PMAG

SMC/PMAG – Control Account Manager (CAM) Notebook Evaluation

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9-10/June/2010

Agenda

- Introduction
- PMAG Approach for CAM Notebook Evaluation
- Implementation
- Conclusions

INTRODUCTION

What is a CAM Notebook?

- **The CAM Notebook is the responsible manager's repository of all the technical, cost and schedule information (artifacts) concerning a work task for which he/she is responsible –**
  - A detailed technical description of the work with clear statements of authorization from the customer thru the contractor organization to the CAM's immediate manager then the CAM to expend resources to perform the tasks
  - A detailed time phased plan to accomplish the work with a logical interconnect series of activities leading to work completion
  - A detailed time phased budget indicating the amount and type of resources necessary to complete the work indicating both units of resources, e.g., hours and dollars
  - Performance results indicating technical progress, schedule status and resources consumed over time to perform the tasks
  - An estimate of the completion date and total resources to be consumed at task completion

Why is CAM Notebook Important?

- The CAM Notebook gives a clear picture of whether the control account's technical scope, schedule , risk and resources are integrated – play together – make sense
- The CAM Notebook, when understood by the government action officer (AO) and the CAM, brings both parties to a clear mutual understanding of all aspects of the task
- The CAM Notebook ensures a foundation of information for continuity if the CAM or AO is reassigned or not available for some reason
- The CAM Notebook documents what is going on and enables a third party to be convinced that all aspects of the task are being considered and harmonized and reasonably managed now and with an eye on the future

➢An accurate, current, and complete CAM Notebook is critical to the successful management of the contracted work
➢The review of the CAM Notebook and identification of the resulting risks are key parts of the IBR process to verify and validate the technical, cost and schedule baselines

PMAG APPROACH FOR CAM NOTEBOOK EVALUATION

PMAG Approach for CAM Notebook Evaluation

- **The PMAG Approach differs significantly from the common "box check" IBR and cursory review of the CAM Notebook**
- **Key Attributes of PMAG Approach:**
  - Co-located and integrated cross functional team of technical, cost, scheduling, and business & program management experts
  - Detailed-oriented, objective review and risk assessment of all the content in CAM Notebook of individual control accounts
    - Prioritize resources to focus on critical path, high risk and critical control accounts
    - Verify and validate information/data traceability from statement of work to detail technical, budget and schedule information
    - Verify and validate consistency of information horizontally among documents
  - PMAG Work Products from CAM Notebook Evaluation
    - Integrated program risks for individual control accounts
    - Assess control account's performance in 11 evaluation criteria
    - Overarching integrated program risks for program

PMAG CAM Notebook Evaluation Criteria

- **PMAG's 11 Evaluation Criteria**
  - Roles & Responsibilities
  - Requirements Authorization
  - SOW-Control Account Plan
  - Schedule Integrity
  - PMB Integrity / Risk Mgmt
  - Resource Loading Adequacy
  - Subcontract Mgmt
  - TPM Mgmt
  - EV Mgmt and EAC
  - Mgmt Control Processes
  - Integrated Program Mgmt
- **PMAG's 5 Categories of Integrated Program Risks**
  - Technical
  - Cost
  - Schedule
  - Resources
  - Management Processes

➢ **Risks are provided to the contractor for resolution. Open risks are addressed at the IBR in-plan CAM interviews and track until resolution**

Importance of Command Media

- **The Command Media of a company specifies the policies and process related to a certain subject area**
- **EVMS Command Media typically includes a corporate level EVMS System Description, a subordinate company or division EVMS Policy or procedure and a program specific program directive issued by the program manager**
  - Command media below the corporate level are generally more specific and more detailed , for example:
    - Battle rhythm/business cycles are specified
    - Approved earned value techniques are indicated
    - Variance analysis thresholds are stated
- **The EVMS Command Media describes the EVMS approved/accepted for use on DoD programs**
- **Compliance with the Command Media is the standard used during surveillance reviews conducted by the company's internal auditors and/or DCMA**
- **Compliance with the Command Media is a key benchmark used during CAM Notebook evaluation**

