

— USS STEPHEN W GROVES —

(FFG-29)

**SEMAT II SHELL CONDITION ASSESSMENT SURVEY
INTERIOR AREAS
6/24/01 – 7/6/01**



**PREPARED BY SUPSHIP
PORTSMOUTH
07/10/01**

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9 July 2001

Q.E.D. Systems, Inc. was tasked by the Supervisor of Shipbuilding Conversion and Repair, USN (SPORT) Portsmouth, VA to conduct an Ultrasonic Thickness (U/T) Survey of specific locations on board USS STEPHEN W. GROVES (FFG 29) during the period of 25 June 2001 – 6 July 2001.

The survey was conducted by Francis J. (Joe) LaRock II, Certified Level I on 9 March 2001.

The instrument used was a Kraut Kramer Branson, Model DMS-2.

Serial Number: 00N3V8
Calibration Date: 22 February 2001
Probes Used: TC 560
FH 2 E
KBA 525

I have reviewed the results of the survey and approved of the findings. The discrepancies have been recorded on MAF's and are included in this report.


Francis J. LaRock
Certified Level II
9 March 2001

USS STEPHEN W GROVES (FFG-29)

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SHELL CONDITION ASSESSMENT SURVEY SUMMARY

Interior Areas

A Semat II Shell and Supporting Structure survey of all accessible interior areas was conducted on board the USS STEPHEN W. GROVES (FFG-29) at MOSS POINT NAVAL STATION in Pascagoula Mississippi, from 25, JUNE through 06, JULY 2001.

The survey was conducted in accordance with Hull Structure MRC 1102 using a Delmhorst model BD 2100 moisture meter and a Krautkramer Branson model DM2TC ultrasonic test instrument, serial no. 00NV8 calibration due date; 02/22/02.

During the survey, areas historically prone to corrosion (hot spots) on (FFG-7) class vessels were inspected and noted along with other areas where corrosion was found. The only areas where heavy deterioration was found were the stringers in **AMR 3** and the **STEERING GEAR ROOM**.

The overall condition of the USS STEPHEN W. GROVES except for the deteriorated stringers was better than other FFG 7 class ships. This is because repairs have been made, and lagging has been removed, reducing corrosion caused by condensation and trapped water. The Survey Results section provides additional details.

FFG-29 STRUCTURAL INSPECTION RESULTS
UNSATISFACTORY AREAS.

LOCATION	AREA	RESULTS
5-368-0-E STEERING GEAR RM	STBD SIDE, AFT OF BHD (368) STRINGERS (8-9)	STRINGERS (8-9) ARE HOLED FROM BHD (368) APPROXIMATELY 2' OUT.
5-292-0-E AUX 3	PORT SIDE, AFT OF SSDG #4 STRINGER 11.	STRINGER (11) IS HOLED. APPROXIMATELY 8FT AFT OF SSDG #4.
5-292-0-E AUX 3	PORT SIDE, 2FT AFT OF WF (316) BTWN STRINGERS (9-10)	APPROXIMATELY 1SF BETWEEN STRINGERS (9-10) SHELL IS THINNING.
5-292-0-E AUX 3	CENTER LINE, TRANSVERSE WEB FRAME (316)	APPROXIMATELY 16SF OF TRANSVERSE WEB FRAME HAS HEAVY PITTING AND HOLES, ASSOCIATED HORIZONTAL AND VERTICAL STIFFNERS ARE CORRODED.
5-292-0-E AUX 3	SHAFT AT TRANSVERSE WEB FRAME (316)	APPROXIMATELY 58SF OF SHAFT HAS HEAVY RUST AND PAINT SEPARATION.
5-292-0-E AUX 3	STBD SIDE, UNDER HOT POTABLE WATER TANK STRINGER (8) BTWN BHD (292) AND WF (300)	APPROXIMATELY 4 LF OF STRINGER (8) IS HOLED.
5-250-0-E MER	PORT SIDE, WF (264-270) FROM MARGIN PLATE TO STRINGER (11) APPROXIMATELY 2 FT AFT OF WF (270) AT TRANSVERSE WELD SEAM.	APPROXIMATELY 100 SF OF SURFACE RUST AND PAINT SEPARATION.
5-212-0-E AMR 2	PORT SIDE, BHD (212) FROM STRINGERS (7-12)	APPROXIMATELY 10 SF OF AREA HAS RUST AND PAINT SEPARATION.
5-180-0-E AMR 1	STBD SIDE, INSIDE SSDG ENCLOSURE. 34" AFT OF WF (196) BTWN STRINGERS (10-11)	PITTING IN SHELL PLATE.
5-51-0-Q FWD EDUCTOR RM	ENTIRE BILGE POCKET	APPROXIMATELY 60 SF HAS SURFACE RUST AND PAINT SEPARATION.
4-100-0-E APU RM	STBD BILGE POCKET,	APPROXIMATELY 40 SF OF RUST AND PAINT SEPARATION.
4-48-1-Q SONAR COOLING ROOM	STBD SIDE, FROM THE DECK UP THE THIRD STRINGER AND BHD (56)	APPROXIMATELY 12 SF OF AREA HAS RUST AND PAINT SEPARATION.
3-84-0-E A/C MACHINERY ROOM	PORT SIDE, BETWEEN WF (90) AND BHD (100) UP TO FIRST STRINGER OFF THE DECK	APPROXIMATELY 20 SF OF AREA HAS SURFACE RUST AND PAINT SEPARATION.
3-84-0-E A/C MACHINERY ROOM	PORT SIDE, AT BHD (100), TANK TOP/DECK AND FOUNDATION OF A/C UNIT.	APPROXIMATELY 50 SF OF RUST AND PAINT SEPARATION.

