

## SV3-110: SV3 Pre-Launch Checklist

Status Checklist Config Operate Setup Help

Readme

## SV3 Pre-Launch Checklist

|         |                          |              |                         |
|---------|--------------------------|--------------|-------------------------|
| Date    | 2025-06-06T17:49:29.452Z | Glider Name  | SV3-466563798 (SV3-110) |
| Tech(s) | cwah1                    | Organization | MBARI                   |
| Project | MBTS                     | Ship/Op Area | Paragon MB              |

## Software Information

|                 |                                                                                                                                                              |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regulus Version | SV3-110, sn=466563798, Running Regulus 3.2.2, software version of 2019-12-03T23:58:34Z, production build 35, sv3, SOMDM3730-30-1880AKIR-A, (1.2.3) secure // |
| Plugins         | Running: AirmarWeather, GPSasRudderCompass, LogAlarmReporter, RudderParametersManager, ThrusterAdjuster Not running: PortForwarder, ThrudderDiagnosticsFixer |

## 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 (19h32m48.903s), virtualDevice=true, powerThreadActive=false (no internet connectivity)                                                                                                                                                                                                                                                                                                                                                                                                                                              | Still not working... | <input type="checkbox"/>            |
| WGMS Iridium               | IMEI:300434060354880, starts=1, r=12, w=1182, sessionAttempts=1342, sessionErrs=158, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=5.0 (i=5), 0 queued msgs state=TALKING, sent=1182, lastTx=21.068s, avgTxSize=135.4B, totalTx=155.191kB, received=12, lastRx=29m20.361s, avgRxSize=37.5B, totalRx=0.521kB, powerState=ON (19h32m17.719s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false                                                                                                                                                                                          |                      | <input checked="" type="checkbox"/> |
| Vehicle telemetry received | available channels=[tcpChannel, virtualRelay, iridiumModem]466 blocked messages, totalMessagesDiscarded=461, averageMessageQueueRate=46.938s, sent=1182, totalBytesSent=155.191kB, received=12, totalBytesReceived=0.521kB, lastRx=29m20.449s, 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=12, #handled=12, lastRx=rx=2025-06-05T22:19:02.970Z, clockDt=2.182s |                      | <input checked="" type="checkbox"/> |
| Location                   | Using GPSUBlox, declination=12.489177, failoverCounter=1, timeLastSwitchedGps=2025-06-05T22:19:02.970Z, clockDt=2.182s                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                      | <input checked="" type="checkbox"/> |
| Tracker telemetry received | <div><div>Battery (Volts)</div><div>15.8 volts</div><div>Report Rate</div><div>4 hours</div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      | <input checked="" type="checkbox"/> |

## Configuration

| Item/Procedure                 | Readings                                           | Specifications | Comments                                                            | Initials                            |
|--------------------------------|----------------------------------------------------|----------------|---------------------------------------------------------------------|-------------------------------------|
| Tracker WGMS name              | <input type="text" value="Tiny Tracker"/>          |                | <input type="text"/>                                                | <input checked="" type="checkbox"/> |
| (Optional) Second Tracker Name | <input type="text"/>                               |                | <input type="text"/>                                                | <input type="checkbox"/>            |
| Drybox WGMS name               | <input type="text" value="CCU SV3-110 Tiny"/>      |                | <input type="text"/>                                                | <input checked="" type="checkbox"/> |
| Float name                     | <input type="text" value="Tiny too"/>              |                | <input type="text"/>                                                | <input checked="" type="checkbox"/> |
| Glider name                    | <input type="text" value="Tiny v200"/>             |                | <input type="text"/>                                                | <input checked="" type="checkbox"/> |
| Umbilical Length               | <input type="text" value="4m"/>                    |                | <input type="text"/>                                                | <input checked="" type="checkbox"/> |
| G1                             | <input type="text" value="Ecopuck"/>               |                | <input type="text"/>                                                | <input checked="" type="checkbox"/> |
| G2                             | <input type="text"/>                               |                | <input type="text"/>                                                | <input type="checkbox"/>            |
| G3                             | <input type="text"/>                               |                | <input type="text"/>                                                | <input type="checkbox"/>            |
| T1                             | <input type="text"/>                               |                | <input type="text"/>                                                | <input type="checkbox"/>            |
| D1                             | <input type="text"/>                               |                | <input type="text"/>                                                | <input type="checkbox"/>            |
| S1                             | <input type="text" value="Hotspot 3 with MF DAT"/> |                | <input type="text"/>                                                | <input checked="" type="checkbox"/> |
| S2                             | <input type="text" value="GPCTD plus D0"/>         |                | <input type="text"/>                                                | <input checked="" type="checkbox"/> |
| S3                             | <input type="text" value="pCO2 plus pH"/>          |                | <input type="text" value="std refilled and minor payload service"/> | <input checked="" type="checkbox"/> |
| S4                             | <input type="text" value="Airmar"/>                |                | <input type="text"/>                                                | <input checked="" type="checkbox"/> |

