ITT AESD CDOCS

120570A-39A

~~SECRET RESTRICTED DATA~~

~~FRD~~

J. Friedman

SAC200274410000

MINUTES OF THE 2nd RELIABLE REPLACEMENT WARHEAD PROJECT OFFICERS GROUP MEETING (U)

A-05-254(R)

9 June 2005

~~FORMERLY RESTRICTED DATA~~
~~Unauthorized disclosure subject to Administrative and Criminal Sanctions. Handle as Restricted Data in Foreign Dissemination Section 144.b., Atomic Energy Act 1954.~~

Derived from OPNAVINST S5513.5B, Encl (27), Change 4, dated 12 January 2004.

~~RESTRICTED DATA~~
~~This material contains Restricted Data as defined in the Atomic Energy Act of 1954. Unauthorized disclosure subject to administrative and criminal sanctions.~~

~~DISTRIBUTION LIMITED~~
~~Further distribution by any holder may be made only with specific prior approval of STRATEGIC SYSTEMS PROGRAMS, WASHINGTON DC 20393-5446, ATTN: SP-28.~~

Copy 39 of 63 Copies

A Series

A-120570

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW

1st REVIEW-DATE: 11/7/06
AUTHORITY: DD
NAME: TY SANNEES

2nd REVIEW-DATE: 1-22-07
AUTHORITY: DD
NAME: Eric Holzen

DETERMINATION (CIRCLE NUMBER(S))
1. CLASSIFICATION RETAINED
2. CLASSIFICATION CHANGED TO: FRD
3. CONTAINS NO DOE CLASSIFIED INFO
4. COORDINATE WITH: DOD
5. CLASSIFICATION CANCELED
6. CLASSIFIED INFO BRACKETED
7. OTHER (SPECIFY): DOE INFO CFRD

Advanced Engineering & Sciences

5009 Centennial Boulevard (80919)
P.O. Box 39550
Colorado Springs, CO 80949-9550

ITT Industries
Engineered for life

NNSA Tracked Material
NNSA.T.000014011

~~FRD~~

~~SECRET RESTRICTED DATA~~

~~SECRET RESTRICTED~~ DATA ~~FRD~~

ITT Industries

Advanced Engineering & Sciences

5009 Centennial Boulevard (80919)
PO Box 39550
Colorado Springs, CO 80949-9550
tel 719 599.1500
fax 719 599.1942

SAC20027441 0000

MINUTES OF THE 2nd RELIABLE REPLACEMENT WARHEAD PROJECT OFFICERS GROUP MEETING (U)

A-05-254(R)

9 June 2005

Derived from OPNAVINST S5513.5B, Encl (27), Change 4, dated 12 January 2004.

~~RESTRICTED DATA~~
~~This material contains Restricted Data as defined in the Atomic Energy Act of 1954. Unauthorized disclosure subject to administrative and criminal sanctions.~~

~~DISTRIBUTION LIMITED~~
~~Further distribution by any holder may be made only with specific prior approval of STRATEGIC SYSTEMS PROGRAMS, WASHINGTON DC 20393-5446, ATTN: SP-28.~~

~~FORMERLY RESTRICTED DATA~~
~~Unauthorized disclosure subject to Administrative and Criminal Sanctions. Handle as Restricted Data in Foreign Dissemination. Section 144.b., Atomic Energy Act 1954.~~

~~SECRET~~

MINUTES OF THE 2nd RELIABLE REPLACEMENT WARHEAD
PROJECT OFFICERS GROUP MEETING (U)
Sandia National Laboratories, Albuquerque, NM

9 June 2005

(U) TABLE OF CONTENTS
(This Table of Contents is UNCLASSIFIED)

Section — Page

1.0 GENERAL BUSINESS 1
- 1.1 INTRODUCTION 1
- 1.2 ORGANIZATION / DISTRIBUTION / SIGMA 15 ACCESS 2
- 1.3 ACTION ITEM REVIEW 2

2.0 SPECIAL TOPICS 2
- 2.1 CONSOLIDATED RRW REQUIREMENTS 2
- 2.2 RRW POG STUDY PLAN BRIEFING TO NWCSSC 3

3.0 SUBCOMMITTEE / WORKING GROUP DRAFT CHARTER REVIEW 3
- 3.1 PROGRAM PLANNING & COST CONTROL SUBCOMMITTEE (PPCCSC) 3
- 3.2 LOGISTICS & PRODUCTION SUBCOMMITTEE (LPSC) 4
- 3.3 REQUIREMENTS SUBCOMMITTEE (RSC) 4
- 3.4 DESIGN & INTEGRATION SUBCOMMITTEE (DISC) 4
- 3.5 SYSTEM QUALIFICATION & EVALUATION SUBCOMMITTEE (SQESC) 4
- 3.6 SURETY SUBCOMMITTEE (SSC) 4
- 3.7 SYSTEM PERFORMANCE & ASSESSMENT SUBCOMMITTEE (SPASC) 4
- 3.8 VULNERABILITY WORKING GROUP (VWG) 4

4.0 LABORATORY TEAM DESIGN OPTIONS (PROPRIETARY) 5
- 4.1 LANL DESIGN OPTIONS REVIEW
- 4.2 LLNL DESIGN OPTIONS REVIEW

5.0 OTHER ACTIVITIES 5
- 5.1 DISCUSSION 5
- 5.2 ACTION ITEM REVIEW 6

MINUTES OF THE 2nd RELIABLE REPLACEMENT WARHEAD
PROJECT OFFICERS GROUP MEETING (U)
Sandia National Laboratories, Albuquerque, NM

9 June 2005

(U) TABLE OF CONTENTS (Continued)
(This Table of Contents is UNCLASSIFIED)

Section		Page
5.2.1	OLD ACTION ITEMS	6
5.2.2	NEW ACTION ITEMS	7
5.3	LONG-TERM SCHEDULE	7
5.4	NEXT MEETING	7

MINUTES OF THE 2nd RELIABLE REPLACEMENT WARHEAD
PROJECT OFFICERS GROUP MEETING (U)
Sandia National Laboratories, Albuquerque, NM

9 June 2005

(U) LIST OF APPENDICES
(This Table of Contents is UNCLASSIFIED)

Appendix

A AGENDA

B RELIABLE REPLACEMENT WARHEAD PROJECT OFFICERS GROUP ORGANIZATION

C LIST OF ATTENDEES

D CONSOLIDATED RRW REQUIREMENTS

E RRW POG STUDY PLAN BRIEFING TO THE NWCSSC

F PROGRAM PLANNING & COST CONTROL SUBCOMMITTEE (PPCCSC)

G LOGISTICS & PRODUCTION SUBCOMMITTEE (LPSC)

H REQUIREMENTS SUBCOMMITTEE (RSC)

I DESIGN & INTEGRATIO SUBCOMMITTEE (DISC)

J SYSTEM QUALIFICATION & EVALUATION SUBCOMMITTEE (SQESC)

K SURETY SUBCOMMITTEE (SSC)

L SYSTEM PERFORMANCE & ASSESSMENT SUBCOMMITTEE (SPASC)

M VULNERABILITY WORKING GROUP (VWG)

N LANL PRIMARY DESIGN AND CERTIFICATION REVIEW
[Limited Distribution – Addendum 1]

O LANL RRW DESIGN OPTIONS
[Limited Distribution – Addendum 1]

P LLNL RRW DESIGN OPTIONS
[Limited Distribution – Addendum 2]

Q RRW CLASSIFICATION MANAGEMENT

R RRW POG LONG-TERM SCHEDULE

This Page is Intentionally Left Blank

MINUTES OF THE 2nd RELIABLE REPLACEMENT WARHEAD
PROJECT OFFICERS GROUP MEETING (U)
Sandia National Laboratories, Albuquerque, NM

9 June 2005

1.0 (U) GENERAL BUSINESS

1.1 (U) INTRODUCTION

(U) The second meeting of the Reliable Replacement Warhead (RRW) Project Officers Group (POG) was held on 9 June 2005 at Sandia National Laboratories, Albuquerque, NM (SNL/NM). [redacted] provided the opening administrative remarks regarding the facilities and security requirements. [redacted] presented the Agenda which is included as Appendix A.

Privacy Act 1974 b(6)

privacy act 1974

Privacy Act 1974

(U) [redacted] provided opening remarks. He emphasized the need for everyone to recognize the proprietary nature of the designs that Los Alamos National Laboratory (LANL) and Lawrence Livermore National Laboratory (LLNL) will be presenting to the POG and subcommittees and cautioned everyone to handle the data appropriately. Next, [redacted] discussed some ground-rules for the design options. While a baseline has been established, in the beginning the Laboratories should consider every option and alternative they can conceive. That includes all surety options including shipping containers, both MK4 and MK5 aeroshells for the Navy systems, etc. He wants to ensure that all options are considered and catalogued for future reference. The Laboratories expressed some concern about the large scope of work this would entail, but the idea is to start with the baseline design and to conduct limited excursions to look at other possibilities. The baseline for the Navy system is the MK5 aeroshell with the MK4A Arming Fuzing & Firing (AF&F).

