QA – Cyber Pathfinder
Targeted Risk Analysis

Presented by ACC CYSS

27 August 2018

Overview

- **Targeted Risk Analysis: QA Pathfinder Story**
- **Explain Risk Assessment Process**
- **Changes to MPTO 00-33A-1001**
- **QA Arena, QA-in-a-Box, and QA Handbook**

Make Squadrons Great Again

1. Letting commanders command
2. Saving Airmen's time

QA Pathfinder Story: Why?

Risk Mitigation:

Operational:

- **Safety** of People
- **Safety** of Equipment: “Lack of effective QA impacted processes to manage equip risk” (UEI ‘14)
- Mission Assurance: “[QA] Deficiencies degrade primary mission accomplishment” (UEI ‘14)

Organizational:

- “Failure to ensure compliance”; 2x Significant, 1 REPEAT QA deficiency (UEI ’16)
- Wasted manpower/effort due to poor HHQ guidance
- Poor Ops/Mx delineation

Why Start w/688 COG:

- Right Time
- Right Place
- Right Weapon System
- Right Attitude

Mission Partners:

- AFSPC A4I
- AFSPC CYSS
- 318 COG
- 38 CEIG

688 CW Flight Plan Alignment:

- Goal 2.4. Stand-up/mature/improve Quality Assurance (QA) programs across the Wing
  - Objective 2.4.1. Identify QA functions for all Wing units, as appropriate, IAW applicable instructions.
  - Objective 2.4.2. Establish QA functions for all Wing units, as appropriate, IAW applicable instructions.
  - Objective 2.4.3. Advocate/champion change to AF QA policy to adapt to mission/cyberspace operations.

Objectives:

- Mitigate Risk/Improve Mission Effectiveness
- AFI/TO Compliance
- Inform updates to QA Guidance

Approach

- Partner w/MAJCOM SMEs
- Determine Corrective Action Plans
- Document analysis for use by mission partners
- Development TO update recommendations

QA Pathfinder Story: What?

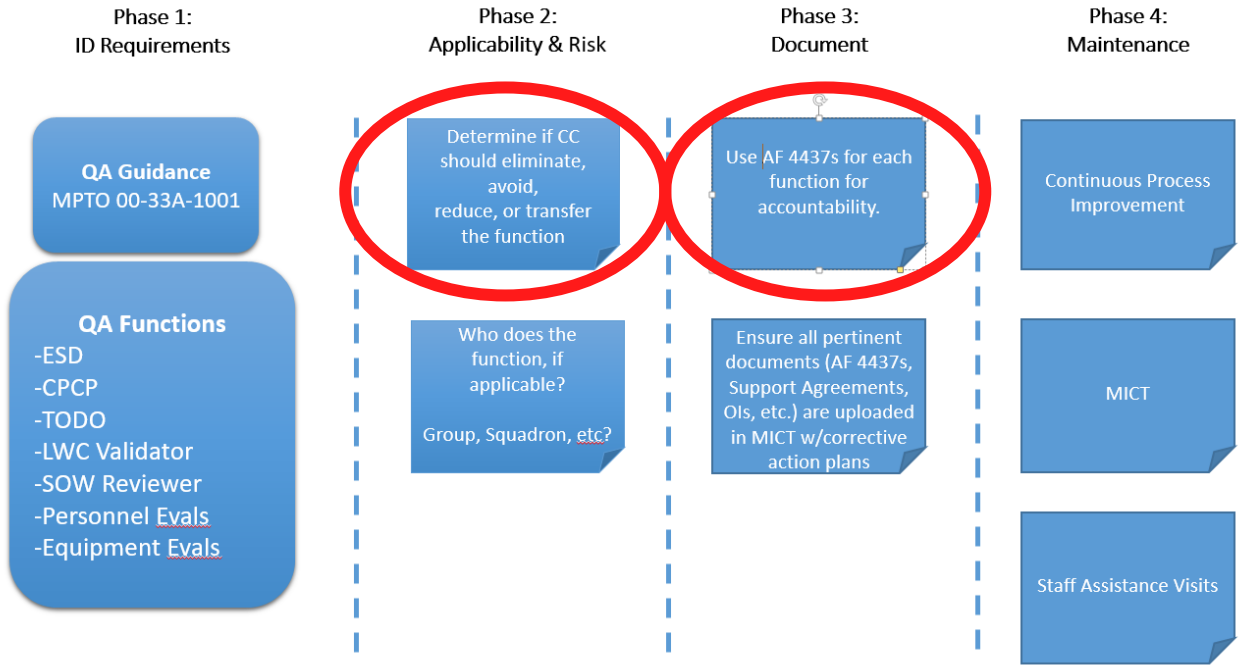
688th COG:

