Air Force Materiel Command

Engineering Enterprise and Authorities

Col Keith Bearden
& Mr. Garry Gagnon
HQ AFMC/EN
23 June 2015

Agenda

- State of AF Acquisition Engineering
- What's Being Done?
- How Are We Going To Get There?
- Why You Should Care?
- What You Can Do?

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- **State of AF Acquisition Engineering**
- **What's Being Done?**
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- **What You Can Do**

The AF Engineering Enterprise: What we are…

Vision

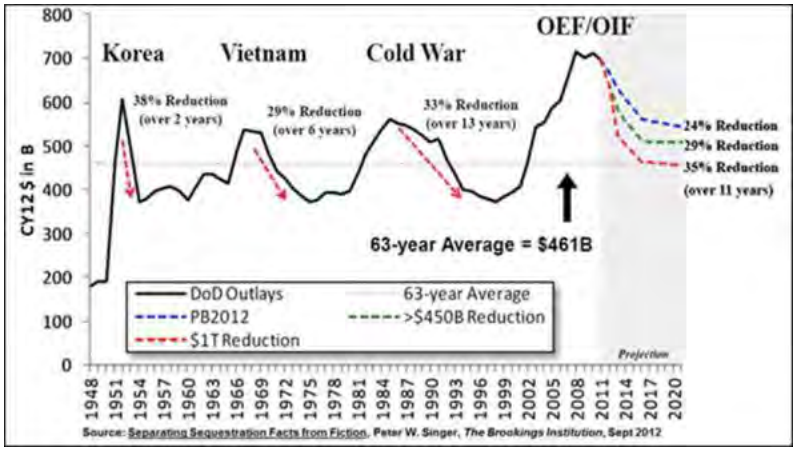
To be a focused engineering enterprise with a culture of discipline and agility that enables warfighter's success

Mission

Provide superior technical expertise to plan, acquire, and sustain dominant warfighting capability through an efficient, effective and innovative engineering enterprise.

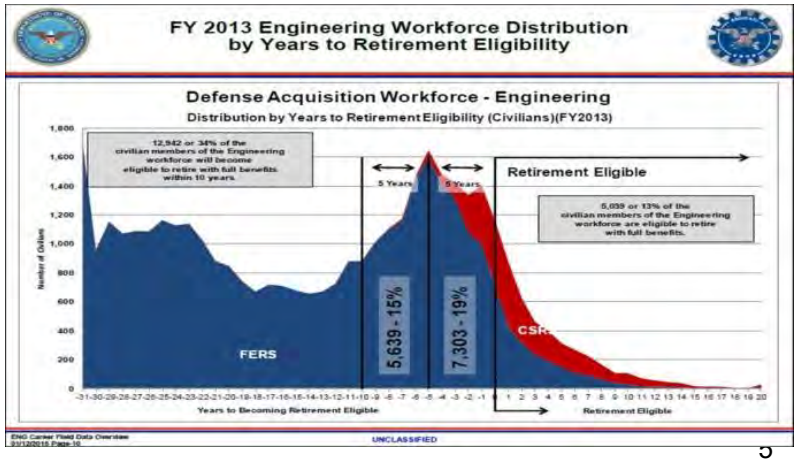
State of AF Acquisition Engineering

- **Challenges and Problems**
  - **U.S. faces a potential loss of technological superiority**



  - **Reduced Budgets**

  - **Aging Workforce and Past hiring freeze**



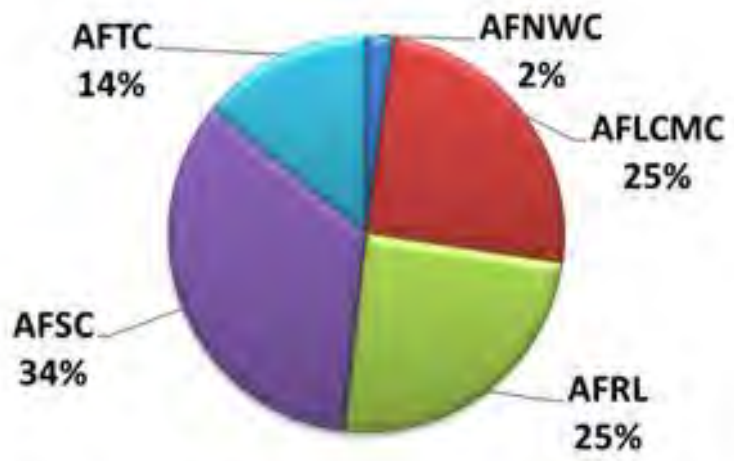
State of AF Acquisition Engineering

- **Externally Perceived Problems:**
  - **Inability to provide sufficient independent technical support to decision makers**
  - **Reduced technical depth in many life cycle engineering areas**
  - **Reduced technical expertise in specialty engineering disciplines**
  - **Lack of standardization across the Air Force**

- **Internally Perceived Problems:**
  - **Confusion across the engineering enterprise about semantics of terms being used**
  - **Inadequately defined enterprise communications and decision making forums**
  - **Questions about the roles and responsibilities across the engineering enterprise**
  - **Lack of engineering strategic planning unifying expectations and implementation**

State of AF Acquisition Engineering

- **What do we have going for us?**
  - Significant workforce – 16,000+ S&Es
  - Proven technical management processes supporting weapon systems across the life cycle
  - Vast infrastructure resources
  - Heritage of excellence



AFMC S&E Center Distribution

Many Challenges and Areas to Improve

Agenda

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What's Being Done?

AF 30-year Strategic Plan

… a requirements process and acquisition system that accommodates more frequent "pivot points" – opportunities to modify or abandon a program during its life cycle – and harnesses rapid prototyping …

Better Buying Power 3.0 DRAFT

Achieving Dominant Capabilities through Technical Excellence and Innovation

Achieve Affordable Programs
- Continue to set and enforce affordability caps

Achieve Dominant Capabilities While Controlling Lifecycle Costs
- Strengthen and expand "should cost" based cost management
- Build stronger partnerships between the acquisition, requirements, and intelligence communities
- Anticipate and plan for responsive and emerging threats
- Institutionalize stronger DoD level Long Range R&D Planning

Incentivize Productivity in Industry and Government
- Align profitability more tightly with Department goals
- Employ appropriate contract types, but increase the use of incentive type contracts
- Expand the superior supplier incentive program across DoD
- Increase effective use of Performance-Based Logistics
- Remove barriers to commercial technology utilization
- Improve the return on investment in DoD laboratories
- Increase the productivity of IRAD and CR&D

Incentivize Innovation in Industry and Government
- Increase the use of prototyping and experimentation
- Emphasize technology insertion and refresh in program planning
- Use Modular Open Systems Architecture to stimulate innovation
- Increase the return on Small Business Innovation Research (SBIR)
- Provide draft technical requirements to industry early and involve industry in funded concept definition to support requirements definition
- Provide clear "best value" definitions so industry can propose and DoD can choose wisely

