

## SV3-272: SV3 Pre-Launch Checklist

Readme

## SV3 Pre-Launch Checklist

|         |                          |              |                         |
|---------|--------------------------|--------------|-------------------------|
| Date    | 2019-08-09T20:15:45.853Z | Glider Name  | SV3-1553177065(SV3-272) |
| Tech(s) | cwahl                    | Organization | MBARI                   |
| Project | KBB Acoustics            | Ship/Op Area | Paragon MB              |

## Software Information

|                 |                                                                                                              |
|-----------------|--------------------------------------------------------------------------------------------------------------|
| Regulus Version | SV3-272, sn=1553177065, Running Regulus 1.1.3, software version of 2017-09-28T01:02:25Z, production build 32 |
| Plugins         | Running: AirmarWeather, LogAlarmReporter, ThrusterAdjuster Not running: GPSasRudderCompass                   |

## Communication

| Item/Procedure             | Readings                                                                                                                                                                     | Comments          | Initials                            |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------|
| WiFi Connection            | WiFi is On                                                                                                                                                                   |                   | <input checked="" type="checkbox"/> |
| Virtual Relay              | ON. 0 queued msgs (Max=2500). Channel is TALKING. (68/74 success rate) sleepTime=60000 packetSize=8192                                                                       | New cell antenna! | <input checked="" type="checkbox"/> |
| WGMS Iridium               | ON. 0 queued msgs (Max=1). Channel is TALKING. IMEI:300434063245550, consecutiveErrors=0, sessionErrors=72, writeErrors=0, readErrors=0, 10min ss avg=4.203982               |                   | <input checked="" type="checkbox"/> |
| Vehicle telemetry received | [virtualRelay, iridiumModem], Last Command: Write Console Script (Dest=0x0, code=0): %ffn.setAvoidObstacles(0). Have 0 blocked messages., averageMessageQueueRate=27m36.862s |                   | <input checked="" type="checkbox"/> |
| Location                   | Using GPSUblox declination=13.003236, failoverCounter=1, timeLastSwitchedGps=2019-08-08T21:08:25Z, clockDt=0.863s                                                            |                   | <input checked="" type="checkbox"/> |
| Tracker telemetry received | <div>Battery (bars)</div> <div>Report Rate</div> <div>15.6 volts</div> <div>4 hrs</div>                                                                                      |                   | <input checked="" type="checkbox"/> |

## Configuration

| Item/Procedure                      | Readings                | Specifications                      | Comments | Initials                            |
|-------------------------------------|-------------------------|-------------------------------------|----------|-------------------------------------|
| Tracker WGMS name                   | Hansen Tracker          |                                     |          | <input checked="" type="checkbox"/> |
| (Optional) Second Tracker Name      | n/a                     |                                     |          | <input type="checkbox"/>            |
| Drybox WGMS name                    | SV3-272 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                                  | Sub/float gpctd plus do |                                     |          | <input checked="" type="checkbox"/> |
| G2                                  |                         |                                     |          | <input type="checkbox"/>            |
| G3                                  |                         |                                     |          | <input type="checkbox"/>            |
| T1                                  |                         |                                     |          | <input type="checkbox"/>            |
| D1                                  |                         |                                     |          | <input type="checkbox"/>            |
| S1                                  |                         |                                     |          | <input type="checkbox"/>            |
| S2                                  |                         |                                     |          | <input type="checkbox"/>            |
| S3                                  |                         |                                     |          | <input type="checkbox"/>            |
| S4                                  |                         |                                     |          | <input type="checkbox"/>            |
| Event definitions                   |                         | Compare against standard list       |          | <input checked="" type="checkbox"/> |
| Vehicle and tracker op area defined |                         | Note area name(s) and enable alarms |          | <input checked="" type="checkbox"/> |

|                                   |  |  |                          |
|-----------------------------------|--|--|--------------------------|
| Escalation list created/populated |  |  | <input type="checkbox"/> |
|-----------------------------------|--|--|--------------------------|

## Vehicle Status

| Item/Procedure              | Readings                                   | Comments             | Initials                            |
|-----------------------------|--------------------------------------------|----------------------|-------------------------------------|
| Battery [Wh] > 700 Wh       | 903.04 //                                  | <input type="text"/> | <input checked="" type="checkbox"/> |
| Solar Power Indicators: > 0 | 5.133 //<br>0.0 //<br>0.442 //<br>7.764 // | <input type="text"/> | <input checked="" type="checkbox"/> |

| Item/Procedure                                                                                   | Readings             |                  |                |                             |                      |  |
|--------------------------------------------------------------------------------------------------|----------------------|------------------|----------------|-----------------------------|----------------------|--|
| Domain Info                                                                                      | AMPS Hardware Status | Temperature (°C) | Pressure (kPa) | Hardware Uptime             | Comments             |  |
| Domain_Name=Host, Node=1, HW_SerNum=0x343747033038363800180028 On=Y                              | OK //                | 34.7 //          | 119.8 //       | Uptime: 0 days, 23:11:05 // | <input type="text"/> |  |
| Domain_Name=Thruder-2, Node=3, HW_SerNum=0x3437470330383638001f0033 On=Y                         | OK //                | 22.1 //          | 194.9 //       | Uptime: 0 days, 23:06:54 // | <input type="text"/> |  |
| Domain_Name=PydInt-0x474850072038384d00380051, Node=5, HW_SerNum=0x474850072038384d00380051 On=Y | OK //                | 31.2 //          | 125.1 //       | Uptime: 0 days, 00:01:21 // | <input type="text"/> |  |

