LIQUID ROBOTICS
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SV3-794595959 "**Tiny**" Version:3.2.2 User:cwahl Hold ~~UNK~~ ~~INET~~ 889Wh WiFi 2021-08-17T22:08:32.636Z

SV3 Pre-Launch Checklist

Date	2021-08-17T22:08:32.687Z	Glider Name	SV3-794595959(Tiny)
Tech(s)	cwahl	Organization	MBARI
Project	Wet WiFi	Ship/Op Area	Paragon MB

Software Information

Regulus Version	Tiny, sn=794595959, 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, LogAlarmReporter, PortForwarder, ThrusterAdjuster Not running: GPSasRudderCompass

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On		☑
Virtual Relay	0 queued msgs state=WAITING, sent=0, received=0, powerState=ON (3h22m16.546s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)		☑
WGMS Iridium	IMEI:300434060708190, starts=1, r=6, w=191, sessionAttempts=254, sessionErrs=51, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=3.8 (i=5), 0 queued msgs state=TALKING, sent=191, lastTx=6.162s, avgTxSize=114.3B, totalTx=21.243kB, received=6, lastRx=2m6.267s, avgRxSize=41.0B, totalRx=0.205kB, powerState=ON (3h21m52.050s), virtualDevice=true, Requested		☑
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]367 blocked messages, averageMessageQueueRate=27.249s, sent=191, totalBytesSent=21.243kB, received=6, totalBytesReceived=0.205kB, lastRx=2m6.251s, 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=2021-		☑
Location	Using GPSUblox, declination=12.85136, failoverCounter=1, timeLastSwitchedGps=2021-08-17T18:48:33Z, clockDt=4.283s		☑
Tracker telemetry received	**Battery (Volts)** 15.7 **Report Rate** 4 hours		☑

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker			☑
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-011 Tiny			☑
Float name	Tiny			☑
Glider name	Tiny v150			☑
Umbilical Length	4m			☑
G1				☐
G2	Ecopuck plus VR2C			☑
G3				☐
T1				☐
D1				☐
S1	Wet WiFi cell modem			☑
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	889.098		☑
Solar Power Indicators: > 0	15.801 0.0 19.173 17.6		☑

Item/Procedure	Readings					
Domain Info	**AMPS Hardware Status**	**Temperature (°C)**	**Pressure (kPa)**	**Hardware Uptime**	**Comments**	**Initials**
Domain_Name=Host, Node=1, HW_SerNum=0x3132471639323739002d0037 On=Y	OK	26.5	119.6	Uptime: 0 days, 03:25:37		☑
Domain_Name=Thrudder-2, Node=3, HW_SerNum=0x3333470738373634002c001c On=Y	OK	20.9	148.8	Uptime: 0 days, 03:18:06		☑
Domain_Name=PyldInt-0x3332470932363032002b0025, Node=5, HW_SerNum=0x3332470932363032002b0025 On=Y	OK	21.5	115.4	Uptime: 0 days, 00:02:07		☑

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	443.0	Spins freely, slow and fast speeds		☑
Rudder Range of Motion		Rudder moves freely and smoothly		☑
Rudder right, left, center	Rudder(2021-08-17T22:08:31.536Z,desiredHeading=329.2,compass=20.9,rack=-12.9,post=-15.6rudd	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 (3h19m46.939s), 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 366966550 (OCEAN ANGEL 2). Pos=36.804860, -121.784998. t=30:0:NOT_DEFINED, 2021-08-17T22:08:32.307Z, lengthErrs=0, latlonErrs=0, broadcastCount=1924, lastRx=2.900s, numberObserved=8,	If in harbor, must see MMSI		☑
Photo Document				☑

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=17.1˚C, Press=1011.5mb, Wind Speed=6.10kn, Wind Dir=215.1˚. Heading=31.0˚		☑
UBLOX GPS	2021-08-17T22:08:39Z@36.8024972,-121.787099,lastRx=0.733s, quality=100, timeout=1m, nmeaValid=true, clockDt=3.754s, lastValidFix=2021-08-17T22:08:39Z@36.8024972,-121.787099, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=9.25,std=0.43,min=9.00,max=10.00,n=300,hdop:sma=1.05,std=0.00,min=1.05,max=1.05,n=300,altitude:sma=5.02,std=0.97,min=2.70,max		☑
Airmar GPS	2021-08-17T22:08:39.700Z@36.8024933,-121.78709,lastRx=0.123s, quality=80, timeout=5m, nmeaValid=true, clockDt=4.415s, lastValidFix=2021-08-17T22:08:39.700Z@36.8024933,-121.78709, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=8.00,std=0.00,min=8.00,max=8.00,n=300,hdop:sma=1.12,std=0.04,min=1.10,max=1.20,n=300,altitude:sma=2.70,std=5.02,min=-6.80,max		☑
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

Wet WiFi cell modem testing!

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