Eliminate Unproductive Processes and Bureaucracy
- Emphasize Acquisition Executive, Program Executive Officer and Program Manager responsibility, authority, and accountability
- Reduce cycle times while ensuring sound investments
- Streamline documentation requirements and staff reviews

Promote Effective Competition
- Create and maintain competitive environments
- Improve technology search and outreach in global markets

Improve Tradecraft in Acquisition of Services
- Increase small business participation, including more effective use of market research
- Strengthen contract management outside the normal acquisition chain
- Improve requirements definition
- Improve the effectiveness and productivity of contracted engineering and technical services

Improve the Professionalism of the Total Acquisition Workforce
- Establish higher standards for key leadership positions
- Establish stronger professional qualification requirements for all acquisition specialties
- Strengthen organic engineering capabilities
- Ensure the DOD leadership for development programs is technically qualified to manage R&D activities
- Improve our leaders' ability to understand and mitigate technical risk
- Increase DoD support for Science, Technology, Engineering and Mathematics (STEM) education

Continue Strengthening Our Culture of:
Cost Consciousness, Professionalism, and Technical Excellence

Achieve Dominant Capabilities while Controlling Lifecycle Costs

Increase the use of prototyping and experimentation

Improve Requirements Definition

Strengthen Organic Engineering Capability

Improve our leaders ability to understand and mitigate technical risk

Priority 1: Refine engineering enterprise governance, roles and responsibilities, and supporting policy

Priority 2: Enable high-quality engineering decisions and seamless comms

Priority 3: Improve engineering discipline through technical information management and standardization

Priority 4: Address engineering enterprise workforce issues, including core competencies, structure, development, and assignment

SAF/AQ

Own the Technical Baseline

View from the Top

"In the more than 60 years that have passed since the Air Force's founding, our engineers and scientists continue to lead the world in the development of those cutting-edge weapon systems vital to the security of our nation and its allies."

"Air Force technological achievements are based upon the ingenuity of our engineering and scientific workforce."

Excerpt from 2014-2024 Engineering Enterprise Strategic Plan

Better Buying Power 3.0

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- Continue to set and enforce affordability caps

Achieve Dominant Capabilities While Controlling Lifecycle Costs
- Strengthen and expand "should cost" based cost management
- Anticipate and plan for responsive and emerging threats by building stronger partnerships of acquisition, requirements and intelligence communities
- Institutionalize stronger DoD level Long Range R&D Program Plans
- Strengthen cybersecurity throughout the product lifecycle

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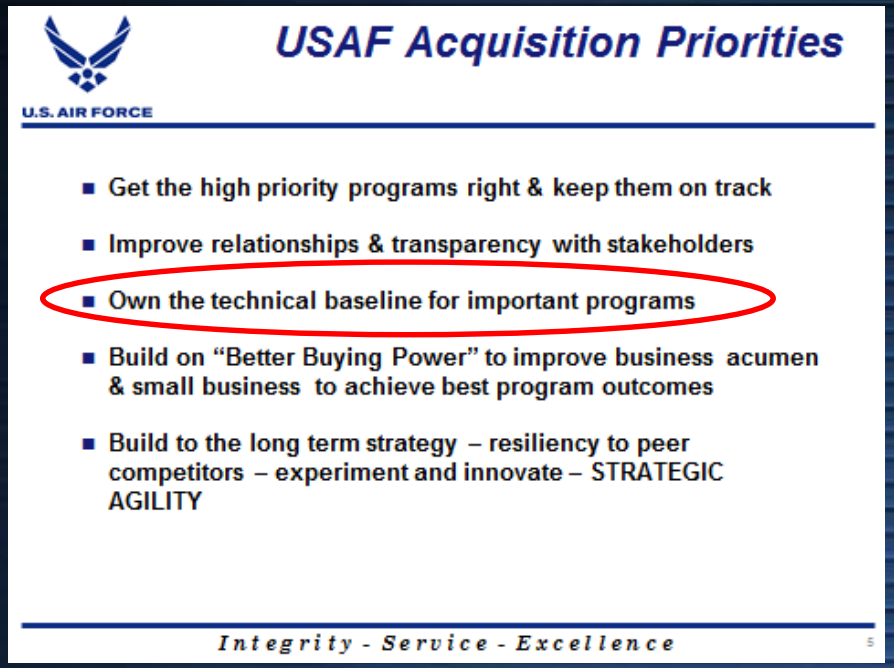
Continue Strengthening Our Culture of:
Cost Consciousness, Professionalism, and Technical Excellence

Attachment 1

Dr. LaPlante's Sep 14 Presentation to Air Force Association



If the program office doesn't have that competency, I don't care how competent the industry partner will be, over time the industry partner will get a little duller. <u>You need two teams to hold each other to the highest standards.</u> I think we've all seen that, we've all lived it. I always tell people that the worst thing in the world when I was outside the government was to work for a weak program office.

We need strong program offices. <u>We need to own the technical baseline</u>.

Agenda

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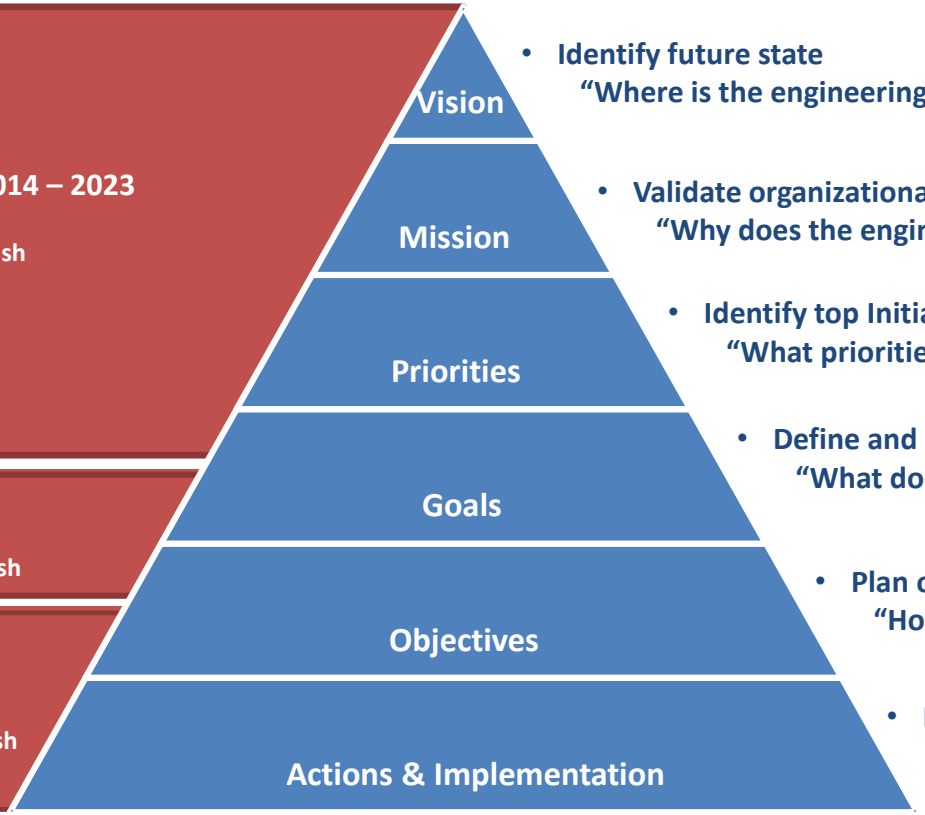
How Are We Going To Get There?