## Mechanical Checks

|       | Item/Procedure                    | Specifications                                       | Comments             | Initials                            |
|-------|-----------------------------------|------------------------------------------------------|----------------------|-------------------------------------|
| Float | Wet-mates connected/lubed         | 3M Silicone Lubricant Spray 3M ID No. 62-4678-4930-3 | <input type="text"/> | <input checked="" type="checkbox"/> |
|       | Connector covers secure           |                                                      | <input type="text"/> | <input checked="" type="checkbox"/> |
|       | Drybox secure                     | Wiggle test                                          | <input type="text"/> | <input checked="" type="checkbox"/> |
|       | Contact info secure               |                                                      | <input type="text"/> | <input checked="" type="checkbox"/> |
|       | Hull                              | Free of cracks and dings                             | <input type="text"/> | <input checked="" type="checkbox"/> |
|       | Skeg/Fin                          | Secure                                               | <input type="text"/> | <input checked="" type="checkbox"/> |
| Sub   | Hardware secure                   |                                                      | <input type="text"/> | <input checked="" type="checkbox"/> |
|       | Umbilical visual inspection       | Free of voids/defects                                | <input type="text"/> | <input checked="" type="checkbox"/> |
|       | Umbilical ribbon cable inspection |                                                      | <input type="text"/> | <input checked="" type="checkbox"/> |
|       | Roll pins inserted                | Flush with surface                                   | <input type="text"/> | <input checked="" type="checkbox"/> |
|       | Wings                             | Hardware secure with Loctite and Lock Nuts           | <input type="text"/> | <input checked="" type="checkbox"/> |
|       | Thruder                           | Hardware secure                                      | <input type="text"/> | <input checked="" type="checkbox"/> |

## Vehicle Functionality

| Item/Procedure              | Readings                                                                                                                                                                        | Specifications                           | Comments             |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------|
| Thruster Spin               | 452.0 //                                                                                                                                                                        | Spins freely, slow and fast speeds //    | <input type="text"/> |
| Rudder Range of Motion      |                                                                                                                                                                                 | Rudder moves freely and smoothly         | <input type="text"/> |
| Rudder right, left, center  | Rudder(2019-08-09T20:15:34.040Z,desiredHeading=147.9,compass=93.9,rack=16,post=15.2rudderS  | Right, Left, Center                      | <input type="text"/> |
| Thruder Compass Correction  | Thruder compass is NOT corrected //                                                                                                                                             | recommended NOT corrected //             | <input type="text"/> |
| Fixed heading test (spin)   | 180 <input type="text"/>                                                                                                                                                        | Avoidance Off, Note Heading Used         | <input type="text"/> |
| Waypoint course test (spin) | 41 <input type="text"/>                                                                                                                                                         | Avoidance Off, Note Waypoint Course Used | <input type="text"/> |
| Buoy Release Mechanism      | device is disarmed, deviceState=OFF, deployCounter=0, waitTime=30s //                                                                                                           | Catch release buoy by hand //            | <input type="text"/> |

|                  |                                                                                                               |                             |  |
|------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------|--|
| Octopus Cable 01 | OK                                                                                                            | Must Pass                   |  |
| Octopus Cable 02 | OK                                                                                                            | Must Pass                   |  |
| AIS Status       | MMSI 367375360 (OCEAN ANGEL 3). Pos=36.804383, -121.785117. t=30:0:UNDERWAY_SAILING, 2019-08-09T19:21:55.797Z | If in harbor, must see MMSI |  |
| Photo Document   |                                                                                                               |                             |  |

## Vehicle Communication and Telemetry

| Item/Procedure            | Readings / Specifications                                                                                                                                                                                                                                         | Comments | Initials                            |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------|
| WX reporting              | Temp=20.2°C, Press=1015.9mb, Wind Speed=2.21kn, Wind Dir=316.1°.                                                                                                                                                                                                  |          | <input checked="" type="checkbox"/> |
| UBLOX GPS                 | 2019-08-09T20:15:47Z@36.8023748, -121.7871527, lastRx=0.832s, quality=100, clockDt=0.981s, failCount=0, ggaQCount:1=215,2=85,numSat:sma=11.49, std=0.64,min=9.00,max=12.00,hdop:sma=0.74,std=0.06,min=0.68,max=1.01,altitude:sma=1.75,std=1.90,min=-0.80,max=5.40 |          | <input checked="" type="checkbox"/> |
| Airmar GPS                | 2019-08-09T20:15:47.010Z@36.802405, -121.7871617, lastRx=0.649s, quality=80, clockDt=0.977s, failCount=0, ggaQCount:2=300,numSat:sma=10.78, std=0.44,min=9.00,max=11.00,hdop:sma=0.82,std=0.04,min=0.80,max=1.00,altitude:sma=2.23, std=0.44,min=1.60,max=3.50    |          | <input checked="" type="checkbox"/> |
| Torpedo GPS               | Not Available!                                                                                                                                                                                                                                                    |          | <input checked="" type="checkbox"/> |
| Water speed readings      | Out of the water; Unknown speed; Not yet running, powerState=OFF, ampsPower=false, powerThreadActive=false                                                                                                                                                        |          | <input checked="" type="checkbox"/> |
| Obstacle Avoidance Status | Disabled                                                                                                                                                                                                                                                          |          | <input checked="" type="checkbox"/> |
| Check alarms              | "Out of bounds" red. All yellow/green                                                                                                                                                                                                                             |          | <input checked="" type="checkbox"/> |

## General Comments

g1 Sub/float GPCTD plus DO  
KBB EK80 Exosounder  
New cell antenna

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