**FFG-29 STRUCTURAL INSPECTION RESULTS
UNASSESSABLE AREAS.**

LOCATION	AREA	RESULTS
3-20-0-Q	CHAIN LOCKER	UNASSESSABLE/REQUIRES GAS FREE
3-64-2-V	VOID	UNASSESSABLE/REQUIRES GAS FREE
3-64-1-V	VOID	UNASSESSABLE/REQUIRES GAS FREE
3-236-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-236-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-240-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-240-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-272-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-272-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-278-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-278-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-286-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-286-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-292-8-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-316-1-J	JP5 FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-322-1-J	JP5 FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
3-328-0-A	STORE ROOM	UNASSESSABLE/DECK REPAIRS
4-H-0-V	VOID	UNASSESSABLE/REQUIRES GAS FREE
4-27-0-V	VOID	UNASSESSABLE/REQUIRES GAS FREE
5-FF-0-V	VOID	UNASSESSABLE/REQUIRES GAS FREE
5-32-0-W	SALT WATER TANK	UNASSESSABLE/REQUIRES GAS FREE
5-56-0-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-64-0-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-84-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-84-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-100-3-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-100-4-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-116-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-116-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5½-116-0-V	VOID	UNASSESSABLE/REQUIRES GAS FREE`
5-132-0-F	CONTAMINATED OIL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-137-1-T	UNDERWATER LOG TANK	UNASSESSABLE/REQUIRES GAS FREE
5-140-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-140-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-164-0-F	CONTAMINATED OIL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-164-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-164-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-170-0-F	CONTAMINATED OIL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-192-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-201-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-201-3-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-204-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-204-2-F	FUEL TANK	UNASSASSABLE/REQUIRES GAS FREE
5-220-2-W	WASTE STORAGE TANK	UNASSESSABLE/REQUIRES GAS FREE
5-222-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-250-1-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-250-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-270-0-F	HYDRAULIC OIL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-276-0-F	LUBE OIL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-290-2-F	FUEL TANK	UNASSESSABLE/REQUIRES GAS FREE
5-398-1-A	STORE ROOM	UNASSESSABLE/ FULL OF STORES

FFG-29 STRUCTURAL INSPECTION RESULTS
SATISFACTORY AREAS.

LOCATION	AREA	RESULTS
3-32-2-A	SECURITY FORCES ISSUE ROOM	SAT
3-32-1-K	FLAMMABLE LIQUID STORAGE	SAT
3-36-2-T	ESCAPE TRUNK	SAT
3-46-1-A	SPECIAL CLOTHING STORE ROOM	SAT
3-56-0-A	DECK GEAR STORE ROOM	SAT
3-93-1-Q	(DOES NOT EXIST)	SAT
3-100-0-L	BERTHING SPACE	SAT
3-100-1-L	CREW LOUNGE	SAT
3-113-0-L	SANITARY SPACE	SAT
3-140-2-L	CREW LOUNGE	SAT
3-144-0-L	CREW BERTHING	SAT
3-156-2-Q	PIPING SPACE	SAT
3-180-2-C	SWITCH GEAR ROOM	SAT
3-180-5-A	DRY PROVISIONS STORE ROOM	SAT
3-196-2-A	STORE ROOM	SAT
4-32-0-Q	SONAR EQUIPMENT ROOM	SAT
4-48-2-L	P-WAY	SAT
4-56-2-A	DECK STOWAGE	SAT
4-56-0-M	SMALL ARMS ROOM	SAT
4-64-0-Q	N2 CHARGING ROOM	SAT
4-140-0-Q	LAUNDRY	SAT
4-151-3-A	CLEANING GEAR LOCKER	SAT
4-152-1-A	STOREROOM	SAT
4-160-0-Q	CHT ROOM	SAT
4-172-1-E	FIRE PUMP ROOM	SAT
5-56-0-M	SMALL ARMS MAGAZINE	SAT
5-100-2-W	APU WELL	SAT
5-100-1-W	APU WELL	SAT
5-376-1-A	STORE ROOM	SAT
5-390-1-A	STORE ROOM	SAT