AF Engineering Enterprise Strategic Planning Model

Strategic Plan 2014 – 2023
10 – yr SECAF Plan
4 – yr relook / refresh

Roadmap
4 - yr SAF/AQ Plan
2 – yr relook / refresh

Action Plans
2 – yr SAF/AQR Plan
1 – yr relook / refresh



- Identify future state
  "Where is the engineering enterprise going?"
- Validate organizational purpose
  "Why does the engineering enterprise exist?"
- Identify top Initiatives for next decade
  "What priorities need to be accomplished?"
- Define and prioritize broad direction
  "What does it look like when we get there?"
- Plan organizing goals and strategies
  "How do we achieve goals, activities, and schedules?"
- Execute and manage implementation
  "Are our actions performance-based?"

How Are We Going To Get There?

AF EE Strat Plan Summary - Priority Champions

Mr. Jeff Stanley
SAF/AQR
- Standardize Roles & Responsibilities
- Focus EE Policy & Processes

Mr. Dennis Miller
AFLCMC/EN
- Establish Engineering Decision Framework
- Develop Analytic Foundation
- Effectively Communicate across EE

Mr. George Mooney
AFLCMC/EN-EZ
- Develop AF EE Core Competencies
- Refine EE Staffing
- Focus Workforce development

Mr. Kevin Stamey,
AFSC/EN
- Formalize Technical Info Management
- Develop Specs & Stds Management Plan
- Create AF Knowledge Management Capability

Priority 1 Status and ECDs of Future Efforts

- **Goal 1.1: Standardize Roles & Responsibilities of the EE Organizations and Key Positions**
  - OBJ 1.1.1: Establish role of AF Technical Authority (TA) (ECD: Oct 15)
  - OBJ 1.1.2: Develop definition for Engineering Authority (EA) (ECD: TBD)
- **Goal 1.2: Focus and Manage the EE Portfolio of Policy & Process**
  - OBJ 1.2.1: Develop a process for EE policy formulation (Complete pending EEEC approval)
  - OBJ 1.2.2: Develop EE policy architecture (ECD: Oct 15)

Return on Investment

- **Technical advice provided to the SAE to aid in decision making**
- **Elimination of duplicative or onerous policy**
- **Alignment of EE policy with overall AF and DoD policy**

EEEC Priority 2 Status

- **Goal 2.1: Formalize role of engineering in the decision framework**
  - ✓ OBJ 2.1.1: Decision Framework
  - ✓ OBJ 2.1.2: Pivot Points
  - OBJ 2.1.3: Policy and Checklists – Sep 15
  - OBJ 2.1.4: CCA Standard Process – Sep 15
- **Goal 2.2: Develop an analytical framework to support decisions**
  - OBJ 2.2.1: A&A Gaps ID'd
  - OBJ 2.2.2: Pilot Projects – ongoing
    - ISR Strategic Roadmap – Sep 15
    - JSTARS Recap – Jan 16
    - KC-46 – Jan 16
    - ACS POM investment – Sep 15
  - OBJ 2.2.3: A&A Governance – May 15
- **Goal 2.3: Establish a process for effectively communicating across the engineering enterprise**
  - Communication Strategy – Sep 15

Return on Investment

- **Senior Leaders requiring organic engineering assessments at every decision point**
- **Organic engineering equipped with necessary tools, data, processes & training**
- **Organic engineering knowledge available & accessible across the lifecycle**

Priority 3 Status and Estimated Completion Dates of Future Efforts

- **Goal 3.1: Formalize Technical Info Management**
  - ✓ OBJ 3.1.1: Define Technical Data
  - ✓ OBJ 3.1.2: Develop Technical Data Management System (TDMS) Construct and Scope
  - OBJ 3.1.3: Develop TDMS Pilot Program (Nov15)
  - OBJ 3.1.4: Create AF TDMS Policy (Jan16)
  - OBJ 3.1.5: Identify Technical Data Gaps (Jan16)
- **Goal 3.2: Develop Specs & Stds Management Plan**
  - ✓ OBJ 3.2.1- Standardized the use of DSP - Published AFPD 60-1, AFI 60-101 and AFI 60-106
  - ✓ OBJ 3.2.2 – Dev AF policy for Spec/Stds Published DoDM 4120.24 and AFI 60-101_AFMCSup
  - ✓ OBJ 3.2.3: Combined with 3.2.2 Establish guiding principles for AF reinstitution of std practices
  - OBJ 3.2.4 – ECD (Ongoing and recurring) Prioritize specs & standards updates/development

Return on Investment

- **Create the foundation of the implementation of Digital Thread/Digital Twin**
- **Promote standardization of materiel, facilities, and engineering practices to improve military operational readiness, and reduce total ownership costs and acquisition cycle time**

Priority 4 Status and ECDs of Future Efforts

- **Goal 4.1: Develop and manage Air Force EE technical competency taxonomy (to include specialty engineering disciplines)**
  - ✓ OBJ 4.1.1: Define a technical competency taxonomy for each AF Center
  - OBJ 4.1.2: Define technical competency proficiency requirements for capability levels (ECD: TBD)
  - OBJ 4.1.3: Map S&E positions to each Center's technical competency taxonomy (TBD)
  - OBJ 4.1.4: Map expertise of S&E personnel to each Center's taxonomy (TBD)
  - OBJ 4.1.5: Conduct a technical competency gap analysis for each Center (TBD)
  - OBJ 4.1.6: Integrate the Center-level technical competency taxonomies into an AF-level technical competency taxonomy (TBD)

Return on Investment

- **Increased AF leadership insight into workforce strengths, weaknesses and gaps**
- **Increased effectiveness of all workforce hiring, development and succession planning efforts, including education, training experience and mentorship**
- **Gap closure will increase the capability of the workforce**

Better Buying Power 3.0

Achieving Dominant Capabilities through Technical Excellence and Innovation

Achieve Affordable Programs (1 2 3)
- (1) Continue to set and enforce affordability caps

Achieve Dominant Capabilities While Controlling Lifecycle Costs (2 3)
- Strengthen and expand "should cost" based cost management
- (1 2) Anticipate and plan for responsive and emerging threats by building stronger partnerships of acquisition, requirements and intelligence communities
- (2) Institutionalize stronger DoD level Long Range R&D Program Plans
- Strengthen cybersecurity throughout the product lifecycle

