



**CRANE**  
AEROSPACE &  
ELECTRONICS

General Technology Corporation

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505.345.5581 fax 505.343.7653

Electronics Group

**FAX Transmission**

To: DARREN MARSH From: PAT LUJAN  
 Fax: 650-926-4979 Pages: 4 TOTAL  
 Phone: \_\_\_\_\_ Date: 11.1.04  
 Re: NCMR 2037 cc: BRIGITE ESTEY

- Urgent  For Review  Please Comment  Please Reply  Please Recycle

• Comments:

ATTACHED IS NCMR WITH REWORK TRAVELER.  
 PLEASE ADVISE WHETHER YOU WOULD LIKE  
 TO SEE ~~A~~ ACTUAL SIGNATURES  
 OR E-MAIL'S STATING APPROVAL.

*Pat*

# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<b>NCMR NUMBER</b>	2037	<b>CUSTOMER RETURN</b>
<b>DATE</b>	10/11/2004	<b>RMA NUMBER</b>
<b>CUSTOMER</b>	SLAC	<b>QUANTITY RETURNED</b>
<b>CUSTOMER</b>	PAT LUJAN	<b>VENDOR DEFECT</b>
<b>VENDOR</b>	General Technology	<b>QUANTITY REJECTED</b> 3
<b>PART NUMBER</b>	LAT-DS-01646	<b>PRODUCTION</b>
<b>LOT QUANTITY</b>	3	<b>QUANTITY REJECTED</b>
<b>SALES ORDER</b>	F17200	<b>REWORK</b>
<b>PURCHASE ORDER</b>	48799	<b>QUANTITY</b>
<b>LOT NUMBER</b>		<b>PURCHASING DEFECT</b>
<b>WORK ORDER</b>	110154, 110155, 110156	<b>PURCHASING QUANTITY REJECTED</b> 3
<b>INITIATOR</b>	P. LUJAN	
<b>ASSIGNED TO</b>	PAT LUJAN	
<b>DATE REQUIRED</b>	10/11/2004	
<b>ASSIGNED TO</b>		
<b>DISCREPANCY</b>	SN's "1, 2 and 3" (Currently not identified as with SLAC numbers)	

1.) U52, fine pitch leads are bent out of compliance for coplanarity.

2.) U45, fine pitch leads are bent out of compliance for coplanarity.

3.) U3, U4, U5, U6, U54, U55, U56, U57, U58, U59, U60 and U61 the lead form of the part is causing a greater than .010 gap between the bottom of the lead foot to the bottom of the component case. The foot to case dimension varies from .012 - .014 on three parts that were checked. The drawing requires a .010 maximum bond line thickness.

Detailed information on FPGAs:

Of the six furnished devices, one of each part exhibits no lead skew or co-planarity deficiencies necessitating correction. One other of each part exhibits minor (less than 6) skewed lead and co-planarity locations, and the final part exhibit slightly more (less than 10, more than 6) skewed lead and co-planarity locations. The lead skew is such that a lead is moved off the designed center point of the device pitch, but not so far as to contact the next adjacent lead. The lead non-co-planarity is such that some leads are lower, or higher, than the majority of the leads on each side, by typically a lead thickness. Adjustments up and down are necessary to moderate the overall co-planarity of the lead array. In no instance are leads observed to be damaged.

**NOTES**

1. Customer Furnished Material
2. Further review and drawing clarification foot to body dimension is within tolerance. No further approvals are required.
3. Approval Signatures on file.

**CAUSE**  
**CAUSE**

Items 1 and 2: Customer furnished material; Parts were received in this condition.  
Unable to determine where damage occurred.

# **GENERAL TECHNOLOGY CORPORATION**

## **NONCONFORMANCE MATERIAL/RMA REPORT**

### ***CORRECTIVE ACTION***

Items 1 and 2: Rework per instructions provided on rework traveler. (GTC-009)

Item 3: Out of tolerance condition of ASIC's requires bond line of .015. Drawing LAT-DS-01646 to be changed to eliminate requirement of Thermally Conductive Adhesive under the ASIC's. Detail B to include statement requiring 50-75 % coverage of component body. A USE AS IS disposition is recommended for the out of tolerance foot to case dimension on the ASIC's

### ***FINAL DISPOSITION***

GET CUSTOMER APPROVAL

### ***Q/A APPROVAL***

Pat Lujan

### ***Q/A APPROVAL***

11/1/2004

### ***COST OF QUALITY***

# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<b>NCMR NUMBER</b>	2037	<b>CUSTOMER RETURN</b>	<input type="checkbox"/>
<b>DATE</b>	10/11/2004	<b>RMA NUMBER</b>	
<b>CUSTOMER</b>	SLAC	<b>QUANTITY RETURNED</b>	
<b>CUSTOMER CONTACT</b>	PAT LUJAN	<b>VENDOR DEFECT</b>	<input type="checkbox"/>
<b>VENDOR</b>	General Technology Corp	<b>QUANTITY REJECTED</b>	3
<b>PART NUMBER</b>	LAT-DS-01646	<b>PRODUCTION DEFECT</b>	<input type="checkbox"/>
<b>LOT QUANTITY</b>	3	<b>QUANTITY REJECTED</b>	
<b>SALES ORDER</b>	F17200	<b>REWORK REQUIRED</b>	<input type="checkbox"/>
<b>PURCHASE ORDER</b>	48796	<b>QUANTITY REWORKED</b>	
<b>LOT NUMBER</b>		<b>PURCHASING DEFECT</b>	<input checked="" type="checkbox"/>
<b>WORK ORDER</b>	110134,110155,110156	<b>PURCHASING QUANTITY REJECTED</b>	3
<b>INITIATOR</b>	P. LUJAN		
<b>ASSIGNED TO</b>	PAT LUJAN		
<b>DATE REQUIRED</b>	10/11/2004		
<b>ASSIGNED TO SIGNATURE</b>			

**DISCREPANCY** SN's "1, 2 and 3" (Currently not identified as with SLAC numbers)

- 1.) U62, fine pitch leads are bent out of compliance for coplanarity.
- 2.) U45, fine pitch leads are bent out of compliance for coplanarity.
- 3.) U3, U4, U6, U8, U34, U55, U56, U57, U58, U59, U60 and U61 the lead form of the part is causing a greater than .010 gap between the bottom of the lead foot to the bottom of the component case. The foot to case dimension varies from .012 - .014 on three parts that were checked. The drawing requires a .010 maximum bond line thickness.

Detailed information on FPGAs:  
 Of the six furnished devices, one of each part exhibits no lead skew or co-planarity deficiencies necessitating correction. One other of each part exhibits minor (less than 6) skewed lead and co-planarity locations, and the final pair exhibit slightly more (less than 10, more than 6) skewed lead and co-planarity locations. The lead skew is such that a lead is moved off the designed center point of the device pitch, but not so far as to contact the next adjacent lead. The lead non-co-planarity is such that some leads are lower, or higher, than the majority of the leads on each side, by typically a lead thickness. Adjustments up and down are necessary to moderate the overall co-planarity of the lead array. In no instance are leads observed to be damaged.

**NOTES** Customer Furnished Material

**CAUSE** Items 1 and 2: Customer furnished material; Parts were received in this condition. Unable to determine where damage occurred.  
 Item 3: As received.

# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

**CORRECTIVE ACTION**

Items 1 and 2: Rework per instructions provided on rework traveler. (BTC-009)  Item 3: Out of tolerance condition of ASIC's require bond line of .015. Drawing LAT-DS-01846 to be changed to eliminate requirement of Thermally Conductive Adhesive under the ASIC's. Detail B to include statement requiring 90- 76 % coverage of component body. A USE AS IS disposition is recommended for the out of tolerance foot to case dimension on the ASIC's
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**FINAL DISPOSITION**

GET CUSTOMER APPROVAL

**Q/A APPROVAL**

[ ]

**Q/A APPROVAL DATE**


[ ]


**COST OF QUALITY**

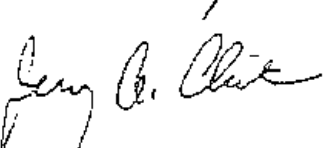
[ ]

~~APPROVED~~  
APPROVED : (SLAC)

LAT QUALITY ASSURANCE MANAGER

DARREN MARSH  11/1/04

GUNTHER HALLER  
DAQ SUBSYSTEM MANAGER  11-1-04

JERRY CLINTON  11/1/04  
LAT MANUFACTURING  
ENGINEER

### REWORK TRAVELER

SO NO: F17200      PART NO: FPGA Components (LAT-DS-03894 & 03895; 3 OF EA)      REV: N/A

ASSEMBLY NAME: (Used on LAT-DS-01646; U45 - LAT-DS-03895; U62 - LAT-DS-03894)      QTY: 6 parts

APPROVAL							
Hefkin	<i>[Signature]</i> 11-10-04	Hefkin	<i>[Signature]</i> 11-10-04	Happaban	<i>[Signature]</i> 11/1/04	Mojib	<i>[Signature]</i> 11-1-04
PREPARED BY	DATE	ENG MGR	DATE	PROD MGR	DATE	QA MGR	DATE

STEP	OPERATION	Operator Sign Off	Date	Time spent
	<p>31. NCMR 2037;                      SFPs "1, 2 and 3" (Currently not identified as with SLAC numbers)</p> <p>1) U62, fine pitch leads are bent out of compliance for coplanarity.</p> <p>2) U45, fine pitch leads are bent out of compliance for coplanarity.</p> <p>3) <del>U3, U4, U5, U6, U54, U55, U56, U57, U58, U59, U60 and U61 the lead form of the part is causing a greater than .010 gap between the bottom of the lead foot to the bottom of the component case. The foot to case dimension varies from .012-.014 on three parts that were checked. The drawing requires a .010 maximum bond line thickness.</del></p> <p><b>CORRECTIVE ACTION:</b>                      Items 1 and 2: Rework per instructions provided on rework traveler. (GTC-009).</p> <p>Some leads of Customer Furnished components are bent, skewed, out of pitch and coplanarity. Straighten leads to as close an optimal condition, as possible -- no dimensional constraints required except alignment with PWB pads for indicated device installation location.</p>			
1	Record SNe of FPGAs:			
2	Straighten leads of devices using component tweezers, under microscope.			
3	Operator inspection (associate in SMT area).			
4	CSI/NCMR closeout.			

# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<i>NCMR NUMBER</i>	2078	<i>CUSTOMER RETURN</i>
<i>DATE</i>	11/11/2004	<i>RMA NUMBER</i>
<i>CUSTOMER</i>	SLAC	<i>QUANTITY RETURNED</i>
<i>CUSTOMER</i>	Pat Lujan	<i>VENDOR DEFECT</i>
<i>VENDOR</i>	General Technology	<i>QUANTITY REJECTED</i>
<i>PART NUMBER</i>	LAT-DS-02388	<i>PRODUCTION</i>
<i>LOT QUANTITY</i>	3	<i>QUANTITY REJECTED</i>
<i>SALES ORDER</i>	F17300	<i>REWORK</i>
<i>PURCHASE ORDER</i>	48800	<i>QUANTITY</i>
<i>LOT NUMBER</i>		<i>PURCHASING DEFECT</i>
<i>WORK ORDER</i>	110393.110394.110432	<i>PURCHASING QUANTITY REJECTED</i>
<i>INITIATOR</i>	Pat Lujan	
<i>ASSIGNED TO</i>	Pat Lujan	
<i>DATE REQUIRED</i>	11/11/2004	
<i>ASSIGNED TO</i>	Pat Lujan	
<i>DISCREPANCY</i>	PWA- LAT-DS-02388: Schottky Diode PN SSR1040GTXV Item 19 of BOM LAT-DS0391-55 The component referenced exhibits solder contacting the component body.  SN 1 D-1 SN 2 D-3, D-4, D-8, D-19 SN 3 D-3, D8	
<i>NOTES</i>	Further investigation revealed that Vendor Supplied parts were tinned and also had evidence of solder on part body. This condition was found to be acceptable per MIL-PRF-19500.	
<i>CAUSE</i>	Parts were initially rejected post SMT and reflow for inadequate heel fillet. During the rework process solder came in contact with the component body.	
<i>CAUSE</i>		
<i>CORRECTIVE ACTION</i>	This has been determined to be a Process Indicator Condition and not a Defect. This will be monitored by on-site source inspector for abnormal variation in future run.	
<i>FINAL DISPOSITION</i>	NO DEFECT	
<i>Q/A APPROVAL</i>	Pat Lujan E-Mails on File	
<i>Q/A APPROVAL</i>	11/12/2004	

**Lujan, Patricio C**

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**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C  
**Cc:**  
**Subject:** RE: NCMR 2078  
**Attachments:**

**Sent:** Fri 11/12/2004 11:51 AM

Approved.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

**From:** Lujan, Patricio C  
**Sent:** Friday, November 12, 2004 9:32 AM  
**To:** Haller, Gunther; Nelson, David J.; Marsh, Darren S.  
**Cc:** Estey, Brigitte  
**Subject:** NCMR 2078

Attached is NCMR for your approvals.



# GENERAL TECHNOLOGY CORPORATION

## NONCONFORMANCE MATERIAL/RMA REPORT

<b>NCMR NUMBER</b>	2082	<b>CUSTOMER RETURN</b>
<b>DATE</b>	11/12/2004	<b>RMA NUMBER</b>
<b>CUSTOMER</b>	SLAC	<b>QUANTITY RETURNED</b>
<b>CUSTOMER</b>		<b>VENDOR DEFECT</b>
<b>VENDOR</b>	General Technology	<b>QUANTITY REJECTED</b>
<b>PART NUMBER</b>	LAT-DS-01646	<b>PRODUCTION</b>
<b>LOT QUANTITY</b>	1	<b>QUANTITY REJECTED</b>
<b>SALES ORDER</b>	F17200	<b>REWORK</b>
<b>PURCHASE ORDER</b>	48799	<b>QUANTITY</b>
<b>LOT NUMBER</b>		<b>PURCHASING DEFECT</b>
<b>WORK ORDER</b>	110155	<b>PURCHASING QUANTITY REJECTED</b>
<b>INITIATOR</b>	Pat Lujan	
<b>ASSIGNED TO</b>	GTC	
<b>DATE REQUIRED</b>	11/15/2004	
<b>ASSIGNED TO</b>		
<b>DISCREPANCY</b>	SN 2: PWA dropped from an approximate distance of 36". PWB sustained damage (dings) along edges of board. Photographs will be e-mailed and are a part of this NCMR.	
<b>NOTES</b>	Re-inspection at 10X power did not reveal any fractured solder joints. Interim Disposition: OK to proceed to Step 14-ICT, then submit test results to QA for review. (If results are acceptable work will be allowed to proceed to step 21-Func. Test before a Final Disposition is made).	
<b>CAUSE</b>	Improper handling.	
<b>CORRECTIVE ACTION</b>		
<b>FINAL DISPOSITION</b>	GET CUSTOMER APPROVAL	
<b>Q/A APPROVAL</b>		
<b>Q/A APPROVAL</b>		
<b>COST OF QUALITY</b>		

**Lujan, Patricio C**

**From:** Haller, Gunther **Sent:** Sat 11/13/2004 3:26 PM  
**To:** Lujan, Patricio C; Estey, Brigitte; Marsh, Darren S.; Nelson, David J.; Sapozhnikov, Leonid  
**Cc:** Haller, Gunther  
**Subject:** RE: NCMR's 2081, 2082, 2083  
**Attachments:**

This is what we need to do:

- leave all 3 NCR's open until we can do the functional testing, which can only be done after loading is complete
- proceed with the original plan and continue finishing assembly of the modules.
- there is some risk on using some additional flight components, but the risk is acceptable.

So continue assembly on Monday morning.

I think Darren needs to concur.

- what we will do while the assembly is proceeding
  - investigate what can be done to "repair" the dings at a later stage
  - investigate the risk on potential shorts between planes and how it can be mitigated
  - investigate whether a impedance test can be done to establish whether there are already shorts. Instructions need to be written up to perform such a test (using a multi-meter)

Thanks for your help.

