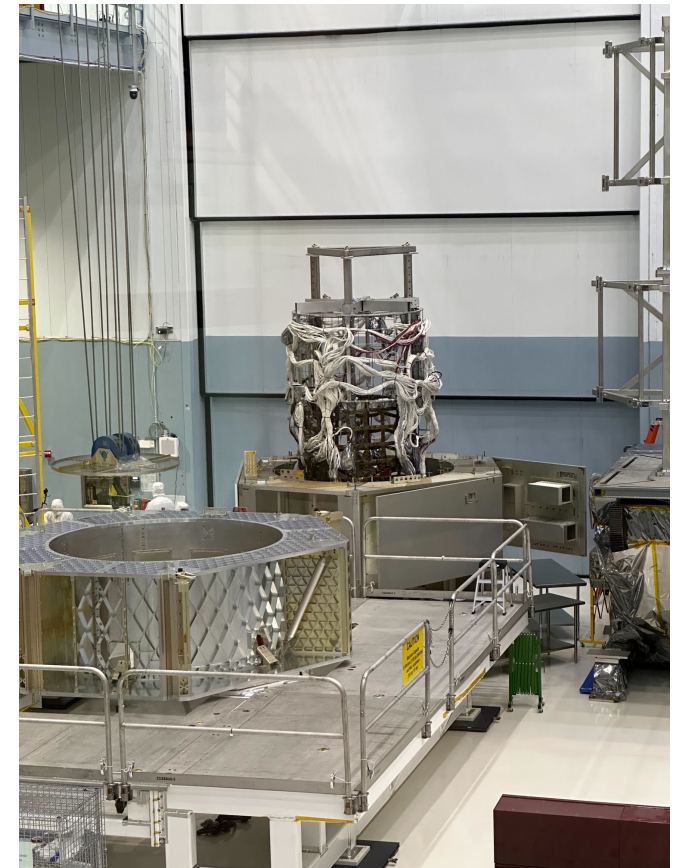
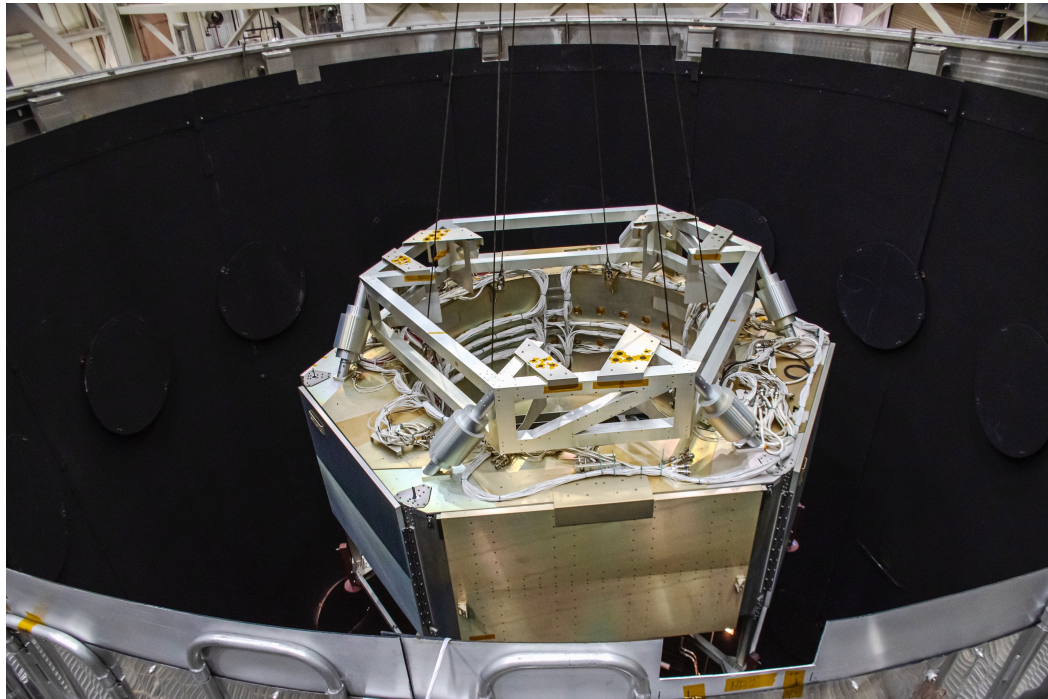