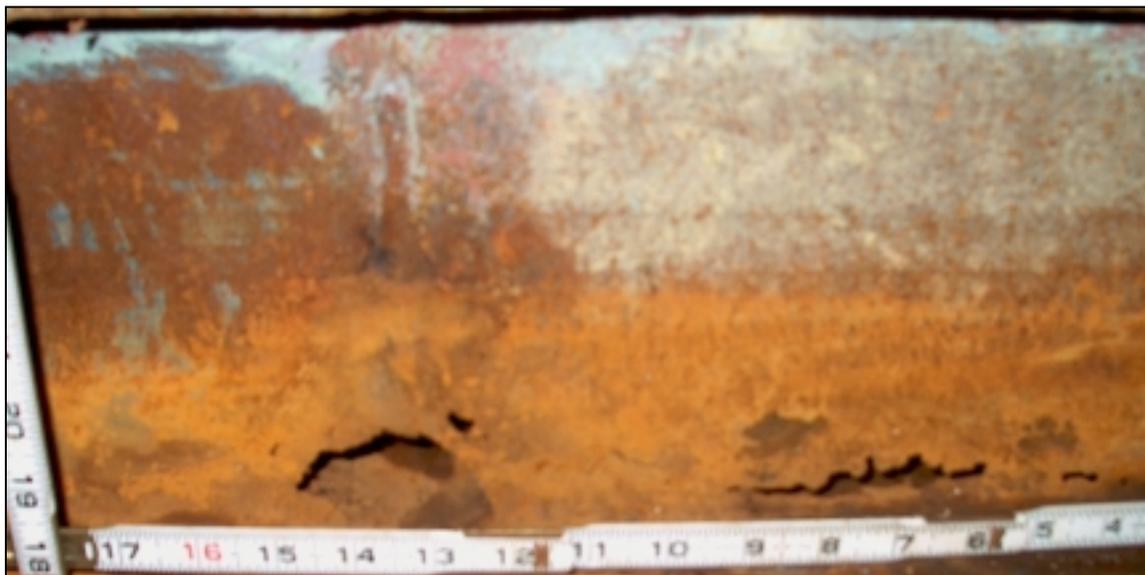
MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)					
SYSTEM SHELL & SUPPORTING STRUCTURE 110		ESWBS 11011	EIC A100	APL X-SYSTEMS	RIN N/L		
EQUIPMENT NAME HULL STRUCTURE 1102XY		IDENT/SERIAL N/A	LOCATION 5-368-0-E	WORK CENTER EMO4	JSN A329		
EQUIPMENT STATUS		PROBLEM STATUS		CATEGORY		EOC	
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		0. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4. S - SHIP'S FORCE *UNCORRECTED PROBLEMS		0. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED		.9	
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS	CAUSE		DEFERRAL REASON		
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PRIOR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 4. NOT APPLICABLE	0. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE		0. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE		
MAN HRS EXPENDED 2	MAN HRS REMAINING 400	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY		
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL		1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION			1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE		
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: STBD SIDE, (5-368-0-E) EDUCTOR ROOM AFT OF BHD (368)							
STRINGERS (8-9) ARE HOLED AND SEVERILY DETERIORATED. APPROXIMATELY 8 LF OF 4X6 T-BEAM.							
RECOMMENDED REPAIRS: CUT OUT AND REPLACE APPROXIMATELY 8 LF OF 4X6 T-BEAM, PRESERVE AND PAINT TO MATCH.							
FTSC is to conduct risk assessment and make final repair recommendations.							
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/ M. MELVIN							
CSMP SUMMARY: STRINGERS (8-9) ARE HOLED WITH HEAVY DETERIORATION.				TEST# MRC 1102/1			
ROOT CAUSE/AMPLIFICATION: H1				STEP# 1,2,3,4 & 5			
SYSTEM LEVEL IMPACT:							
PART NO.	NOMEMCLATURE			QTY	NSN	COST	
1							
2							
3							
4							
5							
6							
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE		
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ OED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP	

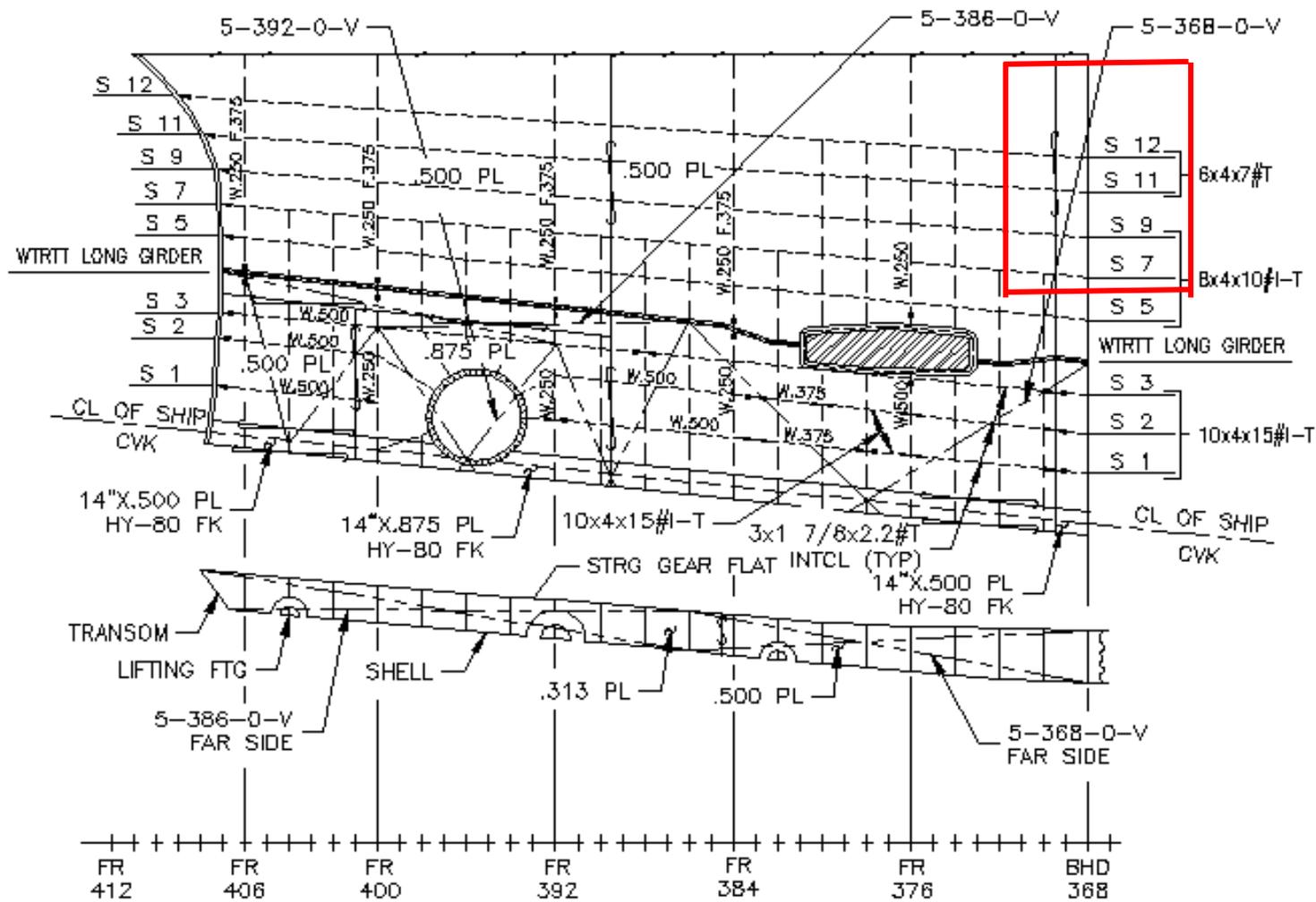
STEERING GEAR ROOM (5-368-0-E)



