NANCY GRACE ROMAN SPACE TELESCOPE

Roman Mission Status

September 25, 2024

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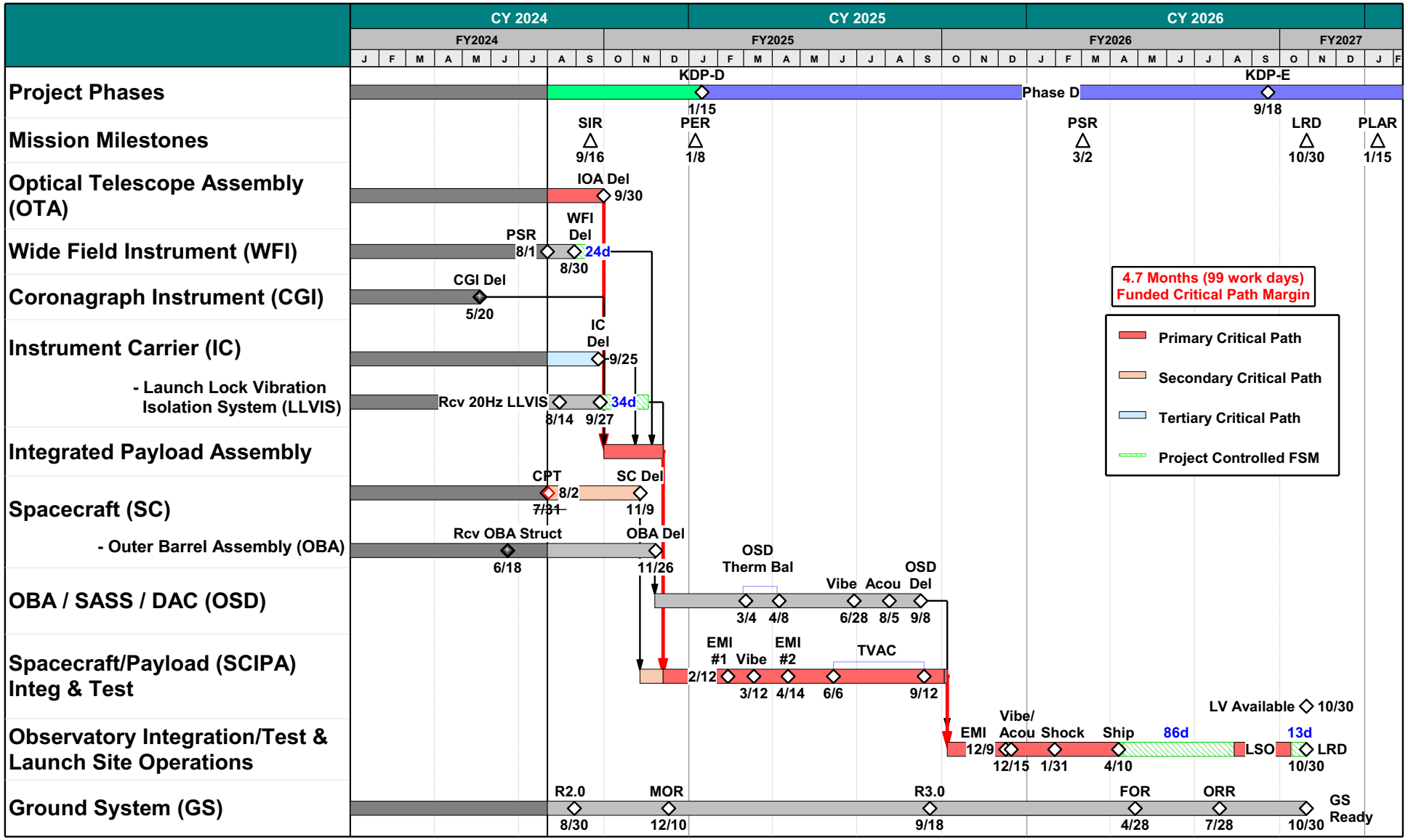
Highlights since last update

