NCR Number

NCR/FM/INFN/RM2/7

Classification	*Item name*	*Found on:*
major	Top Tray Assembly with Payload	08/09/2004 7:00:49 PM

Part number	LAT-DS-00764 (rev2)
Serial number	001
Issued	Marcello Marchetti
Short NCR description	Bias circuit delamination
Approved by	Alessandro Brez
Detected	Test
Cause	manufacturing mistake
NCR description	Bias circuits delamination found after the thermo-vacuum test.See annex 1.
Action	Refer MRB

disposition

disposition ID: 1

A)Send to Plyform for rework of the Kapton and INFN-Pisa suggest to perform further investigation in order to verify the cause of the NCR.
B)Verify rework with standard flow of tests (dimensional test-flatness, New TVAC test)
C)Refer to MRB

Finding

responsible	***due date (mm/dd/yyyy)***	***closed***
Alessandro Brez	08/30/2004	

MRB

disposition ***ID:*** 1

Waiting for disposition (08/10/2004)

Finding

responsible	***due date (mm/dd/yyyy)***	***closed***
	08/30/2004	

Approval

Signatur

Customer approval date

NCR status open

Annex

annex N°	***Identification***
1	Defects image

Istituto Nazionale di Fisica Nucleare

Annex 1 to NCR/FM/INFN/RM2/007

TOP 001:

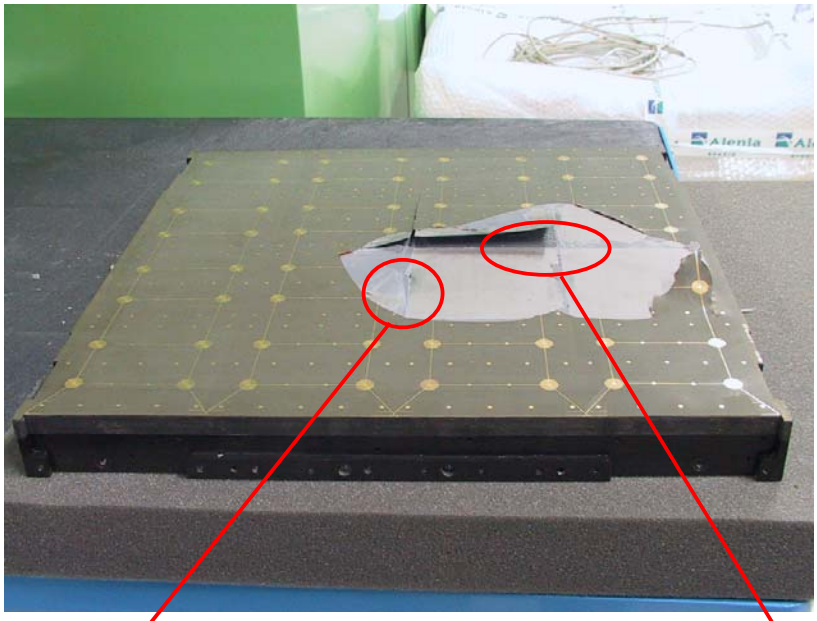

Fig.1

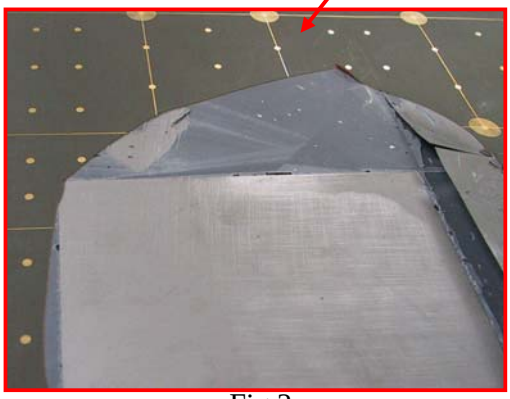

Fig.2

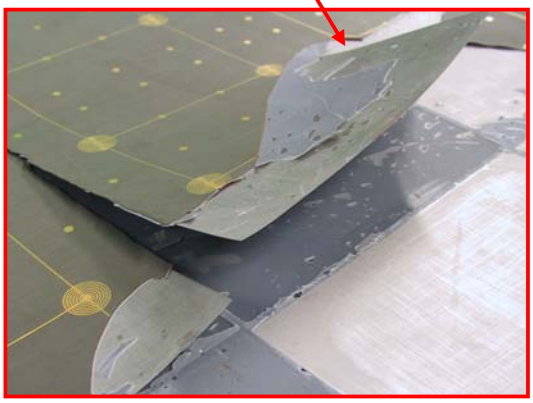

Fig.3

The top tray 001 was equipped with Tungsten plates and kapton bias circuits during the first week of august. On Friday of the same week, at 2p.m it was put in the RomaII thermo-vacuum chamber and left at 55°C 5 hours to complete the 3M2216 curing. At 7p.m. the chamber was depressurised. The thermal stress before, and the thermo-vacuum stress after, caused large de-bonding of the kapton bias circuit and the de-bonding of some tungsten tiles.
The failure of the test is due to two factors:

- Not perfect curing of the 3M2216
- Not perfect adhesion of the 3M2216 to the tungsten tiles (see NCR tray MID-047).