STBD SIDE LOOKING INBOARD, WHERE STRINGER (8) MEETS BHD (368)



STBD SIDE, STRINGER (9)



USS STEPHEN W GROVES (FFG-29)
 STEERING GEAR ROOM (5-368-0-E)
 STBD SIDE LOOKING PORT EXPANDED
 VERTICALLY

RED BOX INDICATES AREA WHERE U/T
 READINGS WERE TAKEN
 SEE PAGE 10

BHD 368

WF 376

W .166
F .193 Δ .512

STRINGER 10

.501
 Δ

W .0
F .189

STRINGER 9

.497
 Δ

W .0
F .202

HOLES IN WEB



STRINGER 8

MARGIN PLATE

USS STEPHEN W. GROVES (FFG-29)
STEERING GEAR ROOM (5-368-0-E)
STBD SIDE EDUCTOR

J. LaROCK/T. ILGENFRITZ
QED SYSTEMS INC.
07/03/01

MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)					
SYSTEM SHELL & SUPPORTING STRUCTURE 110		ESWBS 11011	EIC A100	APL X-SYSTEMS	RIN N/L		
EQUIPMENT NAME HULL STRUCTURE 1102XY		IDENT/SERIAL N/A	LOCATION 5-292-0-E	WORK CENTER EMO4	JSN A363		
EQUIPMENT STATUS		PROBLEM STATUS	CATEGORY			EOC	
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4. S - SHIP'S FORCE *UNCORRECTED PROBLEMS	1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED				
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS	CAUSE		DEFERRAL REASON		
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PIOR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE	1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE		1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE		
MAN HRS EXPENDED 8	MAN HRS REMAINING 300	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY		
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL			1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE. DESCRIBE IN REMARKS/DESCRIPTION SECTION		1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE		
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: PORT SIDE, (5-292-0-E) AUX 3, BETWEEN WF (316-324)							
STRINGER (11) BEHIIND/UNDER POWER PNL (3-319-2) IS HOLED. SHELL PLATE APPROXIMATELY 1.5" ABOVE HOLES IN							
STRINGER (11) IS THINNING. REFER TO DRAWING FOR U/T READINGS.							
RECOMMENDED REPAIRS: REMOVE AND REPLACE APPROXIMATELY 8 LINEAR FEET OF 4X6 T-BEAM. PRESERVE AND PAINT TO MATCH.							
FTSC is to conduct risk assessment and make final repair recommendations.							
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/M. MELVIN							
CSMP SUMMARY: STRINGER (11) BETWEEN WF (316-324) IS DETERIORATED.				TEST# MRC 1102/1			
ROOT CAUSE/AMPLIFICATION: H1				STEP# 1,2,3,4 & 5			
SYSTEM LEVEL IMPACT:							
PART NO.	NOMEMCLATURE			QTY	NSN	COST	
1							
2							
3							
4							
5							
6							
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE		
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ QED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP	