- **Wide-Field Instrument Delivered**
- **Instrument Carrier completed environmental testing**
- **Telescope is in final thermal vacuum testing – due for delivery next month**
- **Outer barrel assembly (OBA), solar-array/sunshield, deployable aperture cover are delivered**
  - OBA completed centrifuge testing; thermal sensors, heaters, blankets installation beginning
  - Integration of these elements begins this Fall, testing as integrated system continues till September 2025
- **Spacecraft:**
  - WFI warm electronics have been installed, final electrical testing in progress
  - S/C complete except for the telescope electronics
- **Systems Integration Review completed**
  - Major milestone for transition from Phase C to Phase D
  - Final programmatic reviews remain at GSFC (November), SMD (December), APMC (January)
  - Marks completion of major element development and beginning of observatory integration and testing
  - Phase D continues to the end of in-orbit checkout

Project Schedule

- Launch 10/30/2026
- Mission System Integration Review (SIR) in September 2024
- Wide field Instrument delivered
- Coronagraph Instrument delivered
- Optical Telescope Assembly complete, in environmental testing
- Spacecraft integration almost complete (waiting on OTA electronics)
- Spacecraft+payload testing begins Fall 2024
- OBA – SASS – DAC integrated Fall 2025
- Final Observatory testing thereafter