Privacy Act 1974 b(6)

Privacy Act 1974

(U) [redacted] added that the Air Force baseline is the MK21 aeroshell. The fuze will have a volume and mass similar to the MK21 but could possibly be the MK4A fuze. [redacted] stated that the Air Force Nuclear Explosive Package (NEP) should be based on the Navy NEP.

Privacy Act 1974

b(6)

Privacy Act 1974

(U) [redacted] National Nuclear Security Administration (NNSA), added that manufacturing and production trades are very important to NNSA. He wanted to ensure that impacts to the NNSA nuclear weapons complex are defined for each weapon design option. b(6)

Privacy Act 1974

(U) [redacted] continued his opening remarks by saying that cost is a major driver. He also remarked that "expectation control" is vital. The point was that RRW is not going to result in large, near-term cost savings and we need to control such expectations. Any savings resulting from RRW will be in the out-years. b(6)

Privacy Act 1974

1.2 (U) ORGANIZATION / DISTRIBUTION / SIGMA 15 ACCESS

(U) [redacted] presented the latest version of the RRW organization charts and asked everyone to provide any corrections or updates as soon as possible. Copies of the updated RRW POG Organization are included as Appendix B. [redacted] also discussed the need for inputs on Sigma 15 clearance requirements. ITT was tasked to maintain the official list of Sigma 15 clearances. The List of Attendees is attached as Appendix C. b(6)

Privacy Act 1974

1.3 (U) ACTION ITEM REVIEW

(U) [redacted] reviewed the action items from the last meeting. The updated action items are included in Section 5.2. b(6)

Privacy Act 1974

2.0 (U) SPECIAL TOPICS

Privacy Act 1974

2.1 (U) CONSOLIDATED RRW REQUIREMENTS

~~(SRD)~~ FRD [redacted] presented a briefing on the Consolidated RRW Requirements. A copy of his briefing is attached as Appendix D. The Requirements Subcommittee (RSC) met prior to the POG meeting to discuss the draft RRW Military Characteristics (MCs). The RSC identified a number of issues that require further coordination and categorized them by importance. [redacted] presented the three of highest importance. The first was related to yield. [redacted] The second issue was on Command & Control (Use Control). That issue remains b(6)

Privacy Act 1974

DOE b(3)

Sec 62 FRD

(~~SRD~~ FRD) open. The third issue related to priorities for evaluation. Some priorities suggested were surety, safety, manufacturability, cost and yield. The Laboratories asked for some minimum quantification of the MCs but [redacted] said that can be addressed after we actually know what the requirements are. The POG will look at the options and make a down-selection first. [redacted] stated that a good starting point for evaluating priorities could be: surety, safety, manufacturability, cost and yield. However, he concluded that he expected inputs from the Laboratories on appropriate evaluation factors and priorities through the RSC. The final priority evaluation list is TBD.

Privacy Act 1974

b(6)

Privacy Act 1974

(U) [redacted] also discussed the RSC recommendation regarding the STS document. That recommendation is to produce the STS in three parts. Part 1 would contain language common to both the Navy and Air Force designs regarding combined or enveloped environments. Part 2 would include those items unique to the Navy design. Part 3 would include those items unique to the Air Force design. The POG agreed with this recommendation.

b(6)

2.2 (U) RRW POG STUDY PLAN BRIEFING TO NWCSSC

Privacy Act 1974

Privacy Act 1974

(U) [redacted] presented this draft briefing on behalf of [redacted] who will actually brief the NWCSSC. A copy of this briefing is included as Appendix E. It was noted that a down-selection milestone needs to be added to the proposed schedule. The Laboratories requested that the schedule be changed to increase the amount of time they have to identify DOE Concepts. The POG concurred and directed increasing that effort by three months. This will result in a shorter evaluation period. [redacted] stated that the message of the briefing should be that the POG is doing what is best for stockpile reliability, surety, etc. and to ensure we continue to field a credible deterrent.

Privacy Act 1974

b(6)

3.0 (U) SUBCOMMITTEE / WORKING GROUP DRAFT CHARTER REVIEW

3.1 (U) PROGRAM PLANNING & COST CONTROL SUBCOMMITTEE (PPCCSC)

Privacy Act 1974

Privacy Act 1974

(U) [redacted] presented the draft charter for the PPCCSC for [redacted] who could not attend. The POG approved this charter. A copy of his briefing is attached as Appendix F.

b(6)

Privacy Act 1974

3.2 (U) LOGISTICS & PRODUCTION SUBCOMMITTEE (LPSC)

(U) [redacted] presented the draft charter for the LPSC. The POG approved this charter. [redacted] provided some guidance for the LPSC to look at the impact of proposed designs on the infrastructure and how we interact with DOE production facilities. A copy of [redacted] briefing is attached as Appendix G. b(6)

Privacy Act 1974

3.3 (U) REQUIREMENTS SUBCOMMITTEE (RSC)

(U) [redacted] presented the draft charter for the RSC. The POG approved this charter. A copy of his briefing is attached as Appendix H. b(6)

Privacy Act 1974

3.4 (U) DESIGN & INTEGRATION SUBCOMMITTEE (DISC)

(U) [redacted] presented the draft charter for the DISC. The POG approved this charter. A copy of his briefing is attached as Appendix I. b(6)

Privacy Act 1974

3.5 (U) SYSTEM QUALIFICATION & EVALUATION SUBCOMMITTEE (SQESC)

(U) [redacted] presented the draft charter for the SQESC for [redacted] who could not attend. The POG approved this charter. A copy of his briefing is attached as Appendix J. b(6)

Privacy Act 1974

3.6 (U) SURETY SUBCOMMITTEE (SSC)

[redacted] presented the draft charter for the SSC. The POG approved this charter. A copy of his briefing is attached as Appendix K. During this presentation [redacted] reminded all the subcommittees to ensure impacts to the Release Assembly (RA) are considered as part of the evaluation. b(6)

Privacy Act 1974

3.7 (U) SYSTEM PERFORMANCE & ASSESSMENT SUBCOMMITTEE (SPASC) b(6)

[redacted] presented the draft charter for the SPASC. The POG approved this charter. A copy of her briefing is attached as Appendix L.

Privacy Act 1974

3.8 (U) VULNERABILITY WORKING GROUP (VWG)

(U) [redacted] presented the draft charter for the VWG. The POG approved this charter. A copy of his briefing is attached as Appendix M. b(6)

Privacy Act 1974

4.0 (U) LABORATORY TEAM DESIGN OPTIONS (PROPRIETARY)

(U) LANL and LLNL both presented briefings on design options. Since the design is being competed between the two Laboratories, all briefing material related to their designs is being treated as proprietary. Each Laboratory's material will be published in a separate, proprietary addendum and distributed to a limited portion of the POG.

4.1 LANL DESIGN OPTIONS REVIEW

Privacy Act 1974

(U) [redacted], presented LANL Primary Design and Certification. A copy of his presentation is included in a limited distribution Addendum # 1 as Appendix N. b(6)

Privacy Act 1974

(U) [redacted] presented the Design Options. A copy of his presentation is included in a limited distribution Addendum # 1 as Appendix O. b(6)

4.2 LLNL DESIGN OPTIONS REVIEW

Privacy Act 1974

(U) [redacted] presented LLNL RRW Design Options. A copy of his presentation is included in a limited distribution Addendum #2 as Appendix P. b(6)

5.0 (U) OTHER ACTIVITIES

5.1 (U) DISCUSSION

Privacy Act 1974

(U) [redacted] complimented both LANL and LLNL on their presentations. [redacted] would like an Executive Session of the RRW POG to spend a half day at each of the Laboratories for a more detailed design review in the next 6 – 8 weeks. b(6)

Privacy Act 1974

(U) [redacted] presented viewgraphs that recommended a Joint RRW Classification Guide be developed. His charts are attached as Appendix Q. The POG concurred and asked that it be done quickly. b(6)

Privacy Act 1974

(U) [redacted] requested that an RRW POG progress briefing be given to [redacted] Commander, Air Force Space Command, in the October 2005 timeframe. b(6)

5.2 (U) ACTION ITEM REVIEW

5.2.1 (U) Old Action Items

AI 1-1	NNSA (NA-11)/ ATSD(NM)	Provide clarification as to what constitutes a "new" weapon. ECD: Next POG meeting STATUS: OPEN
AI 1-3	POG Principals	Provide distribution list for general POG materials. ECD: 20 May 05 STATUS: CLOSED
AI 1-5	RSC	Brief POG on consolidated requirements. ECD: Next POG meeting STATUS: CLOSED
AI 1-7	SNL/NM	Determine MK4A AF&F radar performance in MK5 shell. SNL/NM will provide proposed ECD no later than 16 May 2005. (Completed) ECD: 30 Jun 05 STATUS: OPEN
AI 1-8	USAF/XOS	Identify USAF fuze for RRW study. ECD: Next POG meeting STATUS: OPEN
AI 1-9	All SC/WG	Review draft charters; present revised charter to POG for review/approval. ECD: Next POG meeting STATUS: CLOSED
AI 1-10	POG Principals	Provide list of names for SIGMA 15 access.(20 May 05) Principals, alternates and key significant representatives. ECD: Next POG meeting STATUS: CLOSED

Privacy Act 1974

5.2.2 (U) New Action Items

AI 2-1	POG Chair	Provide RRW POG progress briefing to [redacted] Commander, Air Force Space Command ECD: Oct 05	b(6)

5.3 (U) LONG-TERM SCHEDULE

(U) The Draft RRW POG Long-Term Schedule is included for information as Appendix R.

