OXYGEN GENERATOR LOG (MODEL 7L16)

(Two-Hour Checks and Legend on Back)

SHIP	EOG NO.	ELAPSED TIME	DATE

ONE HOUR CHECKS

EOG SERIAL:	MIN	NOR	MAX	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
DC AMMETER (AMPS)	350■	VARIABLE	1050																								
DC VOLTMETER (VOLTS)	32	VARIABLE	55																								
GAI-103 (% H_2)	0	0	*																								
TIC-101 (°F)	115	125	135																								
GAI-101 (% H_2)	0	0.6-1.4	2.0																								
GAI-102 (% O_2)	0	0.2-0.6	1.0																								
PIC-101 (O_2 SYS. PSIG)	1900•	2100	3100																								
PIC-101 (VALVE PRESS. . . SIG)	--	9-13▲	--																								
PIC-D-102 (D/P. INCHES W.C.)	(--) 0.5	0	(+) 0.5																								
PIC-D-102 (VALVE PRESS. PSIG)	--	9.13▲	--																								
PI-D-103 (D/P. PSIG)	75	VARIABLE	125																								
PI-104 (GA-102. PSIG) B MOD EOG ☐	12	15	18																								
PI-103 (GA-101. PSIG) B MOD EOG ☐	12	15	18																								
PI-104 (GA-102, PSIG) C MOD EOG ☐	8	10	12																								
PI-103 (GA-101. PSIG) C MOD EOG ☐	8	10	12																								
GROUND DETECTION (SIMPSON METER)																											
[+] BUS TO GROUND (DC VOLTS)	*See table on back side*																										
[--] BUS TO GROUND (DC VOLTS)																											
SUM OF [+] AND [--] VOLTAGES																											

WATCH HOURS/REMARKS/SIGNATURES *(Use blank 8 1/2 x 14" white paper if more space required. Identify attachments.)*

WATCH HOURS--FROM: TO:	FROM: TO:	FROM: TO:
(Signature)	*(Signature)*	*(Signature)*
FROM: TO:	FROM: TO:	FROM: TO:
(Signature)	*(Signature)*	*(Signature)*
LPO SIGNATURE	DIV. OFF. SIGNATURE	ENGINEER SIGNATURE

OXYGEN GENERATOR LOG (MODEL 7L16)

TWO-HOUR CHECKS

CELL NO.	CELL TO GROUND VOLTAGE (DURING PERIODS OF RAPID GROUND SHIFT,ONLY RECORD CELL 101, 102, AND INDICATE GROUND POINT)											
	NOR	00	02	04	06	08	10	12	14	16	18	20	22
101	-19												
105	-17												
109	-14												
113	-12												
114	- 9												
115	- 7												
116	- 4												
112	- 1												
111	+ 1												
110	+ 4												
106	+ 7												
107	+ 9												
108	+12												
104	+14												
103	+17												
102	+19												

CELL NO.	CELL TO CELL VOLTAGE *(See Cell to Cell Voltage Limits)*											
	00	02	04	06	08	10	12	14	16	18	20	22
101												
102												
103												
104												
105												
106												
107												
108												
109												
110												
111												
112												
113												
114												
115												
116												

	MIN	NOR	MAX	00	02	04	06	08	10	12	14	16	18	20	22
PIC-101 (Set Point, PSIG)	1900	2100	3100												
PIC-D-102 (Set Point.Inches W.C.)	0	0	0												
TIC-101 (Set Point, °F)	125	125	125												
TIC-101 (Valve Press., PSIG)	--	VARIES	--												
FI-104 (SCFH Oxygen)	5.0	5.0	5.0												
FI-101(SCFH Oxy)(B&C MOD EOG)	1.0	1.0	1.0												
FI-102 (SCFH Hyd.)(BMOD EOG) □	1.5	1.5	1.5												
FI-102 (SCFH Hyd.)(C MOD EOG) □	1.0	1.0	1.0												
PI-107 (H_2 Disposal, PSIG)	DO NOT RECORD (x)														
KILO Amp Hours	See Note 3														

RECTIFIER OUTPUT	SIMPSON 260 VOM GROUND DET. LIMIT Sum of Voltages (Disregarding Polarity) as Measured with the Simpson Meter
32	11-16
34	12-17
36	13-18
38	14-19
40	15-20
42	16-21
44	17-22
46	18-23
48	19-24
50	20-25
52	21-26
54	22-27

If the sum of the voltages (disregarding polarity) recorded above is less than the lower value specified for a given rectifier output voltage, normal generator operation may be continued. If the sum is within the values indicated for a given rectifier output voltage normal operation may be continued, but checks with the ground analyzer shall be made every 1/2 hour to insure that the sum does not exceed the higher value.

If the sum of the voltages exceeds the higher value specified for a given rectifier output voltage immediately interrupt electrolysis, purge the generator and check for ground location per paragraph 9-1-1 of NAVSEA Tech. Manual S9515-AC-MMO-010.

KILOAMPERE HOURS

Brought Forward	
This Date	
Total	

TABLES

CELL TO CELL VOLTAGE LIMITS

RECTIFIER OUTPUT CURRENT AMPERES	CELL TO CELL VOLTAGE VOLTS		
	MIN	NOR	MAX
1050	2.6	2.8-3.0	3.3
950	2.5	2.8-3.0	3.2
850	2.4	2.7-2.9	3.1
750	2.3	2.7-2.8	3.0
650	2.2	2.7-2.8	2.9
550	2.1	2.6-2.7	2.8
450	2.1	2.6-2.7	2.8
350	2.1	2.6-2.7	2.8

The only exceptions to these cross cell voltage limits are:

On initial start up the maximum cross cell voltage may be higher due to low temperature. The maximum should not exceed 3.6 volts. The cross cell voltage should decrease to normal when the generator is at normal operating temperature (TIC-101 125 F).

The minimum voltage may be 0.3 VDC lower for no longer than 24 hours, after a caustic change. When cross cell voltages are out of the above limits, corrective action should be taken for low and high cross cell voltage in accordance with paragraph 6-24 and 9-21-6. of NAVSEA Tech. Manual S9515-AC-MMO-010.

NOTES:

1. At no time should the generator be operated with any cross cell voltage exceeding 3.4 VDC. At no time should a new cell (less than 36 hrs. of operation) be operated with a cross cell voltage exceeding 3.2 VDC. If is extremely important to check the cross cell voltages at start up to insure that no one cell voltage is higher by 10% of the average of all other cell voltages.
2. The Watchstander shall record all readings outside the MIN-MAX limits in red and immediately report them to the Officer of the Watch. Remarks shall be recorded on front side of this Log Sheet. If more space is required, use blank 8 1/2 x 14" white sheet of paper and properly identify such attachment(s).
3. Kilo ampere hours shall be recorded from the meter if installed. Calculate the kilo ampere hours if no meter is installed (1050 Amps for 1 hour = 1.05 K Smp Hr, 1050 Amps for 1/2 hour = 0.55 K Amp Hrs; 525 Amps for 2 hours = 1.05 K Amp Hr.)

LEGEND: * Should not exceed Compartment Background.
▲Varies with Back Pressure and when making pressure changes.
□Only record readings for appropriate unit modification.
■May be lower at startup with 55 volts due to Low Cell Temperature.
•At startup, Pressure will be 600 psi lower than Minimum Value stated, then will gradually increase to Normal Operating Pressure during first 90 minutes of operation.