

Due Date	Item Accomplished	Completion Date
February 2018	Complete Spacecraft Element (combined spacecraft and sunshield) Acoustic Test	Delayed till April by Integration & Test (I&T) delays
	Conduct Observatory Deployment Review #3	Completed 1/31/18
January 2018	Complete Wavefront Sensing & Control commissioning exercise	Delayed till March by government shutdown, well off critical path
	Install spacecraft horizontal radiator panels	Completed 1/3/18

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December 2017	Conduct Operational Readiness Exercise	Completed 12/07/17
	Backup Mission Operation Center ready for use	Completed 11/17/17
	Issue Cycle 1 General Observer call for proposals	Completed 11/30/17
November 2017	Complete Telescope cryovacuum test	Completed 10/20/17
	Tension the Flight Membranes while on the Spacecraft	Completed 10/25/17
October 2017	Pre-Environmental testing Sunshield Deployment	Completed 10/23/17
	Deliver Launch Rehearsal Plan to NASA	Completed 10/02/17
	Hold Consent to Warm Up Telescope following cryovacuum testing meeting	Completed 10/21/17
	Science & Operations Center software package Release 2	Completed 10/02/17
September 2017	Complete OTIS thermal vacuum test	Completed 10/21/17
August 2017	Tension sunshield membranes while they are mounted on the spacecraft	Delayed to February for delays in spacecraft and sunshield I&T
	Deliver final report describing spacecraft influence on observatory optical alignment	Completed 10/12/17.
July 2017	Deliver vibration test results to support the combined analysis of the rocket and the observatory	Delayed to December for delays in spacecraft and sunshield I&T
	Conduct second Flight Operations Team Operational Readiness Exercise	Completed 6/29/17
June 2017	Start OTIS Cryo-vacuum test at JSC Chamber A	Completed 7/13/17
	Deliver Operations Scripts Subsystem software build that supports launch	Completed 3/30/17
	Issue final release of call for proposals for Early Release Science Program	Completed 5/19/17
	Begin Spacecraft Element Thermal Vacuum test	Delayed to December for delays in spacecraft and sunshield I&T
May 2017	Complete room temperature integration of OTIS and test equipment at JSC	Delayed to June due to OTIS vibration investigation (Completed 7/13/17)
	Conduct the Mission Operations Review	Completed 4/7/17
	Perform Spacecraft Acoustic Testing	Delayed to August for several factors (Delayed to October for delays in spacecraft and sunshield I&T)

April 2017	Conduct first test of the Ground System (communications and data handling)	Delayed to July due to propellant system re-welding (Completed 6/20/17)
	Install the deployable horizontal radiators onto the Observatory	Delayed to July due to propellant system re-welding (Delayed to September for delays arising after sunshield installation.)
	Conduct the Observatory Deployment Review #2	Delayed to May, mid-boom 1 deployer issue (Completed 6/13/17)
March 2017	Deliver OTIS to the Johnson Space Center	Completed May 7, 2017
	Deliver the pre-launch Flight Operations System software build	Completed 2/17/17
	Delivery of sunshield extension boom #2 membrane attachment assembly to Observatory I&T	Delayed to April due to shift of resources to deliver pallet structures (Completed 4/24/17)
February 2017	Complete OTIS optical measurements after vibration and acoustics tests	Delayed to March for vibration investigation (Completed 3/31/17)
	Deliver wavefront and control software that supports launch (controls telescope mirror shape)	Completed 1/20/17
	Deliver horizontal deployable radiators to Observatory I&T	Delayed to April for rework (Completed 7/13/17)
January 2017	Complete OTIS vibration and acoustics testing	Completed 3/2/2017
	Deliver observing proposal and planning subsystem software build that supports launch	Completed 1/12/17
	Complete electrical testing of spacecraft at Northrop Grumman.	Delayed to March for propellant system re-welding (Completed 3/7/17)

