		DeMi Requir	ements			
ID	Statement	Parent Requirement	Rationale	Verification Method	Revision date	Expert Contact
example	The system shall	MLR-4	Mission goal, etc.	Analysis	2/15/2013	kerberosUserna
		Mission Stat	tement	, in the second second		
MS-1	The mission of the Deformable Mirror Demonstration (DeMi) is to provide a low-cost, quick access platform to demonstrate microelectromechanical system (MEMS) deformable mirror technology on orbit.				2/18/2013	zaira
		lission Level Re	equirements			
MLR-1	The system design shall follow a 3-unit CubeSat	MS-1	Low-cost, quick			
	platform.	100-1	access space platform	Inspection	2/23/2013	zaira, acarlton
MLR-2	The system shall primarily use commercial off the shelf (COTS) and CubeSat parts and components.	MS-1	Low-cost option for a university project	Inspection	2/23/2013	zaira, acarlton
MLR-3	The system shall accommodate and operate a MEMS deformable mirror demonstration	MS-1	anniorally project		2/20/20 10	zana, acamon
	experimental payload.		Mission goal	Inspection	2/23/2013	zaira, acarlton
MLR-4	The system shall operate and produce operational and experimental data for a period of [TBD].	MS-1	Mission goal	Analysis	2/23/2013	zaira, acarlton
	Tana experimental data for a period of [100].	System Requi		ı, ıılaıyolo	12/20/2010	Lana, acanton
01/0 1			Safety and mission		I	
SYS-1	The system shall survive launch conditions.	MLR-4	requirement	Testing	2/18/2013	zaira
SYS-2	The system shall include electrical, mechanical, and software interfaces to the payload.	MLR-3	Mission requirement	Inchestion	2/18/2012	zaira
	The system shall comply with the requirements		Mission requirement CDS is the standard	Inspection	2/18/2013	zaira
SYS-3	and constraint listed in the most current CubeSat	MLR-1	for CubeSat mission	lmama -4! -	0/00/0040	ira
	Design Specification (CDS) document.  The system shall be capable of sending and		design	Inspection	2/23/2013	zaira
SYS-4	receiving data and instructions to and from the	MLR-3, MLR- 4			0440:5545	
6) (2	ground. The system shall have a deorbit time of 25 years		Mission requirement	Testing	2/18/2013	zaira
SYS-5	or less.	MLR-4	Current regulation	Analysis	2/23/2013	zaira
		CS Subsystem I	Requirements	,		
	ADCS shall meet payload performance requirements during external-source science					
ADCS-1	operation mode				3/8/2013	
	ADCS shall meet 4.7'/s [TBR] slew rate					
ADCS-	requirement of payload imaging technology during external source science operation mode	MID3	Payload requirement	Lab testing, Analysis	3/8/2013	tamz, alewasse
1.1	ADCS shall provide attitude knowledge and control	IVILIX-3	r ayload requirement	Allalysis	3/0/2013	alewasse
ADCS-2	during communication operation				3/1/2013	
	ADCS shall provide attitude knowledge of the	CVC 4	Communication	l ab tastina		40.00
ADCS- 3.1	satellite to an accuracy within [TBD] degrees for communication operations.	515-4	Communication requirement	Lab testing, Analysis	3/1/2013	tamz, alewasse
0.1	ADCS shall provide attitude control of the satellite		roquiomone	rilaryolo	0,1,2010	aiowaccc
ADCS-	to an accuracy within [TBD] degrees for	0)/0 4	Communication		0/4/0040	tamz,
3.2	communication operations.  ADCS shall provide momentum capability to	SYS-4	requirement	Analysis	3/1/2013	alewasse
	despin upon launch vehicle separation within 30	MLR-4	Detumbling			tamz,
ADCS-3	days.		requirement	Analysis	3/8/2013	alewasse
		nics Subsystem	Requirements			
AVI-1	Avionics shall provide the necessary interfaces to support all subsystems.	MLR-3, SYS- 2	Required for operation	Lab testing	2/23/2013	zjcasas,
A\// 0	Avianias shall handle calculations required to run	MLR-3, SYS-	rrequired for operation	Lan testing	212012013	dominicg zjcasas,
AVI-2	all subsystems in real time.	2	Required for operation	Lab testing	2/23/2013	dominicg
AVI-3	Avionics shall write and store data to a mass	MLR-4, SYS-	Data downlink not	Lab tooting	2/23/2012	zjcasas,
	Avionics shall permit software undates and be		always available	Lab testing	2/23/2013	dominicg zjcasas,
AVI-4				1	1	
	capable of reprogramming in orbit.	SYS-2	Reconfigurability	Lab testing	2/23/2013	dominicg
AVI-5	capable of reprogramming in orbit.  Avionics shall be able to recover from potential		Required for operation			zjcasas,
	capable of reprogramming in orbit.  Avionics shall be able to recover from potential single event effects.	MLR-4	Required for operation in space environment	Lab testing Analysis	2/23/2013	