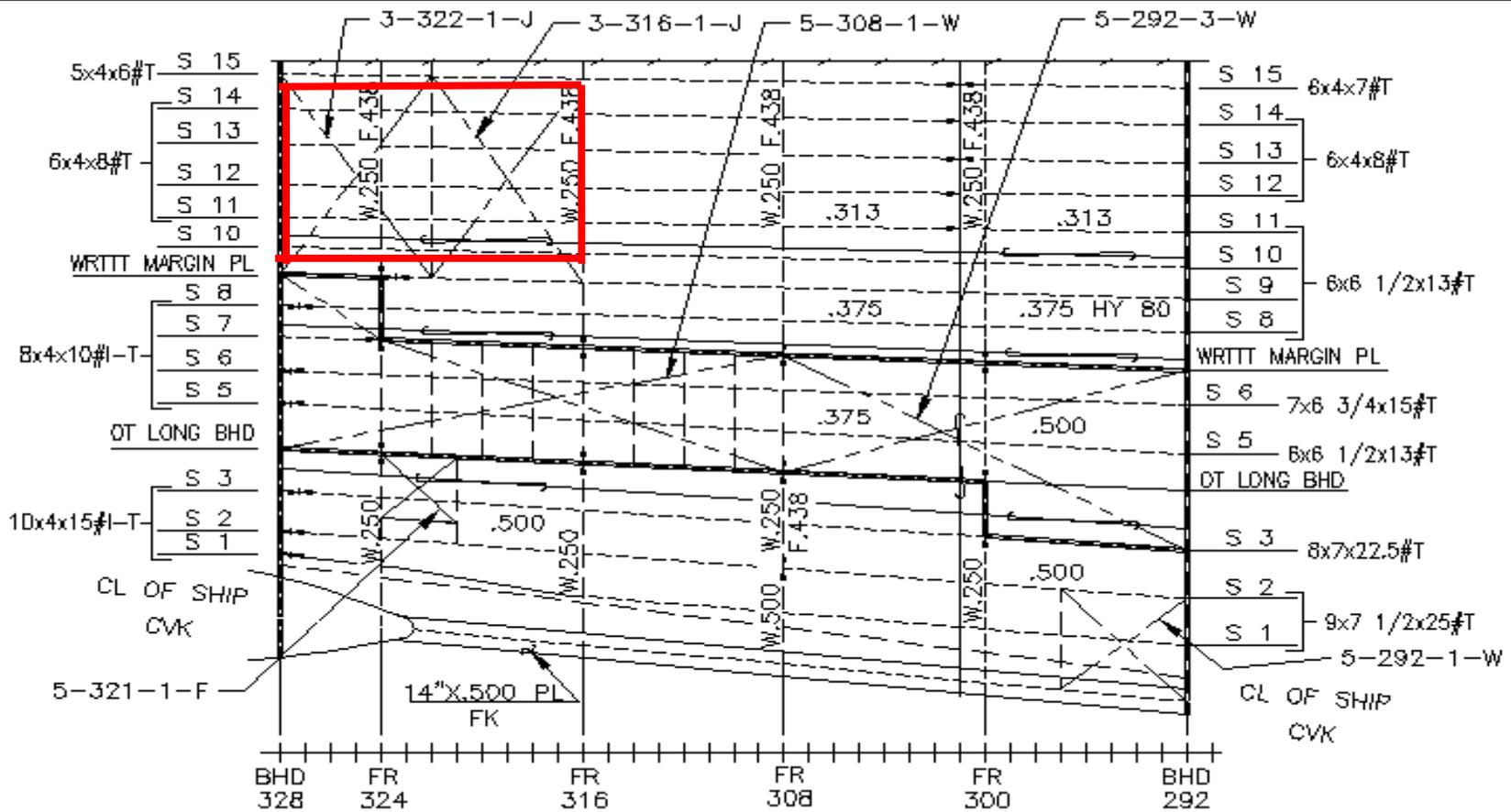
AUXILIARY MACHINERY ROOM 3 (5-292-0-E)



TOP VIEW OF STRINGER (11) FWD OF WF (324).



