation Master Plan Completed
 - Preliminary Weapon System Maintenance & Support Concept Updated
 - Final Design Review (FDR) Conducted

MC2A Spiral 1 SDD – MPE (For Reference Only)

- E- SIL Initial Capability Available
 - Marks the Completion of All SIL Modifications Needed to Integrate and Checkout the Initial Set of BMC4I and Radar Subsystems Elements. Initial Capability Is Established by Proving That the SIL Element Is Ready for Initial Testing and Integration of the MC2A System and It's Subsystems.
 - Significant Accomplishments
 - SIL Element Build and Installation Completed
 - SIL Initial Capability Available
- F- A/C Mission Mods Completed
 - Marks the Completion of All A/C Modifications Needed for Air Worthiness Testing and System Integration. Includes All Major Electrical, Power, ECS and Structure Modifications. Testing of These Modifications Will Be Conducted for Each Modified Element. Completion of This Events Marks the Beginning of the Airworthiness Certification Test Program.
 - Significant Accomplishments
 - A/C Structural Mods Completed
 - A/C Electrical Modifications and Installations Completed
 - A/C Modifications Testing (Ground) Completed



MC2A Spiral 1 SDD – MPE (For Reference Only)

- G- A/C Subsystem Air Worthiness Test (AWT) Completed
 - Marks the Completion of the A/C Subsystem / Airframe Airworthiness Test Program and Clears the MC2A Air Vehicle for Flight. AW Certification Will Be Achieved Based on the Criteria Set Forth by the Approving Governing Entity. Initial FRR Will Conducted During This Event.
 - Significant Accomplishments
 - Air Vehicle Subsystem/Aero Airworthiness Testing Completed
- H- System First Flight Completed
 - Marks Start of Contractor Development Test and Evaluation (CDT&E). System Flight Test Program Objectives Will Be Determined, Including the Flight Requirements and Nominal Number of Flights, Performance Parameters and System Functionality to Be Tested. All Required Integration and Checkout Activities Leading up to Flight Testing Will Be Completed. All Essential Lab, Ground and Flight Test Support Infrastructure Will Be in Place and Available. DT&E FRR, TRB and TRR Will Be Conducted During This Event.
 - Significant Accomplishments
 - MC2A System Integration Completed
 - MC2A System First Flight Completed

MC2A Spiral 1 SDD – MPPE

(For Reference Only)

- J- Development Test Completed
 - Marks the Completion of Contractor Development Test and Evaluation (CDT&E). Includes All Ground and Flight Development Testing As Agreed to by the Contractor and the Government. Also Includes Support Documentation and Training Necessary to Complete the Ground and Flight Testing.
 - Significant Accomplishments
 - System Flight Test / DT Completed
 - Preliminary MC2A Support System Available
- K- System Performance Testing Completed
 - Marks the Completion System Level Performance Verification and Government Development Test and Evaluation (GDT&E). This Event Closes With the Delivery of a System Level Test Report and System Readiness to Commence IOT&E. SLPV TRB/TRR Will Be Conducted During This Review.
 - Significant Accomplishments
 - System Performance Testing Completed
 - MC2A Support System Updated

MC2A Spiral 1 SDD – MPE

(For Reference Only)

- L- Spiral 1 SDD Completed
 - This Event Marks the Completion of the MC2A Spiral 1 SDD Program. Completion of This Event Is Marked by the Execution of DD250 for the Development MC2A System.
 - Significant Accomplishments
 - Air Worthiness Certificate Issued
 - IOT&E Support Available
 - MC2A Support System Completed
 - FCA / PCA / DD 250 Conducted

MC2A Spiral 1 Pre-SDD/SDD Integrated Master Plan (IMP) To Accomplishment Criteria Level *(BMC2 IPT Efforts Not Included In This IMP)*

MC2A - WSI Product Integrated Master Plan (IMP) - Release Rv0.1 Draft Copy-BMC2 Reference Excluded

