

SV3 Pre-Launch Checklist

Date	2020-07-07T23:03:09.389Z	Glider Name	SV3-1531399927(SV3-121)
Tech(s)	cwahl	Organization	MBARI
Project	BOG timeseries/LRAUV testing	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=TALKING, sent=1364, lastTx=8.455s, avgTxSize=181.6B, totalTx=477.607kB, received=19, lastRx=8.443s, avgRxSize=5.0B, totalRx=7.812kB, powerState=ON (22h33m21.084s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false, (63/64 success rate), sleepTime=120000, packetSize=8192,		☒
WGMS Iridium	IMEI:300434060771430, starts=1, r=33, w=7, sessionAttempts=321, sessionErrs=0, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=5.0 (i=5), 0 queued msgs state=TALKING, sent=7, lastTx=2h30m32.965s, totalTx=0.663kB, received=33, lastRx=16m30.193s, avgRxSize=45.0B, totalRx=1.741kB, powerState=ON (22h32m50.851s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]0 blocked messages, averageMessageQueueRate=1m3.552s, sent=1371, totalBytesSent=478.271kB, received=52, totalBytesReceived=9.553kB, lastRx=16m30.195s, 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=52, #handled=52, lastRx=rx=2020-07-07T22:46:39.231Z,		☒
Location	Using GPSUblox, declination=12.956403, failoverCounter=1, timeLastSwitchedGps=2020-07-07T00:32:03Z, clockDt=-0.459s		☒
Tracker telemetry received	Battery (Volts)15.9 volts Report Rate4 hours		☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-121 MBARI Spare CCU			☒
Float name	WG Tiny			☒
Glider name	WG Tiny v200			☒
Umbilical Length	4m			☒
G1				☐
G2				☒

	Ecopuck plus VR2C			
G3				☐
T1				☐
D1				☐
S1	Hotspot with MF dir and LF dir			☒
S2	CTD plus D0			☒
S3	pCO2 plus pH			☒
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	890.555		☒
Solar Power Indicators: > 0	8.956 0.0 5.063 6.875		☒

Item/Procedure	Readings					Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Initials
Domain_Name=Host, Node=1, HW_SerNum=0x333451153936383700260039 On=Y	OK	35.9	125.3	Uptime: 0 days, 22:41:01		☒
Domain_Name=Thruder-2, Node=3, HW_SerNum=0x3333470738373634002c001c On=Y	OK	24.7	161.7	Uptime: 0 days, 22:30:03		☒
Domain_Name=PyldInt- 0x3332470932363032002b0025, Node=5, HW_SerNum=0x3332470932363032002b0025 On=Y	OK	32.5	123.9	Uptime: 0 days, 03:02:59		☒

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	added 4 anchors!	☒
	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		☒
	Thruder	Hardware secure		☒

Vehicle Functionality

Item/Procedure	Readings	Specifications	Comments	Initials
Thruster Spin	442.0	Spins freely, slow and fast speeds		☒
Rudder Range of Motion		Rudder moves freely and smoothly		☒
Rudder right, left, center	Rudder (2020-07-07T23:03:06.497Z, desiredHeading=270, compass=27.8, rack=-12.9, post=-11.3rudde	Right, Left, Center		☒

Thruder Compass Correction	Thruder compass is corrected	recommended NOT corrected	☐
Fixed heading test (spin)	180	Avoidance Off, Note Heading Used	☒
Waypoint course test (spin)	36.797, -121.847	Avoidance Off, Note Waypoint Course Used	☒
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (22h30m45.385s), ampsPower=false, powerThreadActive=false	Catch release buoy by hand	☒
Octopus Cable 01	OK	Must Pass	☒
Octopus Cable 02	OK	Must Pass	☒
AIS Status	t=37:0:NOT_DEFINED, 2020-07-07T23:03:02.425Z, lengthErrs=0, latlonErrs=0, broadcastCount=2974, lastRx=10.373s, numberObserved=6, averageRxRateMillis=21.012s	If in harbor, must see MMSI	☒
Photo Document			☒

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=17.6°C, Press=1012.8mb, Wind Speed=4.20kn, Wind Dir=290.5°. Heading=30.3°		☒
UBLOX GPS	2020-07-07T23:03:12Z@36.8023707,-121.7871303,lastRx=0.470s, quality=100, timeout=1m, nmeaValid=true, clockDt=0.809s, lastValidFix=2020-07-07T23:03:12Z@36.8023707,-121.7871303, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=11.25,std=0.48,min=10.00,max=12.00,n=300,hdop:sma=0.88,std=0.01,min=0.87,max=0.93,n=300,altitude:sma=2.43,std=1.01,min=0.10		☒
Airmar GPS	2020-07-07T23:03:11.700Z@36.80236,-121.7871267,lastRx=0.741s, quality=80, timeout=5m, nmeaValid=true, clockDt=1.130s, lastValidFix=2020-07-07T23:03:11.700Z@36.80236,-121.7871267, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.74,std=0.44,min=10.00,max=11.00,n=300,hdop:sma=1.00,std=0.00,min=1.00,max=1.00,n=300,altitude:sma=2.57,std=0.59,min=1.70		☒
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:

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