



Teaching An Elephant To Ballroom Dance and Win!

DCAPES PROGRAM OFFICE
AFLCMC/GBBZ
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Strategic Motivation

Software Pathway enables DCAPIES Post Inc 2B AFFORGEN initiatives to responsively and directly support:

SecAF, OI 7 "Readiness to Deploy & Fight"

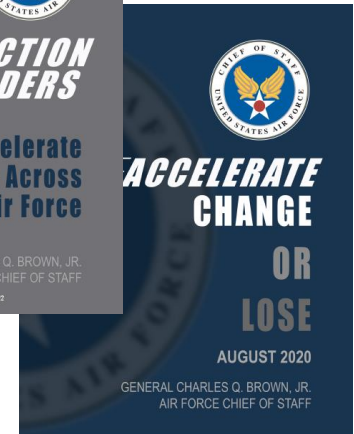
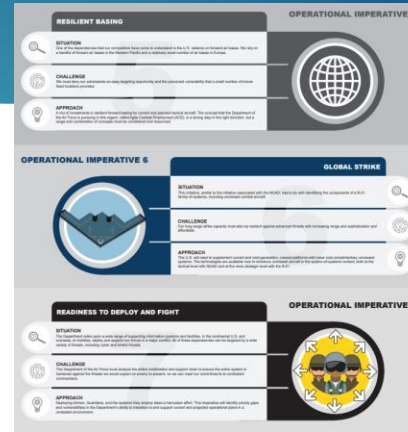
- ▶ "The Department relies upon a **wide range of supporting information systems** and facilities, in the continental U.S. and overseas, to mobilize, deploy and support our forces in a major conflict."

CSAF, Action Order D

- ▶ "Make force structure decisions and amend force planning processes to create the fiscal flexibility required to design and field the future force we need and make way for capabilities that will make us competitive in the future high-end fight."

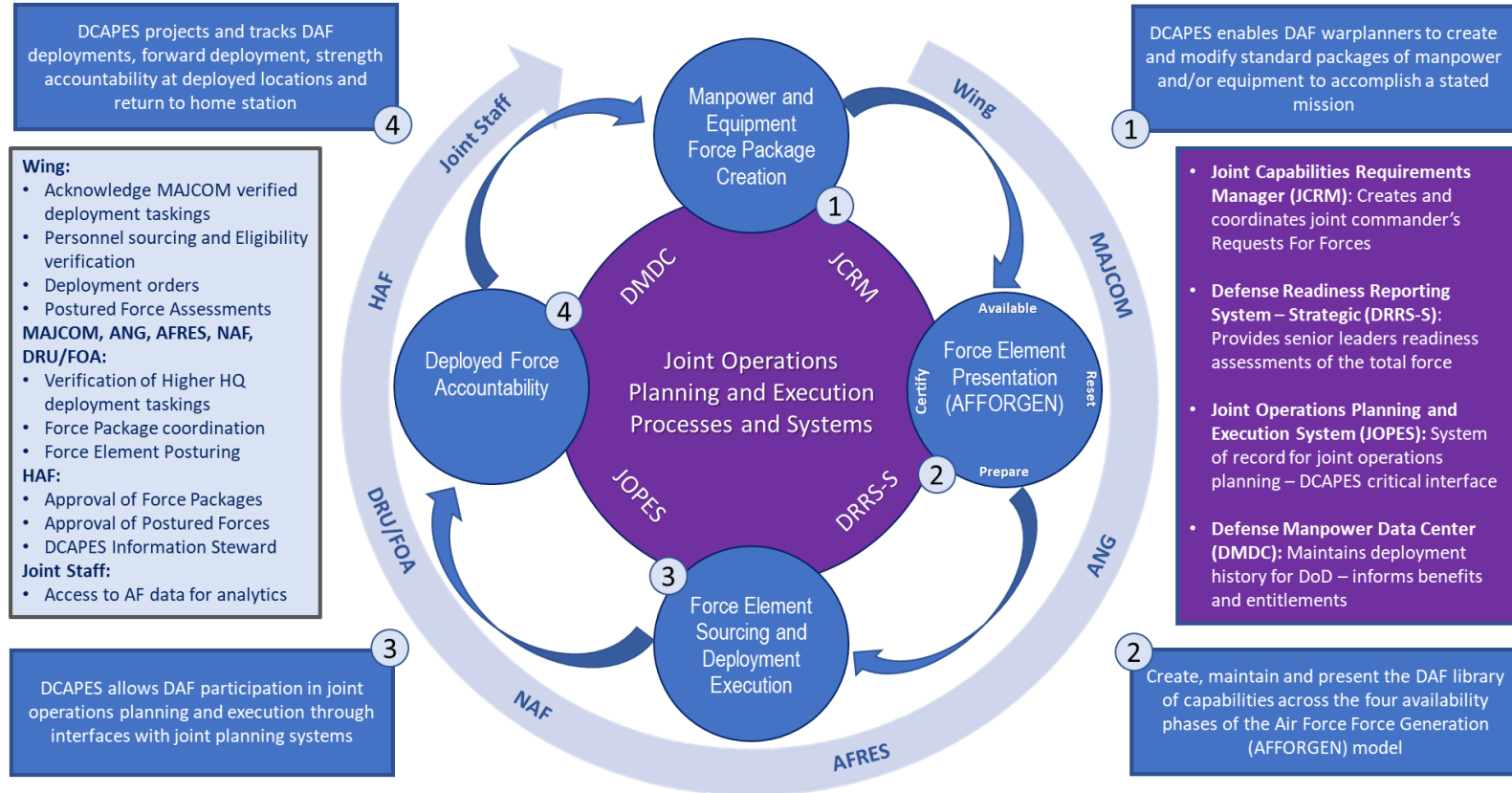
CSAF, Accelerate Change or Lose:

- ▶ "Capabilities must be **conceived, developed, and fielded inside competitors' fielding timelines.**"



"Innovative Airmen are diligently building better ways to generate and present Air Forces to the Joint Force." CSAF, Accelerate Change or Lose

DCAPES enables DAF involvement in joint planning and execution, providing the warfighter the means to project combat capability worldwide



Developing Dynamic Capabilities Enabling Air Force Force Generation

How do we evolve a mature software program to an agile one?

Teaching a marching elephant to waltz

March (Waterfall & Major Capability Acquisition Pathway)

- Everyone marches to the same beat in the same direction
- Strict tempo and rhythm

Waltz (Agile & Software Pathway)

- Movement is fluid around the room
- Structured rhythm flexible to the tempo of the music

Marching Elephant

Contracts:

- Static Fixed contract structures

Operations:

- Waterfall Delivery
- Rigid processes
- Slow capability release to the warfighter due to long dev cycles

Test:

- Late Test involvement in large release format
- Large rework due to late discovery of bugs or errors

Cybersecurity:

- Late code delivery evaluation due to assessment being done after SW Package delivered to PMO

Waltzing Elephant

Contracts:

- Modularized with surge capability

Operations:

- Agile requirements generation and software delivery
- Flexible processes
- Sustainment & modernization of system architectures