Event No	Event Action	Award Event Name	Significance	Accomp No	Significant Accomplishments	Accomp Criteria No	IPT Ref.	Work Outline No	Criteria	IMP Ref. No
A	(A) SPIRAL 1 PRE-SDD DEFINITIZATION	A01	Letter of Contract Award Received	A0101	PET	1.1.3	Firm Proposal Completed			A01011.1.3
				A0102	PET	1.1.3	Negotiations Completed			A01021.1.3
				A0103	PET	1.1.3	Phase I Contract Award			A01031.1.3
		A02	Program Processes Established	A0201	PET	1.1.1	IBR Planning Demonstrated (EVMS)			A02011.1.1
				A0202	SEIT	2.1.1	System Design and Analysis Processes Established			A02022.1.1
				A0203	PET	1.1.6	Integrated Mgmt Framework (IMF) Operational (Phase 1)			A02031.1.6
				A0204	SEIT	2.2.1	Initial Pre-SDD Modeling and Simulation Plan Available			A02042.2.1
				A0205	PET	1.1.1	Contractor Integration Plan Completed			A02051.1.1
B	(B) SYSTEM REQUIREMENTS REVIEW (SRR)	B01	System Requirements Completed	B0101	SEIT	2.1.3	System Requirements Baseline Established			B01012.1.3
				B0102	SEIT	2.1.3	Initial A/C Subsystem TRD Agreement Completed			B01022.1.3

04/04/03

E-10A Program Use Only

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Event No	Event Action	Award Fee	Event Name	Significance	Accomp No	Significant Accomplishments	Accomp Criteria No	IPT Ref.	Work Outline No	Criteria	IMP Ref. No
B	(B) SYSTEM REQUIREMENTS REVIEW (SRR)		B01	System Requirements Completed	B0103	SEIT	2.1.3			Initial Radar Subsystem TRD Agreement Completed (Performance Based Specs)	B01032.1.3
					B0104	SEIT	2.1.3			Initial BMC2 Subsystem TRD Agreement Established	B01042.1.3
			B02	Initial System Analysis and Design Available	B0201	SEIT	2.1.3			Initial System Design Completed (Architecture)	B02012.1.3
					B0202	SEIT	2.1.1			Initial Technical Plans and Process Control Data Updated	B02022.1.1
					B0203	SEIT	2.1.2			System Trade Studies Available	B02032.1.2
					B0204	SEIT	2.1.3			System Analysis Updated	B02042.1.3
					B0205	SUPT	2.1.3			TOC Estimating Structure Defined	B02052.1.3
					B0206	PET	2.1.1			Baseline Risk Items and Mitigation Established	B02062.1.1
			B03	Initial Modeling and Simulation Plan Available	B0301	SEIT	2.2.1			Initial Modeling and Simulation Management Plan Updated	B03012.2.1
					B0302	SEIT	2.2.2			Initial Theater Modeling and Simulation Plan Updated	B03022.2.2

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Event No	Event Action	Award Event Name	Significance	Accomp No	Significant Accomplishments	Accomp Criteria No	IPT Ref.	Work Outline No	Criteria	IMP Ref. No
B	(B)	SYSTEM REQUIREMENTS REVIEW (SRR)		B03	Initial Modeling and Simulation Plan Available	B0303	SEIT	2.2.2	Theater M&S Events/Exercises	B03032.2.2
B04		A/C Subsystem Trades Studies / ICD Development / Requirements Allocations and Design Initiated		B0401	PDT	5.1.1	A/C to Radar Subsystem	ICD Updated		B04015.1.1
B0402				B0402	PDT	5.1.2	A/C Subsystem	Initial Flight Technology and Analysis Completed		B04025.1.2
B0403				B0403	PDT	5.1.1	Initial A/C Manufacturing Processes Established			B04035.1.1
B0404				B0404	PDT	5.1.12	Initial A/C Certification Plan Available			B04045.1.12
B05		Radar Subsystem Design Updated (GFE)		B0501	RDR	6.1.1	Radar Subsystem Design Updates Agreement Completed (GFE)			B05016.1.1
B07		Initial System Verification Baseline Established		B0701	SEIT	3.1.1	Testability Analysis Completed			B07013.1.1
B0702				B0702	SEIT	2.1.1	Initial System Test and Evaluation Master Plan Available			B07022.1.1
B08		System Requirements Review (SRR) Conducted		B0801	SEIT	2.1.3	System Requirements Documents Completed			B08012.1.3
B0802				B0802	PET	1.1.7	SRR- System Requirements Review Conducted			B08021.1.7

