

Readme

SV3 Pre-Launch Checklist

Date	2022-07-14T19:45:24.711Z	Glider Name	SV3-794595959(Tiny)
Tech(s)	Jordan	Organization	MBARI
Project	MBTS	Ship/Op Area	Paragon/Monterey Bay

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=WAITING, sent=0, received=0, powerState=ON (6m21.201s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)		☐
WGMS Iridium	IMEI:300434060708190, starts=1, r=0, w=20, sessionAttempts=20, sessionErrs=0, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.7 (i=5), 0 queued msgs state=TALKING, sent=20, lastTx=15.329s, avgTxSize=129.1B, totalTx=2.521kB, received=0, powerState=ON (5m53.988s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	totalBytesSent=2.521kB, received=0, 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=0, #handled=0],UnsupportedMessageHandler[active=true, #handled=0], minimumMTU=338		☒
Location	Using GPSublox, declination=12.765557, failoverCounter=1, timeLastSwitchedGps=2022-07-14T19:41:34Z, clockDt=11.152s		☒
Tracker telemetry received	Battery (Volts)15.47 Report Rate4hr		☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	Tiny			☒
Float name	Tiny			☒
Glider name	Tiny			☒
Umbilical Length	4m			☒
G1	ECOPuck			☒
G2				☐
G3				☐
T1				☐
D1				☐
S1				☐

S2	GPCTD			
S3	PCo2			
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	899.697		
Solar Power Indicators: > 0	11.859 0.0 13.838 20.964		

Item/Procedure	Readings					Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Init
Domain_Name=Host, Node=1, HW_SerNum=0x3132471639323739002d0037 On=Y	OK	21.7	116.5	Uptime: 0 days, 00:09:55		
Domain_Name=Thruder-2, Node=3, HW_SerNum=0x3333470738373634002c001c On=Y	OK	21.1	146.1	Uptime: 0 days, 00:02:06		

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	Satisfactory	
	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
Thruster Spin	454.0	Spins freely, slow and fast speeds	
Rudder Range of Motion		Rudder moves freely and smoothly	
Rudder right, left, center	Rudder (2022-07- 14T19:45:24.329Z,desiredHeading=298.1,compass=34.3,rack=-12.9,post=-14.1rudderSt	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)		Avoidance Off, Note Waypoint Course Used	21
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (3m48.345s), ampsPower=false, powerThreadActive=false	Catch release buoy by hand	
Octopus Cable 01	OK	Must Pass	
Octopus Cable		Must Pass	

02	OK		
AIS Status	lastSeen=MMSI 367766000 (WESTERN FLYER). Pos=36.802402, -121.787048. t=33:0:UNDERWAY ENGINE, 2022-07-14T19:45:28.887Z, lengthErrs=0, latlonErrs=0, broadcastCount=44, lastRx=2.856s, numberObserved=7, averageRxRateMillis=10.824s	If in harbor, must see MMSI	
Photo Document			

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=18.4°C, Press=1018.1mb, Wind Speed=2.68kn, Wind Dir=247.0°. Heading=32.2°		☒
UBLOX GPS	2022-07-14T19:45:43Z@36.8023872,-121.787155,lastRx=0.293s, quality=100, timeout=1m, nmeaValid=true, clockDt=11.176s, lastValidFix=2022-07-14T19:45:43Z@36.8023872,-121.787155, gpsWatchdogFailureCounter=0, ggaQCount:1=95,2=154,numSat:sma=8.02,std=1.03,min=6.00,max=10.00,n=249,hdop:sma=1.14,std=0.21,min=1.00,max=1.71,n=249,altitude:sma=5.70,std=1.97,min=-0.70,max=8		☒
Airmar GPS	2022-07-14T19:45:39.800Z@36.802385,-121.7871167,lastRx=0.590s, quality=80, timeout=5m, nmeaValid=true, clockDt=7.904s, lastValidFix=2022-07-14T19:45:39.800Z@36.802385,-121.7871167, gpsWatchdogFailureCounter=0, ggaQCount:1=148,2=75,numSat:sma=9.05,std=0.79,min=7.00,max=10.00,n=223,hdop:sma=0.93,std=0.04,min=0.90,max=1.00,n=223,altitude:sma=12.01,std=2.67,min=6.70,max=2		☒
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

Integrator Payloads need to be turned ON.
Under Plugin's Not running: GPSasRudderCompass

Technician Signature: Jordan Caress

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