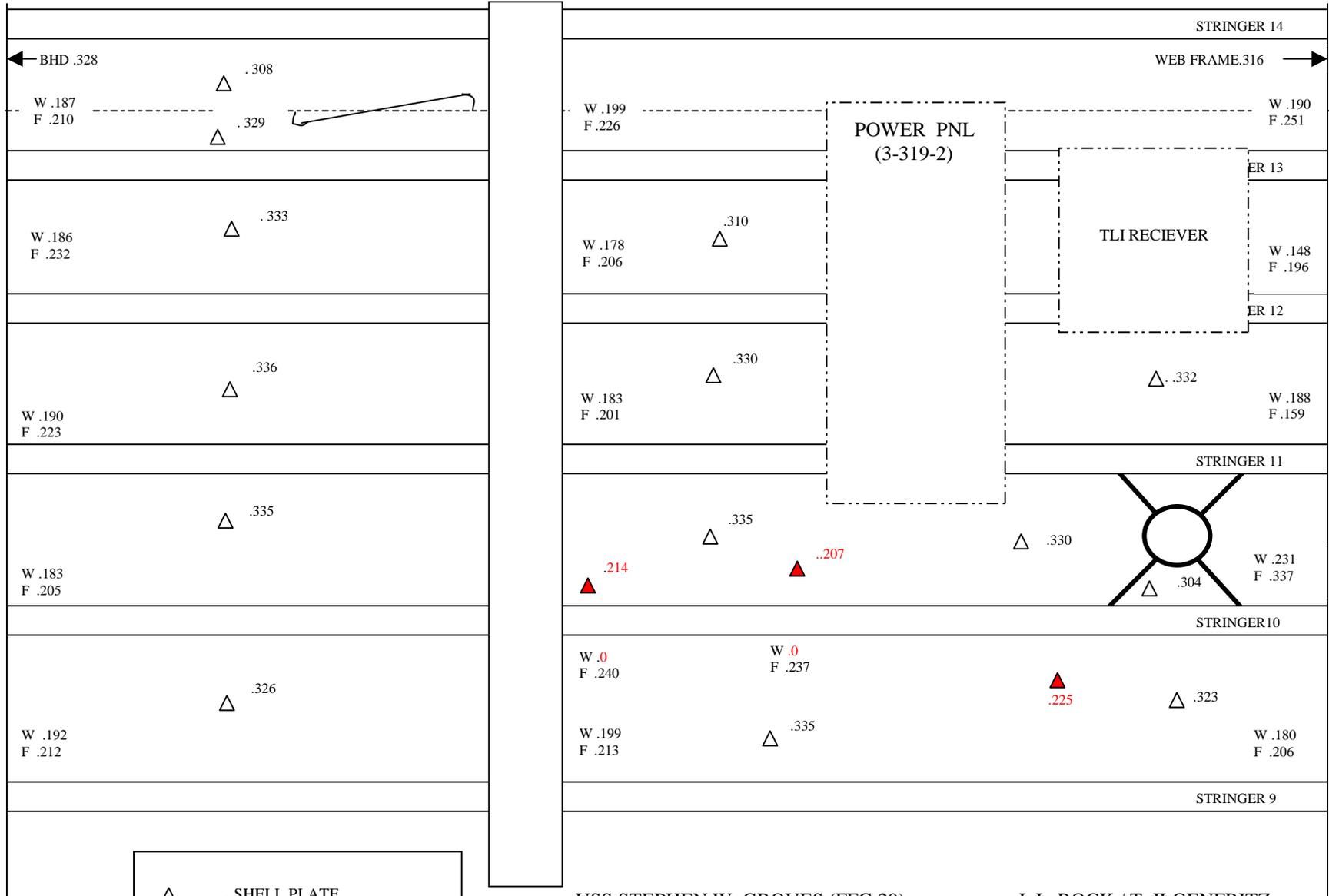
UNDERNEATH VIEW OF STRINGER (11)
RECOMMENDED FOR REPLACEMENT.



