

SV3 Pre-Launch Checklist

Date	2024-05-21T22:56:51.791Z	Glider Name	SV3-466563798 (SV3-110)
Tech(s)	cwahl	Organization	MBARI
Project	MBTS/Brian Whale beacon	Ship/Op Area	Paragon MB

Software Information

Regulus Version	SV3-110, sn=466563798, 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, GPSasRudderCompass, LogAlarmReporter, RudderParametersManager, ThrusterAdjuster Not running: PortForwarder, ThrudderDiagnosticsFixer

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On		☒
Virtual Relay	0 queued msgs state=WAITING, sent=0, received=0, powerState=OFF (6h8m56.592s), virtualDevice=true, powerThreadActive=false (no internet connectivity)	Still not working	☒
WGMS Iridium	IMEI:300434060354880, starts=1, r=3, w=340, sessionAttempts=388, sessionErrs=36, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.1 (i=5), 1 queued msgs state=TALKING, sent=340, lastTx=6.783s, avgTxSize=152.5B, totalTx=50.720kB, received=3, lastRx=14m42.932s, avgRxSize=37.0B, totalRx=0.110kB, powerState=ON (6h8m26.795s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]179 blocked messages, averageMessageQueueRate=56.047s, sent=340, totalBytesSent=50.720kB, received=3, totalBytesReceived=0.110kB, lastRx=14m43.029s, 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=3, #handled=3, lastRx=rx=2024-05-21T22:42:08.984Z, receiver=iridiumModem,		☒
Location	Using GPSUblox, declination=12.589187, failoverCounter=1, timeLastSwitchedGps=2024-05-21T16:50:06Z, clockDt=2.951s		☒
Tracker telemetry received	Battery (Volts) Report Rate	15.8 volts 4 hours	☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	CCU SV3-110 Tiny			☒
Float name	Return of Tiny			☒
Glider name	Tiny v150/v200			☒
Umbilical Length	4m			☒
G1	Ecopuck			☒
G2				☐
G3				☐
T1				☐
D1				☐
S1	Hotspot 3 with MF DAT			☒
S2	GPCTD plus D0			☒
S3	pCO2 plus 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	931.147	//		☒
Solar Power Indicators: > 0	0.328	//		☒
	0.0	//		
	2.714	//		
	10.415	//		

Item/Procedure		Readings					
Domain Info		AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Initials
Domain_Name=Host, Node=1, HW_SerNum=0x32385119353634330055004a On=Y		OK //	32.0 //	118.7 //	Uptime: 0 days, 06:14:13 //		☒
Domain_Name=Thrudder-2, Node=3, HW_SerNum=0x474850052038384d0057002b On=Y		OK //	22.1 //	261.1 //	Uptime: 0 days, 06:05:59 //		☒

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		☒
	Thrudder	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(2024-05-21T22:56:49.521Z,desiredHeading=43.3,compass=19.4,rack=11.5,post=8.5rudderStatus	Right, Left, Center		☒
Thrudder Compass Correction	Thrudder 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)	36.797, -121.847 //	Avoidance Off, Note Waypoint Course Used		☒
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (6h6m26.201s), 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 368323170 (WESTERN FLYER). Pos=36.805758, -121.785685. t=37:0:UNDERWAY ENGINE, 2024-05-21T22:57:02.138Z, lengthErrs=0, latlonErrs=0, broadcastCount=5537, lastRx=5.936s, numberObserved=35, averageRxRateMillis=6.531s //	If in harbor, must see MMSI		☒
Photo Document				☒

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=16.9°C, Press=1014.9mb, Wind Speed=3.76kn, Wind Dir=271.5°. Heading=38.2° //		☒
UBLOX GPS	2024-05-21T22:57:11Z@36.8023457,-121.7871645,lastRx=0.412s, quality=100, timeout=1m, nmeaValid=true, clockDt=2.846s, lastValidFix=2024-05-21T22:57:11Z@36.8023457,-121.7871645, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.32,std=0.47,min=10.00,max=11.00,n=300,hdop:sma=0.87,std=0.03,min=0.78,max=0.98,n=300,altitude:sma=2.25,std=0.82,min= 0.60,max=3.70 //		☒
Airmar GPS	2024-05-21T22:57:10.900Z@36.8023417,-121.7871583,lastRx=0.561s, quality=80, timeout=5m, nmeaValid=true, clockDt=2.664s, lastValidFix=2024-05-21T22:57:10.900Z@36.8023417,-121.7871583, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.00,std=0.00,min=10.00,max=10.00,n=300,hdop:sma=0.90,std=0.00,min=0.90,max=0.90,n=300,altitude:sma=2.10,std=0.27,min=1.50,max=2.50, //		☒
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

G1 didn't startup, did the command go through?

Technician Signature: cwahl

SV3-110: SV3 Pre-Launch Checklist

- 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