

Wave Glider – SV3 Pre-Launch Checklist

Date / Time	Project:
Technician(s):	Ship / Op Area:

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	Tiny	SV3	tm
Float Name	Tiny Float	SV3	Tm
Glider Name	Tiny Glider	SV3	Tm
Thruder Serial Number	Not available	Hardware ID	Tm
Onboard Server WiFi IP	192-168-100-1	URL	Tm
Onboard Server Virtual Cell IP	Not sure	URL10.20.15.XXX	

Tracking			
Resilient Tracker IMEI	Tracker updates seen on 8.28, checklist procedure appears to have turned it off (tracker showed solid green light for 3 seconds, no red, but not reporting on 9/3	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	Sensor Payload			AMPS/SMC UART2/SW0 connected to Wetlabs EcoPuck sensor		
XP 2 (G2)	NA			Description		
XP 3 (G3)	NA			Description		
Payload 1 (sensor 1)	HotSpot, Legacy Payload with SMC			Communication Hotspot, acoustics and wifi, cell, freewave. Forward payload bay		
Payload 2 (S2)	GPCTD+DO			GPCTD+DO in 1U payload box subPIB SubPIB (2048) + PCOM/GPCTD+DO (2049). Float mounted. Mid Payload bay		
Payload 3 (S3)	OA Payload (0x100 -> 0x300)			pCO2 and pH. Aft payload bay		

WGMS			
Organization	mbari		
Escalation List	MBARI: Kieft, Maughan	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				
Solar Power Indicators:	Panel 1	Panel 2	Panel 3	Panel 4
Output > 0 W		0		

Drybox Environmentals:	CCU	XP 1	XP 2	XP 3	
Pressure > 120 kpa (+/-2)					
Temp					
Drybox Environmentals:	Thrudder (170 kpa)	Payload 1	Payload 2	Payload 3	
Pressure > 120 kpa (+/-2)					
Temp					

Vehicle Status: WGMS, SV3 Commands, SV3 vehicle form (AMPS, WX , AIS) Adaptable modular power system			
Item/Procedure	Readings	Specifications	Initials
Linux Uptime	1:59	Time Since Last Boot 2hrs	Tm
Regulus Uptime	1:59	Time Since Last Boot 2hrs	Tm
Weather Station		Accurate Reporting	Tm
Airmar Weather GPS		Latest Report	
Torpedo GPS	Vehicle status page	Latest Report ?	Tm
UBLOX GPS	Vehicle status page	Latest Report ?	Tm
Weather Station Heading	Heading 62.1 (turns=1.172)		
Thruder Heading			
Water Speed		Current Draw 1.461 W	

Mechanical Checks				
Float	Wet-mates connected/lubed		Check'd	Tm
	Connector covers secure		Check'd	Tm
	Drybox secure		Check'd	Tm
	Contact info secure		Check'd	Tm
	Hull		Free of cracks and dings	Tm
	Skeg/Fin		Secure (HotSpot Skeg with acoustic xducer)	Ttm
Sub	Hardware secure		Check'd	Tm
	Umbilical visual inspection		Free of voids/defects (check'd)	Tm
	Roll pins inserted		Flushed with surface	Tm
	Wings		Hardware secure with Loctite (check'd)	Tm
	Thruder		Hardware secure. No protrusion of fin and bottom back fairing fasteners. (epoxy in holes now)	Tm

Final Checks			
Thruster Spin		Slow, Fast (check'd, 2 second stutter at first startup)	Tm
Thruder Range of Motion		Manual and Command (Check'd)	Tm
Rudder Right, Left, Center		(Check'd)	Tm
Fixed Heading Test (spin)		Heading used, Avoidance Off	Tm
Waypoint Course Test (spin)		Waypoint used, Avoidance Off	Tm
Buoy Release Mechanism		Tested and Secure	Tm
Photo Document		Huh?	
RDF Beacon(s) Test		Test with receiver	Nope
Autonomous Obstacle Avoidance		Enabled	Tm
WGMS Alarms Checked / Cleared		"Out of Bounds" = Red. All others = Yellow/Green Not clearable – just warnings	tm

Comments
Stb side Octopus 2: CCU, buoy release, solar panel fwd (1), radar reflector, light

Technician Signature: _____ Thom Maughan

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*