

SV3 Pre-Launch Checklist

Date	2023-04-03T21:16:28.729Z	Glider Name	SV3-1531399927 (SV3-121)
Tech(s)	cwahl	Organization	MBARI
Project	KBB Bioacoustics	Ship/Op Area	Paragon MB

Software Information

Regulus Version	SV3-121, sn=1531399927, Running Regulus 3.2.2, software version of 2019-12-03T23:58:34Z, production build 35, sv3, SOMDM3730-31-1880AKIR-A, (1.2.3) secure
Plugins	Running: AirmarWeather, GPSasRudderCompass, LogAlarmReporter, PortForwarder, RudderParametersManager, ThrusterAdjuster, Winch

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On		☒
Virtual Relay	0 queued msgs state=WAITING, sent=0, received=0, powerState=ON (4h22m23.312s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)	Still not working...	☐
WGMS Iridium	IMEI:300434060771430, starts=1, r=6, w=311, sessionAttempts=331, sessionErrs=14, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.3 (i=5), 1 queued msgs state=TALKING, sent=311, lastTx=2m37.018s, avgTxSize=146.8B, totalTx=39.990kB, received=6, lastRx=3h21m8.034s, totalRx=0.204kB, powerState=ON (4h21m54.765s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]415 blocked messages, averageMessageQueueRate=45.710s, sent=311, totalBytesSent=39.990kB, received=6, totalBytesReceived=0.204kB, lastRx=3h21m8.082s, 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=6, #handled=6, lastRx=rx=2023-04-03T17:55:20.738Z, receiver=iridiumModem,		☒
Location	Using GPSublox, declination=12.6971655, failoverCounter=1, timeLastSwitchedGps=2023-04-03T16:56:27Z, cLockDt=3.141s		☒
Tracker telemetry received	Battery (Volts) Report Rate	15.7 volts 4 hours	☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Hansen Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-121 MBARI Spare			☒
Float name	WG Hansen			☒
Glider name	WG Hansen			☒
Umbilical Length	4m			☒
G1				☐
G2				☐
G3	APU			☒
T1				☐
D1				☐
S1				☐
S2				☐
S3				☐
S4	Airmar			☒
Event definitions		Compare against standard list		☒
Vehicle and tracker op area defined		Note area name(s) and enable alarms		☒
Escalation list created/populated				☒

Vehicle Status

Item/Procedure	Readings	Comments	Initials
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Battery [Wh] > 700 Wh	1709.11		☐
Solar Power Indicators: > 0	2.875 0.0 3.741 5.279		☐

Item/Procedure	Readings					
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Initials
Domain_Name=Host, Node=1, HW_SerNum=0x474850072038384d00390021 On=Y	OK	21.2	112.5	Uptime: 0 days, 04:25:57		
Domain_Name=Bat-0x33334707383736340044003b, Node=3, HW_SerNum=0x33334707383736340044003b On=Y	OK	19.9	114.1	Uptime: 0 days, 04:19:17		
Domain_Name=Thruder-2, Node=4, HW_SerNum=0x3437470330383638001f0033 On=Y	OK	13.4	239.2	Uptime: 0 days, 04:17:57		

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		
	Thruder	Hardware secure		

Vehicle Functionality

Item/Procedure	Readings	Specifications	Comments	Initials
Thruster Spin	444.0	Spins freely, slow and fast speeds		
Rudder Range of Motion		Rudder moves freely and smoothly		
Rudder right, left, center	Rudder(2023-04-03T21:16:28.961Z,desiredHeading=353.5,compass=18.6,rack=-11.4,post=-10.2rudderSt	Right, Left, Center		
Thruder Compass Correction	Thruder compass is corrected	recommended NOT corrected	LR says that this is okay...	
Fixed heading test (spin)	180	Avoidance Off, Note Heading Used		
Waypoint course test (spin)	220	Avoidance Off, Note Waypoint Course Used		
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (4h19m47.944s), ampsPower=false, powerThreadActive=false	Catch release buoy by hand		
Octopus Cable 01	OK	Must Pass		
Octopus Cable 02	OK	Must Pass		
AIS Status	lastSeen=MMSI 367529450 (KING PHILLIP). Pos=36.804930, -121.786033. t=30:0:NOT_DEFINED, 2023-04-03T21:16:33.650Z, lengthErrs=0, latlonErrs=0, broadcastCount=1328, lastRx=5.637s, numberObserved=10, averageRxRateMillis=5.852s	If in harbor, must see MMSI		
Photo Document				

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=10.9°C, Press=1021.8mb, Wind Speed=13.52kn, Wind Dir=285.8°. Heading=4.3°		
UBLOX GPS	2023-04-03T21:16:43Z@36.8023617,-121.7871603,lastRx=0.022s, quality=100, timeout=1m, nmeaValid=true, clockDt=3.654s, lastValidFix=2023-04-03T21:16:43Z@36.8023617,-121.7871603, gpsWatchdogFailureCounter=0, ggaQCount=2=300,numSat:sma=9.97,std=0.17,min=9.00,max=10.00,n=300,hdop:sma=0.83,std=0.04,min=0.82,max=1.01,n=300,altitude:sma=3.11,std=1.15,min=1.50,max=5.80,n=300		
Airmar GPS	2023-04-03T21:16:42.900Z@36.802415,-121.7871967,lastRx=0.106s, quality=80, timeout=5m, nmeaValid=true, clockDt=3.486s, lastValidFix=2023-04-03T21:16:42.900Z@36.802415,-121.7871967, gpsWatchdogFailureCounter=0, ggaQCount=2=300,numSat:sma=9.00,std=0.00,min=9.00,max=9.00,n=300,hdop:sma=0.90,std=0.00,min=0.90,max=0.90,n=300,altitude:sma=15.47,std=2.31,min=7.70,max=19.00,n=300		
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

Hull repaired by Elkhorn Composites. Upper roll bushings replaced due to wear on old bushings. KBB dual transducer set up installed for this deployment.

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