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Event No	Event Action	Award Fee	Event Name	Significance Phase	Accomp No	Significant Accomplishments	Accomp Criteria No	IPT Ref.	Work Outline No	Criteria No	IMP Ref. No
C			(C) INITIAL DESIGN REVIEW (IDR)	C01	C0101	Integrated Baseline Review (IBR) Completed	PET	1.1.6	Integrated Management Framework (IMF) Completed		C01011.6
					C0102	PET	1.1.1	Program Processes Definition Completed			C01021.1
					C0103	PET	1.1.1	Earned Value Management System (EVMS) Established			C01031.1
					C0104	PET	1.1.1	Integrated Baseline Review (IBR) Conducted			C01041.1
				C03	C0302	Initial Subsystem Requirements Allocation Completed	SEIT	2.1.3	Air Vehicle Subsystem Requirements Allocation Updated		C03022.1.3
					C0303	SEIT	2.1.3	Radar Sensor Subsystem Requirements Allocations Reviewed			C03032.1.3
					C0304	SEIT	2.1.3	BMC2 Subsystem Requirements Allocations Updated			C03042.1.3
				C06	C0601	Aircraft Subsystem Initial Trade Studies / Preliminary ICDs / Requirements Allocations Completed	PDT	5.1.2	A/C Subsystem Flight Technology & Analysis Integration Updated		C06015.1.2
					C0602	PDT	5.1.3	A/C Subsystem Primary Structures Initial Trade Studies / Preliminary ICDs/ Requirements Allocations Completed			C06025.1.3
					C0603	PDT	5.1.4	A/C Subsystem Environmental Control System (ECS) Initial Trade Studies / Preliminary ICD's / Requirements Allocations Completed			C06035.1.4

MC2A - WSI Product Integrated Master Plan (IMP) - Release Rv0.1 Draft Copy- BMC2 Reference Excluded

Event No	Event Action	Award Event Name	Significance	Accomp No	Significant Accomplishments	Accomp Criteria No	IPT Ref.	Work Outline No	Criteria	IMP Ref. No
C	(C)	INITIAL DESIGN REVIEW (IDR)	C06	Aircraft Subsystem Initial Trade Studies / Preliminary ICD's / Requirements Allocations Completed	C0604	PDT	5.1.5	A/C Secondary Structures Initial Trade Studies / Preliminary ICD's / Requirements Allocations Completed		C06045.1.5
				C0605	PDT	5.1.6	A/C Electrical Power Generations Initial Trade Studies / Preliminary ICD's / Requirements Allocations Completed			C06055.1.6
				C0606	PDT	5.1.7	A/C InterSystem Cables & Junction Boxes Initial Trade Studies / Preliminary ICD's / Requirements Allocations Completed			C06065.1.7
				C0607	PDT	5.1.8	A/C Fuel Systems Modifications Initial Trade Studies / Preliminary ICD's / Requirements Allocations Completed			C06075.1.8
				C0608	PDT	5.1.9	A/C Hydraulic Systems Modifications Initial Trade Studies / Preliminary ICD's / Requirements Allocations Completed			C06085.1.9
				C0609	PDT	5.1.10	A/C Support Systems Modifications Initial Trade Studies / Preliminary ICD's / Requirements Allocations Completed			C06095.1.10
				C0610	PDT	5.1.11	A/C Avionics Preliminary Initial Trade Studies / Preliminary ICD's / Requirements Allocations Completed			C06105.1.11
				C0611	PDT	5.1.12	Initial AC Certification Plan Completed			C06115.1.12
				C0612	SUPT	2.1.3	A/C Total Ownership Cost Models & RMSS Design Updated			C06122.1.3
				C0613	PDT	5.1.1	A/C to BMC2 ICD Initial Agreement Available			C06135.1.1

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Event No	Event Action	Award Fee	Event Name	Significance	Accomp No	Significant Accomplishments	Accomp Criteria No	IPT Ref.	Work Outline No	Criteria No	IMP Ref. No
C	(C)	INITIAL DESIGN REVIEW (IDR)	C06	Aircraft Subsystem Initial Trade Studies / Preliminary ICDS / Requirements Allocations Completed	C0614	PDT	5.1.1	Initial Air Vehicle Subsystem - A/C Build Requirements Identified- (Mod Plan/Productibility Plan)			C06145.1.1
					C0615	PET	1.1.7	A/C Subsystem Technical Review Conducted			C06151.1.7
			C07	System Preliminary Analysis and Design Completed	C0702	SEIT	2.1.1	Technical Plan / Data Updated			C07022.1.1
					C0703	SEIT	2.1.2	System Trades Studies Completed			C07032.1.2
			C0704		C0704	SEIT	2.1.3	Initial System Design and Analysis Completed			C07042.1.3
					C0705	SUPT	2.1.3	System Total Ownership Cost Models Updated			C07052.1.3
			C0706		C0706	SEIT	2.1.1	Risk Status and Mitigation Updated			C07062.1.1
					C0707	PET	1.1.1	Milestone B Supported			C07071.1.1
			C0708		C0708	SEIT	2.1.3	System Verification Baseline Updated			C07082.1.3
					C0801	SEIT	2.2.1	Modeling and Simulation Management Plan Updated			C08012.2.1
C08			Initial Modeling and Simulation Plan and Development Completed								