5.4 (U) NEXT MEETING

(U) The next meeting of the Reliable Replacement Warhead Project Officers Group is 21 Sep 05.

This Page is Intentionally Left Blank

UNCLASSIFIED

APPENDIX A

AGENDA

This Page is Intentionally Left Blank

APPENDIX A

AGENDA

This Page is Intentionally Left Blank

AGENDA
MEETING OF THE 2nd RELIABLE REPLACEMENT WARHEAD (RRW)
PROJECT OFFICERS GROUP (POG)
Sandia National Laboratories, Albuquerque, NM
9 June 2005

GENERAL BUSINESS

INTRODUCTION ..... SSP
ORGANIZATION / DISTRIBUTION / SIGMA 15 ACCESS ..... ITT
ACTION ITEM REVIEW ..... ITT

SPECIAL TOPICS

CONSOLIDATED RRW REQUIREMENTS ..... RSC
RRW POG STUDY PLAN BRIEFING TO NWCSSC ..... SSP

SUBCOMMITTEE / WORKING GROUP DRAFT CHARTER REVIEW

PROGRAM PLANNING & COST CONTROL SUBCOMMITTEE ..... PPCCSC
LOGISTICS & PRODUCTION SUBCOMMITTEE ..... LPSC
REQUIREMENTS SUBCOMMITTEE ..... RSC
DESIGN & INTEGRATION SUBCOMMITTEE ..... DISC
SYSTEM QUALIFICATION & EVALUATION SUBCOMMITTEE ..... SQESC
SURETY SUBCOMMITTEE ..... SSC
SYSTEM PERFORMANCE & ASSESSMENT SUBCOMMITTEE ..... SPASC
VULNERABILITY WORKING GROUP ..... VWG

LABORATORY TEAM DESIGN OPTIONS (PROPRIETARY)

LANL DESIGN OPTIONS ..... LANL
LLNL DESIGN OPTIONS ..... LLNL

OTHER ACTIVITIES

DISCUSSION ..... ALL
ACTION ITEM REVIEW ..... ALL
LONG-TERM SCHEDULE ..... ITT
NEXT MEETING

This Page is Intentionally Left Blank

APPENDIX B

RELIABLE REPLACEMENT WARHEAD PROJECT OFFICERS GROUP ORGANIZATION

This Page is Intentionally Left Blank

b(6)
Privacy
Act
1974

Privacy Act 1974

b(6)

b(6)
Privacy
Act
1974

b(6)
Privacy
Act
1974

b(6)
Privacy Act 1974

b(6)
Privacy
Act
1974

RRW POG ORGANIZATION

TEAM WORKING GROUPS

	LANL / SNL/NM TEAM WG	LLNL / SNL/CA TEAM WG
SSP		
USAF/XOS		
USAF/NWCA		
LMSSC		
ITT		
LANL		
SNL/NM		
LLNL		
SNL/CA		
NNSA		
OSD/ATSD(NM)		

b(6)

b(6)

privacy Act 1974

RRW POG ORGANIZATION

1.4(c)

b(6) privacy Act 1974

RRW POG ORGANIZATION

1.4 (f)

b(6) Privacy Act 1974

This Page is Intentionally Left Blank

APPENDIX C

LIST OF ATTENDEES

This Page is Intentionally Left Blank

The 2nd Reliable Replacement Warhead Project Officers Group Meeting (U)
Sandia National Laboratories, Albuquerque, NM

(U) List of Attendees

9 June 2005

b(6) Privacy Act 1974

The 2nd Reliable Replacement Warhead Project Officers Group Meeting (U)
Sandia National Laboratories, Albuquerque, NM

(U) List of Attendees (Continued)

9 June 2005

b(6)
Privacy Act
1974

APPENDIX D

CONSOLIDATED RELIABLE REPLACEMENT WARHEAD REQUIREMENTS

[redacted]

b(6)
Privacy Act
1974

This Page is Intentionally Left Blank

Reliable Replacement Warhead Requirements Subcommittee

Sandia, Albuquerque, NM
9 June 2005

[redacted]

b(6) Privacy Act 1974

[redacted]

b(6) Privacy Act 1974

RRW Requirements SC

- First Meeting: May 25-6
- Draft Charter *(to be updated June 29-30)*
- MC: Initial Draft for POG Review
- STS: Recommendation / Status
- Path Forward

Charter / Responsibilities

- Develop and maintain the draft RRW Military Characteristics (MC)
- Develop and maintain draft RRW Stockpile-to-Target Sequence (STS)
- Resolve issues on interpretation of MC/STS requirements
- Provide technical and programmatic impact assessment of proposed changes to the MC/STS
- Interaction with other Requirements activities /documents in other SCs and TWGs
- Other Requirements SC Activities
  - Requirement Tracking Methods, ….
- [illegible]
- [illegible]

MC

- Draft Document available today for Review
- Document to be "finalized" June 29-30
- Issues: (POG decisions needed)
  - Yield
  - Priorities List
  - Use Control
  - Cost
  - Responsive Infrastructure

b(5)

STS

STS

- Initial document format:
  - Part 1: Common language and information and combined or enveloped environments
  - Part 2: Navy Specific Information (updated Mk5/Mk4A information)
  - Part 3: AF Specific Information (updated W87 / MM-III information)
- Draft document started – to be reviewed at next RSC meeting June 29-30
- Part 1 to expand as program evolves *(as environments become evaluated for combining / enveloping as appropriate)*
- NEP designers currently have all the information needed to begin designs *(once MCs completed)*

STS Environments Comparison

b(5)

UNCLASSIFIED

UNCLASSIFIED

Path Forward

- Complete Draft MCs
  - POG decisions (yield, use control, priority list, …)
- Write / Review Draft RRW STS
  - Update Navy and AF Specific Portions of RRW STS
  - Technical Environments Evaluation (identify enveloped environments)
  - Finalize Document Format / Content of Section 1
  - Radiation Requirements (resolve inconsistencies)
- Other Requirements TWG Activities
  - Requirements Tracking
  - Interaction w/ Requirements activities in other TWGs
  - Other trade space studies affecting requirements (in other SCs / TWGs)
    - e.g., Fuze sub-group and/or Mission Effectiveness sub-group to coordinate *"tradeoffs between specific military characteristics and ease of manufacturing, ease of certification, lifecycle costs, and system longevity"*

APPENDIX E

RELIABLE REPLACEMENT WARHEAD PROJECT OFFICERS GROUP STUDY PLAN
BRIEFING TO THE NWCSSC (U)

b(6)
Privacy Act
1974

This Page is Intentionally Left Blank

DRAFT

Reliable Replacement Warhead

Status Brief to NWC SSC

[redacted]

b(6)
Privacy Act
1974

July 14, 2005

Background

- **NWC approved creation of a Joint Reliable Replacement Warhead Project Officers Group (RRW POG) on 23 March 2005**

- **NWC memorandum dated 11 April 2005 establishes a RRW POG**
  - Oversee a laboratory design competition for an RRW
  - First deployment on SLBM
  - 18 month study
  - Assess technical feasibility, design definition and cost
  - At the conclusion of the study, the RRW POG will present the preferred RRW design options and recommendations to the NWCSSC for approval
  - Requested Lead Project Officer brief NWCSSC on study plan in July 2005 including goals, strategy, and milestones

UNCLASSIFIED

UNCLASSIFIED

Reliable Replacement Warhead Study Goals

- **Sustain long term confidence in a safe, secure and reliable stockpile**
- **Enable transformation to a responsive nuclear weapon infrastructure**

[redacted]

b(5)

UNCLASSIFIED

UNCLASSIFIED

Strategy

- **Conduct a design competition between LANL and LLNL**
  - Reliable Replacement Warhead
  - W76 Risk Reduction Warhead
- **Conduct an independent peer review of the LANL and LLNL design options**
- **POG evaluate options, make recommendations, and issue report**

