

Readme

SV3 Pre-Launch Checklist

|         |                          |              |                        |
|---------|--------------------------|--------------|------------------------|
| Date    | 2025-09-30T22:44:27.357Z | Glider Name  | SV3-209609080(SV3-038) |
| Tech(s) | cwahl                    | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       | <input checked="" type="checkbox"/> |
| Virtual Relay              | 0 queued msgs state=WAITING, sent=0, received=0, powerState=OFF (5h43m11.879s), virtualDevice=true, powerThreadActive=false (no internet connectivity)                                                                                                                                                                                                                                                                                                                                                                                                                         | Still not working...  | <input type="checkbox"/>            |
| WGMS Iridium               | IMEI:300434060625300, starts=1, r=2, w=643, sessionAttempts=723, sessionErrs=80, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.5 (i=5), 0 queued msgs state=TALKING, sent=643, lastTx=1.687s, avgTxSize=175.5B, totalTx=114.085kB, received=2, lastRx=5h19m49.053s, totalRx=0.076kB, powerState=ON (5h42m42.797s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false                                                                                                                                                                                           |                       | <input checked="" type="checkbox"/> |
| Vehicle telemetry received | available channels=[tcpChannel, virtualRelay, iridiumModem]244 blocked messages, averageMessageQueueRate=35.758s, sent=643, totalBytesSent=114.085kB, received=2, totalBytesReceived=0.076kB, lastRx=5h19m49.066s, 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=2025-09-30T17:24:38.349Z, receiver=iridiumModem, |                       | <input checked="" type="checkbox"/> |
| Location                   | Using GPSUblox, declination=12.458633, failoverCounter=1, timeLastSwitchedGps=2025-09-30T17:03:33.010Z, clockDt=5.538s                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       | <input checked="" type="checkbox"/> |
| Tracker telemetry received | Battery (Volts)<br>Report Rate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 15.7 volts<br>4 hours | <input checked="" type="checkbox"/> |

Configuration

| Item/Procedure                 | Readings       | Specifications | Comments | Initials                            |
|--------------------------------|----------------|----------------|----------|-------------------------------------|
| Tracker WGMS name              | Hansen Tracker |                |          | <input checked="" type="checkbox"/> |
| (Optional) Second Tracker Name |                |                |          | <input type="checkbox"/>            |
| Drybox WGMS name               | SV3-038 Hansen |                |          | <input checked="" type="checkbox"/> |
| Float name                     | Hansen         |                |          | <input checked="" type="checkbox"/> |
| Glider name                    | Hansen         |                |          | <input checked="" type="checkbox"/> |
| Umbilical Length               | 4m             |                |          | <input checked="" type="checkbox"/> |
| G1                             |                |                |          | <input type="checkbox"/>            |
| G2                             |                |                |          | <input type="checkbox"/>            |
| G3                             | JRF APU        |                |          | <input checked="" type="checkbox"/> |
| T1                             |                |                |          | <input type="checkbox"/>            |
| D1                             |                |                |          | <input type="checkbox"/>            |
| S1                             |                |                |          | <input type="checkbox"/>            |
| S2                             |                |                |          | <input type="checkbox"/>            |
| S3                             |                |                |          | <input type="checkbox"/>            |

|                                     |                   |                                     |             |             |
|-------------------------------------|-------------------|-------------------------------------|-------------|-------------|
| S4                                  | <div>Airmar</div> |                                     | <div></div> | <div></div> |
| Event definitions                   |                   | Compare against standard list       | <div></div> | <div></div> |
| Vehicle and tracker op area defined | <div></div>       | Note area name(s) and enable alarms | <div></div> | <div></div> |
| Escalation list created/populated   |                   |                                     | <div></div> | <div></div> |

Vehicle Status

| Item/Procedure              | Readings                         | Comments    | Initials    |
|-----------------------------|----------------------------------|-------------|-------------|
| Battery [Wh] > 700 Wh       | 1228.796                         | <div></div> | <div></div> |
| Solar Power Indicators: > 0 | 9.172<br>0.0<br>24.416<br>24.708 | <div></div> | <div></div> |

| 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                   | 35.4             | 118.8          | Uptime: 0 days, 05:45:08 | <div></div> | <div></div> |
| Domain_Name=Bat-0x33324703313238340031002d, Node=3, HW_SerNum=0x33324703313238340031002d On=Y | OK                   | 35.1             | 121.2          | Uptime: 0 days, 05:39:58 | <div></div> | <div></div> |
| Domain_Name=Thruder-2, Node=4, HW_SerNum=0x3437470330383638001f0033 On=Y                      | OK                   | 26.7             | 287.3          | Uptime: 0 days, 05:38:15 | <div></div> | <div></div> |

