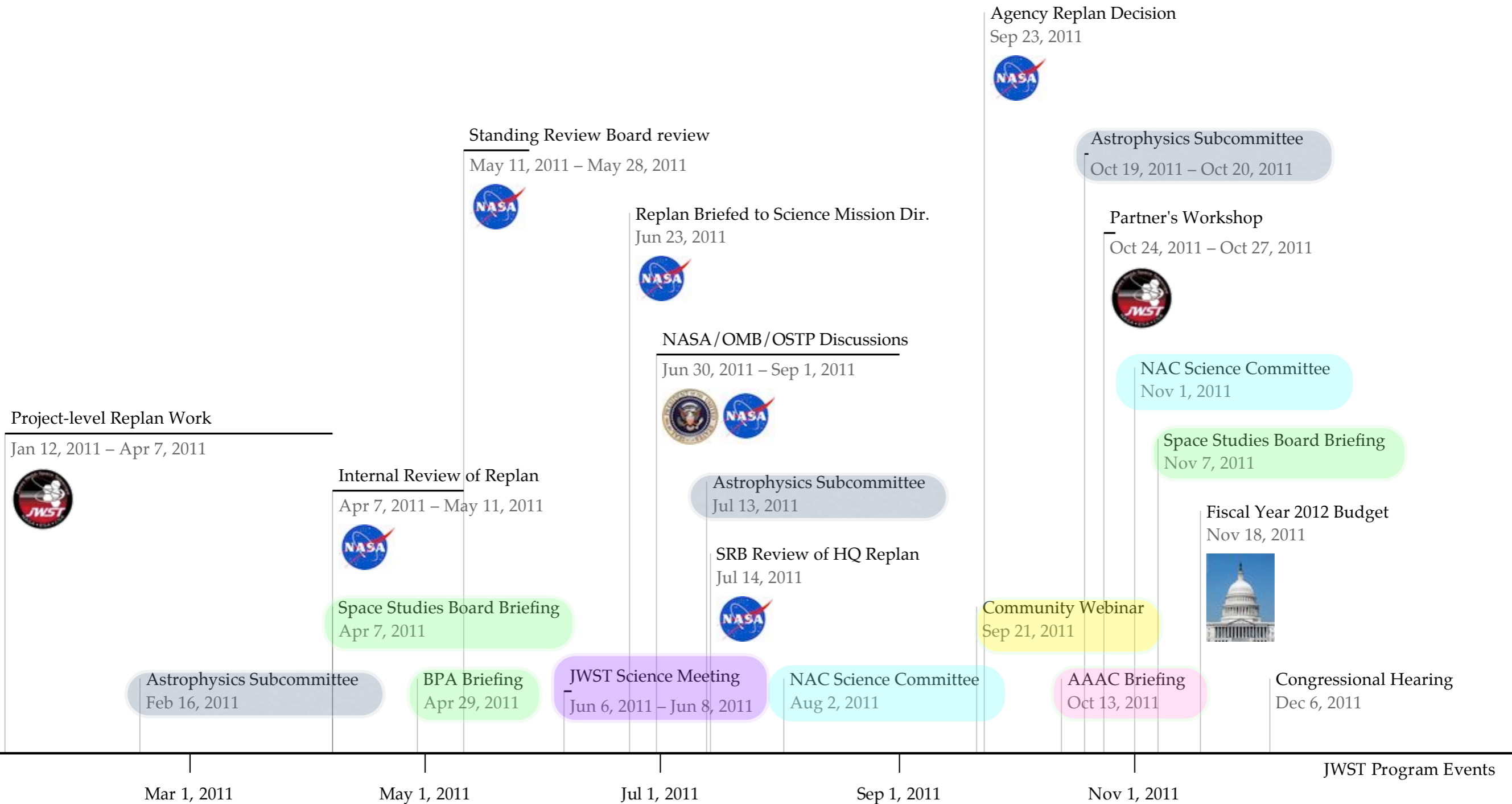


JWST Update

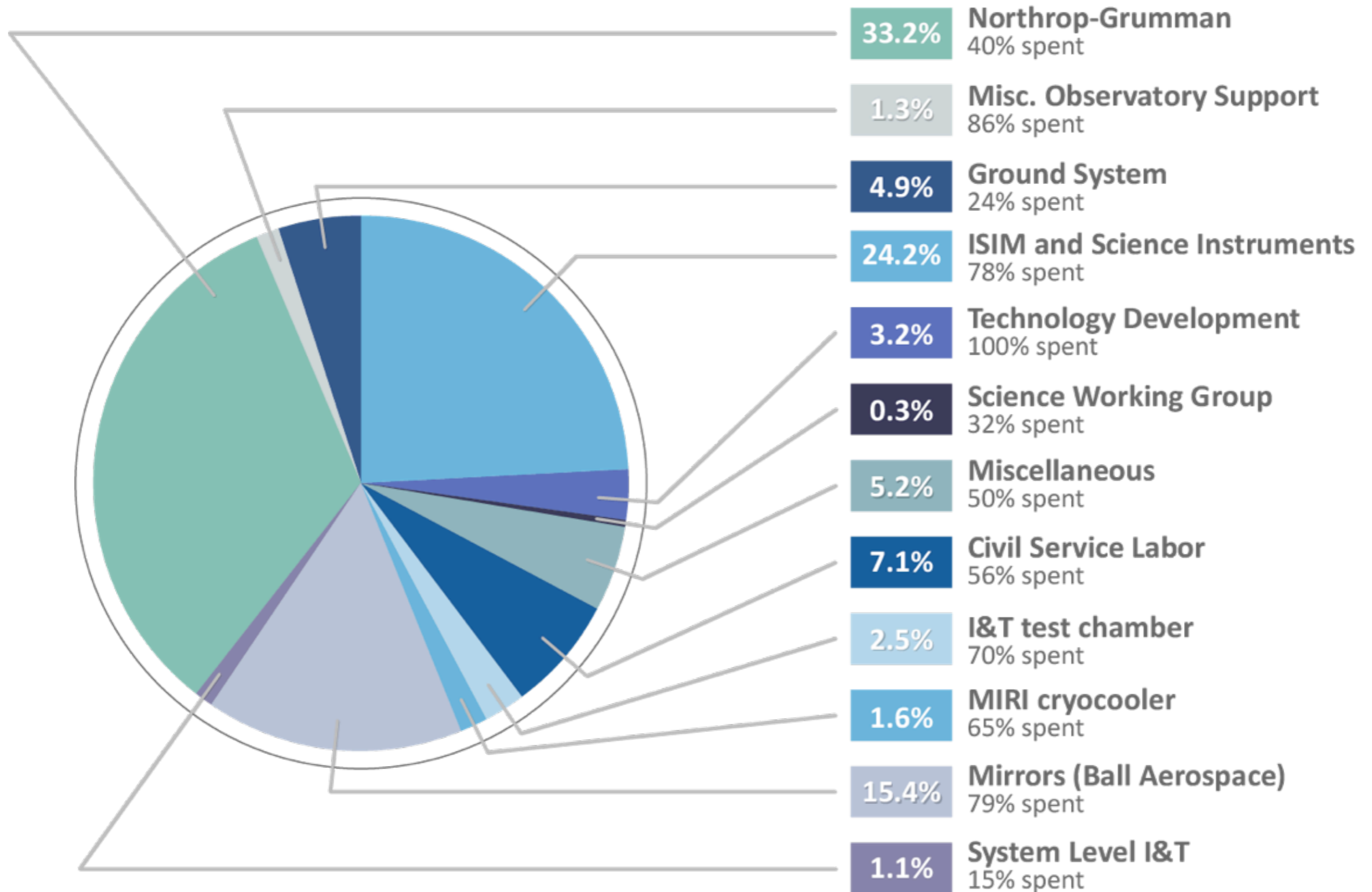
Astronomy & Astrophysics Advisory Committee
10-February-2012