Key Players

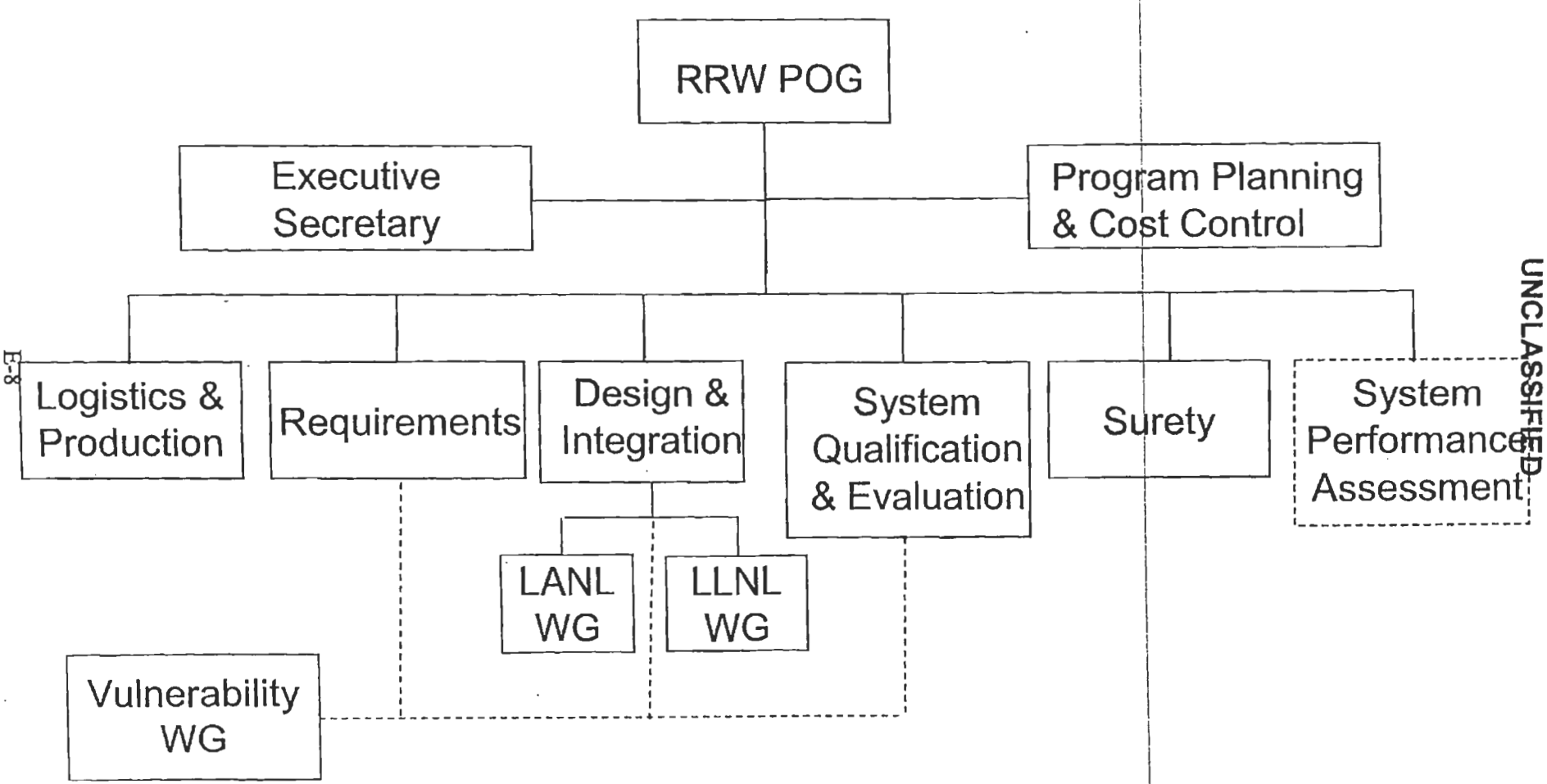
MEMBERS

- Navy SSP (Chair)
- Air Force XOS (Co-chair)
- USSTRATCOM
- DATSD (NM)
- NNSA NA-11
- NNSA NA-12
- LANL
- LLNL
- SNL/NM
- SNL/CA
- ITT
- LMSSC
- PMOSSP (SPF)
- Air Force NWCA

OFFICIAL OBSERVERS

- DTRA
- OPNAV
- Pantex
- KCP
- Y12

RRW Organizational Chart



UNCLASSIFIED

UNCLASSIFIED

E-8

Study Scope

Reliable Replacement Warhead (RRW)

- **Feasibility/design definition and cost study**
  - Laboratory design competition
  - First deployment on SLBMs
- **Considerations:**
  - FPU ~ 2012
  - [redacted] b(5)
  - Enable transformation to a responsive infrastructure
  - "Lifecycle" review of infrastructure requirements
  - [redacted] b(5)

W76 Risk Reduction Warhead

- **Design Concept study**
  - Minimum cost W76 replacement as a backup for the RRW (risk reduction measure)
  - Laboratory design competition
  - FPU ~ 2010

UNCLASSIFIED

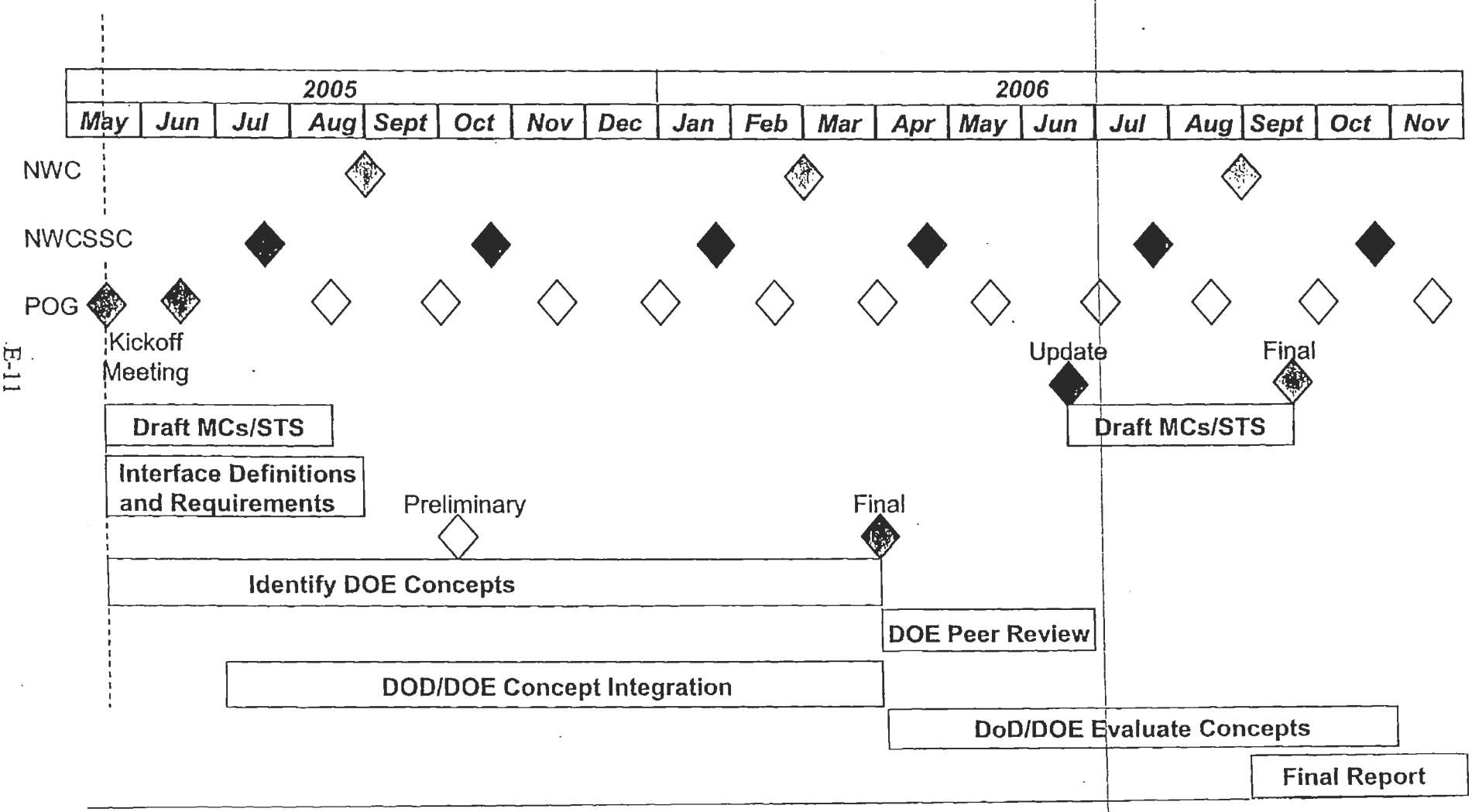
E-9

UNCLASSIFIED

Priorities

- Safety
- Security/Use Control
- Cost
- Certifiability
- Manufacturability
- Reliability
- Survivability
- Yield
- Longevity