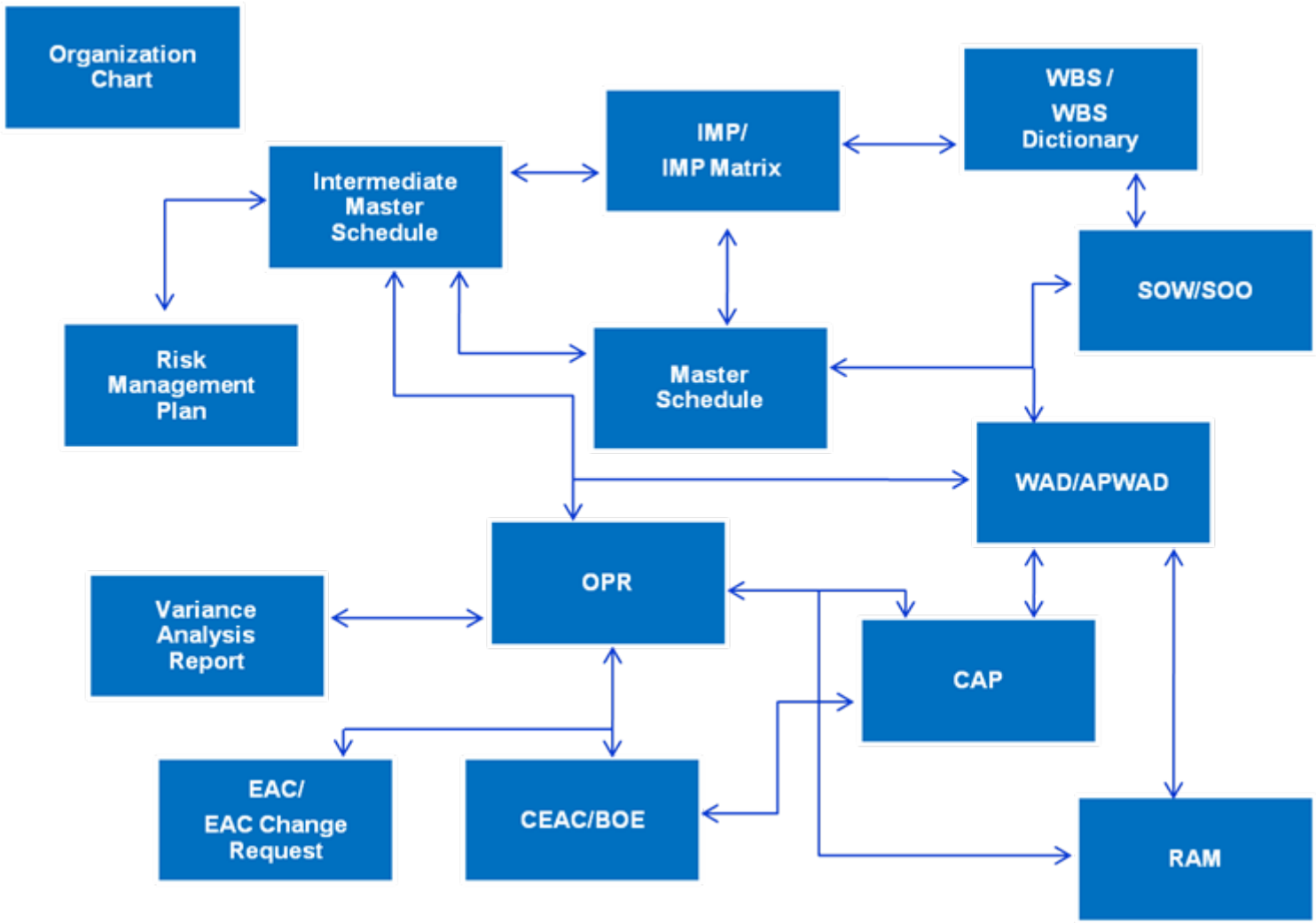
➢ **Essentials for Government Action Officers to be familiar with Command Media**

TYPICAL STRUCTURE OF CAM NOTEBOOK

Typical Structure

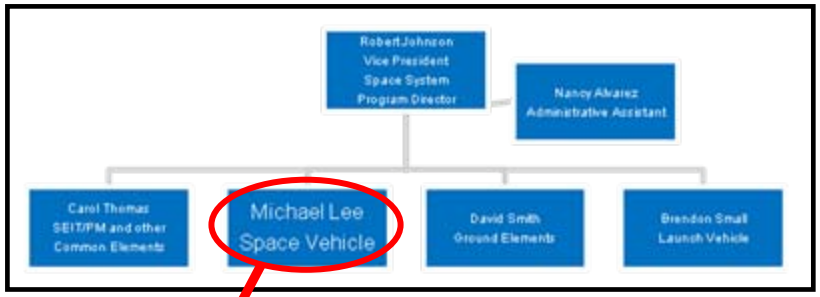
- **The CAM Notebook typically includes the following:**
  - Organization Documentation
  - Integrated Master Plan
  - Statement of Work (SOW)
  - Work Breakdown Structure (WBS) and WBS Dictionary
  - Work Authorization Document
  - Control Account Plan
  - Basis of Estimate and other cost baseline supporting information
  - Integrated Master Schedule including Giver/Receiver Agreements
  - Earned Value Performance Report
  - Subcontractor and Material Documentation
  - Risk and Opportunity Management Documents

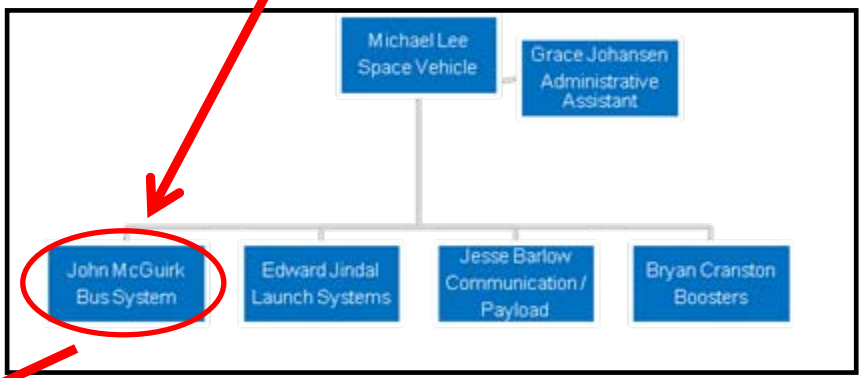
Relationship of the key documents to each other