USS STEPHEN W GROVES (FFG-29)
 AUXILIARY MACHINERY ROOM 3
 (5-292-0-E) PORT SIDE

RED BOX INDICATES LOCATION
 OF U/T READINGS
 DRAWING ON FOLLOWING PAGE

WEB FRAME
.324



△	. SHELL PLATE
W	STRINGER WEB
F	STRINGER FLANGE

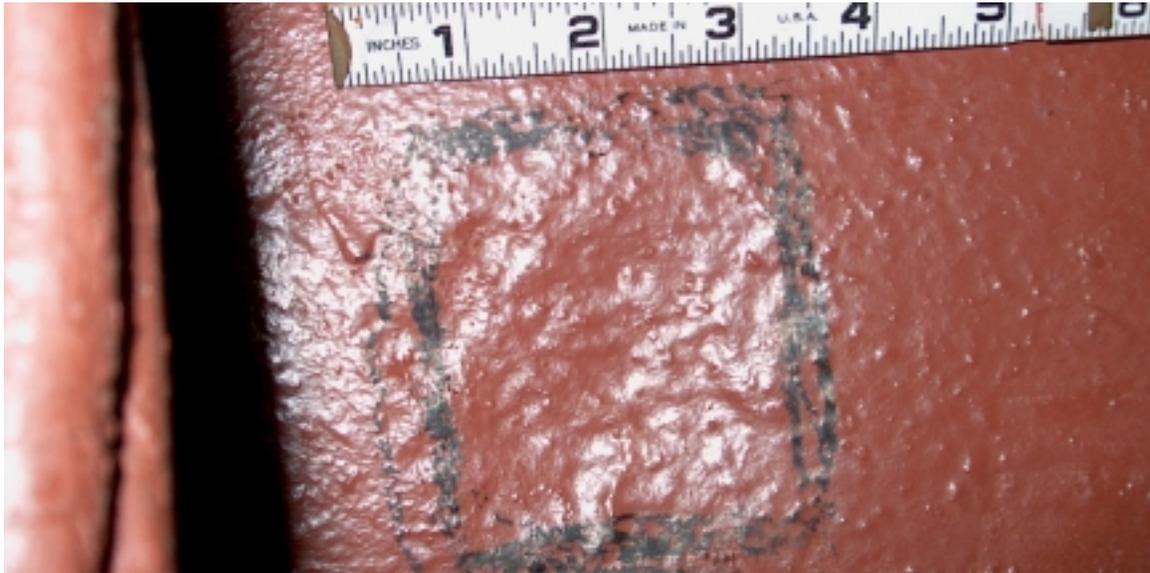
USS STEPHEN W. GROVES (FFG 29)
AUXILLIARY MACH RM 3
(5-292-0-E) PORT SIDE

J. LaROCK / T. ILGENFRITZ
QED SYSTEMS INC
06/25/01

MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)					
SYSTEM SHELL & SUPPORTING STRUCTURE 110		ESWBS 11011	EIC A100	APL X-SYSTEMS		RIN N/L	
EQUIPMENT NAME HULL STRUCTURE 1102XY		IDENT/SERIAL N/A		LOCATION 5-292-0-E	WORK CENTER EMO4	JSN A344	
EQUIPMENT STATUS		PROBLEM STATUS		CATEGORY		EOC	
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4.S - SHIP'S FORCE *UNCORRECTED PROBLEMS		1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED			
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS		CAUSE	DEFERRAL REASON		
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PIOR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE		1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE	1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE		
MAN HRS EXPENDED 4	MAN HRS REMAINING 200	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY		
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAVIER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL			1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION		1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE		
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: PORT SIDE, (5-292-0-E) AUX 3, APPROXIMATELY 2FT AFT OF							
WF (316) BETWEEN STRINGERS (9-10) SHELL PLATE THINNING AT .225. APPROXIMATELY 9 square inches.							
Refer to attached drawing.							
RECOMMENDED REPAIRS: CUT OUT AND REPLACE APPROXIMATELY 1SF OF SHELL PLATING. PRESERVE AND PAINT TO MATCH.							
FTSC is to conduct risk assessment and make final repair recommendations.							
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/M. MELVIN							
CSMP SUMMARY: SHELL PLATE THINNING.					TEST# MRC 1102/1		
ROOT CAUSE/AMPLIFICATION: H1					STEP# 1,2,3,4 & 5		
SYSTEM LEVEL IMPACT:							
PART NO.	NOMEMCLATURE			QTY	NSN	COST	
1							
2							
3							
4							
5							
6							
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE		
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ OED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP	

AUXILIARY MACHINERY ROOM 3 (5-292-0-E)



SHELL PLATE 2FT AFT OF WF (316) BTWN STRINGERS (9-10)
REFER TO DRAWING FOR U/T READINGS



UNDERNEATH VIEW OF STRINGER (11)
RECOMMENDED FOR REPLACEMENT.
REFER TO DRAWING ON PAGE 13 FOR U/T HISTORY.

MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)					
SYSTEM Hull Structure		ESWBS 11011	EIC A100	APL X-SYSTEMS		RIN N/L	
EQUIPMENT NAME Shell & Supporting Structure		IDENT/SERIAL N/A		LOCATION 5-292-0-E	WORK CENTER EMO4	JSN A364	
EQUIPMENT STATUS		PROBLEM STATUS		CATEGORY		EOC	
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4. S - SHIP'S FORCE *UNCORRECTED PROBLEMS		1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED		.9	
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS		CAUSE	DEFERRAL REASON		
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PRIOR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE		1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE	1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE		
MAN HRS EXPENDED 2	MAN HRS REMAINING 200	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY		
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL		1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION			1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE		
DISCREPANCY DESCRIPTION: PER SEMAT I INSPECTION (5-292-0-E), Transverse WF (316) at center line has heavy pitting and holes U/T readings are noted on drawing. Horizontal stiffener on fwd side of WF above shaft opening is severely corroded. The vertical stiffeners on both sides are severely corroded and holed. Approximately 16 SF of .250 plate and 14 linear feet of 4x3x.375 angle.							
RECOMMENDED REPAIRS: Cut out and replace approximately 16 SF of transverse WF (316), and 14 linear ft of associated Stiffeners. FTSC IS TO CONDUCT RISK ASSESSMENT AND MAKE FINAL REPAIR RECOMMENDATIONS.							
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/ M. MELVIN							
CSMP SUMMARY: Transverse WF (316) showing signs of deterioration.				TEST# MRC 1102/1			
ROOT CAUSE/AMPLIFICATION: H1				STEP# 1,2,3,4 & 5			
SYSTEM LEVEL IMPACT:							
PART NO.	NOMENCLATURE			QTY	NSN	COST	
1							
2							
3							
4							
5							
6							
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE		
ASSESSOR / ACT / TECH ID# J. LaROCK / T. ILGENFRITZ QED SYSTEMS			TD	TL	LOGISTICIAN	TSP	

AUXILIARY MACHINERY ROOM 3 (5-292-0-E)



TRANSVERSE WEB FRAME (316) STBD OF CENTER LINE LOOKING FWD
REFER TO DRAWING REGARDING U/T READINGS.



AUXILIARY MACHINERY ROOM 3 (5-292-0-E)