Regards  
Gunther

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**From:** Lujan, Patricio C  
**Sent:** Sat 11/13/2004 10:54 AM  
**To:** Estey, Brigitte; Haller, Gunther; Marsh, Darren S.; Nelson, David J.  
**Subject:** NCMR's 2081, 2082, 2083

The following defects were discovered inspecting at 10X power. One part was mounted upside down, and two parts had unsoldered connections. Of the two unsoldered connections one was tombstoned and the other had insufficient solder. No fractured solder joints or additional PWB damage was discovered. I would like some input on possibly repairing the more serious dings on the PWB. This could be accomplished at a later date.

CCA #1-611;

R418. Non-soldered connection.

CCA #2-614; No defects detected

CCA #3-612;

R664. Part mounted upside down.

R44. Non-soldered connection.

Gary Hefkin and Vishwa Gaundar from GTC were instrumental in providing the necessary support to accomplish this task.

**Lujan, Patricio C**

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**From:** Marsh, Darren S.

**Sent:** Mon 11/15/2004 4:23 PM

**To:** Lujan, Patricio C

**Cc:**

**Subject:** RE: NCMR's 2081, 2082, 2083

**Attachments:**

Will GTC start working a corrective action?

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

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**From:** Lujan, Patricio C

**Sent:** Monday, November 15, 2004 2:00 PM

**To:** Marsh, Darren S.; Estey, Brigitte; Haller, Gunther; Nelson, David J.

**Subject:** NCMR's 2081, 2082, 2083

These are the NCMR's with a interim disposition.

Pat



General Technology Corporation

A Crane Co. Company



ELECTRONICS • MICROELECTRONICS • ENGINEERING • SYSTEMS

GTC-0505-MKM

Date: 1-21-05

Pat Lujan  
SLAC Field Office  
1450 Mission Ave. NE  
Albuquerque, NM 87107

Subject: P/N LAT-DS-01646 (S/N's 1, 2, 3)

Reference: NCMR's 2081, 2082 & 2083

**Finding:** Customer finding - SN 1, 2 & 3  
PWA dropped from an approximate distance of 36". PWB sustained damage (dings) along edges of board. Photographs were e-mailed to SLAC for evaluation.

**Immediate Correction(s):** Evaluate the condition of the board edges, re-inspect at 10X magnification 100% for any and all damage possibly caused to components themselves; no other damage found. Reference GTC rework traveler attached for PWB edge repair.

**Root Cause:** The operator that was transferring the CCAs to the dry room, to be stored over the weekend, made a bad decision and chose an inappropriate material handling method. This person used a flat tray with slots (to be used for PWBs only) with the CCAs in an ESD bag and laying on top of the tray. The ESD bags created a slippery exterior thus allowing the CCAs to slip off and fall to the floor.



**General Technology Corporation**

A Crane Co. Company



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**Root Cause Preventive Action:**

Immediately, engineering, quality and the work cell members convened to make everyone aware of this improper handling method and require no such further handling of that sort. A new rack, with large flat trays, are now in place which will not allow the CCAs to fall off and are enclosed within the rack safely. When necessary, each tray will be pulled out to get the CCA to be worked on. The tray is then to be slid back in. to the rack. Effective 11-12-04.

I apologize for any inconvenience this may have caused SLAC, but I am confident our root cause preventive action will prevent recurrences of this nature.

Respectfully,

A handwritten signature in black ink, appearing to read "Michael Mora", written in a cursive style.

Michael Mora

Quality Assurance Manager

Ph: 505-345-5591 x3018

Fax: 505-345-0788e-mail:

[mora@gt-corp.com](mailto:mora@gt-corp.com)

## REWORK TRAVELER

SO NO: F17200	PART NO: LAT-DS-01646	REV: 54
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ASSEMBLY NAME: CCA, TEM	QTY: 2
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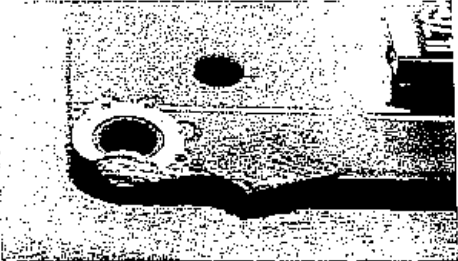



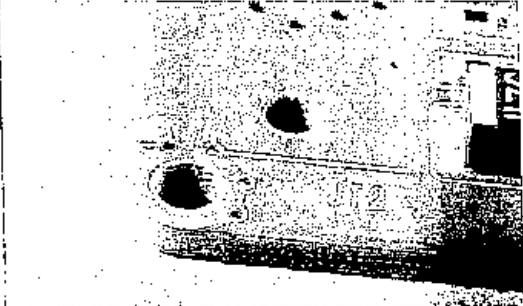
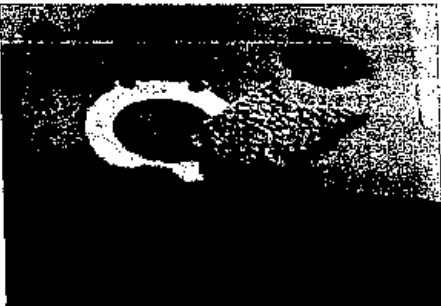

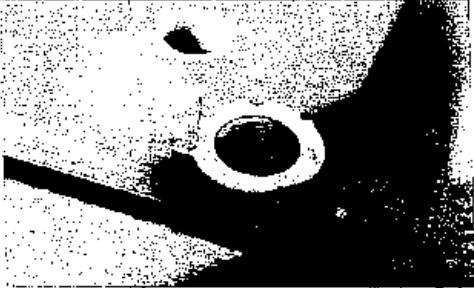
APPROVAL							
HEFKIN	P. LUJAN	HANRAHAN	MORA				
PREPARED BY	DATE	CSI	DATE	PROD	DATE	QA	DATE

STEP	OPERATION	Operator Sign Off.	Date	Time spent
	<i>THIS REWORK TRAVELER APPLIES COATING MATERIAL TO LOCATIONS ON CORNERS OF CCAS DAMAGED BY FALLING OFF A STORAGE TRAY. REWORK AUTHORIZED VIA EMAIL FROM B. ESTEY, DATED 12/12/04; 4:21 pm (ATTACHED)</i>			
1	Serial numbers: #2 (614), #3 (612) REFERENCE NCMR # 2082 AND # 2083.			
2	TOOLS AND MATERIALS: <b>MIXING CONTAINER - PLASTIC, METAL, OR GLASS</b> <b>MIXING UTENSIL - PLASTIC, METAL, OR GLASS</b> <b>SCALE - GRAM, CALIBRATED</b> <b>PLIERS – METAL, NEEDLE, SMOOTH JAW SURFACE</b>			
3	<p>MIX A SMALL AMOUNT OF THE TWO PARTS OF COATING MATERIAL, ARATHANE-5750, FOR BRUSH APPLICATION TO DAMAGED LOCATIONS ON EACH CCA. REFER TO PICTURES ON FOLLOWING PAGE. USE THE FOLLOWING RATIO TO MIX THE MATERIAL:</p> <p>PART A      18 PARTS BY WEIGHT    <b>EXAMPLE: (0.54 GRAMS)</b></p> <p>PART B      100 PARTS BY WEIGHT            <b>(3.00 GRAMS)</b></p> <p>MIX SLOWLY, BY HAND, TO MINIMIZE AIR ENTRAPMENT.</p> <p>POT LIFE IS APPROXIMATELY TWO (2) HOURS).</p> <p>LET MIXED MATERIAL STAND FOR HALF AN HOUR TO RELEASE ANY ENTRAPPED AIR.</p> <p><b>RECORD MIXTURE AMOUNTS, MATERIAL LOT/BATCH CODE, AND EXPIRATION DATE, BELOW:</b></p> <p>AMOUNTS MIXED: PART A: _____ PART B: _____</p> <p>CODE: _____ EXPIRATION DATE: _____</p>			

## REWORK TRAVELER

SO NO: F17200	PART NO: LAT-DS-01646	REV: 54
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ASSEMBLY NAME: CCA, TEM	QTY: 2
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STEP	OPERATION	Operator Sign Off.	Date	Time spent
	<p><i>THIS REWORK TRAVELER APPLIES COATING MATERIAL TO LOCATIONS ON CORNERS OF CCAS DAMAGED BY FALLING OFF A STORAGE TRAY. REWORK AUTHORIZED VIA EMAIL FROM B. ESTEY, DATED 12/12/04; 4:21 pm (ATTACHED)</i></p>			
REF	<p>PICTURES OF DAMAGE TO SN #2 (614)...</p> <div style="display: flex; justify-content: space-around;">   </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;">   </div> <p>NOTE DEFORMED CORNER PADS.</p>			
REF cont.	<p>PICTURES OF DAMAGE TO SN #3 (612)...</p> <div style="display: flex; justify-content: space-around;">   </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;">   </div> <p>NOTE DEFORMED CORNER PADS.</p>			

## REWORK TRAVELER

SO NO: F17200	PART NO: LAT-DS-01646	REV: 54
---------------	-----------------------	---------

ASSEMBLY NAME: CCA, TEM	QTY: 2
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STEP	OPERATION	Operator Sign Off.	Date	Time spent
	<i>THIS REWORK TRAVELER APPLIES COATING MATERIAL TO LOCATIONS ON CORNERS OF CCAS DAMAGED BY FALLING OFF A STORAGE TRAY. REWORK AUTHORIZED VIA EMAIL FROM B. ESTEY, DATED 12/12/04; 4:21 pm (ATTACHED)</i>			
4	<p>WHEN DEFORMED PAD IS EVIDENT, CAREFULLY PRESS IT BACK DOWN INTO NORMAL POSITION. USE PLIERS FOR MOVING THE PAD METAL.</p> <p>USE A BRUSH TO APPLY A SMALL AMOUNT OF COATING TO NOTED DAMAGED LOCATIONS. COVER EXPOSED FIBERS, AND ADJACENT AREAS UP TO 1/4" AWAY FROM DAMAGED SURFACES</p> <p>ALLOW COATING TO AIR-DRY, OBSERVING FOR DRIPS, FOR HALF AN HOUR. REMOVE EXCESS DRIP COATING DURING THIS TIME.</p>			
5	<p>CURE COATING DURING BAKE CYCLE PERFORMED FOR CURING STAKING MATERIALS.</p> <p>RECORD CURE DATE, TEMPERATURE, AND VSTART/STOP TIMES BELOW:</p> <p>DATE: _____ TEMP: _____ START: _____ STOP: _____</p>			
6	INSPECTION			
7	CSI			



# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<b>NCMR NUMBER</b>	2089	<b>CUSTOMER RETURN</b>	<input type="checkbox"/>
<b>DATE</b>	11/17/2004	<b>RMA NUMBER</b>	
<b>CUSTOMER</b>	SLAC	<b>QUANTITY RETURNED</b>	
<b>CUSTOMER CONTACT</b>	David Tarkington	<b>VENDOR DEFECT</b>	<input type="checkbox"/>
<b>VENDOR</b>	SLAC	<b>QUANTITY REJECTED</b>	
<b>PART NUMBER</b>	MAX724ECK	<b>PRODUCTION DEFECT</b>	<input type="checkbox"/>
<b>LOT QUANTITY</b>	200	<b>QUANTITY REJECTED</b>	
<b>SALES ORDER</b>	F17300	<b>REWORK REQUIRED</b>	<input type="checkbox"/>
<b>PURCHASE ORDER</b>	48800	<b>QUANTITY REWORKED</b>	
<b>LOT NUMBER</b>		<b>PURCHASING DEFECT</b>	<input type="checkbox"/>
<b>WORK ORDER</b>	110393, 110394, 110432	<b>PURCHASING QUANTITY REJECTED</b>	
<b>INITIATOR</b>	Pat Lujan		
<b>ASSIGNED TO</b>	SLAC		
<b>DATE REQUIRED</b>	11/19/2004		
<b>ASSIGNED TO SIGNATURE</b>	David Tarkington		
<b>DISCREPANCY</b>	Parts are not formed properly; unable to assemble. Ref. LAT-DS-02388 U6-U8, U10, U15, U17, U18 See photo.		
<b>NOTES</b>	Repaired per instructions from David Tarkington.		
<b>CAUSE</b>	As supplied by SLAC		
<b>CORRECTIVE ACTION</b>	Revise drawing to clarify use of these components		
<b>FINAL DISPOSITION</b>	REPAIR		
<b>Q/A APPROVAL</b>	Pat Lujan (E-Mails on file)		
<b>Q/A APPROVAL DATE</b>	11/20/2004		
<b>COST OF QUALITY</b>			

# GENERAL TECHNOLOGY CORPORATION

## NONCONFORMANCE MATERIAL/RMA REPORT

<i>NCMR NUMBER</i>	<input type="text" value="2100"/>	<i>CUSTOMER RETURN</i>	<input type="checkbox"/>
<i>DATE</i>	<input type="text" value="11/24/2004"/>	<i>RMA NUMBER</i>	<input type="text"/>
<i>CUSTOMER</i>	<input type="text" value="SLAC"/>	<i>QUANTITY RETURNED</i>	<input type="text"/>
<i>CUSTOMER CONTACT</i>	<input type="text"/>	<i>VENDOR DEFECT</i>	<input type="checkbox"/>
<i>VENDOR</i>	<input type="text"/>	<i>QUANTITY REJECTED</i>	<input type="text"/>
<i>PART NUMBER</i>	<input type="text" value="LAT-DS-02338"/>	<i>PRODUCTION DEFECT</i>	<input type="checkbox"/>
<i>LOT QUANTITY</i>	<input type="text" value="3"/>	<i>QUANTITY REJECTED</i>	<input type="text"/>
<i>SALES ORDER</i>	<input type="text" value="F17300"/>	<i>REWORK REQUIRED</i>	<input type="checkbox"/>
<i>PURCHASE ORDER</i>	<input type="text" value="48800"/>	<i>QUANTITY REWORKED</i>	<input type="text"/>
<i>LOT NUMBER</i>	<input type="text"/>	<i>PURCHASING DEFECT</i>	<input type="checkbox"/>
<i>WORK ORDER</i>	<input type="text" value="110393, 110394, 110432"/>	<i>PURCHASING QUANTITY REJECTED</i>	<input type="checkbox"/>
<i>INITIATOR</i>	<input type="text" value="Pat Lujan"/>		
<i>ASSIGNED TO</i>	<input type="text" value="David Tarkington"/>		
<i>DATE REQUIRED</i>	<input type="text" value="11/29/2004"/>		
<i>ASSIGNED TO SIGNATURE</i>	<input type="text"/>		
<i>DISCREPANCY</i>	Mounting thru holes for F/N 36 (MAX724ECK) 7 places is .124 dia. Should be approximately .156. Diameter should provide clearance for 6-32 cap screw (major dia. = .135)		
<i>NOTES</i>			
<i>CAUSE</i>	Design Error		
<i>CORRECTIVE ACTION</i>			
<i>FINAL DISPOSITION</i>	<input type="text" value="GET CUSTOMER APPROVAL"/>		
<i>Q/A APPROVAL</i>	<input type="text" value="Pat Lujan (e-mails on file)"/>		
<i>Q/A APPROVAL DATE</i>	<input type="text" value="11/28/2004"/>		
<i>COST OF QUALITY</i>	<input type="text"/>		

 This message was sent with high importance.

**Lujan, Patricio C**

**From:** Marsh, Darren S. **Sent:** Sun 11/28/2004 12:59 PM  
**To:** Estey, Brigitte; Lujan, Patricio C; Tarkington, David; Nelson, David J.; Haller, Gunther  
**Cc:** Liew, Y.C.; Patterson, Russell  
**Subject:** RE: NCMR2100  
**Attachments:**

Approved.

Darren

---

**From:** Estey, Brigitte  
**Sent:** Fri 11/26/2004 11:14 AM  
**To:** Lujan, Patricio C; Tarkington, David; Marsh, Darren S.; Nelson, David J.; Haller, Gunther  
**Cc:** Liew, Y.C.; Patterson, Russell  
**Subject:** RE: NCMR2100

Pat,

You can use Dave T.'s attachment as disposition for NCMR2089 and NCMR2100. I believe all the information is there for GTC to proceed. Please review. Gunther/Dave N., and Darren. Please provide your concurrence to this disposition as provided by Dave T. for NCMRs 2089 and 2100.