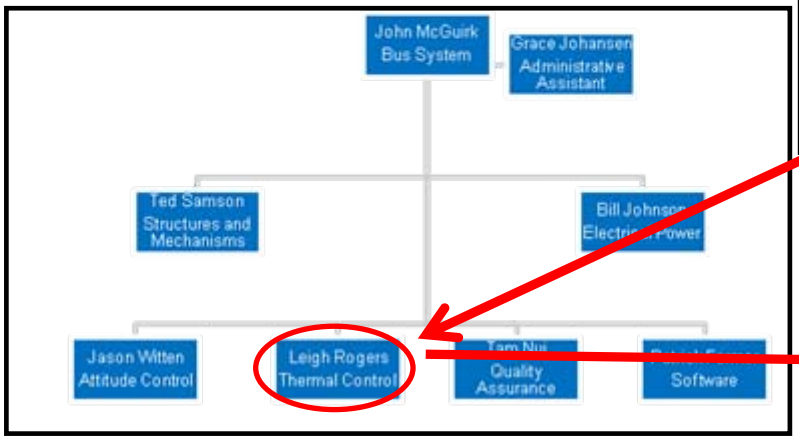


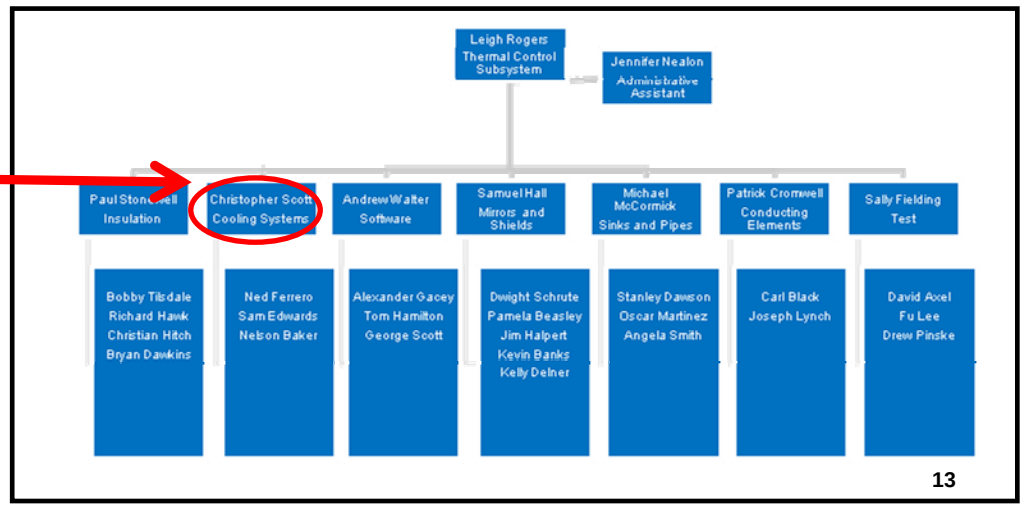
Organization Documentation

- **Program level organization chart should be included traceable to the CAM level**
- **A CAM level chart should show the CAMs direct reports**









Integrated Master Plan

- **The IMP describes Program Events, Accomplishments, and Accomplishment Criteria**
- **The IMP should indicate coding which links the Accomplishment Criteria to the CWBS number to a unique IMP Number**
- **This IMP number should be traceable to the related IMS activities.**

Integrated Master Plan

IPT-Level	Activity	WBS	IMP #
01-Level 5	ASP Payload Completed	1.2.2.3.5	FE-82513
03-Level 5	Space Vehicle Test Review Completed	1.2.2.3.1	VD-8466
01-Level 5	T-Vac Testing Completed	1.2.2.3.1	OS-77148
02-Level 4	Heat Blankets Functional Tests Completed	1.2.2.4	EP-3331
01-Level 5	G2 Contain T-Vac Test	1.2.2.3.1	AD54210

Integrated Master Schedule: CAM: Christopher Scott - 04/09/2009

IMP ID#	WBS	Activity Description	Start	End	% Complete	Predecessor	Successor
AD54210	1.2.2.3.1	G2 Contain T-Vac Test	12/16/2009	12/20/2009	75%	ED-45741	RE-8205
AD87544	1.2.2.3.1	Build AS-3D Heat Blankets	1/5/2010	1/15/2010	23%	ED51002	RE-70346
AD84528	1.2.2.3.1	SV Prepare FSS Package	3/26/2010	4/1/2010	15%	DP-16751	DS-55462
AD87542	1.2.2.3.1	Perform FSS Flight Test	5/30/2010	6/14/2010	0%	EX-78320	SE-7840
AD78452	1.2.2.3.1	Receive NG4 Material	6/21/2010	7/9/2010	0%		
AD98521	1.2.2.3.1	Build SD9-RS Heat Pipes	7/6/2010	8/6/2010	0%	ES-89452	SY-70345

