

Headquarters U. S. Air Force

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AF Software Intensive Systems Strategic Improvement Program (AFSSIP)



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Overview

- n **Background**
- n **AFSSIP Approach**
- n **Related Activities**
- n **Way Ahead**

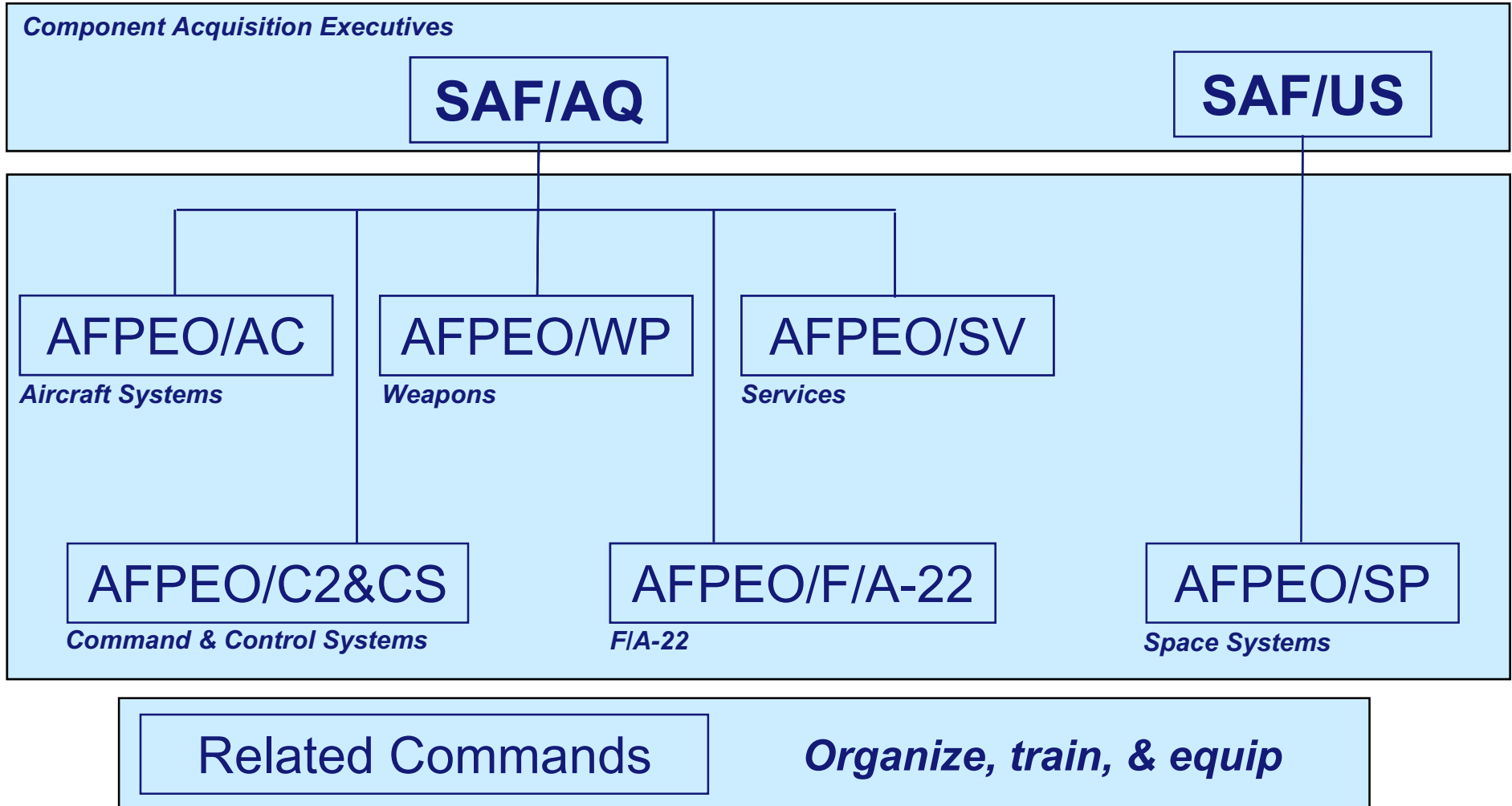


Background

- n **FY03 Authorization Act (Pub. Law 107-314), Section 804**
 - n Services implement S/W acquisition improvement programs
 - n Focus on Processes, Metrics, People, and Compliance
- n **Mar 03 OSD Memo**
 - n DoD SISSG oversight of services/agencies programs
 - n Additional focus areas (e.g. Config. Management, T&E)
- n **Various process improvement activities already underway**
 - n Mix of systems focus, software focus, or both
 - n Not integrated