Incentivize Productivity in Industry and Government (1 2 3)
- Align profitability more tightly with Department goals
- (3) Employ appropriate contract types, but increase the use of incentive type contracts
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- (3) Ensure effective use of Performance-Based Logistics
- (2 3) Remove barriers to commercial technology utilization
- Improve the return on investment in DoD laboratories
- Increase the productivity of corporate IRAD

Incentivize Innovation in Industry and Government (2)
- (2) Increase the use of prototyping and experimentation
- (2) Emphasize technology insertion and refresh in program planning
- (2) Use Modular Open Systems Architecture to stimulate innovation
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- (2) Provide draft technical requirements to industry early and involve industry in funded concept definition
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Eliminate Unproductive Processes and Bureaucracy (1 2 3)
- (1 2) Emphasize acquisition chain of command responsibility, authority and accountability
- (1 2) Reduce cycle times while ensuring sound investments
- Streamline documentation requirements and staff reviews
- (1 2 3) Remove unproductive requirements imposed on industry

Promote Effective Competition (1 2)
- Create and maintain competitive environments
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Improve Tradecraft in Acquisition of Services (1 2 3)
- (2) Strengthen contract management outside the normal acquisition chain – installations, etc.
- (1 2) Improve requirements definition for services
- (2 3) Improve the effectiveness and productivity of contracted engineering and technical services

Improve the Professionalism of the Total Acquisition Workforce (1 2 3 4)
- (4) Establish higher standards for key leadership positions
- (4) Establish stronger professional qualification requirements for all acquisition specialties
- (2 4) Strengthen organic engineering capabilities
- (2 4) Ensure development program leadership is technically qualified to manage R&D activities
- (1 2 3 4) Improve our leaders' ability to understand and mitigate technical risk
- (4) Increase DoD support for STEM education

Continue Strengthening Our Culture of:
Cost Consciousness, Professionalism, and Technical Excellence

Attachment 1

BBP 3.0 Strengthen Organic Engineering Capability

- **Focus Area 1: Affecting the Demand-Signal for In-House Organic Engineering Resources**
  - **Desired End-State: A significant level of early engineering will be conducted by an organic DoD engineering workforce resulting in a more informed DoD buyer able to levy better development requirements and RFPs to industry**
- **Focus Area 2: Competency/Technical Expertise Management**
- **Focus Area 3: Analysis Capability**
  - **Desired End-State: A framework which enables informed decision making, tool interoperability, best practices, training, and authoritative data reuse across the DoD enterprise and industry; resulting in stronger organic engineering capabilities**
- **Focus Area 4: Training/Education**
  - **Desired End-State: Established conditions and environment that enables an innovative workforce to be successful in leading and defining the technical and operational challenges of the Services today and accurately foreseeing the challenges of the future**
- **Focus Area 5: Retaining a Qualified Workforce**
  - **Desired End-State: Establish conditions that "re-attract" and "energize" the current workforce, enticing them to remain with and thrive within the DoD organization by leadership valuing and rewarding their work, and the strong contributions it makes to excellence in supporting DoD's mission**

SAF/AQ Priorities: Owning the Technical Baseline

- **Requires Government engineers to take a lead role in program technical decisions**
- **Requires clear lines of technical authority (Ownership and Accountability)**
- **Necessitates a strong technical workforce of Government, FFRDC and A&AS**
  - **Requires an integrated engineering team**

U.S. AIR FORCE

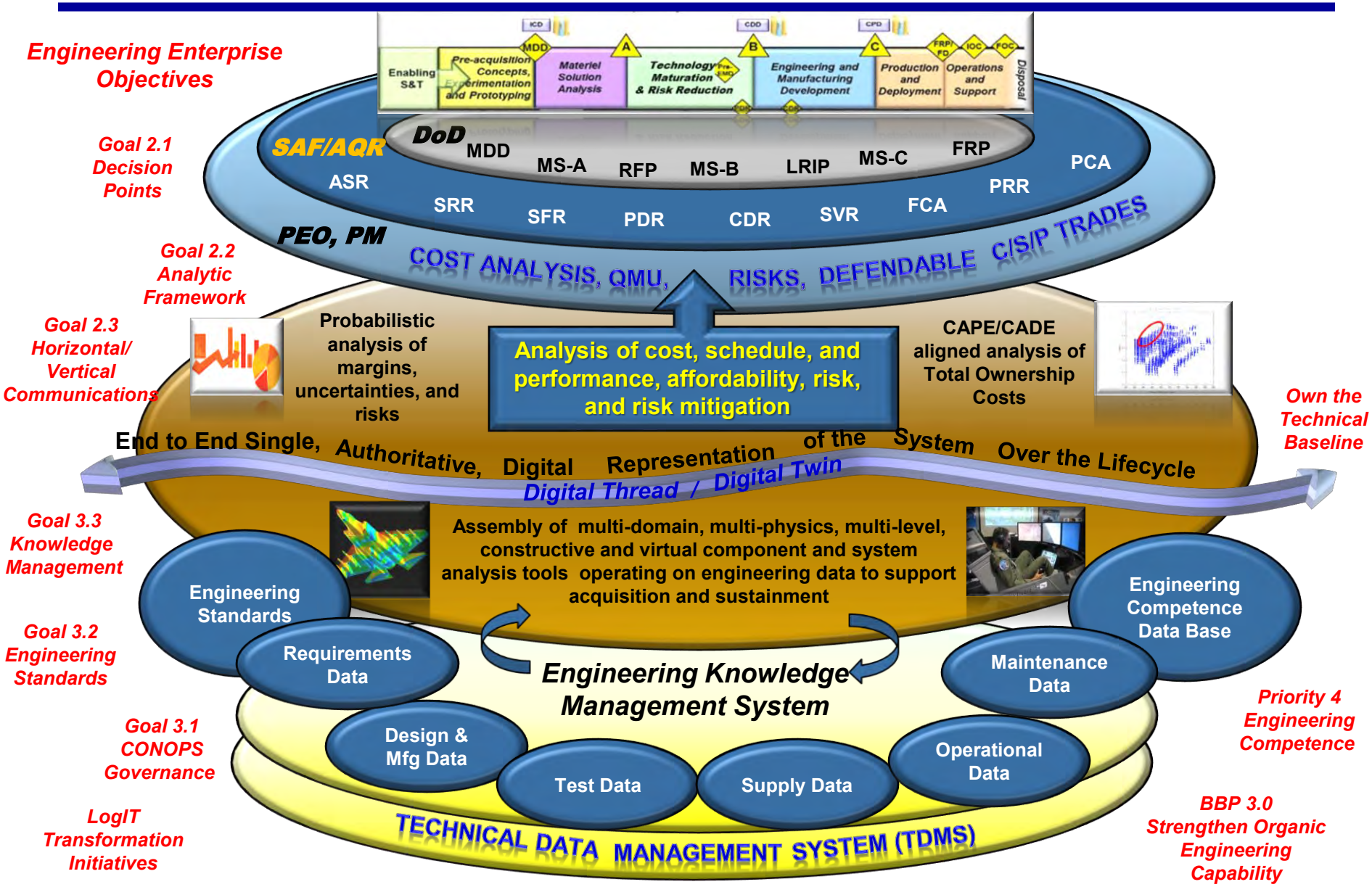
Owning the Technical Baseline

- Definition: Government Owns following
  - System Design
  - Interface Controls
  - End-to-End System model and ability to exercise it
  - Development and Operational Performance Data
  - Data rights and open architectures
  - Cost actuals
- Requires strong stable program office augmented by experts and reachback to Laboratories, FFRDCs, and UARCs
  - Must be institutionalized into life of program vice forming around events ("pick up game")
  - Disciplined execution/integration functions play a role – Program Integration to augment ongoing effective practices

