



Proactive Process Deployment

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Topics



- **Lockheed Martin Aeronautics Overview**
 - **OSP Deployment Plan**
 - **OSP Deployment Process**
 - **OSP Deployment Event Planning**
 - **Conclusions**

Lockheed Martin Aeronautics Overview



29,000 employees across the company and around the world

International - 39

Palmdale, CA
3,834

Johnstown, PA - 103

Clarksburg, WV - 78

Marietta, GA

Greenville, SC - 3400

Fort Worth, TX
14,529

6,864

Meridian, MS - 134

Pinellas Park, FL - 174

U-2

F-117

YF-22

X-35

F-35C
CV

F-16

F-35B
STOVL

F-35A
CTOL

F-22

C-130J

C-5

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Terminology – Organizational Standard Processes (OSP)



- **OSP is the set of AeroCodes that are used as the basis for establishing common development processes across Aeronautics. The OSP describes the fundamental processes that must be incorporated into the defined processes that are implemented by functions and on programs across Aero.**

Terminology – Program Defined Process (PDP)



- **PDP is the Program Defined Process used by personnel assigned to a program when executing work on the program**
 - **A PDP provides a basis for planning, performing, and improving the program tasks and activities. It is tailored from the OSP to meet the objectives, constraints, and environment of a specific program, in accordance with the organization's process tailoring criteria and guidelines.**
- **The PDP is documented in the Program Adoption of the OSP (PAOSP) for approval and configuration control**

Terminology - Tailoring



- **Tailoring is required for deletions, modifications, and substitutions to process requirements, including content (but not format) of work products**
 - **Or when a process requirement is inappropriate for a particular contract, a tailoring is requested**
- **Approved tailorings are referenced in the PAOSP**

OSP Deployment Objectives



- **Ensure all Aero programs are utilizing the best available processes to execute their development projects**
- **Reinforce the use of OSP AeroCodes to document and communicate Aero's best practices**
- **Identify best practices on programs for inclusion in OSP AeroCodes**
- **Generate and verify a compliant set of program plans and processes tailored to meet business needs**

OSP Deployment Plan



- **LM Aero Strategy**

- Bring current programs to OSP-Compliance
- Deploy OSP to all new pursuits
- Deploy OSP changes to programs already compliant, when required

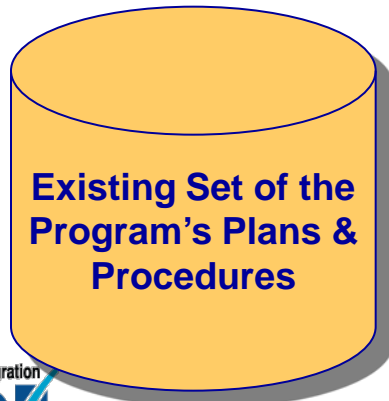
- **OSP Deployment Approach**

- Conduct gap analysis events to accelerate development of compliant program plans
- Identify gaps between OSP and program plans
- Establish set of processes used on each program based on the OSP and record them in a PAOSP
- Develop/update and approve plans to incorporate processes, especially the PMP and SEMP

OSP Deployment To Confirm A Compliant Program Baseline



Inputs



Deploy OSP:

- Conduct Gap Analysis
- Establish initial PAOSP
- Develop/Implement Gap Closure Plans
- Submit/Approve Tailoring Requests
- Update/Approve Program Plans
- Approve PAOSP
- Improve OSP

Outputs



Example of PAOSP Spreadsheet



Domain	AeroCode Number	Title	Description/Objective	Owner	Doc Type	Result of Evaluation				
						Not Applicable	Used as Written	Tailored (Copy attached)		
PM	AC-XXXX	Capture Transition	This process outline the activities and information required of all participants during the final stage of the pursuit...	John Doe	process	y				
PM	AC-XXXX	Program Management Contract Close-out Tasks	To identify the responsibilities of the Program Manager and the Program Leadership Team for the Contract Close-out...	John Doe	process			y		
Eng	AC-XXXX	Build-to-Package Process Control Manual - Design	The Build-to-Package Process Control Manual (BTPCM) - Design describes the LM Aero BTP - Design processes per....	James Smith	process		y			
PM	AC-XXXX	Integrated Cost and Schedule - Earned Value Management	The Integrated Cost and Schedule (ICAS) - Earned Value Management System (EVMS) process is the single....	Mary Jones	process		y			
Tech Pubs	AC-XXXX	Technical Publication Development & Support Process	The Technical Publication Development & Support process provides the means to transform engineering...	Carol Smith	process		y			

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OSP Deployment Responsibilities



- **Functions (Process Owners)**
 - Assist development of, review & approve program plans
 - Work with program to establish PDP including any needed tailoring
- **Program Manager or Equivalent**
 - Supported by program Subject Matter Experts (SMEs)
 - Oversees the development of program plans required by functional processes
 - Establishes the PDP including any needed tailoring
 - Oversees the development and implementation of gap closure plans
- **Enterprise Process Integration**
 - Facilitates function and program assessment of plans
 - Aids in review and approval of plans and tailoring
 - Drives deployment effort to conclusion

Gap Analysis Review Steps



1. Review OSP against Program plans to identify any differences (gaps) – via self-assessment between program POCs and functional SMEs
2. Identify and address gaps between OSP and Program plans via gap closure plans

Gap: is an identified *non-compliance* to a specific OSP AeroCode or process in an OSP AeroCode which the program/project intends to comply with or tailor.