THE NANCY GRACE ROMAN SPACE TELESCOPE



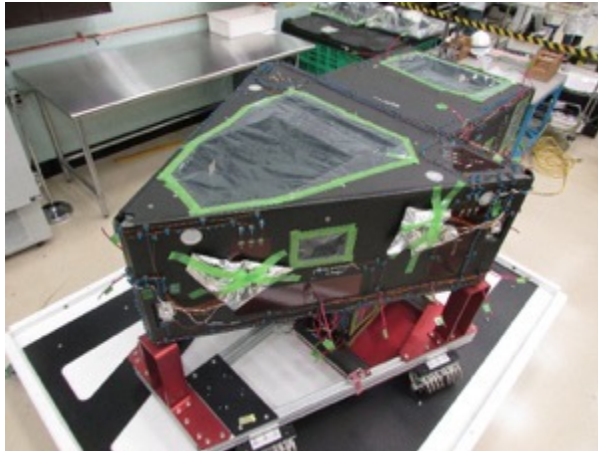
Spacecraft

- **Spacecraft structure moved to SSDIF (large clean room at Goddard)**
- **Spacecraft harness (>40 miles!) completed thermal-vacuum testing and is now being integrated into spacecraft structure**
- **I&T Battery has arrived**
- **Significant progress on many other subsystems**



Telescope

- Currently installing relay optics to CGI



Aft-Optics Structure Thermal Electric Complete



Tip-Tilt Fold Assembly complete



Forward Optical Assembly (FOA) complete

Technical Working Groups

- **Join Roman Technical Working Groups**
 - Groups pursuing topics of interest across many science areas
 - Two groups currently (calibration, software) but will add more after ROSES proposal selection
 - Simple web sign up page, open to all
 - https://asd.gsfc.nasa.gov/roman_signup/
- **Calibration group – meets biweekly**
 - Recent topics: Status of filter bandpass measurements, WFI update, defocused photometry
- **Software group – meets biweekly**
 - Recent topics
 - Slitless spectroscopy
 - Simulation underpinnings
 - Outline of level-3 image combination heritage inherited from JWST
 - Co-addition/supersampling for Bulge data at the SSC
 - Current thinking on Associations for level-3 processing

Roman Science Teams

- **Previous Science Investigation Teams disbanded in 2021**
 - See slides from community briefing for summary of their work
- **ROSES proposal deadline was in March 2023**
 - Anticipate making selections prior to Summer AAS (i.e. within a few weeks)
- **Anticipate a significant increase in science community engagement in Roman**
 - Help coordinate this with:
 - Additional technical working groups – e.g. simulations, photo-Z, astrometry etc
 - Initiate community led Science Collaborations
 - Intent is to help build a cohesive Roman science community. Participation in these groups is voluntary

Keeping in touch with Roman

- **Join the Roman news mailing list**

- sign up to the mailing list by sending an e-mail to Roman-news-join@lists.nasa.gov (no text in the body is required, put something in the subject line)