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Event No	Action	Award Event Name	Significance	Accomp No	Significant Accomplishments	Accomp Criteria No	IPT Ref.	Work Outline No	Criteria	IMP Ref. No
C	(C)	INITIAL DESIGN REVIEW (IDR)	C08	Initial Modeling and Simulation Plan and Development Completed	C0802	SEIT	2.2.2	Initial Theater Modeling and Simulation Models Updated	C08022.2.2	
				C0803	SEIT	2.2.2	Initial Theater Modeling and Simulation Executed		C08032.2.2	
			C09	Preliminary Test and Evaluation Master Plan Available	C0902	SEIT	3.1.1	Preliminary Test & Evaluation Master Test Plan Updated	C09023.1.1	
			C10	Initial Design Review (IDR) Conducted	C1001	PET	1.1.7	Closure of SRR & IBR Action Items Completed	C10011.1.7	
				C1002	PET	1.1.7	Initial Design Review (IDR) Conducted		C10021.1.7	
D	(D)	FINAL DESIGN REVIEW (FDR)	D03	A/C Subsystem Design Completed	D0301	PDT	5.1.2	Final A/C Flight Technology & Analysis Integration Completed	D03015.1.2	
				D0302	PDT	5.1.3	A/C Subsystem Primary Structures Final Design Completed		D03025.1.3	
				D0303	PDT	5.1.4	Environmental Control System (ECS) Final Design Completed		D03035.1.4	
				D0304	PDT	5.1.5	A/C Secondary Structures Final Design Completed		D03045.1.5	
				D0305	PDT	5.1.6	A/C Electrical Power & Distribution (EPS) Final Design Completed		D03055.1.6	

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D			(D) FINAL DESIGN REVIEW (FDR)	D03 A/C Subsystem Design Completed	D0306	PDT	5.1.7	A/C InterSystem Cables & Junction Boxes Final Design Completed		D03065.1.7	
					D0307	PDT	5.1.8	A/C Propulsion Modifications Final Design Completed		D03075.1.8	
					D0308	PDT	5.1.9	A/C Hydraulic Systems Modifications Final Design Completed		D03085.1.9	
					D0309	PDT	5.1.10	A/C Support Systems Modifications Final Design Completed		D03095.1.10	
					D0310	PDT	5.1.11	A/C Avionics Final Design Completed		D03105.1.11	
					D0311	PDT	5.1.12	Final A/C Certification Plan Updated		D03115.1.12	
					D0312	PDT	5.1.13	SPS Subsystem Final Design Management Completed		D03125.1.13	
					D0313	SUPT	2.1.2	A/C Total Ownership Cost Models Updated		D03132.1.2	
					D0314	SUPT	2.2.1	AC RMSS Design Evaluation Updated		D03142.2.1	
					D0315	PDT	2.2.2	A/C Modeling & Simulation Models Updated		D03152.2.2	

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Event No	Action Phase	Award Event Name	Significance	Accomp No	Significant Accomplishments	Accomp Criteria No	IPT Ref.	Work Outline No	Criteria No	IMP Ref. No
D	(D) FINAL DESIGN REVIEW (FDR)	D03	A/C Subsystem Design Completed	D0316	PET	1.1.7	A/C Subsystem Technical Review Conducted			D03161.1.7
		D04	System Final Analysis and Design Completed	D0401	SEIT	5.1.1	Aircraft Subsystem Design Completed			D04015.1.1
		D0402		SEIT	7.1.1	BMC2 Subsystem Design Completed				D04027.1.1
		D0403		SEIT	2.1.3	System Integration Dependencies Identified				D04032.1.3
		D0404		SEIT	2.1.1	Integrated Product Development Data Updated (SEMP/Risk Management)				D04042.1.1
		D0405		SEIT	2.1.2	System Trades Studies Updated				D04052.1.2
		D0406		SEIT	2.1.3	System Design and Analysis Updated				D04062.1.3
		D05	Modeling and Simulation Models Updated	D0501	SEIT	2.1.1	Modeling and Simulation Management Plan Updated			D05012.1.1
		D0502		SEIT	2.2.2	Theater Modeling and Simulation Models Updated				D05022.2.2
		D06	Preliminary Test and Evaluation Master Plan Completed	D0601	SEIT	3.2.2	System SII Element Final Design Completed			D06013.2.2

