

Readme

SV3 Pre-Launch Checklist

Date	2021-12-14T23:27:32.047Z	Glider Name	SV3-794595959(Tiny)
Tech(s)	cwahl	Organization	MBARI
Project	LRAUV Galene tracking/video transfers	Ship/Op Area	Paragon MB

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=291, lastTx=5.312s, avgTxSize=199.2B, totalTx=331.781kB, received=13, lastRx=5.266s, avgRxSize=5.0B, totalRx=2.201kB, powerState=ON (3h28m22.219s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false, (68/68 success rate), sleepTime=120000, packetSize=8192, numberOfDoTransactionFailures=3,		☒
WGMS Iridium	IMEI:300434060708190, starts=1, r=20, w=5, sessionAttempts=87, sessionErrs=0, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=2.5 (i=4), 0 queued msgs state=TALKING, sent=5, lastTx=3h24m45.909s, totalTx=0.590kB, received=20, lastRx=48m47.441s, avgRxSize=52.5B, totalRx=0.937kB, powerState=ON (3h27m54.187s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]0 blocked messages, averageMessageQueueRate=52.318s, sent=296, totalBytesSent=332.371kB, received=33, totalBytesReceived=3.138kB, lastRx=48m47.574s, 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=33, #handled=33, lastRx=rx=2021-12-14T22:38:44.930Z, receiver=iridiumModem,		☒
Location	Using GPSUblox, declination=12.820565, failoverCounter=1, timeLastSwitchedGps=2021-12-14T20:01:32.980Z, clockDt=-0.589s		☒
Tracker telemetry received	Battery (Volts) Report Rate	15.7 volts 4 hours	☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	Tiny			☒
Float name	Tiny			☒
Glider name	Tiny v150			☒
Umbilical Length	4m			☒
G1				☐
G2	Ecopuck plus VR2C			☒
G3	APU			☒
T1				☐
D1				☐
S1	Hotspot 3 with MF DAT			☒
S2	GPCTD plus D0			☒
S3	pCO2 plus pH			☒
S4	Airmar		replaced with new light mast	☒
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	1425.051	has APU	
Solar Power Indicators: > 0	5.825 0.0 6.618 9.504		

Item/Procedure	Readings				Comments	Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime		
Domain_Name=Host, Node=1, HW_SerNum=0x3132471639323739002d0037 On=Y	OK	21.2	116.5	Uptime: 0 days, 03:33:31		
Domain_Name=Bat-0x33345106303037350027002c, Node=3, HW_SerNum=0x33345106303037350027002c On=Y	OK	16.9	114.3	Uptime: 0 days, 03:35:24		
Domain_Name=Thruder-2, Node=4, HW_SerNum=0x3333470738373634002c001c On=Y	OK	14.5	136.8	Uptime: 0 days, 03:22:12		
Domain_Name=PyldInt-0x3332470932363032002b0025, Node=6, HW_SerNum=0x3332470932363032002b0025 On=Y	OK	15.8	111.9	Uptime: 0 days, 01:12:42		

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		
	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	461.0	Spins freely, slow and fast speeds		
Rudder Range of Motion		Rudder moves freely and smoothly		
Rudder right, left, center	Rudder(2021-12-14T23:27:28.020Z,desiredHeading=286.2,compass=22.9,rack=-19.9,post=-18.6rudderSt	Right, Left, Center		
Thruder Compass Correction	Thruder compass is corrected	recommended NOT corrected	LR says that this is okay!	
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 (3h25m57.672s), ampsPower=false, powerThreadActive=false	Catch release buoy by hand		
Octopus Cable 01	OK	Must Pass		
Octopus Cable 02	OK	Must Pass		
AIS Status	lastSeen=MMSI 338353207 (AMITY). Pos=36.801308, -121.786407. t=36:0:NOT_DEFINED, 2021-12-14T23:26:49.549Z, lengthErrs=0, latlonErrs=0, broadcastCount=277, lastRx=1m1.189s, numberObserved=3, averageRxRateMillis=1m4.368s	If in harbor, must see MMSI		
Photo Document				

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=10.9°C, Press=1013.5mb, Wind Speed=4.89kn, Wind Dir=345.3°. Heading=126.9°		
UBLOX GPS	2021-12-14T23:27:50Z@36.8024138,-121.787141,lastRx=0.510s, quality=100, timeout=1m, nmeaValid=true, clockDt=0.907s, lastValidFix=2021-12-14T23:27:50Z@36.8024138,-121.787141, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.22,std=0.45,min=9.00,max=11.00,n=300,hdp:sma=0.86,std=0.02,min=0.86,max=0.97,n=300,altitude:sma=-1.25,std=0.83,min=-3.40,max=0.60		
Airmar GPS	2021-12-14T23:27:49.800Z@36.8024333,-121.7871433,lastRx=0.751s, quality=80, timeout=5m, nmeaValid=true, clockDt=1.176s, lastValidFix=2021-12-14T23:27:49.800Z@36.8024333,-121.7871433, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.00,std=0.06,min=9.00,max=10.00,n=300,hdp:sma=0.90,std=0.00,min=0.90,max=0.90,n=300,altitude:sma=0.67,std=2.70,min=-4.40,max=6.00,		
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		

Tiny: SV3 Pre-Launch Checklist

General Comments

Jules confirmed that pH sensor is working. Electrode cleaned and blue tubing replaced with opaque black tubing.
Mast light failed. Replaced entire light mast.

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