Thanks,  
Brigitte

---

**From:** Lujan, Patricio C  
**Sent:** Wed 11/24/2004 3:12 PM  
**To:** Tarkington, David; Estey, Brigitte; Marsh, Darren S.; Nelson, David J.; Haller, Gunther  
**Cc:** Liew, Y.C.; Patterson, Russell  
**Subject:** RE: NCMR2100

I wrote 2 NCMR's one for the IC (NCMR2089) and one for the PWA (NCMR2100).

Pat

---

**From:** Tarkington, David  
**Sent:** Wed 11/24/2004 3:18 PM  
**To:** Lujan, Patricio C; Estey, Brigitte; Marsh, Darren S.; Nelson, David J.; Haller, Gunther  
**Cc:** Liew, Y.C.; Patterson, Russell  
**Subject:** RE: NCMR2100

Pat,  
Part affected is 02388 (typo on the NCMR).  
See attached for lead trimming and hardware change details.  
Dave T.

---

**From:** Lujan, Patricio C  
**Sent:** Wednesday, November 24, 2004 1:55 PM  
**To:** Estey, Brigitte; Tarkington, David; Marsh, Darren S.; Nelson, David J.; Haller, Gunther  
**Subject:** NCMR2100

**Lujan, Patricio C**

**From:** Haller, Gunther **Sent:** Thu 1/20/2005 9:34 AM  
**To:** Lujan, Patricio C; Marsh, Darren S.  
**Cc:** Estey, Brigitte; Nelson, David J.; Tarkington, David  
**Subject:** RE: NCMR2100  
**Attachments:**

approved

Dr. Gunther Haller

Stanford University/SLAC

MS 96

P.O. 20450

Stanford, CA 94309

T: (650) 926-4257

F: (650) 926-2923

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**From:** Lujan, Patricio C  
**Sent:** Thursday, January 20, 2005 7:44 AM  
**To:** Haller, Gunther; Marsh, Darren S.  
**Cc:** Estey, Brigitte; Nelson, David J.; Tarkington, David  
**Subject:** FW: NCMR2100  
**Importance:** High

Gunther/Darren,

I do not have an e-mail from you approving these NCMR's. Please send me an e-mail approving these.

Thank you,

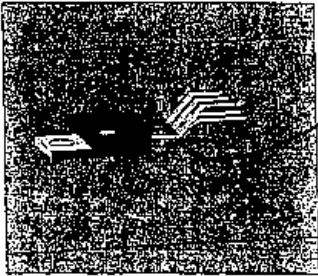
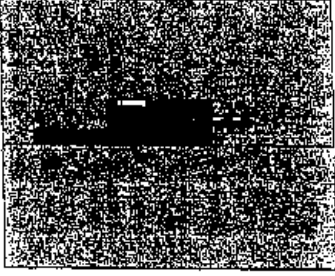
Pat

# REWORK TRAVELER

PO NO: F17300	PART NO: LAT-DS-02388	REV: 55
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ASSEMBLY NAME: CCA, LAT TOWER POWER SUPPLY (TPS)	QTY: 3
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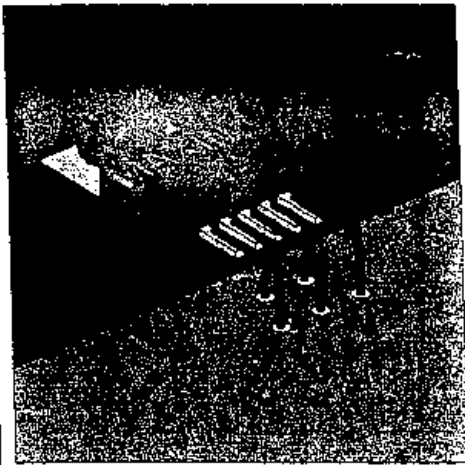
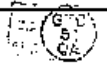

APPROVAL							
HEFKIN	12/1/04	P. LUJAN	12.1.04	HANRAHAN	12/1/04	MORA	12-1-04
PREPARED BY	DATE	CUSTOMER	DATE	PROD MGR	DATE	QA MGR	DATE

STEP	APPROVED RESOLUTION FOR OPERATION NCMR 2089. 12/16/04	Operator Sign Off.	Date	Time spent
1	This Rework Traveler is applicable to unit Serial numbers: #1, #2, #3.			
2	<p>Clip leads of seven (7) MAX724ECK devices to obtain a 0.140" lead length, 5 places. Clamp each lead to be clipped using flat-faced needle nose electronics pliers. CONTACT SLAC QAR FOR WITNESS OF WORK. MINIMUM.</p> <p style="text-align: center;">CUT AT 1<sup>ST</sup> BEND</p> <div style="display: flex; justify-content: space-around;">   </div>	GTC	GTC	GTC
3	<p>Cut five (5) wires, M22759/11-24-9, to fit locations of five leads (approximately one inch long, rough length). Strip insulation using HOTWEEZERS. Strip first end, for lap solder termination to device leads, to 1/8" (.125"). Trim other end to fit installation location (length TBD = 2/16") and strip insulation (Length TBD = 1/8") to fit board thickness with lead protrusion of 0.031" to 0.047"</p>	SS 2002	12/1/04	
4	<p>Mount IC device to TPS Heatsink frames as detailed in CAA LAT-DS-02388, Step 16, to include thermal conductive adhesive applied to surfaces of devices, and use of smaller hardware: Installation hardware changed from #6 to #4 size as follows:                      NAS1352N04-6 – SCREW, NAS1149CN432R – WASHER, NAS671C4 – NUT.</p> <ul style="list-style-type: none"> <li>• TORQUE SCREW/NUT 60 IN-OZ. (56 to 70)</li> <li>• RECORD TOOL NUMBER (GTC-XXX) AND CAL DUE DATE ON WORK ORDER.</li> </ul>	SS 2002	12/2/04	

# REWORK TRAVELER

PO NO: F17300	PART NO: LAT-DS-02388	REV: 55
---------------	-----------------------	---------

ASSEMBLY NAME: CCA, LAT TOWER POWER SUPPLY (TPS)	QTY: 3
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STEP	OPERATION	Operator Sign Off.	Date	Time spent
	<i>This document outlines modification to components U6, U7, U8, U10, U15, U17, and U18 – MAXIM MAX724ECK, and subsequent installation to the CCA. The modification, prepared as applicable to comply with IPC-7721, Section 6.1, entails lead clipping, to remove non-applicable 'as supplied' lead orientation, 'hook-up' wire preparation, mechanical installation with smaller hardware (#4, vs. #6), device lead termination, PCB and lead termination, flux cleaning, inspection, subsequent bonding of the devices using RTV, and final inspection of the rework.</i>			
5	Solder terminate wires to device and PCB. Keep wires short, but do not violate bend radius limits (no sharp bends).  		<del>12/4/04</del> 12/4/04	
6	Locally clean each solder (35 places) joint with Isopropyl Alcohol.	JS 2002	12/6/04	
7	INSPECTION NCMR #2116		12/7/04	
8	CUSTOMER SOURCE INSPECTION		12/7/04	
9	(Task occurs when rtv material is being applied to lead assemblies installed after IGT). APPLY RTV ADHESIVE MATERIAL, DC6-1104, TO COVER THE WIRES AS A GROUP, FROM THE PCB TO THE COMPONENT BODY. <i>AFTER FUNCTIONAL TEST. 12/10/04</i>	<del>11</del> <del>12</del> <del>13</del>	<del>12/10/04</del> <del>12/10/04</del> <del>12/10/04</del>	
10	INSPECTION			
11	CUSTOMER SOURCE INSPECTION			

Performance Products  
Traveler

# GENERAL TECHNOLOGY CORPORATION

## NONCONFORMANCE MATERIAL/RMA REPORT

<p><b>NCMR NUMBER</b>      <input type="text" value="2113"/></p> <p><b>DATE</b>                    <input type="text" value="12/6/2004"/></p> <p><b>CUSTOMER</b>            <input type="text" value="SLAC"/></p> <p><b>CUSTOMER CONTACT</b>   <input type="text" value="Pat Lujan"/></p> <p><b>VENDOR</b>                <input type="text"/></p> <p><b>PART NUMBER</b>        <input type="text" value="LAT-DS-02588"/></p> <p><b>LOT QUANTITY</b>       <input type="text" value="3"/></p> <p><b>SALES ORDER</b>        <input type="text"/></p> <p><b>PURCHASE ORDER</b>   <input type="text"/></p> <p><b>LOT NUMBER</b>         <input type="text"/></p> <p><b>WORK ORDER</b>        <input type="text"/></p> <p><b>INITIATOR</b>            <input type="text" value="Pat Lujan"/></p> <p><b>ASSIGNED TO</b>         <input type="text" value="David Tarkington"/></p> <p><b>DATE REQUIRED</b>        <input type="text" value="12/7/2004"/></p> <p><b>ASSIGNED TO SIGNATURE</b>   <input type="text"/></p>	<p><b>CUSTOMER RETURN</b>      <input type="checkbox"/></p> <p><b>RMA NUMBER</b>            <input type="text"/></p> <p><b>QUANTITY RETURNED</b>   <input type="text"/></p> <p><b>VENDOR DEFECT</b>        <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b>   <input type="text"/></p> <p><b>PRODUCTION DEFECT</b>   <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b>   <input type="text"/></p> <p><b>REWORK REQUIRED</b>       <input checked="" type="checkbox"/></p> <p><b>QUANTITY REWORKED</b>   <input type="text" value="3"/></p> <p><b>PURCHASING DEFECT</b>    <input type="checkbox"/></p> <p><b>PURCHASING QUANTITY REJECTED</b>   <input type="text"/></p>
<p><b>DISCREPANCY</b>      <input style="width: 100%;" type="text" value="Wire length on drawing is 1.50 inches. This dimension is oversize based on the location of the pads where the wire will be lap soldered."/></p>	
<p><b>NOTES</b>                    <input style="width: 100%; height: 40px;" type="text"/></p>	
<p><b>CAUSE</b>                    <input style="width: 100%;" type="text" value="Drawing Error"/></p>	
<p><b>CORRECTIVE ACTION</b>   <input style="width: 100%;" type="text" value="Revise drawing based on information obtained from GTC. GTC manufacturing engineering will provide wire length dimensions."/></p>	
<p><b>FINAL DISPOSITION</b>    <input type="text" value="REWORK"/></p>	
<p><b>Q/A APPROVAL</b>           <input type="text" value="Pat Lujan (e-mails on file)"/></p>	
<p><b>Q/A APPROVAL DATE</b>    <input type="text" value="12/6/2004"/></p>	
<p><b>COST OF QUALITY</b>        <input type="text"/></p>	

**Lujan, Patricio C**

---

**From:** Marsh, Darren S. **Sent:** Mon 12/6/2004 5:27 PM  
**To:** Lujan, Patricio C; Haller, Gunther  
**Cc:** Sapozhnikov, Leonid; Estey, Brigitte; Nelson, David J.; Tarkington, David  
**Subject:** RE: Cable Assembly  
**Attachments:**

Approved.

D. Tarkington, please ensure the drawing gets updated once you receive the required information.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

**From:** Lujan, Patricio C  
**Sent:** Monday, December 06, 2004 4:26 PM  
**To:** Haller, Gunther; Marsh, Darren S.  
**Cc:** Sapozhnikov, Leonid; Estey, Brigitte; Nelson, David J.; Tarkington, David  
**Subject:** RE: Cable Assembly

Gunther/Darren

Wires have been tinned, stripped and cut to the 1.50 dimension. GTC must now repeat that process for each wire. If the intent was to cut to length at assembly; that should have been so noted on the drawing. This is a



separate drawing and the possibility for it to be manufactured by someone other than the PWA assembler necessitates more detail. Please review and reply stating you approve the disposition of NCMR 2113.

Regards,

Pat

---

**From:** Haller, Gunther  
**Sent:** Mon 12/6/2004 4:46 PM  
**To:** Lujan, Patricio C; Tarkington, David; Estey, Brigitte; Nelson, David J.  
**Cc:** Marsh, Darren S.  
**Subject:** RE: Cable Assembly

Just to make sure, we specify the length so one can trim the wires to the appropriate length. So the wires should always be longer of equal length than required, not shorter.

Dr. Gunther Haller

Stanford University/SLAC

MS 96


P.O. 20450

Stanford, CA 94309

T: (650) 926-4257

F: (650) 926-2923

**From:** Lujan, Patricio C  
**Sent:** Monday, December 06, 2004 3:05 PM  
**To:** Tarkington, David; Estey, Brigitte; Nelson, David J.  
**Cc:** Marsh, Darren S.; Haller, Gunther  
**Subject:** Cable Assembly



LAT-DS-02588 calls out a 1.50 inch wire length. This dimension is too long and we probably need 4 different lengths based on the location on the board. There are 4 rows of pads where the wires are lap soldered.

Pat

You forwarded this message on 1/19/2005 8:59 AM.

**Lujan, Patricio C**

**From:** Haller, Gunther **Sent:** Mon 12/6/2004 5:28 PM  
**To:** Lujan, Patricio C; Marsh, Darren S.  
**Cc:** Sapozhnikov, Leonid; Estey, Brigitte; Nelson, David J.; Tarkington, David  
**Subject:** RE: Cable Assembly  
**Attachments:**

Approved.

So you are going ahead in cutting the wires to the appropriate length and letting us know what lengths you prefer?

Gunther

Dr. Gunther Haller

Stanford University/SLAC

MS 96

P.O. 20450

Stanford, CA 94309

T: (650) 926-4257

F: (650) 926-2923

**From:** Lujan, Patricio C  
**Sent:** Monday, December 06, 2004 4:26 PM  
**To:** Haller, Gunther; Marsh, Darren S.  
**Cc:** Sapozhnikov, Leonid; Estey, Brigitte; Nelson, David J.; Tarkington, David  
**Subject:** RE: Cable Assembly

Gunther/Darren

Wires have been tinned, stripped and cut to the 1.50 dimension. GTC must now repeat that process for each wire. If the intent was to cut to length at assembly; that should have been so noted on the drawing. This is a separate drawing and the possibility for it to be manufactured by someone other than the PWA assembler

necessitates more detail. Please review and reply stating you approve the disposition of NCMR 2113.

Regards,

Pat

---

**From:** Haller, Gunther  
**Sent:** Mon 12/6/2004 4:46 PM  
**To:** Lujan, Patricio C; Tarkington, David; Estey, Brigitte; Nelson, David J.  
**Cc:** Marsh, Darren S.  
**Subject:** RE: Cable Assembly

Just to make sure, we specify the length so one can trim the wires to the appropriate length. So the wires should always be longer of equal length than required, not shorter.

Dr. Gunther Haller

Stanford University/SLAC

MS 96

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F: (650) 926-2923

---

**From:** Lujan, Patricio C  
**Sent:** Monday, December 06, 2004 3:05 PM  
**To:** Tarkington, David; Estey, Brigitte; Nelson, David J.  
**Cc:** Marsh, Darren S.; Haller, Gunther  
**Subject:** Cable Assembly

LAT-DS-02588 calls out a 1.50 inch wire length. This dimension is too long and we probably need 4 different lengths based on the location on the board. There are 4 rows of pads where the wires are lap soldered.

Pat

**Lujan, Patricio C**

---

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C  
**Cc:**  
**Subject:** RE: Time Sheet  
**Attachments:**

**Sent:** Tue 12/7/2004 3:51 PM

Thanks for asking.

I am delegating my MRB approval authority to you during my absence.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

---

**From:** Lujan, Patricio C  
**Sent:** Tuesday, December 07, 2004 2:42 PM  
**To:** Marsh, Darren S.  
**Subject:** RE: Time Sheet

Will you designate someone for MRB approval.