Integrity - Service - Excellence

In general, we are not operating this way and not organized for facilitate ownership of the technical baseline

USAF Analytic Framework OV-1



Significant Accomplishments

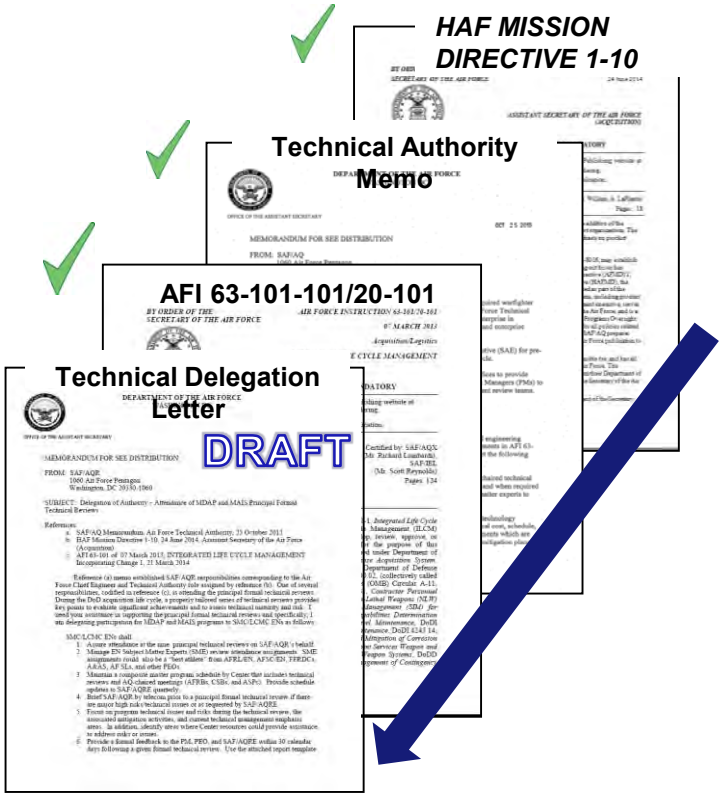
1. Defined Engineering Enterprise (EE)
1. Addressed AFI 63-101 from EE perspective (to include IC1 & 2)
1. Defined AF Technical Authority
1. Identified highest priority interim EE policy gaps in AFI10-601
2. Synchronized Cost Capability work within context of EEEC construct
2. Staffed Analysis & Assessment CBA
2. Supported AF ISR Task & Global Horizons
3. Updated AF Defense Standardization Program (DSP) policy documents
3. Performed AF Standardization Program gap analysis
3. Established initial Engineering Knowledge Management (EKM) capability
3. Launched AF Engineering Resource Center portal
3. Published AF Systems Engineering Assessment Model (SEAM) 3.0
4. Gathered EE competency taxonomies from all Centers
4. Developing common AF EE competency taxonomy
4. Created local Resource Boards at locations w/ multiple units
4. Expanded HQ AFMC/EN Functional Management tenets to SMC

How Are We Going To Get There?

Reestablishing Engineering Authority

Air Force Technical Authority is responsible for engineering policy, guidance, enterprise structure and processes. Technical Authority provides programs with unbiased, independent overview and support. Technical Authority is implemented through Air Force Chief Engineer, SAF/AQR.

- **Accomplishments**
  - **Policy updates completed**
  - **Lines of communication established**
    - Programs discuss/brief AQR for TRA approval & prior to ASPs, AFRBs & CSBs
    - AQ-DOE Roundtable
  - **Draft Delegation Letter – expectations**
    - Center ENs & SME support to nine principal program technical reviews
- **Way ahead**
  - **Implement delegated responsibilities**
  - **Streamline support to OSD PSAs**



How Are We Going To Get There?

Reestablishing Engineering Authority

What a PM should expect of their Chief Engineer….

- **Determine what work is required to support the program**
- **Determine what type of technical staff if required to execute the technical work (to include mix of organic, FFRDC, and A&AS)**
- **Have a <u>technical</u> understanding of their product line**
- **Execute Systems Engineering Plan: Ensure sound systems engineering is applied to program activities**
- **Lead technical reviews: More than attending a meeting**
  - **Set entry exit criteria**
  - **Assess the design, challenge it…**
- **Determine and track technical performance measures**
- **Manage systems interfaces (ie ICDs, and MOAs)**
- **Maintain Insight of the Systems configuration and baseline**

How Are We Going To Get There?

Reestablishing Engineering Authority

What a PEO should expect of their Director of Engineer….

- **Help programs integrate across the PEOs portfolio**
- **Look for opportunities to synergize across the portfolio**
- **Help programs think beyond the system boundary**
- **Consistent application of SE processes**
- **Technical guidance to CE's**
- **Executing Organization Senior Functional responsibilities**

How Are We Going To Get There?

Reestablishing Engineering Authority

- **Align the CE under the Senior Material Leader, 0-6 or GS-15 PM**
  - Except when the division has multiple ACAT I
  - Consistent with AFLCMC/EN Standard Duty Title initiative
- **Align all S&E resources under the CE to include govt engineers, A&AS and FFRDC**
- **Set clear expectations for chief engineers to:**
  - Manage their engineering resources
  - Execute sound systems engineering
  - Manage all technical work and work assignments
  - Growing/mentoring our intellectual capital
  - Take responsibility for operationally safe suitable and effective system

Take Back The Technical Baseline

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Growing S&E Expertise

- **Owning the technical baseline and taking a greater role in programmatic decisions will require S&Es to have stronger technical skills.**
- **Improving technical skills will require…**
  - **Technically challenging work**
  - **Training and technical mentorship**
  - **PM/CE to demand technical rigor**

"We must continue to develop and grow our acquisition workforce ….. so that we can also "own the technical baseline" for our weapon systems and other capabilities. We must strengthen our organic ability to develop, produce, field and sustain the most technologically advanced systems this world has ever known…" Dr William LaPlante