- ✓ Led QA Working Groups and Conferences consisting of QA SMEs
- ✓ Collaborated with AFSPC/A4I and CYSS/CYM to define and document all findings, lessons learned, and after-actions
- ✓ Established a QA model as a resource for other 24 AF Cyberspace units – "QA in a Box"
- ✓ Assist w/QA Cyberspace guidance development – TO 1001 rewrite
- ✓ Completed Pathfinder when AFSPC A4I and 688 CC approved
  - QA functions were stood up or had corrective action plans in-place using AF Form 4437s

Validation:

- ✓ AFSPC/IG OSV, 2-5 May 2017
  - IG was enthusiastic about our way ahead stating that we "got it right"

Risk Assessment Process



1. **Commanders will determine risk of each function at their level**
2. **Standardized AF Form 4437 will be used to document applicability and risk**

****AF Form 4437 completed at squadron level eliminates time wasted drafting waivers**
****This process stops unnecessary waiver requests! Tier 1 Waiver only required if waiving the entire QA program**

Risk Assessment Process

Phase 3: Document

DELIBERATE RISK ASSESSMENT WORKSHEET (Page 1)

1. Mission / Task Description: Electrostatic Discharge (ESD) - EXAMPLE
2. Date (DD/MM/YYYY)
3. Prepared By
A. Last Name /First Name / Middle Initial: Prentice, Ann A.
B. Rank / Grade
C. Duty Title / Position
D. Unit: 688th Cyber Operations Group
G. UIC / CIN (as required)

6-STEPS OF RM: (1) IDENTIFY HAZ (4) IMPLEM

4. Sub-task / Sub-Step of Mission / Task	5. Hazard
Minor weapon system field maintenance MPTO 00-33A-1001 Chapter 6	Safety of personnel equip, mission loss degradation

10. OVERALL RISK LEVEL AFTER CONTROL: ☐ Extremely High
11. OVERALL SUPERVISION PLAN and RES
12. APPROVAL / DISAPPROVAL of MISSION: ☒ APPROVE ☐ DISAPPR
A. Last Name /First Name / Middle Initial: Doe, John A.

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Instructions for Completing Form

1. Mission/Task Description: Briefly describe overall Mission, or Task that the Risk Assessment is being conducted for.

2. Date (DD/MM/YYYY): Self Explanatory

3. Prepared By: This section is self exp
filled out by the individual conducting the tra
deliberate risk assessment; (UIC = Unit Ider
= Course ID Number)

4. Sub-task/Sub-Step of Mission/Task: I
any Sub-Tasks associated with Primary Ta
mitigation consideration.

5. Hazard: Enter specific hazards relate

6. Initial Risk Level: Using the Risk Asse
termine probability, severity and associate
level into column.

7. Control: Enter risk mitigation resources
to abate or reduce risk relevant to the haza
5.

8. How to Implement/Who Will Control:
description of sub-task means of employme
Briefing, Rehearsal) and the name of the ind
that has primary responsibility for control im

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DELIBERATE RISK ASSESSMENT WORKSHEET (Page _ of _)

RISK ASSESSMENT MATRIX

SEVERITY / EFFECT OF HAZARD		PROBABILITY A Frequent (Continuously experienced)	B Likely (Will occur frequently)	C Occasional (Will occur several times)	D Seldom (Unlikely, but can be expected to occur)	E Unlikely (Improbable, but possible to occur)
Catastrophic (Death, Loss of Asset, Mission Capability or Unit Readiness)	I	EH	EH	H	H	M
Critical (Severe Injury or Damage, Significantly Degraded Mission Capability or Unit Readiness)	II	EH	H	H	M	L
Moderate (Minor Injury or Damage, Degraded Mission Capability or Unit Readiness)	III	H	M	M	L	L
Negligible (Minimal Injury or Damage, Little or No Impact to Mission Capability or Unit Readiness)	IV	M	L	L	L	L

Risk Assessment Levels
EH=Extremely High H=High M=Medium L=Low

13. Risk Assessment Review-To be conducted when risk assessment applies to on-going operations / activities

A. Date	B. Last Name	C. Rank / Grade	D. Duty Title / Position	E. Signature of Reviewer
21MAR2016	Previous, Commander A.	Colonel	Commander	Click to sign
21MAR2017	Doe, John A.	Colonel	Commander	Click to sign
				Click to sign

