SV3 Pre-Launch Checklist

Date	2022-11-08T20:20:41.817Z	Glider Name	SV3-1531399927(SV3-121)
Tech(s)	Jordan, Chris	Organization	MBARI
Project	Bioacoustics	Ship/Op Area	Paragon/Monterey Bay

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 (11m55.878s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)		☐
WGMS Iridium	IMEI:300434060771430, starts=1, r=0, w=31, sessionAttempts=34, sessionErrs=2, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.1 (i=5), 1 queued msgs state=TALKING, sent=31, lastTx=2.633s, avgTxSize=112.7B, totalTx=3.412kB, received=0, powerState=ON (11m27.187s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☑
Vehicle telemetry received	totalBytesSent=3.412kB, received=0, 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=0, #handled=0],UnsupportedMessageHandler[active=true, #handled=0], minimumMTU=338		☑
Location	Using GPSUblox, declination=12.735123, failoverCounter=1, timeLastSwitchedGps=2022-11-08T20:11:03Z, clockDt=5.137s		☑
Tracker telemetry received	**Battery (Volts)** 15.72 **Report Rate** 4hrs		☑

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Hansen Tracker			☑
(Optional) Second Tracker Name				☐
Drybox WGMS name	Hansen			☑
Float name	Hansen			☑
Glider name	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	Initals
Battery [Wh] > 700 Wh	1555.948		☑
Solar Power Indicators: > 0	34.976 0.0 35.79 33.811		☑

Item/Procedure	Readings					
Domain Info	**AMPS Hardware Status**	**Temperature (°C)**	**Pressure (kPa)**	**Hardware Uptime**	**Comments**	**Initials**
Domain_Name=Host, Node=1, HW_SerNum=0x474850072038384d00390021 On=Y	OK	17.1	110.9	Uptime: 0 days, 00:13:56		☑
Domain_Name=Bat-0x33334707383736340044003b, Node=3, HW_SerNum=0x33334707383736340044003b On=Y	OK	16.8	113.6	Uptime: 0 days, 00:18:37		☑
Domain_Name=Thrudder-2, Node=4, HW_SerNum=0x343747033038363800 1f0033 On=Y	OK	15.3	251.3	Uptime: 0 days, 00:06:11		☑

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	455.0	Spins freely, slow and fast speeds		☑
Rudder Range of Motion		Rudder moves freely and smoothly		☑
Rudder right, left, center	Rudder(2022-11-08T20:20:40.908Z,desiredHeading=169.5,compass=141.8,rack=11.5,post=14.8rudderSta	Right, Left, Center		☑
Thrudder Compass Correction	Thrudder compass is corrected	recommended NOT corrected	OK	☐
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 (9m25.210s), 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 367742810 (JOHN H MARTIN). Pos=36.804025, -121.786142. t=37:0:NOT_DEFINED, 2022-11-08T20:20:43.495Z, lengthErrs=0, latlonErrs=0, broadcastCount=25, lastRx=1.093s, numberObserved=5, averageRxRateMillis=21.500s	If in harbor, must see MMSI		☑
Photo Document				☐

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=13.0˚C, Press=1010.6mb, Wind Speed=4.34kn, Wind Dir=19.6˚. Heading=106.2˚		☑

UBLOX GPS	2022-11-08T20:20:50Z@36.8022755,-121.7871025,lastRx=0.116s, quality=100, timeout=1m, nmeaValid=true, clockDt=5.353s, lastValidFix=2022-11-08T20:20:50Z@36.8022755,-121.7871025, gpsWatchdogFailureCounter=0, ggaQCount:2=301,numSat:sma=9.57,std=0.50,min=9.00,max=10.00,n=300,hdop:sma=0.86,std=0.03,min=0.83,max=1.02,n=300,altitude:sma=1.52,std=2.34,min=-1.70,max=6.90,n=300		☑
Airmar GPS	2022-11-08T20:20:49.600Z@36.8023333,-121.7870867,lastRx=0.495s, quality=80, timeout=5m, nmeaValid=true, clockDt=4.852s, lastValidFix=2022-11-08T20:20:49.600Z@36.8023333,-121.7870867, gpsWatchdogFailureCounter=0, ggaQCount:1=39,2=261,numSat:sma=9.56,std=0.50,min=9.00,max=10.00,n=300,hdop:sma=0.85,std=0.06,min=0.80,max=1.20,n=300,altitude:sma=1.85,std=4.11,min=-3.80,max=1		☑
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: Jordan Caress

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