Astrophysics Explorers Program 2023 Astrophysics Probe Explorer (APEX) Phase A/Step 2 Q&As

.Change Log		
Revision	Date	Description of Changes
01	12/20/24	Posted Q&As -1 and -2
02	01/27/25	Posted Q&As -3 and -4
03	08/22/25	Posted Q&A-5

- Q-1 The AO in section 4.3.1 lists some items from GO and/or GI program that will be outside the PI-managed mission cost. This leads to the following sub-questions.
 - a. Who is the point of contact for the science centers to discuss the GO support?
 - b. Will there be a separate Call or other guidance for these items?
 - c. Will separate proposals be required from the Science Center?
 - d. Will they be due at the same time as the CSR or on a different schedule?
- A-1 a. As noted in APEX23 Requirement #17, the proposing teams were required to select one of the NASA General Observer Facility (GOFs) (GSFC, STScI, IPAC, CXC) for the GO/GI activities. NASA reserves the right to decide after selection that the proposed GOF is not the optimal one and will choose an alternate. CSR teams should be talking to the POC of their selected GOF.
 - b. Not during Phase A. Upon downselection, NASA will work out the details of the management of GO/GI program with the GOF and the downselected team.
 - c. Not during Phase A. NASA will work with the Science Center, GOF (if different from the Science Center), and the downselected team to ensure the GO/GI items outside the PI-managed mission cost are developed and managed.
 - d. N/A.
- Q-2 The Criteria and Requirements (C&R) document in Appendix L.23, Requirement CS-149 calls for a compliance matrix to the *Explorers & Heliophysics Projects Division (EHPD) Mission Assurance Requirements (MAR) Mission Risk Classification Class C* document. For a NASA center (including JPL) with their own Mission Assurance Authority, is it acceptable to show compliance with the institutional Class C MAR instead?
- A-2 Yes.
- Q-3: What is the impact on the 2023 Astrophysics Probe Explorer Phase A studies of the recent Executive Orders on DEI activities?
- A-3: Pursuant to the Executive Order dated January 20, 2025, and its revocation of Executive Order 13985, factor B-6 "Merit of the Inclusion Plan..." and all references to DEI activities, including those references in the Student Collaboration sections, will not appear in the final 2023 Astrophysics Probe Explorer C&R document. Inclusion Plans will not be required. The final Step 2 C&R is currently in review and will be officially provided with this change when approved.
- Q-4 The "Writing Level 1 Requirements" presentation given at the Phase A Kick-Off meeting emphasized that Level 1s describe scientific results. Should CSRs capture any Level 1 requirements associated with the Guest Observer or Guest Investigator programs mandated by the AO? If Yes, how can the GO/GI Level 1 requirements

be written given that the concept study team cannot constrain the scope of GO/GI investigations or predict their results?

- A-4 The PI-led science investigation and the potential GO/GI programs are both required and critical aspects of an Astrophysics Probe project. At the same time, there are requirements imposed by NASA on the project relating to guaranteeing a GO/GI program, as described in the AO. Factor B-7 in the C&R document, "Merit of the proposed mission architecture, instruments, and measurement techniques for addressing the potential General Observer or Guest Investigator science", still applies in Step 2. This leads to the following answers to the question:
 - a. The PI investigation is expected to be the main focus of the Level 1 requirements provided in the CSR and of their flow down into Level 2 requirements. Evaluation of Factor B-8, "Maturity of proposed Level 1 and Level 2 requirements", will focus on the requirements associated with the PI-led science investigation as described in the C&R.
 - b. The Level 1 requirements must also capture the commitment made to NASA regarding the GO/GI programs, consistent with the AO requirements on these programs.
 - c. The "Writing Level 1 Requirements" presentation given at the Phase A Kick-Off applies only to the Level 1 requirements associated with the PI-led science investigation. Level 1 requirement(s) relating to the GO/GI program are expected to be a separate, programmatic type of requirement(s). This type of requirement is not expected to characterize science objectives but rather to describe the minimum time set aside for NASA to use on the GO/GI programs, and its general capability, consistent with the AO requirements on the GO/GI programs.
 - d. The value of the Level 1 and Level 2 requirements to enable potential GO/GI programs as described in the CSR Science section will be part of the evaluation of Factor B-7 as described in the C&R.
- Q-5 The acquisition of Lunar Exploration Ground Sites (LEGS) appears to have been paused. Should Concept Study Teams continue to assume that LEGS will be available to the down-selected mission, with the specifications published in the Acquisition Program Library?
- A-5 Yes.