RRW Study Plan



UNCLASSIFIED

Study Status

- **RRW POG has been formed with supporting subcommittees**
  - Kickoff Meeting: 11 May 2005
  - 2nd Meeting: 9 June 2005
- **Subcommittee charters developed and approved by POG**
- **Draft Military Characteristics (MC) and Stockpile-to-Target Sequence (STS) documents being prepared with STRATCOM interaction**
- **DoD and NNSA are working together to prepare an RRW Classification Guide**

Summary

- RRW POG established and organized
- Study goals, strategy, and scope defined and understood
- Requirements are being defined (MC, STS)
- Design competition underway

This Page is Intentionally Left Blank

APPENDIX F

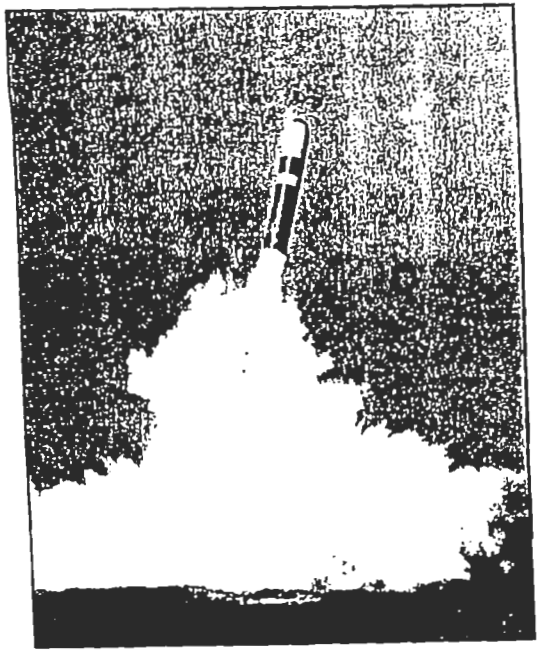
PROGRAM PLANNING & COST CONTROL SUBCOMMITTEE (PPCCSC) (U)

[redacted]

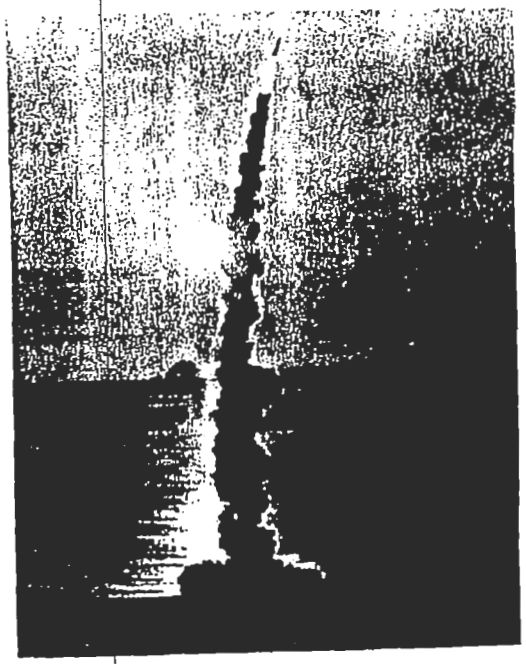
b(6)
Privacy Act
1974

This Page is Intentionally Left Blank

RRW



Planning & Assessment Subcommittee Update



9 June 2005

~~FOR OFFICIAL USE ONLY~~

~~FOR OFFICIAL USE ONLY~~

Status

- **Recommend additional item for Charter**
  - Compile evaluation criteria for POG to select design
- **Subcommittee kickoff late June - early July**
  - Date currently being coordinated

~~FOR OFFICIAL USE ONLY~~

~~FOR OFFICIAL USE ONLY~~

Program Planning and Cost Control Subcommittee

- Cost report, detailing the resources required to produce and maintain each preferred design through the design's lifecycle
- An acquisition strategy for RRW that fits within the JCIDS process
- A recommendation for the optimal balance of W76-1, W88 and RRW warheads in the SLBM fleet
- Prepare, update and maintain a Joint Integrated Project Plan (JIPP)
- Coordinate, develop, and maintain the Integrated Master Schedule (IMS)
- Prepare, update and maintain the Coordinated Project Summary
- Coordinate the development of Memorandums of Understanding, Memorandum of Agreements, and Inter-Agency Agreements to support development, production, and deployment of RRW

Page Included for Completeness, Not Actually Presented

~~FOR OFFICIAL USE ONLY~~

~~FOR OFFICIAL USE ONLY~~

This Page is Intentionally Left Blank

APPENDIX G

LOGISTICS & PRODUCTION SUBCOMMITTEE (LPSC)

[redacted]

b(6)
Privacy Act
1974

This Page is Intentionally Left Blank

Reliable Replacement Warhead Logistics & Production Subcommittee Charter

b(6)
Privacy Act 1974

Logistics & Production Subcommittee Charter

Define logistic and production requirements, conduct initial lifecycle study, and prepare an Joint Logistics and Production Plan with an emphasis placed on design producibility, production readiness, deployment, logistical support, and Department of Defense (DoD) and National Nuclear Security Administration (NNSA) infrastructure transformations with minimizing total ownership cost.

UNCLASSIFIED

UNCLASSIFIED

Logistics & Production Subcommittee Duties

Specifically, the L&P subcommittee shall include:

- Assess the RRW Military Characteristics (MC) and Stockpile-to-Target Sequence (STS) to establish appropriate logistic and production requirements and constraints.
- Coordinate DoD/NNSA procurement responsibilities and schedules for assemblies/subassemblies, Limited Life Components (LLC)/spares/repair parts, test equipment, documentation, trainers, Packaging, Handling, Storage and Transportation (PHS&T).
- Consider commonality with current weapon systems support elements where feasible and practical to minimize development and cost.
- Identify and coordinate procedures for implementing at facilities (Strategic Weapon Facilities, Pantex, contractors, etc.)

Logistics & Production Subcommittee Members

Organization	Name	Position
Strategic Systems Programs		Chairperson
Strategic Systems Programs		Member
Strategic Systems Programs		Member
U.S. Air Force/XOS		Co-Chairperson
U.S. Air Force/NWCA		
Assistant to the Secretary of Defense (Nuclear Matters)		Member
U.S. Strategic Command (USSTRATCOM)		Member
PMOSSP Sunnyvale (SPF)		Member
National Nuclear Security Administration		Member
Los Alamos National Laboratory		Member
Sandia National Laboratories, New Mexico		Member
Lawrence Livermore National Laboratory		Member
Sandia National Laboratories, California		Member
Lockheed Martin Space Systems		Member
ITT Advanced Engineering & Sciences		Member/Secretary

Privacy Act 1974
b(6)

UNCLASSIFIED

UNCLASSIFIED

Logistics & Production Subcommittee Observers

Organization	Name
Defense Treat Reduction Agency	
Office of the Chief Of Naval Operation	
Pantex Plant	
Kansas City Plant	[redacted]
Y12 Plant	

b(6)

Privacy Act 1974

UNCLASSIFIED

This Page is Intentionally Left Blank

APPENDIX H

REQUIREMENTS SUBCOMMITTEE (RSC)

[redacted]

b(6)
Privacy Act
1974

This Page is Intentionally Left Blank

Reliable Replacement Warhead (RRW) Project Officers Group Requirements Subcommittee Charter

NAVY
Strategic Systems Programs
Nuclear Deterrence
Ballistic Missile Systems
Conventional Deterrence
From the Sea

b(6)
Privacy Act
1974

UNCLASSIFIED

UNCLASSIFIED

RSC Responsibility & Authority

- **Responsibility**
  - The Requirements Subcommittee (RSC) is responsible to the Reliable Replacement Warhead (RRW) Project Officers Group (POG) for defining the RRW MC and STS requirements and coordinating associated cost/performance tradeoff studies.
- **Authority**
  - This RSC was formed at the direction of the RRW POG in support of a Nuclear Weapons Council study request. (Nuclear Weapons Council Minutes, 23 March 2005.)

RSC Duties

- Develop and maintain the draft RRW Military Characteristics.
- Develop and maintain the draft RRW Stockpile-to-Target Sequence.
- Resolve issues on interpretation of MC/STS requirements.
- Provide technical and/or programmatic impact assessment of proposed changes to the MC/STS.
- Interact with other SCs and TWGs regarding their requirements activities /documents.
- Assess requirements tracking methods.
- Develop and maintain MC/STS requirements tradeoff matrix.
- Identify and coordinate MC/STS requirements tradeoff studies.

