

Tiny: SV3 Pre-Launch Checklist

Status Checklist Config Operate Setup Help

Readme

SV3 Pre-Launch Checklist

Date	2021-02-08T23:56:10.170Z	Glider Name	SV3-794595959 (Tiny)
Tech(s)	cwahl	Organization	MBARI
Project	MBTS	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, SCMDM3730-30-1880AKIR-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 (3d4hlm59.059s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false (no internet connectivity)		☒
WGMS Iridium	IMEI:300434060708190, starts=1, r=15, w=4450, sessionAttempts=4839, sessionErrs=378, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.0 (i=5), 0 queued msgs state=TALKING, sent=4450, lastTx=8.508s, avgTxSize=100.6B, totalTx=498.684kB, received=15, lastRx=5h53m16.333s, totalRx=0.579kB, powerState=ON (3d4hlm33.638s), virtualDevice=true, Requested by: iridiumModem,		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]0 blocked messages, totalMessagesDiscarded=626, averageMessageQueueRate=48.209s, sent=4450, totalBytesSent=498.684kB, received=15, totalBytesReceived=0.579kB, lastRx=5h53m16.341s, 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,		☒
Location	Using GPSUblox, declination=12.901247, failoverCounter=1, timeLastSwitchedGps=2021-02-05T19:56:27Z,		☒
Tracker telemetry received	Battery (Volts)	15.72 volts	☒
	Report Rate	4 hr	☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-011 Tiny			☒
Float name	SV3-Tiny			☒
Glider name	Tiny v200			☒
Umbilical Length	4m			☒
G1	EcoPuck			☒
G2				☐
G3				☐
T1				☐
D1				☐
S1				☐
S2	GPCTD plus DO			☒
S3	pCO2 plus pH			☒
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	764.754		☒
Solar Power Indicators: > 0	1.471		☒
	0.0		
	4.395		
	5.237		

Item/Procedure	Readings					Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime	Comments	

Domain_Name=Host, Node=1, HW_SerNum=0x3132471639323739002d0037 On=Y	OK	20.3	117.1	Uptime: 3 days, 04:06:06		☒
Domain_Name=Thruder-2, Node=3, HW_SerNum=0x3333470738373634002c001c On=Y	OK	13.9	138.6	Uptime: 3 days, 03:58:27		☒
Domain_Name=PyldInt-0x33335114373330300043001a, Node=5, HW_SerNum=0x33335114373330300043001a On=Y	OK	18.0	111.1	Uptime: 0 days, 06:55:50		☒

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	447.0	Spins freely, slow and fast speeds		☒
Rudder Range of Motion		Rudder moves freely and smoothly		☒
Rudder right, left, center	Rudder (2021-02-08T23:56:08.259Z, desiredHeading=307.8, compass=34.7, rack=-12.9, post=-15.1rudderStatus=0000000B,)	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 (3d3h59m33.695s), 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 368159560 (NOVA) . Pos=36.800538, -121.787202. t=37:0:NOT_DEFINED, 2021-02-08T23:55:45.238Z, lengthErrs=10, latlonErrs=0, broadcastCount=15260, lastRx=28.235s, numberObserved=8, averageRxRateMillis=6.923s	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=1014.9mb, Wind Speed=2.09kn, Wind Dir=222.7°. Heading=29.7°		☒
UBLOX GPS	2021-02-08T23:56:13Z@36.8023363,-121.7871632,lastRx=0.638s, quality=100, timeout=1m, nmeaValid=true, clockDt=0.495s, lastValidFix=2021-02-08T23:56:13Z@36.8023363,-121.7871632, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=11.79,std=0.41,min=11.00,max=12.00,n=300,hdop:sma=0.8		☒
Airmar GPS	2021-02-08T23:56:12.700Z@36.8023667,-121.78716,lastRx=0.901s, quality=80, timeout=5m, nmeaValid=true, clockDt=0.833s, lastValidFix=2021-02-08T23:56:12.700Z@36.8023667,-121.78716, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=9.00,std=0.00,min=9.00,max=9.00,n=300,hdop:sma=1.20,s		☒
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

Hotspot removed for cell modem upgrade
Tiny has new port/stbd markings
radar reflector installed for test mission

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