Statement of Work (SOW)

- **Vertical Traceability**
  - The contract SOW describes the work to be performed and will be traceable to the WBS and the WBS Dictionary
  - The SOW will be traceable directly to the IMP by coding or SOW paragraph reference number or be traceable indirectly to the IMP by using the WBS coding
  - The Work Authorization Document work/task statement will be traceable to the SOW
- **Completeness**
  - The entire SOW work description should be included in the IMP and is included in the WADs
- **Within Scope**
  - All work described in the WADs should be included in the SOW

WBS and WBS Dictionary

- **The Work Breakdown Structure (WBS) and WBS Dictionary are critical documents which provide structure to program documentation and further technical detail concerning the contract work to be performed**
  - The contract WBS is the detailed product tree of the work to be performed to execute the contract SOW
  - The contract WBS is an extension of the program WBS provided by the customer which in turn follows the guidance in MIL-STD-881A
  - The WBS dictionary is a description of the WBS elements and should be more detailed than the SOW
- **The WBS number is included in the IMP, is traceable to the IMS activities and is included in Work Authorization Document (WAD), and the Control Account Plan (CAP)**

Space System	1.0
SEIT/PM and other Common Elements	1.1
Space Vehicle	1.2
SEIT/PM and other Common Elements	1.2.1
Spacecraft Bus	1.2.2
SEIT/PM and other Common Elements	1.2.2.1
Structures and Mechanisms Subsystem	1.2.2.2
Thermal Control Subsystem	1.2.2.3
Cryogenic Devices	1.2.2.3.1
Design	1.2.2.3.1.1
Development	1.2.2.3.1.2
Fabrication	1.2.2.3.1.3
Assembly	1.2.2.3.1.4
Quality Control	1.2.2.3.1.5

Work Authorization Document (WAD)

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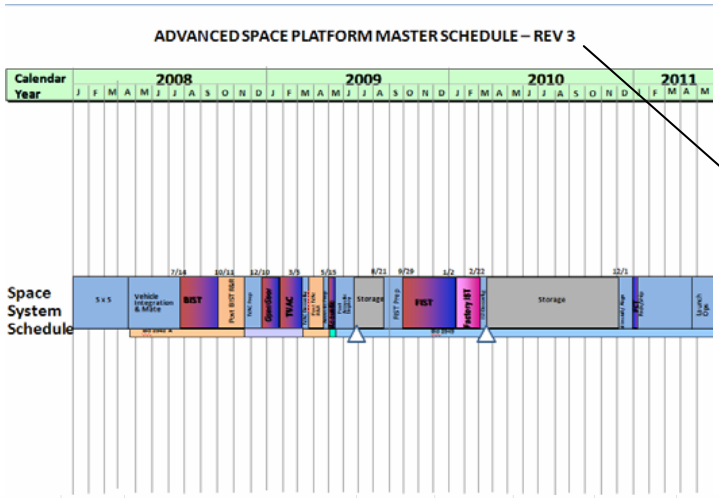
- **The WAD is the official document from the program manager authorizing the CAM to plan and execute the work task. It should be signed by the program manager, the CAM and usually the business manager**
- **The following elements should be on the WAD**
  - Contract number and name
  - CAM name
  - Control account number and title
  - WBS element number with name
  - IMS reference
  - Description of Work/Scope of Work
  - Control Account period of performance
  - Budget in hours and/or dollars
  - PM and CAM signatures and others per the command media
  - Indication whether WAD is original or a revision with changes from last version indicated ; plus the detailed change history of the WAD
- **Description of Work trace**
  - The WAD Description of Work should be traceable to the SOW/SOO and the WBS Dictionary – it should not be “cut and paste” extract
  - The Description of work should be more detailed and specific than the WBS Dictionary.
  - Each Description of Work should be unique so that work between WADs can be differentiated
- **Signatures – PM and CAM signatures should be evident and signed before period of performance begins**

WAD (continued)

- The schedule reference number and title should be traceable to the master schedule and the IMS
- Period of performance start and finish dates in WAD should agree with the IMS



Integrated Master Schedule: CAM: Christopher Scott - 04/09/2009

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WORK AUTHORIZATION DOCUMENT (WAD)

Program Name:	Advanced Satellite Program		
Responsible Organization:	Space System	**Control Number:**	ZD2001-89C-2008
Control Account Number:	ASP-12231-01	**Period of Performance:**	Jan 2009-Dec 2010
Control Account Manager	Christopher Scott		
WBS Element:	1.2.2.3.1		
Schedule Name and Revision Number:	ASP Master Schedule Rev-3		
Period of Performance	**Start:** Jan 2009	**End:** Dec 2010	
WAD Revision Number:	Rev-3	**Previous WAD Rev. Number:**	Rev-2

WAD (continued)

- **The WAD POP start and finish dates should agree with the control account plan (CAP)**
- **All resource spreads must be within the period of performance**

