

SV3-110: SV3 Pre-Launch Checklist

Status Checklist Config Operate Setup Help

Readme

SV3 Pre-Launch Checklist

Date	2025-10-13T22:48:30.201Z	Glider Name	SV3-466563798(SV3-110)
Tech(s)	cwahl	Organization	MBARI
Project	Testing/Bioinspiration Supervised Autonomy	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 (2h9m21.212s), virtualDevice=true, powerThreadActive=false (no internet connectivity) ⌵	Still not working.	☐
WGMS Iridium	IMEI:300434060354880, starts=1, r=18, w=300, sessionAttempts=352, sessionErrs=46, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.6 (i=4), 0 queued msgs state=TALKING, sent=300, lastTx=40.037s, avgTxSize=152.0B, totalTx=48.309kB, received=18, lastRx=23m46.264s, avgRxSize=46.6B, totalRx=0.781kB, powerState=ON (2h8m51.905s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false ⌵		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]971 blocked messages, averageMessageQueueRate=27.169s, sent=300, totalBytesSent=48.309kB, received=18, totalBytesReceived=0.781kB, lastRx=23m46.259s, 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=18, #handled=18, lastRx=rx=2025-10-13T22:24:43.945Z, receiver=iridiumModem, ⌵		☒
Location	Using GPSUblox, declination=12.455209, failoverCounter=1, timeLastSwitchedGps=2025-10-13T20:41:21.010Z, clockDt=1.774s ⌵		☒
Tracker telemetry received	Battery (Volts) 15.9 Volts Report Rate 4 hours		☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Tiny Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	CCU SV3-110			☒
Float name	Tiny Copper			☒
Glider name	Tiny v200			☒
Umbilical Length	4m			☒
G1	Ecopuck		Not working? Clean up SMC files system.	☒
G2				☐
G3				☐
T1				☐
D1				☐
S1	Hotspot 2 with MF DAT			☒
S2	GPCTD Plus D0			☒
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	911.967 //		☒
Solar Power Indicators: > 0	2.677 // 0.0 // 2.969 // 3.225 //		☒

Item/Procedure	Readings					Comments	Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime			
Domain_Name=Host, Node=1, HW_SerNum=0x32385119353634330055004a On=Y	OK //	23.2 //	114.7 //	Uptime: 0 days, 02:14:17 //			☒
Domain_Name=Thruder-2, Node=3, HW_SerNum=0x474850052038384d0057002b On=Y	OK //	18.4 //	232.7 //	Uptime: 0 days, 02:06:11 //			☒
Domain_Name=PydInt-0x33335114373330300043001a, Node=5, HW_SerNum=0x33335114373330300043001a On=Y	OK //	20.4 //	114.2 //	Uptime: 0 days, 00:51:47 //			☒

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	448.0 //	Spins freely, slow and fast speeds		☒
Rudder Range of Motion		Rudder moves freely and smoothly		☒
Rudder right, left, center	Rudder(2025-10-13T22:48:29.535Z,desiredHeading=341.9,compass=6.9,rack=-11.4,post=-12.4rudderSta	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 (2h6m53.715s), 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 367529450 (KING PHILLIP). Pos=36.804930, -121.786028. t=30:0:NOT_DEFINED, 2025-10-13T22:48:30.737Z, lengthErrs=0, latlonErrs=0, broadcastCount=1884, lastRx=2.411s, numberObserved=25, averageRxRateMillis=2.796s	If in harbor, must see MMSI		☒
Photo Document				☒

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=15.5°C, Press=1002.1mb, Wind Speed=5.03kn, Wind Dir=220.2°. Heading=18.2° //		☒

UBLOX GPS	2025-10-13T22:48:35Z@36.8024675,-121.7871383,lastRx=0.129s, quality=100, timeout=1m, nmeaValid=true, clockDt=1.843s, lastValidFix=2025-10-13T22:48:35Z@36.8024675,-121.7871383, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=11.81,std=0.39,min=11.00,max=12.00,n=300,hdop:sma=0.84,std=0.02,min=0.79,max=0.94,n=300,altitude:sma=0.13,std=0.74,min=-1.60,max=1.40			
Airmar GPS	2025-10-13T22:48:34.700Z@36.8024417,-121.7871333,lastRx=0.481s, quality=80, timeout=5m, nmeaValid=true, clockDt=1.528s, lastValidFix=2025-10-13T22:48:34.700Z@36.8024417,-121.7871333, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=11.00,std=0.00,min=11.00,max=11.00,n=300,hdop:sma=0.90,std=0.00,min=0.90,max=0.90,n=300,altitude:sma=6.17,std=2.12,min=1.60,max=10.30			
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 got hit on its last mission. Two antenna mast broken (hotspot 3 cell and vehicle cell) and umbilical damaged. Spare umbilical installed along with Hotspot 2 payload.

Technician Signature:

cwahl

- 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