

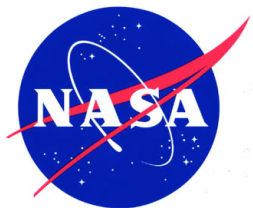
Minimum Spaceflight Experience Requirements for Mission Principal Investigators

What, Why, The Role, The Duties, The Rule, MOs, How, The AO

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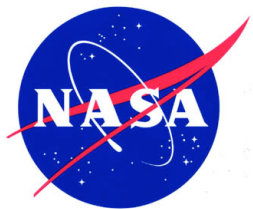
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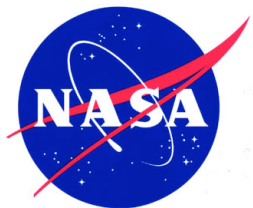
What

- Beginning with the 2007 SMEX AO, NASA is instituting minimum spaceflight experience requirements for the proposed PI for PI-led missions.
- Proposed investigations that are led by PIs lacking demonstrated, relevant, and appropriate experience sufficient to meet these requirements will be declared noncompliant and will not be reviewed or selected.



Why

- A PI-led mission is more likely to be successful if the PI has demonstrated skills through appropriate prior experiences.
- Having an experienced PI reduces the inherent risk in PI-led missions. This risk can jeopardize the mission's cost and schedule attainability, and can increase the mission's technical risk.
- NASA has programmatic reasons to reduce the probability that its missions are not achieved within the planned cost and schedule commitments. Overruns and delays adversely affect the frequency of future missions that NASA can mount and can jeopardize the viability of the PI-led mission model.



The Role

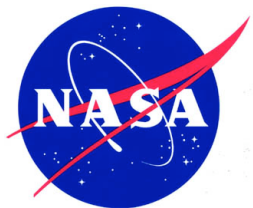
- Accountable to NASA for the scientific success of the investigation.
- Responsible to NASA if the project can not be completed within the committed cost and schedule.
- Fully responsible for scientific integrity, technical integrity, execution within the committed cost and schedule.
- Prepared to recommend project termination when the successful achievement of established minimum science objectives is not likely to be achievable within the committed cost and schedule.



The Duties

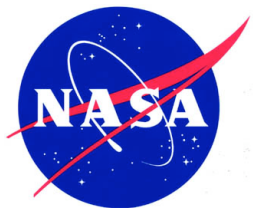
The PI roles and responsibilities are generally as follows:

- Ensure overall project scientific and programmatic success.
- Assemble and lead the science, management, and technical team to formulate, implement, and operate the project. The PI may delegate day-to-day management of the project to a PM.
- Stay actively involved with all aspects of project implementation, decision making, and reporting.
- Ensure that the project is ready to successfully pass all gateway reviews.



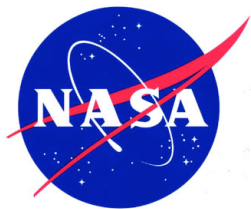
The Rule

- Previously carried out the duties of a key position for at least two years in a space project that has launched or is under development for launch.
 - the mission PI must have (a) senior project experience on a (b) project that went into (c) space or near-space.
 - a) Served for at least two years previously as the PI, Deputy PI, PS, Deputy PS, PM, or Deputy PM on a qualifying space project. It is acceptable to have carried out the duties of one of the named positions under a different title as long as the position entailed the same roles and responsibilities.
 - b) A qualifying space project can be a full mission, an instrument, or an experiment (e.g., shuttle attached payloads, suborbital projects, and portions of missions/instruments).
 - c) The qualifying project must be a “space” project that has launched or is under development for launch. For the purpose of this AO, a suborbital experiment that reached greater than 100K ₆ feet can be considered to have gone into “space”.



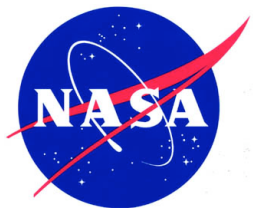
MOs

- PIs for MOs are not required to meet the same space flight experience standards that a mission PI must meet.
- A MO PI must demonstrate within the proposal that his/her qualifications and experience is sufficient to ensure the success of the investigation.



How

- PI experience requirement is one of 31 compliance checks
 - SMD has established practices for conducting compliance reviews of AO proposals
 - To review PI experience, a compliance review panel will be formed, chaired by Explorer Program Scientist, includes Explorer Program Executive and experienced program scientists and program executives from Astrophysics and Heliophysics Divisions
 - Compliance review panel will read Appendix I.7 of each proposal and make a determination
 - For any non-compliant recommendations (of any type), there will be an immediate review by co-chairs of AO Steering Committee
 - Decisions to declare a proposal non-compliant (for any reason) will be briefed to Senior management (AA, Heliophysics Director, Astrophysics Director) before non-compliant letters are sent out



The AO

- Draft SMEX AO
 - Anticipated release date: Friday, June 8, 2007, 5 pm
<http://nspires.nasaprs.com> (Select “Solicitations” then “Open Solicitations”)
 - Section 4.5.1, Single Principal Investigator
 - Appendix B, Section I.7, Demonstration of Minimum Spaceflight Experience for the PI
 - Appendix H, Roles and Responsibilities for Principal Investigator, Project Scientist, and Project Manager
- Questions and comments on Draft AO to
 - Hashima Hasan, Explorer Program Scientist
 - smexao@nasa.gov