

SV3-110: SV3 Pre-Launch Checklist

Status Checklist Config Operate Setup Help

Readme

SV3 Pre-Launch Checklist

Date	2024-03-08T00:00:21.236Z	Glider Name	SV3-466563798 (SV3-110)
Tech(s)	cwahl	Organization	MBARI
Project	MBTS	Ship/Op Area	Paragon MB

Software Information

Regulus Version	SV3-110, sn=466563798, 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, PortForwarder, RudderParametersManager, ThrudrDiagnosticsFixer, ThrusterAdjuster

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On		☒
Virtual Relay	0 queued msgs state=WAITING, sent=0, received=0, powerState=OFF (1d6h47m37.593s), virtualDevice=true, powerThreadActive=false (no internet connectivity)		☒
WGMS Iridium	IMEI:300434060354880, starts=1, r=24, w=3373, sessionAttempts=3646, sessionErrs=254, wErrs=0, rErrs=0, cErrs=1, 10m ss avg=4.2 (i=3), 1 queued msgs state=ATTEMPTING, sent=3373, lastTx=37.854s, avgTxSize=180.0B, totalTx=567.152kB, received=24, lastRx=14m50.144s, avgRxSize=30.0B, totalRx=1.034kB, powerState=ON (1d6h47m11.826s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	totalBytesSent=567.152kB, received=24, totalBytesReceived=1.034kB, lastRx=14m50.152s, 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=24, #handled=24, lastRx=rx=2024-03-07T23:45:31.114Z, receiver=iridiumModem, headerByte=0x0A, length=30],UnsupportedMessageHandler[active=true, #handled=0], minimumMTU=338		☒
Location	Using GPSUblox, declination=12.609063, failoverCounter=1, timeLastSwitchedGps=2024-03-06T17:15:03Z, clockDt=-0.287s		☒
Tracker telemetry received	Battery (Volts) Report Rate	15.9 volts 4 hours	☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-110			☒
Float name	Tiny copper version			☒
Glider name	Tiny v200			☒
Umbilical Length	4m			☒
G1	Ecopuck		Date/time/GPS working now!	☒
G2				☐
G3				☐
T1				☐
D1				☐
S1	Hotspot 3 with MF DAT			☒
S2	GPCTD plus D0			☒
S3	pCO2 plus ph			☒
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	Initials
----------------	----------	----------	----------

Battery [Wh] > 700 Wh	944.597	//		☒
Solar Power Indicators: > 0	5.819	//		☒
	0.0	//		
	5.312	//		
	7.447	//		

Item/Procedure	Readings					
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Initials
Domain_Name=Host, Node=1, HW_SerNum=0x32385119353634330055004a On=Y	OK	28.4	117.1	Uptime: 1 day, 06:49:54		☒
Domain_Name=Thrudder-2, Node=3, HW_SerNum=0x474850052038384d0057002b On=Y	OK	22.3	265.7	Uptime: 1 day, 06:42:16		☒
Domain_Name=PyldInt-0x33335114373330300043001a, Node=7, HW_SerNum=0x33335114373330300043001a On=Y	OK	27.5	116.2	Uptime: 0 days, 05:13:28		☒

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	447.0	Spins freely, slow and fast speeds		☒
Rudder Range of Motion		Rudder moves freely and smoothly		☒
Rudder right, left, center	Rudder(2024-03-08T00:00:19.728Z,desiredHeading=256.2,compass=268.9,rack=-11.1,post=-12rudderSta	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 (1d6h45m11.567s), 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 338407295 (ONELOVE). Pos=36.803008, -121.785713. t=36:0:MOORED, 2024-03-08T00:00:27.929Z, lengthErrs=1, latlonErrs=1, broadcastCount=16656, lastRx=0.405s, numberObserved=16, averageRxRateMillis=2.203s	If in harbor, must see MMSI		☒
Photo Document				☒

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=35.7°C, Press=1015.6mb, Wind Speed=5.80kn, Wind Dir=330.3°. Heading=272.7°		☒
UBLOX GPS	2024-03-08T00:00:28Z@36.8022178,-121.7869127,lastRx=0.351s, quality=100, timeout=1m, nmeaValid=true, clockDt=0.373s, lastValidFix=2024-03-08T00:00:28Z@36.8022178,-121.7869127, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.27,std=0.44,min=10.00,max=11.00,n=300,hdop:sma=0.90,std=0.01,min=0.89,max=1.00,n=300,altitude:sma=0.86,std=0.78,min=-1.20,max=2.20		☒
Airmar GPS	2024-03-08T00:00:27.790Z@36.8022383,-121.7869283,lastRx=0.582s, quality=80, timeout=5m, nmeaValid=true, clockDt=0.594s, lastValidFix=2024-03-08T00:00:27.790Z@36.8022383,-121.7869283, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.00,std=0.06,min=9.00,max=10.00,n=300,hdop:sma=0.94,std=0.05,min=0.90,max=1.20,n=300,altitude:sma=5.63,std=0.56,min=4.60,max=6.40,n=300		☒
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

Science SMC SD card was full. Cleared Ecopuck logs and manually set the SMC time. Ecopuck Sensor is working now! Hotspot 3 DAT transmitting. Both cell and Iridium connections checked and are working!

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