- **Monthly Roman Community Forum**

- https://asd.gsfc.nasa.gov/roman_forum/

- **Monthly Roman Virtual Lecture Series**

- <https://roman.ipac.caltech.edu/Lectures.html>

- **Regular Science Workshops**

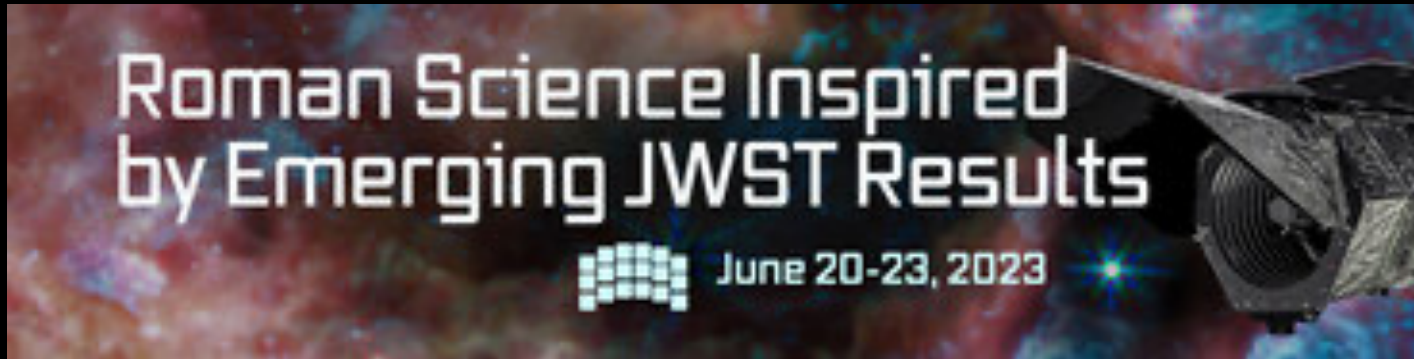
- Next one will be organized by STScI – Roman Science Inspired by Emerging JWST Results, June 20-23
 - <https://www.stsci.edu/contents/events/stsci/2023/june/roman-science-inspired-by-emerging-jwst-results>
 - And next slides...

2023 #NASARoman Community Conference

hosted by

Space Telescope Science Institute

Baltimore, MD, USA



Hybrid Conference

- In person Registration Closes May 29th (11:59 PM EST)
- Virtual Registration Closes June 9th (11:59 PM EST)

For more information: bit.ly/RomanConf2023

Topics & Invited Speakers:

Surveying the Solar System --

- [Rosemary Pike](#) (CfA, Minor Planet Center)

Surveys within the Milky Way --

- [Samuel Grunblatt](#) (Johns Hopkins University)
- [Nitya Kallivayalil](#) (University of Virginia)

Resolved Studies of Nearby Galaxies --

- [Myung Gyoon Lee](#) (Seoul National University)

Galaxy Surveys at Low to Medium Redshift --

- [Vivian U](#) (UC Irvine)

Galaxy Surveys at High Redshift --

- [Micaela Bagley](#) (UT Austin)
- [Jasleen Matharu](#) (Cosmic Dawn Center)
- [Jinyi Yang](#) (University of Arizona/Steward)

Cosmology and Large Scale Structure --

- [Ami Choi](#) (Goddard Space Flight Center)

Surveys in the Time Domain --

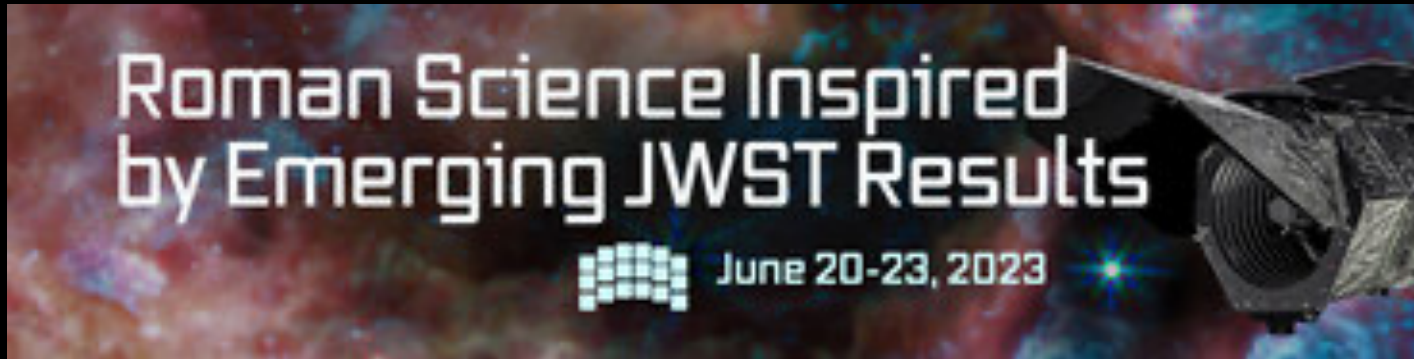
- [Patrick Kelly](#) (University of Minnesota)