AVI-5	capable of reprogramming in orbit.  Avionics shall be able to recover from potential single event effects.  Communication	MLR-4 nication Subsys	Required for operation			zjcasas, dominicg
	capable of reprogramming in orbit.  Avionics shall be able to recover from potential single event effects.  Communications system shall provide the ability to transmit and receive data.	MLR-4	Required for operation in space environment			zjcasas,
AVI-5	capable of reprogramming in orbit.  Avionics shall be able to recover from potential single event effects.  Communications system shall provide the ability to transmit and receive data.  The system at the satellite shall receive	MLR-4 nication Subsys MLR-4, SYS-	Required for operation in space environment tem Requirements	Analysis	2/23/2013	zjcasas, dominicg zjcasas, dominicg
AVI-5	capable of reprogramming in orbit.  Avionics shall be able to recover from potential single event effects.  Communications system shall provide the ability to transmit and receive data.  The system at the satellite shall receive commands from the ground station, and transmit	MLR-4 nication Subsys MLR-4, SYS- 4	Required for operation in space environment tem Requirements  Mission requirement	Analysis  Lab testing	2/23/2013	zjcasas, dominicg zjcasas, dominicg zjcasas,
AVI-5 C-1 C-1.1	capable of reprogramming in orbit.  Avionics shall be able to recover from potential single event effects.  Communications system shall provide the ability to transmit and receive data.  The system at the satellite shall receive	MLR-4 nication Subsys MLR-4, SYS-	Required for operation in space environment tem Requirements	Analysis	2/23/2013	zjcasas, dominicg zjcasas, dominicg
AVI-5	capable of reprogramming in orbit.  Avionics shall be able to recover from potential single event effects.  Communications system shall provide the ability to transmit and receive data.  The system at the satellite shall receive commands from the ground station, and transmit telemetry and image packets to the ground station.  The communications system shall establish a robust and periodic link.	MLR-4 nication Subsys MLR-4, SYS- 4 C-1	Required for operation in space environment tem Requirements  Mission requirement	Analysis  Lab testing  Lab testing	2/23/2013	zjcasas, dominicg zjcasas, dominicg zjcasas, dominicg
C-1 C-1.1 C-2	capable of reprogramming in orbit.  Avionics shall be able to recover from potential single event effects.  Communications system shall provide the ability to transmit and receive data.  The system at the satellite shall receive commands from the ground station, and transmit telemetry and image packets to the ground station.  The communications system shall establish a robust and periodic link.  The system shall recognize correct packets from	MLR-4 nication Subsys MLR-4, SYS- 4 C-1 MLR-4, SYS-	Required for operation in space environment tem Requirements  Mission requirement  Mission requirement	Analysis  Lab testing  Lab testing	2/23/2013 2/27/2013 2/27/2013	zjcasas, dominicg zjcasas, dominicg zjcasas, dominicg zjcasas, dominicg
C-1.1	capable of reprogramming in orbit.  Avionics shall be able to recover from potential single event effects.  Communications system shall provide the ability to transmit and receive data.  The system at the satellite shall receive commands from the ground station, and transmit telemetry and image packets to the ground station. The communications system shall establish a robust and periodic link.  The system shall recognize correct packets from incorrect packets and request retransmission if the	MLR-4 nication Subsys MLR-4, SYS- 4 C-1 MLR-4, SYS- 4	Required for operation in space environment tem Requirements  Mission requirement  Mission requirement  Required for operation	Analysis  Lab testing  Lab testing  Lab testing	2/23/2013 2/27/2013 2/27/2013 2/27/2013	zjcasas, dominicg zjcasas, dominicg zjcasas, dominicg zjcasas, dominicg zjcasas,
C-1.1 C-2 C-2.1	capable of reprogramming in orbit.  Avionics shall be able to recover from potential single event effects.  Communications system shall provide the ability to transmit and receive data.  The system at the satellite shall receive commands from the ground station, and transmit telemetry and image packets to the ground station. The communications system shall establish a robust and periodic link.  The system shall recognize correct packets from incorrect packets and request retransmission if the packet is faulty.  The system shall store packets to prevent	MLR-4 nication Subsys MLR-4, SYS-4 C-1 MLR-4, SYS-4 C-2	Required for operation in space environment tem Requirements  Mission requirement  Mission requirement  Required for operation  Maintain data integrity	Analysis  Lab testing  Lab testing  Lab testing  Lab testing	2/23/2013 2/27/2013 2/27/2013 2/27/2013 2/27/2013	zjcasas, dominicg zjcasas, dominicg zjcasas, dominicg zjcasas, dominicg zjcasas, dominicg zjcasas,