CONTROL ACCOUNT PLAN

CA	WBS	Total	Jan-08	Jan-09	Feb-09	Mar-09	Apr-09	Nov-10	Dec-10
ASP-12231-01		$241,224	$0	$10,051	$10,051	$10,051	$10,051	$10,051	$10,051
ASP-12231-02		$160,192	$0	$20,024	$20,024	$20,024	$20,024	$0	$0
ASP-12231-03		$16,010	$0	0	0	0	$1,001	$1,500	$1,500
ASP-12231-04		$23,842	$0	0	0	0	$1,703	$1,703	$1,703
ASP-12231-05		$19,698	$0	0	0	0	$1,407	$1,407	$1,407
ASP-12231-06		$110,698	$0	0	0	0	$7,907	$7,907	$7,907
ASP-12232-01		$84,980	$0	0	0	0	$6,070	$6,070	$6,070
ASP-12232-02		$35,798	$0	0	0	0	$2,557	$2,557	$2,557
ASP-12232-03		$59,290	$0	0	0	0	$4,235	$4,235	$4,235
ASP-12232-04		$75,510	$0	$4,195	$4,195	$4,195	$4,195	$4,195	$4,195
ASP-12232-05		$173,358	$0	$9,631	$9,631	$9,631	$9,631	$9,631	$9,631
ASP-12232-06		$143,550	$0	$7,975	$7,975	$7,975	$7,975	$7,975	$7,975
ASP-12233-01		$157,878	$0	$8,771	$8,771	$8,771	$8,771	$8,771	$8,771
ASP-12233-02		$270,126	$0	$0	$0	$0	$0	$0	$0
ASP-12233-03		$126,144	$0	$0	$0	$0	$0	$0	$0
ASP-12233-04		$83,454	$0	$0	$0	$0	$0	$0	$0
ASP-12233-05		$60,174	$0	$0	$0	$0	$0	$0	$0
ASP-12233-06		$87,768	$0	$0	$0	$0	$0	$0	$0
ASP-12234-01		$89,982	$0	$0	$0	$0	$0	$0	$0
ASP-12234-02		$133,146	$0	$0	$0	$0	$0	$0	$0
ASP-12234-03		$210,996	$0	$0	$0	$0	$0	$0	$0

WORK AUTHORIZATION DOCUMENT (WAD)

Program Name:	Advanced Satellite Program		
Responsible Organization:	Space System	**Control Number:**	ZD2001-89C-2008
Control Account Number:	ASP-12231-01	**Period of Performance:**	Jan 2009-Dec 2010
Control Account Manager	Christopher Scott		

WAD (continued)

- **The current amount authorized in the WAD should agree with –**
  - the CAP budget values
  - The RAM values for the control account
  - The control account Earned Value Performance Report budget at completion

WORK AUTHORIZATION DOCUMENT (WAD)

Program Name:	Advanced Satellite Program		
Responsible Organization:	Space System	**Control Number:**	ZD2001-89C-2008
Control Account Number:	ASP-12231-01	**Period of Performance:**	Jan 2009-Dec 2010
Control Account Manager	Christopher Scott		
WBS Element:	1.2.2.3.1		
Budget:	**Previous:**	**Change:**	**Current:**
	$241,224	$0	$241,224

CONTROL ACCOUNT PLAN

CA	WBS	Total	Jan-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09
ASP-12231-01		$241,224	$0	$10,051	$10,051	$10,051	$10,051	$10,051	$10,051
ASP-12231-02		$160,192	$0	$20,024	$20,024	$20,024	$20,024	$0	$0
ASP-12231-03		$16,010	$0	0	0	0	$1,001	$1,001	$1,001
ASP-12231-04		$23,842	$0	0	0	0	$1,703	$1,703	$1,703
ASP-12231-05		$19,698	$0	0	0	0	$1,407	$1,407	$1,407
ASP-12231-06		$110,698	$0	0	0	0	$7,907	$7,907	$7,907
ASP-12232-01		$84,980	$0	0	0	0	$6,070	$6,070	$6,070

RESPONSIBILITY ASSIGNMENT MATRIX - $

	WBS	Paul Stonewell	Christopher Scott	Samuel Hall	Michael McCormick	Patrick Cromwell	Sally Fielding
Cryogenic Devices	1.2.2.3.1	$19,698	$241,224	$160,192	$16,010	$23,842	$110,698
Liquid Loops	1.2.2.3.2	$84,980	$35,798	$59,290	$75,510	$173,358	$143,550
Electric Cooling	1.2.2.3.3	$157,878	$270,126	$126,144	$83,454	$60,174	$87,768
Insulation Blankets	1.2.2.3.4	$89,982	$133,146	$210,996	$16,668	$192,264	$961,584
Surface Coatings	1.2.2.3.5	$111,064	$73,652	$148,124	$14,988	$103,368	$29,056
Mirrors with Optical Coatings	1.2.2.3.6	$385,584	$356,208	$388,896	$142,845	$321,792	$274,064
Coatings	1.2.2.3.7	$817,584	$202,336	$271,568	$114,488	$23,540	$179,105
Thermal Tape	1.2.2.3.8	$149,055	$80,810	$154,539	$395,219	$202,708	$361,889

