



**REPORT OF TEST ON**

**MATED CONNECTORS**

**RAIN TEST**

**for**

**AMPHENOL AEROSPACE**

Date: January 16, 2007

**Prepared by: Donald R. Zoon**  
**Test Engineer**

**Checked by: Alan Benda**  
**Environmental Test Technician**

**Signed:** Signature on File

**Signed:** Signature on File

**Date:** 1/18/07

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ADMINISTRATIVE DATA

**1.0 PURPOSE:** To subject the units to a rain test.

**2.0 MANUFACTURER:** Amphenol Aerospace  
40-60 Delaware Ave.  
Sidney, N.Y. 13838-1395

**3.0 TEST UNIT IDENTIFICATION:** Samples marked 500, 750, 1K, 1.5K.

**4.0 SPECIFICATION:** MIL-STD-810F

**5.0 QUANTITY OF ITEMS TESTED:** 4 (mated connectors)

**6.0 SECURITY CLASSIFICATION:** Unclassified

**7.0 DATE TEST COMPLETED:** January 15, 2007

**8.0 TEST CONDUCTED BY:** Sypris Test & Measurement  
1133 Route 23 South  
Wayne, NJ 07470

**9.0 DISPOSITION OF TEST ITEMS:** Returned to Amphenol Aerospace

**10.0 ABSTRACT:** The connector pairs completed the rain test with no evidence of external damage. In addition, the connector pairs exhibited no evidence of water penetration inside the connectors.

## LIST OF APPARATUS

ITEM	MANUFACTURER	MODEL NO.	DATE	<b>Calibration</b> DUE DATE
Anemometer	Dwyer	470-1	12/27/06	12/27/07
Rain Gage	Cole Parmer	03319-00	Not	Required
Stop Watch	Accusplit	705X	5/25/06	5/25/07
Rain Apparatus	Bell Tech.	*	Before	Use
Blower	Dayton	FD10011CA	Before	Use

\* Fabricated in accordance with MIL-STD-810.

## RAIN TEST

### TEST PROCEDURE

The rain test was conducted in accordance with Method 506.4, Procedure I of MIL-STD-810F.

The connector pairs were placed in a rain test setup, as shown in Figure 1.

The connector pairs were then subjected to the following conditions.

Rainfall:	17.24 inches/hour
Wind velocity:	40 MPH
Duration:	30 minutes/side
Number of sides tested:	4 (front, back, right side, left side)
Total test duration:	2 hours

At the completion of the test the connector pairs were examined for damage. The connector pairs were then separated and checked for water penetration.

Photographs of the unmated connectors following the test may be seen in figures 2 through 5.

### TEST RESULTS

The connector pairs completed the rain test with no evidence of external damage. In addition, the connector pairs exhibited no evidence of water penetration inside the connectors.



