

Readme

SV3 Pre-Launch Checklist

Date	2025-08-19T21:19:32.222Z	Glider Name	SV3-209609080 (SV3-038)
Tech(s)	cwah1	Organization	MBARI
Project	KBB Bioacoustics	Ship/Op Area	Paragon MB

Software Information

Regulus Version	SV3-038, sn=209609080, Running Regulus 3.2.2, software version of 2019-12-03T23:58:34Z, production build 35, sv3, SOMDM3730-32-1880AKIR-A, (1.2.3) secure
Plugins	Running: AirmarWeather, LogAlarmReporter, PortForwarder, RudderParametersManager, ThrusterAdjuster Not running: GPSasRudderCompass

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On		☒
Virtual Relay	0 queued msgs state=WAITING, sent=0, received=0, powerState=OFF (1h29m8.273s), virtualDevice=true, powerThreadActive=false (no internet connectivity)	Cell modem still not working	☐
WGMS Iridium	IMEI:300434060625300, starts=1, r=28, w=180, sessionAttempts=194, sessionErrs=10, wErrs=0, rErrs=0, cErrs=1, 10m ss avg=4.2 (i=4), 1 queued msgs state=ATTEMPTING, sent=180, lastTx=43.415s, avgTxSize=146.3B, totalTx=22.165kB, received=28, lastRx=53m28.152s, avgRxSize=44.0B, totalRx=0.811kB, powerState=ON (1h28m38.523s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]246 blocked messages, averageMessageQueueRate=19.401s, sent=180, totalBytesSent=22.165kB, received=28, totalBytesReceived=0.811kB, lastRx=53m28.180s, 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=28, #handled=28, lastRx=rx=2025-08-19T20:26:04.162Z, receiver=iridiumModem,		☒
Location	Using GPSUblox, declination=12.469685, failoverCounter=1, timeLastSwitchedGps=2025-08-19T19:52:33Z, clockDt=3.597s		☒
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	CCU SV3-038			☒
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			Copied from SV3-034	☒

Vehicle Status

Item/Procedure	Readings		Comments	Initials
Battery [Wh] > 700 Wh	1602.924	//		☒
Solar Power Indicators: > 0	4.659	//		☒
	0.0	//		
	21.757	//		
	11.267	//		

Item/Procedure	Readings				Comments	Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime		
Domain_Name=Host, Node=1, HW_SerNum=0x333247093236303200430026 On=Y	OK //	36.3 //	118.7 //	Uptime: 0 days, 01:33:12 //		☒
Domain_Name=Bat-0x33324703313238340031002d, Node=4, HW_SerNum=0x33324703313238340031002d On=Y	OK //	35.0 //	121.3 //	Uptime: 0 days, 21:07:12 //		☒
Domain_Name=Thruder-2, Node=3, HW_SerNum=0x3437470330383638001f0033 On=Y	OK //	23.6 //	278.0 //	Uptime: 0 days, 01:25:58 //		☒

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	Initials
Thruster Spin	446.0	// Spins freely, slow and fast speeds		☒
Rudder Range of Motion		Rudder moves freely and smoothly		☒
Rudder right, left, center	Rudder(2025-08-19T21:19:29.061Z,desiredHeading=353.5,compass=18.4,rack=-11.4,post=-12rudderStat	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)	36.797, -121.847	Avoidance Off, Note Waypoint Course Used		☒
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=3, waitTime=1m30s, powerState=OFF (1m7.506s), ampsPower=false, powerThreadActive=false	Catch release buoy by hand	Float release mechanism replaced. still having problems... Cable or float guide issue?	☐
Octopus Cable 01	OK	// Must Pass		☒
Octopus Cable 02	OK	// Must Pass		☒
AIS Status	lastSeen=MMSI 367425910 (SEA HORSE). Pos=36.808668, -121.786062. t=33:0:UNDERWAY_ENGINE, 2025-08-19T21:19:38.226Z, lengthErrs=0, latlonErrs=0, broadcastCount=2698, lastRx=3.141s, numberObserved=15, averageRxRateMillis=0.678s	// If in harbor, must see MMSI		☒
Photo Document				☒

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=20.6°C, Press=1017.9mb, Wind Speed=3.75kn, Wind Dir=271.4°. Heading=332.8°		☒

UBLOX GPS	2025-08-19T21:19:45Z@36.8024265,-121.787139,lastRx=0.480s, quality=100, timeout=1m, nmeaValid=true, clockDt=3.555s, lastValidFix=2025-08-19T21:19:45Z@36.8024265,-121.787139, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=9.80,std=0.40,min=9.00,max=10.00,n=300,hdop:sma=1.01,std=0.03,min=0.98,max=1.08,n=300,altitude:sma=0.67,std=1.59,min=-2.20,max=4.60,n=300,		☒
Airmar GPS	2025-08-19T21:19:45.200Z@36.8024633,-121.7871517,lastRx=0.242s, quality=80, timeout=5m, nmeaValid=true, clockDt=3.693s, lastValidFix=2025-08-19T21:19:45.200Z@36.8024633,-121.7871517, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=9.72,std=0.49,min=8.00,max=10.00,n=300,hdop:sma=1.03,std=0.06,min=1.00,max=1.30,n=300,altitude:sma=9.55,std=0.86,min=7.60,max=10.60,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

Hansen's last CCU (SV3-034) developed a leak. CCU SV3-038 software was updated to 3.2.2 and tested. Vehicle has been stable for over 24 hours. Compasses recalibrated. Installed a spare float release mechanism but still had problems with new float release. cable or float tab fitment issues?

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

Submit

Print

Clear User Input