EVM Performance Report - Advanced Space Platform

WBS Level: 5 Cryogenic Devices

	Current Period					Cumulative					At Completion			
	BCWS	BCWP	ACWP	SV$	CV$	BCWS	BCWP	ACWP	SV$	CV$	BAC	LRE	EAC	VAC$
Hours	605	575	633	-30	-58	3055	3,924	3,999	869	-75	10,874	10,875	12,745	-1,871
Direct	$2,000	$1,195	$1,046	-$805	$149	$11,594	$10,987	$11,742	-$607	-$755	$27,895	$27,895	$33,475	-$5,580
Overhead 1	$2,789	$2,108	$2,555	-$681	-$447	$3,784	$4,410	$4,851	$626	-$441	$85,000	$85,000	$91,540	-$6,540
Overhead2	$1,744	$990	$1,877	-$754	-$887	$2,210	$2,389	$2,474	$179	-$85	$90,400	$90,400	$92,415	-$2,015
G&A	$2,287	$2,211	$2,410	-$76	-$199	$3,187	$3,715	$3,974	$528	-$259	$37,929	$37,929	$40,020	-$2,091
Total	$8,820	$6,504	$7,888	-$2,316	-$1,384	$20,775	$21,501	$23,041	$726	-$1,540	$241,224	$241,224	$257,450	-$16,226

Control Account Plan

- **The Control Account Plan (CAP) lays out the work packages and planning packages with time phased resources necessary to accomplish all the work in the WAD Description of Work**
  - The resource category, e.g., labor, material, subcontract, should be indicated
  - The earned value technique, e.g., percent complete, LOE, should be stated
  - Planning Packages should be properly coded and resources time phased
- **The CAP contents should be traced to other CAM Notebook contents**
  - Total budget agrees with WAD
  - Start date of earliest work package and end date of latest work package/planning package agrees with the WAD and IMS

CONTROL ACCOUNT PLAN

CA	WBS	Total	Jan-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09
ASP-12231-01		$241,224	$0	$10,051	$10,051	$10,051	$10,051	$10,051	$10,051
ASP-12231-02		$160,192	$0	$20,024	$20,024	$20,024	$20,024	$0	$0
ASP-12231-03		$16,010	$0	0	0	0	$1,001	$1,001	$1,001
ASP-12231-04		$23,842	$0	0	0	0	$1,703	$1,703	$1,703
ASP-12231-05		$19,698	$0	0	0	0	$1,407	$1,407	$1,407
ASP-12231-06		$110,698	$0	0	0	0	$7,907	$7,907	$7,907
ASP-12232-01		$84,980	$0	0	0	0	$6,070	$6,070	$6,070
ASP-12232-02		$35,798	$0	0	0	0	$2,557	$2,557	$2,557
ASP-12232-03		$59,290	$0	0	0	0	$4,235	$4,235	$4,235
ASP-12232-04		$75,510	$0	$4,195	$4,195	$4,195	$4,195	$4,195	$0
ASP-12232-05		$173,358	$0	$9,631	$9,631	$9,631	$9,631	$9,631	$0
ASP-12232-06		$143,550	$0	$7,975	$7,975	$7,975	$7,975	$7,975	$0
ASP-12233-01		$157,878	$0	$8,771	$8,771	$8,771	$8,771	$8,771	$0
ASP-12233-02		$270,126	$0	$0	$0	$0	$0	$0	$45,021
ASP-12233-03		$126,144	$0	$0	$0	$0	$0	$0	$21,024
ASP-12233-04		$83,454	$0	$0	$0	$0	$0	$0	$13,909

BOE and Cost Baseline Support Info

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- **Basis of Estimate (BOE) documents provide detailed estimating methodology for the control account plan budgeted value and/or the last comprehensive estimate at completion**
  - The BOE should be time phased in hours and dollars if labor, and dollars if non-labor
  - Months without resources should be explained
  - Month to month wide variations in resources estimated should be explained and should be supported by similarly varying IMS activities
  - Hours should be converted to equivalent person months using the contractor's accounting calendar to determine the number of staff charging to get a more accurate view of the staffing profile
  - Period of performance should agree with the CAP
  - Detailed cost justification and estimates should sum to the totals presented for the control account
- **Interdivisional work authorization documents and subcontract/vendor information should support the BOE and CAP budget.**

Integrated Master Schedule including Giver/Receiver Agreements

- **The IMS contains all the activities necessary to accomplish the control account description of work**
  - The IMS should trace to the
    - Program Master Schedule
    - IMP
    - WAD
    - CAP
  - Activities should have predecessor and successor activities
  - Critical path should be calculated for the program and the control account
- **Significant relationships should be documented with a giver/receiver agreement (GRA)**
  - GRAs are between CAMs, between IPTs, between prime and subcontractors/vendors, or between prime and government, for example, GFE, GFI
  - GRAs are a mini-contract and should clearly state the giver and receive control account , the agreed to date and CAM names with signatures
  - The clear description of what is given/received should be included