Figure 1  
Typical Rain Test Setup

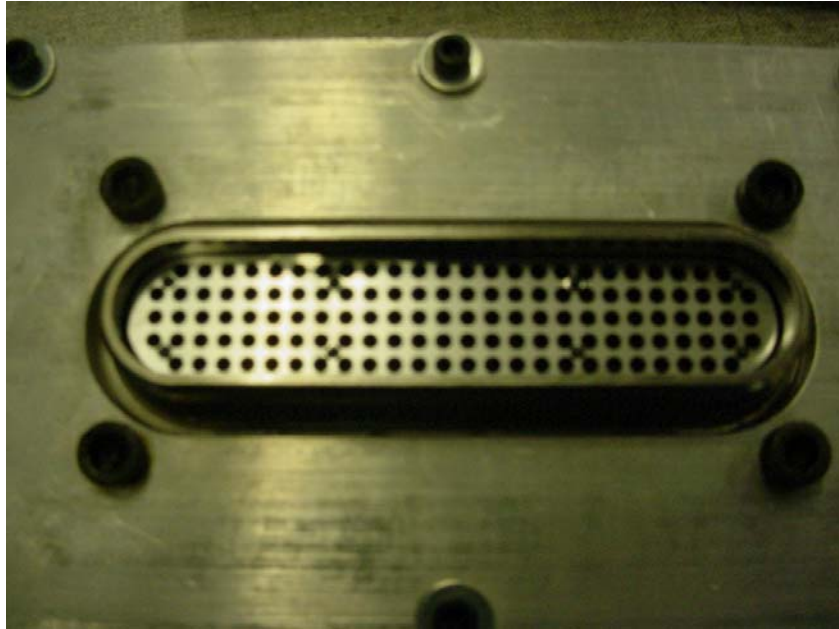


Figure 2  
1.5K Connector

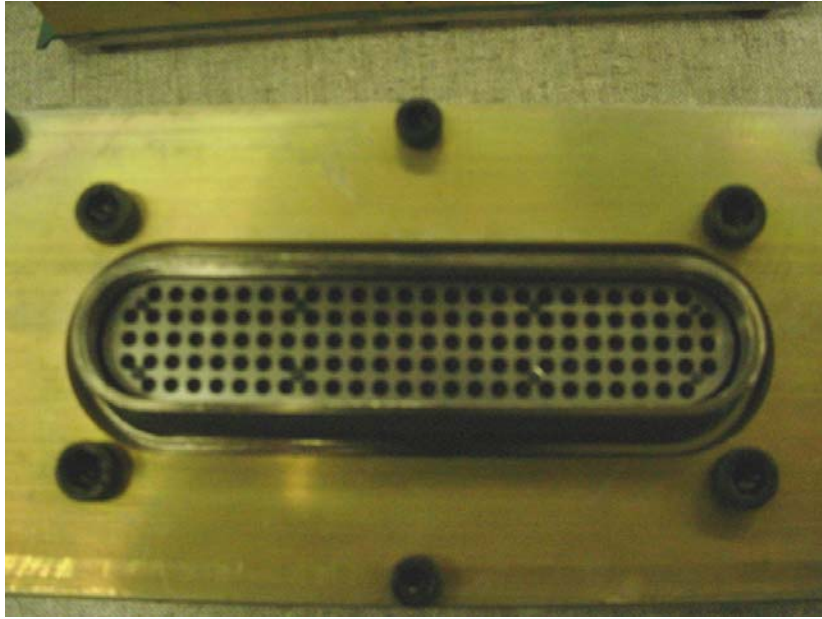


Figure 3  
1K Connector

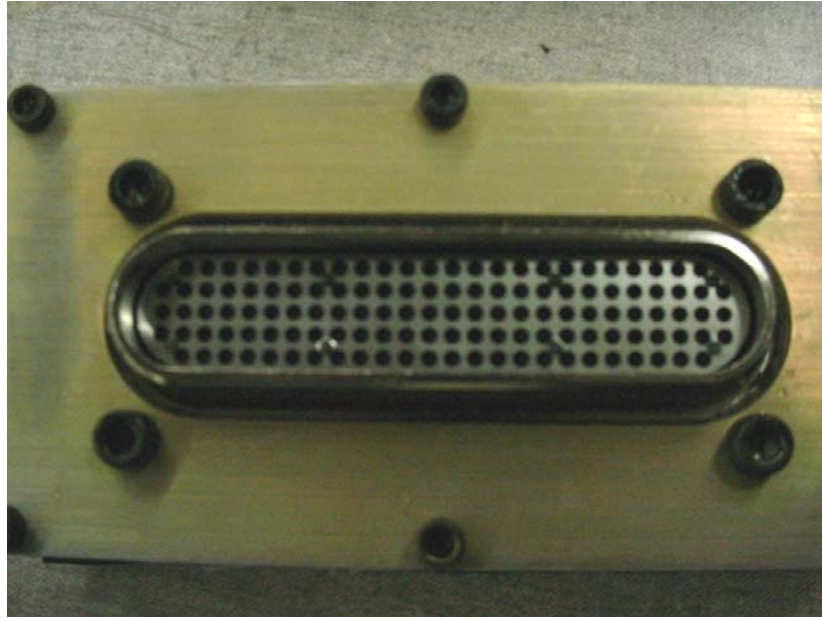


Figure 4  
500 Connector



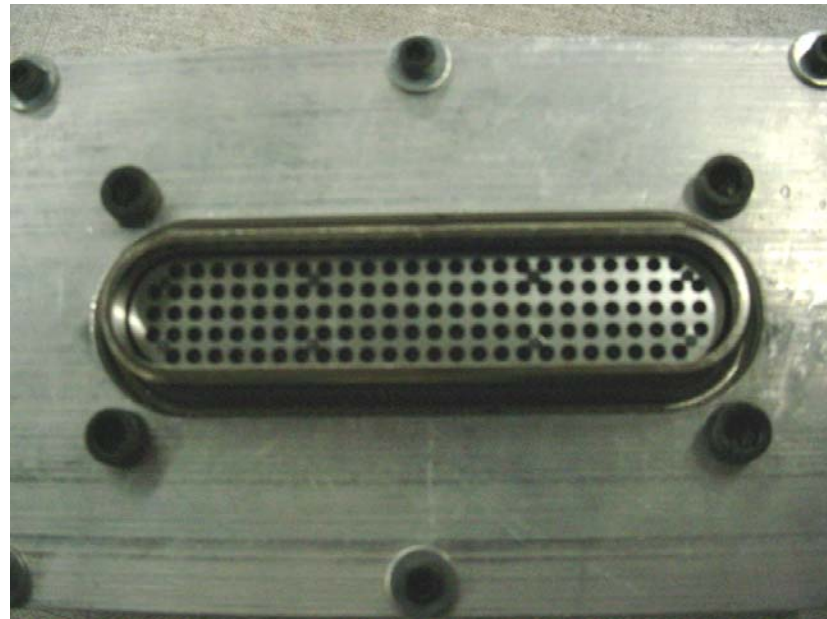


Figure 5  
750 Connector