

Team Members: Atkinson, Donald L LtCol A8Y/A4YU; Callahan, Kathleen D LtCol A4YA; Rubino, Chad L LtCol A8A1; Taylor, Kevin L LtCol A4F
 Facilitators: Lt Col Matthew Cox, ACC/A4; Mr. Jeff Combs, ACC/A4; MSgt John Ace, ACC/A4Y

ACC/A4 SA&D Objective - Weapon System Management Problem Solving Workshop

OODA – Observe, Orient, Decide, & Act 8-Step Problem Solving Model

Approval Information/Signatures
 Ms Sarah V. Keller, ACC/A4P
 Maj Gen P. David Gillett, Jr, ACC/A4

1. Clarify & Validate the Problem

Lack of clear guidance on how the WST operates modernization and sustainment
 Lack of clarity in who is in charge, ref. roles and responsibilities
 Lack of training, guidance, and clarity
 Unclear processes

O O D A

SIPOC (see VSM in block 3)

SUPPLIERS	INPUTS	PROCESSES	OUTPUTS	CUSTOMERS
SPOs (North/South) AFRL Units A4 / A8 COCOMs Warfighter AFCENT Defense Industrial Sector Industry Government Organizations Politicians Congress	People Access to SPOs/AFMC/Wings IPTs Liaison with Acquisition Community Gut Feeling/Common Sense "SMEness" / Expertise 1067 Process Capability Shortfalls Money Defining Capabilities Collaboration with A3 and other Staffs Capabilities Requirements and Risk Assessment (CRRA) Process (touchstone) Vision/Future Thinking Technology Urgent Operational Need (UON) Process Joint Urgent Operational Need (JUON) Process Data/Engineering Feedback from Units	Requirements Acquisition Modernization Sustainment Weapon System Management POM [See VSM]	Mission Ready Weapon Systems Capabilities to Achieve Effects on Battlefield Policy/Guidance Delivering the Systems via the Acquisition Process Advocacy (funding, capabilities, etc.) Program Prioritization (funding, capabilities, etc.) Analysis Answering "What's wrong?" Taskers (distractors) Future Decision Making/Planning Guidance Aircraft Availability	* Warfighter Units (home/deployed) COMACC * COCOMs A8 / A4 A8A/A4F/Y/U [* = Key Customers]

4. Determine Root Cause Problem Areas / Gap Analysis

- Products/efforts not coordinated
- Current processes are the product of evolution, not design
- Lack of commonality
- Need an overall review process
- Who's in charge? SPO, MAJCOM, SECDEF, JCS, AFMC, Nobody, Everybody, WST, SAF/AQ, Congress?
- Who has the money? – SAF/AQ and AFMC
- Lack of vision
- Degradation of control, authority, and responsibility
- Need the training to do the job
- Organizational impacts
- Fleet Viability Board expanding influence

O O D A

WSM SA&D Interrelationship Diagram

Key Relationships:
 9 - CONOPS
 8 - ECSS
 7 - AAIP
 7 - RNT
 7 - TRNG
 6 - NUKE ENT
 6 - SCH MX
 5 - PROG-WSIS
 4 - REACHBACK
 4 - REQTS DEF'N
 3 - TECH DATA

6. See Countermeasures Through

Additional Information/Data/Vectors Needed:

Ownership for the CONOPS and A4 Training:
 Who is the process owner?
 Who is the team leader?

What form will the CONOPS take? (TTP, AFI, Annex, etc.)