GIVER RECEIVER AGREEMENT

Giver:
CAM: A
CA: ASP-12231-01
Receiver:
CAM: B
CA: ASP-Software
Description: Deliver completed cryogenic interfaces to Andrew Walter for software integration testing

Date: 01-23-2010

Activity: AD87542

Integrated Master Schedule Review

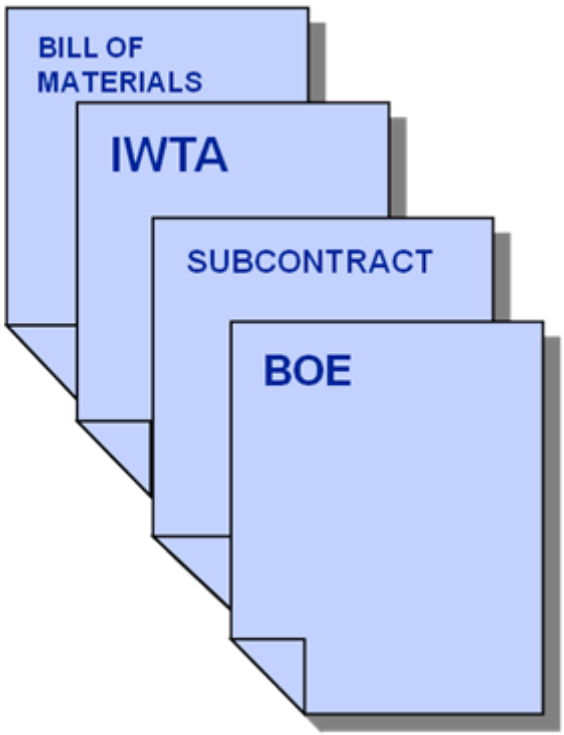
- **Logical connectivity**
  - Critical Path : Start to Finish
  - Predecessor and Successor relationship
  - Horizontal and Vertical Traceability
- **Schedule Tranparency**
  - Visibility and Accuracy
  - Schedule Effectiveness
- **Schedule Maintenance Process**
- **Resourced Schedule**
  - Traceable to control accounts
- **Integration between Prime and Major Subs**
  - Integration of interfaces tied points
  - Scheduling tools compatibility
- **Integration between IMS and Supplemental Schedule**

Earned Value Performance Report

- **Compare the Budget at Completion to the control account budget in the WAD and CAP**
- **Examine the report for data causing reason for concern and/or not logical**
  - Cumulative budget (BCWS) greater than Budget at Completion (BAC)
  - Cumulative earned value (BCWP) greater than BAC
  - Cumulative actual costs (ACWP) greater that estimate at completion
  - Negative current month and cumulative values
  - Unusual and widely varying cost performance index (CPI), schedule performance index (SPI) and to-complete cost performance index (TCPI)
    - Also look for significant differences between the CPI and the TCPI
- **It is of particular concern if the following is noted**
  - BCWP and BCWS values with no actual costs recorded
  - Conversely actual costs recorded with no BCWS and BCWP
  - Inconsistency between cumulative dollar and % cost variance and variance at completion, e.g., cumulative CV of -18% and VAC of -2%

Subcontractor and Material Documentation

- **Subcontract, Inter-divisional Work Authorization Document and material information (including the Bill of Material) should be included**
- **This information is backup for the material budgets and schedule**
  - Reviewed and compare to the CAP, the BOE and the IMS to determine agreement



Integrated Master Schedule: CAM: Christopher Scott - 04/09/2009

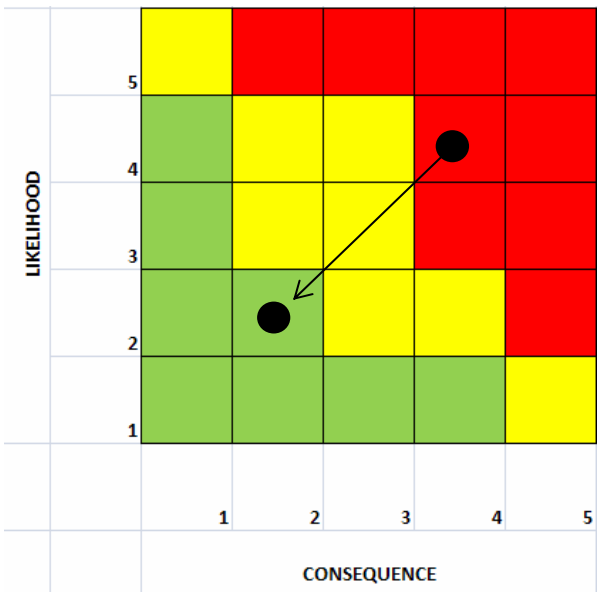
IMP ID#	WBS	Activity Description	Start	End	% Complete	Predecessor	Successor
AD54210	1.2.2.3.1	G2 Contain T-Vac Test	12/16/2009	12/20/2009	75%	ED-45741	RE-8205
AD87544	1.2.2.3.1	Build AS-3D Heat Blankets	1/5/2010	1/15/2010	23%	ED51002	RE-70346
AD84528	1.2.2.3.1	SV Prepare FSS Package	3/26/2010	4/1/2010	15%	DP-16751	DS-55462
AD87542	1.2.2.3.1	Perform FSS Flight Test	5/30/2010	6/14/2010	0%	EX-78320	SE-7840
AD78452	1.2.2.3.1	Receive NG4 Material	6/21/2010	7/9/2010	0%		
AD98521	1.2.2.3.1	Build SD9-RS Heat Pipes	7/6/2010	8/6/2010	0%	ES-89452	SY-70345

