

Readme

SV3 Pre-Launch Checklist

Date	2021-05-17T19:40:20.689Z	Glider Name	SV3-1531399927(SV3-121)
Tech(s)	cwahl	Organization	MBARI
Project	Bioacoustics	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, 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 (2d21h44m5.294s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)		☒
WGMS Iridium	IMEI:300434060771430, starts=1, r=7, w=6768, sessionAttempts=7784, sessionErrs=1010, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.1 (i=5), 1 queued msgs state=TALKING, sent=6768, lastTx=2.557s, avgTxSize=162.00, totalTx=1132.354kB, received=7, lastRx=2d20h48m48.260s, totalRx=0.250kB, powerState=ON (2d21h43m37.241s),		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]1 blocked messages, totalMessagesDiscarded=275, averageMessageQueueRate=36.269s, sent=6768, totalBytesSent=1132.354kB, received=7, totalBytesReceived=0.250kB, lastRx=2d20h48m48.278s, 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		☒
Location	Using GPSUblox, declination=12.875959, failoverCounter=1, timeLastSwitchedGps=2021-05-14T21:58:33.010Z, clockDt=-0.815s		☒
Tracker telemetry received	Battery (Volts)15.8 Volts Report Rate4 hours		☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Hansen Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-121 MBARI Spare CCU			☒
Float name	Hansen			☒
Glider name	Hansen			☒
Umbilical Length	4m			☒
G1				☐
G2				☐
G3	APU			☒
T1				☐
D1				☐
S1				☐
S2				☐
S3				☐
S4				☐
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	Initials
Battery [Wh] > 700 Wh	1750.206		☒
Solar Power Indicators: > 0	3.628		☒
	0.0		
	4.385		
	3.598		

Item/Procedure	Readings				Comments	Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime		
Domain_Name=Host, Node=1, HW_SerNum=0x333451153936383700260039 On=Y	OK	27.2	121.9	Uptime: 2 days, 22:00:55		☒
Domain_Name=Bat-0x474850072038384d00380042, Node=3, HW_SerNum=0x474850072038384d00380042 On=Y	OK	24.6	114.7	Uptime: 2 days, 21:49:13		☒
Domain_Name=Thruder-2, Node=4, HW_SerNum=0x3437470330383638001f0033 On=Y	OK	19.8	183.7	Uptime: 2 days, 21:38:32		☒

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	some new dents and dings...	☒
	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		☒
	Thruder	Hardware secure		☒

Vehicle Functionality

Item/Procedure	Readings	Specifications	Comments	Initials
Thruster Spin	455.0	Spins freely, slow and fast speeds		☒
Rudder Range of Motion		Rudder moves freely and smoothly		☒
Rudder right, left, center	Rudder(2021-05-17T19:40:18.770Z,desiredHeading=260.1,compass=11.4,rack=-12.9,post=-15.3rudd	Right, Left, Center		☒
Thruder Compass Correction	Thruder compass is corrected	recommended NOT corrected	LR says that this is fine	☒
Fixed heading test (spin)	180	Avoidance Off, Note Heading Used		☒
Waypoint course test (spin)	102	Avoidance Off, Note Waypoint Course Used		☒
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (2d21h41m34.459s), 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 338303904 (PACIFIC SNAPPER). Pos=36.802433, -121.784660. t=37:0:NOT_DEFINED, 2021-05-17T19:40:23.604Z, lengthErrs=0, latlonErrs=0, broadcastCount=83547, lastRx=0.906s, numberObserved=14,	If in harbor, must see MMSI		☒
Photo Document				☒

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=16.9°C, Press=1020.2mb, Wind Speed=2.37kn, Wind Dir=196.7°. Heading=354.5°		☒
UBLOX GPS	2021-05-17T19:40:24Z@36.8025223,-121.787078,lastRx=0.521s, quality=100, timeout=1m, nmeaValid=true, clockDt=0.529s, lastValidFix=2021-05-17T19:40:24Z@36.8025223,-121.787078, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=8.66,std=0.71,min=7.00,max=10.00,n=300,hdop:sma=1.17,std=0.13,min=0.96,max=1.39,n=300,altitude:sma=1.29,std=3.19,min=-3.30,ma		☒
Airmar GPS	2021-05-17T19:40:24.300Z@36.80254,-121.787095,lastRx=0.243s, quality=80, timeout=5m, nmeaValid=true, clockDt=0.263s, lastValidFix=2021-05-17T19:40:24.300Z@36.80254,-121.787095, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=9.00,std=0.00,min=9.00,max=9.00,n=300,hdop:sma=1.15,std=0.13,min=1.00,max=1.40,n=300,altitude:sma=5.12,std=3.87,min=-2.10,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		☒

EK80 installed, plan is to run Trianguloid

Technician Signature:

- 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