



# SENIOR REVIEW STATUS

Demonstration of scientific productivity  
Promise of future science  
Cost effectiveness

**The unique scientific return from SOFIA is worth the resources (cost) invested by NASA and DLR**



# Senior Review Proposal Team

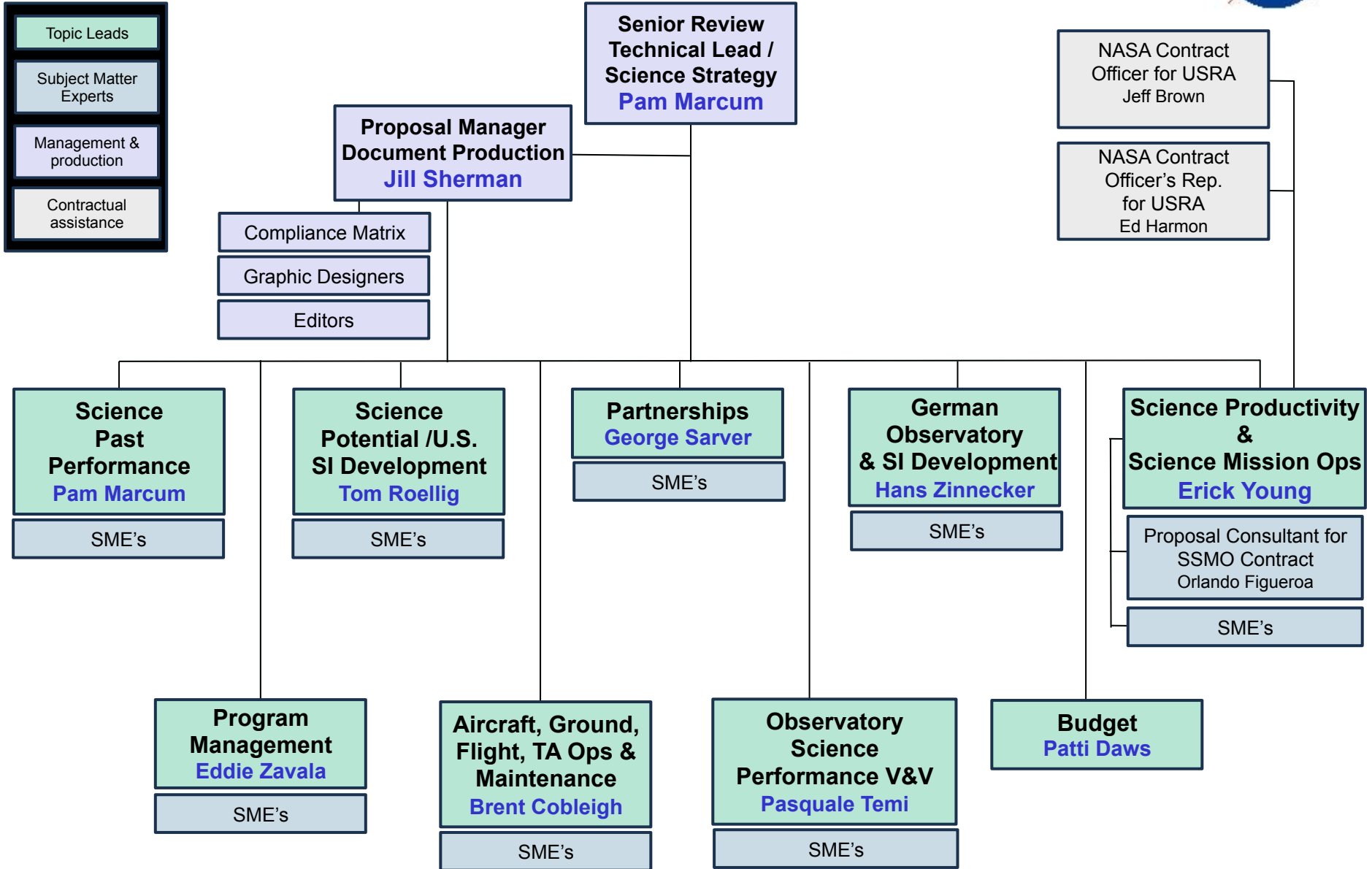
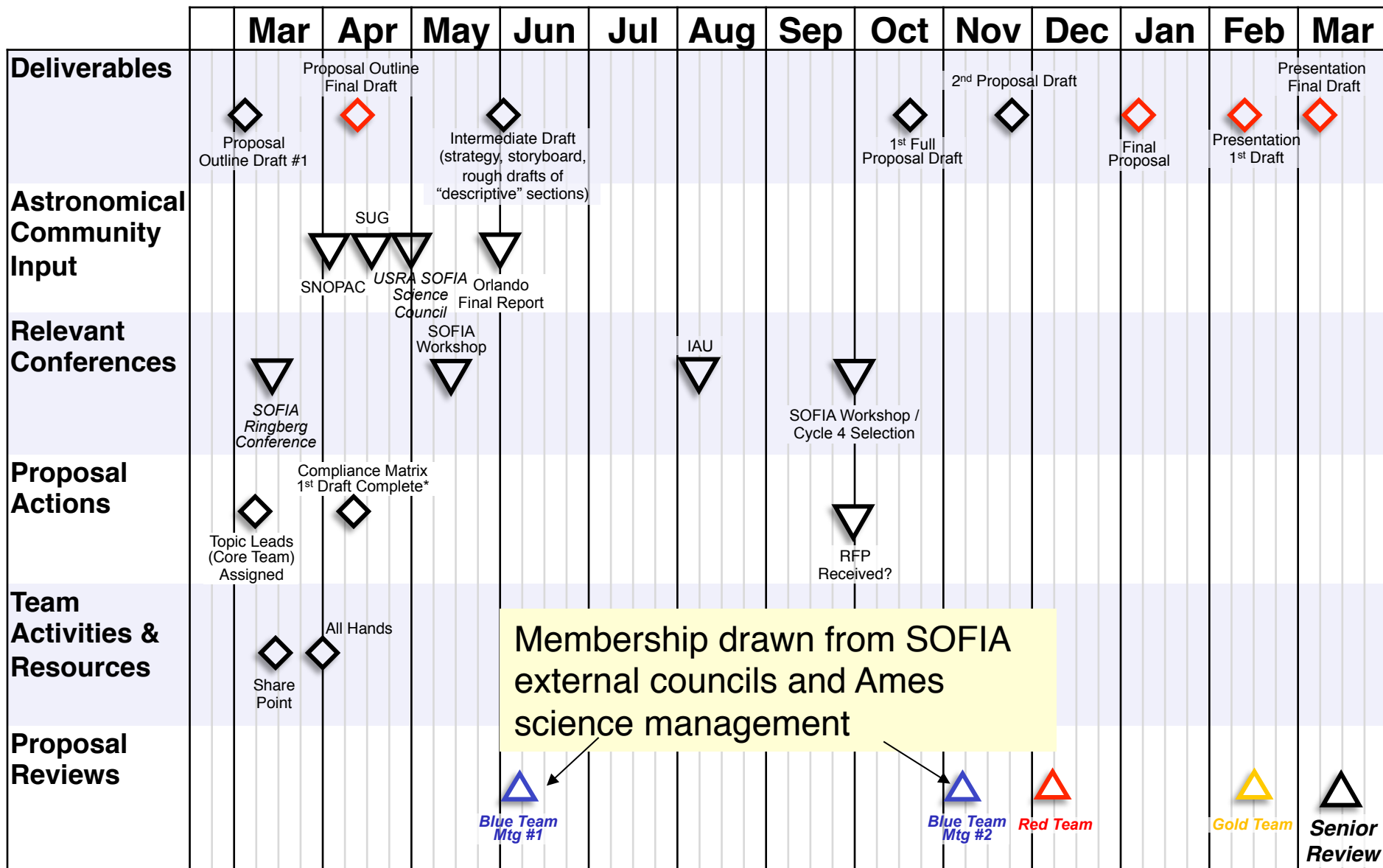