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D	(D) FINAL DESIGN REVIEW (FDR)	D06	Preliminary Test and Evaluation Master Plan Completed	D0602	SEIT	3.1.1	System Verification Baseline Updated		D06023.1.1	
				D0603	SEIT	3.1.1	Preliminary System Test and Evaluation Master Plan Updated		D06033.1.1	
D07	Preliminary Weapon System Maintenance & Support Concept Updated	D0701	SUPT	4.1.2	Preliminary System Maintenance & Sustainment Concept			D07014.1.2		
		D0702	SUPT	4.1.2	System LMI Definition Complete and Data Updated			D07024.1.2		
		D0703	SUPT	4.3.1	Support Equipment Design Concept Updated			D07034.3.1		
		D0704	SUPT	2.1.3	System Total Ownership Cost Models Updated			D07042.1.3		
		D0705	SUPT	2.1.1	System Level RMSS Analysis Updated			D07052.1.1		
		D0706	SUPT	4.1.2	System Maintenance Supportability & Sustainability Concepts Updated			D07064.1.2		
D08	Final Design Review (FDR) Conducted	D0801	PET	1.1.1	Closure of IDR Action Items Completed			D08011.1.1		
		D0802	PET	1.1.7	Final Design Review (FDR) Conducted			D08021.1.7		

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E	(E) AVAILABLE	SIL INITIAL CAPABILITY	E01	SIL Element Build and Installation Completed	E0101	SEIT	3.2.2	SIL Elements Procurement Completed	E01013.2.2	
				E0102	SEIT	3.2.2	SIL IACO Completed	E01023.2.2		
				E0103	SEIT	3.2.2	SIL Integration Completed	E01033.2.2		
			E02	SIL Initial Capability Available	E0201	SEIT	3.2.2	SIL O&M Support Established	E02013.2.2	
				E0202	SEIT	3.2.2	Lab Test Tools Available	E02023.2.2		
				E0203	SEIT	3.2.2	SIL V&V Conducted	E02033.2.2		
				E0204	SEIT	3.2.2	SIL Initial Capability Established	E02043.2.2		
F	(F) A/C MISSION MODS COMPLETED	A/C Structural Mods Completed	F01	F0101	PDT	5.1	A/C Subsystem Procurement and Assembly Completed (Includes	F01015.1		
				F0102	PDT	5.1.2	A/C Receive and Inspect Operations and Mod Center Training Completed	F01025.1.2		
				F0103	PDT	5.1.3	Major Structure Mods - Elect, Vert Tail Completed	F01035.1.3		

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Event No	Event Action	Award Event Name	Significance	Accomp No	Significant Accomplishments	Accomp Criteria No	IPT Ref.	Work Outline No	Criteria	IMP Ref. No
F	(F) A/C MISSION MODS COMPLETED	F01	A/C Structural Mods Completed	F0104	PDT	5.1.4			Components Mods and Installation Completed	F01045.1.4
				F0105	PDT	5.1.4		Hardback, Fixed Radome, Preliminary Structure Mods Completed		F01055.1.4
		F02	A/C Electrical Modifications and Installations Completed	F0201	PDT	5.1.1		Electrical Connections / Final System Installations Completed		F02015.1.1
				F0202	PDT	5.1.1		SEPS Installation / PME Less Radar and Sensors Installation Completed		F02025.1.1
		F03	A/C Modifications Testing (Ground) Completed	F0301	PDT	5.1.1		Functional Equipment Testing Completed		F03015.1.1
				F0302	PDT	5.1.1		ECS and Power Plan Validation Completed		F03025.1.1
				F0303	PDT	5.1.1		A/C Flight Testing Completed		F03035.1.1
G	(G) A/C SUBSYSTEM AIR WORTHINESS TEST (AWT) COMPLETED	G01	Air Vehicle Subsystem /Aero Airworthiness Testing Completed	G0101	PDT	5.1.11		Air Worthiness Test Plan Approved		G01015.1.11
				G0102	PDT	5.1.11		Aero AWT Prep and FRR Completed		G01025.1.11
				G0103	PDT	5.1.11		AWT Flight Test Program Completed		G01035.1.11

