November 17, 2000

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W.
Suite 700
Washington, D.C. 20004

Dear Mr. Chairman:

Enclosed is a copy of the Final Change Order (FCO) requiring the use of Inconel 718 capscrews to secure the flange on the AL-R8 Sealed Insert (SI) for all future container assembly procurements. This FCO is a deliverable to you under Commitment 5.1.1 of the Department’s Recommendation 99-1 Implementation Plan (IP). As discussed in the IP, the Department will incorporate this new corrosion-resistant capscrew into the AL-R8 SI design to replace carbon steel capscrews. Procurement of the initial lot of Inconel 718 capscrews was initiated on September 29, 2000, with an expected delivery in February 2001.

If you have any questions concerning this information, please contact me at (202) 586-4879 or Tim Evans at (301) 903-3989.

Sincerely,

[Signature]
David E. Beck
Assistant Deputy Administrator
for Military Application and
Stockpile Operations
Defense Programs

Enclosure

cc w/enclosure:
Mark B. Whitaker, S-3.1
CHG NO: 20000087PX

SUBJECT: FINAL CHANGE ORDER

ICO NO: PX/J.L. ADDINGTON, EXT.

REV NO: 0

FROM: PX/J.L. ADDINGTON, EXT.

TO: PX/J.B. RHODES, EXT.

REFERENCE LEVELS RELATED RELEASES DISTRIBUTION

DRAWING

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PROGRAM: AL-R8 SI SME 980037PX

DOE/AL/NMSP  S. ARP
DOE/AO  D. *KELLY
DOE/AO  R. DEMERSON
DOE/AO  L. SHAFFER
LL/L125  S. ABDULLAH
LL/L125  S. COUTURE
LL/TRILAB  S. WIHEBRINK
LA/  G. CARLSON
LA/TRILAB  R. HENDERSON
PX/850  G.D. COCKRELL
PX/850  J.L. ADDINGTON
PX/910  R. BAKER

REASON FOR RELEASE

TO UPDATE DOCUMENTS WITH RESULTS FROM 718 ALLOY FASTENER STUDIES.

REASON FOR REVISION

DRAWING NUMBERS DWG NEW SUF NEW INSPEC REPORTING/EFFECTIVITY

NUMBERS LOC DA PA ISSUE ALT REQUIREMENTS

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706035 PX 003 H

TK706035 PX F

PQ706035 PX F

PS706035 PX B

INCORPORATION INSTRUCTIONS & MATERIAL DISPOSITION

CHANGED PRODUCT WILL BE INCORPORATED BY THE PA AS SOON AS POSSIBLE FOLLOWING RECEIPT OF NEW PRODUCT. EXISTING PRODUCT MAY BE USED VIA SXR IF THE CARBON STEEL FASTENERS ARE REPLACED WITH THE 718 ALLOY FASTENER DEFINITION.

REFERENCES & REMARKS

CHANGES COORDINATED WITH LLNL AND LANL DURING 706035 PRT MEETING OF 10/05/00-

10/06/00. CONCURRENCE PROVIDED VIA EMAIL FROM LLNL/S. ABDALLAH AND LANL/G.

CARLSON.

END OF PAGE 1 OF 2/UNCLASSIFIED
DESCRIPTION OF RELEASE

1.0 706035-002 ISSUE G.

1.1 ADD NEW LINE 31400 AS TOOLING DRAWING 13296 ISSUE 0, 718 ALLOY FASTENER DEFINITION.

1.2 CHANGE LINE 30200 FROM 13047 ISSUE 5 TO 13047 ISSUE 6.

2.0 TK706035-001 ISSUE E.

2.1 ADD DATA FROM PARA. 3.2.2 CARBON STEEL DROP TEST TO APPENDIX A.

2.2 ADD NEW APPENDIX B WITH DATA FROM 718 ALLOY FASTENER TESTING.

3.0 PQ706035-001 ISSUE E.

3.1 ADD NEW PARAGRAPH 4.4.2.F(LC) PROVIDING 718 ALLOY STUDY REQUIREMENTS INCLUDING THERMAL ANALYSIS AND GALLING STUDY.

3.2 CHANGE APPENDIX G TO H AND APPENDIX F TO G.

3.3 ADD THERMAL ANALYSIS AND GALLING STUDY DATA TO APPENDIX G.

3.4 ADD NEW APPENDIX F WITH ATTENDANCE ROSTER AND MINUTES FROM 718 ALLOY FASTENER REVIEW/PRT MEETING.

4.0 PS706035-000 ISSUE A.

4.1 UPDATE PARA. 4 TEAM MEMBERSHIP TO REFLECT CURRENT PRT MEMBERSHIP.

4.2 IN PARA. 3.2.9.C.7, ADD NOTE STATING "WHEN USING SI CONTAINERS WITH 718 ALLOY FASTENERS, MULTIPLE PASSES WILL BE NECESSARY TO REACH AND MAINTAIN THE 40-50 FT-LBS TORQUE VALUE."

END OF PAGE 2 OF 2/UNCLASSIFIED