

Quality Assurance

Office of Nuclear Safety and Operations (NA-17)

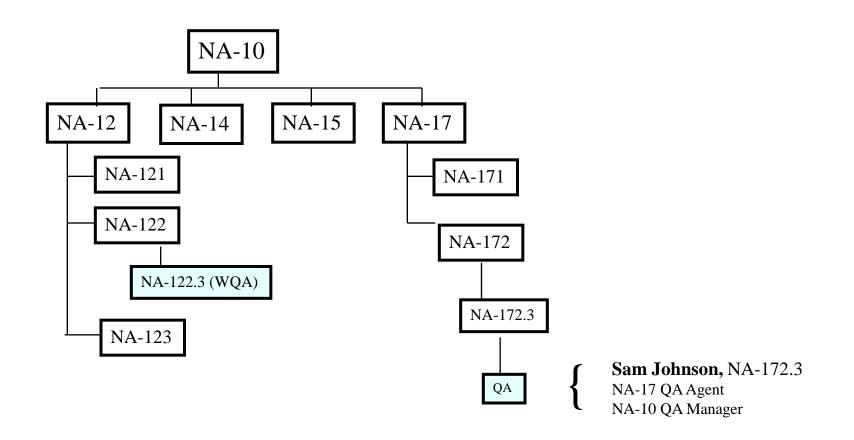
Defense Programs QUALITY ASSURANCE Status Briefing

August, 25, 2009



NA-10 Re-Organization of 2008

Office of Nuclear Safety and Operations (NA-17)





SAM JOHNSON, NA-172.3

- NA-17 QA Agent & NA-10 QA Manager
- Experience:
 - 15 years in DOE ES&H & QA
 - 34 years in U. S. Navy (8 enlisted; 26 Officer)
 - Served in Command of USS HENRY L STIMSON (SSBN 655)
 - Engineer Officer of USS JAMES MONROE (SSBN ^22)
 - Executive Officer of USS FRANCIS SCOTT KEY (SSBN 655)
 - New Construction; Refueling Overhaul; Defueling & Decommissioning
 - 16 SSBN Strategic Deterrent Patrols and numerous SSN & SS "deployments"
- Education:
 - BEEE (Bachelor Of Engineering (Electrical Engineering)), 1975, Vanderbilt University
 - MBA, Frostburg University, 2000
- "Distinguished West Virginian" by Dean of Engineering School, WVU, 2002



QA Implementation in NA-10

Office of Nuclear Safety and Operations (NA-17)

Contractors

- DOE Order 414.1C is in all nuclear site contracts
- Sites have implemented SSQA requirements and programs
 - Significant progress has been made across entire complex
 - Safety Software Experts Working Group (SSEWG)
 - Safety Software Registry and Website
 - Closing out DNFSB Recommendation 2002-1
- Contractors continuing to mature self-assessment programs
- Continuing to emphasize improved work planning
 - Using DOE Quality Council and (annual +) surveys to raise the bar
 - Encouraging EFCOG ISM/QA working group participation
 - EFCOG Joint QAIP in progress; milestones being met
- Improving construction quality assurance
 - Emphasizing NQA-1 Version 2000+ & Lead Auditor Training
 - Primary initial focus of QA Improvement Project with EFCOG



QA Implementation in NA-10

Office of Nuclear Safety and Operations (NA-17)

Site Offices

- All NNSA Site Offices have QAPs approved by NA-10
 - 3 Sites' QAP Revisions approved in FY 2009
 - 2 more Sites (SRSO and LASO have submitted QPA Revisions for NA-10 review

• QA staffing is limited

- Adequate for routine operations (SQA FLP Intern: Gladys Udenta)
- Need to improve our depth chart
- Improvement efforts need more attention at some sites
- Nuclear construction project offices QA staff improved at UPC and PDCF
- Available funding limits options

• Emphasizing reducing repeat QA / work planning incidents

• Supporting Departmental initiatives

- Using DOE Quality Council and (annual +) surveys to raise the bar
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- Safety Software Experts Working Group (success story)
- HEPA filter action team

