

Readme

SV3 Pre-Launch Checklist

Date	2021-09-27T21:36:30.844Z	Glider Name	SV3-794595959(Tiny)
Tech(s)	Jordan Caress	Organization	MBARI
Project	MBTS/Station M	Ship/Op Area	Paragon MB Bay

Software Information

Regulus Version	Tiny, sn=794595959, Running Regulus 3.2.2, software version of 2019-12-03T23:58:34Z, production build 35, sv3, SOMDM3730-30-1880AKIR-A, (1.2.3) secure
Plugins	Running: AirmarWeather, LogAlarmReporter, PortForwarder, ThrusterAdjuster Not running: GPSasRudderCompass

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On		☒
Virtual Relay	0 queued msgs state=TALKING, sent=567, lastTx=9.239s, avgTxSize=271.2B, totalTx=155.230kB, received=3, lastRx=9.182s, avgRxSize=5.0B, totalRx=3.006kB, powerState=ON (4d4h38m2.086s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false, (143/144 success rate), sleepTime=120000, packetSize=8192,		☒
WGMS Iridium	sessionAttempts=12537, sessionErrs=1163, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=5.0 (i=5), 0 queued msgs state=TALKING, sent=11196, lastTx=3h43m39.812s, totalTx=1479.538kB, received=36, lastRx=35m48.203s, avgRxSize=36.0B, totalRx=1.453kB, powerState=ON (4d4h37m34.207s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	averageMessageQueueRate=40.973s, sent=11763, totalBytesSent=1634.769kB, received=39, totalBytesReceived=4.459kB, lastRx=35m48.229s, ProtobufMessageHandler[header=BB,header=BC,active=true, #accepted=0, #handled=0],ProtobufMessageHandler[header=BB,header=BC,active=true, #accepted=0, #handled=0],secureComms[header=A9,active=true, #accepted=0, #handled=0],WGMSCommandHandler[header=0A,active=true, #accepted=39, #handled=39, lastRx=rx=2021-09-27T21:00:42.673Z, receiver=iridiumModem, headerByte=0x0A, length=33],UnsupportedMessageHandler[active=true, #accepted=0, #handled=0]		☒
Location	Using GPSUblox, declination=12.841794, failoverCounter=1, timeLastSwitchedGps=2021-09-23T17:00:34Z, clockDt=-0.915s		☒
Tracker telemetry received	Battery (Volts)15.9 Report Rate4 hrs		☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-011 Tiny			☒
Float name	Tiny			☒
Glider name	Tiny version 200			☒
Umbilical Length	4 meters			☒
G1				☐
G2	ecopuck and vr2c			☒
G3				☐
T1				☐
D1				☐
S1	Hotspot 2 Payload MF and LF Directional Transducers			☒
S2	gpctd and do			☒
S3	co2 and ph			☒
S4	Airmar			☒
Event definitions		Compare against standard list		☒

Vehicle and tracker op area defined		Note area name(s) and enable alarms		☒
Escalation list created/populated				☒

Vehicle Status

Item/Procedure	Readings	Comments	Initials
Battery [Wh] > 700 Wh	818.295 //		☒
Solar Power Indicators: > 0	21.125 0.0 1.187 33.079 // // // //		☒

Item/Procedure	Readings					
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Initials
Domain_Name=Host, Node=1, HW_SerNum=0x3132471639323739002d0037 On=Y	OK	26.8	119.8	Uptime: 4 days, 04:42:22		
Domain_Name=Thruder-2, Node=3, HW_SerNum=0x3333470738373634002c001c On=Y	OK	19.8	144.9	Uptime: 4 days, 04:34:32		
Domain_Name=PyIdInt-0x3332470932363032002b0025, Node=5, HW_SerNum=0x3332470932363032002b0025 On=Y	OK	23.5	116.3	Uptime: 3 days, 22:14:34		

Mechanical Checks

	Item/Procedure	Specifications	Comments	Initials
Float	Wet-mates connected/lubed	3M Silicone Lubricant Spray 3M ID No. 62-4678-4930-3		☒
	Connector covers secure			☒
	Drybox secure	Wiggle test		☒
	Contact info secure			☒
	Hull	Inspect, note condition	Recently Repair from minor sharkbite damage	☒
	Skeg/Fin	Secure		☒
Sub	Hardware secure			☒
	Umbilical visual inspection	Free of voids/defects		☒
	Umbilical ribbon cable inspection			☒
	Roll pins inserted	Flush with surface		☒
	Wings	Hardware secure with Loctite, lock nuts, and seizing wire		☒
	Thruder	Hardware secure		☒

Vehicle Functionality

Item/Procedure	Readings	Specifications	Comments	Initials
Thruster Spin	445.0 //	Spins freely, slow and fast speeds		☒
Rudder Range of Motion		Rudder moves freely and smoothly		☒
Rudder right, left, center	Rudder(2021-09-27T21:36:26.939Z,desiredHeading=306.2,compass=16.3,rack=-9.9,post=29.6rudder	Right, Left, Center		☒
Thruder Compass Correction	Thruder compass is corrected //	recommended NOT corrected	LR says this is ok	☒
Fixed heading test (spin)	180	Avoidance Off, Note Heading Used		☒
Waypoint course test (spin)	41	Avoidance Off, Note Waypoint Course Used		☒
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (4d4h35m33.018s), ampsPower=false, powerThreadActive=false //	Catch release buoy by hand		☒
Octopus Cable 01	OK //	Must Pass		☒
Octopus Cable 02	OK //	Must Pass		☒
AIS Status	t=30:0:NOT_DEFINED, 2021-09-27T21:36:25.320Z, lengthErrs=11, latlonErrs=0, broadcastCount=62951, lastRx=10.385s, numberObserved=11, averageRxRateMillis=7.453s //	If in harbor, must see MMSI		☒
Photo Document				☒

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=18.4°C, Press=1029.0mb, Wind Speed=5.21kn, Wind Dir=206.3°. Heading=31.8° //		☒
UBLOX GPS	timeout=1m, nmeaValid=true, clockDt=0.719s, lastValidFix=2021-09-27T21:36:35Z@36.8024467,-121.7871187, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.04,std=0.36,min=9.00,max=11.00,n=300,hdop:sma=0.93,std=0.07,min=0.91,max=1.20,n=300,altitude:sma=11.13,std=2.32,min=7.40,max=18.10,n=300		☒
Airmar GPS	2021-09-27T21:36:35Z@36.8024483,-121.7871233,lastRx=0.523s, quality=80, timeout=5m, nmeaValid=true, clockDt=0.754s, lastValidFix=2021-09-27T21:36:35Z@36.8024483,-121.7871233, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=8.16,std=0.37,min=8.00,max=9.00,n=300,hdop:sma=1.13,std=0.12,min=1.00,max=1.40,n=300,altitude:sma=2.53,std=5.68,min=-9.50,max		☒
Torpedo GPS	Not Available! //		☒

Water speed readings	Unknown speed; ncc=0, nci=0, tec=0, aip=0.00		☒
Obstacle Avoidance Status	Enabled		☒
Check alarms	"Out of bounds" red. All yellow/green		☒

General Comments

Technician Signature:

- Note: Once vehicle is launched the following tasks must be completed
- 1. Clear alarms
 - 2. Log vehicle modifications in notebook
 - 3. Vehicle on mission
 - 4. Create *LAUNCHED* comment into WGMS
 - 5. Upload photos to gallery website with album name: *YYYY-MM-DD VehicleName*

Submit

Print

Clear User Input