14. Feedback and Lessons Learned
The 688 COG Commander assessed the risk of the ESD program within a cyberspace operations unit and determined the risk was low enough, based on normal mission operations, for an operator to only be required to use mobile ESD kits. PMO provides contract maintenance for the cyber weapon system therefore, the need for larger scale ESD benches and equipment is necessary for the MSS contractors, but not cyber operators or 3D/XOs.
- Are 3qs using ESD kits?
- How often have CPTs experienced equip failure due to ESD issues?
- Is ESD a real-world practice for msn partners or sister-service CPTs?

15. Additional Comments or Remarks
A Risk Assessment Review will be performed annually, as mission requirements change, and within 90-days of an assumption of command by gaining commander per MPTO 00-33A-1001.

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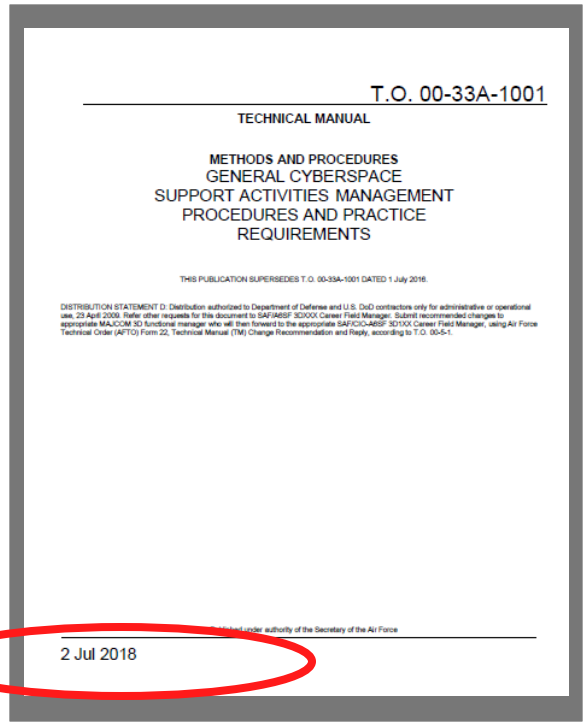
Phase 4: Maintenance

Inspection Support | Inspection History | Print Inspection

Criticality	Score	Notes	Action
Tier 3	Yes / Comply No / Non-Comply N/A	Yes, Risk Management awareness training is a Mandatory brief to all personnel. Safety Office assists commanders and	
Tier 3	Yes / Comply No / Non-Comply N/A	Through ESOHCAMP Inspection Program	
Tier 3	Yes / Comply No / Non-Comply N/A	Through ANG Ground Safety Newletters and ANG Weekly, Yearly, and CDS Slides	
Tier 3	Yes / Comply No / Non-Comply N/A	Through Annual Safety Facility Inspection and Program Assessment	

TO 00-33A-1001 Revision



T.O. 00-33A-1001

TECHNICAL MANUAL

METHODS AND PROCEDURES
GENERAL CYBERSPACE
SUPPORT ACTIVITIES MANAGEMENT
PROCEDURES AND PRACTICE
REQUIREMENTS

THIS PUBLICATION SUPERSEDES T.O. 00-33A-1001 DATED 1 July 2016.

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...published under authority of the Secretary of the Air Force

2 Jul 2018

2.1.1 Applicability and Authority. The QA program is applicable to any unit where 3DXXX personnel perform maintenance. This includes DoD civilians and contracted personnel performing 3DXXX maintenance as prescribed in their PWS or SOW per paragraph 1.5. Commanders will perform the QA functions prescribed within this technical order unless a risk assessment is performed on the function. The seven QA functions are:

- Personnel evaluations
- Equipment evaluations
- Technical order management
- Corrosion prevention and control program
- Electrostatic discharge program
- Statement of work reviewer
- Local work card validator

2.1.1.1 Commanders will actively manage their unit(s) QA program. This includes performing a deliberate risk assessment across each of the seven QA functions. Commanders can identify any risks associated to not fully performing QA functions and eliminate/avoid/reduce/transfer risk on QA functions to an acceptable level. This is done by completing a documented risk assessment for each function. Commanders will document this process using the AF Form 4437, *Deliberate Risk Assessment Worksheet,* per AFI 90-802, *Risk Management* and AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*. Commanders use the results from the risk management (RM) process to establish and maintain their QA programs. Commanders will ensure the QA program's roles, responsibilities, structure, and local procedures are documented in an operating instruction following guidance in AFI 33-360, *Publication and Forms Management*.