|                                     |                      |                                     |                      |                                     |
|-------------------------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|
| Event definitions                   |                      | Compare against standard list       | <input type="text"/> | <input checked="" type="checkbox"/> |
| Vehicle and tracker op area defined | <input type="text"/> | Note area name(s) and enable alarms | <input type="text"/> | <input checked="" type="checkbox"/> |
| Escalation list created/populated   |                      |                                     | <input type="text"/> | <input checked="" type="checkbox"/> |

Vehicle Status

| Item/Procedure              | Readings |    | Comments             | Initials                            |
|-----------------------------|----------|----|----------------------|-------------------------------------|
| Battery [Wh] > 700 Wh       | 823.306  | // | <input type="text"/> | <input checked="" type="checkbox"/> |
| Solar Power Indicators: > 0 | 11.422   | // | <input type="text"/> | <input checked="" type="checkbox"/> |
|                             | 0.0      | // |                      |                                     |
|                             | 12.536   | // |                      |                                     |
|                             | 12.288   | // |                      |                                     |

| Item/Procedure                                                                                   | Readings             |                  |                |                             |  | Comments             | Initials                            |
|--------------------------------------------------------------------------------------------------|----------------------|------------------|----------------|-----------------------------|--|----------------------|-------------------------------------|
| Domain Info                                                                                      | AMPS Hardware Status | Temperature (°C) | Pressure (kPa) | Hardware Uptime             |  |                      |                                     |
| Domain_Name=Host, Node=1, HW_SerNum=0x32385119353634330055004a On=Y                              | OK //                | 24.3 //          | 114.5 //       | Uptime: 0 days, 19:38:40 // |  | <input type="text"/> | <input checked="" type="checkbox"/> |
| Domain_Name=Thruder-2, Node=3, HW_SerNum=0x474850052038384d0057002b On=Y                         | OK //                | 19.5 //          | 245.9 //       | Uptime: 0 days, 19:30:18 // |  | <input type="text"/> | <input checked="" type="checkbox"/> |
| Domain_Name=PydInt-0x33335114373330300043001a, Node=5, HW_SerNum=0x33335114373330300043001a On=Y | OK //                | 20.8 //          | 110.6 //       | Uptime: 0 days, 01:34:48 // |  | <input type="text"/> | <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 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                              | Inspect, note condition                                   | <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, lock nuts, and seizing wire | <input type="text"/> | <input checked="" type="checkbox"/> |
|       | Thruder                           | Hardware secure                                           | <input type="text"/> | <input checked="" type="checkbox"/> |