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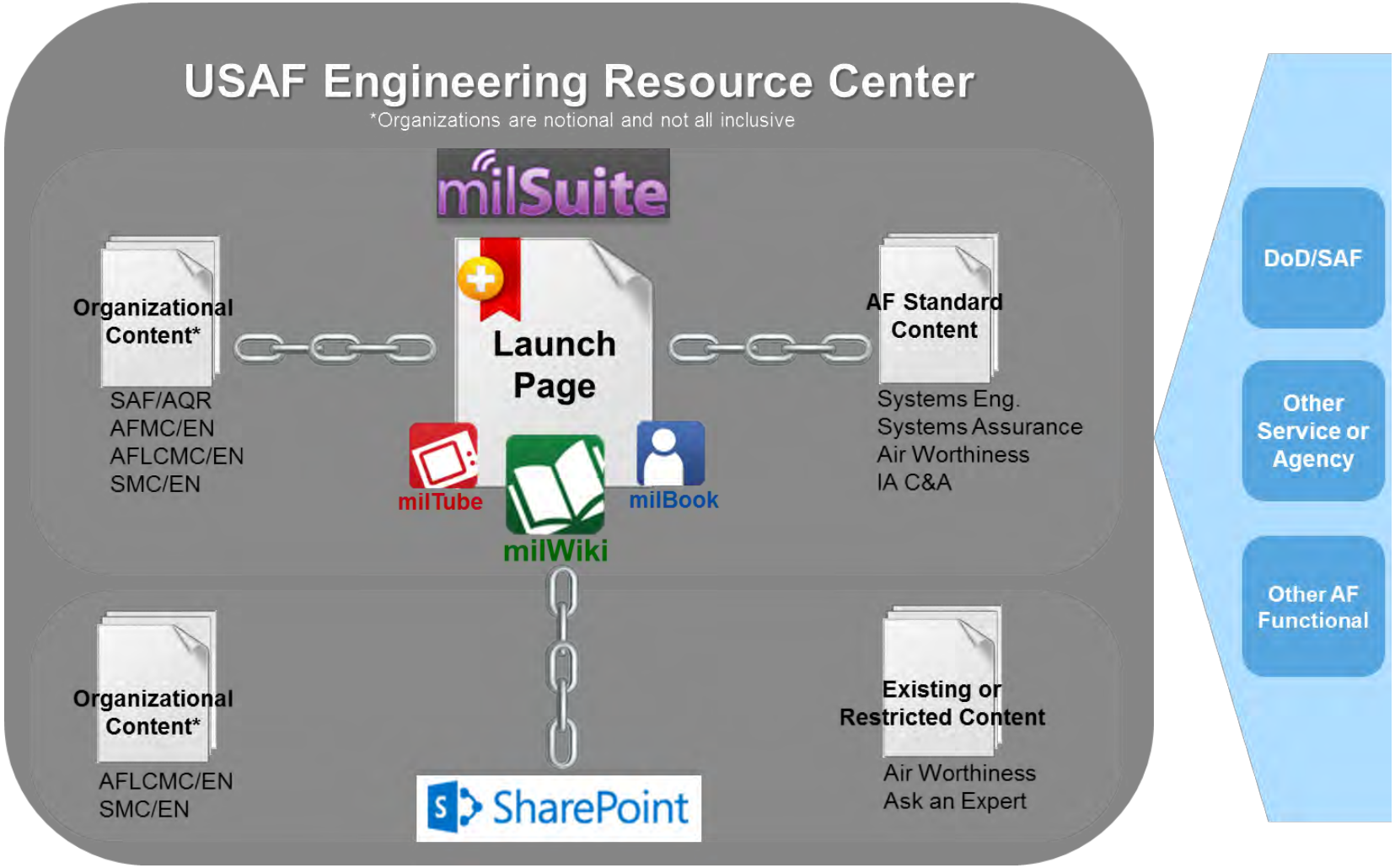
What You Can Do

- Engage!
- Get an Engineering Knowledge Management account at: https://www.milsuite.mil/wiki/Portal:Air_Force_Engineering_Resource_Center
  …and use it! This tool is only as good as we make it.
- If we use EKM it will become a robust tool for the Engineering Enterprise

BACKUPS

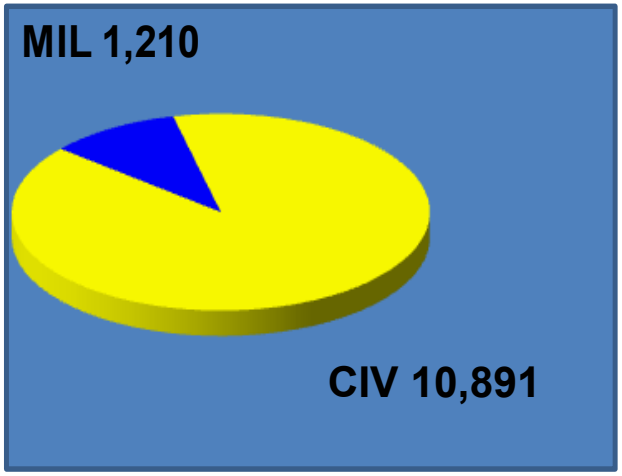
AF Engineering Knowledge Management



State of AF Acquisition Engineering
AFMC S&E Community (Assigned)

AFMC has:

- **39% of AF S&E Military**
- **80% of AF S&E Civilians**



AF Materiel Command Total – 12,101

MAJOR COMMAND (MAJCOM)	Military	Civilian
AIR COMBAT COMMAND	288	275
AIR EDUCATION AND TRAINING COMMAND	110	84
AF ACADEMY	124	23
NATIONAL AIR AND SPACE INTELLIGENCE CENTER	154	562
AF MATERIEL COMMAND	1,210	10,891
SPACE COMMAND	649	553
All Other COMMANDs	541	1,176
AF Total	3,076	13,564

