

Department of Energy

National Nuclear Security Administration

Washington, DC 20585

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,

David E. Beck

Assistant Deputy Administrator for Military Application and **Stockpile Operations**

Defense Programs

Enclosure

cc w/enclosure:

Mark B. Whitaker, S-3.1

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CHG NO: 20000087PX CHG CLS: B

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SUBJECT: FINAL CHANGE ORDER

REV NO: 0

FROM

PX/J.L. ADDINGTON, EXT.

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TO:

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REFERENCE LEVELS RELATED RELEASES DISTRIBUTION

PX/J.B. RHODES.

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DRAWING

RELEASES

PROGRAM: AL-R8 SI SIER 980037PX

DOE/AL/NMSPO S. ARP
DOE/AAO D. TKELLY
DOE/AAO E. DEMERSON
DOE/AAO L. SHAFFER
LL/L125 S. ABDULLAH
LL/L125 S. COUTURE
LL/TRILAB S. WIHEBRINK
LA/ G. CARLSON
LA/TRILAB R. HENDERSON

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 LOC	NEW DA	SUF PA	NEW ISSUE	INSP ALT	REPORTING/EFFECTIVITY REQUIREMENTS
706035	PX	003		H		
TK706035	PX			F		
PQ706036	PΧ			F		
PS706035	PX			В		
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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

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CHG NO: 20000087PX

CHG CLS: B
REV NO: 0

DOC CODE REVISION APPROVED BY AGENCY ORG DATE

FCO 0 G.D. COCKRELL PX 850 10/20/00

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.8.
- 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. 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

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