Chart Revised March 27, 2015

# Senior Review Process



# A Few Questions We'd Like You To Consider...

1. How would you define “impactful” or “compelling” science?
2. What would you consider to be SOFIA’s top 3 most impactful science results to date?
3. What do you anticipate (or would like to see) being SOFIA’s most impactful science results in the next 5 years?
4. What do you think should be the advertised model for SOFIA in the future:
  - a. remain as an “open observatory” with science directions completely defined by a peer-reviewed proposal process utilizing the current broad range of wavelength space,
  - b. redefine itself as being an observatory aimed at addressing key projects for which the community helps to define,
  - c. remain an “open observatory” but limit the science investigations to specific wavelength ranges
5. If you had to come up with a single phrase to put on the bottom of a coffee mug that summed up what SOFIA offers to the scientific community, what would it say? (Is there a common theme that ties together all of the science that SOFIA does, or in your opinion, does SOFIA mostly perform a variety of investigations that are largely unconnected by a common theme but rather stand on their own merits?)
6. Up to this point, has SOFIA performed any kinds of observations that you consider to not be the best use of resources (for example, observations that can be done in a fraction of the exposure time and at better sensitivity with JWST, or science questions that can be answered from ground based telescopes just as effectively)?
7. Do you have any other thoughts about how SOFIA’s science productivity and future promise should be described in the Senior Review that would be particularly compelling, that would highlight SOFIA’s uniqueness, and underscore its ability to substantially advance the field in particular areas?



