

SV3-029: SV3 Pre-Launch Checklist

Status Checklist Config Operate Setup Help

Readme

SV3 Pre-Launch Checklist

Date	2023-07-06T18:29:49.387Z	Glider Name	SV3-1167408762(SV3-029)
Tech(s)	Jordan Caress	Organization	MBARI
Project	KBB Bioacoustics Upper Monterey Canyon	Ship/Op Area	Paragon

Software Information

Regulus Version	SV3-029, sn=1167408762, 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

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On		☒
Virtual Relay	0 queued msgs state=WAITING, sent=0, received=0, powerState=OFF (1h45m29.357s), virtualDevice=true, powerThreadActive=false (no internet connectivity)		☐
WGMS Iridium	IMEI:300434060620290, starts=1, r=6, w=135, sessionAttempts=156, sessionErrs=14, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.1 (i=5), 1 queued msgs state=TALKING, sent=135, lastTx=4.710s, avgTxSize=100.8B, totalTx=14.136kB, received=6, lastRx=3m51.947s, avgRxSize=39.0B, totalRx=0.229kB, powerState=ON (1h45m2.239s), virtualDevice=true, Requested by: iridiumModem, powerThreadActive=false		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]53 blocked messages, averageMessageQueueRate=44.478s, sent=135, totalBytesSent=14.136kB, received=6, totalBytesReceived=0.229kB, lastRx=3m51.974s, 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=6, #handled=6, lastRx=rx=2023-07-06T16:46:51Z, clockDt=9.476s		☒
Location	Using GPSUblox, declination=12.672694, failoverCounter=1, timeLastSwitchedGps=2023-07-06T16:46:51Z, clockDt=9.476s		☒
Tracker telemetry received	Battery (Volts)	15.63	☒
	Report Rate	4 hrs	

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Hansen Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-121			☒
Float name	Hansen			☒
Glider name	Hansen			☒
Umbilical Length	4m			☒
G1				☐
G2				☐
G3	APU			☒
T1				☐
D1				☐
S1				☐
S2				☐
S3				☐

S4	Airmar			✓
Event definitions		Compare against standard list		✓
Vehicle and tracker op area defined	Yes	Note area name(s) and enable alarms		✓
Escalation list created/populated				✓

Vehicle Status

Item/Procedure	Readings	Comments	Initials
Battery [Wh] > 700 Wh	1625.344		✓
Solar Power Indicators: > 0	19.07 0.0 19.937 17.555		✓

Item/Procedure	Readings					Comments	Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime			
Domain_Name=Host, Node=1, HW_SerNum=0x31324716393237390034002c On=Y	OK	26.1	117.2	Uptime: 0 days, 01:49:07			✓
Domain_Name=Bat-0x33324703313238340031002d, Node=3, HW_SerNum=0x33324703313238340031002d On=Y	OK	26.3	115.0	Uptime: 0 days, 01:53:30			✓
Domain_Name=Thrudder-2, Node=4, HW_SerNum=0x474850052038384d0057002b On=Y	OK	21.1	266.0	Uptime: 0 days, 01:42:13			✓

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		✓
	Thrudder	Hardware secure		✓

Vehicle Functionality

Item/Procedure	Readings	Specifications	Comments	Initials
Thruster Spin	456.0	Spins freely, slow and fast speeds	Tested on Slow	✓
Rudder Range of Motion		Rudder moves freely and smoothly		✓
Rudder right, left, center	Rudder(2023-07-06T18:29:49.456Z,desiredHeading=34.2,compass=84.6,rack=-12.9,post=-14.6rudderSta	Right, Left, Center		✓
Thrudder Compass Correction	Thrudder compass is corrected	recommended NOT corrected	LR says ok	✓
Fixed heading test (spin)		Avoidance Off, Note Heading Used	180	✓
Waypoint course test (spin)	Waypoint 220	Avoidance Off, Note Waypoint Course Used		✓
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (1h42m56.313s), 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 366934770 (NOAHS ARK). Pos=36.804473, -121.785878. t=30:0:FISHING, 2023-07-06T18:29:47.561Z, lengthErrs=0, latlonErrs=0, broadcastCount=987, lastRx=8.012s, numberObserved=7, averageRxRateMillis=6.367s	If in harbor, must see MMSI		✓
Photo Document				✓

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=17.3°C, Press=1014.9mb, Wind Speed=1.75kn, Wind Dir=210.8°. Heading=63.1°		☒
UBLOX GPS	timeout=1m, nmeaValid=true, clockDt=9.390s, lastValidFix=2023-07-06T18:30:05Z@36.8025878,-121.7870748, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=11.94,std=0.24,min=11.00,max=12.00,n=300,hdop:sma=0.99,std=0.13,min=0.77,max=1.14,n=300,altitude:sma=-0.58,std=0.54,min=-1.50,max=1.00,n=300		☒
Airmar GPS	2023-07-06T18:30:05.300Z@36.8026067,-121.7870767,lastRx=0.544s, quality=80, timeout=5m, nmeaValid=true, clockDt=9.662s, lastValidFix=2023-07-06T18:30:05.300Z@36.8026067,-121.7870767, gpsWatchdogFailureCounter=0, ggaQCount:2=300,numSat:sma=10.31,std=3.27,min=0.00,max=12.00,n=300,hdop:sma=0.80,std=0.01,min=0.70,max=0.80,n=300,altitude:sma=2.62,std=1.69,min=-2.00,max=5.20,		☒
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

Not running: PortForwarder

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