LIQUID ROBOTICS
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SV3-1531399927 "**SV3-121**" Version:3.2.2 User:jdec95 Hold ~~UNK~~ ~~INET~~ 1793Wh WiFi 2022-06-30T20:08:44.178Z

SV3-121: SV3 Pre-Launch Checklist

Status Checklist Config Operate Setup Help

Readme

SV3 Pre-Launch Checklist

Date	2022-06-30T20:08:44.353Z	Glider Name	SV3-1531399927(SV3-121)
Tech(s)	Jordan, Chris	Organization	MBARI
Project	Bioacoustics	Ship/Op Area	Paragon/Monterey Bay

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 (5h37m54.761s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)		☐
WGMS Iridium	IMEI:300434060771430, starts=1, r=4, w=458, sessionAttempts=510, sessionErrs=45, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.2 (i=5), 1 queued msgs state=TALKING, sent=458, lastTx=7.728s, avgTxSize=150.1B, totalTx=63.442kB, received=4, lastRx=4h41m38.435s, totalRx=0.125kB, powerState=ON (5h37m27.679s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☑
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]410 blocked messages, averageMessageQueueRate=46.221s, sent=458, totalBytesSent=63.442kB, received=4, totalBytesReceived=0.125kB, lastRx=4h41m38.454s, 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=4, #handled=4, lastRx=rx=2022-06-30T15:27:05.954Z, receiver=iridiumModem,		☑
Location	Using GPSUblox, declination=12.769229, failoverCounter=1, timeLastSwitchedGps=2022-06-30T14:33:03.010Z, clockDt=3.563s		☑
Tracker telemetry received	**Battery (Volts)** 15.72 **Report Rate** 4 hrs		☑

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Hansen Tracker			☑
(Optional) Second Tracker Name				☐
Drybox WGMS name	Hansen			☑
Float name	Hansen			☑
Glider name	Hansen			☑
Umbilical Length	4m			☑
G1	NA			☐
G2	NA			☐
G3	APU			☑

T1	NA			☐
D1	NA			☐
S1	NA			☐
S2	NA			☐
S3	NA			☐
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	1793.681		☑
Solar Power Indicators: > 0	4.11 0.0 3.585 7.467		☑

Item/Procedure	Readings					
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Init
Domain_Name=Host, Node=1, HW_SerNum=0x474850072038384d00390021 On=Y	OK	28.0	122.4	Uptime: 0 days, 05:42:02		☑
Domain_Name=Bat-0x474850072038384d00380042, Node=3, HW_SerNum=0x474850072038384d00380042 On=Y	OK	26.1	114.3	Uptime: 0 days, 05:43:22		☑
Domain_Name=Thrudder-2, Node=4, HW_SerNum=0x343747033038363800 1f0033 On=Y	OK	21.6	273.6	Uptime: 0 days, 05:34:13		☑

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
Thruster Spin	452.0	Spins freely, slow and fast speeds	
Rudder Range of Motion		Rudder moves freely and smoothly	
Rudder right, left, center	Rudder(2022-06-30T20:08:42.092Z,desiredHeading=136.1,compass=108.8,rack=11.5,post=14rudderStatu	Right, Left, Center	
Thrudder Compass Correction	Thrudder compass is corrected	recommended NOT corrected	
Fixed heading		Avoidance Off,	

test (spin)	180	Note Heading Used	
Waypoint course test (spin)		Avoidance Off, Note Waypoint Course Used	21
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (5h35m28.434s), 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=36.802402, -121.787048. t=33:0:UNDERWAY_ENGINE, 2022-06-30T20:08:42.830Z, lengthErrs=0, latlonErrs=0, broadcastCount=3793, lastRx=6.407s, numberObserved=12, averageRxRateMillis=6.669s	If in harbor, must see MMSI	
Photo Document			

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=17.9˚C, Press=1019.1mb, Wind Speed=4.38kn, Wind Dir=265.6˚. Heading=89.7˚		☑
UBLOX GPS	2022-06-30T20:08:53Z@36.8023002,-121.787124,lastRx=0.321s, quality=100, timeout=1m, nmeaValid=true, clockDt=3.727s, lastValidFix=2022-06-30T20:08:53Z@36.8023002,-121.787124, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=11.93,std=0.26,min=11.00,max=12.00,n=300,hdop:sma=0.81,std=0.02,min=0.79,max=0.92,n=300,altitude:sma=1.32,std=0.83,min=-0.30,max=3.00		☑
Airmar GPS	2022-06-30T20:08:52.500Z@36.8023533,-121.787095,lastRx=0.824s, quality=80, timeout=5m, nmeaValid=true, clockDt=3.191s, lastValidFix=2022-06-30T20:08:52.500Z@36.8023533,-121.787095, gpsWatchdogFailureCounter=0, ggaQCount:1=2,2=298,numSat:sma=11.14,std=0.37,min=10.00,max=12.00,n=300,hdop:sma=0.83,std=0.06,min=0.80,max=1.00,n=300,altitude:sma=2.34,std=4.15,min=-7.70,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

Vehicle was recently reconfigured. Thrudder was replaced due to ground faults and low housing pressure.

Technician Signature: Jordan

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