2023 #NASARoman Community Conference

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Topics

Surveying the Solar System

Surveys within the Milky Way

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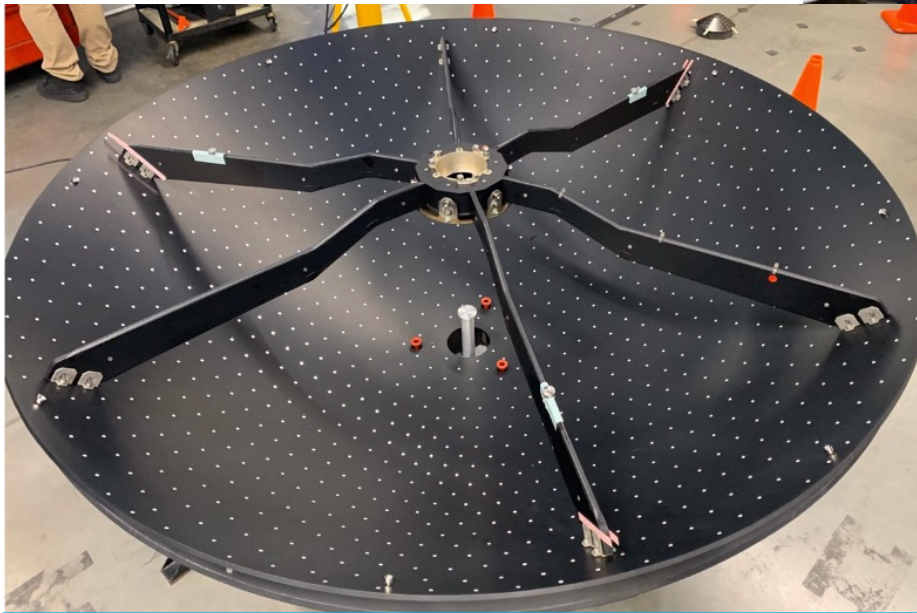
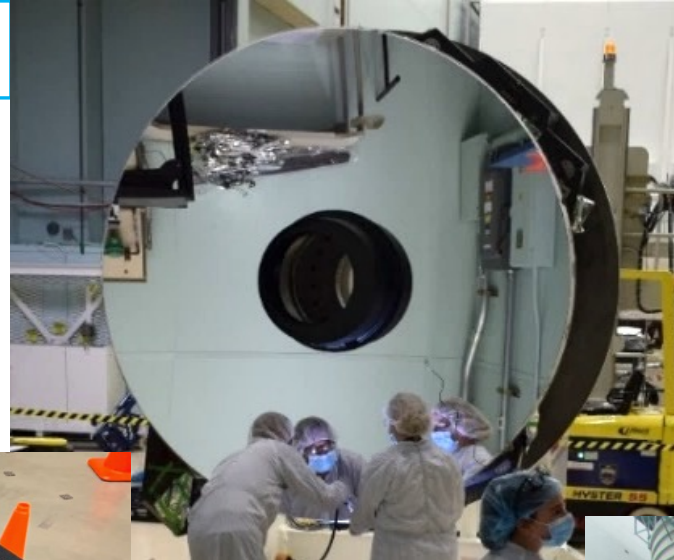
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For more information: bit.ly/RomanConf2023



Hardware Glamour Shots

Final pre-assembly Primary Mirror
Assembly cleaning & inspection



Flight High Gain Antenna (HGA) at vendor – received 12/9!