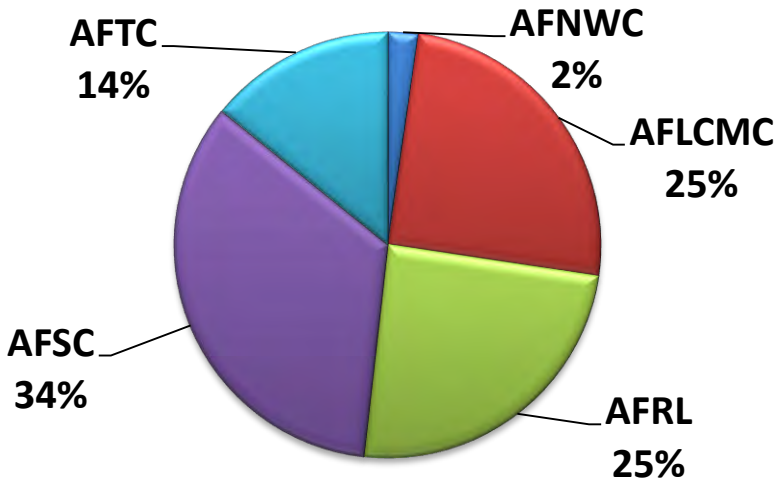
Source: AFPC IDEAS, Apr 15

Military AFSC 61/62
Civilian Occ Series 8XX/13XX/15XX

State of AF Acquisition Engineering

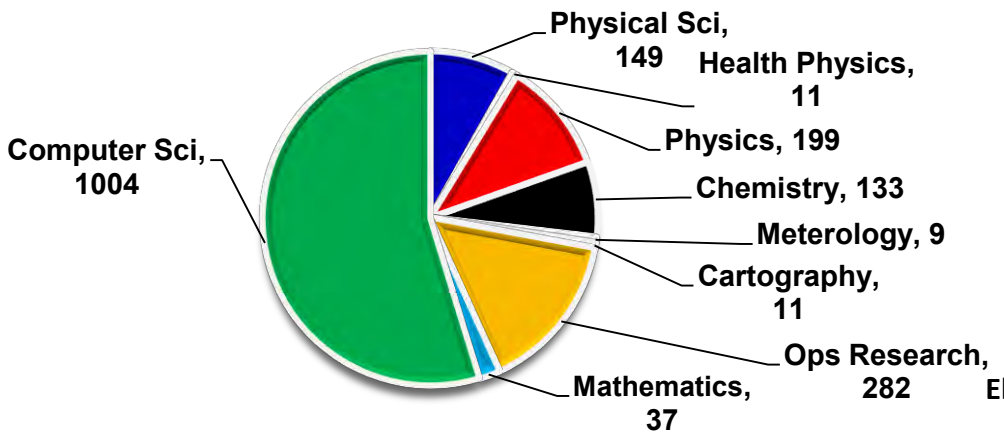
AFMC S&E Workforce: Distributed & Diverse

AFMC S&E Center Distribution

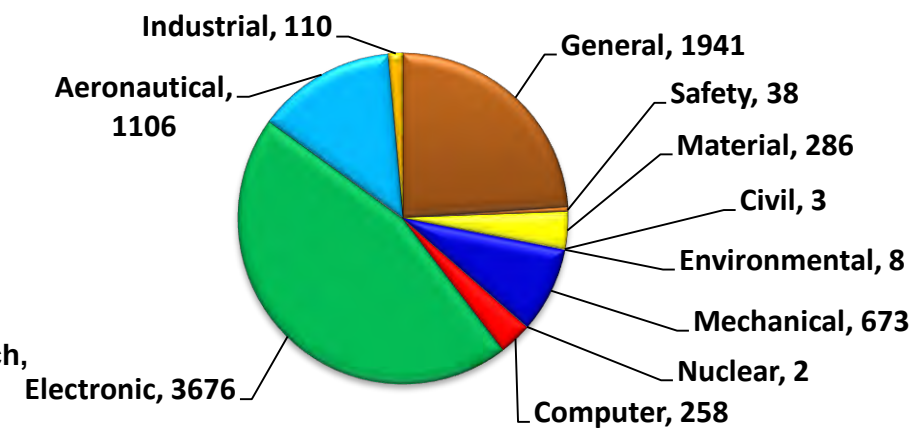


- S&E Workforce distributed throughout the Command
- Varied skill sets required
- Steep learning curve to SME
- Assignments across enterprise needed for development
- Increasing system complexities, changing threats, and technology advancements

AFMC Scientists Workforce Diversity
(not all-inclusive)

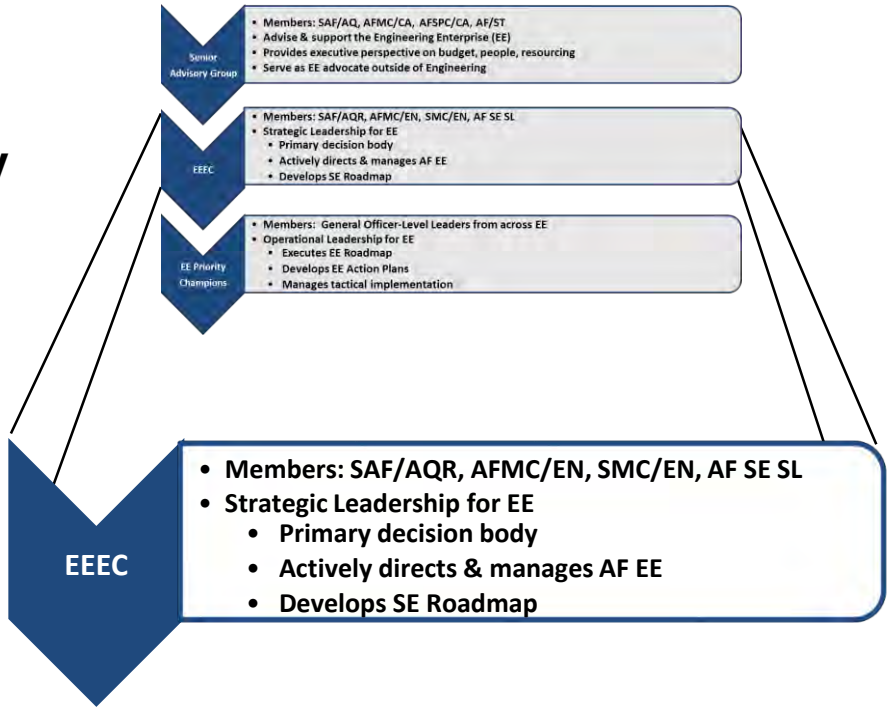


AFMC Engineering Workforce Diversity
(not all-inclusive)



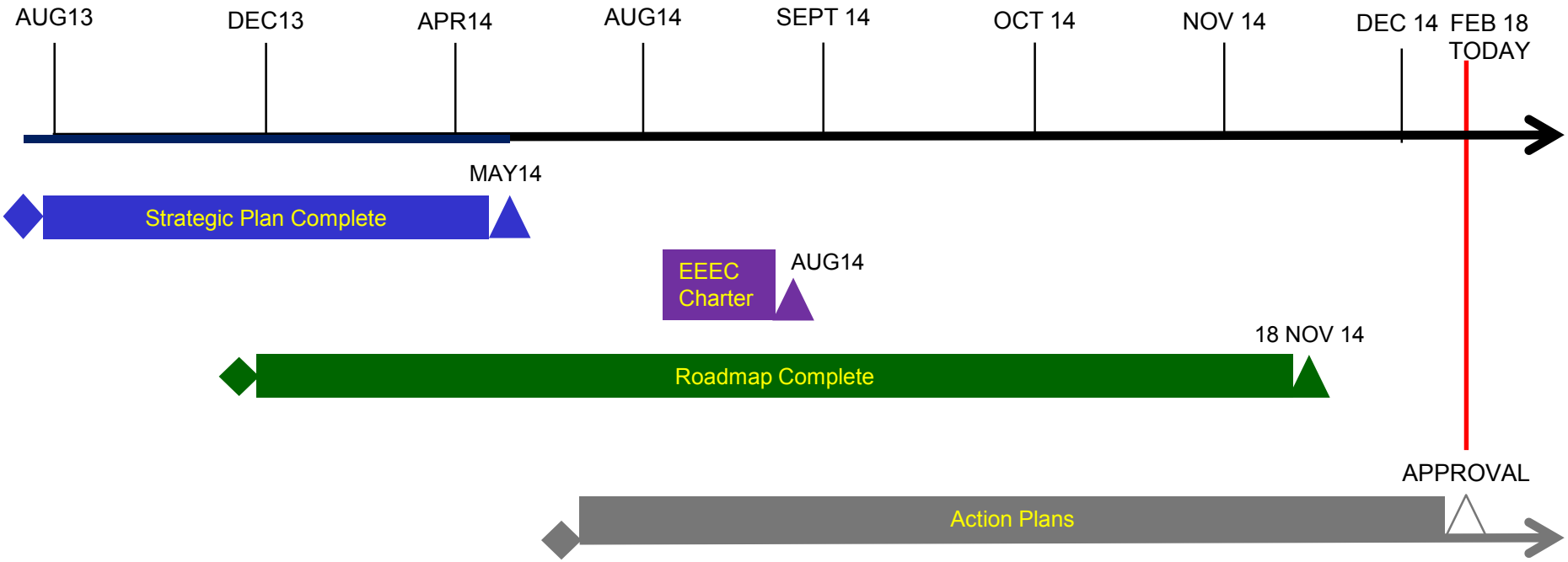
AF EE Executive Council Charter Highlights

