

SV3 Pre-Launch Checklist

Date	2024-07-02T16:50:08.708Z	Glider Name	SV3-16977098(SV3-034)
Tech(s)	Jordan, Chris	Organization	MBARI
Project	Bioacoustics	Ship/Op Area	Paragon/Monterey Bay

Software Information

Regulus Version	SV3-034, sn=16977098, 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

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On		☒
Virtual Relay	0 queued msgs state=WAITING, sent=0, received=0, powerState=ON (16m37.902s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)		☐
WGMS Iridium	IMEI:300434060000860, starts=1, r=0, w=41, sessionAttempts=52, sessionErrs=10, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=3.1 (i=5), 1 queued msgs state=TALKING, sent=41, lastTx=7.789s, avgTxSize=122.2B, totalTx=4.895kB, received=0, powerState=ON (16m8.413s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]0 blocked messages, averageMessageQueueRate=17.059s, sent=41, totalBytesSent=4.895kB, received=0, 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]		☒
Location	Using GPSUblox, declination=12.578113, failoverCounter=1, timeLastSwitchedGps=2024-07-02T16:35:51Z, clockDt=6.131s		☒
Tracker telemetry received	Battery (Volts)15.69 V Report Rate4 hrs		☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Hansen Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-034			☒
Float name	Hansen			☒
Glider name	Hansen			☒
Umbilical Length	4m			☒
G1				☐
G2				☐
G3	APU			☒
T1				☐
D1				☐

S4	24, 11:18 AM	Airmar	SV3-034: SV3 Pre-Launch Checklist	☒
	Event definitions		Compare against standard list	☒
	Vehicle and tracker op area defined	Yes	Note area name(s) and enable alarms	Does this need to change based on the mission? ☒
	Escalation list created/populated			☒

Vehicle Status

Item/Procedure	Readings	Comments	Initials
Battery [Wh] > 700 Wh	1445.126		✓
Solar Power Indicators: > 0	29.554		✓
	0.0		
	31.524		
	30.733		

Item/Procedure	Readings						
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Init	
Domain_Name=Host, Node=1, HW_SerNum=0x3332470b32363032001e0022 On=Y	OK	23.2	113.6	Uptime: 0 days, 00:21:09			
Domain_Name=Bat-0x33324703313238340031002d, Node=3, HW_SerNum=0x33324703313238340031002d On=Y	OK	26.4	112.5	Uptime: 0 days, 00:22:25			
Domain_Name=Thruder-2, Node=4, HW_SerNum=0x343747033030383638001f0033 On=Y	OK	26.5	300.7	Uptime: 0 days, 00:14:14			

Mechanical Checks

	Item/Procedure	Specifications	Comments	Initials
Float	Wet-mates connected/lubed	3M Silicone Lubricant Spray 3M ID No. 62-4678-4930-3		☒
	Connector covers secure			☒
	Drybox secure	Wiggle test		☒
	Contact info secure			☒
	Hull	Inspect, note condition		☒
	Skeg/Fin	Secure		☒
Sub	Hardware secure			☐
	Umbilical visual inspection	Free of voids/defects		☒
	Umbilical ribbon cable inspection			☒
	Roll pins inserted	Flush with surface		☒
	Wings	Hardware secure with Loctite, lock nuts, and seizing wire		☒
	Thrudder	Hardware secure		☒

Vehicle Functionality

Item/Procedure	Readings	Specifications	Comments
Thruster Spin	462.0	Spins freely, slow and fast speeds	Cruise
Rudder Range of Motion		Rudder moves freely and smoothly	
Rudder right, left, center	02T16:50:07.022Z,desiredHeading=191,compass=165.6,rack=11.5,post=13.2rudderStatus=0000000B,)	Right, Left, Center	
Thruder Compass Correction	Thruder compass is corrected	recommended NOT corrected	LR says OK
Fixed heading test (spin)	270	Avoidance Off, Note Heading Used	

7/24, 11:18 AM

Octopus Cable 01	OK	Must Pass	
Octopus Cable 02	OK	Must Pass	
AIS Status	lastSeen=MMSI 366934770 (NOAHS ARK). Pos=36.804090, -121.785210. t=30:0:FISHING, 2024-07-02T16:50:14.903Z, lengthErrs=0, latlonErrs=0, broadcastCount=219, lastRx=2.911s, numberObserved=14, averageRxRateMillis=10.128s	If in harbor, must see MMSI	
Photo Document			

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=19.0°C, Press=1012.2mb, Wind Speed=1.02kn, Wind Dir=203.4°. Heading=293.0°		☒
UBLOX GPS	2024-07-02T16:50:24Z@36.8025915,-121.7870828,lastRx=0.624s, quality=100, timeout=1m, nmeaValid=true, clockDt=6.103s, lastValidFix=2024-07-02T16:50:24Z@36.8025915,-121.7870828, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=8.02,std=0.29,min=7.00,max=9.00,n=300,hdop:sma=1.19,std=0.10,min=1.16,max=1.56,n=300,altitude:sma=2.85,std=1.10,min=0.50,max=5.00,n=300		☒
Airmar GPS	2024-07-02T16:50:24.400Z@36.8025917,-121.7871,lastRx=0.383s, quality=80, timeout=5m, nmeaValid=true, clockDt=6.343s, lastValidFix=2024-07-02T16:50:24.400Z@36.8025917,-121.7871, gpsWatchdogFailureCounter=0, ggaQCount:1=115,2=185,numSat:sma=7.62,std=0.49,min=7.00,max=8.00,n=300,hdop:sma=1.20,std=0.00,min=1.20,max=1.20,n=300,altitude:sma=6.25,std=2.86,min=1.40,max=12		☒
Torpedo GPS	Not Available!		☐
Water speed readings	Unknown speed; ncc=0, nci=0, tec=0, aip=0.00		☐
Obstacle Avoidance Status	Enabled		☒
Check alarms	"Out of bounds" red. All yellow/green		☒

General Comments

Issues:

1. Unsure if vehicle op area need to change based on the new mission?

2. Solar Panels need to be secured post Chad's install.

Technician Signature: Jordan Caress

- 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