

Readme

SV3 Pre-Launch Checklist

Date	2021-04-08T16:35:12.821Z	Glider Name	SV3-794595959(Tiny)
Tech(s)	cwahl	Organization	MBARI
Project	CANON/ECOHAB/Biogeochemical lab	Ship/Op Area	Paragon MB

Software Information

Regulus Version	Tiny, sn=794595959, 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, 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=1137, lastTx=17.805s, avgTxSize=820.5B, totalTx=409.188kB, received=10, lastRx=17.783s, avgRxSize=5.0B, totalRx=6.144kB, powerState=ON (16h4m46.221s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false, (141/141 success rate), sleepTime=120000, packetSize=8192,		☒
WGMS Iridium	IMEI:300434060708190, starts=1, r=5, w=5, sessionAttempts=263, sessionErrs=1, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=3.1 (i=2), 0 queued msgs state=TALKING, sent=5, lastTx=16h54.776s, totalTx=0.586kB, received=5, lastRx=5m46.012s, avgRxSize=30.0B, totalRx=0.212kB, powerState=ON (16h4m17.474s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]0 blocked messages, averageMessageQueueRate=35.415s, sent=1142, totalBytesSent=409.774kB, received=15, totalBytesReceived=6.355kB, lastRx=5m46.067s, 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=15, #handled=15, lastRx=rx=2021-04-08T16:29:26.952Z,		☒
Location	Using GPSUblox, declination=12.885478, failoverCounter=1, timeLastSwitchedGps=2021-04-08T00:32:52Z, clockDt=-1.076s		☒
Tracker telemetry received	Battery (Volts)15.9 Report Rate4 hours		☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-011 Tiny			☒
Float name	Tiny			☒
Glider name	Tiny			☒
Umbilical Length	4m			☒
G1	Ecopuck plus VR2C			☒
G2				☐
G3				☐
T1				☐
D1				☐
S1	Hotspot with MF DAT (no cell)			☒
S2	GPCTD plus D0			☒
S3	pCO2 plus pH			☒
S4	Airmar			☒
Event definitions		Compare against standard list		☒
Vehicle and tracker op		Note area name(s) and enable alarms		☒

Vehicle Status

Item/Procedure	Readings	Comments	Initials
Battery [Wh] > 700 Wh	761.558 //		☒
Solar Power Indicators: > 0	9.679 // 0.0 // 10.291 // 10.186 //		☒

Item/Procedure	Readings				Comments	Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime		
Domain_Name=Host, Node=1, HW_SerNum=0x3132471639323739002d0037 On=Y	OK //	17.7 //	116.4 //	Uptime: 0 days, 16:09:37 //		☒
Domain_Name=Thruder-2, Node=3, HW_SerNum=0x3333470738373634002c001c On=Y	OK //	12.6 //	136.8 //	Uptime: 0 days, 16:02:08 //		☒
Domain_Name=PydInt-0x33335114373330300043001a, Node=5, HW_SerNum=0x33335114373330300043001a On=Y	OK //	13.2 //	109.9 //	Uptime: 0 days, 01:08:05 //		☒

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	0.0 //	Spins freely, slow and fast speeds		☒
Rudder Range of Motion		Rudder moves freely and smoothly		☒
Rudder right, left, center	Rudder (2021-04-08T16:35:12.495Z,desiredHeading=306.6,compass=26.9,rack=-19.9,post=-20.4rudd	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)	41	Avoidance Off, Note Waypoint Course Used		☒
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (16h2m20.595s), 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 368082290 (GODDESS FANTASY). Pos=36.802407, -121.786295. t=60:0:NOT_DEFINED, 2021-04-08T16:35:19.901Z, lengthErrs=1, latlonErrs=0, broadcastCount=5261, lastRx=2.688s, numberObserved=10,	If in harbor, must see MMSI		☒
Photo Document				☒

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=11.7°C, Press=1025.1mb, Wind Speed=1.92kn, Wind Dir=198.8°. Heading=33.2° //		☒
UBLOX GPS	2021-04-08T16:35:22Z@36.8024202,-121.7871475,lastRx=0.363s, quality=100, timeout=1m, nmeaValid=true, clockDt=0.716s, lastValidFix=2021-04-08T16:35:22Z@36.8024202,-121.7871475, gpsWatchdogFailureCounter=0, ggaQCount=2=300,numSat:sma=11.88,std=0.32,min=11.00,max=12.00,n=300,hdop:sma=0.80,std=0.06,min=0.76,max=1.04,n=300,altitude:sma=4.16,std=2.82,min=-1.10,		☒
Airmar GPS	2021-04-08T16:35:22.200Z@36.8024333,-121.7871467,lastRx=0.287s, quality=80, timeout=5m, nmeaValid=true, clockDt=0.562s, lastValidFix=2021-04-08T16:35:22.200Z@36.8024333,-121.7871467, gpsWatchdogFailureCounter=0, ggaQCount=2=300,numSat:sma=9.00,std=0.00,min=9.00,max=9.00,n=300,hdop:sma=0.90,std=0.02,min=0.90,max=1.00,n=300,altitude:sma=4.14,std=2.87,min=-1.50,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		☒

General Comments

MF DAT Installed, new Airmar, pCO2 at 30 min intervals, pH at 5 minute intervals

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