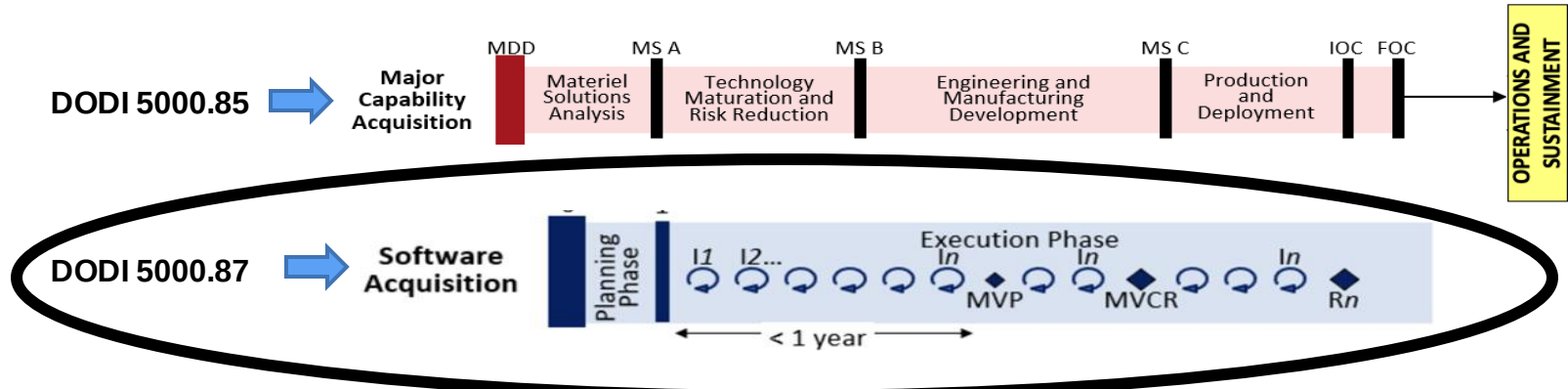
Test:

- Early user and test community involvement
- Synchronized DT & OT
- Automation throughout

Cybersecurity:

- Evaluation throughout lifecycle & continuous self-monitoring
- Securing the Software Supply Chain

Adaptive Acquisition Frameworks



DODI 5000.85 MCA	DODI 5000.87 SWP
Static requirements defined upfront (CDD)	Dynamic requirements prioritized annually (CNS)
Lifecycle cost estimates	Annual cost estimates
Milestone driven (multi-year) schedule	Iterative (annual) and needs based release schedule
Milestone based testing	Early test and integration
Performance measured against APB	Performance measured via annual Value Assessments

How DCAVES Cybersecurity Dances

- ▶ Automated code testing/scans
 - ▶ Bug fixes earlier enables faster delivery/fielding
- ▶ Early involvement in coding approach and software acceptance
- ▶ Continuous system risk management

How DCAPES Development Dances

- ▶ Utilize CI/CD to facilitate efficient and timely ***delivery to production***
- ▶ Able to reprioritize software development based on stakeholders needs
- ▶ Continuous communication between Stakeholders and Requirements Team
- ▶ Minimize unnecessary documentation deliveries

How DCAPES Program Management Dances

- ▶ Streamlined required reporting
 - ▶ Semi-Annual Metrics
 - ▶ Annual Value Assessment
- ▶ Automated Process Improvements with Atlassian Tool Suite
 - ▶ Streamlined release approval process
 - ▶ Configuration Management
 - ▶ Improved Requirements visibility and tracking

How DCAPES Test Dances

- ▶ Maximizing Automated Testing
 - ▶ Developer incorporating automated tools before delivery
- ▶ Early involvement of Users and Development / Operational Test (DT/OT) Orgs
 - ▶ User First-Look Site
 - ▶ Maximizing Single Test events for DT/OT
 - ▶ Use of Zephyr Scale for Government Test acceptance
- ▶ Emphasis on Virtual Test events

How DCAPES Requirements Dance

- ▶ Continuous Stakeholder Feedback
 - ▶ Perpetual requirements backlog grooming
- ▶ Flexibility with reprioritizing requirements to deliver capabilities
- ▶ Fielding delivery increased from 2/year to 12/year
- ▶ Constant communication with Development team

Lessons Learned

Transitioning to schedule flexibility

- Balance requirements flexibility with delivery schedule
- Documentation and agile process updates can start early

Early Stakeholder Involvement

- Includes external partners and internal team members
- Be mindful of impact on the various Teams