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Event No	Action	Award Phase	Event Name	Significance	Accomp No	Significant Accomplishments	Accomp Criteria No	IPT Ref.	Work Outline No	Criteria No	IMP Ref. No
G	(G) A/C SUBSYSTEM AIR WORTHINESS TEST (AWT)	COMPLETED	G01	Air Vehicle Subsystem /Aero Airworthiness Testing Completed	G0104	PDT	5.1.11	Initial Flight Clearance Received			G01045.1.11
H	(H) SYSTEM FIRST FLIGHT	COMPLETED	H01	MC2A System Integration Completed	H0101	SEIT	3.1.2	SIL System IACO Complete			H01013.1.2
					H0102	SEIT	3.1.2	Lab System Integration			H01023.1.2
					H0103	SEIT	3.1.2	SIL System SIT Complete			H01033.1.2
					H0104	SEIT	3.1.2	Aircraft System IACO Completed			H01043.1.2
					H0105	SEIT	3.1.2	Aircraft System Integration			H01053.1.2
					H0106	SEIT	3.1.2	Aircraft System SIT Complete			H01063.1.2
H02	MC2A System First Flight Completed		H0201	SEIT	3.1.3	A/C Operations and Test Support Available					H02013.1.3
					H0202	SEIT	3.1.3	EMI Safety of Flight Testing Completed			H02023.1.3
					H0203	SEIT	3.1.3	DT&E D FRR / TRB / TRR Conducted			H02033.1.3

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Event No	Action	Award Event Name	Significance	Accomp No	Significant Accomplishments	Accomp Criteria No	IPT Ref.	Work Outline No	Criteria	IMP Ref. No
H	(H)	SYSTEM FIRST FLIGHT COMPLETED		H02	MC2A System First Flight Completed	H0204	SEIT	3.1.3	First System Flight Conducted	H02043.1.3
J	(J)	DEVELOPMENT TEST COMPLETED		J01	System Flight Test / DT Completed	J0101	SEIT	3.1.3	G/CDT&E Ground Test Conducted	J01013.1.3
				J0102	SEIT	3.2.2	G/CDT&E Flight Test Conducted			J01023.2.2
				J0103	SEIT	3.1.3	Mission Instrumentation Installed			J01033.1.3
				J0104	SEIT	3.2.2	Data Reduction Available			J01043.2.2
J02	Preliminary MC2A Support System Available			J0201	SUPT	4.1.3	Draft MC2A Flight/Mission Crew Manuals Available			J02014.1.3
				J0202	SUPT	4.1.3	Draft MC2A Draft Positional Handbooks Available			J02024.1.3
				J0203	SUPT	4.2.3	MC2A Type 1 Flight Crew Training Completed			J02034.2.3
				J0204	SUPT	4.2.2	MC2A Type 1 Mission Crew Training Completed			J02044.2.2
				J0205	SUPT	4.3.1	MC2A Support Equipment Available			J02054.3.1

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K	(K) SYSTEM VERIFICATION TESTING COMPLETED	K01	System Performance Testing Completed	K0101	SEIT	3.1.3	System Verification TRB/TRR Conducted		K01013.1.3	
		K0102	SEIT	3.1.3	SLPV Flight Test Completed				K01023.1.3	
		K0103	SUPT	3.1.3	System Reliability Data Completed				K01033.1.3	
		K0104	SEIT	3.1.3	SLPV Test Report Submitted				K01043.1.3	
K02	MC2A Support System Updated	K0201	SUPT	4.2.4	MC2A Maintenance Type 1 Training Completed				K02014.2.4	
		K0202	SUPT	4.1.3	MC2A Preliminary Technical Manuals Available				K02024.1.3	
L	(L) SPIRAL 1 SDD COMPLETED	L01	Air Worthiness Certificate Issued	L0101	FDT	5.1.11	Air Worthiness Certification Issued		L01015.1.11	
		L02	IOT&E Support Available	L0201	SEIT	3.1.4	ATP / FAT Procedure Available		L02013.1.4	
		L0202	SEIT	3.1.4	IOT&E Support Available				L02023.1.4	
L03	MC2A Support System Completed	L0301	SUPT	4.1.3	Final System Technical Manuals Updated				L03014.1.3	

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L	(L) SPIRAL 1 SDD COMPLETED	L03	MC2A Support System	Completed	L0302	SUPT	4.1.3	SDD Phase DMSMS / GIDEP Program Completed			L03024.1.3
		L04	FCA / PCA / DD 250	Conducted	L0401	PET	2.1.1	FCA Conducted			L04012.1.1
					L0402	PET	2.1.1	PCA Conducted			L04022.1.1

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