RSC Membership

Membership of this SC will be comprised of one appointed member and no more than one alternate from each of the following agencies/organizations:

• Strategic Systems Programs	Chairperson
• U.S. Air Force/XOS	Co-Chairperson
• U.S. Air Force/NWCA	Member
• National Nuclear Security Administration	Member
• Sandia National Laboratories, New Mexico	Member
• Sandia National Laboratories, California	Member
• Los Alamos National Laboratory	Member
• Lawrence Livermore National Laboratory	Member
• Lockheed Martin Space Systems	Member
• ITT Advanced Engineering & Sciences	Member/Secretary
• U.S. Strategic Command (USSTRATCOM)	Member
• PMOSSP Sunnyvale (SPF)	Member
• OSD/ATSD	Member

RSC Observers & Meetings

- **Observers**
  - Selected observers from other agencies/organizations may attend meetings with the approval of the Chairperson or as requested to support an official member. An observer from the Kansas City Plant (KCP) has already been approved.

- **Meetings**
  - The date, location, and tentative agenda will be issued at least two weeks prior to a scheduled meeting. Special meetings may be called at any time.

RSC Reporting

- **Reporting**
  - The minutes of the meeting will be prepared and distributed electronically to each member and approved observers. Copies of material to be presented in each meeting will be provided to the Secretary (in electronic form where possible) at the meeting so that minutes may be accurately and expeditiously published.
  - The Chairperson shall provide a summary report of the RSC activities at each RRW POG meeting.

CHARTER

RELIABLE REPLACEMENT WARHEAD REQUIREMENTS SUBCOMMITTEE

9-June-2005

RESPONSIBILITY

The Requirements Subcommittee (RSC) is responsible to the Reliable Replacement Warhead (RRW) Project Officers Group (POG) for defining the RRW requirements and performing associated cost/performance tradeoff studies.

AUTHORITY

This RSC was formed at the direction of the RRW POG in support of a Nuclear Weapons Council study request. (Nuclear Weapons Council Minutes, 23 March 2005.)

DUTIES

The Requirements Subcommittee shall respond to direction from the RRW POG and requests from the other RRW Subcommittees. In meeting these responsibilities, the Requirements Subcommittee shall:

- Develop and maintain the draft RRW Military Characteristics.
- Develop and maintain the draft RRW Stockpile-to-Target Sequence.
- Resolve issues on interpretation of MC/STS requirements.
- Provide technical and programmatic impact assessment of proposed changes to the MC/STS.
- Interact with other SCs and TWGs regarding their requirements activities /documents.
- Assess requirements tracking methods.
- Develop and maintain MC/STS requirements tradeoff matrix.
- Identify and coordinate MC/STS requirements tradeoff studies.

MEMBERSHIP

Membership of this SC will be comprised of one appointed member and no more than one alternate from each of the following agencies/organizations:

Strategic Systems Programs	Chairperson
U.S. Air Force/XOS	Co-Chairperson
U.S. Air Force/NWCA	Member
National Nuclear Security Administration	Member
Sandia National Laboratories, New Mexico	Member
Sandia National Laboratories, California	Member
Los Alamos National Laboratory	Member
Lawrence Livermore National Laboratory	Member
Lockheed Martin Space Systems	Member
ITT Advanced Engineering & Sciences	Member/Secretary
U.S. Strategic Command (USSTRATCOM)	Member
PMOSSP Sunnyvale (SPF)	Member
OSD/ATSD	Member

Each member organization agrees to support the meetings and address action items assigned and to provide the coordinated position of the respective organization.

OBSERVERS

Selected observers from other agencies/organizations may attend meetings with the approval of the Chairperson or as requested to support an official member. An observer from the Kansas City Plant (KCP) has already been approved.

MEETINGS

The date, location, and tentative agenda will be issued at least two weeks prior to a scheduled meeting. Special meetings may be called at any time.

REPORTING

The minutes of the meeting will be prepared and distributed electronically to each member and approved observers. Copies of material to be presented in each meeting will be provided to the Secretary (in electronic form where possible) at the meeting so that minutes may be accurately and expeditiously published.

The Chairperson shall provide a summary report of the RSC activities at each RRW POG meeting.

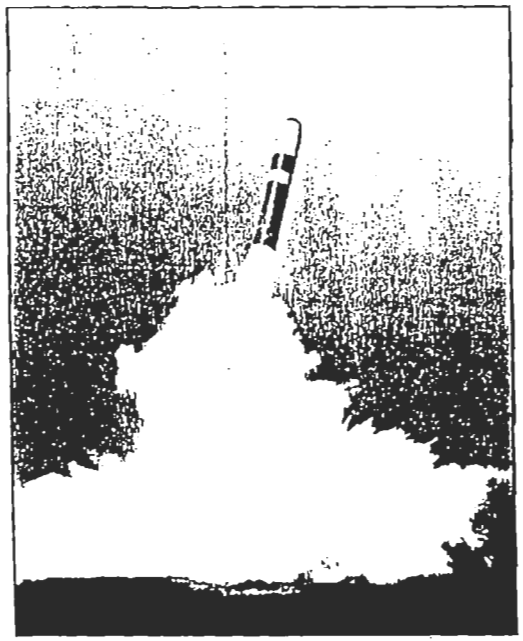
APPENDIX I

DESIGN & INTEGRATION SUBCOMMITTEE (U)

b(6)
Privacy Act
1974

This Page is Intentionally Left Blank

RRW



Design & Integration Subcommittee Update

9 June 2005

~~FOR OFFICIAL USE ONLY~~

~~FOR OFFICIAL USE ONLY~~

Status

- Charter OK as is
- Subcommittee kickoff June 22

Design and Integration Subcommittee

- Coordinate the development of RRW Interface Control Documents (ICDs)
- Coordinate the development of RRW design data packages for WR, JTA, IH, and Trainers
- Coordinate the development of W76 risk reduction option design data packages
- Conduct Design Integration Tradeoff Studies

Page Included for Completeness, Not Actually Presented

This Page is Intentionally Left Blank

APPENDIX J

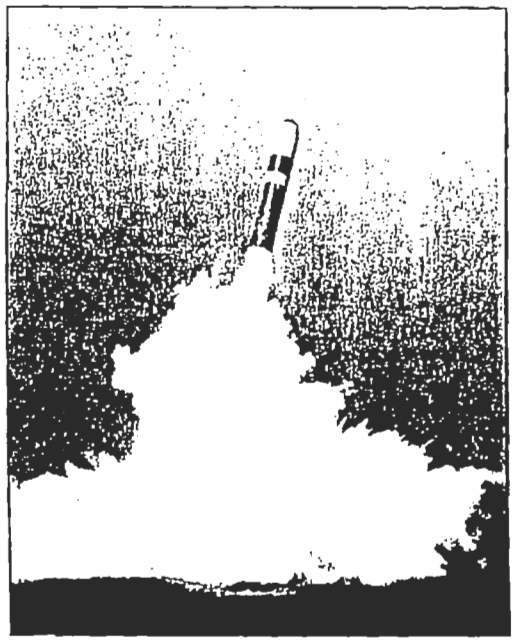
SYSTEM QUALIFICATION & EVALUATION SUBCOMMITTEE (SQESC) (U)

[redacted]

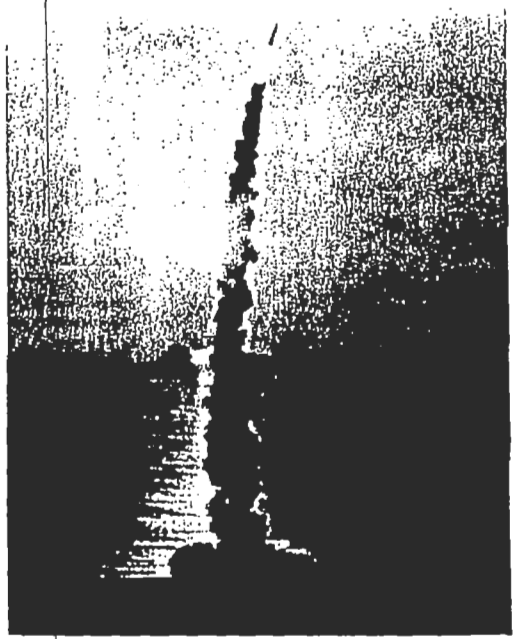
b(6)
Privacy Act
1974

This Page is Intentionally Left Blank

RRW



System Qualification & Evaluation Subcommittee Update



9 June 2005

~~FOR OFFICIAL USE ONLY~~

~~FOR OFFICIAL USE ONLY~~

Status

- Charter OK as is

- Subcommittee kickoff late June - early July
  - Date currently being coordinated