Be patient - paradigm

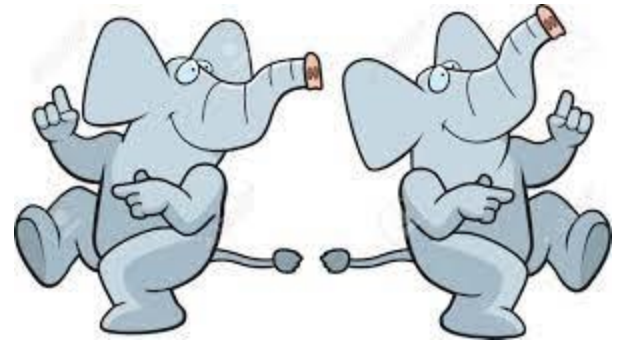
- SWP approval and agile transition doesn't happen overnight

Process Improvements

- Process improvements may lead to additional improvement opportunities (Domino Effect)

How do you teach an elephant to ballroom dance . . . and win?

One step at a time!!





► QUESTIONS?

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Back up

Benefits of Software Acquisition Pathway

- ▶ Tailored acquisition processes for software development
- ▶ Annual reviews replace formal milestones in the Execution Phase
- ▶ Expedited JCIDS and SPR for requirements
- ▶ Streamlined reviews & documentation requirements - No MDAPs
 - ▶ Streamlined requirements process and iterative backlogs
- ▶ Leverages enterprise services & not “rebuilding the factory” for every program
- ▶ Program tailoring and flexibility for Services/Agencies

Prioritizes speed, flexibility, and rigor

SWP Required Documentation

Entering the Execution Phase	Applicability
Acquisition Decision Memorandum (ADM) signed by Decision Authority authorizing use of SWP.	Regulatory
Capability Needs Statement	Regulatory
User Agreement	Regulatory
Acquisition Strategy (acquisition approach, risk management, business strategy, contract strategy, IP strategy, logistics/sustainment, etc.)	Statutory for major programs (> ACAT II). Regulatory for others
Market Research (part of Acquisition Strategy)	Statutory
Cybersecurity Strategy (may be part of Acquisition Strategy or standalone document)	Statutory for Mission Critical and Mission Essential IT programs. Regulatory for others
Test Strategy (may be part of Acquisition Strategy)	Regulatory. Programs on DOT&E Oversight list may require a TEMP.
Intellectual Property Strategy (may be part of Acquisition Strategy)	Regulatory
Product Support Strategy including Business Case Analysis (may be part of Acquisition Strategy)	Regulatory
Information Support Plan	Regulatory
Bandwidth Requirements Review (part of ISP or related document)	Statutory for programs > ACAT II. Regulatory for Others
Program Cost Estimate and Independent Cost Estimate	Regulatory. CAPE ICE for programs > ACAT II unless delegated
Cost Analysis Requirements Document	Regulatory
Clinger Cohen Act (CCA) Compliance (see CCA table)	Statutory

During the Execution Phase	Applicability
Operational Test Plan	Statutory for programs on the DOT&E Oversight List
Post Implementation Review	Statutory
Program Metrics	Regulatory
Semi-Annual Data Reporting to OUSD(A&S)	Regulatory
Contractor Cost Data Report (\$100M+ contracts)	Regulatory
Software Resources Data Report (\$100M+ Programs)	Regulatory
Technical Data Report (\$100M+ Programs)	Regulatory
Contractor Business Data Report (CTRs with \$250M)	Regulatory
Maintenance and Repair Parts Data Report (\$100M+ Programs)	Regulatory

Source: DoDI 5000.87

DBS Use of SWP

- ▶ USD (A&S) memo dated 24 Aug 2022, “DBS solutions would increasingly benefit from Agile, Lean, and DevSecOps methods. By using the SWP for appropriate DBS programs, [PMs] can gain additional flexibility to provide timely critical business capabilities for the DoD enterprise.”
- ▶ It is critical DBS programs ensure that Title 10 USC §2222 requirements are incorporated into the natural cadence of work under the SWP