Need to gather additional information and understand linkages and relationship between related efforts, e.g.:
 AFMC Guide
 HAF/A4MY Efforts
 AFI 63-101, Acquisition and Sustainment Life Cycle Management (Rewrite)

RESOURCE REQUIREMENTS:

A4 and A8 appointment of dedicated Team Leaders

Senior Leadership Priority and Support

Mid-level Leadership Priority and Support

Team Leader and Personnel afforded the time to do the work

Other ACC A-Staff and functional support as needed (A3, A4, A5, A8)

O O D A

2. Break Down the Problem/Identify Performance Gaps

Related efforts were reviewed as were related SA&D and ongoing A4 value streams.
 Problem Area Breakdown (Elements of Related Objectives): (see Perf Gaps in block 4)

O O D A

CONOPS: Standardization Reachback Requirements Definition Weapon System Management AAIP: Money/People Priority Optimize Scheduled Maintenance OPTIMIZE SCHEDULED MAINTENANCE: Aircraft Availability COMMON TECHNICAL DATA: Standardization Economy	PROGNOSIS: Improve Effectiveness/Reduce Cost Eliminate Unnecessary Inspections Weapon System Management TRAINING: Internal/AO Standardization REQUIREMENTS DEFINITION: Clearly Identify Requirements (Operational and Logistics) RNT: Link to AAIP Doing the Same Thing Cheaper ECSS: Improve, Automate, Standardize the Sustainment Process Standardize/Replace Legacy Systems
---	--

5. Develop Countermeasures

Recommendation to A4 Executive Council to charter two projects: one to develop a Concept of Operations Document for ACC/CAF Weapon System Management, and one to develop a comprehensive Training plan. The team reviewed these measures against problem areas/perf gaps to ensure they adequately address the issues.

O O D A

CONOPS AAIP Balancing Fleet Hours Scheduled Maintenance Requirements Definition Common Systems Tech Data Test Equipment Deploy/Re-Deploy Role of WST Structure, Functions, and Processes Mission Specific Nuke C2ISR UAS MDS Specific Policy Training FVB Interaction Other topics as identified by team	TRAINING CONOPS Action Officer Products A-Staff Structure and Functions POM Process CAM Process External Courses (Knowledge Base) (AFIT/DAU) SAF/AQ, LL, HAF Structure UON Process Warfighter Defense Industry Sector D&SWC Who's the OPR in A4? Figure out who's in charge (Outline of key responsibilities) Training Requirements Driven by CONOPS
	OTHER SA&D AREAS (stand-alone efforts in their own right, but addressed in CONOPS and Training): Tech Data Reachback GSC Scheduled Maintenance Nuclear Enterprise RNT AAIP ECSS

7. Confirm Results & Process

The overall metric is:
 Completed CONOPS by 1 Jul 09
 Completed Training Program by 1 April 09

Measures to ensure improvements:
 Track progress in EC Council
 Evaluate the priority afforded to the effort
 Evaluate the effectiveness of resources applied to the effort (Do the Team Leaders have the resources, support, and afforded the time to do the work?)
 Evaluate effectiveness of CONOPS (survey)
 Evaluate training effectiveness (survey)

Link back measures outlined in problem statement
 CONOPS and Training addresses all items identified in the problem areas / gap analysis

O O D A

3. Set Improvement Target

Clear guidelines for how a WST is to operate in its modernization and sustainment role
 Customer has better support and better product--what they need
 CONOPS Complete (project) - 1 July 2009
 Training Program in Place (project) – 1 April 2009

O O D A

Weapon System Management Value Stream

8. Standardize Successful Processes

Standardization is achieved by formalizing the Weapon System Management CONOPS and instituting the formal Training Plan.

ROI:
 Standardized processes
 Trained AOs and WSTs
 Increased aircraft availability to support increased mission requirements
 Improved communication and coordination
 Better final product to the customer

O O D A

OODA – Observe, Orient, Decide, & Act
8-Step Problem Solving Model

Air Force Problem Solving Process & Related Toolsets

Approval Information/Signatures

1. Clarify & Validate the Problem

○ ○ **○** D A

- Does this problem, when solved, help meet needs identified by the organization?
 - Is it linked to the SA&D of organization?
 - Does it help satisfy customer needs (VOC)?
- Does this problem, when solved, address key issues identified during SWOT analysis?
- Has this problem been identified and directed by a Value Stream Map at the appropriate level?
 - What does the “Future State” need?
 - What resources have been identified to address this issue?
- What opportunities were identified or observed by the process or problem area “walk”?
 - Will addressing or improving these issues deliver results that relate to #a or #b?
 - Will addressing or improving this problem deliver the desired future state from #c?