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# SMO Senior Review Support

Erick Young  
SOFIA Science Center



SOFIA Users' Group 15 April 2015





# Productivity



- The most important thing the SMO can do is to successfully execute the science program for 2015
  - Northern flight series
  - Southern Hemisphere Deployment
  - Pluto Occultation
  - Instrument Commissioning
  - Cycle 4 Observation Program
  - Delivering the Data to the Observers
  - Publishing results
  - Making SOFIA known to the wider astronomical community

**The team has been doing an outstanding job!**





# USRA Sponsored Strategic Study



- USRA is sponsoring an independent study to provide input to the overall proposal effort
  - Led by Orlando Figueroa, former NASA Director of Solar System Division, Director of Mar Exploration Division, Deputy Center Director GSFC
    - Ed Weiler, former NASA Associate Administrator for Space Science
    - Judy Pipher, University of Rochester
    - Gary Melnick, Smithsonian Astrophysical Observatory
    - Rick Howard, former SOFIA Program Executive
    - Bill Green, former manager IPAC
- Deliverables – Brief Reports
  - Science Themes for 2017 – 2020
  - Innovative approaches to observing program
  - Efficiencies in science operations
- Work of team would be done by end of May
- SOFIA Science Council meets April 30 to also provide input





# My Assessment

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- We will be challenged in the coming year by the Senior Review
  - Lots of extra work on top of our “Day/Night” jobs
- Opportunity to reassess and focus our efforts
- Most challenging area will be demonstrating “cost effectiveness” relative to other missions
- We have a great story to tell and I’m confident we will do well



