

Rascal Berthing Subsystem Meeting

Meeting Date	3/30/2014		
Meeting Place	SSRL	Leader	Tom Moline
Minutes Date	3/30/2014	Participants	Andrew Zimmerman, Denana Vehab, Tom Moline, Nate Richard, Marek Janiczek, Alex Howard, Tyler Olson

Description	Action	Due Date
<p>RVM Overview:</p> <p>Requirements have been imposed on the design of the conjunction mechanism that limits the initial separation and rotational velocity between each spacecraft.</p> <p>These requirements are that the mechanism must survive initial spacecraft separation, achieve a separation velocity of less than 1 m/s, and a rotational velocity of 10 deg/s.</p> <p>Also necessitates a power inhibit that prevents the secondary spacecraft from being powered on until separation.</p> <p>Future Work:</p> <p>Need to allocate volume and power constraints.</p> <p>Set up a weekly meeting time:</p> <ul style="list-style-type: none"> • DV: MW after 3 PM, TR before 4 PM • AZ: M after 5 PM, Every Other Day after 1 PM • MJ: Every day but Tuesday after 3 PM, T after 5 PM • TM: <p>Figure out which spacecraft the docking mechanism will be incorporated into.</p> <ul style="list-style-type: none"> • NR: Do we want to sacrifice power on secondary spacecraft for ease of integration? • TM: Also need to look at this from a volume budget standpoint. <p>What are some initial ideas for separating mechanism?</p> <ul style="list-style-type: none"> • DV: could use primary propulsion system for main separation force. <ul style="list-style-type: none"> ○ Might have to change the power off requirement if we want to have the 	<p>Schedule weekly meeting time (JB)</p> <p>Provide at least three different design ideas for separation mechanism (DV)</p>	<p>04/01/2014</p> <p>04/01/2014</p>



Rascal Berthing Subsystem Meeting

Description	Action	Due Date
<p>separation mechanism on the secondary spacecraft.</p> <ul style="list-style-type: none">• DV: could also use a nylon tie-down and have a different version of the burn circuit.• MJ: could have physical way of conjunction and use electromagnets for separation force.		