Eric P. Smith
JWST Deputy Program Director

2011 Program Events



Expenses Through FY11



FY11 Accomplishments

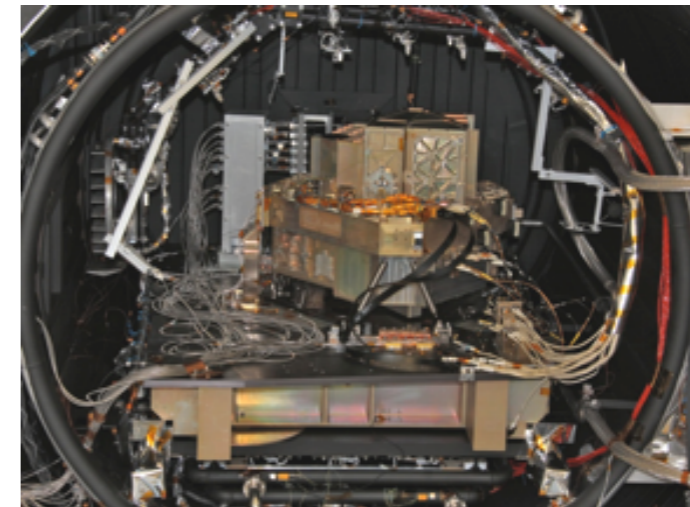
Month	Milestone	Comment
January '11	Ship MIRI Focal Plane Electronics to ESA (RAL) Ball's Flight Actuator Drive Unit S/W Test Review	Successfully Completed - 1/24 Successfully Completed - 1/20
February '11	Deliver <u>NRISpec</u> flight spare detector to GSFC Pathfinder PMBSS delivered to NGAS Establish No-Earlier-Than Launch Readiness Date as part of replan Establish Work Breakdown Structure for new GSFC responsibilities	Successfully Completed - 1/29 Pathfinder delivered to NGAS on 3/25 Based on current funding constraints a NET LRD of Oct. 2018 established, FY11 and FY12 schedule does not preclude an earlier date if deemed possible in the future - Completed 2/25 Successfully Completed - 2/28
March '11	Complete flight IRSU Thermal Vacuum testing Deliver FGS ETU electronics to ISIM I&T Complete 2018 LRD budget details	Successfully Completed - 2/19 Successfully Completed - 2/24 Preliminary Budget was presented to Program Office and Center Management on 4/7
April '11	Pathfinder Primary Mirror Segments Assemblies complete Deliver ICDH ETU to ISIM I&T Complete 2018 LRD project lead JCL	Successfully Completed - 4/25 Successfully Completed - 4/22 Initial JCL run completed - 4/28
May '11	Start flight FGS environmental testing (instrument level) Complete S/C Secondary Mirror Support Cone Structure IDR 3/4	Successfully Completed - 5/4 Successfully completed - 4/20
June '11	Complete CCTS Build 2.3 Start ISIM level I&T	Successfully completed - 4/13 Successfully Completed - 6/24 Began the ISIM Flight I&T with the integration of the Spacecraft Simulator 2A (SCSIM-2A) into the Flight Electrical Environment.
July '11	Deliver ISIM Region 1 Harnesses Deliver ISIM Structure to ISIM I&T	Successfully completed - 7/22 Successfully completed - 7/28
August '11	S/C Flight S/W Build 1 Technical Readiness Review	Successfully Completed - 6/30
September '11	Deliver Flight ISIM Electronics Compartment to ISIM I&T Deliver flight ICDH #1 to ISIM I&T	Deferred due to design changes Successfully Completed 9/27

