

Readme

SV3 Pre-Launch Checklist

Date	2025-01-06T23:29:25.343Z	Glider Name	SV3-16977098 (SV3-034)
Tech(s)	cwahl	Organization	MBARI
Project	Bioacoustics	Ship/Op Area	Paragon MB

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 (2h28m56.864s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)	Still not working...	☒
WGMS Iridium	IMEI:300434060000860, starts=1, r=2, w=131, sessionAttempts=167, sessionErrs=34, wErrs=0, rErrs=0, cErrs=1, 10m ss avg=3.9 (i=4), 1 queued msgs state=ATTEMPTING, sent=131, lastTx=5m28.907s, avgTxSize=126.5B, totalTx=15.873kB, received=2, lastRx=2h6m35.688s, totalRx=0.076kB, powerState=ON (2h28m29.486s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]246 blocked messages, averageMessageQueueRate=44.962s, sent=131, totalBytesSent=15.873kB, received=2, totalBytesReceived=0.076kB, lastRx=2h6m35.741s, 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=2, #handled=2, lastRx=rx=2025-01-06T21:22:49.726Z, receiver=iridiumModem,		☒
Location	Using GPSUblox, declination=12.528782, failoverCounter=1, timeLastSwitchedGps=2025-01-06T21:02:47Z, clockDt=2.444s		☒
Tracker telemetry received	Battery (Volts)	15.9 Volts	☒
	Report Rate	4 hours	

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Hansen Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-034 Hansen			☒
Float name	Hansen			☒
Glider name	Hansen			☒
Umbilical Length	4m			☒
G1				☐
G2				☐
G3	JRF 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	1385.912 //		☒
Solar Power Indicators: > 0	3.059 // 0.0 // 5.287 // 6.902 //		☒

Item/Procedure	Readings				Comments	Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime		
Domain_Name=Host, Node=1, HW_SerNum=0x3332470b32363032001e0022 On=Y	OK //	26.7 //	114.4 //	Uptime: 0 days, 02:33:05 //		☒
Domain_Name=Bat-0x33324703313238340031002d, Node=5, HW_SerNum=0x33324703313238340031002d On=Y	OK //	26.9 //	111.3 //	Uptime: 0 days, 02:50:03 //		☒
Domain_Name=Thrudder-2, Node=3, HW_SerNum=0x3437470330363638001f0033 On=Y	OK //	17.1 //	270.3 //	Uptime: 0 days, 02:25:59 //		☒

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	450.0 //	Spins freely, slow and fast speeds		☒
Rudder Range of Motion		Rudder moves freely and smoothly		☒
Rudder right, left, center	Rudder(2025-01-06T23:29:23.030Z,desiredHeading=230.1,compass=202.3,rack=11.5,post=14.2rudderSta	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 (2h26m29.367s), 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 366934770 (NOAHS ARK). Pos=36.804605, -121.785890. t=30:0:FISHING, 2025-01-06T23:29:31.710Z, lengthErrs=0, latlonErrs=0, broadcastCount=1642, lastRx=1.894s, numberObserved=10, averageRxRateMillis=6.160s	If in harbor, must see MMSI		☒
Photo Document				☒

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=14.0°C, Press=1018.6mb, Wind Speed=3.06kn, Wind Dir=164.6°. Heading=148.8° //		☒

UBLOX GPS	2025-01-06T23:29:36Z@36.8024138,-121.7871398,lastRx=0.117s, quality=100, timeout=1m, nmeaValid=true, clockDt=2.343s, lastValidFix=2025-01-06T23:29:36Z@36.8024138,-121.7871398, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.77,std=0.42,min=10.00,max=11.00,n=300,hdop:sma=1.04,std=0.06,min=1.00,max=1.17,n=300,altitude:sma=0.54,std=1.55,min=-2.50,max=3.80			☒
Airmar GPS	2025-01-06T23:29:35.600Z@36.802435,-121.7871567,lastRx=0.486s, quality=80, timeout=5m, nmeaValid=true, clockDt=1.917s, lastValidFix=2025-01-06T23:29:35.600Z@36.802435,-121.7871567, gpsWatchdogFailureCounter=0, ggaQCount:1=300,numSat:sma=9.84,std=0.36,min=9.00,max=10.00,n=300,hdop:sma=0.92,std=0.04,min=0.90,max=1.10,n=300,altitude:sma=2.13,std=1.05,min=0.40,max=3.90,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

Light mast replaced due to failed light. Cell broken on last deployment and removed. New batteries installed in Xeos beacon for this year's ops.

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