Forward Structure
Assembly complete and
ready for the next level of
integration



Alignment Compensation Mechanism (ACM), Optical Bench, Enclosure, Latches, and Element Wheel Assembly have been integrated

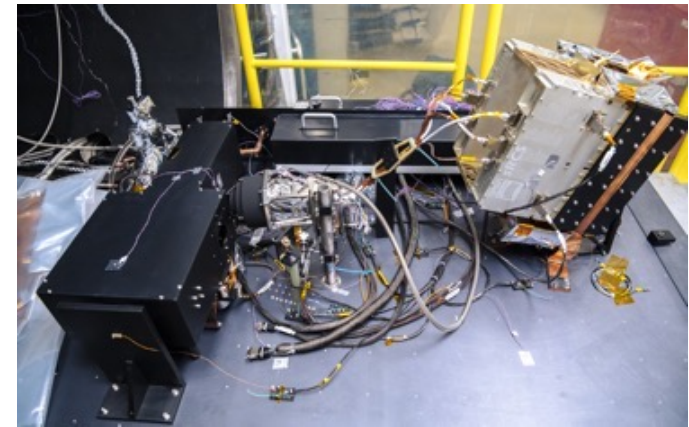
Hardware Glamour Shots



(OTA) Lateral Vibe weldment flying over to the head expander



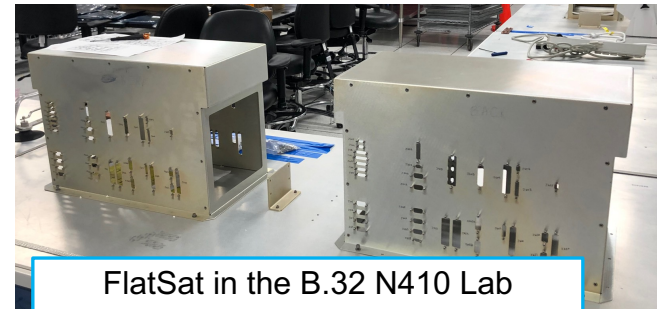
(WFI) Flight Focal Plane Assembly pre-vibration thermal/vacuum testing completed



(WFI) simplified Relative Calibration System (sRCS) is in thermal/vacuum testing



(OTA) Optical Large Aperture Flat System (OLAFS) mirror ready for Mounted Mirror Assembly (MMA) integration



