

2021-11-22 Meeting notes

Agenda

- Project status, CDR (pptx)- Julie
- Project Status, hardware - Jeff
- Early Definition Survey option RFI (pptx) - Julie, all
 - [rfi webpage](#), [resources webpage](#), [charter](#), [submission template](#), [rfi](#)
- Topics for next meeting
 - Community engagement (workshops, monthly meetings, AAS etc)
 - Astro2020

Attendees

Julie McEnery, Jeff Kruk, Alice Shapley, Ashley Villar, Cristina Oliveira, David Spergel, Dimitri Mawet, Dominic Benford, George Helou, Gisella de Rosa, James Rhoads, Jan Tauber, Jason Rhodes, Jessica Lu, Jessie Christiansen, John Mackenty, Megan Donahue, Roeland van der Marel, Saurabh Jha, Neil Zimmerman

Minutes

Julie / Project status - CDR

Mission CDR completed in September
Lots of things are being built and tested
Formulation Science Working Group disbanded, Science Investigation Team contracts ended.
Held a science team closeout workshop last week
Would like suggestions from you on how we can build on those resources

Covid reduced the efficiency of Roman through 2020-2021
Still dealing with supply chain problems, many weeks in some cases
As a consequence, the project schedule was replanned in May 2021.

Difference in terminology between Management Agreement (MA) and Agency Baseline Commitment (ABC)
The MA includes schedule and funding reserves held by Roman project at Goddard
The ABC includes HQ controlled schedule and funding reserves. The ABC is harder to change.

MA and ABC each have different launch readiness dates.
Covid happened at the worst possible time for the project. The impact is a 7 month schedule slip, applied to both the MA and ABC launch dates (July 2026 and May 2027 respectively), and a cost increase 382M to both MA and ABC.

CDR

CDR is actually a long, extended process. There were about 100 engineering peer reviews held in advance.
Aerospace corp conducts independent assessment of budget and schedule. They found the ABC cost and schedule is achievable. However, they also found inadequate project reserves.
Next steps are the CMC (tomorrow), DPMC, and APMC reviews. The outcome of those meetings is likely to shift the MA launch date, but no change to ABC. Can interpret this as a shift of reserves from NASA HQ to project.

Jeff / Project status - hardware

Launch vehicle selection process to begin soon.
Two LVs in the running
We have been designing for a wide variety of launch vehicles and environments, but it helps to establish what environment to test for.

Spacecraft passed its CDR
Engineering units for nearly all subsystems built and tested
ACS models show we are meeting slew & pointing performance
Telescope optics have been coated, meeting specs. Most optics have been mounted.

CGI

3 EMCCDs delivered to JPL for testing, 3 DMs in process suitable for flight.

WEI

optical bench received, element wheel received, ETU focal plane assembly TVAC test complete
FPA electronics assembly almost complete
Flight prism is aligned and bonded
sRCS passed its mechanical design review
Detector placement in focal plane has been decided. Optimized to maximize uniformity
Performance modeling can now begin to incorporate test data

This is the end of the beginning! Moving on to the fun part.

Discussion

The current main concern is getting all the hardware delivered on time.
The project is often switching to alternate vendors, or multiple vendors in parallel, to buy down schedule risk.

Julie / Early Definition Survey RFI

Assign up to one month of observations to one survey, executed within the first two years of the mission.

RSIG concluded that we should be open to wide range of science topics. Two-step process.

We have just completed the first step, collecting white papers from community.

Announcement went out Aug 27, deadline was Oct 22.

20 white papers received on a broad range of science topics.

Asking the RSIG to help categorize and these white papers and rank the survey categories by scientific impact and benefit of early definition.

Discussion

This was not a call for proposals, so the next step would be a workshop

this is not an RSIG subcommittee. But the committee could include RSIG members.

Was the white paper response (20) strong enough? To some extent, the research communities self-organized. But the evaluation committee should assess this.

We hope to learn lessons from this community process to assist in defining the core surveys.

Next meeting is Dec 20. Propose communicating via email in the meantime.

Saurabh - Suggested topic for next meeting: some discussion of Astro2020 recommendation for a committee to look at Roman rebalancing core community surveys vs general astrophysics? This might interact with these ongoing community processes.