C-1 C-1.1 C-2	capable of reprogramming in orbit.  Avionics shall be able to recover from potential single event effects.  Communications system shall provide the ability to transmit and receive data.  The system at the satellite shall receive commands from the ground station, and transmit telemetry and image packets to the ground station. The communications system shall establish a robust and periodic link.  The system shall recognize correct packets from incorrect packets and request retransmission if the packet is faulty.	MLR-4 nication Subsys MLR-4, SYS- 4 C-1 MLR-4, SYS- 4	Required for operation in space environment tem Requirements  Mission requirement  Mission requirement  Required for operation	Analysis  Lab testing  Lab testing  Lab testing	2/23/2013 2/27/2013 2/27/2013 2/27/2013	zjcasas, dominicg zjcasas, dominicg zjcasas, dominicg zjcasas, dominicg zjcasas, dominicg

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ID	Statement	Parent Requirement	Rationale	Verification Method	Revision date	Expert Contact
C-3	The communications system shall support a bandwidth and data rate necessary to transmit all telemetry and images.	MLR-4, SYS-	Required for operation		2/27/2013	zjcasas, dominicg
C-3.1	The system shall transmit at [TBD] kbps for uplink and [TBD] kbps for downlink.	C-3	Abililty to link	Lab testing	2/27/2013	zjcasas, dominicg
C-3.2	The system shall have a bandwidth of [TBD] Hz for uplink and [TBD] Hz for downlink.	C-3	Ability to link	Lab testing	2/27/2013	zjcasas, dominicg
C-4	The communications system shall be able to encrypt data packets.	MLR-4, SYS- 4	Required for uplink	Lab testing	2/27/2013	zjcasas, dominicg
C-5	The communications subsystem shall downlink data with a bit error rate no greater than [TBD]%.	MLR-4, SYS- 4	Ensure continuous link during contact	Lab testing	2/23/2013	zjcasas, dominicg
C-6	The communications subsystem shall obey communications regulations.	SYS-5	Must comply with FCC, IARU regulations	Lab testing, inspection	2/23/2013	zjcasas, dominicg
Orbit Subsyste Requiren	<u> </u>					
ORB-1	The orbit altitude shall sustain under aerodynamic drag for the duration of mission life time.	MLR-4	Ensure satellite remains on orbit for mission lifetime	Analysis	3/11/3013	tamz, alewasse
	The orbit shall have an inclination of 40 deg. [TBR] for ground station access.	SYS-4	Ensure communication with ground station(s)	Analysis	3/11/3013	tamz, alewasse
Payload Subsyste Requiren						
-	The payload shall command a MEMS deformable mirror to run a pre-defined test sequence for at least 5 minutes [TBR] each orbit.	MLR-3, MLR-	Mission requirement	Analysis	2/26/2013	acarlton, kree
PLD-1.1	The payload shall have the ability to control any combination of actuators within 0.001 seconds [TBR] of each other, at a minimum rate of 100 Hz [TBR], with a minimum stroke of 1.5 microns, and with a precision of at least 1 nm [TBR].	PLD-1	Need to be able to control individual actuators and the DM as a whole with a certain speed, rate, stroke, and precision	Lab testing	5/3/2013	acarlton, kree
PLD-2	The payload shall have the ability to measure and reconstruct the optical wavefront at one wavelength for the duration of a 5 minute [TBR] test sequence each orbit at a frequency of at least	MLR-3, MLR-	Need to be able to measure and reconstruct the wavefront in test our (theoretical) ability to			
PLD-2.1	10 Hz [TBR]. The payload shall have the ability to measure the optical wavefront at a minimum rate of 10 Hz	4	correct for it.  Diagnostic mode for taking full frame	Lab testing	5/3/2013	acarlton, kree
PLD-2.2	[TBR] for at least one minute each orbit.  The payload shall have the ability to measure the optical wavefront at a minimum rate of 200 Hz [TBR] for at least 30 seconds each orbit.	PLD-2	Burst mode for data capture	Lab testing  Lab testing	5/3/2013	acarlton, kree
PLD-2.3	The payload shall have the ability to reconstruct the optical wavefront with a minimum accuracy of 100 nm rms [TBR].	PLD-2	Need to be able to reconstruct the wavefront accurately	Lab testing	5/3/2013	acarlton, kree
