LIQUID ROBOTICS
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SV3-466563798 "**SV3-110**" Version:3.2.2 User:cwahl Hold ~~UNK~~ ~~INET~~ 854Wh WiFi 2024-04-18T17:56:09.517Z

SV3 Pre-Launch Checklist

Date	2024-04-18T17:56:15.476Z	Glider Name	SV3-466563798(SV3-110)
Tech(s)	cwahl	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		☑
Virtual Relay	0 queued msgs state=WAITING, sent=0, received=0, powerState=OFF (18h6m55.358s), virtualDevice=true, powerThreadActive=false (no internet connectivity)	Still not working...	☐
WGMS Iridium	IMEI:300434060354880, starts=1, r=5, w=817, sessionAttempts=933, sessionErrs=78, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.8 (i=5), 0 queued msgs state=TALKING, sent=817, lastTx=13.059s, avgTxSize=109.4B, totalTx=96.019kB, received=5, lastRx=14h30m33.452s, totalRx=0.201kB, powerState=ON (18h6m31.602s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☑
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]0 blocked messages, totalMessagesDiscarded=396, averageMessageQueueRate=1m7.200s, sent=817, totalBytesSent=96.019kB, received=5, totalBytesReceived=0.201kB, lastRx=14h30m33.512s, 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=2024-04-		☑
Location	Using GPSUblox, declination=12.597884, failoverCounter=1, timeLastSwitchedGps=2024-04-17T23:51:33Z, clockDt=4.277s		☑
Tracker telemetry received	**Battery (Volts)** 15.9 volts **Report Rate** 4 hours		☑

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker			☑
(Optional) Second Tracker Name				☐
Drybox WGMS name	CCU SV3-110 Tiny			☑
Float name	Return of Tiny			☑
Glider name	Tiny v150/v200			☑
Umbilical Length	4m			☑
G1	Ecopuck			☑
G2				☐
G3				☐
T1				☐
D1				☐
S1	Hotspot with MF DAT			☑
S2	GPCTD plus DO			☑
S3	pCO2 plus pH			☑
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	854.105		☑
Solar Power Indicators: > 0	19.077 0.0 20.491 22.799		☑

Item/Procedure	Readings					
Domain Info	**AMPS Hardware Status**	**Temperature (°C)**	**Pressure (kPa)**	**Hardware Uptime**	**Comments**	**Initials**
Domain_Name=Host, Node=1, HW_SerNum=0x32385119353634330055004a On=Y	OK	22.8	114.9	Uptime: 0 days, 18:09:52		☑
Domain_Name=Thrudder-2, Node=3, HW_SerNum=0x4748500520383 84d0057002b On=Y	OK	20.4	256.1	Uptime: 0 days, 18:02:18		☑
Domain_Name=PyldInt-0x333351143733303000 43001a, Node=5, HW_SerNum=0x333351143733303000 43001a On=Y	OK	16.9	111.1	Uptime: 0 days, 00:00:-1		☑

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	462.0	Spins freely, slow and fast speeds		☑
Rudder Range of Motion		Rudder moves freely and smoothly		☑
Rudder right, left, center	Rudder(2024-04-18T17:56:15.941Z,desiredHeading=0.1,compass=25.2,rack=-11.4,post=-10.8rudderStat	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)	41	Avoidance Off, Note Waypoint Course Used		☑
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (18h4m35.610s), 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 338407295 (ONELOVE). Pos=36.813138, -121.787940. t=36:0:MOORED, 2024-04-18T17:56:24.694Z, lengthErrs=0, latlonErrs=0, broadcastCount=4663, lastRx=1.872s, numberObserved=19, averageRxRateMillis=22.949s	If in harbor, must see MMSI		☑
Photo Document				☑

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=13.4˚C, Press=1015.2mb, Wind Speed=5.65kn, Wind Dir=224.3˚. Heading=35.4˚		☑
UBLOX GPS	2024-04-18T17:56:31Z@36.802343,-121.787148,lastRx=0.053s, quality=100, timeout=1m, nmeaValid=true, clockDt=4.321s, lastValidFix=2024-04-18T17:56:31Z@36.802343,-121.787148, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.95,std=0.22,min=10.00,max=11.00,n=300,hdop:sma=0.84,std=0.01,min=0.84,max=0.87,n=300,altitude:sma=0.59,std=0.82,min=-1.30,max=1.70		☑
Airmar GPS	2024-04-18T17:56:30.900Z@36.80235,-121.7871367,lastRx=0.047s, quality=80, timeout=5m, nmeaValid=true, clockDt=4.100s, lastValidFix=2024-04-18T17:56:30.900Z@36.80235,-121.7871367, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=11.00,std=0.06,min=10.00,max=11.00,n=300,hdop:sma=0.90,std=0.01,min=0.90,max=1.00,n=300,altitude:sma=0.90,std=0.86,min=-0.70,max=2.00		☑
Torpedo GPS	Not Available!		☑
Water speed readings	Unknown speed; ncc=0, nci=0, tec=0, aip=0.00		☑
Obstacle Avoidance Status	Disabled		☑
Check alarms	"Out of bounds" red. All yellow/green		☑

General Comments

Airmar replaced. It looks like AIS or associated WGMS avoidance alarms are causing the excessive Iridium usage. No fix yet!

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