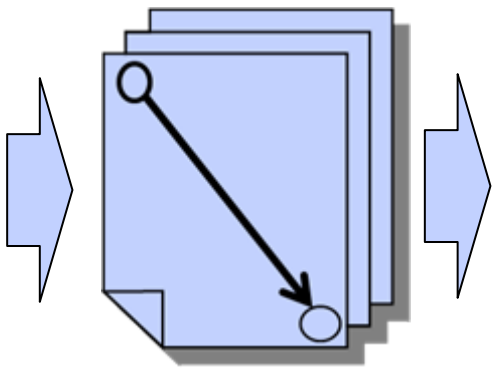
CONTROL ACCOUNT PLAN

CA	WBS	Total	Jan-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09
ASP-12231-01		$241,224	$0	$10,051	$10,051	$10,051	$10,051	$10,051	$10,051
ASP-12231-02		$160,192	$0	$20,024	$20,024	$20,024	$20,024	$0	$0
ASP-12231-03		$16,010	$0	0	0	0	$1,001	$1,001	$1,001
ASP-12231-04		$23,842	$0	0	0	0	$1,703	$1,703	$1,703
ASP-12231-05		$19,698	$0	0	0	0	$1,407	$1,407	$1,407
ASP-12231-06		$110,698	$0	0	0	0	$7,907	$7,907	$7,907
ASP-12232-01		$84,980	$0	0	0	0	$6,070	$6,070	$6,070
ASP-12232-02		$35,798	$0	0	0	0	$2,557	$2,557	$2,557
ASP-12232-03		$59,290	$0	0	0	0	$4,235	$4,235	$4,235
ASP-12232-04		$75,510	$0	$4,195	$4,195	$4,195	$4,195	$4,195	$0
ASP-12232-05		$173,358	$0	$9,631	$9,631	$9,631	$9,631	$9,631	$0
ASP-12232-06		$143,550	$0	$7,975	$7,975	$7,975	$7,975	$7,975	$0
ASP-12233-01		$157,878	$0	$8,771	$8,771	$8,771	$8,771	$8,771	$0
ASP-12233-02		$270,126	$0	$0	$0	$0	$0	$0	$45,021
ASP-12233-03		$126,144	$0	$0	$0	$0	$0	$0	$21,024
ASP-12233-04		$83,454	$0	$0	$0	$0	$0	$0	$13,909

Risk and Opportunity Management Documents

- **Examine risk and opportunity documentation**
  - Identify control account risks tracked at program level
  - Identify other risks CAM tracked at the control account level
  - Locate and evaluate burn down plans
  - Look for inclusion for risk related schedule activities and budgeted work packages





RISK BURNDOWN PLAN

Integrated Master Schedule: CAM: Christopher Scott - 04/09/2009							
IMP ID#	WBS	Activity Description	Start	End	% Complete	Predecessor	Successor
AD54210	1.2.2.3.1	G2 Contain T-Vac Test	12/16/2009	12/20/2009	75%	ED-45741	RE-8205
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IBR Documentation Review Risks

- **The end product of the thorough, detailed and precise review of the CAM Notebook are the IBR Documentation Review Risks which includes**
- **CAM Evaluation format**
  - Comments from the notebook review are documented against the 11 evaluation categories and their evaluation criteria- this is the concern or what in the documentation bothers you - comments are the source data for the Risk section in the Risk Format
- **Risk Format**
  - Risk – what in the documentation is viewed as an issue – what is bothering you; "If" statement – the condition that "If" the concern exists or continues to exist
  - Impact - "Then" statement – the impact of the "If" /concern at the current time or the future impact
  - "Questions "– Questions to ask the contractor to understand the concern, to verify the impacts and to identify what will be done to correct the situation
- **The Risks should be thoroughly reviewed by the wing for accuracy and a determination of government program office agreement**
- **Contractor response should be sought**
- **All Risks should be followed up on until successfully resolved**

Conclusions

- **PMAG details-oriented, risk-based, integrated team approach to IBR has proven to be successful in improving the program baseline executability**
  - Demonstrated effectiveness in identifying and mitigating IBR integrated program risks
  - Demonstrated expertise in verifying and validating the executability of the program baseline
- **PMAG application-oriented training enhance organic IPMC capabilities**
  - Prepare the Government action officers, their supporting staff and the CAMS to conduct much more effective and focused in-plant IBR CAM interviews
  - Provide a systematic, methodological approach to IBR that can be used to train new action officers
  - Set high performance expectations for contractor's CAM thru disciplined execution with honest, unbiased assessment of integrated program risks by Government action officers