Pat


# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<p><b>NCMR NUMBER</b> <input type="text" value="2118"/></p> <p><b>DATE</b> <input type="text" value="12/7/2004"/></p> <p><b>CUSTOMER</b> <input type="text" value="SLAC"/></p> <p><b>CUSTOMER CONTACT</b> <input type="text"/></p> <p><b>VENDOR</b> <input type="text" value="General Technology Corp"/></p> <p><b>PART NUMBER</b> <input type="text" value="LAT-DS-02338"/></p> <p><b>LOT QUANTITY</b> <input type="text" value="3"/></p> <p><b>SALES ORDER</b> <input type="text" value="F17300"/></p> <p><b>PURCHASE ORDER</b> <input type="text" value="48800"/></p> <p><b>LOT NUMBER</b> <input type="text"/></p> <p><b>WORK ORDER</b> <input type="text" value="110393, 110394, 110432"/></p> <p><b>INITIATOR</b> <input type="text"/></p> <p><b>ASSIGNED TO</b> <input type="text" value="Gary Hefkin"/></p> <p><b>DATE REQUIRED</b> <input type="text" value="12/8/2004"/></p> <p><b>ASSIGNED TO SIGNATURE</b> <input type="text"/></p> <p><b>DISCREPANCY</b> <input type="text" value="Damaged insulation/exposed wire."/></p> <p><b>NOTES</b> <input type="text" value="Reference NCMR 2089&lt;br/&gt;Part of the repair process is to encapsulate the jumper wires."/></p> <p><b>CAUSE</b> <input (cut,="" and="" damaged="" exposing="" insulation="" jumper="" long="" strip="" tin)="" type="text" value="During preparation of 1/2" was="" wire."="" wire;=""/></p> <p><b>CORRECTIVE ACTION</b> <input type="text" value="On the following 19 units all wire will be inspected for this condition prior to solder."/></p> <p><b>FINAL DISPOSITION</b> <input type="text" value="USE AS IS"/></p> <p><b>Q/A APPROVAL</b> <input type="text" value="Pat Lujan (e-mails on file)"/></p> <p><b>Q/A APPROVAL DATE</b> <input type="text" value="12/8/2004"/></p> <p><b>COST OF QUALITY</b> <input type="text"/></p>	<p><b>CUSTOMER RETURN</b> <input type="checkbox"/></p> <p><b>RMA NUMBER</b> <input type="text"/></p> <p><b>QUANTITY RETURNED</b> <input type="text"/></p> <p><b>VENDOR DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input type="text"/></p> <p><b>PRODUCTION DEFECT</b> <input checked="" type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input type="text" value="3"/></p> <p><b>REWORK REQUIRED</b> <input type="checkbox"/></p> <p><b>QUANTITY REWORKED</b> <input type="text"/></p> <p><b>PURCHASING DEFECT</b> <input type="checkbox"/></p> <p><b>PURCHASING QUANTITY REJECTED</b> <input type="text"/></p>
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# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<i>NCMR NUMBER</i>	2116	<i>CUSTOMER RETURN</i>
<i>DATE</i>	12/7/2004	<i>RMA NUMBER</i>
<i>CUSTOMER</i>	SLAC	<i>QUANTITY RETURNED</i>
<i>CUSTOMER</i>		<i>VENDOR DEFECT</i>
<i>VENDOR</i>	General Technology	<i>QUANTITY REJECTED</i>
<i>PART NUMBER</i>	LAT-DS-02338	<i>PRODUCTION</i>
<i>LOT QUANTITY</i>	3	<i>QUANTITY REJECTED</i>
<i>SALES ORDER</i>	F17300	<i>REWORK</i>
<i>PURCHASE ORDER</i>	48800	<i>QUANTITY</i>
<i>LOT NUMBER</i>		<i>PURCHASING DEFECT</i>
<i>WORK ORDER</i>	110393, 110394, 110432	<i>PURCHASING QUANTITY REJECTED</i>
<i>INITIATOR</i>		
<i>ASSIGNED TO</i>	Gary Hefkin	
<i>DATE REQUIRED</i>	12/8/2004	
<i>ASSIGNED TO</i>		
<i>DISCREPANCY</i>	Damaged insulation/exposed wire.	
<i>NOTES</i>	Reference NCMR 2089	
	Part of the repair process is to encapsulate the jumper wires.	
<i>CAUSE</i>	During preparation of 1/2" long jumper wire: (cut, strip and tin) insulation was	
<i>CAUSE</i>	damaged exposing wire.	
<i>CORRECTIVE ACTION</i>	On the following 19 units all wire will be inspected for this condition prior to solder.	
<i>FINAL DISPOSITION</i>	USE AS IS	
<i>Q/A APPROVAL</i>		
<i>Q/A APPROVAL</i>		
<i>COST OF QUALITY</i>		



 You forwarded this message on 12/8/2004 10:15 AM.

**Lujan, Patricio C**

**From:** Haller, Gunther **Sent:** Wed 12/8/2004 10:13 AM  
**To:** Lujan, Patricio C; Marsh, Darren S.  
**Cc:** Estey, Brigitte  
**Subject:** RE: NCMR2116  
**Attachments:**

approved

Dr. Gunther Haller

Stanford University/SLAC

MS 96

P.O. 20450

Stanford, CA 94309

T: (650) 926-4257

F: (650) 926-2923

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**From:** Lujan, Patricio C  
**Sent:** Wednesday, December 08, 2004 9:10 AM  
**To:** Haller, Gunther; Marsh, Darren S.  
**Cc:** Estey, Brigitte  
**Subject:** NCMR2116

Please review and approve the attached NCMR.

Pat

**Lujan, Patricio C**

---

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C; Haller, Gunther  
**Cc:** Estey, Brigitte  
**Subject:** RE: NCMR2116  
**Attachments:**

**Sent:** Wed 12/8/2004 10:17 AM

Approved.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, MS 43A

Menlo Park, CA 94025

(650) 926-4577

**From:** Lujan, Patricio C  
**Sent:** Wednesday, December 08, 2004 9:10 AM  
**To:** Haller, Gunther; Marsh, Darren S.  
**Cc:** Estey, Brigitte  
**Subject:** NCMR2116

Please review and approve the attached NCMR.

Pat

# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<p><b>NCMR NUMBER</b> <input style="width: 50px;" type="text" value="2121"/></p> <p><b>DATE</b> <input style="width: 50px;" type="text" value="12/15/2004"/></p> <p><b>CUSTOMER</b> <input style="width: 100px;" type="text" value="SLAC"/></p> <p><b>CUSTOMER CONTACT</b> <input style="width: 100px;" type="text" value="Dave Tarkington"/></p> <p><b>VENDOR</b> <input style="width: 100px;" type="text" value="SLAC"/></p> <p><b>PART NUMBER</b> <input style="width: 100px;" type="text" value="LAT-DS-01646"/></p> <p><b>LOT QUANTITY</b> <input style="width: 50px;" type="text" value="3"/></p> <p><b>SALES ORDER</b> <input style="width: 100px;" type="text" value="F17200"/></p> <p><b>PURCHASE ORDER</b> <input style="width: 100px;" type="text" value="48799"/></p> <p><b>LOT NUMBER</b> <input style="width: 150px;" type="text"/></p> <p><b>WORK ORDER</b> <input style="width: 150px;" type="text" value="110154, 110155, 110156"/></p> <p><b>INITIATOR</b> <input style="width: 100px;" type="text" value="Pat Lujan"/></p> <p><b>ASSIGNED TO</b> <input style="width: 100px;" type="text" value="Dave Tarkington"/></p> <p><b>DATE REQUIRED</b> <input style="width: 50px;" type="text" value="12/15/2004"/></p> <p><b>ASSIGNED TO SIGNATURE</b> <input style="width: 150px;" type="text"/></p> <p><b>DISCREPANCY</b> <input style="width: 550px; height: 40px;" type="text" value="Item 8 on drawing IS: MS24671-2 (.375 length) Should be: .25 length. Scew is bottoming out; unable to assemble."/></p> <p><b>NOTES</b> <input style="width: 550px; height: 40px;" type="text"/></p> <p><b>CAUSE</b> <input style="width: 500px; height: 40px;" type="text" value="Drawing Error"/></p> <p><b>CORRECTIVE ACTION</b> <input style="width: 500px; height: 40px;" type="text" value="Change drawing to correct part number MS24671-1."/></p> <p><b>FINAL DISPOSITION</b> <input style="width: 150px;" type="text" value="REWORK"/></p> <p><b>Q/A APPROVAL</b> <input style="width: 150px;" type="text" value="Pat Lujan (e-mail on file)"/></p> <p><b>Q/A APPROVAL DATE</b> <input style="width: 50px;" type="text" value="12/15/2004"/></p> <p><b>COST OF QUALITY</b> <input style="width: 100px;" type="text"/></p>	<p><b>CUSTOMER RETURN</b> <input type="checkbox"/></p> <p><b>RMA NUMBER</b> <input style="width: 50px;" type="text"/></p> <p><b>QUANTITY RETURNED</b> <input style="width: 50px;" type="text"/></p> <p><b>VENDOR DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p> <p><b>PRODUCTION DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p> <p><b>REWORK REQUIRED</b> <input type="checkbox"/></p> <p><b>QUANTITY REWORKED</b> <input style="width: 50px;" type="text"/></p> <p><b>PURCHASING DEFECT</b> <input type="checkbox"/></p> <p><b>PURCHASING QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p>
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**Lujan, Patricio C**

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**From:** Haller, Gunther  
**To:** Lujan, Patricio C  
**Cc:** Estey, Brigitte; Nelson, David J.; Ludvik, Jeffrey; Marsh, Darren S.; Sapozhnikov, Leonid  
**Subject:** RE: NCMR2121  
**Attachments:**

**Sent:** Wed 12/15/2004 5:39 PM

approved

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**From:** Lujan, Patricio C  
**Sent:** Wednesday, December 15, 2004 3:57 PM  
**To:** Haller, Gunther  
**Cc:** Estey, Brigitte; Nelson, David J.; Ludvik, Jeffrey; Marsh, Darren S.; Sapozhnikov, Leonid  
**Subject:** NCMR2121

Gunther,

Please review and approve the attached NCMR2121. I will approve in Darren's absence.

Pat

**Lujan, Patricio C**

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C  
**Cc:**  
**Subject:** RE: Time Sheet  
**Attachments:**

**Sent:** Tue 12/7/2004 3:51 PM

Thanks for asking.

I am delegating my MRB approval authority to you during my absence.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

---

**From:** Lujan, Patricio C  
**Sent:** Tuesday, December 07, 2004 2:42 PM  
**To:** Marsh, Darren S.  
**Subject:** RE: Time Sheet

Will you designate someone for MRB approval.

Pat

# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<b>NCMR NUMBER</b>	<input type="text" value="2127"/>	<b>CUSTOMER RETURN</b>	<input type="checkbox"/>
<b>DATE</b>	<input type="text" value="12/16/2004"/>	<b>RMA NUMBER</b>	<input type="text"/>
<b>CUSTOMER</b>	<input type="text" value="SLAC"/>	<b>QUANTITY RETURNED</b>	<input type="text"/>
<b>CUSTOMER CONTACT</b>	<input type="text" value="David Nelson/Jeffrey Lud"/>	<b>VENDOR DEFECT</b>	<input type="checkbox"/>
<b>VENDOR</b>	<input type="text"/>	<b>QUANTITY REJECTED</b>	<input type="text"/>
<b>PART NUMBER</b>	<input type="text" value="LAT-DS-02388"/>	<b>PRODUCTION DEFECT</b>	<input type="checkbox"/>
<b>LOT QUANTITY</b>	<input type="text" value="3"/>	<b>QUANTITY REJECTED</b>	<input type="text"/>
<b>SALES ORDER</b>	<input type="text" value="F17300"/>	<b>REWORK REQUIRED</b>	<input type="checkbox"/>
<b>PURCHASE ORDER</b>	<input type="text" value="48800"/>	<b>QUANTITY REWORKED</b>	<input type="text"/>
<b>LOT NUMBER</b>	<input type="text"/>	<b>PURCHASING DEFECT</b>	<input type="checkbox"/>
<b>WORK ORDER</b>	<input type="text" value="110393, 110394, 110432"/>	<b>PURCHASING QUANTITY REJECTED</b>	<input type="checkbox"/>
<b>INITIATOR</b>	<input type="text" value="Pat Lujan"/>		
<b>ASSIGNED TO</b>	<input type="text" value="David Nelson"/>		
<b>DATE REQUIRED</b>	<input type="text" value="12/16/2004"/>		
<b>ASSIGNED TO SIGNATURE</b>	<input type="text" value="Dave Neison"/>		
<b>DISCREPANCY</b>	<input type="text" value="Test Failure"/>		
<b>NOTES</b>	<input type="text"/>		
<b>CAUSE</b>	<input type="text" value="Test Failure"/>		
<b>CORRECTIVE ACTION</b>	<input type="text" value="Per David Nelson:&lt;br/&gt;Remove R231 and replace with F/N 62 (15K) M56342K06B16E0R"/>		
<b>FINAL DISPOSITION</b>	<input type="text" value="REWORK"/>		
<b>Q/A APPROVAL</b>	<input type="text" value="Pat Lujan (e-mails on file)"/>		
<b>Q/A APPROVAL DATE</b>	<input type="text" value="12/16/2004"/>		
<b>COST OF QUALITY</b>	<input type="text"/>		

**Lujan, Patricio C**

**From:** Haller, Gunther  
**To:** Lujan, Patricio C  
**Cc:**  
**Subject:** RE: NCMR2127  
**Attachments:**

**Sent:** Mon 12/20/2004 9:35 PM

approved

---

**From:** Lujan, Patricio C  
**Sent:** Mon 12/20/2004 7:54 PM  
**To:** Haller, Gunther  
**Subject:** FW: NCMR2127

Gunther,

Attached is NCMR2127 for your approval.

---

**From:** Haller, Gunther  
**Sent:** Thu 12/16/2004 9:30 PM  
**To:** Lujan, Patricio C  
**Cc:** Sapozhnikov, Leonid; Ludvik, Jeffrey; Nelson, David J.; Marsh, Darren S.; Estey, Brigitte  
**Subject:** RE: NCMR2127

I don't understand this. Does this mean Lupe has to order more resistors/  
If so, Lupe please do asap

---

**From:** Lujan, Patricio C  
**Sent:** Thu 12/16/2004 11:44 AM  
**To:** Haller, Gunther  
**Cc:** Sapozhnikov, Leonid; Ludvik, Jeffrey; Nelson, David J.; Marsh, Darren S.; Estey, Brigitte  
**Subject:** NCMR2127

Gunther,

Attached is NCMR2127 for your approval.

Brigitte,

This is going to impact inventory.

Pat

**Lujan, Patricio C**

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C  
**Cc:**  
**Subject:** RE: Time Sheet  
**Attachments:**

**Sent:** Tue 12/7/2004 3:51 PM

Thanks for asking.

I am delegating my MRB approval authority to you during my absence.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

---

**From:** Lujan, Patricio C  
**Sent:** Tuesday, December 07, 2004 2:42 PM  
**To:** Marsh, Darren S.  
**Subject:** RE: Time Sheet

Will you designate someone for MRB approval.