- **Formally Establishes EEEC Roles & Responsibilities**
  - **Primary decision body for AF EE strategic initiatives**
  - **Sets priorities and assigns Priority Champions**
  - **Reviews/Monitors progress to achieving strategic priorities**
  - **Reviews/Proposes updates to AF EE Strategic Plan every 4 years**
  - **Reviews/Updates AF EE Roadmap every 2 years**
  - **Manages communication within and external to the EEEC**



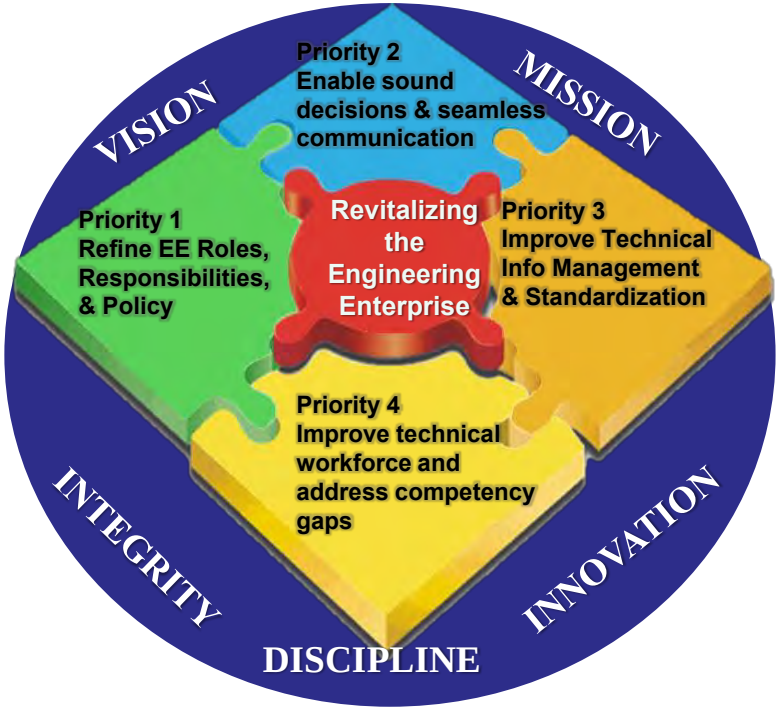
❖ **Supported by Core Team: O6/GS-15 members and staff**

AF Engineering Enterprise Planning Progress



AF Engineering Enterprise Strategy 2014-2024

- SECAF directed
- SAF/AQ championed
- Institutionalized by AF Senior Engineering Leadership
- Enterprise focus



- Streamline policy and processes
  - Define lines of technical authority
  - Coalesce engineering policy and integrate with other policy
- Improve communication
  - Establish decision framework for reliable technical advice
  - Improve collaboration
  - Provide technical expertise to programs when needed
- Improve information management
  - Develop common tools & processes
  - Establish knowledge repository
- Develop the technical workforce
  - Enhance competency management
  - Improve training
  - Increase proficiency

Right People in the Right Place at the Right Time with the Right Tools

How We Got Here

- Goldwater-Nichols Defense Reorganization Act 1986
- Acquisition Reform(s) 1994 – 1998
- Agile Acquisition: Lightning Bolts 2001
- Outsourcing/Downsizing
- Wing/Group/Squadron Reorganization
- PEO Centered Reorganization
- Insourcing
- Weapon System Acquisition Reform Act (WSARA) 2009
- 2011 AF Systems Engineering Strategic Plan

AFMC Engineering Senior Leaders

HQ AFMC – EN

Ms. Susan Thornton

AFLCMC

Mr. Jorge Gonzalez
WPAFB OH

Mr. George Mooney
OL Eglin AFB FL

Mr. Dennis Miller
OL Hanscom AFB MA

AFSC

Mr. Kevin Stamey
Tinker AFB OK

Mr. Tom Fischer
OL Robins AFB GA

VACANT
OL Hill AFB UT

AFTC

Mr. Dave Robertson

AFNWC

Mr. Joe Bradley

AFRL

Mr. Jay Fiebig

Senior Leaders	Title/Specialty	Located
Dr. Edward Kraft	Tech Advisor, T&E	Arnold AFB
Dr. Joseph Nichols	Tech Advisor, T&E	Edwards AFB
Dr. Elisabetta Jerome	Tech Advisor, T&E	Eglin AFB
Dr. Tim Rudolph	Tech Advisor, SoS Inoperability	Hanscom AFB
Mr. Mark Fraker	Tech Advisor, Avionics	Wright Patterson AFB
Mr. Charles Babish	Tech Advisor, Structures	Wright Patterson AFB
Dr. Kenneth Barker	Tech Advisor, Systems Eng	Wright Patterson AFB
Dr. Raju Patel	Tech Advisor, ECS Software & Info Assurance	Wright Patterson AFB
Dr. Dale Carlson	Tech Advisor, Propulsion	Wright Patterson AFB
Dr. Robert Clemens	Tech Advisor, Low Observables	Wright Patterson AFB
Dr. Daniel Atkins	Tech Advisor, ISR & Acq Intelligence	Wright-Patterson AFB
Dr. Chris Colliver	Tech Advisor, ISR & Requirements	Wright-Patterson AFB

as of 2015-05-22

Challenge to AF Engineering Enterprise

PROBLEM: ***The Air Force Engineering Enterprise does not adequately meet today's life cycle engineering expectations***

Not sure I like this one

Budget constraints drive need to regain acquisition excellence

Adversary growth & complexity requires flexibility & agility

SECAF: "GO FIX ENGINEERING"