

SV3 Pre-Launch Checklist

|         |                          |              |                     |
|---------|--------------------------|--------------|---------------------|
| Date    | 2021-10-27T23:53:01.278Z | Glider Name  | SV3-794595959(Tiny) |
| Tech(s) | cwahl                    | Organization | MBARI               |
| Project | MBTS                     | Ship/Op Area | Paragon MB          |

Software Information

|                 |                                                                                                                                                        |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regulus Version | Tiny, sn=794595959, 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, LogAlarmReporter, PortForwarder, ThrusterAdjuster Not running: GPSasRudderCompass                                              |

Communication

| Item/Procedure             | Readings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Comments | Initials                            |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------|
| WiFi Connection            | Wifi is On                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          | <input checked="" type="checkbox"/> |
| Virtual Relay              | 0 queued msgs state=TALKING, sent=2355, lastTx=10.107s, avgTxSize=259.0B, totalTx=818.487KB, received=19, lastRx=9.893s, avgRxSize=5.0B, totalRx=12.639KB, powerState=ON (1d30m33.061s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false, (144/144 success rate), sleepTime=120000, packetSize=8192, numberOfDoTransactionFailures=6,                                                                                                                                                                                      |          | <input checked="" type="checkbox"/> |
| WGMS Iridium               | IMEI:300434060708190, starts=1, r=27, w=7, sessionAttempts=424, sessionErrs=17, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=2.6 (i=1), 0 queued msgs state=TALKING, sent=7, lastTx=6h47m38.003s, totalTx=0.667KB, received=27, lastRx=7m42.913s, avgRxSize=34.0B, totalRx=1.086KB, powerState=ON (1d30m9.085s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false                                                                                                                                                                  |          | <input checked="" type="checkbox"/> |
| Vehicle telemetry received | totalBytesSent=819.154kB, received=46, totalBytesReceived=13.725kB, lastRx=7m42.941s, 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=46, #handled=46, lastRx=rx=2021-10-27T23:45:18.499Z, receiver=iridiumModem, headerByte=0x0A, length=30],UnsupportedMessageHandler[active=true, #handled=0], minimumMTU=338 |          | <input checked="" type="checkbox"/> |
| Location                   | Using GPSUblox, declination=12.8333025, failoverCounter=1, timeLastSwitchedGps=2021-10-26T23:24:58Z, clockDt=-0.453s                                                                                                                                                                                                                                                                                                                                                                                                                               |          | <input checked="" type="checkbox"/> |
| Tracker telemetry received | <div>Battery (Volts)15.7 volts</div> <div>Report Rate4 hours</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          | <input checked="" type="checkbox"/> |

Configuration

| Item/Procedure                      | Readings           | Specifications                      | Comments | Initials                            |
|-------------------------------------|--------------------|-------------------------------------|----------|-------------------------------------|
| Tracker WGMS name                   | Tiny Tracker       |                                     |          | <input checked="" type="checkbox"/> |
| (Optional) Second Tracker Name      |                    |                                     |          | <input type="checkbox"/>            |
| Drybox WGMS name                    | CCU SV3-011        |                                     |          | <input checked="" type="checkbox"/> |
| Float name                          | Tiny               |                                     |          | <input checked="" type="checkbox"/> |
| Glider name                         | Tiny v200          |                                     |          | <input checked="" type="checkbox"/> |
| Umbilical Length                    | 4m                 |                                     |          | <input checked="" type="checkbox"/> |
| G1                                  |                    |                                     |          | <input type="checkbox"/>            |
| G2                                  | Ecopuck plus VR2C  |                                     |          | <input checked="" type="checkbox"/> |
| G3                                  |                    |                                     |          | <input type="checkbox"/>            |
| T1                                  |                    |                                     |          | <input type="checkbox"/>            |
| D1                                  |                    |                                     |          | <input type="checkbox"/>            |
| S1                                  | Hotspot 3 with DAT |                                     |          | <input checked="" type="checkbox"/> |
| S2                                  | GPCTD plus D0      |                                     |          | <input checked="" type="checkbox"/> |
| S3                                  | pCO2 plus pH       |                                     |          | <input checked="" 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       | 513.302                        | Will charge overnight with charger | <input checked="" type="checkbox"/> |
| Solar Power Indicators: > 0 | 2.281<br>0.0<br>2.099<br>2.619 | In dockhouse shadow                | <input checked="" type="checkbox"/> |