FlatSat in the B.32 N410 Lab



(SC) C&DH ETU Box

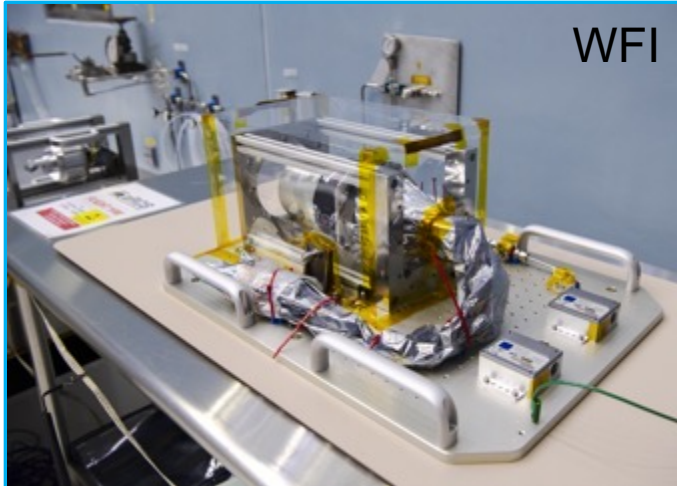


(SC) PDU ETU Box

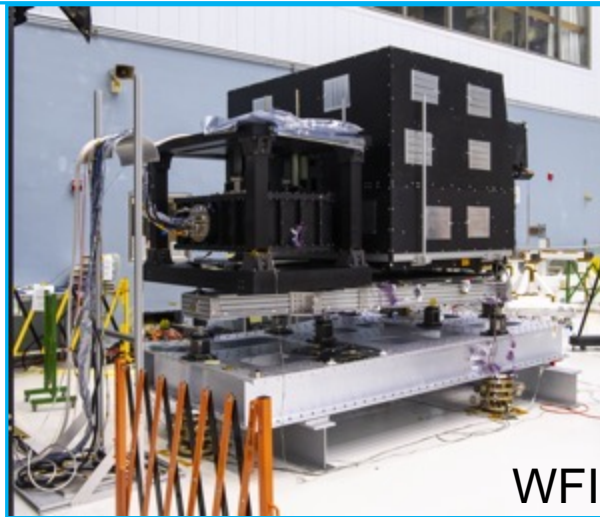


(WFI) Cold Module and Warm Electronics have been integrated and tested at Ball

Hardware Glamour Shots



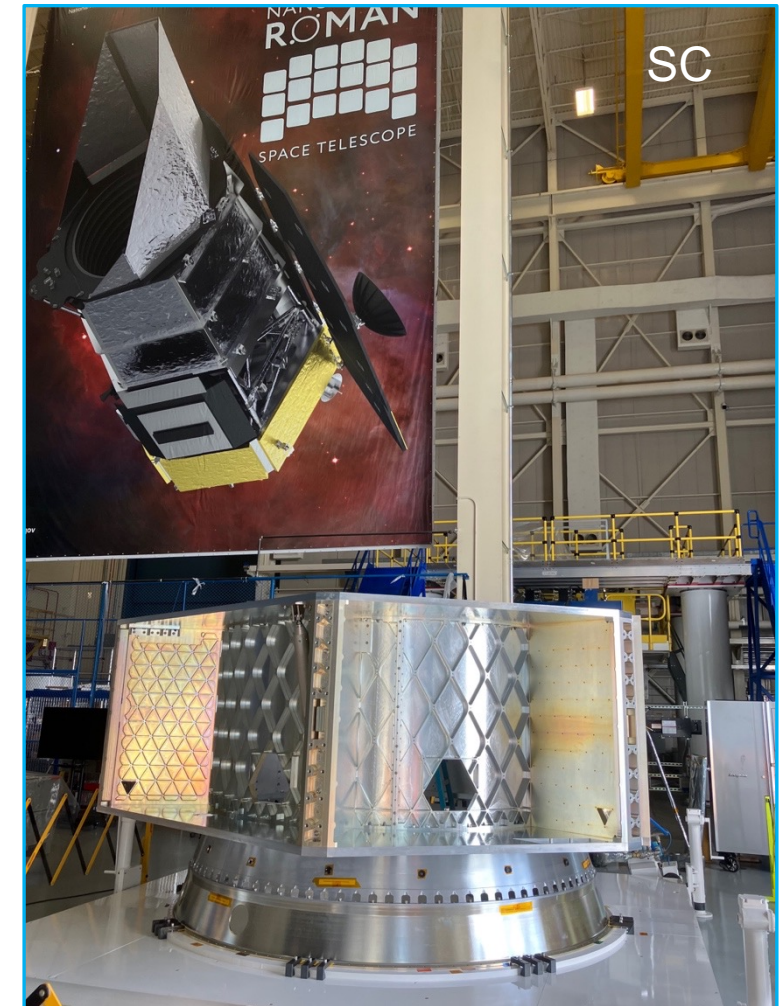
simplified Relative Calibration System (sRCS) being packed for transport to Ball