Pat



# GENERAL TECHNOLOGY CORPORATION

## NONCONFORMANCE MATERIAL/RMA REPORT

<p><b>NCMR NUMBER</b> <input style="width: 100px;" type="text" value="2129"/></p> <p><b>DATE</b> <input style="width: 100px;" type="text" value="12/18/2004"/></p> <p><b>CUSTOMER</b> <input style="width: 150px;" type="text" value="SLAC"/></p> <p><b>CUSTOMER CONTACT</b> <input style="width: 150px;" type="text" value="Pat Lujan"/></p> <p><b>VENDOR</b> <input style="width: 150px;" type="text" value="General Technology Corp"/></p> <p><b>PART NUMBER</b> <input style="width: 150px;" type="text" value="LAT-DS-02388"/></p> <p><b>LOT QUANTITY</b> <input style="width: 50px;" type="text" value="3"/></p> <p><b>SALES ORDER</b> <input style="width: 130px;" type="text" value="F17300"/></p> <p><b>PURCHASE ORDER</b> <input style="width: 150px;" type="text" value="48800"/></p> <p><b>LOT NUMBER</b> <input style="width: 200px;" type="text"/></p> <p><b>WORK ORDER</b> <input style="width: 180px;" type="text" value="110393, 110394, 110432"/></p> <p><b>INITIATOR</b> <input style="width: 180px;" type="text" value="Pat Lujan"/></p> <p><b>ASSIGNED TO</b> <input style="width: 180px;" type="text" value="Hefkin"/></p> <p><b>DATE REQUIRED</b> <input style="width: 120px;" type="text" value="12/20/2004"/></p> <p><b>ASSIGNED TO SIGNATURE</b> <input style="width: 180px;" type="text" value="Hefkin"/></p> <p><b>DISCREPANCY</b> <input style="width: 580px; height: 40px;" type="text" value="IS: Wires from J1 connector dressed to lay on adjacent components.&lt;br/&gt;SB: No wires dressed to contact adjacent components."/></p> <p><b>NOTES</b> <input style="width: 580px; height: 40px;" type="text" value="Disposition is USE AS IS with supplemental work instructions to detail potting instructions that ensure wires are not resting on adjacent components."/></p> <p><b>CAUSE</b> <input style="width: 530px; height: 40px;" type="text" value="Wires are lap soldered to termination pads on PWA without a heel fillet. This process does not allow for proper wire dressing."/></p> <p><b>CORRECTIVE ACTION</b> <input style="width: 530px; height: 40px;" type="text" value="Immediate corrective action for SN's 1, 2 and 3 is per attached supplemental instructions.&lt;br/&gt;SN's 4 thru 22 work instructions will be updated to include detail to prep wire to allow a heel fillet to dress wires in a manner that will not contact adjacent components."/></p> <p><b>FINAL DISPOSITION</b> <input style="width: 180px;" type="text" value="USE AS IS"/></p> <p><b>Q/A APPROVAL</b> <input style="width: 180px;" type="text" value="Pat Lujan (e-mails on file)"/></p> <p><b>Q/A APPROVAL DATE</b> <input style="width: 80px;" type="text" value="12/18/2004"/></p> <p><b>COST OF QUALITY</b> <input style="width: 130px;" type="text"/></p>	<p><b>CUSTOMER RETURN</b> <input type="checkbox"/></p> <p><b>RMA NUMBER</b> <input style="width: 80px;" type="text"/></p> <p><b>QUANTITY RETURNED</b> <input style="width: 50px;" type="text"/></p> <p><b>VENDOR DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p> <p><b>PRODUCTION DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p> <p><b>REWORK REQUIRED</b> <input type="checkbox"/></p> <p><b>QUANTITY REWORKED</b> <input style="width: 50px;" type="text"/></p> <p><b>PURCHASING DEFECT</b> <input type="checkbox"/></p> <p><b>PURCHASING QUANTITY REJECTED</b> <input style="width: 30px;" type="text"/></p>
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 You forwarded this message on 12/18/2004 5:04 PM.

**Lujan, Patricio C**

**From:** Haller, Gunther **Sent:** Sat 12/18/2004 4:49 PM  
**To:** Lujan, Patricio C; Marsh, Darren S.; Shepherd, Tracy L  
**Cc:** Estey, Brigitte; Tarkington, David  
**Subject:** RE: NCMR2129  
**Attachments:**

approve

---

**From:** Lujan, Patricio C  
**Sent:** Sat 12/18/2004 12:10 PM  
**To:** Haller, Gunther; Marsh, Darren S.; Shepherd, Tracy L  
**Cc:** Estey, Brigitte; Tarkington, David  
**Subject:** NCMR2129

Tracy,

Attached is the NCMR generated based on your observation.

Gunther,

For your review and approval.

Pat

**Lujan, Patricio C**

Sent: Tue 12/7/2004 3:51 PM

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C  
**Cc:**  
**Subject:** RE: Time Sheet  
**Attachments:**

Thanks for asking.

I am delegating my MRB approval authority to you during my absence.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

---

**From:** Lujan, Patricio C  
**Sent:** Tuesday, December 07, 2004 2:42 PM  
**To:** Marsh, Darren S.  
**Subject:** RE: Time Sheet

Will you designate someone for MRB approval.

Pat

# GENERAL TECHNOLOGY CORPORATION

## NONCONFORMANCE MATERIAL/RMA REPORT

<p><b>NCMR NUMBER</b> <input style="width: 50px;" type="text" value="2133"/></p> <p><b>DATE</b> <input style="width: 50px;" type="text" value="12/22/2004"/></p> <p><b>CUSTOMER</b> <input style="width: 100px;" type="text" value="SLAC"/></p> <p><b>CUSTOMER CONTACT</b> <input style="width: 100px;" type="text" value="Pat Lujan"/></p> <p><b>VENDOR</b> <input style="width: 100px;" type="text"/></p> <p><b>PART NUMBER</b> <input style="width: 100px;" type="text" value="LAT-DS-01646"/></p> <p><b>LOT QUANTITY</b> <input style="width: 50px;" type="text" value="3"/></p> <p><b>SALES ORDER</b> <input style="width: 100px;" type="text" value="F17200"/></p> <p><b>PURCHASE ORDER</b> <input style="width: 100px;" type="text" value="48799"/></p> <p><b>LOT NUMBER</b> <input style="width: 100px;" type="text"/></p> <p><b>WORK ORDER</b> <input style="width: 100px;" type="text" value="110154, 110155, 110156"/></p> <p><b>INITIATOR</b> <input style="width: 100px;" type="text" value="Pat Lujan"/></p> <p><b>ASSIGNED TO</b> <input style="width: 100px;" type="text" value="Gunther Haller"/></p> <p><b>DATE REQUIRED</b> <input style="width: 50px;" type="text" value="12/27/2004"/></p> <p><b>ASSIGNED TO SIGNATURE</b> <input style="width: 100px;" type="text"/></p> <p><b>DISCREPANCY</b> <input style="width: 100%; height: 40px;" type="text" value="During thermal cycling board temp. reaches -37 C. Should be -40 C."/></p> <p><b>NOTES</b> <input style="width: 100%; height: 40px;" type="text" value="Above referenced cause is an excerpt from e-mail from Leonid."/></p> <p><b>CAUSE</b> <input style="width: 100%; height: 40px;" type="text" value="Gunther, we placed TEM in thermal chamber and started test. They set delta T to 3C. so when it target -40 it go to -37 on top of FPGA (chamber is going to almost -50C)"/></p> <p><b>CORRECTIVE ACTION</b> <input style="width: 100%; height: 40px;" type="text" value="The corrective action for subsequent assemblies is to decrease the temperature to reach -40C."/></p> <p><b>FINAL DISPOSITION</b> <input style="width: 100px;" type="text" value="USE AS IS"/></p> <p><b>Q/A APPROVAL</b> <input style="width: 100px;" type="text" value="Pat Lujan (e-mails on file)"/></p> <p><b>Q/A APPROVAL DATE</b> <input style="width: 50px;" type="text" value="12/22/2004"/></p> <p><b>COST OF QUALITY</b> <input style="width: 100px;" type="text"/></p>	<p><b>CUSTOMER RETURN</b> <input type="checkbox"/></p> <p><b>RMA NUMBER</b> <input style="width: 50px;" type="text"/></p> <p><b>QUANTITY RETURNED</b> <input style="width: 50px;" type="text"/></p> <p><b>VENDOR DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p> <p><b>PRODUCTION DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p> <p><b>REWORK REQUIRED</b> <input type="checkbox"/></p> <p><b>QUANTITY REWORKED</b> <input style="width: 50px;" type="text"/></p> <p><b>PURCHASING DEFECT</b> <input type="checkbox"/></p> <p><b>PURCHASING QUANTITY REJECTED</b> <input type="checkbox"/></p>
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# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<b>NCMR NUMBER</b>	<input type="text" value="2134"/>	<b>CUSTOMER RETURN</b>	<input type="checkbox"/>
<b>DATE</b>	<input type="text" value="12/22/2004"/>	<b>RMA NUMBER</b>	<input type="text"/>
<b>CUSTOMER</b>	<input type="text" value="SLAC"/>	<b>QUANTITY RETURNED</b>	<input type="text"/>
<b>CUSTOMER CONTACT</b>	<input type="text" value="Pat Lujan"/>	<b>VENDOR DEFECT</b>	<input type="checkbox"/>
<b>VENDOR</b>	<input type="text"/>	<b>QUANTITY REJECTED</b>	<input type="text"/>
<b>PART NUMBER</b>	<input type="text" value="LAT-DS-02388"/>	<b>PRODUCTION DEFECT</b>	<input type="checkbox"/>
<b>LOT QUANTITY</b>	<input type="text" value="3"/>	<b>QUANTITY REJECTED</b>	<input type="text"/>
<b>SALES ORDER</b>	<input type="text" value="F17300"/>	<b>REWORK REQUIRED</b>	<input type="checkbox"/>
<b>PURCHASE ORDER</b>	<input type="text" value="48800"/>	<b>QUANTITY REWORKED</b>	<input type="text"/>
<b>LOT NUMBER</b>	<input type="text"/>	<b>PURCHASING DEFECT</b>	<input type="checkbox"/>
<b>WORK ORDER</b>	<input type="text" value="110393, 110394, 110432"/>	<b>PURCHASING QUANTITY REJECTED</b>	<input type="checkbox"/>
<b>INITIATOR</b>	<input type="text" value="Pat Lujan"/>		
<b>ASSIGNED TO</b>	<input type="text" value="Gunther Haller"/>		
<b>DATE REQUIRED</b>	<input type="text" value="12/27/2004"/>		
<b>ASSIGNED TO SIGNATURE</b>	<input type="text"/>		
<b>DISCREPANCY</b>	<input type="text" value="During thermal cycling board temp. reaches -37 C. Should be -40 C."/>		
<b>NOTES</b>	<input type="text"/>		
<b>CAUSE</b>	<input type="text"/>		
<b>CORRECTIVE ACTION</b>	<input type="text" value="The corrective action for subsequent assemblies is to decrease the temperature to reach -40C."/>		
<b>FINAL DISPOSITION</b>	<input type="text" value="USE AS IS"/>		
<b>Q/A APPROVAL</b>	<input type="text" value="Pat Lujan (e-mails on file)"/>		
<b>Q/A APPROVAL DATE</b>	<input type="text" value="12/22/2004"/>		
<b>COST OF QUALITY</b>	<input type="text"/>		

**Lujan, Patricio C**

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**From:** Haller, Gunther **Sent:** Wed 12/22/2004 7:02 PM  
**To:** Lujan, Patricio C  
**Cc:** Estey, Brigitte; Marsh, Darren S.; Sapozhnikov, Leonid; Ludvik, Jeffrey; Tarkington, David; Nelson, David J.  
**Subject:** RE: NCMR's and Thermal Cycling  
**Attachments:**

- a) we need to see that future boards go to -40C
- b) we accept these 3 boards to -37C.

gunther

---

**From:** Lujan, Patricio C  
**Sent:** Wed 12/22/2004 5:09 PM  
**To:** Haller, Gunther  
**Cc:** Estey, Brigitte; Marsh, Darren S.; Sapozhnikov, Leonid; Ludvik, Jeffrey; Tarkington, David; Nelson, David J.  
**Subject:** NCMR's and Thermal Cycling

Gunther,

I need a disposition and corrective action on these NCMR's.

Pat

**Lujan, Patricio C**

---

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C  
**Cc:**  
**Subject:** RE: Time Sheet  
**Attachments:**

**Sent:** Tue 12/7/2004 3:51 PM

Thanks for asking.

I am delegating my MRB approval authority to you during my absence.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

---

**From:** Lujan, Patricio C  
**Sent:** Tuesday, December 07, 2004 2:42 PM  
**To:** Marsh, Darren S.  
**Subject:** RE: Time Sheet

Will you designate someone for MRB approval.

Pat

# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<p><b>NCMR NUMBER</b> <input style="width: 50px;" type="text" value="2135"/></p> <p><b>DATE</b> <input style="width: 50px;" type="text" value="12/29/2004"/></p> <p><b>CUSTOMER</b> <input style="width: 100px;" type="text" value="SLAC"/></p> <p><b>CUSTOMER CONTACT</b> <input style="width: 100px;" type="text" value="Pat Lujan"/></p> <p><b>VENDOR</b> <input style="width: 100px;" type="text"/></p> <p><b>PART NUMBER</b> <input style="width: 100px;" type="text" value="LAT-DS-02388"/></p> <p><b>LOT QUANTITY</b> <input style="width: 50px;" type="text" value="3"/></p> <p><b>SALES ORDER</b> <input style="width: 100px;" type="text" value="F17300"/></p> <p><b>PURCHASE ORDER</b> <input style="width: 100px;" type="text" value="48800"/></p> <p><b>LOT NUMBER</b> <input style="width: 150px;" type="text"/></p> <p><b>WORK ORDER</b> <input style="width: 150px;" type="text"/></p> <p><b>INITIATOR</b> <input style="width: 100px;" type="text" value="Pat Lujan"/></p> <p><b>ASSIGNED TO</b> <input style="width: 100px;" type="text" value="Dave Tarkington"/></p> <p><b>DATE REQUIRED</b> <input style="width: 100px;" type="text" value="1/10/2005"/></p> <p><b>ASSIGNED TO SIGNATURE</b> <input style="width: 150px;" type="text"/></p> <p><b>DISCREPANCY</b> <div style="border: 1px solid black; padding: 5px; min-height: 40px;">                     "The SOW calls out for a buyer provided bar code label for the CCAs (with SLAC tracking number), to be applied subsequent to conformal coat. There is no mention of this part/material on the CCA dwg."                 </div></p> <p><b>NOTES</b> <div style="border: 1px solid black; height: 40px; width: 100%;"></div></p> <p><b>CAUSE</b> <div style="border: 1px solid black; padding: 5px; min-height: 40px;">                     Label not provided.                 </div></p> <p><b>CORRECTIVE ACTION</b> <div style="border: 1px solid black; padding: 5px; min-height: 40px;">                     Immediate C/A. Mark boards using CAT-LINK ENTHONE #50-100R, WHITE with Serial Numbers provided by SLAC.                       SLAC Design Engineering to evaluate and change drawing accordingly.                 </div></p> <p><b>FINAL DISPOSITION</b> <input style="width: 100px;" type="text" value="REWORK"/></p> <p><b>Q/A APPROVAL</b> <input style="width: 100px;" type="text" value="Pat Lujan (e-mails on file)"/></p> <p><b>Q/A APPROVAL DATE</b> <input style="width: 50px;" type="text" value="12/29/2004"/></p> <p><b>COST OF QUALITY</b> <input style="width: 100px;" type="text"/></p>	<p><b>CUSTOMER RETURN</b> <input type="checkbox"/></p> <p><b>RMA NUMBER</b> <input style="width: 50px;" type="text"/></p> <p><b>QUANTITY RETURNED</b> <input style="width: 50px;" type="text"/></p> <p><b>VENDOR DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p> <p><b>PRODUCTION DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p> <p><b>REWORK REQUIRED</b> <input type="checkbox"/></p> <p><b>QUANTITY REWORKED</b> <input style="width: 50px;" type="text"/></p> <p><b>PURCHASING DEFECT</b> <input type="checkbox"/></p> <p><b>PURCHASING QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p>
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# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<p><b>NCMR NUMBER</b> <input type="text" value="2136"/></p> <p><b>DATE</b> <input type="text" value="12/29/2004"/></p> <p><b>CUSTOMER</b> <input type="text" value="SLAC"/></p> <p><b>CUSTOMER CONTACT</b> <input type="text" value="Pat Lujan"/></p> <p><b>VENDOR</b> <input type="text"/></p> <p><b>PART NUMBER</b> <input type="text" value="LAT-DS-01646"/></p> <p><b>LOT QUANTITY</b> <input type="text" value="3"/></p> <p><b>SALES ORDER</b> <input type="text" value="F17200"/></p> <p><b>PURCHASE ORDER</b> <input type="text" value="48799"/></p> <p><b>LOT NUMBER</b> <input type="text"/></p> <p><b>WORK ORDER</b> <input type="text"/></p> <p><b>INITIATOR</b> <input type="text" value="Pat Lujan"/></p> <p><b>ASSIGNED TO</b> <input type="text" value="Dave Tarkington"/></p> <p><b>DATE REQUIRED</b> <input type="text" value="1/10/2005"/></p> <p><b>ASSIGNED TO SIGNATURE</b> <input type="text"/></p>	<p><b>CUSTOMER RETURN</b> <input type="checkbox"/></p> <p><b>RMA NUMBER</b> <input type="text"/></p> <p><b>QUANTITY RETURNED</b> <input type="text"/></p> <p><b>VENDOR DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input type="text"/></p> <p><b>PRODUCTION DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input type="text"/></p> <p><b>REWORK REQUIRED</b> <input type="checkbox"/></p> <p><b>QUANTITY REWORKED</b> <input type="text"/></p> <p><b>PURCHASING DEFECT</b> <input type="checkbox"/></p> <p><b>PURCHASING QUANTITY REJECTED</b> <input type="checkbox"/></p>
<b>DISCREPANCY</b>	<p>"The SOW calls out for a buyer provided bar code label for the CCAs (with SLAC tracking number), to be applied subsequent to conformal coat. There is no mention of this part/material on the CCA dwg."</p>
<b>NOTES</b>	
<b>CAUSE</b>	<p>Label not provided.</p>
<b>CORRECTIVE ACTION</b>	<p>Immediate CIA. Mark boards using CAT-LINK ENTHONE #50-100R, WHITE with Serial Numbers provided by SLAC.</p> <p>SLAC Design Engineering to evaluate and change drawing accordingly.</p>
<b>FINAL DISPOSITION</b>	<p>REWORK</p>
<b>Q/A APPROVAL</b>	<p>Pat Lujan (e-mails on file)</p>
<b>Q/A APPROVAL DATE</b>	<p>12/29/2004</p>
<b>COST OF QUALITY</b>	<p></p>

**Lujan, Patricio C**

---

**From:** Haller, Gunther  
**To:** Lujan, Patricio C  
**Cc:** Estey, Brigitte; Tarkington, David; Marsh, Darren S.  
**Subject:** RE: NCMR 2135 and 2136  
**Attachments:**

**Sent:** Wed 12/29/2004 7:41 PM

approved, both.