| Item/Procedure                                                                                    | Readings             |                  |                |                          |          | Initials                            |
|---------------------------------------------------------------------------------------------------|----------------------|------------------|----------------|--------------------------|----------|-------------------------------------|
| Domain Info                                                                                       | AMPS Hardware Status | Temperature (°C) | Pressure (kPa) | Hardware Uptime          | Comments | Initials                            |
| Domain_Name=Host, Node=1, HW_SerNum=0x3132471639323739002d0037 On=Y                               | OK                   | 28.3             | 119.8          | Uptime: 1 day, 00:33:24  |          | <input checked="" type="checkbox"/> |
| Domain_Name=Thruder-2, Node=3, HW_SerNum=0x3333470738373634002c001c On=Y                          | OK                   | 19.0             | 143.0          | Uptime: 1 day, 00:26:03  |          | <input checked="" type="checkbox"/> |
| Domain_Name=PyldInt-0x3332470932363032002b0025, Node=5, HW_SerNum=0x3332470932363032002b0025 On=Y | OK                   | 21.8             | 114.9          | Uptime: 0 days, 07:06:38 |          | <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                              | Inspect, note condition                                   |          | <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, lock nuts, and seizing wire |          | <input checked="" type="checkbox"/> |
|       | Thruder                           | Hardware secure                                           |          | <input checked="" type="checkbox"/> |

Vehicle Functionality

| Item/Procedure              | Readings                                                                                                                                                                                                                              | Specifications                           | Comments                  | Initials                            |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------------------------|-------------------------------------|
| Thruster Spin               | 458.0                                                                                                                                                                                                                                 | 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  | 27T23:53:00.180Z,desiredHeading=327.5,compass=26.8,rack=-12.9,post=-16.2rudderStatus=0000000B,)                                                                                                                                       | Right, Left, Center                      |                           | <input checked="" type="checkbox"/> |
| Thruder Compass Correction  | Thruder compass is corrected                                                                                                                                                                                                          | recommended NOT corrected                | LR says that this is okay | <input checked="" type="checkbox"/> |
| Fixed heading test (spin)   | 180                                                                                                                                                                                                                                   | Avoidance Off, Note Heading Used         |                           | <input checked="" type="checkbox"/> |
| Waypoint course test (spin) | 41                                                                                                                                                                                                                                    | Avoidance Off, Note Waypoint Course Used |                           | <input checked="" type="checkbox"/> |
| Buoy Release Mechanism      | device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (1d28m12.745s), ampsPower=false, powerThreadActive=false                                                                                         | 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                  | lastSeen=MMSI 338415000 (RACHEL CARSON). Pos=36.802173, -121.787198. t=70:0:UNDERWAY_ENGINE, 2021-10-27T23:53:05.939Z, lengthErrs=2, latlonErrs=0, broadcastCount=15637, lastRx=0.647s, numberObserved=10, averageRxRateMillis=8.341s | 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=17.2°C, Press=1023.8mb, Wind Speed=4.01kn, Wind Dir=175.2°. Heading=40.4°                                                                                                                                                                                                                                                                                                     |          | <input checked="" type="checkbox"/> |
| UBLOX GPS                 | 2021-10-27T23:53:06Z@36.8024113,-121.7871383,lastRx=0.261s, quality=100, timeout=1m, nmeaValid=true, clockDt=0.602s, lastValidFix=2021-10-27T23:53:06Z@36.8024113,-121.7871383, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=9.00,std=0.06,min=8.00,max=9.00,n=300,hdop:sma=0.93,std=0.04,min=0.90,max=1.03,n=300,altitude:sma=-1.48,std=1.28,min=-4.10,max=2.20,n=300  |          | <input checked="" type="checkbox"/> |
| Airmar GPS                | 2021-10-27T23:53:05.700Z@36.802455,-121.78714,lastRx=0.657s, quality=80, timeout=5m, nmeaValid=true, clockDt=0.944s, lastValidFix=2021-10-27T23:53:05.700Z@36.802455,-121.78714, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=7.06,std=0.24,min=7.00,max=8.00,n=300,hdop:sma=1.06,std=0.07,min=1.00,max=1.20,n=300,altitude:sma=2.54,std=5.26,min=-9.00,max=13.20,n=300 |          | <input checked="" type="checkbox"/> |
| Torpedo GPS               | Not Available!                                                                                                                                                                                                                                                                                                                                                                     |          | <input checked="" type="checkbox"/> |
| Water speed readings      | Unknown speed; ncc=0, nci=0, tec=0, aip=0.00                                                                                                                                                                                                                                                                                                                                       |          | <input checked="" 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

MBTS plus CPF tracking deployment  
New DAT Transducer installed on skeg

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*

Submit

Print

Clear User Input