Due Date	Item Accomplished	Completion Date
December 2016	Deliver Forward Sunshield Pallet Structure to Observatory Integration and Test (I&T)	Delayed to February for work on tensioning system (Completed 3/28/17)
	Start OTIS vibration and acoustic testing program	Completed 11/19/16
	Complete final test of engineering model of telescope center section at Johnson Space Center (JSC)	Completed 10/31/16
	Deliver sunshield flight membranes to Observatory I&T	Completed 12/15/16
November 2016	Start optical measurements of OTIS prior to vibration and acoustic tests	Completed 10/24/16
	Deliver Science and Operations Center release 1	Completed 9/30/16
	Perform Cryocooler installation into the spacecraft bus and begin functional testing	Completed 10/29/16
	Complete Aft Unitized Pallet Structure assembly	Completed 10/29/16
	Deliver Aft Unitized Pallet Structure to Observatory I&T	Delayed to January for work on tensioning system (Completed 3/14/17)
October 2016	Complete portable cleanroom for Telescope and Science Instruments (OTIS)	Completed 10/13/16
	Complete final checkout of new shaker tables at Goddard Space Flight Center	Completed 10/13/16
	Begin making electrical connections between spacecraft panels	Completed 10/7/16
	Complete Sunshield Mid-Boom Assembly #2 functional test	Delayed to November, accelerometer anomaly during test (Completed 12/5/16)
September 2016	Complete Thermal Pathfinder test at JSC	Delayed to November
	Deliver Forward Sunshield Pallet Structure to Observatory I&T	Delayed to December because of membrane tensioning system component rebuild

	Deliver After Sunshield Pallet Structure to Observatory I&T	Delayed to November because of membrane tensioning system component rebuild
	Complete command procedures for initial test of real-time control of Observatory	Completed 9/28/16
August 2016	Deliver cryocooler and associated electronics to Spacecraft I&T	Completed 5/26/16
	Complete test of model Observatory core assembly thermal performance	Completed 6/30/16
	Deliver flight Observatory core assembly to Observatory I&T	Completed 8/2/16
	Deliver Operations Scripts Subsystem build for Telescope commanding and Spacecraft attitude control	Completed 6/13/16
July 2016	Deliver Spacecraft Structure/Propulsion subsystem to observatory I&T	Completed 6/28/16
	Deliver Data Management Subsystem build for advanced data search and distribution	Completed 6/1/16
June 2016	Start Thermal Pathfinder test at JSC Chamber A	Delayed to September because of change to how Chamber A cool down specifics will be handled
	Deliver Fixed ISIM Radiator Panels to OTIS	Completed 11/30/15
	Complete flight software verification Test Readiness Review (moving targets)	Completed 6/30/16
	Complete Science and Operations Center System Design Review #2	Completed 5/18/16
May 2016	Deliver Optical Telescope Element (OTE) to OTIS	Completed 3/9/16
	Begin OTIS integration (install ISIM onto OTE)	Completed 3/28/16
	Complete Flight Battery Manufacturing Readiness Review	Completed 1/12/16
	Deliver Flight Operations Subsystem build with real-time command and telemetry functions	Completed 3/28/16
	Deliver Proposal Planning Subsystem build supporting GTO call for proposals	Completed 4/29/16
April 2016	Deliver ISIM to OTIS	Completed 3/31/16

	Complete Sunshield Aft Pallet Structure assembly	Delayed until July
	Complete Spacecraft Panel Integration	Completed 5/25/16
March 2016	Start Spacecraft Panel Integration	Completed 10/26/15
	Complete Sunshield Mid-Boom Assembly #2 functional test	Forecasting July completion data due to latch and detent pin redesign and tubes segment rebuild
	Complete cryocooler thermal performance acceptance testing	Completed 3/5/16
February 2016	Deliver Aft Deployable Instrument Radiator to Observatory I&T	Completed 2/15/16
	Deliver Command & Telemetry computer to Observatory I&T	Delayed til April to re-run testing
	Deliver Secondary Mirror Support Structure verification report to GSFC	Completed 1/28/16
	Complete deliveries of Spacecraft wire harnesses	Completed 1/22/16
	Deliver spare Cryocooler Compressor Assembly to JPL	Delayed til May 2016, no schedule impact
January 2016	Deliver flight Aft Optics System to Telescope I&T	Completed December 14, 2015
	Complete final checkout of new GSFC vibration shaker table	Delayed to March, vertical shaker issues
	Sunshield Flight Layer #4 shipped to Northrop Grumman	Completed December 3, 2015
	Sunshield Forward Cover Assembly shipped to Northrop Grumman	Delayed til June. Nexolve revised schedule to implement NGAS design changes. No anticipated schedule impact.
	Complete Flight Operations Subsystem System Design Review #2	Completed December 17, 2015
	Complete Mission Operations Center construction at STScI	Completed December 29, 2015