Please make sure we provide appropriate labels for the production.

Regards  
Gunther

---

**From:** Lujan, Patricio C  
**Sent:** Wed 12/29/2004 5:55 PM  
**To:** Haller, Gunther  
**Cc:** Estey, Brigitte; Tarkington, David; Marsh, Darren S.  
**Subject:** NCMR 2135 and 2136

Gunther,

For your review and approval.

Pat

**Lujan, Patricio C**

---

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C  
**Cc:**  
**Subject:** RE: Time Sheet  
**Attachments:**

**Sent:** Tue 12/7/2004 3:51 PM

Thanks for asking.

I am delegating my MRB approval authority to you during my absence.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

---

**From:** Lujan, Patricio C  
**Sent:** Tuesday, December 07, 2004 2:42 PM  
**To:** Marsh, Darren S.  
**Subject:** RE: Time Sheet

Will you designate someone for MRB approval.

Pat

# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<p><b>NCMR NUMBER</b> <input style="width: 50px;" type="text" value="2151"/></p> <p><b>DATE</b> <input style="width: 50px;" type="text" value="1/4/2005"/></p> <p><b>CUSTOMER</b> <input style="width: 100px;" type="text" value="SLAC"/></p> <p><b>CUSTOMER CONTACT</b> <input style="width: 100px;" type="text" value="David Tarkington"/></p> <p><b>VENDOR</b> <input style="width: 100px;" type="text"/></p> <p><b>PART NUMBER</b> <input style="width: 100px;" type="text" value="LAT-DS-00554"/></p> <p><b>LOT QUANTITY</b> <input style="width: 50px;" type="text" value="22"/></p> <p><b>SALES ORDER</b> <input style="width: 100px;" type="text" value="F17200"/></p> <p><b>PURCHASE ORDER</b> <input style="width: 100px;" type="text" value="48799"/></p> <p><b>LOT NUMBER</b> <input style="width: 150px;" type="text"/></p> <p><b>WORK ORDER</b> <input style="width: 150px;" type="text"/></p> <p><b>INITIATOR</b> <input style="width: 100px;" type="text" value="Pat Lujan"/></p> <p><b>ASSIGNED TO</b> <input style="width: 100px;" type="text" value="David Tarkington"/></p> <p><b>DATE REQUIRED</b> <input style="width: 50px;" type="text" value="1/5/2005"/></p> <p><b>ASSIGNED TO SIGNATURE</b> <input style="width: 150px;" type="text"/></p> <p><b>DISCREPANCY</b> <input style="width: 550px; height: 50px;" type="text" value="Ref. DWG ZN C-5:&lt;br/&gt;Should be 2.253 BASIC&lt;br/&gt;Is: 2.100&lt;br/&gt;&lt;br/&gt;Unable to assemble LAT-DS-01481."/></p> <p><b>NOTES</b> <input style="width: 550px; height: 30px;" type="text" value="David Tarkington to provide repair instructions. GTC to machine 3 bases. 19 to be repaired by SLAC."/></p> <p><b>CAUSE</b> <input style="width: 500px; height: 40px;" type="text" value="Machining error. Dimension should be taken from Datum -A- not center line of other relief hole."/></p> <p><b>CORRECTIVE ACTION</b> <input style="width: 500px; height: 40px;" type="text" value="To be supplied by vendor."/></p> <p><b>FINAL DISPOSITION</b> <input style="width: 150px;" type="text" value="REPAIR"/></p> <p><b>Q/A APPROVAL</b> <input style="width: 150px;" type="text" value="Pat Lujan (e-mails on file)"/></p> <p><b>Q/A APPROVAL DATE</b> <input style="width: 50px;" type="text" value="1/4/2005"/></p> <p><b>COST OF QUALITY</b> <input style="width: 100px;" type="text"/></p>	<p><b>CUSTOMER RETURN</b> <input type="checkbox"/></p> <p><b>RMA NUMBER</b> <input style="width: 50px;" type="text"/></p> <p><b>QUANTITY RETURNED</b> <input style="width: 50px;" type="text" value="19"/></p> <p><b>VENDOR DEFECT</b> <input checked="" type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text" value="22"/></p> <p><b>PRODUCTION DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text" value="22"/></p> <p><b>REWORK REQUIRED</b> <input type="checkbox"/></p> <p><b>QUANTITY REWORKED</b> <input style="width: 50px;" type="text"/></p> <p><b>PURCHASING DEFECT</b> <input type="checkbox"/></p> <p><b>PURCHASING QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p>
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# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<b>NCMR NUMBER</b>	<input type="text" value="2152"/>	<b>CUSTOMER RETURN</b>	<input type="checkbox"/>
<b>DATE</b>	<input type="text" value="1/4/2005"/>	<b>RMA NUMBER</b>	<input type="text"/>
<b>CUSTOMER</b>	<input type="text" value="SLAC"/>	<b>QUANTITY RETURNED</b>	<input type="text"/>
<b>CUSTOMER CONTACT</b>	<input type="text" value="David Tarkington"/>	<b>VENDOR DEFECT</b>	<input type="checkbox"/>
<b>VENDOR</b>	<input type="text"/>	<b>QUANTITY REJECTED</b>	<input type="text"/>
<b>PART NUMBER</b>	<input type="text" value="LAT-DS-01482"/>	<b>PRODUCTION DEFECT</b>	<input type="checkbox"/>
<b>LOT QUANTITY</b>	<input type="text" value="3"/>	<b>QUANTITY REJECTED</b>	<input type="text"/>
<b>SALES ORDER</b>	<input type="text" value="F17300"/>	<b>REWORK REQUIRED</b>	<input type="checkbox"/>
<b>PURCHASE ORDER</b>	<input type="text" value="48800"/>	<b>QUANTITY REWORKED</b>	<input type="text"/>
<b>LOT NUMBER</b>	<input type="text"/>	<b>PURCHASING DEFECT</b>	<input type="checkbox"/>
<b>WORK ORDER</b>	<input type="text"/>	<b>PURCHASING QUANTITY REJECTED</b>	<input type="checkbox"/>
<b>INITIATOR</b>	<input type="text" value="Pat Lujan"/>		
<b>ASSIGNED TO</b>	<input type="text" value="David Tarkington"/>		
<b>DATE REQUIRED</b>	<input type="text" value="1/5/2005"/>		

**ASSIGNED TO SIGNATURE**

- DISCREPANCY**
- 1) Excess cable length does not allow for assembly as shown in drawing.
  - 2) Cable harness support does not allow for assembly due to proximity to other components.
  - 3) Unable to bond cable harness support to conformal coated board.
  - 4) DWG note 8 does not provide enough detail regarding serial number.

**NOTES**

**CAUSE**

Design

**CORRECTIVE ACTION**

Provide repair instructions and modify drawings.

**FINAL DISPOSITION**

**Q/A APPROVAL**

**Q/A APPROVAL DATE**

**COST OF QUALITY**

**Lujan, Patricio C**

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**From:** Haller, Gunther  
**To:** Lujan, Patricio C; Marsh, Darren S.  
**Cc:** Estey, Brigitte; Nelson, David J.; Tarkington, David  
**Subject:** RE: NCMR's 2151 and 2152

**Sent:** Tue 1/4/2005 5:41 PM

**Attachments:**

Approve NCMR's.

Dr. Gunther Haller

Stanford University/SLAC

MS 96

P.O. 20450

Stanford, CA 94309

T: (650) 926-4257

F: (650) 926-2923

---

**From:** Lujan, Patricio C  
**Sent:** Tuesday, January 04, 2005 4:10 PM  
**To:** Haller, Gunther; Marsh, Darren S.  
**Cc:** Estey, Brigitte; Nelson, David J.; Tarkington, David  
**Subject:** NCMR's 2151 and 2152

Attached are NCMR's for your review and approval.

Pat

**Lujan, Patricio C**

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C; Haller, Gunther  
**Cc:** Estey, Brigitte; Nelson, David J.; Tarkington, David  
**Subject:** RE: NCMR's 2151 and 2152  
**Attachments:**

**Sent:** Tue 1/4/2005 5:41 PM

Approved.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

---

**From:** Lujan, Patricio C  
**Sent:** Tuesday, January 04, 2005 4:10 PM  
**To:** Haller, Gunther; Marsh, Darren S.  
**Cc:** Estey, Brigitte; Nelson, David J.; Tarkington, David  
**Subject:** NCMR's 2151 and 2152

Attached are NCMR's for your review and approval.

Pat

**Lujan, Patricio C**

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C  
**Cc:**  
**Subject:** RE: NCMR2156  
**Attachments:**

**Sent:** Thu 1/20/2005 5:47 PM

Approved.


Darren

**From:** Lujan, Patricio C  
**Sent:** Thu 1/20/2005 9:33 AM

**GENERAL TECHNOLOGY CORPORATION  
 NONCONFORMANCE MATERIAL/RMA REPORT**

<b>NCMR NUMBER</b>	<input type="text" value="2156"/>	<b>CUSTOMER RETURN</b>	<input type="checkbox"/>
<b>DATE</b>	<input type="text" value="1/5/2005"/>	<b>RMA NUMBER</b>	<input type="text"/>
<b>CUSTOMER</b>	<input type="text" value="SLAC"/>	<b>QUANTITY RETURNED</b>	<input type="text"/>
<b>CUSTOMER CONTACT</b>	<input type="text" value="Pat Lujan"/>	<b>VENDOR DEFECT</b>	<input type="checkbox"/>
<b>VENDOR</b>	<input type="text"/>	<b>QUANTITY REJECTED</b>	<input type="text"/>
<b>PART NUMBER</b>	<input type="text" value="LAT-DS-01481"/>	<b>PRODUCTION DEFECT</b>	<input type="checkbox"/>
<b>LOT QUANTITY</b>	<input type="text" value="3"/>	<b>QUANTITY REJECTED</b>	<input type="text"/>
<b>SALES ORDER</b>	<input type="text" value="F17200"/>	<b>REWORK REQUIRED</b>	<input type="checkbox"/>
<b>PURCHASE ORDER</b>	<input type="text" value="48799"/>	<b>QUANTITY REWORKED</b>	<input type="text"/>
<b>LOT NUMBER</b>	<input type="text"/>	<b>PURCHASING DEFECT</b>	<input type="checkbox"/>
<b>WORK ORDER</b>	<input type="text"/>	<b>PURCHASING QUANTITY REJECTED</b>	<input type="text"/>
<b>INITIATOR</b>	<input type="text" value="Pat Lujan"/>		
<b>ASSIGNED TO</b>	<input type="text" value="Dave Tarkington"/>		
<b>DATE REQUIRED</b>	<input type="text" value="1/10/2005"/>		
<b>ASSIGNED TO SIGNATURE</b>	<input type="text"/>		
<b>DISCREPANCY</b>	<input type="text" value="1) Unable to torque FN-4 screws at 28 in-oz."/>		



 You forwarded this message on 1/20/2005 10:33 AM.

**Lujan, Patricio C**

**From:** Haller, Gunther  
**To:** Lujan, Patricio C  
**Cc:**  
**Subject:** RE: NCMR2156  
**Attachments:**

**Sent:** Wed 1/5/2005 5:14 PM

approve

Dr. Gunther Haller

Stanford University/SLAC

MS 96

P.O. 20450

Stanford, CA 94309

T: (650) 926-4257

F: (650) 926-2923

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**From:** Lujan, Patricio C  
**Sent:** Wednesday, January 05, 2005 2:41 PM  
**To:** Estey, Brigitte; Haller, Gunther; Marsh, Darren S.  
**Cc:** Tarkington, David; Nelson, David J.  
**Subject:** RE: NCMR2156

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**From:** Estey, Brigitte  
**Sent:** Wed 1/5/2005 3:26 PM  
**To:** Lujan, Patricio C; Haller, Gunther; Marsh, Darren S.  
**Cc:** Tarkington, David; Nelson, David J.  
**Subject:** RE: NCMR2156

no attachment....

# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<p><b>NCMR NUMBER</b> <input type="text" value="2161"/></p> <p><b>DATE</b> <input type="text" value="1/6/2005"/></p> <p><b>CUSTOMER</b> <input type="text" value="SLAC"/></p> <p><b>CUSTOMER CONTACT</b> <input type="text"/></p> <p><b>VENDOR</b> <input type="text"/></p> <p><b>PART NUMBER</b> <input type="text" value="LAT-DS-02388"/></p> <p><b>LOT QUANTITY</b> <input type="text" value="3"/></p> <p><b>SALES ORDER</b> <input type="text" value="F17300"/></p> <p><b>PURCHASE ORDER</b> <input type="text" value="48800"/></p> <p><b>LOT NUMBER</b> <input type="text"/></p> <p><b>WORK ORDER</b> <input type="text"/></p> <p><b>INITIATOR</b> <input type="text" value="Pat Lujan"/></p> <p><b>ASSIGNED TO</b> <input type="text" value="Dave Tarkington"/></p> <p><b>DATE REQUIRED</b> <input type="text" value="1/7/2005"/></p> <p><b>ASSIGNED TO SIGNATURE</b> <input type="text"/></p> <p><b>DISCREPANCY</b> <input type="text" value="Per Flag Note 6 Cable ties to be staked with Item 18 on item 4 cable assembly. IS: RTV adhesive used to stake cable tie does not adhere to wire and cable tie. Material does not flake and is removed in one piece."/></p> <p><b>NOTES</b> <input type="text"/></p> <p><b>CAUSE</b> <input type="text" value="Incompatibility of materials"/></p> <p><b>CORRECTIVE ACTION</b> <input type="text" value="Staking not required on cable tie. Remove requirement from drawing."/></p> <p><b>FINAL DISPOSITION</b> <input type="text" value="REWORK"/></p> <p><b>Q/A APPROVAL</b> <input type="text" value="Pat Lujan (e-mails on file)"/></p> <p><b>Q/A APPROVAL DATE</b> <input type="text" value="1/6/2005"/></p> <p><b>COST OF QUALITY</b> <input type="text"/></p>	<p><b>CUSTOMER RETURN</b> <input type="checkbox"/></p> <p><b>RMA NUMBER</b> <input type="text"/></p> <p><b>QUANTITY RETURNED</b> <input type="text"/></p> <p><b>VENDOR DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input type="text"/></p> <p><b>PRODUCTION DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input type="text"/></p> <p><b>REWORK REQUIRED</b> <input type="checkbox"/></p> <p><b>QUANTITY REWORKED</b> <input type="text"/></p> <p><b>PURCHASING DEFECT</b> <input type="checkbox"/></p> <p><b>PURCHASING QUANTITY REJECTED</b> <input type="checkbox"/></p>
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**Lujan, Patricio C**

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**From:** Haller, Gunther  
**To:** Lujan, Patricio C; Marsh, Darren S.  
**Cc:** Tarkington, David; Estey, Brigitte  
**Subject:** RE: NCMR2161

**Sent:** Thu 1/6/2005 3:43 PM

**Attachments:**

approve

Dr. Gunther Haller

Stanford University/SLAC

MS 96

P.O. 20450

Stanford, CA 94309

T: (650) 926-4257

F: (650) 926-2923

---

**From:** Lujan, Patricio C  
**Sent:** Thursday, January 06, 2005 2:37 PM  
**To:** Haller, Gunther; Marsh, Darren S.  
**Cc:** Tarkington, David; Estey, Brigitte  
**Subject:** NCMR2161

Please review attached NCMR.

