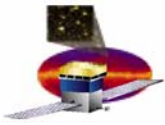


GLAST Large Area Telescope

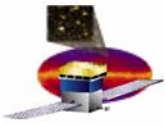
Hardware Handling

Jerry Clinton
Chief Manufacturing Engineer
Stanford Linear Accelerator Center
jclinton@SLAC.stanford.EDU
(650) 926-5435



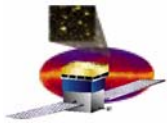
General Guidelines

- **Do not touch flight hardware with bare hands**
 - **Wear cotton or nitrile gloves to pick up and handle**
 - **Finger cots may be used when required to touch flight equipment**
- **Follow ESD control procedures at all times**
 - **Test your wrist strap after gowning**
 - **Make sure it is touching your skin**
- **Do not handle flight equipment any more than is absolutely necessary**
- **Keep work area clean and free of unnecessary items**
- **Turn off equipment power and cover equipment with ESD-safe wrapper at the end of your shift**
- **If you aren't sure what it is, TREAT IT AS FLIGHT EQUIPMENT**
- **TAKE YOUR TIME. Hurrying is a major cause of accidents**



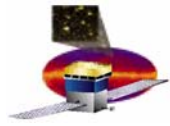
Hardware Transport Within the Clean Room

- **Wrap or bag the item in ESD-safe material. Wrapping should completely enclosed the item**
- **Do not hand-carry flight equipment from one location to another, even within the clean room. USE A CART**



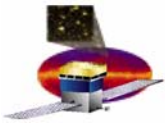
Hardware Transport from Clean Room to Stores

- **Wrap item in ESD-safe material. Item must be completely enclosed**
- **Seal wrapper**
 - **Vacuum/GN2 sealer available**
 - **Use approved tape**
- **Place wrapped and sealed item on a cart and move it to the gowning room**
- **Pack item in approved storage or shipping container**
- **Call Albert Conceicao (x2621) or Jerry Clinton (5435) to store item**



Hardware Transport from Stores to Clean Room

- **If you're unsure of the procedure, GET HELP**
 - **Albert Conceicao**
 - **Jeff Tice**
 - **Jerry Clinton**
 - **Darren Marsh**
- **USE A CART. Do not hand-carry flight hardware, even the small stuff**
- **Protective bags and/or inner containers are not to be opened until the item is in a clean environment**
 - **Gowning room**
 - **Clean room**
- **Clean item protective cover/inner container in accordance with LAT-MD-00404, LAT Contamination Control Plan**



Accident Procedure

- If you drop a flight hardware item . . .
 - Don't immediately pick it up.
 - Leave it where it stops and protect it from further damage
 - Contact the responsible engineer
 - Follow the direction of the responsible engineer
 - Write a Non-conformance report detailing what happened and the direction given by the responsible engineer
- **REPORT IT!!**