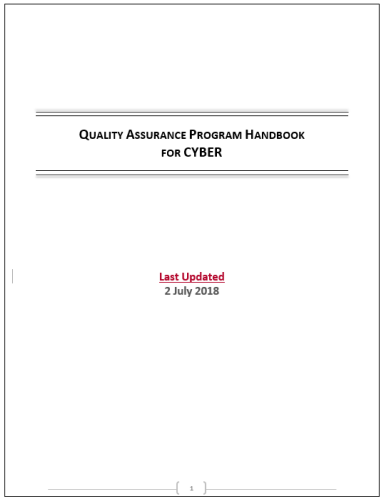
NOTE

AFI 90-802 states, *to effectively apply risk management, commanders, supervisors, and personnel must dedicate time and resources to integrate RM principles into planning, operational processes and day-to-day activities.* It is a best practice that gaining commanders should accomplish AF Forms 4437s for each of the seven QA functions within 90-days of their assumption of command.

The QA program will not be completely waived without a Tier T-1 level waiver as outlined in AFI 90-201, *The Air Force Inspection System*. See Chapter 10 for more information on processing waivers.

Additional Info to Help You

- **Commanders have more flexibility to tailor QA to their mission and use a standardized process using the AF Form 4437**
- **CYSS has templates and FAQs available for cyber community to view at any time**
- **QA Arena and other relevant information can be found at: https://cs2.eis.af.mil/sites/12994/default.aspx**


QUALITY ASSURANCE PROGRAM HANDBOOK
FOR CYBER

Last Updated
2 July 2018

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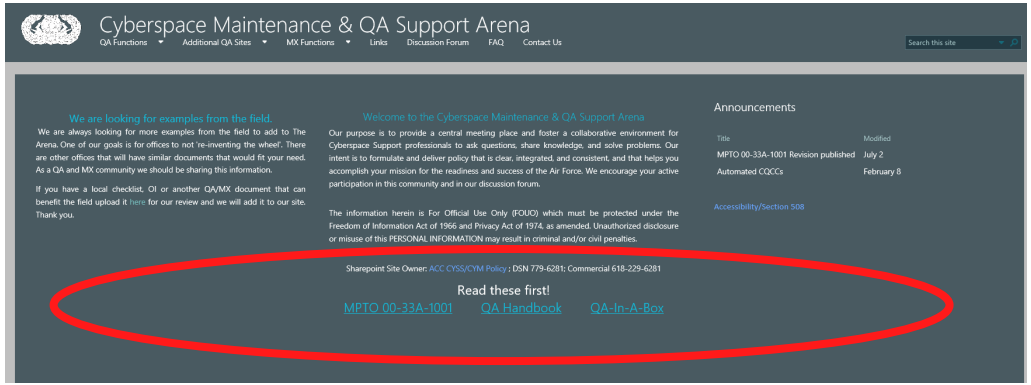

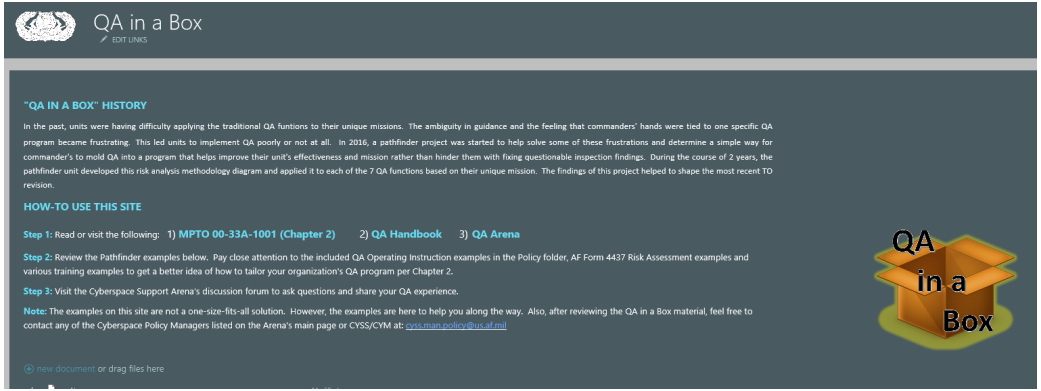

In Review

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