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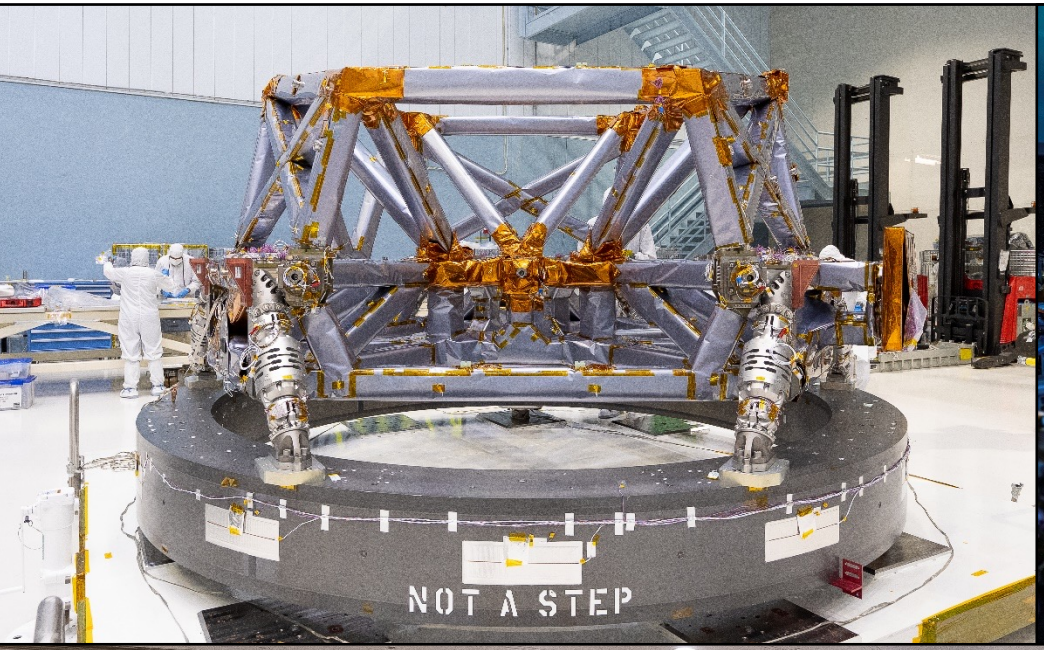
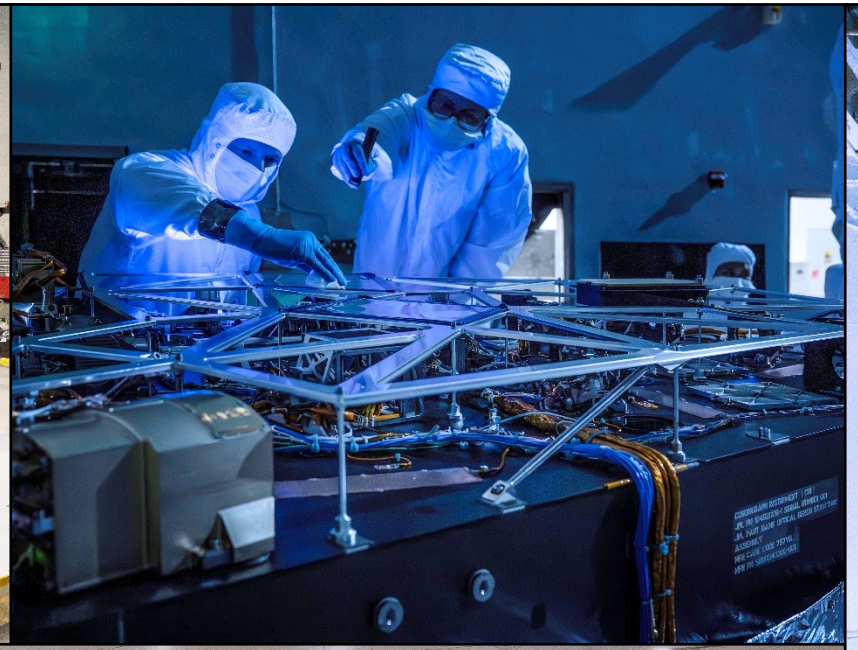
