

SV2 Wave Glider Pre-Launch Checklist

Date: 08DEC2014	Glider Name: OA Wave Glider
Operator: Chris Wahl	Payload: pCO2, CTD + DO and VR2C
Ship/Op Area: Monterey Bay	Project: 901310

Communication

Item/Procedure	Readings	Specifications	Initials
Xbee Connection		Coms Established	CDW
WGMS Updating		Coms Established	CDW

Configuration

Print xbee commands		<CR>,26,27,97 (attach to this doc)	CDW
RDF Frequency	Top:N/A expired Bottom:N/A expired		CDW
Tracker name/#	Tracker 45		CDW
Float name	OA Wave Glider		CDW
Glider name	OA Wave Glider		CDW
Drybox name	OA Wave Glider		CDW

Vehicle Status

Battery Wh	646.29	> 550 Watt-hours	CDW
Solar Power Indicators:	Panel 1 Panel 2		
	248mW 1937mW	> 1000 mW	CDW
Environmental:	Pressure Temp		
C&C Drybox (Float)	127 28	> 135 kpa, < 35° C	CDW
C&C humidity		<50%	CDW
Rudder Module (Sub)	112 38	< 105 kpa, < 35° C	CDW
Payload 1	100 20	> 135 kpa, < 35° C (Plastic PL ~100 kpa)	CDW
Payload humidity	66!	< 50%	CDW
Payload 2	115 20	> 135 kpa, < 35° C	CDW
Payload humidity	9	< 50%	CDW

Mechanical Checks

Float			
Wet-mates connected/lubed			CDW
Connector covers secure		30 in/lbs	CDW
Drybox secure		30 in/lbs	CDW
Turtledeck secure		30 in/lbs	CDW
Contact info secure			CDW
Remove RDF magnet		Top & Bottom RDF	N/A
Orange flag attached to mast			CDW
Cable tie on shorting pin		Secure shorting pin	CDW
Glider			
Line Terminator secure		Rubber mallet treatment	CDW
Umbilical visual inspection		Free of voids/defects	CDW
Roll pin inserted			CDW

Vehicle Functionality – WGMS

Tracker report rate/reporting	Time	Yes/No	
	6 hrs	Yes	CDW
Light on/off			CDW
IPIB sensors powered on			CDW
Rudder moves 360			CDW
Rudder center			CDW
Rudder left			CDW
Rudder right			CDW
Fixed heading test (spin)	100	Heading used	CDW

Vehicle Functionality – WGMS Cont.

Item/Procedure	Readings	Specifications	Initials
Waypoint course test (spin)	2	Waypoint number used, full vehicle spin	CDW
Op area defined		Monterey Bay, c1 to m1 to m2 loop	CDW
Photo document		Turtledeck, umbilical, rudder, spring bar, wing spring hardware, etc.	CDW
Event definitions		Compare against standard list	? Not changed
Set default comms		Change to iridium or alt-iridium	CDW
Check alarms			CDW

Payload Checks

[illegible]

Comments

-Solar panels may have problems? Power output low, but batteries are fully charged?

-Umbilical rubber damaged in some spots, but SS cable is fine, should be fine for our short test deployment

-Oxygen data from test tank testing does not look good

-Desiccant was forgotten in payload 1, this is okay for this short test deployment and will be added for future deployments

Technician Signature: Chris Wahl

Note: Once vehicle is launched the following tasks must be completed

1. Clear alarms
2. Vehicle on mission
3. Create *LAUNCHED* comment into WGMS.
4. Upload photos to box.com with album name: *YYYY-MM-DD VehicleName*

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Pyld1=-1mA, Pyld2=-1mA, Umb=4mA, iPib=0mA (-1=Off, -32768=Over Current)
 Pyld3=-1mA, Pyld4=-1mA, PEP=-1mA, Lightbar=-1mA (-1=Off, -32768=Over Current)
 Total Pwr=645086mWh, Bat Cur=0mA, Sys Cur=47mA, Sys Volt=21924mV
 Pyld Volt=13902mV, Pyld Cur=25mA, Modem Cur=13mA
 Panel0=20mW, Panel1=2198mW, Aux=22mW, Rsvrd=0mW

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0x01=Present, 0x02=Discharged, 0x04=Charged, 0x08=Discharging
 0x10=Discharge Alarm, 0x20=Charge Alarm, 0x40=Temp Alarm, 0x80=On-Line
 Battery 0: Status=2d, Temp = 20C
 Power=9303 (10mWh), Current=0mA, Voltage=16688mV
 Battery 1: Status=2d, Temp = 20C
 Power=9337 (10mWh), Current=0mA, Voltage=16676mV
 Battery 2: Status=2d, Temp = 20C
 Power=9402 (10mWh), Current=0mA, Voltage=16275mV
 Battery 3: Status=2d, Temp = 20C
 Power=9090 (10mWh), Current=0mA, Voltage=16688mV
 Battery 4: Status=2d, Temp = 20C
 Power=9159 (10mWh), Current=0mA, Voltage=16678mV
 Battery 5: Status=2d, Temp = 20C
 Power=9172 (10mWh), Current=0mA, Voltage=16686mV
 Battery 6: Status=2d, Temp = 21C
 Power=9046 (10mWh), Current=0mA, Voltage=16681mV

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Float SW Version 01.05 Bld 0826
 Float Boot SW Version 01.00 Bld 0001
 Rudder SW Ver 01.06 -- HW Ver 02.00
 Radome SW Ver 20.240 -- HW Ver 01.02
 Sensor Module SW Ver 00.00 -- HW Ver 00.00
 Battery Charger SW Ver 22.62 -- HW Ver 255.255
 Hardware ID: 0x430176293639473005D7FF39
 Battery #0: manufactured date = 03/10/2011, SerNum = 02463, Version = 3.1
 Battery #1: manufactured date = 03/10/2011, SerNum = 02391, Version = 3.1
 Battery #2: manufactured date = 03/10/2011, SerNum = 02360, Version = 3.1
 Battery #3: manufactured date = 03/10/2011, SerNum = 02486, Version = 3.1
 Battery #4: manufactured date = 03/10/2011, SerNum = 02380, Version = 3.1
 Battery #5: manufactured date = 03/10/2011, SerNum = 02495, Version = 3.1
 Battery #6: manufactured date = 03/10/2011, SerNum = 02362, Version = 3.1
 System is DB 3.5