

SV3 Pre-Launch Checklist

Date	2022-08-15T21:36:35.589Z	Glider Name	SV3-1531399927 (SV3-121)
Tech(s)	cwahl	Organization	MBARI
Project	Blue Whale Observatory	Ship/Op Area	Paragon MB

Software Information

Regulus Version	SV3-121, sn=1531399927, Running Regulus 3.2.2, software version of 2019-12-03T23:58:34Z, production build 35, sv3, SOMDM3730-31-1880AKIR-A, (1.2.3) secure
Plugins	Running: AirmarWeather, GPSasRudderCompass, LogAlarmReporter, PortForwarder, RudderParametersManager, ThrusterAdjuster, Winch

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On		☒
Virtual Relay	0 queued msgs state=WAITING, sent=0, received=0, powerState=ON (1h10m17.214s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)		☐
WGMS Iridium	IMEI:300434060771430, starts=1, r=4, w=77, sessionAttempts=93, sessionErrs=12, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=3.9 (i=4), 1 queued msgs state=TALKING, sent=77, lastTx=3.716s, avgTxSize=89.4B, totalTx=7.082kB, received=4, lastRx=14m19.142s, avgRxSize=32.0B, totalRx=0.125kB, powerState=ON (1h9m52.268s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]411 blocked messages, averageMessageQueueRate=56.749s, sent=77, totalBytesSent=7.082kB, received=4, totalBytesReceived=0.125kB, lastRx=14m19.154s, 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=4, #handled=4, lastRx=rx=2022-08-		☒
Location	Using GPSublox, declination=12.757153, failoverCounter=1, timeLastSwitchedGps=2022-08-15T20:29:03.010Z, clockDt=2.357s		☒
Tracker telemetry received	Battery (Volts)	15.8 volts	☒
	Report Rate	4 hours	

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Hansen Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-121 MBARI Spare			☒
Float name	WG Hansen			☒
Glider name	WG Hansen			☒
Umbilical Length	4m			☒
G1				☐
G2				☐
G3	APU			☒
T1				☐

D1				☐
S1				☐
S2				☐
S3				☐
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	1808.252		☒
Solar Power Indicators: > 0	19.998 0.0 20.262 21.827		☒

Item/Procedure	Readings					
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Init
Domain_Name=Host, Node=1, HW_SerNum=0x474850072038384d00390021 On=Y	OK	25.5	121.0	Uptime: 0 days, 01:13:40		☒
Domain_Name=Thruder-2, Node=4, HW_SerNum=0x3437470330383638001f0033 On=Y	OK	21.1	263.4	Uptime: 0 days, 01:05:36		☒
Domain_Name=Bat-0x474850072038384d00380042, Node=5, HW_SerNum=0x474850072038384d00380042 On=Y	OK	24.1	113.4	Uptime: 0 days, 01:04:45		☒

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
Thruster Spin	453.0	Spins freely, slow and fast speeds	cruise speed
Rudder Range of Motion		Rudder moves freely and smoothly	
Rudder right, left, center	Rudder (2022-08-15T21:36:33.684Z,desiredHeading=353.3,compass=18.4,rack=-11.4,post=-12.1rudderSt	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)	21	Avoidance Off, Note Waypoint Course Used	
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (1h7m26.101s), 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 367766000 (WESTERN FLYER). Pos=36.802398, -121.787048. t=33:0:UNDERWAY ENGINE, 2022-08-15T21:36:37.342Z, lengthErrs=0, latlonErrs=0, broadcastCount=501, lastRx=1.885s, numberObserved=4, averageRxRateMillis=8.581s	If in harbor, must see MMSI	
Photo Document			

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=16.8°C, Press=1012.6mb, Wind Speed=4.25kn, Wind Dir=197.6°. Heading=5.3°		☒
UBLOX GPS	2022-08-15T21:36:42Z@36.8024102,-121.7871288,lastRx=0.085s, quality=100, timeout=1m, nmeaValid=true, clockDt=2.727s, lastValidFix=2022-08-15T21:36:42Z@36.8024102,-121.7871288, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=9.51,std=0.54,min=8.00,max=10.00,n=300,hdop:sma=1.13,std=0.21,min=0.89,max=2.20,n=300,altitude:sma=0.83,std=1.29,min=-1.50,max=4.00,n=300		☒
Airmar GPS	2022-08-15T21:36:41.200Z@36.802435,-121.787165,lastRx=0.730s, quality=80, timeout=5m, nmeaValid=true, clockDt=1.892s, lastValidFix=2022-08-15T21:36:41.200Z@36.802435,-121.787165, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=9.00,std=0.00,min=9.00,max=9.00,n=300,hdop:sma=0.92,std=0.08,min=0.90,max=1.40,n=300,altitude:sma=0.96,std=4.75,min=-6.60,max=13.60,n=300		☒
Torpedo GPS	Not Available!		☒
Water speed readings	Unknown speed; ncc=0, nci=0, tec=0, aip=0.00		☒
Obstacle Avoidance Status	Disabled		☒
Check alarms	"Out of bounds" red. All yellow/green		☒

General Comments

Upper Ujoint bushings are ready for replacement, not sure when we will have time to fit this in?

Technician Signature:

cwahl

- 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