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December 2015	Complete second test of Pathfinder Telescope equipment at the JSC Chamber A	Completed October 31, 2015
	Complete Solar Array panel #2 cell installation	Completed December 24, 2015
	Complete Sunshield Mid-Boom Assembly #1 functional test	Delayed to April for reassembly of mid-boom #1
	Complete Delivery of Reaction Wheel Assemblies to Observatory Integration & Test (I&T)	Two of 3 wheels delivered in December, 1 in May, being rebuilt, no schedule impact
	Deliver Data Management Subsystem build for basic data search and distribution functionality	Completed November 30, 2015
November 2015	Deliver update for launch and activation sequence of events for JWST commissioning	Completed October 29, 2015
	Deliver the Observaory Operations Handbook Vol 1&2 updates	Completed October 30, 2015
	Deliver new build of the proposal planning software for Telescope plus ISIM (OTIS) testing	Completed October 30, 2015
October 2015	Start Integrated Science Instrument Module (ISIM) cryovacuum test #3	Completed October 27, 2015
September 2015	Deliver Communications Antenna Bi-Axial Gimbal Assembly to Observatory Integration and Testing	Completed August 24, 2015
August 2015	Deliver Spacecraft Side Equipment Panels to Observatory integration and testing	Completed 1st panel August 31, 2015, 2nd panel September 3, 2015
	Deliver Reaction Wheel Assemblies to Observator integration & testing	Forecasting December completion, no schedule impact
	Start ISIM Cryo-vacuum Test #3	Delayed to October because of NIRCcam SCA and heat strap repair
	Start Optical Ground Support Equipment Test #2 at JSC	Delayed to October (ripple effect from previous late milestone)
July 2015	Flight spare cryo-cooler assembly to JPL for Acceptance Test #4	Deferred until December 2015, using spare as pathfinder for flight unit
	Aft Deployable ISIM Radiator build complete	Completed June 23, 2015

	ISIM Electro-Magnetic testing complete	Delayed to August because of NIRCam SCA and heat strap repair
June 2015	Attitude Control System test set delivery to Observatory Integration and Test	Completed February 6, 2015
	Propellant Mid-Course Correction testing complete	Completed June 17, 2015
	Delivery of new Vibration Test System to GSFC	75% of hardware in place, remainder in September
	ISIM Acoustic testing complete	Delayed to July because of NIRCam SCA and heat strap repair
	Proposal Planning Subsystem Build 11	Completed April 30, 2015
	Thruster Module Test Readiness Review	Completed February 23, 2015
May 2015	Flight Cryocooler Compressor Assembly to JPL for Acceptance Test #3	Delay at least until July, CCA still experiencing schedule difficulties
	Spacecraft Flight Software Build 2.2 Test Readiness Review	Completed April 30, 2015
	Sunshield Forward Cover Assembly shipped to NGAS	Moved to September, reprioritizing work for efficiencies at Nexolve
	Deliver Flight Aft Optics System to Telescope Pathfinder	Completed April 22, 2015
	Data Management Subsystem Build 4 delivery	Completed March 31, 2015
April 2015	Star acceptance testing of flight Cryocooler Assembly and Electronics	Completed March 23, 2015 (CCA delayed to September 2015)
	Flight Observatory Deployment Tower Assembly complete	Completed March 12, 2015
	ISIM Vibration Testing complete	Delayed to June because of heat strap repair
	Star Optical Ground Support Equipment test #1 at JSC	Delayed to May
March 2015	Qualification Sunshield Membrane Retention Device thermal vacuum test start	Completed March 12, 2015
	Deliver Cryocooler Jitter Attenuator Assembly to Optical Telescope Element	Delayed to April, ground support equipment issue

	NGAS Acceptance of Spacecraft propellant tank	Delayed to June due to test unit welding issue, no schedule impact
	Near Infrared Instrument Detector changeouts complete	Completed 4/3/2015
February 2015	Start formal Engineering Model Test Bed electrical integration	Completed November 13, 2014
	Sunshield Mid-boom Manufacturing Readiness Review	Completed February 9, 2015
	Sunshield Flight Layer 3 delivered to Northrop-Grumman (NGAS)	Completed February 16, 2015
	Deliver Telescope Pathfinder Structure to JSC	Completed February 4, 2015
	Observatory Operations Scripts Subsystem Build 4 delivery	Completed January 16, 2015
	Wavefront Sensing and Control Software Build 4 delivery	Completed December 30, 2014
January 2015	Deliver Spacecraft Simulator handbook, Rev B (flight software build 1) to GSFC	Completed December 11, 2014
	JSC Chamber A Commissioning complete	Completed November 27, 2014