

Tiny: SV3 Pre-Launch Checklist

Status Checklist Config Operate Setup Help

Readme

SV3 Pre-Launch Checklist

Date	2022-04-20T17:28:51.887Z	Glider Name	SV3-794595959(Tiny)
Tech(s)	cwahl	Organization	MBARI
Project	Station M	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=WAITING, sent=0, received=0, powerState=ON (21h24m31.222s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)	Looks like old cell network is finally down...	☐
WGMS Iridium	IMEI:300434060708190, starts=1, r=22, w=1550, sessionAttempts=1800, sessionErrors=234, wErrors=0, rErrors=0, cErrors=0, 10m ss avg=4.5 (i=3), 1 queued msgs state=TALKING, sent=1550, lastTx=1m10.232s, avgTxSize=113.9B, totalTx=172.323kB, received=22, lastRx=32m55.150s, avgRxSize=43.2B, totalRx=0.835kB, powerState=ON (21h24m2.735s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]0 blocked messages, totalMessagesDiscarded=847, averageMessageQueueRate=36.622s, sent=1550, totalBytesSent=172.323kB, received=22, totalBytesReceived=0.835kB, lastRx=32m55.154s, 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=22, #handled=22, lastRx=rx=2022-04-		☒
Location	Using GPSublox, declination=12.787852, failoverCounter=1, timeLastSwitchedGps=2022-04-19T20:06:34Z, clockDt=3.071s		☒
Tracker telemetry received	Battery (Volts) Report Rate	15.78 volts 4 hours New batteries	☒

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 v150/v200			☒
Umbilical Length	4m			☒
G1	Ecopuck		new cable	☐
G2				☐
G3				☐
T1				☐
D1				☐
S1	Hotspot 2 with MF and LF directionals			☒
S2	GPCTD plus D0			☒
S3	pCO2 plus pH			☒
S4	Airmar		Replaced with light mast	☒
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			☒

	769.563	//		
Solar Power Indicators: > 0	26.199 0.0 11.992 7.673	// // // //		☒

Item/Procedure	Readings					
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	Initials
Domain_Name=Host, Node=1, HW_SerNum=0x3132471639323739002d0037 On=Y	OK //	21.6 //	117.8 //	Uptime: 0 days, 21:30:07 //		☒
Domain_Name=Thruder-2, Node=3, HW_SerNum=0x3333470738373634002c001c On=Y	OK //	17.3 //	141.9 //	Uptime: 0 days, 21:22:13 //		☒
Domain_Name=PyldInt-0x33335114373330300043001a, Node=5, HW_SerNum=0x33335114373330300043001a On=Y	OK //	20.2 //	115.1 //	Uptime: 0 days, 20:20:59 //		☒

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(2022-04-20T17:28:49.490Z,desiredHeading=303.1,compass=353,rack=-19.9,post=-19.6rudderSta	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)	41	Avoidance Off, Note Waypoint Course Used		☒
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (21h22m4.445s), 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 366966550 (OCEAN ANGEL 2). Pos=36.804850, -121.784862. t=30:0:NOT_DEFINED, 2022-04-20T17:28:52.346Z, lengthErrs=2, latLonErrs=0, broadcastCount=14428, lastRx=2.555s, numberObserved=9, averageRxRateMillis=10.088s, //	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=1016.6mb, Wind Speed=2.08kn, Wind Dir=319.5°. Heading=348.1° //		☒
UBLOX GPS	2022-04-20T17:28:58Z@36.8023785,-121.7871548,lastRx=0.479s, quality=100, timeout=1m, nmeaValid=true, clockDt=3.075s, lastValidFix=2022-04-20T17:28:58Z@36.8023785,-121.7871548, gpsWatchdogFailureCounter=0, ggaQCount=2=300,numSat:sma=10.78,std=0.42,min=9.00,max=11.00,n=300,hdop:sma=0.99, std=0.04,min=0.97,max=1.18,n=300,altitude:sma=4.46,std=2.49,min=-0.60,max=8.90, //		☒
Airmar GPS	2022-04-20T17:28:57.900Z@36.80243,-121.7871417,lastRx=0.493s, quality=80, timeout=5m, nmeaValid=true, clockDt=2.961s, lastValidFix=2022-04-20T17:28:57.900Z@36.80243,-121.7871417, gpsWatchdogFailureCounter=0, ggaQCount=2=300,numSat:sma=9.94,std=0.24,min=9.00,max=10.00,n=300,hdop:sma=1.11, std=0.02,min=1.10,max=1.20,n=300,altitude:sma=2.22,std=2.26,min=-2.80,max=5.90,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

New Umbilical bushings are looking good!

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