Blue indicates accomplishment ahead of schedule

Recent Hardware Progress



Sunshield Layer 5 Test Unit

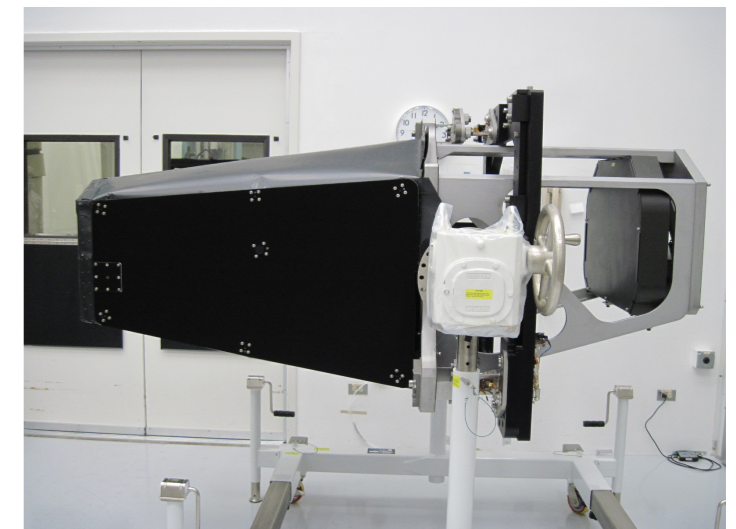
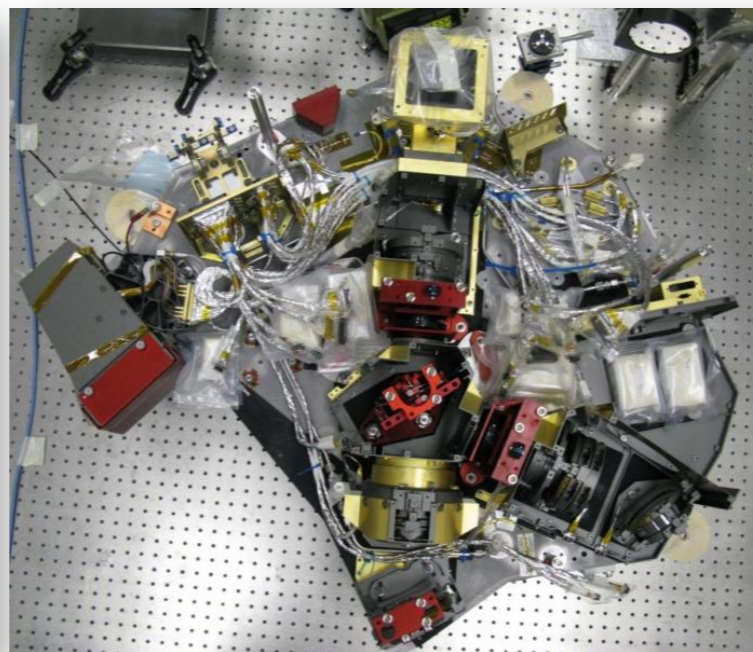
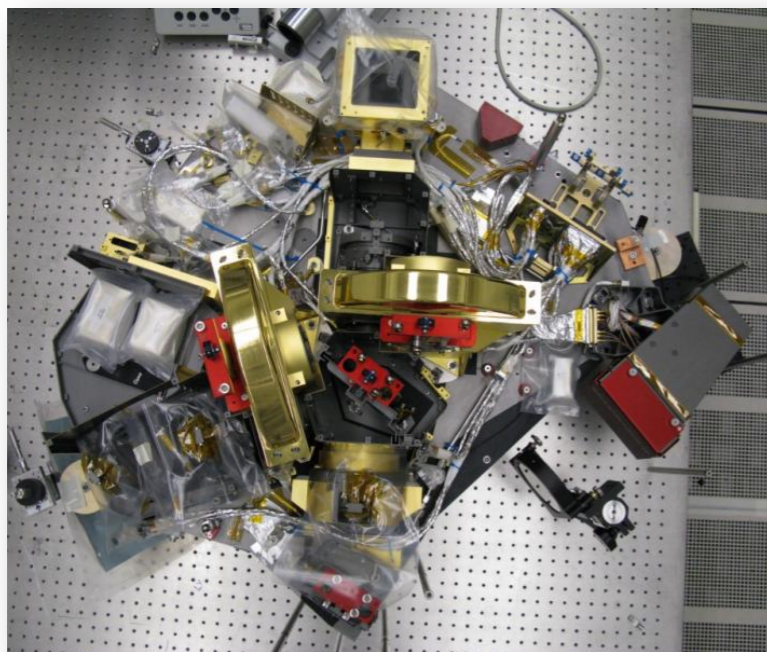


CSA's Fine Guidance Sensor leaving its 85 day cryo test

NIRCam

Module A

Module B



Flight Aft Optics System ready for test

Budget Authority (\$M)