Improving construction quality assurance

- Improving Federal QA staffing and oversight of projects (PDCF & UPF)
- Strengthening assessments (e.g. T-IPR; CDNS Biennial Reviews)
- NA-10 audits (PDCF design (DONE) & RLWTF planned for OCT with T-IPR)
 - -- SNRL Container Program audit DONE; writing report
- Implementing NQA-1 (NA-10 QAP & EFCOG Joint QAIP)
- Supporting QA Improvement Project (with EFCOG) in "Execution Phase"



QA Implementation in NA-10

Office of Nuclear Safety and Operations (NA-17)

Headquarters

- Site Office MSD/QAP approvals (see previous page)
 - 3 Sites' QAP Revisions approved in FY 2009
 - 2 more Sites (SRSO and LASO have submitted QPA Revisions for NA-10 review
- QA Federal staffing
 - HQ QA is understaffed (lost new hire; gained SQA FLP Intern)
 - Establishing Human Capital Management System for Federal QA personnel

Emphasizing reduction of repeat incidents

- Some Site Offices have a well defined approach.
- Identifying best practices (EFCOG Joint QAIP tasking)
- "Lessons Learned" is a major ultimate goal of the EFCOG Joint QAIP
- Supporting Departmental QA Initiatives
 - DOE Quality Council and (annual +) surveys to raise the bar
 - Safety Software QA (SSEWG, website and registry; nuclear construction project SQA)

Office of Environment, Safety & Health & Quality Assurance

Headquarters continued

- Improving (nuclear) construction QA
 - Improving Federal QA staffing and oversight of projects (PDCF & UPF)
 - Strengthening assessments (e.g. T-IPR; CDNS Biennial Reviews; NA-10 NQA-1 Audits (PDCF Design & RLWTF (planned for OCT) Emphasizing NQA-1 Version 2000+ & Lead Auditor Training (Several recent graduates need audit experience)
 - Primary initial focus of QA Improvement Project (with EFCOG)
 - Developing CRADs and Lessons Learned based on factual data
- **Study of QA "Culture"** in the NNSA complex is complete; reviewing results.
 - (EFCOG Joint QAIP Project)
 - Study is complete; Evaluating Results
- QA Personnel Human Capital Management System in development
 - (EFCOG evaluating)



Update on QA-Related Activities

Office of Nuclear Safety and Operations (NA-17)

Headquarters continued

Line Oversight Contractor Assurance System Procedure Issued

- LOCAS process description and reporting procedures issued
- LOCAS may influence how NNSA oversees contractor QA, but Site Offices will continue to perform primary Federal oversight.

NNSA Headquarters FRAM, ISMS System Description and QAP are Complete

- Interim NA-17 Management System Description issued (includes HQ QAPD)
- Finalizing document while formally implementing

QA Roadmap is closed out (using more formal mechanisms)

NA-1 Nuclear Oversight Focus Group

• Seeking to improve nuclear safety information flow and oversight processes (includes QA) – will interface with LOCAS IC

CDNS Biennial Review of NA-10 Corrective Actions: 4 QA Items

- QA-1: Update the NA-10 QAP [Now due 09/30/09]
- QA-2: Update the NA-10 QAP IP [Now due 11/30/09]
- QA-3: Develop a Process Description for QA (DONE)
- QA-4: Develop a Process Description for Weapons QA (DONE)



QA Improvement Project Joint with EFCOG ISM/QA Group

Office of Nuclear Safety and Operations (NA-17)

- EFCOG Joint QAIP Project Plan Revision 2 approved 06/26/09
- Project Plan focuses on nuclear construction QA

Project Organization

Executive Committee

Jerry Talbot Dave Amerine

NA-17 & Acting NA 10-1 EFCOG ISM/QA BoD

Mike Thompson Frank Russo NA-172

NA-3.6

Norm Barker Energy Solutions **Pam Horning** EFCOG Chair B&W Y-12

Project Managers

Sam Johnson

Bob Dotson

NA-17 QA Agent &

B&O PTX

NA-10 QA Manager Performance Assurance Manager