



SCIENCE

Draft AO for SOFIA 2nd Generation Instruments

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SOFIA Splinter Session, 217th AAS Meeting, January 11, 2011

SOFIA 2nd Generation Instruments



NASA has issued for community comment a Draft Program Element Appendix (PEA) to the Stand Alone Missions of Opportunity Notice (SALMON) AO entitled “Appendix H8: SOFIA Second Generation Instruments.”

Draft solicitation is posted at <http://nspires.nasaprs.com/>.

Potential bidders telecon on January 26, 2011.

Details will be posted at <http://soma.larc.nasa.gov/SOFIA/>.

Comments are due to paul.hertz@nasa.gov by February 11, 2011.

SOFIA 2nd Generation Instruments



This Draft AO describes the process for NASA to acquire and fund additional U.S. instrument capabilities for SOFIA.

This Draft AO does not include the acquisition of additional German instrument capabilities; that is the responsibility of DLR.

The NASA and DLR processes will be coordinated in such a way that

- The overall SOFIA Observatory capabilities will be improved through the totality of additional instrument capabilities acquired by both countries.
- Each country's requirements (e.g. procurement regulations, decision process, funding arrangements) are respected.

SOFIA 2nd Generation Instruments



SOFIA development priorities for project funding are

- Begin science operations and ramp up flight hours
- Initiate second generation science instrument(s)
- Complete deferred observatory and systems upgrades

This sets the schedule for beginning development of the next instrument.

SOFIA's instrument suite can be upgraded, enhanced, refreshed throughout the life of the observatory

- Funding for new U.S. instrument calls is one component of NASA's SOFIA budget
- Under the current planning budget*, funding for NASA selections will be available in mid-FY12, so planning is underway for a mid-2011 solicitation and a late 2011 selection.

* The President's FY11 proposed budget – waiting for Congress to appropriate funds for FY11.

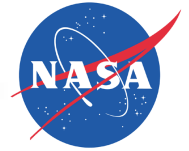
SOFIA 2nd Generation Instruments



NASA will solicit science investigations using:

- Facility science instruments
 - General purpose instruments that are maintained and operated for GOs by SOFIA Science Mission Operations
- Science instrument upgrades
 - Major upgrades and modifications to existing instruments, after which the instrument is a facility science instrument
- Technology demonstration science instruments
 - Developed for the purpose of maturing and demonstrating new capabilities and methodologies of value to SOFIA and future NASA missions
 - Analogous to NASA's sounding rocket and scientific balloon suborbital investigations
 - Allowed to have shorter duration and significantly less costly than a facility instrument in exchange for higher risk and reduced reliability

