

SV3 Pre-Launch Checklist

Date	2024-09-05T15:50:31.467Z	Glider Name	SV3-16977098(SV3-034)
Tech(s)	Jordan, Chris	Organization	MBARI
Project	Bioacoustics	Ship/Op Area	Paragon/Monterey Bay

Software Information

Regulus Version	SV3-034, sn=16977098, 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

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On		☒
Virtual Relay	0 queued msgs state=WAITING, sent=0, received=0, powerState=ON (10m11.594s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)		☐
WGMS Iridium	IMEI:30043406000860, starts=1, r=0, w=31, sessionAttempts=35, sessionErrs=3, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=3.6 (i=5), 1 queued msgs state=TALKING, sent=31, lastTx=3.783s, avgTxSize=109.6B, totalTx=3.317kB, received=0, powerState=ON (9m44.572s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	totalBytesSent=3.317kB, 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=12.561105, failoverCounter=1, timeLastSwitchedGps=2024-09-05T15:42:33.010Z, clockDt=4.221s		☐
Tracker telemetry received	Battery (Volts)15.99v Report Rate4 hrs		☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Hansen			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-034			☒
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	Initials
Battery [Wh] > 700 Wh	1672.804		☒
Solar Power Indicators: > 0	2.317 0.0 4.767 5.269	Morning Sun = Low Angle	☒

Item/Procedure	Readings					Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Initials
Domain_Name=Host, Node=1, HW_SerNum=0x3332470b32363032001e0022 On=Y	OK	21.1	112.7	Uptime: 0 days, 00:13:16		☒
Domain_Name=Bat-0x33324703313238340031002d, Node=3, HW_SerNum=0x33324703313238340031002d On=Y	OK	21.5	110.3	Uptime: 0 days, 00:14:00		☒
Domain_Name=Thrudder-2, Node=4, HW_SerNum=0x3437470330383638001f0033 On=Y	OK	21.7	285.7	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
Thruster Spin	451.0	Spins freely, slow and fast speeds	Cruise
Rudder Range of Motion		Rudder moves freely and smoothly	
Rudder right, left, center	Rudder(2024-09-05T15:50:29.131Z,desiredHeading=342,compass=6.8,rack=-11.4,post=-11.7rudderStatu	Right, Left, Center	
Thrudder Compass Correction	Thrudder compass is corrected	recommended NOT corrected	LR says ok
Fixed heading test (spin)	270	Avoidance Off, Note Heading Used	
Waypoint course test	232	Avoidance Off, Note Waypoint	

(spin)		Course Used	
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (7m42.750s), 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 368159560 (NOVA). Pos=36.802168, -121.784930. t=37:0:NOT_DEFINED, 2024-09-05T15:50:34.803Z, lengthErrs=0, latlonErrs=0, broadcastCount=87, lastRx=4.119s, numberObserved=9, averageRxRateMillis=6.984s	If in harbor, must see MMSI	
Photo Document			

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=16.3°C, Press=1019.2mb, Wind Speed=0.76kn, Wind Dir=145.6°. Heading=140.4°		☒
UBLOX GPS	2024-09-05T15:50:43Z@36.8025762,-121.7870685,lastRx=0.110s, quality=100, timeout=1m, nmeaValid=true, clockDt=3.947s, lastValidFix=2024-09-05T15:50:43Z@36.8025762,-121.7870685, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.39,std=0.87,min=9.00,max=11.00,n=300,hdop:sma=0.86, std=0.12,min=0.78,max=1.05,n=300,altitude:sma=-0.47,std=0.75,min=-1.80,max=1.10		☒
Airmar GPS	2024-09-05T15:50:42.400Z@36.8026033,-121.7870783,lastRx=0.814s, quality=80, timeout=5m, nmeaValid=true, clockDt=3.197s, lastValidFix=2024-09-05T15:50:42.400Z@36.8026033,-121.7870783, gpsWatchdogFailureCounter=0, ggaQCount:1=300,numSat:sma=7.76,std=0.87,min=7.00,max=9.00,n=300,hdop:sma=1.01,std=0.10,min=0.90,max=1.10,n=300,altitude:sma=10.93,std=4.09,min=2.60,max=16.90,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

Still needs Chads equipment installed and solar panels secured.

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