Stimulus of Ray Cones in final test before thermal vacuum testing

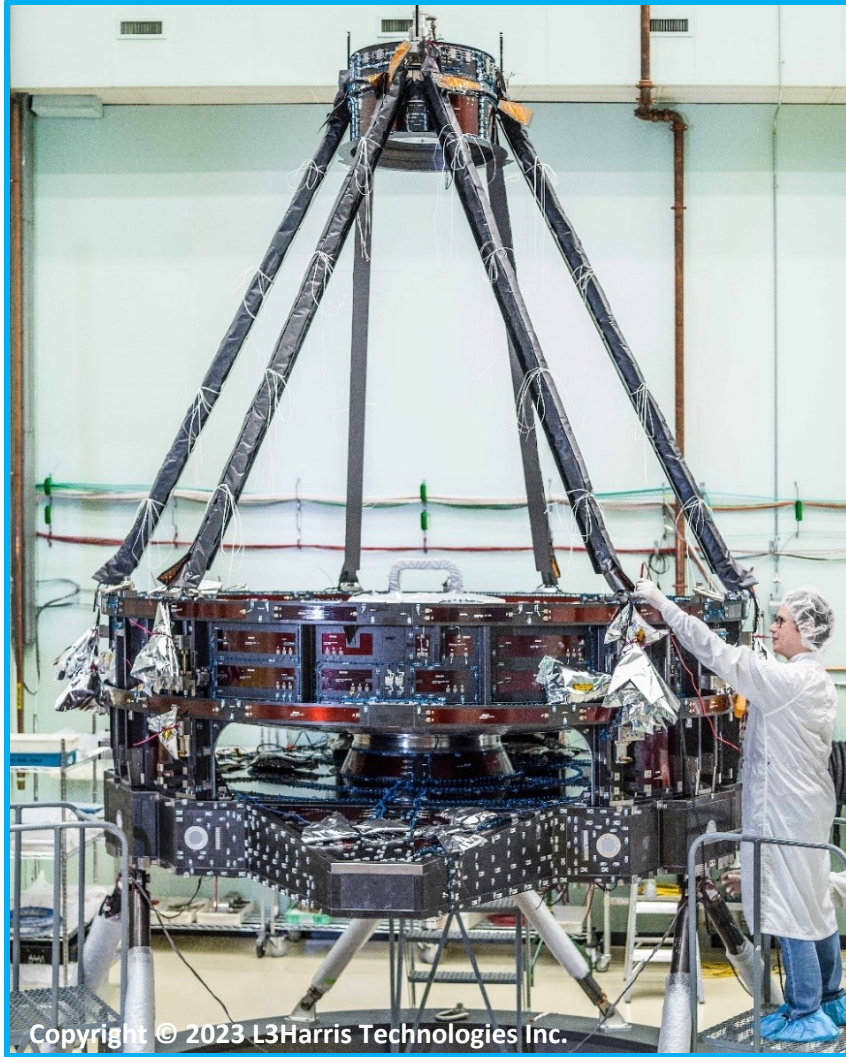


Forward Optical Assembly (FOA) integration



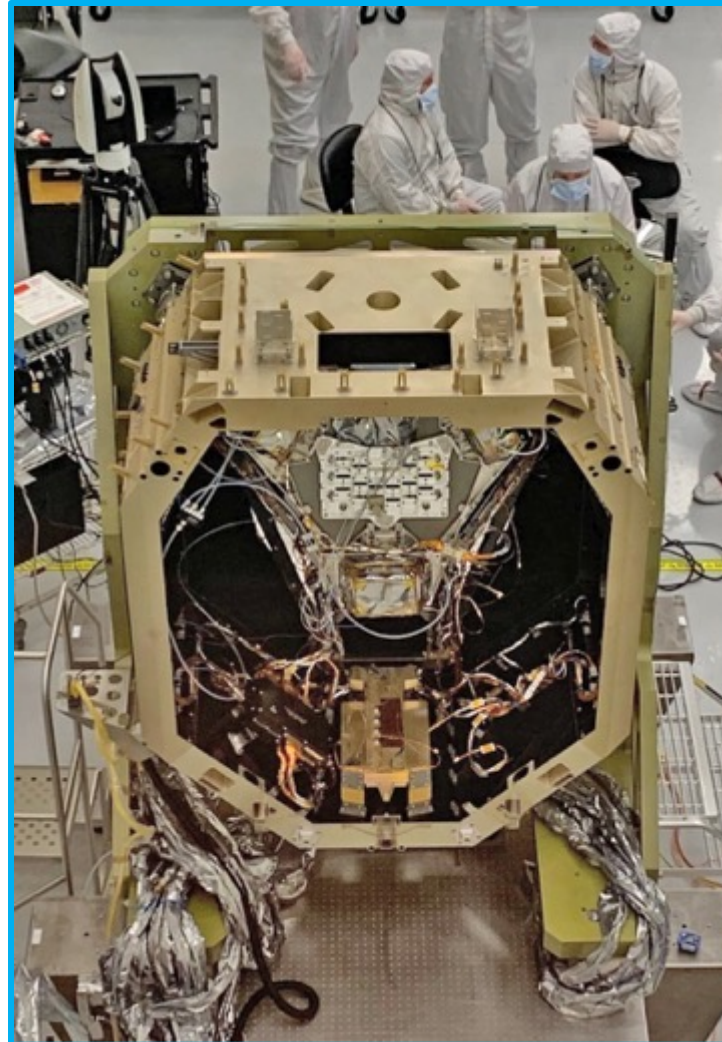
Bus Primary Structure and lower/upper skirts arrive from B.5 – currently in B.29 High Bay ready for next level of assembly