Power Subsyste Requiren			,			
POW-1	Power subsystem shall supply 3.54 [TBR] watts to power bus on average over each orbit.	MLR-3	Satellite will not operate without power. CubeSat is too small	VirSat	5/1/2013	jclark, eremin
POW- 1.1	Power subsystem shall have solar panels to supply power to other systems while satellite is in		for nuclear power to be worthwhile, and needs to run for long periods of time (i.e. needs to be able to			
	sunlight and recharge batteries for eclipse.	POW-1	recharge).  Need to supply	VirSat	3/1/2013	jclark, eremin
POW- 1.1.1	Solar panels shall supply 3.54 [TBR] watts after 12 months [TBR] of operation.	POW-1.1	sufficient power through end of mission.	VirSat	5/1/2013	jclark, eremin
POW- 1.2	Power subsystem shall have rechargeable (secondary) batteries to supply power during eclipse.	POW-1	Satellite in LEO will spend up to 1/3 of its orbit in shadow, so we need to store power for that time.	VirSat	5/5/2013	jclark, eremin
POW- 1.2.1	Secondary batteries shall have 2.1 [TBR] watthours of capacity after 12 months / 6,000 cycles [TBR].	POW-1.2	Batteries decay over time so we need enough capacity to support other systems through the end of mission lifetime.	VirSat		jclark, eremin

POW Power subsystem shall supply 13.84 [TBR] Wat of cover for peak operations with the cover for peak operation with the cover for peak operations with the cover for peak operations with the cover for peak operations with the cover for peak operation		DeMi Requirements							
Power subsystem shall supply 13.84 [TBR] Watt of mover for peak operations mover for peak operat	ID	Statement		Rationale		Revision date	Expert Contact		
Useyste Sequence 18-1. The system shall be a 3U CubeSat 5YS-3 (CubeSat design specification 18-1.1 (No orm in width (v) by 100 orm in height (v) b	POW-2			to withstand maximum		5/1/2013	jclark, eremin		
STR-1 100.0 mm in length (x) by specification in specifion 2/25/2013 khoza, imdavid properties and in the system shall not exceed 6.5mm in profusion profusion in width (y) by 100.0 mm in height (z) and the system shall not exceed 6.5mm in profusion profusion profusion in width (y) by 100.0 mm in height (z) and the system shall not exceed 6.5mm in profusion profusion profusion in many specification in specificat	Subsyste								
181-1. 10 0.0 mm in width (y) by 100.0 mm in height (2) 5176-1. 12 provides thall not exceed 6.5 mm in protonule.  181-1. 13 The strings with all not exceed 6.5 mm in protonule.  181-1. 3 The center of gravity of the system shall be no the surface of the 100mm oube.  181-1. 3 The center of gravity of the system shall be no the surface of the 100mm oube.  181-1. 4 The structure shall provide a composed of Auminium.  181-1. 6 The system shall have rails of hard anodized shall be shall be shall be shall be also of the system shall have rails of hard anodized shall be	STR-1	The primary structure shall be a 3U CubeSat.	SYS-3			3/18/2013	khoza, imdavid		
Separation   Sep		100.0 mm in width (y) by 100.0 mm in height (z)		specification	inspection	2/25/2013	khoza, imdavid		
More than 20 mm offset from centerline. TR-1.4 The structure shall be components shall be able to monitor the TR-2.3 TR-2.1 The structure shall pass a minimum of 1 fit check power system, the ADCS, and the propulsion system.  TR-2.4 TR-2.5 TR-2.5 TR-2.5 TR-2.5 TR-2.5 TR-2.5 TR-3 TR-3 TR-4.5 TR-4.5 TR-5 TR-5 TR-5 TR-5 TR-6 TR-7 TR-7 TR-7 TR-7 TR-7 TR-7 TR-7 TR-7	TR-1.2	normal to the surface of the 100mm cube.	STR-1	specification	inspection	2/25/2013	khoza, imdavid		
TR-1.5 In system shall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized STR-1.5 In Septimes hall have rails of hard anodized space of the Cube Stat design specification.  TR-2.2 In Septimes hall have rails of hard anodized space and attachment points shall be hall ensure that all support a mass of 4 kg not have been confered by the subsystems need to receive inputs from anolysis and requency of launch whicle.  STR-2.3 In Structure shall anot interfere with payload operation.  TR-3 The structure shall selected with payload operation.  TR-6 In Structure shall anot interfere with payload operation.  TR-6 In Structure shall anot interfere with payload operation.  TR-6 In Structure shall anot interfere with payload operation.  TR-6 In Structure shall anot interfere with payload operation.  TR-6 In Structure shall allow for workmanship screening of avionics boards.  