Vehicle Functionality

| Item/Procedure              | Readings                                                                                                                                                                                                                      | Specifications                              | Comments                     | Initials                            |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------------------|-------------------------------------|
| Thruster Spin               | 446.0 //                                                                                                                                                                                                                      | Spins freely, slow and fast speeds //       | <input type="text"/>         | <input checked="" type="checkbox"/> |
| Rudder Range of Motion      |                                                                                                                                                                                                                               | Rudder moves freely and smoothly //         | <input type="text"/>         | <input checked="" type="checkbox"/> |
| Rudder right, left, center  | Rudder(2025-06-06T17:49:29.842Z,desiredHeading=350.5,compass=15.7,rack=-11.4,post=-14.7rudderSt //                                                                                                                            | Right, Left, Center //                      | <input type="text"/>         | <input checked="" type="checkbox"/> |
| Thruder Compass Correction  | Thruder compass is corrected //                                                                                                                                                                                               | recommended NOT corrected //                | LR says that this is okay // | <input type="checkbox"/>            |
| Fixed heading test (spin)   | 180 <input type="text"/>                                                                                                                                                                                                      | Avoidance Off, Note Heading Used //         | <input type="text"/>         | <input checked="" type="checkbox"/> |
| Waypoint course test (spin) | 36.797, -121.847 <input type="text"/>                                                                                                                                                                                         | Avoidance Off, Note Waypoint Course Used // | <input type="text"/>         | <input checked="" type="checkbox"/> |
| Buoy Release Mechanism      | device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (19h30m22.549s), ampsPower=false, powerThreadActive=false //                                                                             | Catch release buoy by hand //               | <input type="text"/>         | <input checked="" type="checkbox"/> |
| Octopus Cable 01            | OK //                                                                                                                                                                                                                         | Must Pass //                                | <input type="text"/>         | <input checked="" type="checkbox"/> |
| Octopus Cable 02            | OK //                                                                                                                                                                                                                         | Must Pass //                                | <input type="text"/>         | <input checked="" type="checkbox"/> |
| AIS Status                  | lastSeen=MMSI 366934770 (NOAHS ARK). Pos=36.804477, -121.785895. t=30:0:FISHING, 2025-06-06T17:49:31.199Z, lengthErrs=1, latlonErrs=0, broadcastCount=15643, lastRx=17.324s, numberObserved=28, averageRxRateMillis=1.478s // | If in harbor, must see MMSI //              | <input type="text"/>         | <input checked="" type="checkbox"/> |
| Photo Document              |                                                                                                                                                                                                                               |                                             | <input type="text"/>         | <input checked="" type="checkbox"/> |

Vehicle Communication and Telemetry

| Item/Procedure | Readings / Specifications                                                        | Comments             | Initials                            |
|----------------|----------------------------------------------------------------------------------|----------------------|-------------------------------------|
| WX reporting   | Temp=16.4°C, Press=1014.6mb, Wind Speed=2.08kn, Wind Dir=10.3°. Heading=24.7° // | <input type="text"/> | <input checked="" type="checkbox"/> |
|                |                                                                                  |                      |                                     |

|                           |                                                                                                                                                                                                                                                                                                                                                                                   |             |             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|
| UBLOX GPS                 | 2025-06-06T17:49:51Z@36.8024333,-121.7871387,lastRx=0.114s, quality=100, timeout=1m, nmeaValid=true, clockDt=2.388s, lastValidFix=2025-06-06T17:49:51Z@36.8024333,-121.7871387, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=9.07,std=0.71,min=8.00,max=11.00,n=300,hdop:sma=1.12,std=0.04,min=1.00,max=1.47,n=300,altitude:sma=2.80,std=1.69,min=-0.70,max=5.60,n=300 | <div></div> | <div></div> |
| Airmar GPS                | 2025-06-06T17:49:50.400Z@36.80242,-121.78711,lastRx=0.226s, quality=80, timeout=5m, nmeaValid=true, clockDt=1.675s, lastValidFix=2025-06-06T17:49:50.400Z@36.80242,-121.78711, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=9.92,std=0.27,min=9.00,max=10.00,n=300,hdop:sma=1.05,std=0.05,min=1.00,max=1.10,n=300,altitude:sma=7.25,std=0.75,min=5.90,max=8.90,n=300   | <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 | Disabled                                                                                                                                                                                                                                                                                                                                                                          | <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