~~FOR OFFICIAL USE ONLY~~

~~FOR OFFICIAL USE ONLY~~

System Qualification and Evaluation Subcommittee

- **Coordinate the planning, scheduling, and implementation of the verification, validation, qualification, certification, and acceptance of the RRW**
- **Prepare, update and maintain the System Qualification/Certification Plan**
  - Integrated Test Plan
  - Joint Modeling & Simulation Plan
- **Coordinate the planning, scheduling, implementation & evaluation of joint DOD/DOE tests**
  - Joint Ground Tests
  - Joint Flight Tests
- **Coordinate the use of Modeling & Simulation**
  - Monitor development of M&S to be used as basis for qualification
  - Monitor Verification, Validation & Accreditation of Models
  - Monitor Verification, Validation & Certification of Data

Page Included for Completeness, Not Actually Presented

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

This Page is Intentionally Left Blank

APPENDIX K

SURETY SUBCOMMITTEE (SSC)

[redacted]

b(6)
Privacy Act
1974

This Page is Intentionally Left Blank

U.S. NAVY

U.S. AIR FORCE

Reliable Replacement Warhead Surety Subcommittee

b(6)

[redacted]

Privacy Act 1974

U.S. NAVY

Draft Surety Charter

U.S. AIR FORCE

- **Review RRW / W76 Risk Reduction options to evaluate compliance with nuclear surety (safety, security, and control) requirements**
  - DoD Nuclear Weapons Safety Standards
  - Military Characteristics (MCs)
  - Stockpile to Target Sequence (STS)
- **Compare surety themes and architectures of each warhead candidate**
- **Prioritize nuclear/HE safety concerns for each warhead candidate**
- **Compare warhead candidates from an Intrinsic Radiation (INRAD) perspective and to existing weapon systems**

U.S. NAVY

Draft Surety Charter cont.

U.S. AIR FORCE

- **Identify areas where special efforts and/or testing may be warranted to satisfy existing safety criteria**
- **Recommend tests to the System Qualification & Evaluation Subcommittee to evaluate surety attributes**
- **Coordinate the planning, scheduling and implementation of nuclear weapons safety assessments and reviews**
  - Preliminary Safety Study
  - Pre-Operational Safety Study (POSS)
  - Operational Safety Study (OSR)
  - Nuclear Weapons Acceptance Inspection (NWAI)

U.S. NAVY

SSC Summary

U.S. AIR FORCE

- Charter has been provided to all members for review
- First SSC meeting is being coordinated
- SSC activities are underway

APPENDIX L

SYSTEM PERFORMANCE & ASSESSMENT SUBCOMMITTEE (SPASC)

[redacted]

b(6)
Privacy Act
1974

This Page is Intentionally Left Blank

RELIABLE REPLACEMENT WARHEAD (RRW) SYSTEM PERFORMANCE ASSESSMENT SUBCOMMITTEE (SPASC) CHARTER

b(6)

Privacy Act 1974

SPASC RESPONSIBILITY & AUTHORITY

RESPONSIBILITY

The Reliable Replacement Warhead (RRW) System Performance Assessment Subcommittee (SPASC) of the Reliable Replacement Warhead Project Officers Group (POG) shall develop and execute a project plan to assess the RRW's performance, quality and reliability trends over the life of the system. The SPASC shall also provide the necessary technical planning and coordination to ensure an integrated quality/reliability assessment.

AUTHORITY

This subcommittee derives its authority from the RRW POG.

SPASC DUTIES

Review and coordinate implementation of all performance and reliability-related activities and programs that will assist in the evaluation, and lead to the determination of system performance assessment. As a minimum the subcommittee shall:

Establish requirements for development, qualification, production, and surveillance to achieve desired stockpile evaluation objectives.

Prepare, a flexible and achievable integrated system performance assessment plan.

Draft, the Nuclear Weapon Subsystem Test Plan (NWSSTP) in accordance with the current Memorandum of Understanding (MOU) between DOD and NNSA.

Develop, assessment techniques and tools for stockpile evaluation, including a preliminary failure modes and reliability model.

Support the Annual Assessment and COMEVAL processes.

SPASC MEMBERSHIP

The following agencies will provide members for this subcommittee:

USN Strategic Systems Programs (SSP)	Chairperson
USAF AFSPC/XON	Co-Chairperson
USSTRATCOM	Member
Lawrence Livermore National Laboratory	Member
Los Alamos National Laboratory	Member
Sandia National Laboratories, California	Member
Sandia National Laboratories, New Mexico	Member
National Nuclear Security Administration (NNSA)	Member
Lockheed Missiles & Space Systems	Member
PMOSSP, Sunnyvale (SPF)	Member
Naval Surface Weapons Center, IHD det Seal Beach	Member
Johns Hopkins University, Applied Physics Lab	Member
ITT Advanced Engineering & Sciences	Member/Secretary

SPASC OBSERVERS & MEETINGS

OBSERVERS

Members with the approval of the chairperson may invite observers involved in the development, production and/or surveillance of the RRW to meetings.

MEETINGS

The SPASC shall meet at the call of the chairperson. The chairperson will publish and distribute an agenda of subjects for discussion at the meeting normally at least three weeks prior to the meeting.

SPASC REPORTING & EFF. DATE

REPORTING

The minutes of the meeting will be prepared and distributed electronically to each member and approved observers. Copies of material to be presented in each meeting will be provided to the Secretary (in electronic form where possible) at the meeting so that the minutes may be accurately and expeditiously published.

EFFECTIVE DATE

This charter is effective upon approval by the RRW POG.

APPENDIX M

VULNERABILITY WORKING GROUP (VWG)

[redacted]

b(6)
Privacy Act
1974

This Page is Intentionally Left Blank

(U) Reliable Replacement Warhead (RRW) Project Officers Group Vulnerability Working Group Charter

NAVY
Strategic Systems Programs
Nuclear Deterrence
Ballistic Missile Systems
Conventional Deterrence
From the Sea

b(6)
Privacy Act
1974

UNCLASSIFIED

UNCLASSIFIED

(U) VWG Charter

- **(U) Responsibility**
  - (U) The Vulnerability Working Group (VWG) is responsible to the Reliable Replacement Warhead (RRW) Project Officers Group (POG) for providing technical expertise and recommendations to insure that the hostile and fratricide requirements are defined, and that the RRW design meets all radiation requirements, including normal, hostile, and fratricide.

- **(U) Authority**
  - (U) The VWG derives its authority from the RRW POG.

(U) VWG Charter (continued)

- **(U) Duties**
  - (U) The RRW VWG will define the hostile and fratricide environment requirements for the RRW program, and resolve vulnerability issues. The VWG will provide expertise in the use of testing and analysis to qualify the RRW to hostile and fratricide environment requirements. Specifically, the VWG shall:
    - (U) Assist the Requirements Subcommittee develop Hostile and Fratricide environment requirements.
    - (U) Assist the Design & Integration Subcommittee assess the design options for vulnerability to hostile and fratricide environments.
    - (U) Assist the System Qualification and Evaluation Subcommittee define test and evaluation requirements for hostile and fratricide requirements.
    - (U) Evaluate commonality in AF / Navy radiation requirements, including normal, hostile and fratricide.

(U) VWG Charter (continued)

- **(U) Membership**
  - (U) Membership of the VWG will consist of the following appointed member from each agency/organization:

b(6) Privacy Act 1974

[redacted]

- Strategic Systems Programs (SP 28E) Chairperson
- U.S. Air Force/XOS
- U.S. Air Force/NWCA Co-Chairperson
- National Nuclear Security Administration
- OSD/ATSD(NM)
- Sandia National Laboratories, New Mexico
- Sandia National Laboratories, California
- Los Alamos National Laboratory
- Lawrence Livermore National Laboratory
- Lockheed Martin Space Systems
- ITT Advanced Engineering & Sciences Secretary
- U.S. Strategic Command (USSTRATCOM)
- PMOSSP Sunnyvale (SPF)

(U) VWG Charter (continued)

- **(U) Observers**
  - (U) Selected observers from other agencies/organizations may attend meetings with the approval of the Chairperson or as requested to support an official member. An already approved observer for the VWG is Defense Threat Reduction Agency.

- **(U) Meetings**
  - (U) The date, location, and tentative agenda will be issued at least two weeks prior to a scheduled meeting. Special meetings may be called at any time.

(U) VWG Charter (concluded)

- **(U) Reporting**
  - (U) The minutes of the meeting will be prepared and distributed electronically to each member and approved observers. Copies of material to be presented in each meeting will be provided to the Secretary (in electronic form where possible) at the meeting so that minutes may be accurately and expeditiously published.
  - (U) The Chairperson shall provide a summary report of the VWG activities at each RRW POG meeting.

RELIABLE REPLACEMENT WARHEAD (RRW) PROJECT OFFICERS GROUP VULNERABILITY WORKING GROUP CHARTER

RESPONSIBILITY

The Vulnerability Working Group (VWG) is responsible to the Reliable Replacement Warhead (RRW) Project Officers Group (POG) for providing technical expertise and recommendations to insure that the hostile and fratricide requirements are defined, and that the RRW design meets all radiation requirements, including normal, hostile, and fratricide.

