

## SV3-272: SV3 Pre-Launch Checklist

Readme

## SV3 Pre-Launch Checklist

|         |                          |              |                         |
|---------|--------------------------|--------------|-------------------------|
| Date    | 2019-04-15T18:05:09.336Z | Glider Name  | SV3-1553177065(SV3-272) |
| Tech(s) | cwahl                    | Organization | MBARI                   |
| Project | DMO test                 | 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. (104/104 success rate) sleepTime=60000 packetSize=8192                                                        |          | <input checked="" type="checkbox"/> |
| WGMS Iridium               | ON. 0 queued msgs (Max=1). Channel is TALKING. IMEI:300434063245550, consecutiveErrors=0, sessionErrors=957, writeErrors=0, readErrors=0, 10min ss avg=3.306707 |          | <input checked="" type="checkbox"/> |
| Vehicle telemetry received | [virtualRelay, iridiumModem], Last Command: Read file transaction closed. Have 0 blocked messages., averageMessageQueueRate=59m28.748s                          |          | <input checked="" type="checkbox"/> |
| Location                   | Using GPSUblox declination=13.037868, failoverCounter=1, timeLastSwitchedGps=2019-04-11T21:16:53Z, clockDt=0.361s                                               |          | <input checked="" type="checkbox"/> |
| Tracker telemetry received | <b>Battery (bars)</b> 12.9 v alkaline?<br><b>Report Rate</b> Should have been changed to 4hrs                                                                   |          | <input checked="" type="checkbox"/> |

## Configuration

| Item/Procedure                      | Readings                    | Specifications                      | Comments                                               | Initials                            |
|-------------------------------------|-----------------------------|-------------------------------------|--------------------------------------------------------|-------------------------------------|
| Tracker WGMS name                   | SV3-272 MB                  |                                     |                                                        | <input checked="" type="checkbox"/> |
| (Optional) Second Tracker Name      |                             |                                     |                                                        | <input type="checkbox"/>            |
| Drybox WGMS name                    | SV3-272                     |                                     |                                                        | <input checked="" type="checkbox"/> |
| Float name                          | SV3-272                     |                                     |                                                        | <input checked="" type="checkbox"/> |
| Glider name                         | SV3-272                     |                                     |                                                        | <input checked="" type="checkbox"/> |
| Umbilical Length                    | 4m                          |                                     |                                                        | <input checked="" type="checkbox"/> |
| G1                                  | Sub and Float GPCTD plus DO |                                     |                                                        | <input checked="" type="checkbox"/> |
| G2                                  | APU                         |                                     |                                                        | <input checked="" type="checkbox"/> |
| G3                                  |                             |                                     |                                                        | <input type="checkbox"/>            |
| T1                                  |                             |                                     |                                                        | <input type="checkbox"/>            |
| D1                                  |                             |                                     |                                                        | <input type="checkbox"/>            |
| S1                                  |                             |                                     | All S port lights are on even though payloads are off? | <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       | 977.96                           |          | <input checked="" type="checkbox"/> |
| Solar Power Indicators: > 0 | 8.597<br>0.0<br>28.413<br>38.047 |          | <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                   | 40.6             | 124.4          | Uptime: 3 days, 20:51:44 | CCU                   |  |
| Domain_Name=Bat-0x474850072038384d00380042, Node=3, HW_SerNum=0x474850072038384d00380042 On=Y    | OK                   | 32.9             | 119.6          | Uptime: 3 days, 20:57:42 | APU                   |  |
| Domain_Name=Thruder-2, Node=4, HW_SerNum=0x3437470330383638001f0033 On=Y                         | OK                   | 25.8             | 209.3          | Uptime: 3 days, 20:47:45 |                       |  |
| Domain_Name=PydInt-0x474850072038384d00380051, Node=8, HW_SerNum=0x474850072038384d00380051 On=Y | OK                   | 31.9             | 123.7          | Uptime: 0 days, 00:26:56 | GPCTD Science payload |  |