TOOLS: SA&D, Voice of Customer, VSM, Go & See

2. Break Down the Problem/Identify Performance Gaps

○ ○ **○** D A

- Does the problem require more analysis or does leadership have enough information to execute a solution?
 - Is this simply a leadership directive?
- If more data is needed, how do we measure performance now?
 - What are the KPIs? What is the performance gap?
- Does other “non-existent” data need to be gathered?
- What does the data indicate are the potential root causes?
- Does the data review indicate a bottleneck or constraint?

TOOLS: KPI/Metrics, Performance Gap Analysis, Bottleneck Analysis

3. Set Improvement Target

○ ○ **○** D A

- Is the improvement target measurable? Is it concrete? Is it challenging?
- Is the target “Output Oriented”?
 - What is the desired output?
 - Should be “things to achieve”; should avoid “things to do”
 - Will be addressed by Action Plans (Step 5)
- The desired target should:
 - Do what? By how much? By when?
- If it is a Process Problem, what is the future state?
 - How will it be realized?

TOOLS: Ideal State, Future State Mapping, SMART

4. Determine Root Cause

○ ○ **○** D A

- What root cause analysis tools are necessary?
 - Why are these tools necessary?
 - What benefit will be gained by using them?
 - Who will need to be involved in the root cause analysis?
 - 10 heads are better than one
 - Remember “cultural” issues related to problem
- What is (are) the root cause(s) according to the tools?
- How will the root cause be addressed?
- Will addressing these address the performance gap?
- Can the problem be turned on or off by addressing the root cause?
- Does the root cause make sense if the 5 Whys are worked in reverse?
 - Working in reverse, say “therefore” between each of the “whys”

TOOLS: 5 Whys, Brainstorming, Pareto, Affinity, Fishbone, Control Charts

5. Develop Countermeasures

○ ○ **○** D A

- Develop potential countermeasures
 - Tools and philosophies from Lean, TOC, 6 Sigma and BPR as appropriate
- Select the most practical and effective countermeasures
- Build consensus with others by involving all stakeholders appropriately
 - Communicate, communicate, communicate
- Create clear and detailed action plan
 - SMART actions
 - Reference Facilitation Techniques as appropriate

TOOLS: A3, Action Plans, Timelines, FM Tool

6. See Countermeasures Through

○ ○ D **○** A

- Which philosophy best prescribes tools that address root cause(s)?
- Which tools best address root cause(s)?
- Which method for implementation fits the tool and improvement need?
 - Rapid Improvement Event?
 - Improvement Project?
 - Point Improvement or “Just Do It”?
- If RIE or Project, create “Charter” and communicate
- What training or education is needed? By Whom?

TOOLS: 6S & Visual Mgt, Standard Work, Cell Design, Variation Reduction, Error Proofing, Quick Changeover, TPM, RIE

7. Confirm Results & Process

○ ○ D **○** A

- How are we performing relative to the Observe phase (Steps 1 & 2)?
- How are we performing relative to Step 3?
- How are we performing relative to FM Tool projections?
- If we are not meeting targets, do we need to return to Step 4?
 - Most problem solving “breakdowns” occur relative to improper root cause identification

TOOLS: KPIs/Metrics, Performance Mgt, SA&D, Standard Work, Audit

8. Standardize Successful Processes

○ ○ D **○** A

- What is needed to Standardize Improvements?
 - Tech Order changes?
 - Air Force Instruction changes?
 - Official Instruction changes?
- How should improvements and lessons learned be communicated?
 - PowerSteering
 - Key meetings?
- Were other opportunities or problems identified by the Problem Solving Process?
 - Restart OODA Loop

TOOLS: Checkpoints/Standardization Table, Report Out Theme Story, Broad Implementation, CPI Mgt Tool