

Wave Glider – SV3 Pre-Launch Checklist

Date / Time: <u>3/14/2014</u>	Project: <u>Hotspot</u>
Technician(s): <u>Kieth / Canan</u>	Ship / Op Area: <u>Montana Bay</u>

Cycle Power on CCU Prior to Pre-Launch Checks. Ensure Auto Avoidance settings = 0, and no check in WSS: assume in water

Vehicle / WGMS Configurations

Item/Procedure	Readings	Specifications	Initials
SV3 WGMS Name	<u>Tiny SV3-011</u>		
Float Name			
Glider Name			
Thruster Serial Number	<u>003867</u>	Hardware ID	
Onboard Server WiFi IP	<u>192-168-100-1</u>	URL	
Onboard Server Virtual Cell IP	<u>192.168.2.100</u>	URL10.20.15.XXX	

Tracking

Resilient Tracker IMEI	<u>300434060708110</u>	Every 10 min (1 st hour), then every 12 hrs.	
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(O2) ☒ RTE

(S4) ☒

(O1) speed

(S4) ☒ lightbar

Payloads

	RTE ☒	AIS ☒	Weather Station ☒	Water Speed ☒	Lightbar ☒	
XP 1 (G1) SV3 PL or MPU	NA	see comments section		Description		
XP 2 (G2)	NA			Description		
XP 3 (G3)	NA			Description		
Payload 1 (sensor 1)	NA	<u>Hotspot</u>		Description		
Payload 2 (S2)	NA			Description		
Payload 3 (S3)	NA	<u>Hotspot Ex. Puck</u>		Description <u>Hotspot</u>		

WGMS

Organization	☒	<u>see mission</u>		
Escalation List	☒	<u>plan</u>	Created and Populated	
Event Definitions	☒		Compare Against Standard List	
Vehicle Op Area Defined	☒		Poly Name(s). Alarms Enabled	

Communications

WiFi Connection ☒		Onboard Server Accessible	
Virtual Relay Cell		WGMS Raw Outputs – VR Cell	
Iridium		WGMS Raw Outputs - IridiumStatus	
Vehicle Telemetry Received		Packet Data Displayed in WGMS	
Resilient Tracker		WGMS Raw Outputs	

Vehicle Status

Battery [Wh] > 500 Wh	<u>765.575 Wh</u>				
Solar Power Indicators:	Panel 1	Panel 2	Panel 3	Panel 4	
Output > 0 W	<u>2.2PS W</u>	<u>0</u>			
Drybox Environmental:	CCU	XP 1	XP 2	XP 3	
Pressure > 120 kpa (+/-2)	<u>141 kpa</u>				
Temp	<u>21.2 C</u>				
Drybox Environmental:	Thruster (170 kpa)	Payload 1	Payload 2	Payload 3	
Pressure > 120 kpa (+/-2)	<u>153.7 kpa</u>				
Temp	<u>15.3 C</u>				

Vehicle Status: WGMS, SV3 Commands, SV3 vehicle form (AMPS, WX , AIS) Adaptable modular power system			
Item/Procedure	Readings	Specifications	Initials
Linux Uptime 1:38		Time Since Last Boot	
Regulus Uptime		Time Since Last Boot	
Weather Station 179W		Accurate Reporting	
Airmar Weather GPS		Latest Report	
Torpedo GPS	Vehicle status page	Latest Report	
UBLOX GPS 189W	Vehicle status page	Latest Report	
Weather Station Heading			
Thrudder Heading			
Water Speed 1.4W		Current Draw	

Mechanical Checks			
Float	Wet-mates connected/lubed		
	Connector covers secure		
	Drybox secure		
	Contact info secure		
	Hull	Free of cracks and dings	
	Skeg/Fin	Secure	
Sub	Hardware secure ✓		
	Umbilical visual inspection ✓	Free of voids/defects	
	Roll pins inserted ✓	Flushed with surface	
	Wings ✓	Hardware secure with Loctite	
	Thrudder ✓	Hardware secure. No protrusion of fin and bottom back fairing fasteners.	

Final Checks			
Thruster Spin ✓		Slow, Fast	
Thrudder Range of Motion ✓		Manual and Command	
Rudder Right, Left, Center ✓			
Fixed Heading Test (spin) ✓		Heading used, Avoidance Off	
Waypoint Course Test (spin) ✓		Waypoint used, Avoidance Off	
Buoy Release Mechanism ✓		Tested and Secure	
Photo Document ✓			
RDF Beacon(s) Test		Test with receiver	
Autonomous Obstacle Avoidance		Enabled	
WGMS Alarms Checked / Cleared		"Out of Bounds" = Red. All others = Yellow/Green	

Comments	
Port side Octopus 1: CCU, water speed, solar panel mid and aft (3, 4)	
Stbd side Octopus 2: CCU, buoy release, solar panel fwd (1), radar reflector, light	

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: *VehicleName YYYYMMDD*