LIQUID ROBOTICS
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SV3-1167408762 "**SV3-029**"(*SV3-029*) Version:3.2.2 User:cwahl Hold ~~UNK~~ ~~INET~~ 1619Wh WiFi 2023-08-08T21:34:02.670Z

SV3-029: SV3 Pre-Launch Checklist

Status Checklist Config Operate Setup Help

Readme

SV3 Pre-Launch Checklist

Date	2023-08-08T21:34:03.348Z	Glider Name	SV3-1167408762(SV3-029)
Tech(s)	cwahl	Organization	MBARI
Project	Blue Whale Observatory Bioacoustics	Ship/Op Area	Paragon - Monterey Bay

Software Information

Regulus Version	SV3-029, sn=1167408762, 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=OFF (14m59.230s), virtualDevice=true, powerThreadActive=false (no internet connectivity)		☑
WGMS Iridium	IMEI:300434060620290, starts=1, r=0, w=33, sessionAttempts=44, sessionErrs=10, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.3 (i=5), 1 queued msgs state=TALKING, sent=33, lastTx=3.365s, avgTxSize=104.4B, totalTx=3.364kB, received=0, powerState=ON (14m31.739s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☑
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]11 blocked messages, averageMessageQueueRate=14.246s, sent=33, totalBytesSent=3.364kB, 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=tr		☑
Location	Using GPSUblox, declination=12.664002, failoverCounter=1, timeLastSwitchedGps=2023-08-08T21:21:45Z, clockDt=14.354s		☑
Tracker telemetry received	**Battery (Volts)** 15.9 volts **Report Rate** 4 hours		☑

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Hansen Tracker			☑
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-029			☑
Float name	Tiny replacement hull			☑
Glider name	Tiny v150			☑
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	Initals
Battery [Wh] > 700 Wh	1619.668		☑
Solar Power Indicators: > 0	21.483 0.0		☑

	23.99 26.014			

Item/Procedure	Readings					
Domain Info	**AMPS Hardware Status**	**Temperature (°C)**	**Pressure (kPa)**	**Hardware Uptime**	**Comments**	**Initials**
Domain_Name=Host, Node=1, HW_SerNum=0x3132471639323739003 4002c On=Y	OK	31.2	119.8	Uptime: 0 days, 00:28:52		☑
Domain_Name=Bat-0x333247033132383400310 02d, Node=2, HW_SerNum=0x333247033132383400310 02d On=Y	OK	29.0	115.8	Uptime: 0 days, 00:16:36		☑
Domain_Name=Thrudder-2, Node=3, HW_SerNum=0x474850052038384d0057002b On=Y	OK	26.3	280.8	Uptime: 0 days, 00:21:39		☑

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	450.0	Spins freely, slow and fast speeds		☑
Rudder Range of Motion		Rudder moves freely and smoothly		☑
Rudder right, left, center	Rudder(2023-08-08T21:34:00.338Z,desiredHeading=11.6,compass=36.4,rack=-11.4,post=-16.7rudderSta	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)	81	Avoidance Off, Note Waypoint Course Used		☑
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (11m58.142s), 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 367742810 (JOHN H MARTIN). Pos=36.804022, -121.786148. t=37:0:NOT_DEFINED, 2023-08-08T21:34:16.640Z, lengthErrs=0, latlonErrs=0, broadcastCount=126, lastRx=3.574s, numberObserved=7, averageRxRateMillis=6.887s	If in harbor, must see MMSI		☑
Photo Document				☑

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=19.4˚C, Press=1017.5mb, Wind Speed=2.63kn, Wind Dir=259.3˚. Heading=3.4˚		☑
UBLOX GPS	2023-08-08T21:34:35Z@36.802343,-121.7871298,lastRx=0.140s, quality=100, timeout=1m, nmeaValid=true, clockDt=14.620s, lastValidFix=2023-08-08T21:34:35Z@36.802343,-121.7871298, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.71,std=0.45,min=10.00,max=11.00,n=300,hdop:sma=0.80,std=0.03,min=0.78,max=0.84,n=300,altitude:sma=-0.19,std=0.92,min=-1.70,max=2.0		☑
Airmar GPS	2023-08-08T21:34:35Z@36.8023917,-121.7871583,lastRx=0.280s, quality=80, timeout=5m, nmeaValid=true, clockDt=14.480s, lastValidFix=2023-08-08T21:34:35Z@36.8023917,-121.7871583, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.00,std=0.00,min=10.00,max=10.00,n=300,hdop:sma=0.80,std=0.00,min=0.80,max=0.80,n=300,altitude:sma=8.70,std=3.53,min=-0.50,max=15.2		☑
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

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