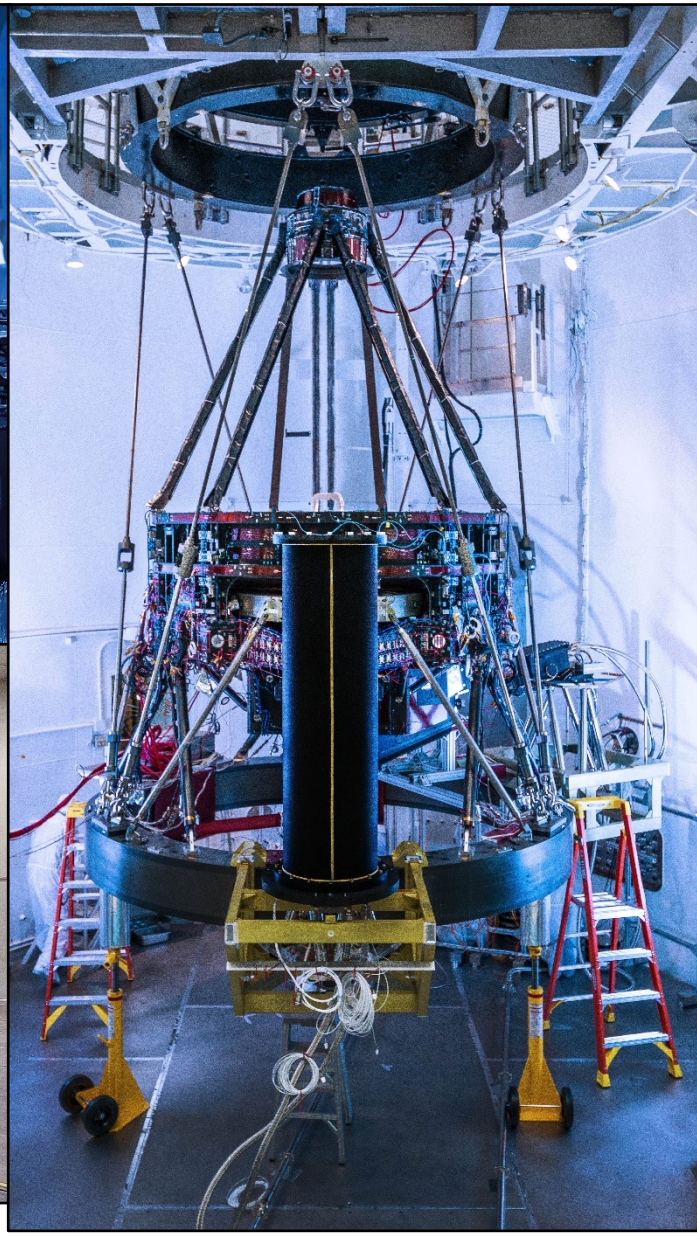
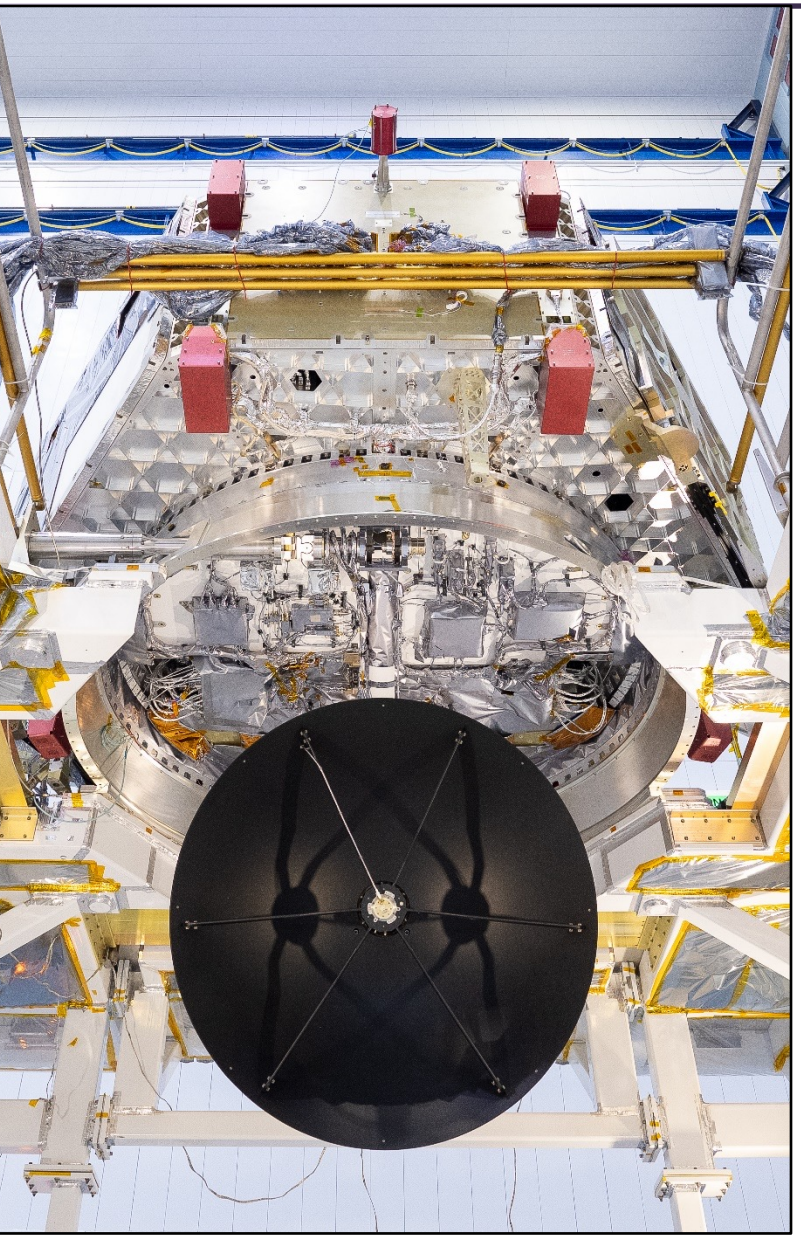
Payload Progress: IC, LLVIS, CGI at GSFC; OTA at L3Harris