Mechanical Checks

|       | Item/Procedure                    | Specifications                                            | Comments    | Initials    |
|-------|-----------------------------------|-----------------------------------------------------------|-------------|-------------|
| Float | Wet-mates connected/lubed         | 3M Silicone Lubricant Spray 3M ID No. 62-4678-4930-3      | <div></div> | <div></div> |
|       | Connector covers secure           |                                                           | <div></div> | <div></div> |
|       | Drybox secure                     | Wiggle test                                               | <div></div> | <div></div> |
|       | Contact info secure               |                                                           | <div></div> | <div></div> |
|       | Hull                              | Inspect, note condition                                   | <div></div> | <div></div> |
|       | Skeg/Fin                          | Secure                                                    | <div></div> | <div></div> |
| Sub   | Hardware secure                   |                                                           | <div></div> | <div></div> |
|       | Umbilical visual inspection       | Free of voids/defects                                     | <div></div> | <div></div> |
|       | Umbilical ribbon cable inspection |                                                           | <div></div> | <div></div> |
|       | Roll pins inserted                | Flush with surface                                        | <div></div> | <div></div> |
|       | Wings                             | Hardware secure with Loctite, lock nuts, and seizing wire | <div></div> | <div></div> |
|       | Thruder                           | Hardware secure                                           | <div></div> | <div></div> |

Vehicle Functionality

| Item/Procedure              | Readings                                                                                                                                                                                                                            | Specifications                           | Comments                  | Initials    |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------------------------|-------------|
| Thruster Spin               | 450.0                                                                                                                                                                                                                               | Spins freely, slow and fast speeds       | <div></div>               | <div></div> |
| Rudder Range of Motion      |                                                                                                                                                                                                                                     | Rudder moves freely and smoothly         | <div></div>               | <div></div> |
| Rudder right, left, center  | Rudder(2025-09-30T22:44:26.295Z,desiredHeading=349.1,compass=14.1,rack=-11.4,post=-13.9rudderSt                                                                                                                                     | Right, Left, Center                      | <div></div>               | <div></div> |
| Thruder Compass Correction  | Thruder compass is corrected                                                                                                                                                                                                        | recommended NOT corrected                | LR says that this is okay | <div></div> |
| Fixed heading test (spin)   | 180                                                                                                                                                                                                                                 | Avoidance Off, Note Heading Used         | <div></div>               | <div></div> |
| Waypoint course test (spin) | 36.797 -121.847                                                                                                                                                                                                                     | Avoidance Off, Note Waypoint Course Used | <div></div>               | <div></div> |
| Buoy Release Mechanism      | device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (5h40m41.891s), ampsPower=false, powerThreadActive=false                                                                                       | Catch release buoy by hand               | <div></div>               | <div></div> |
| Octopus Cable 01            | OK                                                                                                                                                                                                                                  | Must Pass                                | <div></div>               | <div></div> |
| Octopus Cable 02            | OK                                                                                                                                                                                                                                  | Must Pass                                | <div></div>               | <div></div> |
| AIS Status                  | lastSeen=MMSI 338200114 (R/V CURRENT SEA). Pos=36.803065, -121.785002. t=67:0:NOT_DEFINED, 2025-09-30T22:44:30.301Z, lengthErrs=1, latlonErrs=0, broadcastCount=2372, lastRx=0.314s, numberObserved=14, averageRxRateMillis=12.324s | If in harbor, must see MMSI              | <div></div>               | <div></div> |
| Photo Document              |                                                                                                                                                                                                                                     |                                          | <div></div>               | <div></div> |

Vehicle Communication and Telemetry

| Item/Procedure | Readings / Specifications                                                       | Comments    | Initials    |
|----------------|---------------------------------------------------------------------------------|-------------|-------------|
| WX reporting   | Temp=22.4°C, Press=1017.2mb, Wind Speed=1.79kn, Wind Dir=201.8°. Heading=327.1° | <div></div> | <div></div> |

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |             |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|
| UBLOX GPS                 | 2025-09-30T22:44:36Z@36.8025143,-121.7870983,lastRx=0.600s, quality=100, timeout=1m, nmeaValid=true, clockDt=5.379s, lastValidFix=2025-09-30T22:44:36Z@36.8025143,-121.7870983, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.87,std=0.83,min=9.00,max=12.00,n=300,hdop:sma=1.01,std=0.08,min=0.83,max=1.08,n=300,altitude:sma=1.69,std=1.31,min=-1.00,max=4.20, <div><div></div><div></div><div></div><div></div></div>        | <div></div> | <div></div> |
| Airmar GPS                | 2025-09-30T22:44:36.010Z@36.8024483,-121.7870167,lastRx=0.555s, quality=80, timeout=5m, nmeaValid=true, clockDt=5.374s, lastValidFix=2025-09-30T22:44:36.010Z@36.8024483,-121.7870167, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=8.75,std=0.84,min=7.00,max=10.00,n=300,hdop:sma=1.28,std=0.27,min=0.90,max=1.60,n=300,altitude:sma=27.70,std=2.24,min=22.80,max=31.20 <div><div></div><div></div><div></div><div></div></div> | <div></div> | <div></div> |
| Torpedo GPS               | Not Available! //                                                                                                                                                                                                                                                                                                                                                                                                                            | <div></div> | <div></div> |
| Water speed readings      | Unknown speed; ncc=0, nci=0, tec=0, aip=0.00 //                                                                                                                                                                                                                                                                                                                                                                                              | <div></div> | <div></div> |
| Obstacle Avoidance Status | Enabled //                                                                                                                                                                                                                                                                                                                                                                                                                                   | <div></div> | <div></div> |
| Check alarms              | "Out of bounds" red. All yellow/green                                                                                                                                                                                                                                                                                                                                                                                                        | <div></div> | <div></div> |

General Comments

Technician Signature: 

cwahl

- 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