TR-7 The structure shall allow for workmanship screening of avionics boards.  TR-7 The structure shall allow for workmanship screening of avionics boards.  TR-8 In thermal system shall ensure that all may batteries the payload operation.  TR-1 TR-1 The structure shall allow for workmanship screening of avionics boards.  TR-8 The structure shall allow for workmanship screening of avionics boards.  TR-8 The structure shall ensure that all may batteries the payload special in temperatures on higher than [TBD] degrees.  TR-1 The structure shall ensure that all may batteries the payload special in temperature	TR-1.3	more than 20 mm offset from centerline.	STR-1	CubeSat design specification		2/19/2013	khoza, imdavid		
TR-1.6 TR-1.6 TR-1.6 TR-1.6 TR-2.1 The structure shall provide space and attachment points for the payload, the avionics system, the power system, the ADCS, and the propulsion system. The ADCS and the propulsion of attachment points of the payload, the avionics system, the power system, the ADCS, and the propulsion of attached modules during launch as well as during nominal operating conditions.  TR-2.1 TR-2.1 Attachment points shall ensure no relative motion of attached modules during launch as well as during nominal operating conditions.  The structure shall survive themal expansion and requency of all CubeSat components shall be higher than resonant frequency of launch well-inde.  STR-3 Cowest resonant frequency of all CubeSat components shall be higher than resonant frequency of launch well-inde.  STR-3 TR-5 STR-5 TR-5 STR-6 STR-6 STR-1 STR-6 STR-1 STR-6 STR-1 STR-6 STR-1 The structure shall support a mass of 4 kg including its own mass.  STR-7 The structure shall sullow induced magnetic fields to interfere with payload field of yiew.  STR-7 TR-6 STR-7 TR-6 STR-7 The structure shall allow for workmanship components are kept within their operating components are ke	TR-1.4	7075 or 6061.	STR-1	specification	inspection	2/25/2013	khoza, imdavid		
The system shall pass a minimum of 1 fit check. The structure shall proxide space and attachment points for the payload, the avionics system, the power system, the ADCS, and the propulsion system.  The structure shall proxide space and attachment points for the payload, the avionics system, the power system, the ADCS, and the propulsion system.  The structure shall survive thermal expansion and followed the proxide structure shall allow for workmanship screening of avionics boards.  The structure shall allow for workmanship screening of avionics boards.  The thermal system shall ensure that any batteries thin 2.  The thermal system shall ensure that any batteries thin 2.  The thermal system shall ensure that the avionics that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall be able to monitor the survivoral temperatures no higher than (TBD) degrees.  The structure shall nesure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The thermal system shall ensure that any batteries that 2.  The ther				specification	inspection	2/25/2013	khoza, imdavid		
points for the payload, the avionics system, the power system, the ADCS, and the propulsion system.  TR-2 power system, the ADCS, and the propulsion system.  Attachment points shall ensure no relative motion of attached modules during launch as well as during nominal operating conditions.  The structure shall survive thermal expansion and The structure shall ensure that all components are kept within their survival temperature ranges.  TR-2.3  STR-2.3  Lowest resonant frequency of all CubeSat components shall be higher than resonant frequencies of the CubeSat components shall be higher than resonant enduring the components are kept within their survival temperature ranges for the duration of the majoration of their modules.  STR-3  TR-6  STR-3  The structure shall not allow induced magnetic fields to live.  TR-7  The structure shall allow for workmanship screening of avionics boards.  TR-7  The thermal system shall ensure that all components are kept within their survival temperature ranges.  The hermal system shall ensure that all components are kept within their survival temperature ranges for the duration of the modules.  TR-2, and the structure shall allow for workmanship screening of avionics boards.  TR-1  The thermal system shall ensure that all components are kept within their survival components are ke	TR-1.6		STR-1		inspection	2/25/2013	khoza, imdavid		