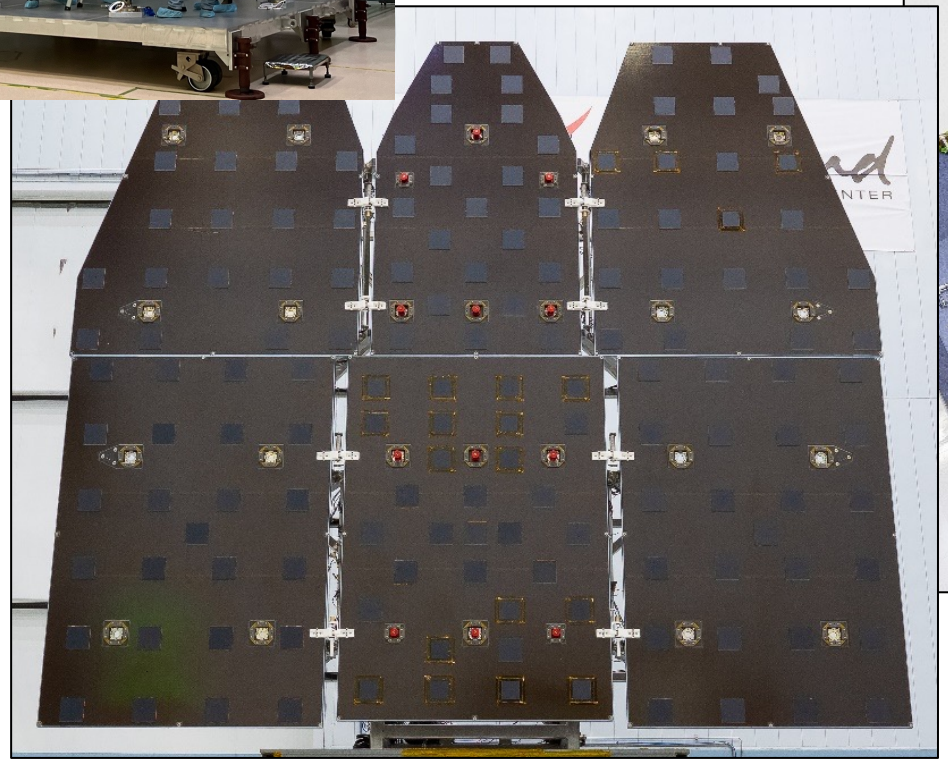


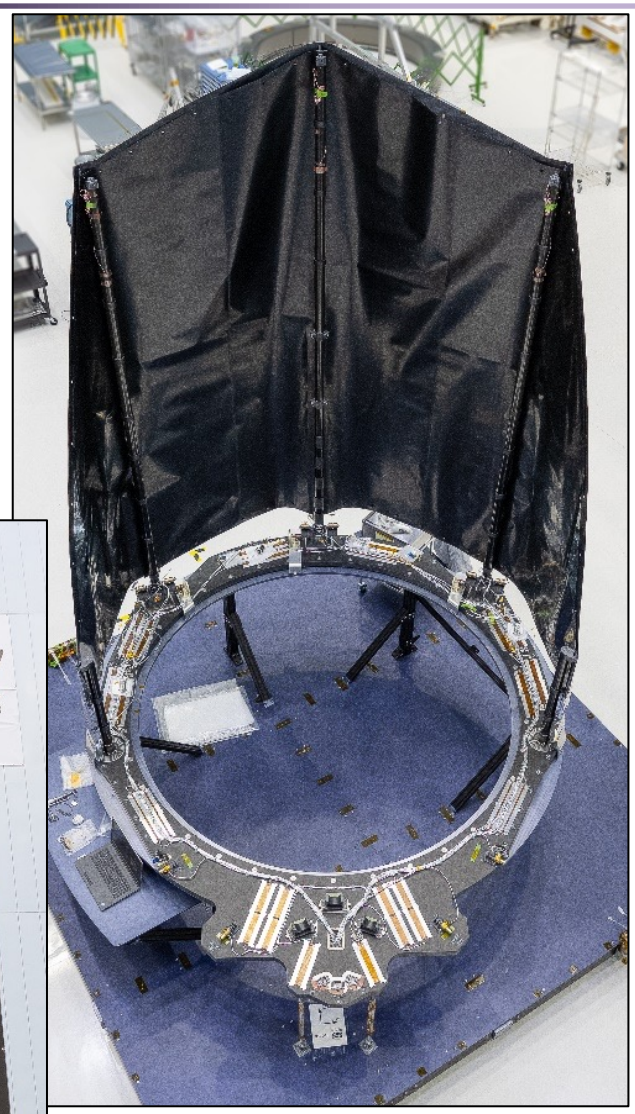


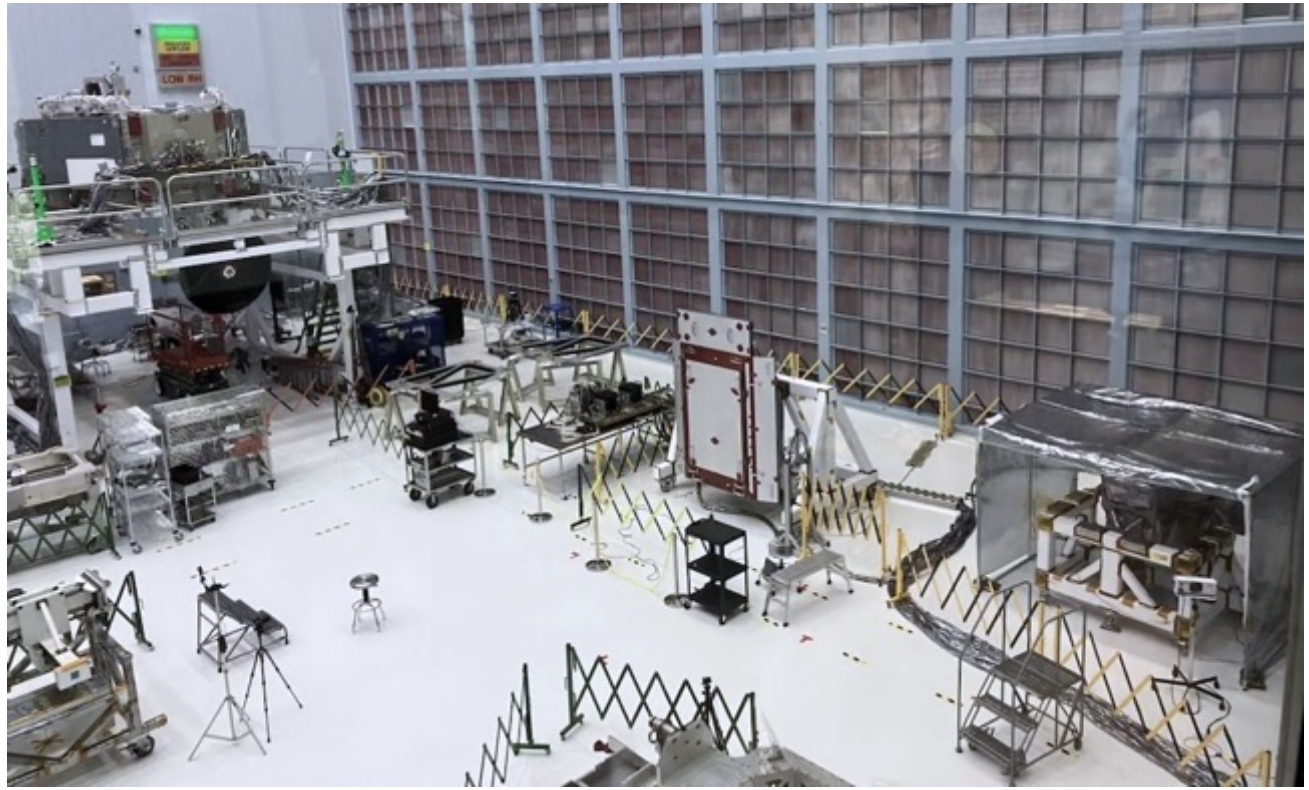


Spacecraft Bus, OBA, SASS and DAC

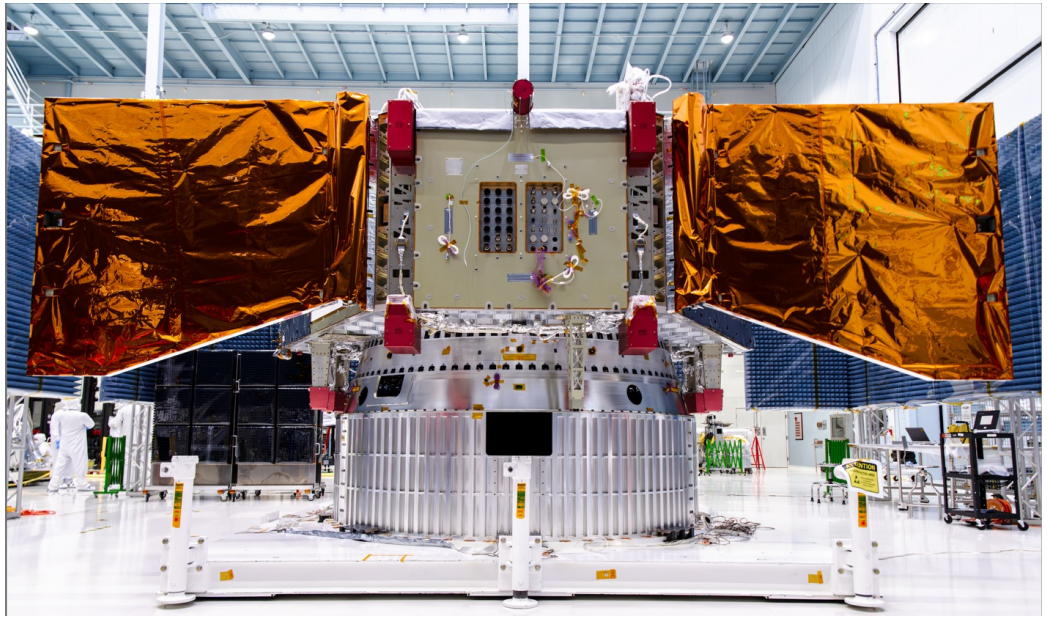








WFI in the SSDIF after integration onto the Instrument Carrier simulator (center; white protective covers on radiators).
S/C in upper left, CGI at lower right.



Lower Instrument Sun Shield (LISS) Deployment on SC Bus

Recent Science Conferences/Workshops

talks, recordings available online

- **Roman Science Conference: Challenging Theory with Roman – from planet formation to cosmology**
  - https://conference.ipac.caltech.edu/roman2024/
  - July 9-12, Pasadena, CA

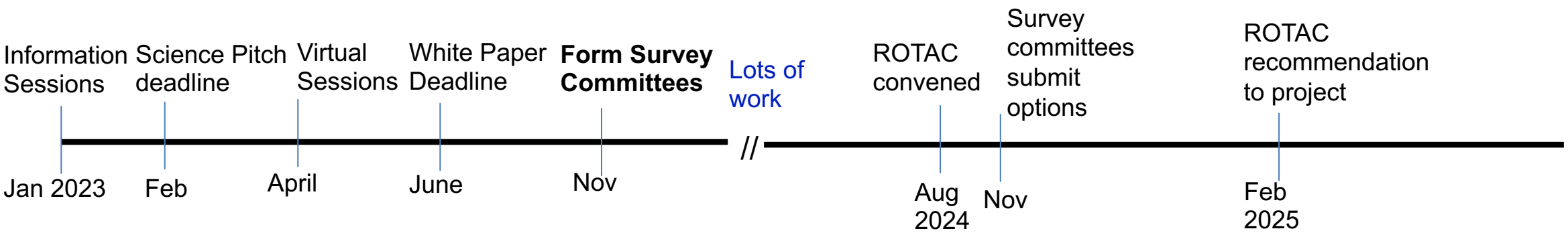
- **Subaru-Roman planning meeting + SUPER IRNET workshop**
  - July 22-26, Beppu Japan