3. Record results in PAOSP Spreadsheet
4. Update, submit and approve Program plans

Step #1 – Review OSP Against Program Plans



- Review the existing plans against the applicable process checklist and/or AeroCodes to identify gaps

Or, if plans don't exist...

- Discuss program planning with the applicable SME and program manager to determine if the steps in the AeroCode will be followed

Step #2 – Identify & Address Gaps



- **Gap items are typically**
 - **Program actions**
 - **Implement the OSP on the program**
 - **Update / develop required program plans and submit for approval**
 - **Function actions**
 - **Improve / update OSP (AeroCodes)**
 - **Support programs to develop/update plans**
 - **Provide training**
- **POCs are assigned to develop gap closure plans**
- **Functional and program leadership monitor implementation of gap plans until closure**

Step #3 – Record Results



- **Based on the review of the plan or program planning, determine if the AeroCode will be:**
 - **Used As Written**
 - Use or import process asset without deletions or substitutions
 - **Tailored**
 - Modify for inclusion with deletions or substitutions
 - **Not Applicable**
 - None of the AeroCode applies based on the program's contract or life cycle
 - **Substitute with Program Implementation**
 - Create new process asset to replace an AeroCode

Step #3 – Record Results (cont'd)



- **Capture decisions in PAOSP worksheet**
 - As program manager or delegates reviews the OSP and determines its applicability on the program, documentation of this decision is captured in the PAOSP spreadsheet
 - Authors of the applicable program plans will use the PAOSP worksheet as guidance in creating / updating their plan

Domain	AeroCode Number	Title	Description/Objective	Owner	Doc Type	Result of Evaluation				
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Step #4 – Update and Approve OSP-Compliant Program Plans



- **Update existing program plan or develop new program plans**
- **Submit program plans to the applicable functional SME for review and comments**
- **Functional SME approves the plan (original and updated versions) and any NA's**

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- **Enterprise Common Process Management**
- **OSP Deployment Plan**
- **OSP Deployment Process**
- **OSP Deployment Event Planning**
- **Conclusions**

OSP Deployment Event Schedule Summary

Day 1: EPI, PM, F&BO, MM & Eng

- Opening Event Brief – Purpose, Objectives, etc.
- Program Management Plan (PMP)
- IMP & IMS
- Communication Plan
- Monitor and Control Planning (PMP)
- Resource Plan
- EVMS (PMP)
- Estimating & Pricing (PMP)
- Strategic Sourcing Plan
- Subcontract Mgt Plan
- Configuration Mgt Plan

Day 2: Eng, PM & F&BO

- Data Mgt Plan
- Risk & Opportunity Mgt Plan
- SEMP & Technical Planning
 - *Requirements / WPEs*
 - *Verification / Validation*
 - *Architecture*
 - *Preliminary & Detail Design*
 - *Implementation*

Day 3: Eng, PPQA, & EPI

- SEMP & Technical Planning
 - *Product Integration*
 - *BTP / WPEs*
- Software Development Plan
- Measurement and Analysis Plan
- Quality Assurance Plan
- Remaining OSP Assessments

Day 4: All

- Create Event Outbrief
- Conduct Event Outbrief

Note: If team cannot hold to schedule, then parallel gap sessions will be conducted

Program OSP Gap Analysis Objectives



- **Inventory the program defined processes by dispositioning the “Core” OSP AeroCodes**
 - **Accept as is**
 - **Accept with tailorings**
 - **Not applicable: due to program business need**
 - **Substitute program process implementation**
 - **Defer: discuss during follow-on telecon**
- **Determine what actions, if any, are required to ensure compliance with the LM Aero Process Policy**
 - **Program actions**
 - **Core Function actions**

Program Outcomes



- **Gap analysis event ends when...**
 - **Core AeroCodes in the OSP are dispositioned**
 - **Initial PAOSP worksheet is completed and tailorings are identified**
 - **Gap action plans are developed and POCs assigned**
- **Event follow-up ends when...**
 - **Final PAOSP worksheet is completed and tailorings are dispositioned**
 - **Any plan updates are completed and approved**
 - **Gap action plans are completed**

OSP Deployment Monitoring



Initial OSP Deployment Status Summary							
Program/ Project	Event Status		OSP Assessment			Program POC	Comments
	Planned	Comp	Assmt's Complete	Tailorings Complete - Approved/ Total	Acceptance Status		
F-XX	2007	2007	100%	6/6	Complete	Jon Doe 762-1000	Initial OSP Deployment Complete
F-YY	2007	2007	100%	2/2	Complete	Jon Doe 762-1000	Initial OSP Deployment Complete
F-ZZ	6/2008	6/2008	100%	3/3	Complete	Jon Doe 762-1000	Initial OSP Deployment Complete
C-1	8/2008	8/2008	100%	2/2	Complete	Jon Doe 762-1000	Initial OSP Deployment Complete
F-A	1/2009	1/2009	100%	0/0	Complete	Jon Doe 762-1000	Initial OSP Deployment Complete
F-B	6/2009	6/2009	100%	1/1	Complete	Jon Doe 762-1000	Initial OSP Deployment Complete
C-2	11/2009	11/2009	100%	0/0	Complete	Jon Doe 762-1000	Initial OSP Deployment Complete
C-3	12/2010	12/2010	25%		In-work	Jon Doe 762-1000	Deployment Event Scheduled
Non-Program Deployment Events							
Tool XYZ	8/2009	8/2009	100%	N/A	N/A	Jon Doe 762-1000	Initial OSP Deployment Complete



Questions?