

DLA L&M, in an effort to make sure all affected parties have access to this information, requested and obtained Amphenol Aerospace's permission on 09 May to post the following on our public website. Since this data was excerpted from GIDEP document NX4-P-09, we also requested and obtained the GIDEP Program Manager's permission to take this special and urgent action in accordance with GIDEP Distribution Policy.

1. TITLE (Class, Function, Type, etc.)		2. DOCUMENT NUMBER
MIL-DTL-22992 Retention Testing		NX4-P-16-08
		3. DATE (DD-MMM-YY)
		11-APR-16
4. MANUFACTURER AND ADDRESS	5. PART NUMBER	6. NATIONAL STOCK NUMBER
Amphenol Aerospace	Not Available	Not Available
40-60 Delaware Ave	7. SPECIFICATION	8. GOVERNMENT PART NUMBER
Sidney, NY 13838	MIL-DTL-22992	MS1734X
	9. LOT DATE CODE START	10. LOT DATE CODE END
	1105	1402
11. MANUFACTURER'S POINT OF CONTACT	12. CAGE	13. MANUFACTURER'S FAX
Ron Williams	77820	Not Available
14. MFR. POC PHONE	15. MANUFACTURER'S E-MAIL	
(607) 563-5344	rwilliams@aao-amphenol.com	
16. SUPPLIER - Not Applicable	17. SUPPLIER ADDRESS - Not Applicable	18. SUPPLIER CAGE - Not Applicable

19. PROBLEM DESCRIPTION / DISCUSSION / EFFECT  
 Amphenol Aerospace (AAO) is currently delinquent on MIL-DTL-22992 group C periodic retention testing.

Groups A and B were completed and reports and data submitted November 2014 with no failures. Group C testing indicated air leakage at -55C, group 1, failure per MIL-DTL-22992 para. 3.10 and 4.6.7 after thermal shock.

MS9055X (class L) passed all group C testing for this retention period.  
 Air Leakage is not a requirement for MS1734XR (class R) product.

AAO has no knowledge of any field failures associated with air leakage.

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20. ACTION TAKEN/PLANNED  
 DLA imposed a stop production and stop shipment on AAO relative to the subject MIL-Spec product for delinquent retention testing. In addition, DLA requested that AAO disclose an analysis of failures observed during current testing period. Upon resolution of open actions with DLA and the lifting of their imposed stop shipment/production order, AAO plans to resume production and shipment of the subject connectors.

21. DATE MFR. NOTIFIED/ SUPPLIER NOTIFIED - Not Applicable	22. MFR./SUPPLIER RESPONSE - Not Applicable  <input type="checkbox"/> REPLY ATTACHED <input type="checkbox"/> NO REPLY	23. ORIGINATOR ADDRESS/POINT OF CONTACT Ron Williams, Amphenol Aerospace 191 Delaware Ave Sidney, NY 13838-1304 rwilliams@amphenol-aao.com (607) 563-5344
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24. GIDEP REPRESENTATIVE Kyle Christoffersen	25. SIGNATURE Signature on File	26. DATE 11-APR-16
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**Block 19 Continued:**

**Product failure analysis:**

Based on DPA it was determined that there was a bond failure between the shell of the connector and the rubber insert. This failure caused an air leak between the shell and the insert after thermal conditioning of -55C for 30 minutes which is performed after temperature cycling and contact retention testing in group 1. The leak requirement is 1 cubic inch/hour at 30 PSI.

An air leak between the insert and shell could cause upper level assembly leakage if used in a sealed box or when using a sealed cable. This would only be applicable in areas of extreme cold where temperatures could be in the -55C range.

This would only be a potential leak path or air pressure degradation path if connectors are used not mated, or without a sealed protection cap. If connectors are mated or have the proper environmental cap installed this failure mode would not be applicable.

**AAO process controls:**

Amphenol has implemented a 100% lot check for this condition. This would include performing a cold soak at -55C for a minimum of 7 hours, bringing the part to room temp, performing an axial load of 30lbs and then returning parts to -50C for at least 30 minutes. After this parts are checked within 30 seconds of coming out of the cold chamber.