AUTHORITY

The VWG derives its authority from the RRW POG.

DUTIES

The RRW VWG will define the hostile and fratricide environment requirements for the RRW program, provide subject matter expertise to support other RRW subcommittees, and resolve vulnerability issues. This includes expertise in the use of testing and analysis to qualify the RRW to hostile and fratricide environment requirements. Specifically, the VWG shall:

- Assist the Requirements Subcommittee develop Hostile and Fratricide environment requirements.
- Assist the Design & Integration Subcommittee assess the design options for vulnerability to hostile and fratricide environments.
- Assist the System Qualification and Evaluation Subcommittee define test and evaluation requirements for hostile and fratricide requirements.
- Evaluate commonality in AF / Navy radiation requirements, including normal, hostile and fratricide.

MEMBERSHIP

Membership of the VWG will consist of the following appointed member from each agency/organization:

Strategic Systems Programs (SP 28E)	Chairperson
U.S. Air Force/XOS	
U.S. Air Force/NWCA	Co-Chairperson
National Nuclear Security Administration	
OSD/ATSD(NM)	
Sandia National Laboratories, New Mexico	
Sandia National Laboratories, California	
Los Alamos National Laboratory	
Lawrence Livermore National Laboratory	
Lockheed Martin Space Systems	

b(6)
Privacy Act 1974

ITT Advanced Engineering & Sciences Secretary
U.S. Strategic Command (USSTRATCOM)
PMOSSP Sunnyvale (SPF)

[redacted]
b(6) Privacy Act 1974

OBSERVERS

Selected observers from other agencies/organizations may attend meetings with the approval of the Chairperson or as requested to support an official member. An already approved observer for the VWG is Defense Threat Reduction Agency.

MEETINGS

The date, location, and tentative agenda will be issued at least two weeks prior to a scheduled meeting. Special meetings may be called at any time.

REPORTING

The minutes of the meeting will be prepared and distributed electronically to each member and approved observers. Copies of material to be presented in each meeting will be provided to the Secretary (in electronic form where possible) at the meeting so that minutes may be accurately and expeditiously published.

The Chairperson shall provide a summary report of the VWG activities at each RRW POG meeting.

APPENDIX N

LANL PRIMARY DESIGN AND CERTIFICATION REVIEW

[redacted]

b(6)
Privacy Act
1974

Information in this Appendix is contained in
Addendum 1, Limited Distribution

This Page is Intentionally Left Blank

APPENDIX O

LANL DESIGN OPTIONS

[redacted] b(6) Privacy Act 1974

Information in this Appendix is contained in Addendum 1, Limited Distribution

This Page is Intentionally Left Blank

APPENDIX P

LLNL RRW DESIGN OPTIONS

[redacted]

b(6)
Privacy Act
1974

Information in this Appendix is contained in
Addendum 2, Limited Distribution

This Page is Intentionally Left Blank

APPENDIX Q

RELIABLE REPLACEMENT WARHEAD CLASSIFICATION MANAGEMENT

[redacted]

b(6)
Privacy Act
1974

This Page is Intentionally Left Blank

Reliable Replacement Warhead (RRW) Classification Management

9 June 2005

RRW Information Issue

- Sensitive information surrounding the RRW needs to be protected

RRW Information Classification

- Programmatics?
  - Costs that would reveal quantities of assets
  - Facility information
  - Military Characteristics
  - Stockpile-to-Sequence (STS)
- Physical attributes?
  - Size
  - Weight
  - Yield
  - Efficiency
- Hardening characteristics?
- Flight parameters?
- AF&F characteristics?
  - HOB
  - V-Gamma maps/information
  - Radar Antenna characteristics/frequencies
- Reliability statements/assessments?
- Use Control?
- Surety considerations?

Summary

- **Recommendation:**
  - Develop a Joint DoD – DOE/NNSA RRW Topical Classification Guide to facilitate protecting equities
    - Navy SSP / USAF XOS working with NNSA
  - Present to RRW POG for concurrence
  - Submit for approval to Joint DOD/DOE Management

APPENDIX R

RELIABLE REPLACEMENT WARHEAD PROJECT OFFICERS GROUP LONG-TERM SCHEDULE (U)

This Page is Intentionally Left Blank

Reliable Replacement Warhead Project Officers Group Schedule

ID	Task Name	2005 Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
1	**AO Briefings**														
2	RRW POG Plan			RRW POG Plan ◆ 6/28											
3	RRW POG Status						RRW POG Status ◇ 10/4								
4	RRW POG Status									RRW POG Status ◇ 1/3					
5															
6	**SSC Briefings**														
7	RRW POG Plan			RRW POG Plan ◆ 7/14											
8	RRW POG Status						RRW POG Status ◇ 10/13								
9	RRW POG Status									RRW POG Status ◇ 1/12					
10															
11	**NWC Briefings**														
12	RRW POG Plan			RRW POG Plan ◆ 7/27											
13	RRW POG Status									RRW POG Status ◇ 1/25					
14															
15	**RRW POG Meetings**														
16	Kickoff RRW POG	Ickoff RRW POG ◆ 5/11 ITT/CC													
17	2nd RRW POG		2nd RRW POG ◆ 6/9 SNL/NM												
18	LANL Design Option Review EPOG						LANL ◇ 8/23								
19	LLNL Design Option Review EPOG						LLNL ◇ 8/25								
20	3rd RRW POG						3rd RRW POG ◇ 9/21@ ITT/CC								
21	4th RRW POG									4th RRW POG ◇ 12/14 TBD?					
22	5th RRW POG											5th RRW POG ◇ 03/06 TBD			

RRW
FY05/09
ds

Page 1

This Page is Intentionally Left Blank

MINUTES OF THE 2nd RELIABLE REPLACEMENT WARHEAD
PROJECT OFFICERS GROUP MEETING (U)

(U) DISTRIBUTION LIST
(This Distribution List is UNCLASSIFIED)

	Copy Number
Privacy Act 1974	1/63A
	2/63A
	3/63A
	4/63A
b(6)	
	5/63A
	6/63A
	7/63A
	8/63A
	9/63A
	10/63A
	11/63A
	12/63A
	13/63A
	14/63A
	15/63A

MINUTES OF THE 2nd RELIABLE REPLACEMENT WARHEAD
PROJECT OFFICERS GROUP MEETING (U)

(U) DISTRIBUTION LIST (Continued)
(This Distribution List is UNCLASSIFIED)

	Copy Number
	16/63A
	17/63A
	18/63A
	19/63A
b(6) Privacy Act 1974	20/63A
	21/63A
	22/63A
	23/63A
	24/63A
	25/63A
	26/63A
	27/63A
	28/63A
	29/63A
	30/63A
	31/63A

MINUTES OF THE 2nd RELIABLE REPLACEMENT WARHEAD
PROJECT OFFICERS GROUP MEETING (U)

(U) DISTRIBUTION LIST (Continued)
(This Distribution List is UNCLASSIFIED)

	Copy Number
	32/63A
	33/63A
	34/63A
b(6)	35/63A
	36/63A
	37/63A
Privacy Act 1974	
	38/63A
	39/63A
	40/63A
	41/63A
	42/63A
	43/63A
	44/63A
	45/63A

MINUTES OF THE 2nd RELIABLE REPLACEMENT WARHEAD
PROJECT OFFICERS GROUP MEETING (U)

(U) DISTRIBUTION LIST (Continued)
(This Distribution List is UNCLASSIFIED)

	Copy Number
	46/63A
	47/63A
	48/63A
b(6) Privacy Act 1974	49/63A
	50/63A
	51/63A
	52/63A
	53/63A
	54/63A
	55/63A
	56/63A

MINUTES OF THE 2nd RELIABLE REPLACEMENT WARHEAD
PROJECT OFFICERS GROUP MEETING (U)

(U) DISTRIBUTION LIST (Continued)
(This Distribution List is UNCLASSIFIED)

	Copy Number
	57/63A
b(6) Privacy Act 1974	58/63A
	59/63A
	60/63A
	61/63A
	62-63/63A

This Page is Intentionally Left Blank

RESTRICTED DATA
This material contains Restricted Data as defined in the Atomic Energy Act of 1954. Unauthorized disclosure subject to administrative and criminal sanctions.

~~RESTRICTED DATA~~
This material contains Restricted Data as defined in the Atomic Energy Act of 1954. Unauthorized disclosure subject to administrative and criminal sanctions.

ITT Industries
Engineered for life

~~RESTRICTED DATA
This material contains Restricted Data as defined in the Atomic Energy Act of 1954. Unauthorized disclosure subject to administrative and criminal sanctions.~~

Advanced Engineering
& Sciences

5009 Centennial Boulevard (80919)
P.O. Box 39550
Colorado Springs, CO 80949-9550