


Test Case ID: 001, Ver-CG-67	Test Case Name: VE-CG-3100 Inspections		Test Plan Document No.: 3167-20000	Test Plan Rev.: 2-00	Test Date: 10/15/2012
Test Director (Print Name) Ed Dever	Signature in lieu of electronic signature	Design Engineer	Approval Signature John S. Dingess in lieu of electronic signature		Date 10-11-2012
Test Conductor (Print Name) David Neiman	Signature 	System Engineer	Approval Signature Ed Dever (in lieu of electronic signature)		Date 10/15/2012
Witnessed by (Print name)	Signature	QA/QC Engineer	Approval Signature Michael A. Zernick		Date 10/17/12

Test Class	<input checked="" type="checkbox"/> Performance	<input checked="" type="checkbox"/> Behavioral	<input type="checkbox"/> Reliability	<input type="checkbox"/> Endurance / Longevity	<input type="checkbox"/> Survivability	<input type="checkbox"/> Safety
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Test Description
The glider and its documentation will be inspected by CGSN personnel to confirm presence of communications equipment, glider controls, sensors, glider markings, transportation case, and necessary tools and supplies for functional glider tests. All purchase and quality documents will be presented and reviewed. Included will be reviews of instrument documentation to confirm all instrument meet mobile platform specifications.

Requirements Addressed
Glider: L4-CG-GD-RQ-214, L4-CG-GD-RQ-120, L4-CG-GD-RQ-155, L4-CG-GD-RQ-89, L4-CG-GD-RQ-167, L4-CG-GD-RQ-168

Test Setup	Test Artifacts
The complete glider will be available. All equipment, tools, and supplies required to operate the glider will be present. All instrument documentation, including calibration records and operating documents, will be present. Calibration sheets and TWR purchase specifications (referenced in the instrument verification section of this document) are attached in the 'test artifacts' section. The TWR purchase specifications include the instrument manufacturers' published specifications.	This document Glider "blue book" containing manufacturing and test records and sensor documentation (kept at TWR). Other relevant information supplied by vendor List of required equipment

Test Procedure				Test Results		
Step No.	Instructions	Expected Results (Accept Criteria)	Requirement ID	Test Data	Pass/Fail	Notes/Waiver No.
1.1	Inspect the build documentation	The glider is equipped with a pump head optimized for the 1000m depth, installed within the vehicle.	L4-CG-GD-RQ-214	The glider is fitted with 1000m engine SN 00092 There is nothing about the design that disqualifies use with other TWR engines.	Pass	See attached Glider Assembly Record
1.2	Inspect the communication file transfer code	Open-ocean glider communications protocol employs an error detection/correction protocol.	L4-CG-GD-RQ-120	The same communications code is used on the coastal and open-ocean gliders	Pass	See coastal glider documentation for details

Test Procedure				Test Results		
Step No.	Instructions	Expected Results (Accept Criteria)	Requirement ID	Test Data	Pass/Fail	Notes/Waiver No.
1.3	Inspect acoustic modem documentation	The open ocean glider acoustic link communications protocol employs a CRC error detection/correction protocol.	L4-CG-GD-RQ-155	The modem uses a CRC protocol. CRC error checks were also shown on TWR development/test documentation.	Pass	
1.4	Inspect the mission planning suite.	A mission planning program, spread sheet, model, or algorithm is provided to estimate glider energy requirements and communications bandwidth usage for operational scenarios and sensor payloads.	L4-CG-GD-RQ-89	Tool provided	Pass	A planning tool that encompasses both coastal and open-ocean gliders is available
1.5	Analyze ballast range	The glider can be ballasted to cover the range of water density from (0PSU, 30°C) to (40PSU, -2° C)	L4-CG-GD-RQ-167 L4-CG-GD-RQ-168	The minimum water density for which the glider can be ballasted is 1003.8kg/m ³ . The requirement extreme of 30°C and 0PSU give a water density of 995.5 kg/m ³ . On the high-density end (-2°C, 40PSU), the glider can be successfully ballasted.	L4-CG-GD-RQ-167 Pass L4-CG-GD-RQ-168 passed with waiver	Gliders have been used across the temperature range specified by L4-CG-GD-RQ-167. Over the temperature range historically encountered at the global sites, the salinity required to meet the minimum density restriction of the glider is well below the salinity recorded. Thus, L4-CG-GD-RQ-168 has been waived per ECR 1303-00842