## Mechanical Checks

|       | Item/Procedure                    | Specifications                                       | Comments | 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"/> |
|       | Umbilical ribbon cable inspection |                                                      |          | <input checked="" type="checkbox"/> |
|       | Roll pins inserted                | Flush with surface                                   |          | <input checked="" type="checkbox"/> |
|       | Wings                             | Hardware secure with Loctite and Lock Nuts           |          | <input checked="" type="checkbox"/> |
|       | Thruder                           | Hardware secure                                      |          | <input checked="" type="checkbox"/> |

## Vehicle Functionality

| Item/Procedure             | Readings                                                                                   | Specifications                     | Comments                         |
|----------------------------|--------------------------------------------------------------------------------------------|------------------------------------|----------------------------------|
| Thruster Spin              | 0.0                                                                                        | Spins freely, slow and fast speeds | Forgot to start before checklist |
| Rudder Range of Motion     |                                                                                            | Rudder moves freely and smoothly   |                                  |
| Rudder right, left, center | Rudder(2019-04-15T18:05:05.887Z,desiredHeading=347.2,compass=37.2,rack=-19.9,post=-21.9rud | Right, Left, Center                |                                  |
| Thruder Compass Correction | Thruder compass is NOT corrected                                                           | recommended NOT corrected          |                                  |
| Fixed heading test (spin)  | 180                                                                                        | Avoidance Off, Note Heading Used   |                                  |

|                             |                                                                                                          |                                          |                      |
|-----------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------|
| Waypoint course test (spin) | m1                                                                                                       | Avoidance Off, Note Waypoint Course Used |                      |
| Buoy Release Mechanism      | device is disarmed, deviceState=OFF, deployCounter=0, waitTime=30s                                       | Catch release buoy by hand               |                      |
| Octopus Cable 01            | OK                                                                                                       | Must Pass                                |                      |
| Octopus Cable 02            | OK                                                                                                       | Must Pass                                |                      |
| AIS Status                  | MMSI 366966550 (OCEAN ANGEL 2). Pos=36.804607, -121.785808. t=30:0:NOT_DEFINED, 2019-04-15T18:05:02.642Z | If in harbor, must see MMSI              |                      |
| Photo Document              |                                                                                                          |                                          | on chris' cell phone |

## Vehicle Communication and Telemetry

| Item/Procedure            | Readings / Specifications                                                                                                                                                                                                                                                  | Comments   | Initials                            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------------------|
| WX reporting              | Temp=16.7°C, Press=1012.7mb, Wind Speed=5.49kn, Wind Dir=213.4°. Heading=17.8°                                                                                                                                                                                             |            | <input checked="" type="checkbox"/> |
| UBLOX GPS                 | 2019-04-15T18:05:11Z@36.8023412, -121.7871702, lastRx=0.224s, quality=100, clockDt=0.346s, failCount=0, ggaQCount=2=300, numSat:sma=10.72, std=0.45, min=10.00, max=11.00, hdop:sma=0.96, std=0.16, min=0.84, max=1.19, altitude:sma=0.86, std=0.44, min=0.30, max=2.30    |            | <input checked="" type="checkbox"/> |
| Airmar GPS                | 2019-04-15T18:05:10.590Z@36.8023417, -121.7871667, lastRx=0.485s, quality=80, clockDt=0.774s, failCount=0, ggaQCount=2=300, numSat:sma=10.00, std=0.00, min=10.00, max=10.00, hdop:sma=0.90, std=0.00, min=0.90, max=0.90, altitude:sma=1.99, std=0.80, min=0.60, max=4.10 |            | <input type="checkbox"/>            |
| Torpedo GPS               | Not Available!                                                                                                                                                                                                                                                             | Not there? | <input type="checkbox"/>            |
| Water speed readings      | Out of the water; 0 min: 0 max: 0 mean: 0 No handler, lastRx=0.628s, consecutiveErrorLimit=10, powerState=ON, ampsPower=true, Requested by: pilotRequest, powerThreadActive=false                                                                                          |            | <input type="checkbox"/>            |
| Obstacle Avoidance Status | Enabled                                                                                                                                                                                                                                                                    |            | <input checked="" type="checkbox"/> |
| Check alarms              | "Out of bounds" red. All yellow/green                                                                                                                                                                                                                                      |            | <input checked="" type="checkbox"/> |

## General Comments

First deployment!

Technician Signature: cwah1

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