Figures from October 2011 report to Congress

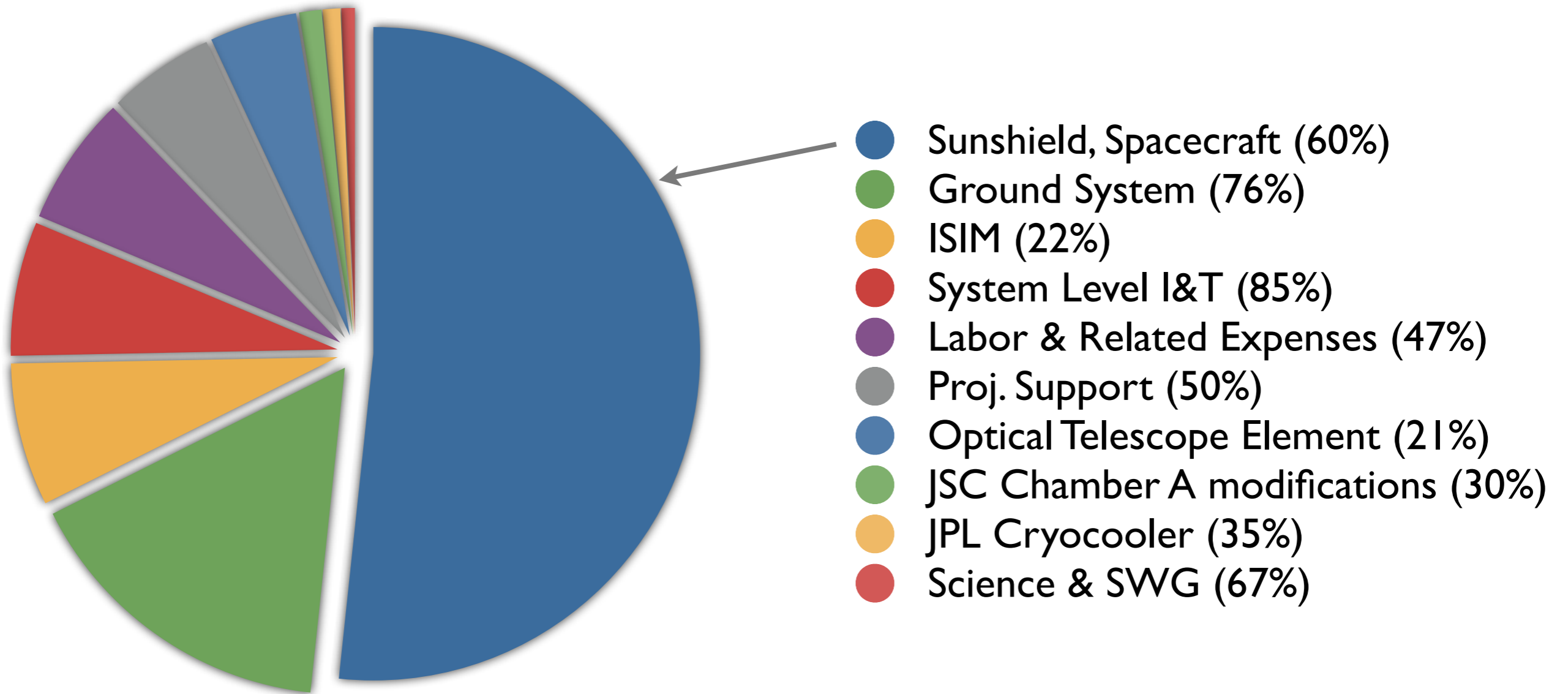
	Prior	FY12 (Enacted)	FY13	FY14	FY15	FY16	BTC	Total
“Replan” Revised Profile	3,529	528	628	659	646	622	2,224	8,835

Figures rounded to nearest million

FY 12 Accomplishments

Month	Milestone	Comments
Oct '11	Begin construction of 140,000-lb robotic facility to build segmented main mirror at GSFC	Assembly began 10/4
Nov '11	Complete electronics simulator model for Integrated Science Instrument Module ("ISIM") Deliver tools for software development environment and verification	Completed 11/15 Completed 10/27
Dec '11	Install Helium shroud floor at Johnson Space Center thermal vacuum chamber ("JSC TVC") Determine root cause of NIRSpec optical bench flaw	Completed 10/26 Completed 12/15
Jan '12	Conduct Critical Design Review for Spacecraft-to-Optical Telescope Element vibration isolation system Finish building Center of Curvature Optical Assembly ("COCOA") for testing primary mirror in JSC TVC Review preliminary requirements for ground structure for spacecraft equipment panels Complete Aft Optic System integration and alignment Update Program Plan and Program Commitment Agreement to reflect replan	Completed 12/15 Completed 1/13 Completed 12/1 Completed 12/2 Completed 1/28
Feb '12	Complete assembly and initial testing of main mirrors at Marshall Space Flight Center Install Helium shroud walls at JSC TVC	Completed 12/19

Work-To-Go



Relative proportion of project funding to-go

% work on this element to-go

How to stay current

- Mission status

- ▶ <http://www.jwst.nasa.gov/> (navigation links on left, “Status”)

- Hardware images and videos

- ▶ <http://www.flickr.com/photos/nasawebbtelescope/>

- ▶ <http://www.youtube.com/user/NASAWebbTelescope>

- Exposure time estimators

- ▶ <http://jwstetc.stsci.edu/etc/>