Air Force Organizations With Major Acquisition Roles



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AFSSIP Approach

- n **Guidance from Dr. Sambur (SAF/AQ)**
 - n Ensure AFSSIP meets Congressional intent
 - n Focus on AF acquisition programs
 - n Implement through AF Acquisition Executives & PEOs

- n **Congressional Intent**
 - n Based on October 2003 discussions with SASC staffers
 - n Focus on MDAPs, not IT
 - n Ensure software is properly addressed in program reviews



AFSSIP Strategy

SAF/IAQ – SAF/US 13 Jan 04 Memo to PEOs

n Program Purpose

- n Evaluate efficiency and effectiveness of software management and processes as part of systems engineering and capability acquisition
- n Identify changes that may be needed to improve them

n Working Group Responsible to Execute

- n Core team
- n PEO representatives
- n Industry representatives

n Report results to CAEs by July 2004



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Core Team

n Membership

- n Software experts from product and logistics centers, SAF/AQ, supporting organizations, SEI, and support contractors

n Responsibilities

- n Define overall AFSSIP approach
- n Accomplish familiarization and feedback for PEOs
- n Assist with data gathering from acquisition programs
- n Define As-Is and To-Be states
- n Perform gap analysis
- n Define roadmap and implementation recommendations
- n Accomplish all activities required to produce AFSSIP products and results

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PEO Representatives

n **Membership**

- n Acquisition Program Representatives appointed by PEOs
- n Senior program managers and engineers with software acquisition experience

n **Responsibilities**

- n Provide program experience and data
 - n Information on section 804 focus areas
 - n Problems encountered / success stories
 - n Recommended best practices
- n Review interim core team products and provide heading checks

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Industry Representatives

- n **Responsibilities similar to those of PEO Representatives:**
 - n Solicited for input to As-Is and To-Be states
 - n Review and validate working group products and provide input to roadmap and recommendations



Desired Acquisition Program Information (Draft)

- n **Program description**
- n **Policy & guidance (all levels)**
- n **Organizational structure and practices**
- n **People, training, and experience**
- n **Resources, funding, and investment**
- n **Processes**
- n **Metrics**
- n **Best Practices**
- n **Technology development and insertion**
- n **Potential improvement activities**



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Challenges

n **Achieving balance:**

- n Prescribed processes with program manager autonomy, responsibility, and accountability
- n Integration within the systems engineering process with software stovepipes
- n Level of software insight with acquisition workforce downsizing
- n Need for speed of acquisition with adherence to disciplined processes

n **Additional challenges:**

- n Commonality across acquisition organizations
- n Reporting
- n Training

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Related On-Going Activities

n Air Force Level

- n Systems Engineering Revitalization**
- n Center for Systems Engineering (CSE)**

n Air Force Materiel Command (AFMC) / Air Force Space Command (AFSPC)

- n Software Intensive Systems Steering Group**

n Acquisition Center Initiatives



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Air Force Level Activities

n **Systems Engineering Revitalization**

- n Focus on application of systems engineering practices through system life cycle
- n Incentivize contractors to perform more robust SE
- n Report status of SE processes/practices in program reviews

n **Center for Systems Engineering (CSE)**

- n Air Force & DoD SE Center of Excellence
- n Advocate, consult, implement, and provide training for SE
- n Repository for academic, government and industry SE best practices, processes, metrics and training

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AFMCI/AFSPC Activities

- n **Software Intensive Systems Steering Group**
 - n Foster collaboration among AFMC product, logistics and test centers
 - n Disseminate S/W development and sustainment best practices
 - n Source of resources for AFSSIP
 - n Organize, train, and equip



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A Possible Outcome

n **Air Force**

- n Software addressed as an integral part of systems engineering policy

n **AFMC/AFSPC**

- n Joint policies and implementation guidance
- n Training

n **Centers**

- n Tailored implementations
- n Training

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AFSSIP Schedule

<u>Task</u>	<u>Complete</u>
n PEOs provide AFSSIP Working Group (WG) reps	30 Jan 04
n Finalize AFSSIP WG Charter	2 Feb 04
n Core Team Initial Activities	Mar 04
n “As Is” State Draft	
n “To Be” State Templates	
n Planning for Working Group meeting	
n Working Group Session	Apr 04
n “As Is” & “To Be” Gap Analysis	May 04
n Develop Roadmap & Implementation Recommendations	Jun 04
n Brief Roadmap and recommendations to SAF/AQ/US	Jul 04

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