

Meeting Date	4/1/2014		
Meeting Place	SSRL	Leader	Tom Moline
Minutes Date	4/1/2014	Participants	Nate Richard, Nick Mercadante, Max Polley, Kate Clements, Denana Vehab, Tyler Olson, Casey Smith, Chris Berry, Nathan Bossart, Joseph Mayer, Richard Henry, Manu, Dr. Swartwout

Description	Action	Due Date
RVM Update:		
We are in the process of updating the RVM, based on Dr. Swartwout's input.		
Developing more concrete values for some of the more vague requirements (Launch Vehicle Separation, Conjoinment, etc).	Send out RVM update by the end of the day (TM)	4/01/2014
Will have an updated version sent out by the end of the day.		
Boeing Questions:		
All questions need to go through Tom Moline, Nate Richard, or Dr. Swartwout.		
So, if anyone has any questions, forward them to each of the above.		
Purchases:		
Senior design team has \$500 available to spend, no questions asked.		
So, if we need to purchase something quickly, do it this way.		
COM:		
Looked at options for communication between primary and secondary spacecraft.	Perform initial trade study between each	04/08/2014
Seems like a pseudo-bluetooth device can be used for this purpose.	option (MP)	
May need to add a separate system on primary spacecraft to accomplish this.		
MS: May be easier to yell at the secondary spacecraft at the ground, also have licensing issues.		



Description	Action	Due Date
Need to perform a trade study between each option.		
Weekly meeting time: Monday at 4:00 PM		
ADC:		
We have lots of different methods for nutation damping.	Perform trade study into nutation dampening	
 Damping fluids 		4/08/2014
• Electromagnetic	systems (KC)	
 Electromechanical 	Draft initial control	4/08/2014
• Etc	system for z-axis position estimation (TM)	
So, we can look into these options.	(11/2)	
What is reasonable for detumbling rates and timeframe?		
 Responsibility is shared between separation and ADC system. 		
 Usually handled based on an error budget. 		
 Could say 1 Orbit for requirement. 		
 Then do work based on that within each system. 		
 Just need to set values at this point (big design driver). 		
 Need to also decide on rotation axis. 		
• Might be able to do this with a single reaction wheel.		
STR:		
Preliminary design on the secondary spacecraft design is done.		
Is capable of folding into and out of itself.	Have an updated skeleton with feedthroughs and mounting for PCB's (CB)	4/08/2014
A lot easier to deal with than the CSK skeleton.		
Going to have meeting on Thursdays at 5:30 PM		
BRT:		
Working on a separation mechanism between the secondary and primary spacecraft.		
Initial concept consists of a mating piece between each, with a solenoid used for actual separation.	Have trade study conducted on various methods (DV)	4/08/2014
Might use a spring to induce separation.		
TM: need to account for the fact that the secondary spacecraft will be off during this time.		

Description	Action	Due Date
MS: there are power connectors that exist to relay power from the primary spacecraft to the secondary spacecraft.		
This would also turn on the secondary spacecraft as well.		
Need to talk to Boeing about how to deal with mating the spacecraft next to each other over a whole side.		
Also need constraints on positioning.		
Meeting time is 5:30 PM on Mondays.		
PRP:		
Had first meeting yesterday at 6:30 PM.		
Tried looking at Manu's previous work, couldn't get the files open.	Sand a preliminary	4/8/2014
Going to limit the propulsion volume to 0.5 U	Send a preliminary drawing to Boeing (TO)	4/8/2014
Also imposing a 3W power limit.		
Also imposing a mass limit of 75% of payload mass.		
Need to ask Boeing a bunch of questions, like form factor, location, etc.		
MS: Should just send a drawing to Boeing of what we would think that our attachment scheme would look like.		
• <i>Motivates</i> Boeing to answer questions.		
Oak Ridge is offering free titanium printing for scientific purposes.		
PWR:		
Power meeting is scheduled for Thursday at 2:00 PM.		
Will have an updated budget by next Tuesday.		