

Readme

SV3 Pre-Launch Checklist

Date	2025-01-31T00:36:03.963Z //	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, RudderParametersManager, ThrusterAdjuster Not running: PortForwarder, ThrudderDiagnosticsFixer //

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On //		☒
Virtual Relay	0 queued msgs state=WAITING, sent=0, received=0, powerState=OFF (1h8m13.313s), virtualDevice=true, powerThreadActive=false (no internet connectivity) //	Still not working...	☐
WGMS Iridium	IMEI:300434060354880, starts=1, r=6, w=95, sessionAttempts=108, sessionErrs=8, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=5.0 (i=5), 0 queued msgs state=TALKING, sent=95, lastTx=1.975s, avgTxSize=122.6B, totalTx=11.113kB, received=6, lastRx=42m31.642s, avgRxSize=46.3B, totalRx=0.271kB, powerState=ON (1h7m43.277s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false //		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]680 blocked messages, averageMessageQueueRate=51.228s, sent=95, totalBytesSent=11.113kB, received=6, totalBytesReceived=0.271kB, lastRx=42m36.403s, 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=2025-01-30T23:30:03Z, clockDt=4.169s //		☒
Location	Using GPSUblox, declination=12.5224495, failoverCounter=1, timeLastSwitchedGps=2025-01-30T23:30:03Z, clockDt=4.169s //		☒
Tracker telemetry received	Battery (Volts)15.7 volts // Report Rate4 hours //		☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker //			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	CCU SV3-110 //			☒
Float name	Tiny Copper version //			☒
Glider name	Tiny's new sub //			☒
Umbilical Length	4m //			☒
G1	Ecopuck //		Sensor swapped with a freshly calibrated one //	☒
G2				☐
G3				☐
T1				☐
D1				☐
S1	Hotspot with MF DAT //			☒
S2	GPCTD plus DO //			☒
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	853.691	//		☒
Solar Power Indicators: > 0	2.654	//		☒
	0.0	//		
	3.775	//		
	4.658	//		

Item/Procedure	Readings					Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Initials
Domain_Name=Host, Node=1, HW_SerNum=0x32385119353634330055004a On=Y	OK //	22.2 //	113.9 //	Uptime: 0 days, 01:14:18 //		☒
Domain_Name=Thruder-2, Node=3, HW_SerNum=0x474850052038384d0057002b On=Y	OK //	19.3 //	247.0 //	Uptime: 0 days, 01:02:10 //		☒
Domain_Name=PydInt-0x33335114373330300043001a, Node=5, HW_SerNum=0x33335114373330300043001a On=Y	OK //	20.4 //	110.5 //	Uptime: 0 days, 00:49:57 //		☒

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		☒
	Thruder	Hardware secure		☒

Vehicle Functionality

Item/Procedure	Readings	Specifications	Comments	Initials
Thruster Spin	452.0 //	Spins freely, slow and fast speeds		☒
Rudder Range of Motion		Rudder moves freely and smoothly		☒
Rudder right, left, center	Rudder(2025-01-31T00:36:05.541Z,desiredHeading=2.7,compass=27.7,rack=-11.4,post=-12.3rudderStat	Right, Left, Center		☒
Thruder Compass Correction	Thruder 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)	36.797, -121.847	Avoidance Off, Note Waypoint Course Used		☒
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (1h5m56.296s), 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=36.813070, -121.787967. t=36:0:MOORED, 2025-01-31T00:35:55.061Z, lengthErrs=0, latlonErrs=0, broadcastCount=674, lastRx=19.963s, numberObserved=15, averageRxRateMillis=2.209s //	If in harbor, must see MMSI		☒
Photo Document				☒

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=11.4°C, Press=1024.5mb, Wind Speed=4.23kn, Wind Dir=246.7°. Heading=28.1° //		☒

UBLOX GPS	2025-01-31T00:36:19Z@36.8023328,-121.7871745,lastRx=0.728s, quality=100, timeout=1m, nmeaValid=true, clockDt=3.943s, lastValidFix=2025-01-31T00:36:19Z@36.8023328,-121.7871745, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.36,std=0.51,min=9.00,max=11.00,n=300,hdop:sma=0.86,std=0.03,min=0.85,max=0.97,n=300,altitude:sma=0.33,std=1.19,min=-1.80,max=2.70, //			
Airmar GPS	2025-01-31T00:36:19.600Z@36.8023167,-121.7871683,lastRx=0.098s, quality=80, timeout=5m, nmeaValid=true, clockDt=4.521s, lastValidFix=2025-01-31T00:36:19.600Z@36.8023167,-121.7871683, gpsWatchdogFailureCounter=0, ggaQCount:1=300,numSat:sma=9.24,std=0.43,min=9.00,max=10.00,n=300,hdop:sma=0.88,std=0.04,min=0.80,max=0.90,n=300,altitude:sma=6.45,std=4.09,min=-1.20,max=13.60, //			
Torpedo GPS	Not Available! //			
Water speed readings	Unknown speed; ncc=0, nci=0, tec=0, aip=0.00 //			
Obstacle Avoidance Status	Disabled //			
Check alarms	"Out of bounds" red. All yellow/green //			

General Comments

Ecopuck replaced with freshly calibrated instrument. Need to do GPCTD next!

Technician Signature:

cwah1

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