

Wave Glider – SV3 Pre-Launch Checklist

Date / Time 5/21/14
Technician(s): Kieft

Project: BEDs
Ship / Op Area: Monterey Bay

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	Tbay		
Float Name	F-20		
Glider Name	Tbay		
Thruder Serial Number	VS4163	Hardware ID	
Onboard Server WiFi IP	192-168-100-1	URL	
Onboard Server Virtual Cell IP		URL10.20.15.XXX	

Tracking

Resilient Tracker IMEI	300434060618480 activated (green light)	Every 10 min (1 st hour), then every 12 hrs.	
------------------------	--	---	--

(O2)

(S4)

(O1)

(S4)

Payloads	RTE ☒	AIS ☒	Weather Station ☒	Water Speed ☒	Lightbar ☒	
XP 1 (G1) SV3 PL or MPU	NA	see comments section		Description		
XP 2 (G2)	NA	off		Description		
XP 3 (G3)	NA	off		Description		
Payload 1 (sensor 1)	NA	off		Description		
Payload 2 (S2)	NA	off		Description		
Payload 3 (S3)	NA	off		Description		

WGMS

Organization	NBAKE		
Escalation List	LRE	Created and Populated	
Event Definitions	LRE	Compare Against Standard List	
Vehicle Op Area Defined	yes	Poly Name(s). Alarms Enabled	

Communications

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

Vehicle Status

Battery [Wh] > 500 Wh				
Solar Power Indicators:	Panel 1	Panel 2	Panel 3	Panel 4
Output > 0 W	7.75W	0	4.905	
Drybox Environmentals:	CCU	XP 1	XP 2	XP 3
Pressure > 120 kpa (+/-2)	11.9			
Temp	21.6			
Drybox Environmentals:	Thruder (170 kpa)	Payload 1	Payload 2	Payload 3
Pressure > 120 kpa (+/-2)	156.1			
Temp	18.8			

Vehicle Status: WGMS, SV3 Commands, SV3 vehicle form (AMPS, WX , AIS) Adaptable modular power system			
Item/Procedure	Readings	Specifications	Initials
Linux Uptime	00:12:48	Time Since Last Boot 12:48	
Regulus Uptime		Time Since Last Boot	
Weather Station		Accurate Reporting	
Airmar Weather GPS	reporting	Latest Report	
Torpedo GPS	Vehicle status page	Latest Report present	
UBLOX GPS	Vehicle status page	Latest Report	
Weather Station Heading			
Thruder Heading			
Water Speed		Current Draw	

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

Final Checks			
Thruster Spin		Slow, Fast	✓
Thruder 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	N/A
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*