

Rascal Master Schedule

Mar 21, 2014

Saint Louis University

<http://>

Project managers:

Dates:

Mar 6, 2014 - Aug 2, 2014

Complete:

0%

Tasks:

68

People:

9

This schedule lists all of mission milestones associated with the Rascal mission, which is being co-developed with resources from Saint Louis University and the Boeing Company.

Tasks

Name	Begin date	End date
Rascal Mission CONOPS	3/6/14	4/2/14
Rascal CONOPS Trade Study	3/6/14	3/20/14
Rascal CONOPS Selection	3/20/14	3/20/14
CONOPS Revision 1	3/21/14	4/1/14
Rascal Mission Objective and Success Criteria	3/21/14	4/1/14
Preliminary Rascal RVM	3/21/14	4/1/14
Mission Status Review	4/2/14	4/2/14
Primary ADC Subsystem	3/17/14	4/23/14
Preliminary Relative Orbit Analysis	3/17/14	3/21/14
Preliminary Controls Analysis	3/22/14	3/25/14
Preliminary Controls Matlab Algorithm	3/26/14	4/8/14
Secondary Controls Matlab Algorithm	4/9/14	4/23/14
Preliminary ADC Sensor Research	3/21/14	4/1/14
Primary PLD Subsystem	3/21/14	5/5/14
Verify Operation of Hardware System	3/21/14	3/24/14
Hardware System Integration	3/25/14	3/31/14
Verify Integrated Hardware System	4/1/14	4/7/14
Configure Hardware Drivers	4/8/14	4/14/14
Finalize and Verify Software in SDK	4/15/14	4/21/14
Verify Integrated Hardware and Software System	4/22/14	4/28/14
Test, Calibrate, and Demonstrate	4/29/14	5/5/14
PRP Subsystem	3/21/14	8/1/14
Preliminary PRP System Research	3/21/14	4/1/14
Prototype Design	3/24/14	4/21/14
Coordinate System Definitions	3/24/14	3/28/14
Sizing Requirements	3/24/14	3/28/14

Tasks

Name	Begin date	End date
DeltaV Requirements	3/24/14	4/4/14
Tank Design	3/24/14	4/14/14
Thruster Design/Layout	3/24/14	4/14/14
Valve Integration Design	4/7/14	4/21/14
Valve Testing	4/7/14	4/21/14
Functional Prototype	4/21/14	5/19/14
Print Prototype	4/21/14	4/28/14
Valve Integration	4/28/14	5/5/14
Functional Testing	5/5/14	5/19/14
Functional Engineering Unit	5/19/14	8/1/14
Print Engineering Unit	5/19/14	6/2/14
Functional Testing	6/2/14	8/1/14
Pressure Testing	6/9/14	6/30/14
Environmental Testing	6/23/14	8/1/14
Primary CDH Subsystem	3/21/14	4/6/14
Review Boeing Colony-II Bus User Guide	3/21/14	3/25/14
Preliminary Spacecraft Functional Block Diagram	3/26/14	4/6/14
DCK Subsystem	3/21/14	4/13/14
Define Separation Requirements	3/21/14	4/1/14
Preliminary Docking Mechanism Research	3/21/14	4/1/14
Assess Primary Spacecraft Docking Integration	3/21/14	4/1/14
Preliminary Methodology Trade Study	4/2/14	4/13/14
Secondary STR Subsystem	3/21/14	4/1/14
Review Previous Skeleton Design Work	3/21/14	3/25/14
Preliminary Mass Budget	3/25/14	4/1/14
Preliminary Component Listing	3/21/14	4/1/14

Tasks

Name	Begin date	End date
Secondary COM Subsystem	3/21/14	4/1/14
Secondary Link Budget Analysis	3/21/14	3/25/14
Preliminary Component Research	3/21/14	4/1/14
Secondary PWR Subsystem	3/21/14	4/15/14
Secondary Power Budget	3/21/14	4/1/14
Preliminary Component Selection	4/2/14	4/15/14
Secondary ADC Subsystem	3/21/14	4/22/14
Preliminary Detumbling Analysis	3/21/14	4/8/14
Preliminary Detumbling Requirements	4/9/14	4/15/14
Preliminary Detumbling Component Selection	4/9/14	4/22/14
Determine GPS Frequency	3/21/14	3/25/14
Secondary CDH Subsystem	3/21/14	4/13/14
Preliminary Spacecraft Functional Block Diagram	3/21/14	4/1/14
Preliminary Software System Overview	4/2/14	4/13/14
Student Graduation	5/15/14	5/15/14
EDU Delivery	8/1/14	8/1/14

Resources

Name	Default role
Tom Moline	Primary Spacecraft Program Manager
Nate Richard	Secondary Spacecraft Program Manager
Jennifer Babb	DCK Lead
Tyler Olson	PRP Lead
Kate Clements	Primary ADC Co-Lead
Nathan Bossart	Primary PLD Lead
Joe Mayer	undefined
Christopher Berry	undefined
Alex Howard	Secondary PWR Lead

Gantt Chart