Hardware Glamour Shots

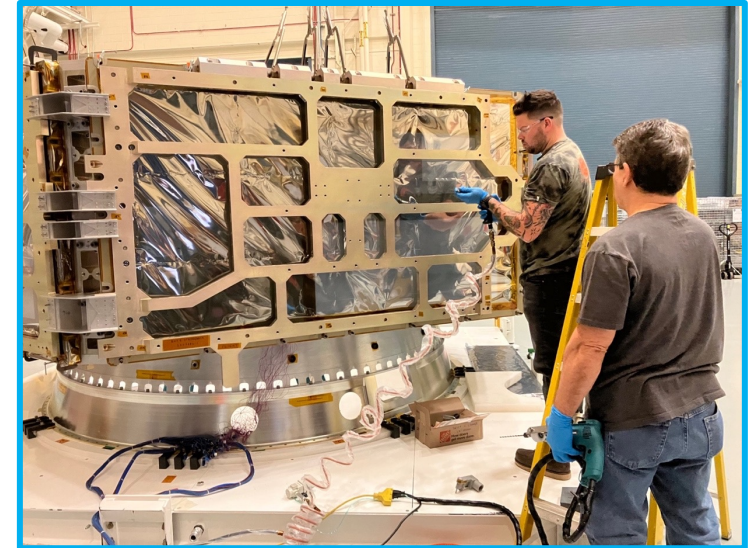


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Forward Structure Assembly (FSA) successfully integrated to Primary Mirror Assembly (PMA)
★ Heritage Hardware Complete ★



WFI Cold Module integration continues with the addition of the sRCS



Match drilling of bus to avionics panels in B.29 High Bay



High-Gain Antenna in the SSIDF

Three Paths for Community Engagement

- **Join Roman Technical Working Groups**
 - Groups pursuing topics of interest across many science areas
 - Two groups currently (calibration, software) but will add more after ROSES proposal selection
 - Simple web sign up page, open to all
 - https://asd.gsfc.nasa.gov/roman_signup/
- **Submit science pitch/white paper for Core Community Survey definition**
 - Science pitch – few paragraphs describing science case for one of the community surveys, short questionnaire on survey parameters
 - Deadline Feb 17, low bar to entry (i.e. encourage high participation)
 - White papers – several page document with details on science case, sketch of survey design and methods/metrics on how to evaluate science FOM against survey parameters
 - Deadline summer, detail enables more meaningful evaluation
- **Submit proposal to Roman ROSES solicitation**
 - Funding to work on Roman science preparation (including engagement in working groups and survey definition)
 - Deadline March 21

Roman Project Status (selected highlights)

- **Wide Field Instrument**
 - Completed Relative Calibration System at Goddard, delivered to Ball Aerospace and installed in WFI
 - Testing of full instrument will begin this summer
- **Coronagraph Instrument**
 - The topic of this entire session!
- **Telescope**
 - The Primary Mirror Assembly (PMA) and Forward Structural Assembly (FSA) (with the Secondary Mirror Assembly) are complete.
- **Spacecraft**
 - Spacecraft bus Primary Structure being prepared to enter clean room
 - High gain antenna arrived at Goddard
 - Reaction Wheel Assemblies arrived at Goddard
- **Ground System**
 - Science Operations Center (at STScI) first software released earlier this month (includes things like planning and scheduling system)
- **Remain on track for October 2026 launch readiness date**

Keeping in touch with Roman

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Upcoming deadlines

- **Feb 17 (this Friday) - science pitch pitch for core community survey**
 - Please tell us how one of the three core community surveys could address your science!
 - https://roman.gsfc.nasa.gov/science/ccs_community_input.html
- **March 21 – deadline for proposals to the Roman ROSES solicitation**
 - <https://roman.gsfc.nasa.gov/science/roes.html>