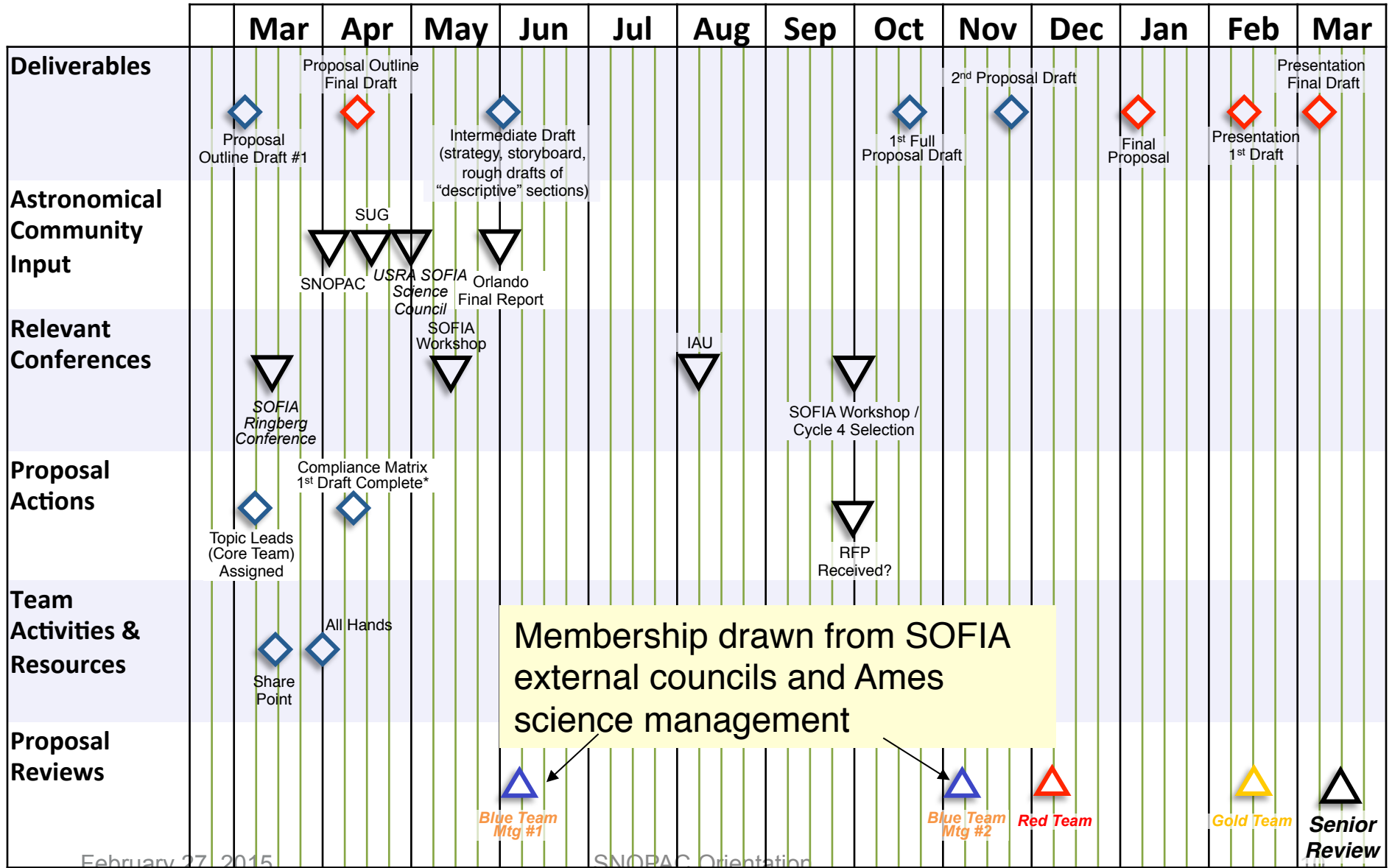




# External councils

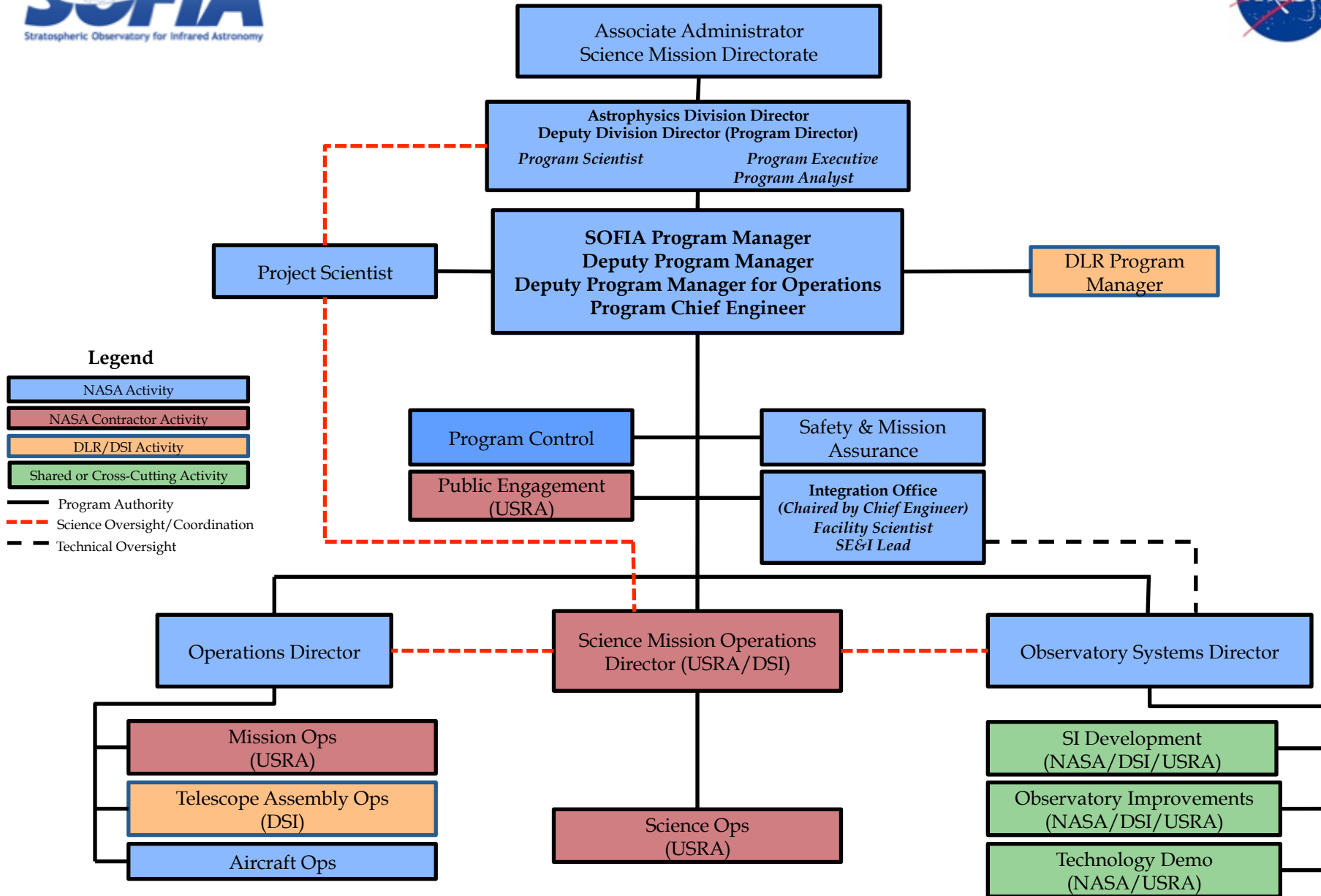
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# Senior Review Process





# SOFIA Organization for Operations Phase





# SOFIA Organization w/ External Councils