Pat

**Lujan, Patricio C**

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C; Haller, Gunther  
**Cc:** Tarkington, David; Estey, Brigitte  
**Subject:** RE: NCMR2161  
**Attachments:**

**Sent:** Thu 1/6/2005 3:44 PM

Approved.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

**From:** Lujan, Patricio C  
**Sent:** Thursday, January 06, 2005 2:37 PM  
**To:** Haller, Gunther; Marsh, Darren S.  
**Cc:** Tarkington, David; Estey, Brigitte  
**Subject:** NCMR2161

Please review attached NCMR.

Pat

# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<p><b>NCMR NUMBER</b> <input style="width: 50px;" type="text" value="2173"/></p> <p><b>DATE</b> <input style="width: 50px;" type="text" value="1/17/2005"/></p> <p><b>CUSTOMER</b> <input style="width: 100px;" type="text" value="SLAC"/></p> <p><b>CUSTOMER CONTACT</b> <input style="width: 100px;" type="text" value="Jeffrey Ludvik"/></p> <p><b>VENDOR</b> <input style="width: 100px;" type="text"/></p> <p><b>PART NUMBER</b> <input style="width: 100px;" type="text" value="LAT-DS-01643"/></p> <p><b>LOT QUANTITY</b> <input style="width: 50px;" type="text" value="3"/></p> <p><b>SALES ORDER</b> <input style="width: 100px;" type="text" value="F17301"/></p> <p><b>PURCHASE ORDER</b> <input style="width: 100px;" type="text" value="53627"/></p> <p><b>LOT NUMBER</b> <input style="width: 150px;" type="text"/></p> <p><b>WORK ORDER</b> <input style="width: 150px;" type="text" value="111593, 111594, 111595"/></p> <p><b>INITIATOR</b> <input style="width: 100px;" type="text" value="Pat Lujan"/></p> <p><b>ASSIGNED TO</b> <input style="width: 100px;" type="text" value="Jeffrey Ludvik"/></p> <p><b>DATE REQUIRED</b> <input style="width: 50px;" type="text" value="1/18/2005"/></p> <p><b>ASSIGNED TO SIGNATURE</b> <input style="width: 100px;" type="text"/></p> <p><b>DISCREPANCY</b> <input style="width: 550px; height: 40px;" type="text" value="1) Test failed at Step 5.5.2 -11 of LAT-TD-04085-02 (GLAT1752, GLAT1753, GLAT1754)&lt;br/&gt;2) Unable to perform Vibe testing at GTC"/></p> <p><b>NOTES</b> <input style="width: 550px; height: 40px;" type="text"/></p> <p><b>CAUSE</b> <input style="width: 550px; height: 40px;" type="text" value="1) Test Failure&lt;br/&gt;2) Equipment and fixturing problems yet to be resolved"/></p> <p><b>CORRECTIVE ACTION</b> <input style="width: 550px; height: 60px;" type="text" value="TKR Analog B: Change tolerance to 2.35- 2.75&lt;br/&gt;CAL Bias current: Change tolerance to 0.000400 - 0.001000&lt;br/&gt;TKR Analog A: Change tolerance to 1.30 - 1.65&lt;br/&gt;&lt;br/&gt;2) Ship Units to SLAC. SLAC to perform Vibe, Thermal and Functional testing at SLAC and Wylie Lab."/></p> <p><b>FINAL DISPOSITION</b> <input style="width: 150px;" type="text" value="USE AS IS"/></p> <p><b>Q/A APPROVAL</b> <input style="width: 150px;" type="text" value="Pat Lujan (e-mails on file)"/></p> <p><b>Q/A APPROVAL DATE</b> <input style="width: 50px;" type="text" value="1/18/2005"/></p> <p><b>COST OF QUALITY</b> <input style="width: 100px;" type="text"/></p>	<p><b>CUSTOMER RETURN</b> <input type="checkbox"/></p> <p><b>RMA NUMBER</b> <input style="width: 50px;" type="text"/></p> <p><b>QUANTITY RETURNED</b> <input style="width: 50px;" type="text"/></p> <p><b>VENDOR DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p> <p><b>PRODUCTION DEFECT</b> <input type="checkbox"/></p> <p><b>QUANTITY REJECTED</b> <input style="width: 50px;" type="text"/></p> <p><b>REWORK REQUIRED</b> <input type="checkbox"/></p> <p><b>QUANTITY REWORKED</b> <input style="width: 50px;" type="text"/></p> <p><b>PURCHASING DEFECT</b> <input type="checkbox"/></p> <p><b>PURCHASING QUANTITY REJECTED</b> <input type="checkbox"/></p>
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**Lujan, Patricio C**

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C; Haller, Gunther  
**Cc:** Estey, Brigitte  
**Subject:** RE: NCMR2173  
**Attachments:**

**Sent:** Tue 1/18/2005 3:13 PM

Approved with change recommended by Gunther Haller.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

**From:** Lujan, Patricio C  
**Sent:** Tuesday, January 18, 2005 11:39 AM  
**To:** Marsh, Darren S.; Haller, Gunther  
**Cc:** Estey, Brigitte  
**Subject:** NCMR2173

I added an additional item to NCMR 2173 that should cover the Vibe and TC testing. Please review.

Pat

**Lujan, Patricio C**

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**From:** Haller, Gunther  
**To:** Lujan, Patricio C; Marsh, Darren S.  
**Cc:** Ludvik, Jeffrey; Estey, Brigitte; Nelson, David J.  
**Subject:** RE: NCMR  
**Attachments:**

**Sent:** Tue 1/18/2005 12:34 PM

This one is ok. The flight TPS had some set values changed compared to the EGSE (e.g. TKR voltage).

The monitored readback is ok for the flight and the limits were adjusted.

Dr. Gunther Haller

Stanford University/SLAC

MS 96

P.O. 20450

Stanford, CA 94309

T: (650) 926-4257

F: (650) 926-2923

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**From:** Lujan, Patricio C  
**Sent:** Tuesday, January 18, 2005 11:23 AM  
**To:** Marsh, Darren S.; Haller, Gunther  
**Cc:** Ludvik, Jeffrey; Estey, Brigitte; Nelson, David J.  
**Subject:** FW: NCMR

I need this reviewed so that I can clean up some paper work prior to shipping the units to SLAC.

Pat

**From:** Lujan, Patricio C  
**Sent:** Mon 1/17/2005 4:47 PM  
**To:** Haller, Gunther; Marsh, Darren S.  
**Cc:** Ludvik, Jeffrey; Estey, Brigitte; Nelson, David J.  
**Subject:** NCMR


Attached is NCMR2173 for your review.

Jeffrey,

This documents the changes you made to the procedure.

Pat



 You replied on 1/18/2005 1:51 PM.

**Lujan, Patricio C**

**From:** Haller, Gunther **Sent:** Tue 1/18/2005 12:59 PM  
**To:** Lujan, Patricio C; Marsh, Darren S.  
**Cc:** Estey, Brigitte  
**Subject:** RE: NCMR2173  
**Attachments:**

I think it should say : unable to perform vib testing at GT (not SLAC)

Dr. Gunther Haller

Stanford University/SLAC

MS 96

P.O. 20450

Stanford, CA 94309

T: (650) 926-4257

F: (650) 926-2923

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**From:** Lujan, Patricio C  
**Sent:** Tuesday, January 18, 2005 11:39 AM  
**To:** Marsh, Darren S.; Haller, Gunther  
**Cc:** Estey, Brigitte  
**Subject:** NCMR2173

I added an additional item to NCMR 2173 that should cover the Vibe and TC testing. Please review.

Pat

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**From:** Marsh, Darren S.  
**Sent:** Tue 1/18/2005 4:57 AM  
**To:** Lujan, Patricio C  
**Subject:** FW: shock sensors

Pat.

# GENERAL TECHNOLOGY CORPORATION NONCONFORMANCE MATERIAL/RMA REPORT

<b>NCMR NUMBER</b>	<input type="text" value="2179"/>	<b>CUSTOMER RETURN</b>	<input type="checkbox"/>
<b>DATE</b>	<input type="text" value="1/20/2005"/>	<b>RMA NUMBER</b>	<input type="text"/>
<b>CUSTOMER</b>	<input type="text" value="SLAC"/>	<b>QUANTITY RETURNED</b>	<input type="text"/>
<b>CUSTOMER CONTACT</b>	<input type="text" value="Pat Lujan"/>	<b>VENDOR DEFECT</b>	<input type="checkbox"/>
<b>VENDOR</b>	<input type="text"/>	<b>QUANTITY REJECTED</b>	<input type="text"/>
<b>PART NUMBER</b>	<input type="text" value="LAT-DS-01643"/>	<b>PRODUCTION DEFECT</b>	<input type="checkbox"/>
<b>LOT QUANTITY</b>	<input type="text" value="3"/>	<b>QUANTITY REJECTED</b>	<input type="text"/>
<b>SALES ORDER</b>	<input type="text" value="F17301"/>	<b>REWORK REQUIRED</b>	<input type="checkbox"/>
<b>PURCHASE ORDER</b>	<input type="text" value="53627"/>	<b>QUANTITY REWORKED</b>	<input type="text"/>
<b>LOT NUMBER</b>	<input type="text"/>	<b>PURCHASING DEFECT</b>	<input type="checkbox"/>
<b>WORK ORDER</b>	<input type="text" value="111593, 111594, 111595"/>	<b>PURCHASING QUANTITY REJECTED</b>	<input type="checkbox"/>
<b>INITIATOR</b>	<input type="text" value="Pat Lujan"/>		
<b>ASSIGNED TO</b>	<input type="text" value="Pat Lujan"/>		
<b>DATE REQUIRED</b>	<input type="text" value="1/20/2005"/>		
<b>ASSIGNED TO SIGNATURE</b>	<input type="text"/>		
<b>DISCREPANCY</b>	<input type="text" value="The following units are being shipped with out the End Item Date Package.( EIDP)"/>		
<b>NOTES</b>	<input type="text"/>		
<b>CAUSE</b>	<input type="text" value="Change in location of vibe testing"/>		
<b>CORRECTIVE ACTION</b>	<input type="text" value="EIDP to be shipped at later date."/>		
<b>FINAL DISPOSITION</b>	<input type="text" value="GET CUSTOMER APPROVAL"/>		
<b>Q/A APPROVAL</b>	<input type="text" value="Pat Lujan (e-mails on file)"/>		
<b>Q/A APPROVAL DATE</b>	<input type="text" value="1/20/2005"/>		
<b>COST OF QUALITY</b>	<input type="text"/>		

**Lujan, Patricio C**

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**From:** Haller, Gunther **Sent:** Fri 1/21/2005 10:34 AM  
**To:** Lujan, Patricio C; Marsh, Darren S.  
**Cc:** Estey, Brigitte  
**Subject:** RE: NCMR2179  
**Attachments:**

Approved.

But they said they will have the data-package by end of this week.

Is it done now?

And if not, what is holding it up?

--- Dr. Gunther Haller

Stanford University/SLAC

MS 96

P.O. 20450

Stanford, CA 94309

T: (650) 926-4257

F: (650) 926-2923

**From:** Lujan, Patricio C  
**Sent:** Friday, January 21, 2005 9:29 AM  
**To:** Lujan, Patricio C; Marsh, Darren S.; Haller, Gunther  
**Cc:** Estey, Brigitte  
**Subject:** RE: NCMR2179

I referenced NCMR2179 on the travelers of the units that shipped yesterday. I need approval of this NCMR to close the loop.

**Lujan, Patricio C**

**From:** Marsh, Darren S.  
**To:** Lujan, Patricio C  
**Cc:**  
**Subject:** RE: NCMR2179  
**Attachments:**

**Sent:** Fri 1/28/2005 8:59 AM

NCR 2179 Approved.

Darren

Darren S. Marsh

GLAST Large Area Telescope Project

Stanford Linear Accelerator Center

2575 Sand Hill Road, M/S 43A

Menlo Park, CA 94025

(650) 926-4577

**From:** Lujan, Patricio C  
**Sent:** Thursday, January 27, 2005 1:06 PM  
**To:** Marsh, Darren S.  
**Subject:** RE: NCMR2179

As I type GTC is in the process of reviewing the build documentation. I should be done with the test documentation today and will have GTC put in binders and make copies. I would like at least 2 days to review all the documentaion after it is presented to me. I believe I have all the information and NCMRs are closed. I do not see a problem in sending you the EIDP directly.

Pat

S/N 2 (60311311)

TEST ID:

# GTC TEST DEFECT RECORD REPORT

PART NUMBER: A6-D3-02332  
WO: 110394 WC:

TEST TYPE:  
TEST LEVEL:  
TEST TECH:

DATE:

SO:  
CUSTOMER:

PROGRAM NAME:

REF DES

TEST QTY:  
FAIL QTY:

DEFECT DESCRIPTION

SERIAL # QTY DEFECT CODE  
GUM 1774 1 MCR# 2123  
TEST INFO

RW INFO:

REWORKED BY: INSPECTED BY:

REWORK NOTES (OPTIONAL):

REPLACE R231 (18.2k) WITH F/N62 (15k) M55342 K061315 EOR

RETEST NOTES (OPTIONAL):  
Removed + Replaced  
DL 1648  
R231 12-15-04

RETESTED BY:

RETEST DATE: P F

S. Ludvik

12/16/09



# GTC TEST DEFECT RECORD REPORT

TEST ID: 21022

PART NUMBER: LAT-DS-02388

WO: 110394 WC: 4-MIXED

SO: F17300

TEST QTY: 1

FAIL QTY: 1

TEST TYPE: SPEA

TEST LEVEL: 1ST

TEST TECH: STEFFEN BODE

CUSTOMER: SLAC

PROGRAM NAME: LAT-DS-02388

DATE: 12/10/2004

SERIAL # QTY DEFECT CODE

#2 1 T302

DEFECT DESCRIPTION  
MISSING COMPONENT

RW INFO:

REF DES

R67

REWORKED BY INSPECTED BY:

*See*

*12/10/04*

REWORK NOTES (OPTIONAL):

RETEST NOTES (OPTIONAL):

RETESTED BY:

*dhase*

RETEST DATE: P F

12.13.04

X

# DEFECT RECORD REPORT

*Close P. Jr.*

ID: 27133

PART NUMBER: LAC-DS-02388

INSPECTION TYPE: FIRST ARTICLE RUN

OFF SOLDER: 0

ORK ORDER: 110394

INSPECTION LEVEL: 1

FE ASSEMBLY: 0

SALES ORDER: F17300

INSPECTOR: TORRES

ATE: 11/4/2004

QUANTITY: 1 RW QTY: 1

WEEK CODE: 46

CUSTOMER: SLAC

SERIAL NO.	QUANTITY	OPERATOR	DEFECT CODE	WORKCELL	DEFECT DESCRIPTION	REF DES	PIN NOTES
2	1	499	A337	4-MIXED	DEFORMED LEAD	U560-1	
2	1	499	A338	4-MIXED	MIS REGISTRATION	L12	
2	1	499	A338	4-MIXED	MIS REGISTRATION	U12	
2	1	499	S407	4-MIXED	NON SOLDERED CONNECTION	U660	
2	1	499	S412	4-MIXED	< 75% HEEL FILLET AT 10X MAGN.	D2	
2	1	499	S412	4-MIXED	< 75% HEEL FILLET AT 10X MAGN.	D1	
2	1	499	S412	4-MIXED	< 75% HEEL FILLET AT 10X MAGN.	D20	
2	1	499	S412	4-MIXED	< 75% HEEL FILLET AT 10X MAGN.	D19	
2	1	499	S412	4-MIXED	< 75% HEEL FILLET AT 10X MAGN.	D5	
2	1	499	S412	4-MIXED	< 75% HEEL FILLET AT 10X MAGN.	D4	

