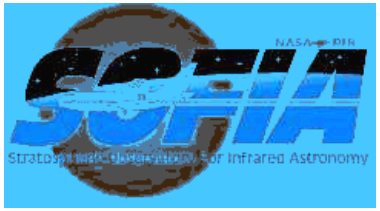

Conclusions

Frank J. Kirchman

Conclusions

Agenda

- Integration and Test
- Budget
- Overall Schedule
- Conclusions

Integration and Test

- HAWC Integration will be accomplished at GSFC
- Building 7 cleanroom space will be used
  - Currently baselining the use of the CRIF
- Building 7 facilities have access to cleanroom support, network (IP address), emergency power, and other institutional facilities
- Any vibration testing required can be performed in the building

Integration and Test

- Individual components are qualified prior to delivery to I&T
- Co-located Yerkes personnel function as I&T management
- I&T Management consists of
  - Planning the systems integration of the HAWC instrument
  - Developing procedures for the operation of HAWC
  - Insuring that HAWC is operated correctly
  - Documenting the HAWC procedures into operating manuals
  - Training SOFIA personnel

Budget

- The HAWC program has been cost estimated by UC and GSFC
  - Costs for the basic HAWC system fit within the awarded amount
    - Contingency is assumed to held by SOFIA
- Additional cost estimation by GSFC personnel for advanced software system has been performed
  - Assumes a software system that is applicable to any SOFIA Instrument
  - Costs are significantly more than HAWC budget, but may be less than SOFIA cost for equivalent system

Budget

- Preliminary Grass Roots costing performed by UC and GSFC personnel
  - Update to Grass roots costing exercise will take place immediately after PDR, in support of GSFC POP

- Current level of funding is adequate for HAWC's basic mission

HAWC Schedule

- Detector development requires HAWC hardware availability well in advance of SOFIA Integration
  - HAWC Technology is needed for other missions, such as SAFIRE, FIRST, SHARC, etc.
  - Accelerated schedule enables cost containment
- Software availability will be in phases
  - Rudimentary system will enable system integration and test
  - Flight system will be available for SOFIA integration
  - Advanced system can be available early in the SOFIA observation program if resources are available in early design phase

Conclusions

- HAWC Hardware design is on track
- Fabrication of selected hardware elements will commence
  - Detectors
  - ADR
  - Electromechanical Devices
  - Cryostat
  - Data system
- Software Design will commence immediately after PDR