LIQUID ROBOTICS
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SV3-1531399927 "**SV3-121**" Version:3.2.2 User:cwahl Hold ~~UNK~~ ~~INET~~ 1399Wh WiFi 2023-01-11T19:03:03.519Z

SV3-121: SV3 Pre-Launch Checklist

SV3 Pre-Launch Checklist

Date	2023-01-11T19:03:03.567Z	Glider Name	SV3-1531399927(SV3-121)
Tech(s)	cwahl	Organization	MBARI
Project	KBB Astrid TOPO line	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 (1d44m37.399s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)		☐
WGMS Iridium	IMEI:300434060771430, starts=1, r=5, w=1151, sessionAttempts=1365, sessionErrs=209, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=3.3 (i=3), 0 queued msgs state=TALKING, sent=1151, lastTx=17.614s, avgTxSize=92.1B, totalTx=106.623kB, received=5, lastRx=23h47m7.549s, totalRx=0.149kB, powerState=ON (1d44m9.330s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☑
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]0 blocked messages, totalMessagesDiscarded=414, averageMessageQueueRate=55.150s, sent=1151, totalBytesSent=106.623kB, received=5, totalBytesReceived=0.149kB, lastRx=23h47m7.548s, 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=5, #handled=5, lastRx=rx=2023-01-		☑
Location	Using GPSUblox, declination=12.718861, failoverCounter=1, timeLastSwitchedGps=2023-01-10T18:21:01Z, clockDt=2.410s		☑
Tracker telemetry received	**Battery (Volts)** 15.66 Volts **Report Rate** 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	JRF 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	Initals

Battery [Wh] > 700 Wh	1399.537		☑
Solar Power Indicators: > 0	4.879 0.0 4.952 5.302		☑

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	17.7	106.5	Uptime: 1 day, 00:50:06	Repressurize next deployment!	☑
Domain_Name=Bat-0x3333470738373634004403b, Node=3, HW_SerNum=0x3333470738373634004403b On=Y	OK	14.0	112.6	Uptime: 1 day, 00:53:24		☑
Domain_Name=Thrudder-2, Node=4, HW_SerNum=0x34374703303836380001f0033 On=Y	OK	12.7	242.8	Uptime: 1 day, 00:42:01		☑

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	Initials
Thruster Spin	447.0	Spins freely, slow and fast speeds		☑
Rudder Range of Motion		Rudder moves freely and smoothly		☑
Rudder right, left, center	Rudder(2023-01-11T19:02:59.969Z,desiredHeading=230.6,compass=205.7,rack=11.5,post=14.6rudderSta	Right, Left, Center		☑
Thrudder Compass Correction	Thrudder 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)	77	Avoidance Off, Note Waypoint Course Used		☑
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (1d42m3.054s), 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 367766000 (WESTERN FLYER). Pos=36.802410, -121.787057. t=33:0:MOORED, 2023-01-11T19:03:03.103Z, lengthErrs=0, latlonErrs=0, broadcastCount=3408, lastRx=3.400s, numberObserved=4,	If in harbor, must see MMSI		☑
Photo Document				☑

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=10.2˚C, Press=1021.1mb, Wind Speed=6.43kn, Wind Dir=146.8˚. Heading=180.0˚		☑
UBLOX GPS	2023-01-11T19:03:09Z@36.8023752,-121.787128,lastRx=0.312s, quality=100, timeout=1m, nmeaValid=true, clockDt=2.475s, lastValidFix=2023-01-11T19:03:09Z@36.8023752,-121.787128, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.50,std=0.56,min=9.00,max=11.00,n=300,hdop:sma=0.85,std=0.07,min=0.78,max=1.05,n=300,altitude:sma=4.00,std=0.87,min=2.40,max=6.00,n=300		☑
Airmar GPS	2023-01-11T19:03:08.800Z@36.8023367,-121.7871417,lastRx=0.470s, quality=80, timeout=5m, nmeaValid=true, clockDt=2.268s, lastValidFix=2023-01-11T19:03:08.800Z@36.8023367,-121.7871417, gpsWatchdogFailureCounter=0, ggaQCount:1=1,2=299,numSat:sma=10.00,std=0.00,min=10.00,max=10.00,n=300,hdop:sma=0.82,std=0.04,min=0.80,max=1.00,n=300,altitude:sma=6.26,std=2.66,min=1.20,max=1		☑
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

First WG deployment of 2022

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