Preliminary Design Review

Judge 1:		
	Score	Comments
Introduction		
Presentation Outline	2	
Team Organization	2	
Acronyms	2	
Systems Overview		
Mission Summary	2	
System Requirement Summary	2	
System-Level CanSat Configuration Trade & Selection	2	
System Concept of Operations	2	
Physical Layout	2	
Launch Vehicle Compatability	2	
Sensor Subsystem Design		
Sensor Subsystem Overview	2	
Sensor Subsystem Requirements	2	
GPS Trade & Selection	2	
Non-GPS Attitude Sensor Trade & Selection	2	
Air Temperature Trade & Selection	2	
Video Camera Trade & Selection (Selectable)		
Impact Force Sensor Trade & Selection (Selectable)	2	
Descent Control Subsystem Design		
Descent Control Subsystem Overview	2	
Descent Control Requirements	2	
Container Descent Control Strategy Selection and Trade	1	Container should just use a parachute as a passive descent control.
Payload Descent Control Strategy Selection and Trade	0	The payload needs to separate at 400 meters and come down on something besides a parachute.
Descent Rate Estimates	1	No calculation results.
Mechanical Subsystem Design		
Mechanical Subsystem Overview	2	A picture here would be nice even if it is a repeat.
Mechanical Subsystem Requirements	2	
Egg Protection Trade & Selection	2	
Mechanical Layout of Components Trade & Selection	1	Hand drawings would be acceptable. Anything visual to show you have worked on a layout.
Material Selections	0	
Container-Payload Interface	0	
Structure Survivability Trades	0	
Mass Budget	2	
Communication and Data Handling Subsystem Design		
CDH Overview	2	
CDH Requirements	2	
Processor and Memory Trade & Selection	2	
Antenna Trade & Selection	2	
Radio Configuration	2	
Telemetry Format	2	
Activation of Telemetry Transmissions	0	Need activation info not termination
Audible Locating Device Trade & Selection	2	
Electrical Power Subsystem Design		
EPS Overview	1	Block diagram would be better.
EPS Requirements	2	
Electrical Block Diagram	2	
Power Budget	2	
Power Source Trade & Selection	2	
Battery Voltage Measurement Trade & Selection	2	
Flight Sowftware Design		
FSW Overview	2	
FSW Requirements	2	

Judge 2:		
	Score	Comments
Introduction		
Presentation Outline	2	
Team Organization	2	
Acronyms	2	
Systems Overview		
Mission Summary	2	
System Requirement Summary	2	
System-Level CanSat Configuration Trade & Selection	2	
System Concept of Operations	2	
Physical Layout	2	
Launch Vehicle Compatability	2	
Sensor Subsystem Design		
Sensor Subsystem Overview	2	
Sensor Subsystem Requirements	2	
GPS Trade & Selection	2	
Non-GPS Attitude Sensor Trade & Selection	2	
Air Temperature Trade & Selection	2	
Video Camera Trade & Selection (Selectable)		
Impact Force Sensor Trade & Selection (Selectable)	2	
Descent Control Subsystem Design		
Descent Control Subsystem Overview	2	
Descent Control Requirements	2	
Container Descent Control Strategy Selection and Trade	1	Container should use a passive system for descent control
Payload Descent Control Strategy Selection and Trade	0	Missing. Payload needs to separate from the container and come down using a system that is not a parachute
Descent Rate Estimates	1	No calculations performed.
Mechanical Subsystem Design		
Mechanical Subsystem Overview	2	
Mechanical Subsystem Requirements	2	
Egg Protection Trade & Selection	2	
Mechanical Layout of Components Trade & Selection	1	Need visual drawing of layout
Material Selections	0	
Container-Payload Interface	0	
Structure Survivability Trades	0	
Mass Budget	2	
Communication and Data Handling Subsystem Design		
CDH Overview	2	
CDH Requirements	2	
Processor and Memory Trade & Selection	1	How did you derive those numbers for memory?
Antenna Trade & Selection	2	
Radio Configuration	2	
Telemetry Format	1	Specify the units you will use and give an example of what a packet will look like. Also give a total byte count.
Activation of Telemetry Transmissions	0	Need activation info, not termination.
Audible Locating Device Trade & Selection	2	
Electrical Power Subsystem Design		
EPS Overview	1	A block diagram would be better.
EPS Requirements	2	
Electrical Block Diagram	2	
Power Budget	2	
Power Source Trade & Selection	2	
Battery Voltage Measurement Trade & Selection	2	
Flight Sowftware Design		
FSW Overview	2	
FSW Requirements	2	

CanSat FSW State Diagram	2	I think you are sampling the pressure and temperature sensors much too fast.
Software Development Plan	0	
Ground Control System Design		
GCS Overview	2	
GCS Requirements	2	
GCS Antenna Trade & Selection	2	
GCS Software	0	missing. At least identify what software you plan to use.
CanSat Integration and Test		
CanSat I&T Overview	1	Need to describe how the tests are to be performed, not just list them.
Mission Operations and Analysis		
Overview of Mission Sequence of Events	2	
Mission Operations Manual Development Plan	0	Missing this information
CanSat Location and Recovery	2	
Management		
CanSat Budget - Hardware	2	
CanSat Budget - Other Costs	0	Need to show travel cost estimate
Program Schedule	2	
Conclusions	2	
Quality		
Quality	7	
Handling of Questions	2	

CanSat FSW State Diagram	2	You don't need to sample that fast.
Software Development Plan	0	
Ground Control System Design		
GCS Overview	2	
GCS Requirements	2	
GCS Antenna Trade & Selection	2	
GCS Software	0	What software will you use?
CanSat Integration and Test		
CanSat I&T Overview	1	Need to add how the tests will be performed
Mission Operations and Analysis		
Overview of Mission Sequence of Events	2	
Mission Operations Manual Development Plan	0	
CanSat Location and Recovery	2	
Management		
CanSat Budget - Hardware	2	
CanSat Budget - Other Costs	0	
Program Schedule	2	
Conclusions	2	
Quality		
Quality	6	
Handling of Questions	2	