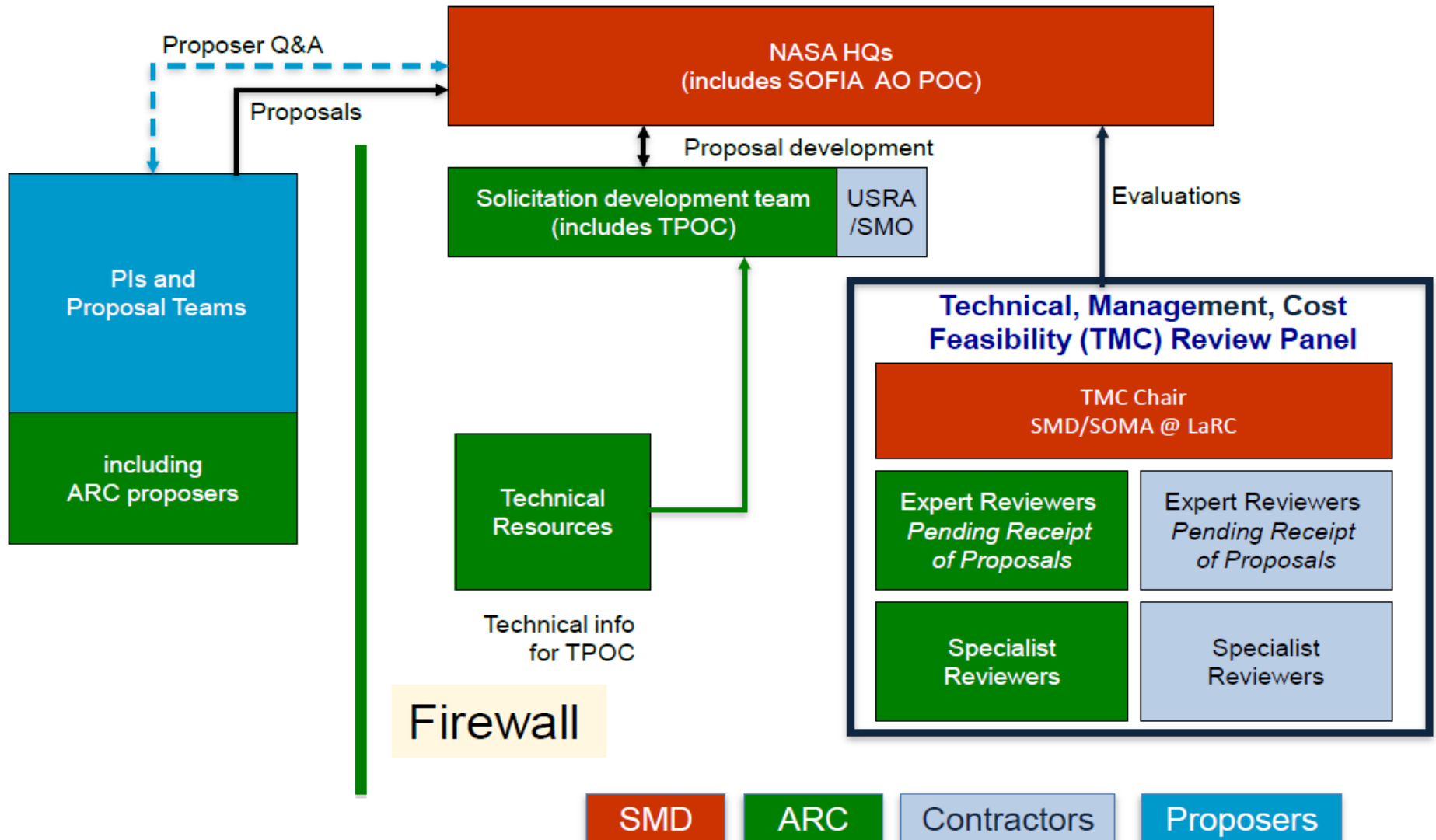
SOFIA 2nd Generation Instruments



AO process integrity

- NASA intends for USRA to help NASA with writing the AO and evaluating proposals, therefore USRA is precluded from proposing (clause in USRA contract under negotiation)
- USRA and NASA SOFIA staff at ARC are helping with the AO and are precluded from proposing, however the rest of ARC may propose (NASA has put in place a firewall at ARC and DFRC)
- The universities who are members of USRA may propose (NASA has waived any apparent or real organizational conflict of interest)

SOFIA Second Generation Instruments AO – ARC Firewalled Roles



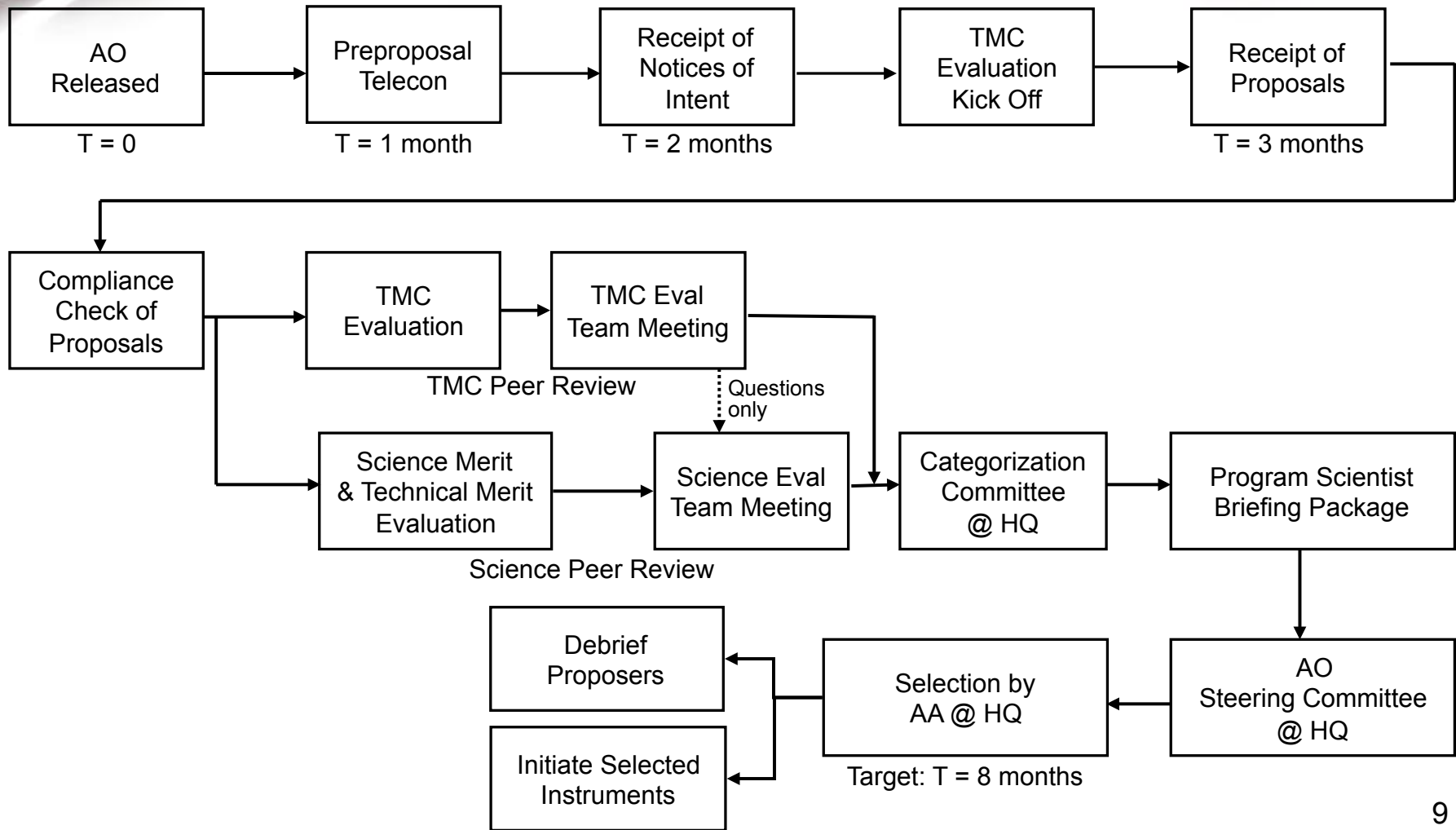
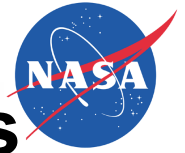
SOFIA 2nd Generation Instruments