  - https://www.ir.isas.jaxa.jp/Roman_V/index.html

- **Roman coronagraph 2-day info session**
  - August 26-27 2024 at Caltech/IPAC
  - Detailed Roman coronagraph instrument as-built capabilities, focusing on the technical performance demonstrated in TVAC.
  - https://conference.ipac.caltech.edu/romancgi24/

Upcoming conferences/workshops

- **Subaru-Roman planning meeting + SUPER IRNET workshop**
  - December 16-18, Beppu Japan (TBD)
- **Accurate Flux Calibration in the era of Space Astronomy and All-sky Surveys**
  - October 22-25, 2024, STScI
- **AAS**
  - Jan 12-16, National Harbor, MD
  - Many Roman-related special sessions, splinters, Town Hall
  - Workshop on using the science platform for data analysis

Core Community Survey Definition



- **Less than a year for the new committees to provide point designs for the core surveys!**
- **Committees have evaluated all inputs, working through survey options**
  - PITs performing simulations to quantify return from candidate survey designs
- **In person committee meetings and public sessions at Roman conference in July**
- **Two public sessions for each CCS held weeks of August 26, September 2**
  - Presentations, recordings available through the Roman Forum webpage https://asd.gsfc.nasa.gov/roman/comm_forum/ and the Outerspace page: https://outerspace.stsci.edu/site/ruf
- **Final inputs from the CCS committees planned for November 2024**

- **Galactic Plane General Astrophysics Survey definition has begun**
  - Kickoff meeting held September 11
  - Targeting April 2025 for candidate survey design.

QUESTIONS?