

Readme

SV3 Pre-Launch Checklist

Date	2024-10-23T22:28:21.035Z //	Glider Name	SV3-466563798(SV3-110)
Tech(s)	cwahl //	Organization	MBARI //
Project	Vehicle testing/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 (23m58.985s), virtualDevice=true, powerThreadActive=false (no internet connectivity) //	Still not working //	☐
WGMS Iridium	IMEI:300434060354880, starts=1, r=2, w=51, sessionAttempts=54, sessionErrs=1, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.6 (i=4), 0 queued msgs state=TALKING, sent=51, lastTx=1.060s, avgTxSize=106.5B, totalTx=5.434kB, received=2, lastRx=6m37.332s, avgRxSize=41.0B, totalRx=0.080kB, powerState=ON (23m27.026s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false //		☒
Vehicle telemetry received	totalBytesReceived=0.080kB, lastRx=6m43.817s, 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=2, #handled=2, lastRx=rx=2024-10-23T22:21:43.848Z, receiver=iridiumModem, headerByte=0x0A, length=39],UnsupportedMessageHandler[active=true, #handled=0], minimumMTU=338 //		☒
Location	Using GPSUblox, declination=12.548437, failoverCounter=1, timeLastSwitchedGps=2024-10-23T22:06:33Z, clockDt=2.298s //		☒
Tracker telemetry received	Battery (Volts)15.6 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 Tiny //			☒
Float name	Tiny Copper version //			☒
Glider name	New v200 glider with previous thrudder //			☒
Umbilical Length	4m //			☒
G1	Ecopuck //			☒
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	900.706	//		☒
Solar Power Indicators: > 0	7.665	//		☒
	0.0	//		
	9.977	//		
	18.796	//		

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 //	26.5 //	116.2 //	Uptime: 0 days, 00:25:59 //		☒
Domain_Name=Thruder-2, Node=4, HW_SerNum=0x474850052038384d0057002b On=Y	OK //	24.6 //	262.9 //	Uptime: 0 days, 00:18:11 //		☒
Domain_Name=PydInt-0x33335114373330300043001a, Node=5, HW_SerNum=0x33335114373330300043001a On=Y	OK //	24.3 //	114.0 //	Uptime: 0 days, 00:16:52 //		☒

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	442.0 //	Spins freely, slow and fast speeds		☒
Rudder Range of Motion		Rudder moves freely and smoothly		☒
Rudder right, left, center	Rudder(2024-10-23T22:28:26.758Z,desiredHeading=40.7,compass=15.8,rack=11.5,post=13.5rudderStatu	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 (21m36.714s), 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 338200114 (R/V CURRENT SEA). Pos=36.803040, -121.784982. t=67:0:NOT_DEFINED, 2024-10-23T22:28:37.947Z, lengthErrs=0, latlonErrs=0, broadcastCount=120, lastRx=3.227s, numberObserved=10, averageRxRateMillis=0.669s //	If in harbor, must see MMSI		☒
Photo Document				☒

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=19.0°C, Press=1017.3mb, Wind Speed=3.12kn, Wind Dir=222.0°. Heading=26.8° //		☒

UBLOX GPS	2024-10-23T22:28:44Z@36.8024387,-121.787131,lastRx=0.272s, quality=100, timeout=1m, nmeaValid=true, clockDt=2.733s, lastValidFix=2024-10-23T22:28:44Z@36.8024387,-121.787131, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.08,std=0.60,min=9.00,max=11.00,n=300,hdop:sma=0.95, std=0.02,min=0.94,max=1.00,n=300,altitude:sma=1.69,std=0.65,min=0.60,max=3.20,n=300		☒
Airmar GPS	2024-10-23T22:28:44.100Z@36.8024233,-121.7871633,lastRx=0.160s, quality=80, timeout=5m, nmeaValid=true, clockDt=2.754s, lastValidFix=2024-10-23T22:28:44.100Z@36.8024233,-121.7871633, gpsWatchdogFailureCounter=0, ggaQCount:1=300,numSat:sma=10.00,std=0.00,min=10.00,max=10.00,n=300,hdop:sma=0.80,std=0.00,min=0.80,max=0.80,n=300,altitude:sma=4.85,std=1.87,min=1.80,max=8.50,		☒
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

Tiny's glider replaced with new v200 glider. Previous thrudder reinstalled and external compass recalibrated. Cardinal compass directions checked.

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