*Reviewed  
11/19/04  
1409 Dina*

# DEFECT RECORD REPORT

ID: 27133

PART NUMBER: LAG-DS-02388

INSPECTION TYPE: FIRST ARTICLE RUN

OFE SOLDER: 0

ORK ORDER: 110394

INSPECTION LEVEL: 1

FE ASSEMBLY: 0

SALES ORDER: FT7300

INSPECTOR: TORRES


ATE: 11/4/2004

QUANTITY: 1 RW QTY: 1

WEEK CODE: 46

CUSTOMER: SLAC

SERIAL NO.	QUANTITY	OPERATOR	DEFECT CODE	WORKCELL	DEFECT DESCRIPTION	REF DES	PIN NOTES
2	1	499	S428	4-MIXED	DISTURBED SOLDER	Q12	
2	1	499	S428	4-MIXED	DISTURBED SOLDER	Q11	
2	1	499	S428	4-MIXED	DISTURBED SOLDER	Q10	
2	1	499	S402	"	<i>Imagery - solder</i>	L6	
2	1	"	"	"	"	L7	
2	1	"	"	"	"	L12	


  
 Francisco  
 11/9/04  
 11/9/04  
 11/9/04



# DEFECT RECORD REPORT

*Handwritten initials/signature*

ID: 27188

PART NUMBER: LATDS

INSPECTION TYPE: 1ST SOLDER INSPECTIO

OPE SOLDER: 0

ORK ORDER: 01646

INSPECTION LEVEL: 1

FE ASSEMBLY: 0

SALES ORDER: F17200

INSPECTOR: TORRES

ATE: 11/9/2004

QUANTITY: 1 RW QTY: 1

WEEK CODE: 48

CUSTOMER: SLAC

SERIAL NO.	QUANTITY	OPERATOR	DEFECT CODE	WORKCELL	DEFECT DESCRIPTION	REF DES	PIN NOTES
2	1	499	A337	4-MIXED	DEFORMED LEAD	U47-8	
2	1	1829	A385	4-MIXED	SOAP RESIDUE		THROUGHOUT
2	1	499	S413	4-MIXED	BRIDGING		

*Handwritten notes:*  
 U3 ~~1/9/04~~ ~~11/8/04~~  
 Rousckid  
 11/9/04  
 11/10/04

*Handwritten date:* 11-10-04

# DEFECT RECORD REPORT

*Closeal*  
12/1/04

ID: 27353

PART NUMBER: LAT-DS-01646

INSPECTION TYPE: HAND SOLDER

OPER SOLDER: 817

ORK ORDER: 110155

INSPECTION LEVEL: 1

FE ASSEMBLY: 836

SALES ORDER: F17200

INSPECTOR: TORRES

ATE: 11/17/2004

QUANTITY: 1 RW QTY: 1

WEEK CODE: 49

CUSTOMER: SLAC

SERIAL NO.	QUANTITY	OPERATOR	DEFECT CODE	WORKCELL	DEFECT DESCRIPTION	REF DES	PIN NOTES
2	1	692	A310	4-MIXED	MISSING MARKING	JS1	MFG# <i>Did not Do</i>
2	1	692	A310	4-MIXED	MISSING MARKING	JT1-3.5	MFG#
2	1	692	S406	4-MIXED	EXCESS SOLDER	JT0	
2	1	692	S413	4-MIXED	BRIDGING	JT2-4.7	<i>MAA 45 &amp; 11-18-04</i>

# DEFECT RECORD REPORT

*W. Lopez*

ID: 27598

PART NUMBER: LAT DS 02388      INSPECTION TYPE: HAND SOLDER

ORK ORDER: 110394      INSPECTION LEVEL: 1

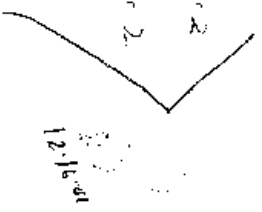
SALES ORDER: F17300      INSPECTOR: TORRES

QUANTITY: 1      RW QTY: 1

CUSTOMER: SLAC

OFF SOLDER: 0  
 FF ASSEMBLY: 0  
 ATE: 12/1/2004  
 WEEK CODE: 49

SERIAL NO.	QUANTITY	OPERATOR	DEFECT CODE	WORKCELL	DEFECT DESCRIPTION	REF DES	PIN NOTES
2	1	2002	A301	4-MIXED	MIS ORIENTATION	C153	SS 2002
2	1	2002	A329	4-MIXED	INCORRECT WIRE ROUTING	VR5	S. 2002


  
 12/1/04

# DEFECT RECORD REPORT

ID: 27730

PART NUMBER: LAT-DS-02388

INSPECTION TYPE: HAND SOLDER

OPE SOLDER: 0

ORK ORDER: 110394

INSPECTION LEVEL: 1

FE ASSEMBLY: 0

SALES ORDER: F17300

INSPECTOR: TORRES

ATE: 12/7/2004

QUANTITY: 1 RW QTY: 1

WEEK CODE: 51

CUSTOMER: SLAC

SERIAL NO.	QUANTITY	OPERATOR	DEFECT CODE	WORKCELL	DEFECT DESCRIPTION	REF DES	PIN NOTES
2	1	12/7/04	A320		DAMAGED INSULATION	42	NCMR 21)6 (390)
2	1	2002	A320		DAMAGED INSULATION	41	USK AS LS 0
2	1	2002	A320		DAMAGED INSULATION	33	8008 12/15/05
2	1	2002	A343		INCOMPLETE PAPERWORK		PRE RNM 05 2002
2	1	2002	S402		INSUFFICIENT SOLDER	40	5 2002
2	1	2002	S427		FLUX RESIDUE		THRU-OUT 05 2002

12/7/04

12/7/04

# DEFECT RECORD REPORT

ID: 27964

PART NUMBER: LAT-DS-01648

INSPECTION TYPE: BONDING

OFF SOLDER: 0

ORK ORDER: 110453 *110155-5000*

INSPECTION LEVEL: 1

FE ASSEMBLY: 104

SALES ORDER: F17200

INSPECTOR: TORRES

ATE: 12/16/2004

QUANTITY: 1 RW QTY: 1

WEEK CODE: 54

CUSTOMER: SIAC

SERIAL NO.	QUANTITY	OPERATOR	DEFECT CODE	WORKCELL	DEFECT DESCRIPTION	REF DES	PIN NOTES
<i>2</i>	1	1928	A309	4-MIXED	INSUFFICIENT COATING / POTTING / BONDI JI		<i>R.H. Torres</i> <i>12/28/04</i>

*R.H. Torres*  
*12/28/04*

*12/28/04*

# DEFECT RECORD REPORT

ID: 28054

PART NUMBER: LAT-DS-02388

INSPECTION TYPE: BONDING

OFE SOLDER: 0

ORK ORDER: 110394

INSPECTION LEVEL: 1

FE ASSEMBLY: 0

SALES ORDER: F47300

INSPECTOR: TORRES

ATE: 12/21/2004

QUANTITY: 1 RW QTY: 1

WEEK CODE: 52

CUSTOMER: SI,AC

SERIAL NO.	QUANTITY	OPERATOR	DEFECT CODE	WORKCELL	DEFECT DESCRIPTION	REF DES	PIN NOTES
2	1	A309		4-MIXED	INSUFFICIENT COATING / POTTING / BONDI	IP	
2	1	A309		4-MIXED	INSUFFICIENT COATING / POTTING / BONDI	OP	
2	1	A348		4-MIXED	MISSING WIRES	IP	TIES

*[Handwritten signature]*  
12/21/2004

# DEFECT RECORD REPORT

ID: 28081

INSPECTION TYPE: HAND SOLDER

OFF SOLDER: 75

PART NUMBER: LAT-DS-02388

INSPECTION LEVEL: 1

OFF ASSEMBLY: 90

WORK ORDER: 110394

INSPECTOR: HUBBARD

DATE: 12/22/2004

SALES ORDER: F17300

QUANTITY: 1 RW QTY: 1

WEEK CODE: 51

CUSTOMER: SLAC

SERIAL NO.	QUANTITY	OPERATOR	DEFECT CODE	WORKCELL	DEFECT DESCRIPTION	REF DES	PIN NOTES
2	1	2002	A317	4 MIXED	BIRDCAGING	U7	PIN2, WIRE
2	1	2002	S408	4-MIXED	CONTAMINANTS IN SOLDER	U15	PIN 5, WIRE

*Handwritten notes:*  
 ) OF  
 1048  
 12-22-04

*Handwritten notes:*  
 12/22/04

# REWORK TRAVELER

*closed*

SO NO: F17200	PART NO: LAT-DS-01646	REV: 54
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ASSEMBLY NAME: CCA, TEM	QTY: 2 / <i>see</i>
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APPROVAL	<i>ORIGINAL <del>FILE</del> - cover page copied to provide each w/see</i>						
HEFKIN	<i>12-13-04</i>	P. LUJAN	<i>12-13-04</i>	HANRAHAN	<i>12/14/04</i>	MORA	<i>12-14-04</i>
PREPARED BY	DATE	CSI	DATE	PROD	DATE	QA	DATE

STEP	OPERATION	Operator Sign Off.	Date	Time spent
1	Serial numbers: #2 (614), #3 (612) REFERENCE NCMR # 2082 AND # 2083.			
2	<b>TOOLS AND MATERIALS:</b> ✓ MIXING CONTAINER - PLASTIC, METAL, OR GLASS ✓ MIXING UTENSIL - PLASTIC, METAL, OR GLASS ✓ SCALE - GRAM, CALIBRATED ✓ PLIERS - METAL, NEEDLE, SMOOTH JAW SURFACE			
3	MIX A SMALL AMOUNT OF THE TWO PARTS OF COATING MATERIAL, ARATHANE 5750, FOR BRUSH APPLICATION TO DAMAGED LOCATIONS ON EACH CCA. REFER TO PICTURES ON FOLLOWING PAGE. USE THE FOLLOWING RATIO TO MIX THE MATERIAL:  PART A      18 PARTS BY WEIGHT    EXAMPLE:    (0.54 GRAMS) PART B      100 PARTS BY WEIGHT                      (3.00 GRAMS)  MIX SLOWLY, BY HAND, TO MINIMIZE AIR ENTRAPMENT.  POT LIFE IS APPROXIMATELY TWO (2) HOURS). LET MIXED MATERIAL STAND FOR HALF AN HOUR TO RELEASE ANY ENTRAPPED AIR. RECORD MIXTURE AMOUNTS, MATERIAL LOT/BATCH CODE, AND EXPIRATION DATE, BELOW:  <i>80# 30201</i> AMOUNTS MIXED: PART A: <u>10.0g</u> PART B: <u>1.8g.</u> CODE: <u>AK4GB8013A</u> EXPIRATION DATE: <u>3/05</u> A-code <u>AK4GX8033A</u> Exp-DATE <u>3/05</u>	<i>Mixed</i> <i>DM/1035</i> <i>12-14-04</i>		

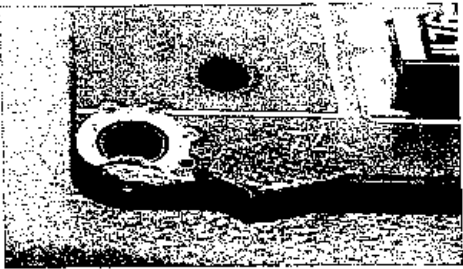


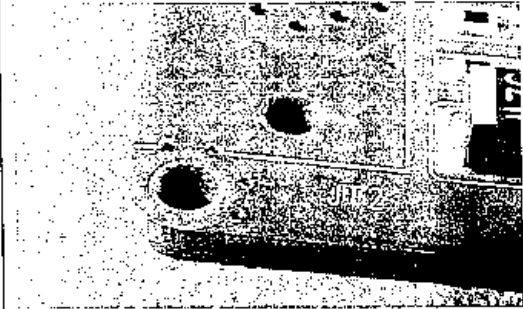
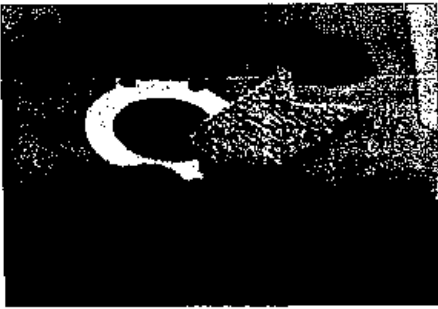

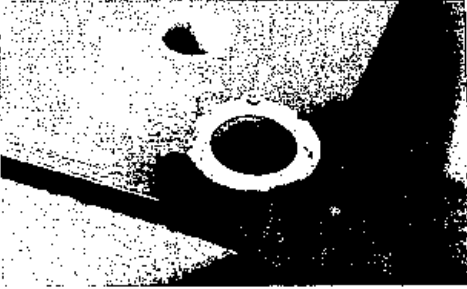




# REWORK TRAVELER

#2

SO NO: F17200	PART NO: LAT-DS-01646	REV: 54	
ASSEMBLY NAME: CCA, TEM			QTY: <u>2</u> <i>See</i>

STEP	OPERATION	Operator Sign Off.	Date	Time spent
	<p><i>THIS REWORK TRAVELER APPLIES COATING MATERIAL TO LOCATIONS ON CORNERS OF CCAS DAMAGED BY FALLING OFF A STORAGE TRAY. REWORK AUTHORIZED VIA EMAIL FROM B. ESTEY, DATED 12/12/04; 4:21 pm (ATTACHED)</i></p>			
REF	<p>PICTURES OF DAMAGE TO SN #2 (614)...</p> <div style="display: flex; flex-wrap: wrap;">    </div> <p>NOTE DEFORMED CORNER PADS.</p>			
REF cont.	<p>PICTURES OF DAMAGE TO SN #3 (612)...</p> <div style="display: flex; flex-wrap: wrap;">     </div> <p>NOTE DEFORMED CORNER PADS.</p>			



# REWORK TRAVELER

#2

SO NO: F17200	PART NO: LAT-DS-01646	REV: 54
ASSEMBLY NAME: CCA, TEM		QTY: 2 / cen

STEP	OPERATION	Operator Sign Off.	Date	Time spent
	<i>THIS REWORK TRAVELER APPLIES COATING MATERIAL TO LOCATIONS ON CORNERS OF CCAS DAMAGED BY FALLING OFF A STORAGE TRAY. REWORK AUTHORIZED VIA EMAIL FROM B. ESTEY, DATED 12/12/04; 4:21 pm (ATTACHED)</i>			
4	WHEN DEFORMED PAD IS EVIDENT, CAREFULLY PRESS IT BACK DOWN INTO NORMAL POSITION. USE PLIERS FOR MOVING THE PAD METAL.  USE A BRUSH TO APPLY A SMALL AMOUNT OF COATING TO NOTED DAMAGED LOCATIONS. COVER EXPOSED FIBERS, AND ADJACENT AREAS UP TO 1/2" AWAY FROM DAMAGED SURFACES  ALLOW COATING TO AIR-DRY, OBSERVING FOR DRIPS, FOR HALF AN HOUR. REMOVE EXCESS DRIP COATING DURING THIS TIME.	<i>[Signature]</i>	12-24-04	
5	CURE COATING DURING BAKE CYCLE PERFORMED FOR CURING STAKING MATERIALS.  RECORD CURE DATE, TEMPERATURE, AND VSTART/STOP TIMES BELOW:  DATE: <u>12/14/04</u> TEMP: <u>120°F</u> START: <u>2:45PM</u> STOP: _____	<i>[Signature]</i>	12-24-04	
6	INSPECTION	<i>[Signature]</i>	12/15/04	
7	CSI			



