Integration

- Contamination control plan
- Material control
  - Travelers
  - Database – MS Access – Export to Oracle
  - Security – Signature controlled custodian/travelers
  - Training
  - Coordination with subsystem teams
- Flight hardware
  - Receiving/Storage
  - Staging
  - Spares
Integration

- Training/certifications
  - NASA
  - SLAC
  - OSHA
  - Test device calibration

- Compliance issues
  - Flight hardware

- Environment sensitive components

- Perform integration
Facilities

- Contamination Control Plan
  - Protocols
    - Cleanroom operations
    - Gowning
    - Workmanship standards
    - Facility maintenance

- Integration Procedures
  - Flight hardware handled by qualified, certified personnel
  - Procedures prototyped, tested and implemented
  - NCR/ECR - originate/resolve/record
  - Metrology support
  - Coordinate requirements of subsystem teams in SLAC Facility
Mechanical Ground Support Equipment (MGSE)

- LAT Assembly
- Shipping
- Vibration Mount
- Thermal Vacuum Mount
- Rigging/Lifting fixtures
- Provide design support for GSE
- Originate operating procedures for GSE
- Maintain/Inspect/Store GSE
Configuration

- Configure tests
  - Flight hardware handled by certified personnel
  - Maintain consistent handling standards
  - Maintain chronology of component handling

- Logistics
  - Packaging/Shipping
  - Coordination with test facility
  - Utilize consistent handling/rigging standards
  - Maintain chronology of component handling

- Setup
  - Support effort expected from subsystem members
  - Interface to subsystems in development of techniques/procedures
Tests

- Performance
  - Functional
  - EMI
  - Cosmic ray
- Particle
- Environmental
  - Vibration
  - Thermal/vacuum
Resources

Schedule

- Master Project Schedule
- Changes to schedule from added tasks TBD

Personnel

- Integration/Test Engineer
- Mechanical/Electronic Technicians
- Design
- Administrative/Clerical
- Support effort expected from subsystems
Cost Estimate

- Many tasks with no cost estimate
- Additional tasks, not yet reflected in cost estimate (Airplane test, Van de Graf)
- Subject to arrangements made with subsystem managers for manpower support at collaborator/contractor’s facility
- Affected by shift work
GLAST Integration Area – Building 33 SLAC
Concept Drawing – LAT Integration Fixture
Concept Drawing – LAT Integration Fixture
ISO View - High Bay – Integration Area (from MGSE handling study)
Side View - High Bay – Integration Area (from MGSE handling study)