

## SV3-121: SV3 Pre-Launch Checklist

## SV3 Pre-Launch Checklist

|              |                          |              |                                                 |
|--------------|--------------------------|--------------|-------------------------------------------------|
| Date         | 2016-08-30T17:18:41.542Z | Glider Name  | SV3-1531399927(SV3-121)                         |
| Tech(s)      | cwahl                    | Organization | Mbari                                           |
| Payload(s)   | S1, s2, s3 gl            | Project      | Bog timeseries and bin/beds c                   |
| Ship/Op Area | Mb                       | Location     | Using GPSUblox declination=13.312166, failoverC |

## Software Information

|    |                                                                                       |
|----|---------------------------------------------------------------------------------------|
| Id | SV3-121, Running Regulus software version of 2015-12-01_16-50-31, production build 35 |
|----|---------------------------------------------------------------------------------------|

## Communication

| Item/Procedure             | Readings                                                                                                 | Initials                            |
|----------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------|
| WiFi Connection            | WiFi is On                                                                                               | <input checked="" type="checkbox"/> |
| Virtual Relay              | ON. 0 queued msgs (Max=2147483647). Channel is TALKING.(12/58 success rate) sleepTime=60000 packetSize=  | <input checked="" type="checkbox"/> |
| WGMS Iridium               | ON. 0 queued msgs (Max=1). Channel is TALKING. IMEI:300434060771430, consecutiveErrors=0, sessionErrors= | <input checked="" type="checkbox"/> |
| Vehicle telemetry received |                                                                                                          | <input checked="" type="checkbox"/> |
| Tracker telemetry received | <b>Battery (bars)</b> 15.7 volts<br><b>Report Rate</b> 4hrs                                              | <input checked="" type="checkbox"/> |

## Configuration

| Item/Procedure                      | Readings | Specifications                                  | Initials                            |
|-------------------------------------|----------|-------------------------------------------------|-------------------------------------|
| Topside RDF Frequency               | N/a      |                                                 | <input type="checkbox"/>            |
| Hull RDF Frequency                  | N/a      |                                                 | <input type="checkbox"/>            |
| Tracker WGMS name                   | Tiny     |                                                 | <input checked="" type="checkbox"/> |
| Drybox WGMS name                    | Tinytoo  |                                                 | <input checked="" type="checkbox"/> |
| Float name                          | Tiny     |                                                 | <input checked="" type="checkbox"/> |
| Glider name                         | Tiny     |                                                 | <input checked="" type="checkbox"/> |
| Thruder Serial Number               | 2c001c   | Last 6 digits of Hardware ID found on AMPS page | <input checked="" 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 checked="" type="checkbox"/> |

## Vehicle Status

| Item/Procedure              | Readings                | Initials                            |
|-----------------------------|-------------------------|-------------------------------------|
| Battery [Wh] > 700 Wh       | 816.481                 | <input checked="" type="checkbox"/> |
| Solar Power Indicators: > 0 | 18.369<br>0.0<br>12.858 | <input checked="" type="checkbox"/> |

| Item/Procedure                                                          | Readings                        |                                   |                                    |                                                       |                                     |
|-------------------------------------------------------------------------|---------------------------------|-----------------------------------|------------------------------------|-------------------------------------------------------|-------------------------------------|
| Domain Info                                                             | AMPS Hardware Status            | Temperature (°C)                  | Pressure (kPa)                     | Hardware Uptime                                       | Initials                            |
| Domain_Name=Host, Node=1, HW_SerNum=0x333451153936383700260039 On=Y     | <input type="text" value="OK"/> | <input type="text" value="23.8"/> | <input type="text" value="115.7"/> | <input type="text" value="Uptime: 5 days, 17:47:48"/> | <input checked="" type="checkbox"/> |
| Domain_Name=Thrudder, Node=4, HW_SerNum=0x3333470738373634002c001c On=Y | <input type="text" value="OK"/> | <input type="text" value="26.5"/> | <input type="text" value="168.2"/> | <input type="text" value="Uptime: 5 days, 17:18:03"/> | <input checked="" type="checkbox"/> |

## Mechanical Checks

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

## Vehicle Functionality

| Item/Procedure              | Readings                                                                                                           | Specifications                           | Initials                            |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------------|
| Thruster Spin               | <input type="text" value="0.0"/>                                                                                   | Spins freely, slow and fast speeds       | <input checked="" type="checkbox"/> |
| Rudder Range of Motion      |                                                                                                                    | Rudder moves freely and smoothly         | <input checked="" type="checkbox"/> |
| Rudder right, left, center  | <input type="text" value="Rudder(2016-08-30T17:18:37.724Z,desiredHeading=288.3,compass=237.3,rack=19.9,post=17)"/> | Right, Left, Center                      | <input checked="" type="checkbox"/> |
| Thrudder Compass Correction | <input type="text" value="Thrudder compass is NOT corrected"/>                                                     |                                          | <input checked="" type="checkbox"/> |
| Fixed heading test (spin)   | <input type="text" value="90"/>                                                                                    | Avoidance Off, Note Heading Used         | <input checked="" type="checkbox"/> |
| Waypoint course test (spin) | <input type="text" value="44"/>                                                                                    | Avoidance Off, Note Waypoint Course Used | <input checked="" type="checkbox"/> |
| Buoy Release Mechanism      | <input type="text" value="device is disarmed, deviceState=OFF, deployCounter=0"/>                                  | Catch release buoy by hand               | <input checked="" type="checkbox"/> |
| Octopus Cable 01            | <input type="text" value="OK"/>                                                                                    | Must Pass                                | <input checked="" type="checkbox"/> |
| Octopus Cable 02            | <input type="text" value="OK"/>                                                                                    | Must Pass                                | <input checked="" type="checkbox"/> |
| AIS Status                  | <input type="text" value="No AIS reports yet received"/>                                                           | If in harbor, must see MMSI              | <input checked="" type="checkbox"/> |
| Photo Document              |                                                                                                                    |                                          | <input type="checkbox"/>            |

## Vehicle Communication and Telemetry

| Item/Procedure | Readings / Specifications |
|----------------|---------------------------|
|----------------|---------------------------|

|                              |                                                                              |
|------------------------------|------------------------------------------------------------------------------|
| WX reporting                 | Temp=18.1°C, Press=1016.6mb, Wind Speed=NaNkn, Wind Dir=NaN°. Heading=224.1° |
| UBLOX GPS                    | At [36.80246267, -121.78708700] @ 2016-08-30T17:18:46Z, quality=100          |
| Airmar GPS                   | At [36.80249333, -121.78710667] @ 2016-08-30T17:16:09Z, quality=80           |
| Torpedo GPS                  | At [36.80245138, -121.78710485] @ 2016-08-30T17:18:46Z, quality=65           |
| Water speed readings         | Out of the water; Unknown speed; Not yet running                             |
| Obstacle Avoidance Status    | Disabled                                                                     |
| RDF beacon tested w/receiver |                                                                              |
| Check alarms                 | "Out of bounds" red. All yellow/green                                        |

## Comments

S1 not spot  
S2 ctd plus do  
S3 pco2 plus pH  
G1 eco puck plus vr2c  
First deployment after hull repairs, s3 not installed for c  
Ais turned on and receiving messages from another checkout

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*