G2 SLOCUM GLIDER - DEEP FINAL ASSY RECORD

SELECT ONE	<input checked="" type="checkbox"/> NEW GLIDER	GLIDER REPAIR	JOB #	1928.02
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NOTE: FILL IN ALL REQ'D DATA, NO EMPTY SPACES, NO DITTOS.

Customer	W.H.O.S.	Job#	1928.02
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DEPTH 1000M 350M SPECIAL, SPECIFY DEPTH _____

PRE-TEST

FORM#
RECORD, G2 GENERIC

1000M GLIDER, ASSY G-4495	REV.	N/A	SERIAL #	276
FORWARD PUMP ASSY	ASSY G-1372	SERIAL #	0092	
ALTIMETER	G-1414 1779	SERIAL #	11089-01	
PAYLOAD BAY, ASSY G-4494	SERIAL #	0530		
AFT SECTION	ASSY G-1435	SERIAL #	0178	
AFT TRAY, ELECTRIC	ASSY G-1425	SERIAL #	0299	
AFT END CAP	ASSY G-1433	SERIAL #	0178	
PRESSURE TRANSDUCER	ASSY G-1312	SERIAL #	99873	
DIGI FIN	ASSY G-1604	SERIAL #	1032	
STROBE ASSY (OPTIONAL)	ASSY G-1429	SERIAL #	N/A	
COMPOSITE HULL, AFT	ASSY G-1405	SERIAL #	0241	
COMPOSITE HULL, FWD	ASSY G-1405	SERIAL #	0238	
FREEWAVE, MASTER	G-489	SERIAL #	875-7421	
IRIDIUM SIM CARD (Cust. Supplied)	SERIAL #	8988109574001019749		
ARGOS ID# (Cust. supplied)	120010 Dec AEFZCAD HEX			
U4SOEM BOARD (OPTIONAL)	G-388A	SERIAL #	P11608	
LITHIUM BATTERY, FWD (OPTIONAL)	SERIAL #	120013		
LITHIUM BATTERY, AFT (OPTIONAL)	SERIAL #	120013		
LITHIUM BATTERY, EMERGENCY	SERIAL #	120013		

SENSORS

SENSOR	SUPPLIER	SENSOR#	SERIAL #	SRMB		U4S Board	
				UART J#	PWR J#	Tx Pin#	Rx Pin#
1	Acoustics	ARM-2FT-8	55425	0	29	-	-
2	Seaward	G-4466	0104	3	30	-	-
3	WSTLABS	G-1615	2419	46	34	2	4
4	AAudenna	G-4663	012	44	39	6	8

3058-12

VACUUM TEST VACUUM (24 HR. @ >7"Hg)

START DATE	4/10	START TIME	8:16
STOP DATE	4/16	STOP TIME	9:11
START - VACUUM "Hg	7.06	STOP - VACUUM "Hg	7.11

PASS FAIL Describe failure: _____
 Completion Date: 4/16/12 Tech Sign: [Signature]

ADDITIONAL INFO # Acoustics is 2 part, 12x12
 Additional Lith Battery For Emergency Bay = # 1100067

TELEDYNE WEBB RESEARCH Completion Date 4/16/12 Tech Sign [Signature]
 Review Date 4/16/12 Approval [Signature]

FORM# 4438-HS - RECORD, G2 GENERIC DEEP GLIDER FINAL ASSY REV. C