

SV3-029: SV3 Pre-Launch Checklist

Readme

SV3 Pre-Launch Checklist

|         |                          |              |                          |
|---------|--------------------------|--------------|--------------------------|
| Date    | 2021-08-09T23:47:36.858Z | Glider Name  | SV3-1167408762 (SV3-029) |
| Tech(s) | cwahl                    | Organization | MBARI                    |
| Project | Bioacoustics             | Ship/Op Area | Paragon MB               |

Software Information

|                 |                                                                                                                                        |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Regulus Version | SV3-029, sn=1167408762, Running Regulus 1.1.3, software version of 2017-09-28T01:02:25Z, production build 32                           |
| Plugins         | Running: AirmarWeather, Leopard_Camera_1_3_2, Leopard_Camera_1_3_3, 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 WAITING. (no internet connectivity)                                                                                    | not sure if cell works, JRF modified! | <input checked="" type="checkbox"/> |
| WGMS Iridium               | ON. 0 queued msgs (Max=1). Channel is TALKING. IMEI:300434060620290, consecutiveErrors=0, sessionErrors=175, writeErrors=0, readErrors=0, 10min ss avg=3.725954 |                                       | <input checked="" type="checkbox"/> |
| Vehicle telemetry received | [virtualRelay, iridiumModem], Last Command: Read file transaction closed. Have 303 blocked messages., averageMessageQueueRate=2.226s                            |                                       | <input checked="" type="checkbox"/> |
| Location                   | Using GPSUBlox declination=12.791339, failoverCounter=1, timeLastSwitchedGps=2021-08-09T22:08:33Z, clockDt=1.886s                                               |                                       | <input checked="" type="checkbox"/> |
| Tracker telemetry received | Battery (bars) Report Rate15 volts4 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                    | SV3-029        |                                     | Transferred from JRF | <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                                  | APU            |                                     |                      | <input type="checkbox"/>            |
| G2                                  |                |                                     |                      | <input type="checkbox"/>            |
| G3                                  | 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                                  | Airmar         |                                     |                      | <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                          | Comments                 | Initials                            |
|-----------------------------|-----------------------------------|--------------------------|-------------------------------------|
| Battery [Wh] > 700 Wh       | 1221.624                          | main batt low, charging! | <input checked="" type="checkbox"/> |
| Solar Power Indicators: > 0 | 12.976<br>0.0<br>13.064<br>11.052 |                          | <input checked="" type="checkbox"/> |

| Item/Procedure             | Readings             |                  |                |                 | Comments | Initials                            |
|----------------------------|----------------------|------------------|----------------|-----------------|----------|-------------------------------------|
| Domain Info                | AMPS Hardware Status | Temperature (°C) | Pressure (kPa) | Hardware Uptime |          |                                     |
| Domain_Name=Host, Node=22, | OK                   | 32.6             | 122.2          |                 |          | <input checked="" type="checkbox"/> |

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|                                                                                                     |    |      |       |                             |  |                                     |
|-----------------------------------------------------------------------------------------------------|----|------|-------|-----------------------------|--|-------------------------------------|
| HW_SerNum=0x31324716393237390034002c On=Y                                                           |    |      |       | Uptime: 0 days,<br>01:42:50 |  |                                     |
| Domain_Name=Thruder-2, Node=32,<br>HW_SerNum=0x3437470330383638001f0033 On=Y                        | OK | 21.1 | 181.3 | Uptime: 0 days,<br>01:24:11 |  | <input checked="" type="checkbox"/> |
| Domain_Name=Bat-0x474850072038384d00380042,<br>Node=1, HW_SerNum=0x474850072038384d00380042<br>On=Y | OK | 22.5 | 113.5 | Uptime: 0 days,<br>00:41:56 |  | <input checked="" type="checkbox"/> |

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 | Initials                            |
|-----------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------|----------|-------------------------------------|
| Thruster Spin               | 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  | Rudder(2021-08-09T23:47:36.564Z,desiredHeading=312.4,compass=2.4,rack=-18.1,post=-16.2rudde         | Right, Left, Center                      |          | <input checked="" type="checkbox"/> |
| Thruder Compass Correction  | Thruder compass is NOT corrected                                                                    | recommended NOT corrected                |          | <input checked="" type="checkbox"/> |
| Fixed heading test (spin)   | 180                                                                                                 | Avoidance Off, Note Heading Used         |          | <input checked="" type="checkbox"/> |
| Waypoint course test (spin) |                                                                                                     | Avoidance Off, Note Waypoint Course Used |          | <input checked="" type="checkbox"/> |
| Buoy Release Mechanism      | device is disarmed, deviceState=OFF, deployCounter=1, waitTime=30s                                  | Catch release buoy by hand               |          | <input checked="" type="checkbox"/> |
| Octopus Cable 01            | OK                                                                                                  | Must Pass                                |          | <input checked="" type="checkbox"/> |
| Octopus Cable 02            | OK                                                                                                  | Must Pass                                |          | <input checked="" type="checkbox"/> |
| AIS Status                  | MMSI 367766000 (WESTERN FLYER). Pos=36.802410, -121.787048. t=33:0:MOORED, 2021-08-09T23:47:29.060Z | If in harbor, must see MMSI              |          | <input checked="" type="checkbox"/> |
| Photo Document              |                                                                                                     |                                          |          | <input checked="" type="checkbox"/> |

Vehicle Communication and Telemetry

| Item/Procedure            | Readings / Specifications                                                                                                                                                                                                                                      | Comments | Initials                            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------|
| WX reporting              | Temp=16.9°C, Press=1014.1mb, Wind Speed=1.90kn, Wind Dir=167.5°. Heading=350.3°                                                                                                                                                                                |          | <input checked="" type="checkbox"/> |
| UBLOX GPS                 | 2021-08-09T23:47:36Z@36.802509, -121.7870485,lastRx=0.857s, quality=100,clockDt=2.371s,failCount=0,ggaQCCount:2=300,numSat:sma=11.37,std=0.51,min=9.00,max=12.00,hdop:sma=0.84,std=0.07,min=0.72,max=1.01,altitude:sma=2.05,std=1.32,min=0.00,max=4.30         |          | <input checked="" type="checkbox"/> |
| Airmar GPS                | 2021-08-09T23:47:36.200Z@36.8025183, -121.7870583,lastRx=0.577s, quality=80,clockDt=2.187s,failCount=0,ggaQCCount:1=1,2=299,numSat:sma=9.55,std=0.50,min=9.00,max=10.00,hdop:sma=0.82,std=0.06,min=0.80,max=1.10,altitude:sma=9.39,std=2.87,min=2.50,max=16.10 |          | <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

Two MBARI CCUs are having issues running the SV3-029 CCU donated from JRF

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