STR-2.1 Attachment points shall ensure no relative motion of attached modules during launch as well as during nominal operating of contraction across a range of -150 degrees C TBR to 60 degrees C TBR.  STR-2.3 Congress of TBR.  Lowest resonant frequency of all CubeSat components shall be higher than resonant frequency of launch vehicle vibrations could hit resonant frequencies of the CubeSat, vibrations could hit resonant frequencies of the CubeSat of the CubeSat subsystems need to receive inputs from an always and lesting 2/23/2013 khoza, imdavid vibrations could hit resonant frequencies of the CubeSat in system failure than 10 allow induced magnetic fields to interfere with payload operation.  STR-3 STR-4 The structure shall not allow induced magnetic fields to interfere with payload operation.  STR-7 The structure shall allow for workmanship screening of avionics boards.  STR-7 The themal system shall ensure that all temperature ranges for the duration of the mission.  The thermal system shall ensure that all temperature ranges for the duration of the mission.  The thermal system shall ensure that all temperature ranges for the duration of the mission.  The thermal system shall ensure that all operating components are kept within their operating degrees.  The thermal system shall ensure that all operating components are kept within their operating degrees.  The thermal system shall ensure that the payload degrees.  The thermal system shall ensure that the payload degrees.  The thermal system shall ensure that the payload degrees.  The thermal system shall ensure that the payload degrees.  The thermal system shall ensure that the payload degrees.  The thermal system shall ensure that the payload degrees.  The thermal system shall ensure that the payload degrees.  The thermal system shall ensure that the avionics operate in temperatures no higher than (TBD) degrees.  The thermal system shall ensure that the avionics operate in temperatu	TR-2	points for the payload, the avionics system, the power system, the ADCS, and the propulsion	SYS-1		inspection	3/18/2013	khoza, imdavid		
of attached modules during launch as well as during nominal operating conditions.  The structure shall survive thermal expansion and to 60 degrees C TBR.  STR-2.3 Lowest resonant frequency of all CubeSat components shall be higher than resonant frequency of launch vehicle.  STR-3 The structure shall facilitate interfaces between other subsystems.  STR-3 The structure shall allow find uced magnetic fields to interfere with payload operation.  STR-5 Structure shall not interfere with payload operation.  STR-6 Structure shall allow for workmanship screening of avionics boards.  The thermal system shall ensure that all temperature ranges for the duration of the mission.  The thermal system shall ensure that all poperating temperature ranges for the duration of the mission.  The thermal system shall ensure that all operating temperature ranges for the duration of the mission.  The thermal system shall ensure that all operating temperature ranges for the duration of the mission.  The thermal system shall ensure that all operating temperature ranges for the duration of the mission.  The thermal system shall ensure that all operating temperature ranges for the duration of the mission.  The thermal system shall ensure that all operating temperature ranges for the duration of the mission.  The thermal system shall ensure that all operating temperature ranges for the duration of the mission.  The thermal system shall ensure that all operating temperature ranges for the duration of the mission.  The thermal system shall ensure that the payload operation in the mission in the first operation in the mission in the first operation in the product operation in temper						0.10.20			
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Interfere with payload operation.   MLR-3   Mission goal   testing   2/17/2013   khoza, imdavid   Structure shall not interfere with payload field of   View.   PLD-2   Mission goal,   functionality of ACDS   testing   2/25/2013   khoza, imdavid   decrease cost and   likelihood fany   mistakes made during   manufacture   manufacture   manufacture   manufacture   manufacture   2/19/2013   khoza, imdavid   2/25/2013   k		including its own mass.	SYS-3	Mission goal	testing	2/17/2013	khoza, imdavid		
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