

Readme

SV3 Pre-Launch Checklist

Date	2022-01-14T23:10:25.054Z	Glider Name	SV3-1531399927(SV3-121)
Tech(s)	cwahl	Organization	MBARI
Project	Sipper winch test	Ship/Op Area	Paragon MB

Software Information

Regulus Version	SV3-121, sn=1531399927, Running Regulus 3.2.2, software version of 2019-12-03T23:58:34Z, production build 35, sv3, SOMDM3730-31-1880AKIR-A, (1.2.3) secure
Plugins	Running: AirmarWeather, GPSasRudderCompass, LogAlarmReporter, PortForwarder, RudderParametersManager, ThrusterAdjuster, Winch

Communication

Item/Procedure	Readings	Comments	Initials
WiFi Connection	WiFi is On		☒
Virtual Relay	0 queued msgs state=TALKING, sent=241, lastTx=15.206s, avgTxSize=268.2B, totalTx=154.773kB, received=6, lastRx=15.202s, avgRxSize=5.0B, totalRx=1.526kB, powerState=ON (1h29m27.673s), virtualDevice=true, Requested by: pilotRequest, powerThreadActive=false, (131/136 success rate), sleepTime=120000, packetSize=8192, numberOfDoTransactionFailures=5,		☒
WGMS Iridium	IMEI:300434060771430, starts=1, r=1, w=9, sessionAttempts=32, sessionErrs=0, wErrs=0, rErrs=0, cErrs=0, 10m ss avg=4.5 (i=4), 0 queued msgs state=TALKING, sent=9, lastTx=1h25m20.711s, totalTx=0.852kB, received=1, lastRx=46m29.035s, totalRx=0.024kB, powerState=ON (1h29m2.122s), virtualDevice=true, Requested by: iridiumModem,		☒
Vehicle telemetry received	available channels=[tcpChannel, virtualRelay, iridiumModem]0 blocked messages, averageMessageQueueRate=26.435s, sent=250, totalBytesSent=155.625kB, received=7, totalBytesReceived=1.551kB, lastRx=46m29.049s, ProtobufMessageHandler[header=BB,header=BC,active=true, #accepted=0, #handled=0],ProtobufMessageHandler[header=BB,heade r=BC,active=true, #accepted=0, #handled=0],secureComms[header=A9,active=true, #accepted=0, #handled=0],WGMSCommandHandler[header=0A,active=tr ue, #accepted=7, #handled=7, lastRx=rx=2022-01-		☒
Location	Using GPSUblox, declination=12.812495, failoverCounter=1, timeLastSwitchedGps=2022-01-14T21:43:03Z, cLockDt=4.806s		☒
Tracker telemetry received	Battery (Volts) Report Rate	15.5 4 hours	☒

Configuration

Item/Procedure	Readings	Specifications	Comments	Initials
Tracker WGMS name	Hansen Tracker			☒
(Optional) Second Tracker Name				☐
Drybox WGMS name	SV3-121 MBARI Spare			☒
Float name	Hansen			☒
Glider name	Hansen		with Tinys thrudder!	☒
Umbilical Length	4 m			☒
G1				☐
G2				☐
G3	APU			☒
T1	LR winch			☒
D1				☐
S1				☐
S2				☐
S3				☐
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	970.674 //		✓
Solar Power Indicators: > 0	7.637 // 0.0 // 6.55 // 0.382 //		✓

Item/Procedure	Readings					Comments	Initials
Domain Info	AMPS Hardware Status	Temperature (°C)	Pressure (kPa)	Hardware Uptime			
Domain_Name=Host, Node=1, HW_SerNum=0x474850072038384d00390021 On=Y	OK //	23.2 //	120.9 //	Uptime: 0 days, 01:33:57 //			✓
Domain_Name=Thruder-2, Node=3, HW_SerNum=0x3333470738373634002c001c On=Y	OK //	19.5 //	149.2 //	Uptime: 0 days, 01:26:20 //			✓
Domain_Name=Bat-0x474850072038384d00380042, Node=4, HW_SerNum=0x474850072038384d00380042 On=Y	OK //	20.2 //	111.6 //	Uptime: 0 days, 01:36:29 //			✓
Domain_Name=Winch, Node=6, HW_SerNum=0x3238511835363433002c003e On=Y	OK //	NaN //	NaN //	Uptime: 0 days, 00:04:45 //			✓

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	444.0 //	Spins freely, slow and fast speeds		✓
Rudder Range of Motion		Rudder moves freely and smoothly		✓
Rudder right, left, center	Rudder(2022-01-14T23:10:24.968Z,desiredHeading=231,compass=206,rack=11.5,post=16.7rudderStatus=	Right, Left, Center		✓
Thruder Compass Correction	Thruder compass is corrected //	recommended NOT corrected	LR says this is okay	✓
Fixed heading test (spin)	180	Avoidance Off, Note Heading Used		✓
Waypoint course test (spin)	21	Avoidance Off, Note Waypoint Course Used		✓
Buoy Release Mechanism	device is disarmed, deviceState=OFF, deployCounter=0, waitTime=1m30s, powerState=OFF (1h26m56.025s), 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 367766000 (WESTERN FLYER). Pos=36.802398, -121.787057. t=33:0:UNDERWAY ENGINE, 2022-01-14T23:10:24.867Z, lengthErrs=0, latlonErrs=0, broadcastCount=794, lastRx=7.541s, numberObserved=6, averageRxRateMillis=8.440s //	If in harbor, must see MMSI		✓
Photo Document				✓

Vehicle Communication and Telemetry

Item/Procedure	Readings / Specifications	Comments	Initials
WX reporting	Temp=17.4°C, Press=1020.4mb, Wind Speed=5.15kn, Wind Dir=29.7°. Heading=240.0° //		✓
UBLOX GPS	2022-01-14T23:10:37Z@36.8023345,-121.7871393,lastRx=0.302s, quality=100, timeout=1m, nmeaValid=true, clockDt=4.563s, lastValidFix=2022-01-14T23:10:37Z@36.8023345,-121.7871393, gpsWatchdogFailureCounter=0, ggaQCount=2=300,numSat:sma=11.19,std=0.44,min=10.00,max=12.00,n=300,hdop:sma=0.93,std=0.07,min=0.87,max=1.20,n=300,altitude:sma=1.69,std=1.85,min=-1.60,max=6.10 //		✓
Airmar GPS	2022-01-14T23:10:36.400Z@36.8023567,-121.7871367,lastRx=0.927s, quality=80, timeout=5m, nmeaValid=true, clockDt=3.934s, lastValidFix=2022-01-14T23:10:36.400Z@36.8023567,-121.7871367, gpsWatchdogFailureCounter=0, ggaQCount=2=300,numSat:sma=10.31,std=0.67,min=9.00,max=12.00,n=300,hdop:sma=0.93,std=0.06,min=0.80,max=1.10,n=300,altitude:sma=6.82,std=3.78,min=-1.20,max=13.20 //		✓
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

First winch deployment!
Running Tinys thrudder due to issues with both Hansens and our spare

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