Schedule

- ✓ Asilomar workshop: June 2010
- ✓ Draft solicitation released: December 15, 2010
- ❖ Discussion at AAS meeting: January 11, 2011
 - Potential bidders telecon: January 26, 2011
 - Comments due date: February 11, 2011
 - Solicitation released: Mid 2011 (target)
 - Proposals due: 90 days later
 - Selection announced: Late 2011
 - Contract initiated: Early 2012

Standard SMD Proposal Evaluation & Selection Process





NATIONAL AERONAUTICS
and SPACE ADMINISTRATION

- + [NASA Portal](#)
- + [Science Mission Directorate](#)
- + [NASA Research Opportunities](#)

Science Office for Mission Assessments (SOMA)
LaRC - 2010

Stratospheric Observatory For Infrared Astronomy Additional Information Home Page

+ [SOMA Home](#)

SOFIA Add'l Info

+ [Announcements](#)

+ [Draft AO](#)

+ [Reference Program Library](#)

+ [Draft AO FAQs](#)

+ [Potential Bidder's Telecon](#)

+ [SALMON AO Additional Info](#)

Community Announcement for NSPIRES and Newsletters:

Subject: Draft AO for SOFIA Second Generation Instruments Released for Community Comment

Release Date: December 15, 2010
SOFIA Instrument Potential Bidders Telecon: January 26, 2011
Comments Due: February 11, 2011
Identification Number: NNH11ZDA009J

On December 15, 2010, the National Aeronautics and Space Administration (NASA) Science Mission Directorate (SMD) is releasing a draft solicitation for community review and comment, the Draft Stratospheric Observatory for Infrared Astronomy (SOFIA) Second Generation Instruments Program Element Appendix (PEA) for the Stand Alone Missions of Opportunity Notice (SALMON) AO. Upon the release date, the full text of the draft solicitation will be available at <http://nspires.nasaprs.com/>.

The SOFIA observatory consists of a German-built 2.7-meter telescope mounted in a Boeing 747-SP aircraft supplied and modified by NASA. Flying at altitudes up to 45,000-feet, SOFIA observes from above more than 99 percent of Earth's atmospheric water vapor, thereby opening windows to the universe not available from the ground. SOFIA will provide international science teams up to 1000 science observing hours per year during its two decade design lifetime. Seven first-generation science instruments are under development by institutions in both the U.S. and Germany, including both imaging cameras and spectrographs. This draft solicitation is a call for science investigations that include the development, delivery, and use of second generation instruments for the SOFIA observatory.

Participation is open to all categories of organizations or institutions including educational, industrial, and not-for-profit institutions, Federally Funded Research and Development Centers (FFRDCs), University Affiliated Research Centers (UARCs), NASA Centers, the Jet Propulsion Laboratory (JPL), other Government agencies, and non-U.S. organizations or institutions.

This draft solicitation will be discussed by NASA at the 217th Meeting of the American Astronomical Society during the Splinter Meeting on Early Results from the SOFIA Observatory, on Tuesday January 11, 2011, at 5:30 – 7:00 pm PST, in Ballroom 6C of the Washington State Convention & Trade Center in Seattle, WA.

NASA will hold a SOFIA Instrument Potential Bidders Telecon/WebEx on Wednesday, January 26, 2011, at 1:00 – 4:00 pm EST (10:00 am – 1:00 pm PST). Details of this Telecon/WebEx will be posted on the SOFIA Instruments PEA Additional Information Homepage, available at

SOFIA 2nd Generation Instruments



The draft solicitation is posted in NSPIRES. It will be issued as an amendment to the SALMON AO

- Stand Alone Mission of Opportunity Notice
- Available at <http://nspires.nasaprs.com/>

A SOFIA Instrument AO Library has been populated with technical reference documents (e.g. ICDs)

- Available at <http://soma.larc.nasa.gov/SOFIA/>

The standard SMD AO process will be used

Potential bidders conference on January 26, 2011

Comments on draft solicitation due by February 11, 2011

