

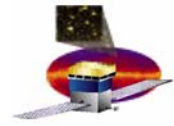
# Design Engineering

## GLAST Large Area Telescope Engineering Meeting

LAT Technical Status for  
January Lehman Review

January 21, 2003  
Lowell A. Klaisner  
Stanford Linear Accelerator Center  
Chief Engineer

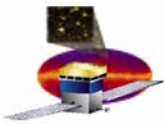
Klaisner@slac.stanford.edu  
650-926-2726



# Agenda

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- **Review the “LAT Top Design Issues” chart (attached)**
  - **Which of these are closed or reduced risk**
  - **What new issues should be added**
- **Discussion of achievements since last Lehman Review that should be highlighted this review**



# LAT Top Design Issues

Issue	Plan	Status
Structural Integrity of the attachment points on the bottom tray of the Tracker tower	<ul style="list-style-type: none"> <li>• Designing and testing Ti reinforcements</li> <li>• Backup design using Invar</li> </ul>	Red
Calorimeter photodiode window cracking	<ul style="list-style-type: none"> <li>• Switch to silicon encapsulant</li> <li>• French investigating</li> </ul>	Yellow
Adequacy of the GRID to CAL mechanical connection	<ul style="list-style-type: none"> <li>• Improve design and test</li> <li>• Working with GSFC on alternatives</li> </ul>	Red
ACD Performance issues due to gaps in coverage required by vibration and thermal testing	<ul style="list-style-type: none"> <li>• Revise design in a number of places</li> <li>• Review environmental specifications</li> </ul>	Cyan
Schedule for the delivery of the TEM with ASICS	<ul style="list-style-type: none"> <li>• Current schedule has time for 2 prototype runs of ASIC</li> <li>• Use XILINX FPGAs</li> </ul>	Yellow
Environmental Specifications -- Vibration	<ul style="list-style-type: none"> <li>• Revisit earlier analysis of subsystem environments</li> <li>• Review process with GSFC</li> </ul>	Yellow
Environmental Specifications -- Thermal	<ul style="list-style-type: none"> <li>• Complete current analysis</li> <li>• Work with subsystem engineers</li> </ul>	Cyan
Test Plans – much work to be done	<ul style="list-style-type: none"> <li>• Complete environmental specification</li> <li>• Identify missing plans</li> </ul>	Yellow

 Issue stable/adequately addressing

 Issue stable/concerned

 Issue dynamic/concerned