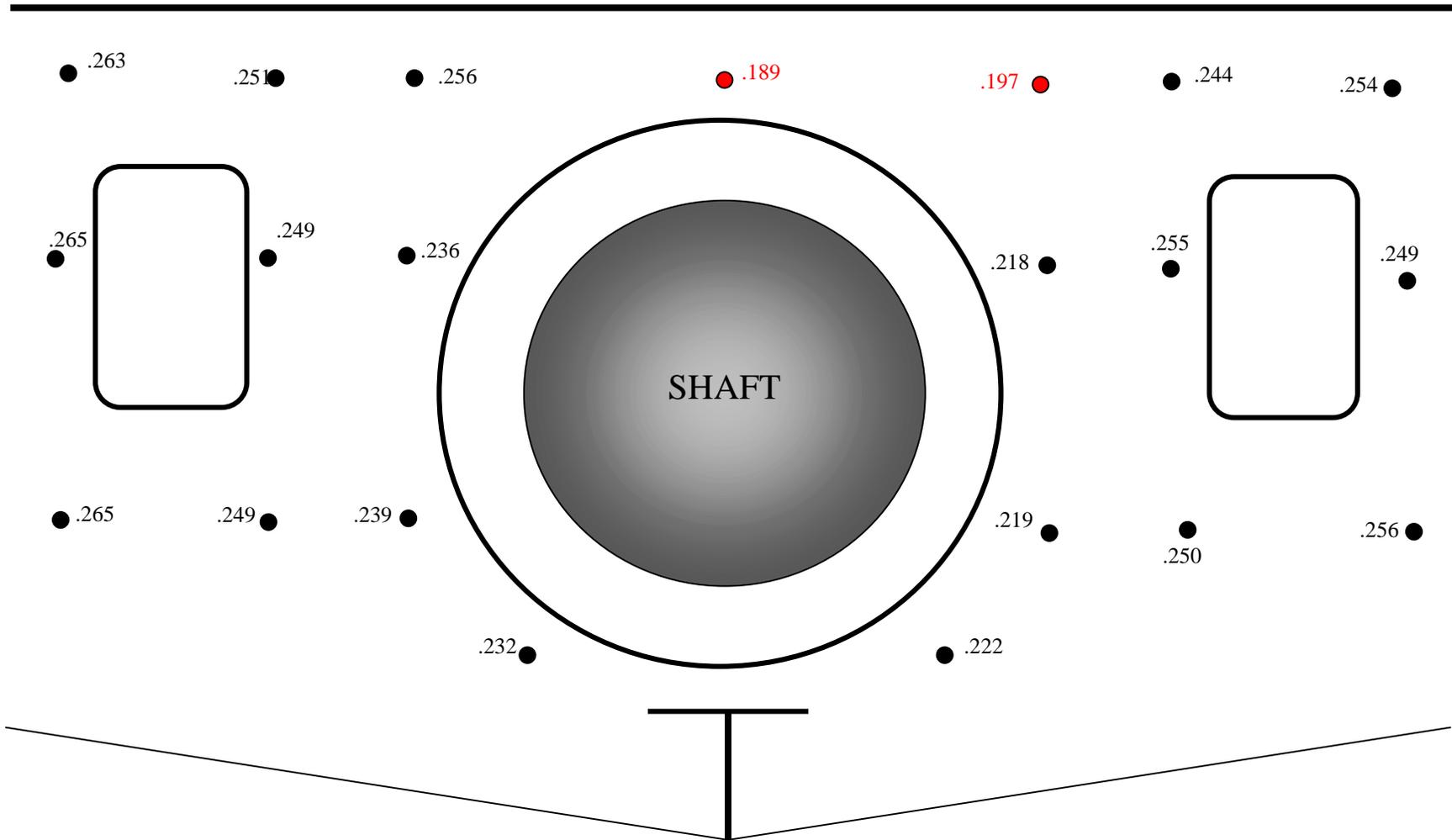
TRANSVERSE WEB FRAME (316) AT CENTER LINE LOOKING FWD
REFER TO DRAWING REGARDING U/T READINGS.



AUXILIARY MACHINERY ROOM 3 (5-292-0-E)



TRANSVERSE WEB FRAME (316) CENTER LINE LOOKING AFT
NOTE HEAVY DETERIORATION OF HORIZONTAL STIFFENER



TRANSVERSE WEB FRAME 316
LOOKING FORWARD

USS STEPHEN W. GROVES (FFG-29)
AUXILIARY MACHINERY ROOM #3
(5-292-0-E)

J. LaROCK / T. ILGENFRITZ
QED SYSTEMS INC.
06/26/01

MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)				
SYSTEM SHELL & SUPPORTING STRUCTURE 110		ESWBS 11011	EIC A100	APL X-SYSTEMS	RIN N/L	
EQUIPMENT NAME HULL STRUCTURE 1102XY		IDENT/SERIAL N/A	LOCATION 5-292-0-E	WORK CENTER EMO4	JSN A362	
EQUIPMENT STATUS		PROBLEM STATUS	CATEGORY			EOC
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4. S - SHIP'S FORCE *UNCORRECTED PROBLEMS	1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE	4. D - DOWN 5. L - LIMITED		.9
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS	CAUSE	DEFERRAL REASON		
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PIROR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE	1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE	1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE		
MAN HRS EXPENDED 2	MAN HRS REMAINING 160	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY	
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL		1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE. DESCRIBE IN REMARKS/DESCRIPTION SECTION			1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE	
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: (5-292-0-E), CENTER LINE AT TRANSVERSE WEB FRAME (316) APPROXIMATELY 58 SF OF SHAFT HAS HEAVY RUST AND PAINT SEPARATION.						
RECOMMENDED REPAIRS: NEEDLE-GUN APPROXIMATELY 58 SF OF SHAFT, PRESERVE AND PAINT TO MATCH.						
CSMP SUMMARY: SHAFT HAS HEAVY RUST AND PAINT SEPARATION.						
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/ M. MELVIN						
				TEST#	MRC 1102/1	
ROOT CAUSE/AMPLIFICATION: H1				STEP#	1,2,3,4 & 5	
SYSTEM LEVEL IMPACT:						
PART NO.	NOMEMCLATURE			QTY	NSN	COST
1						
2						
3						
4						
5						
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE	
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ QED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP

AUXILIARY MACHINERY ROOM 3 (5-292-0-E)

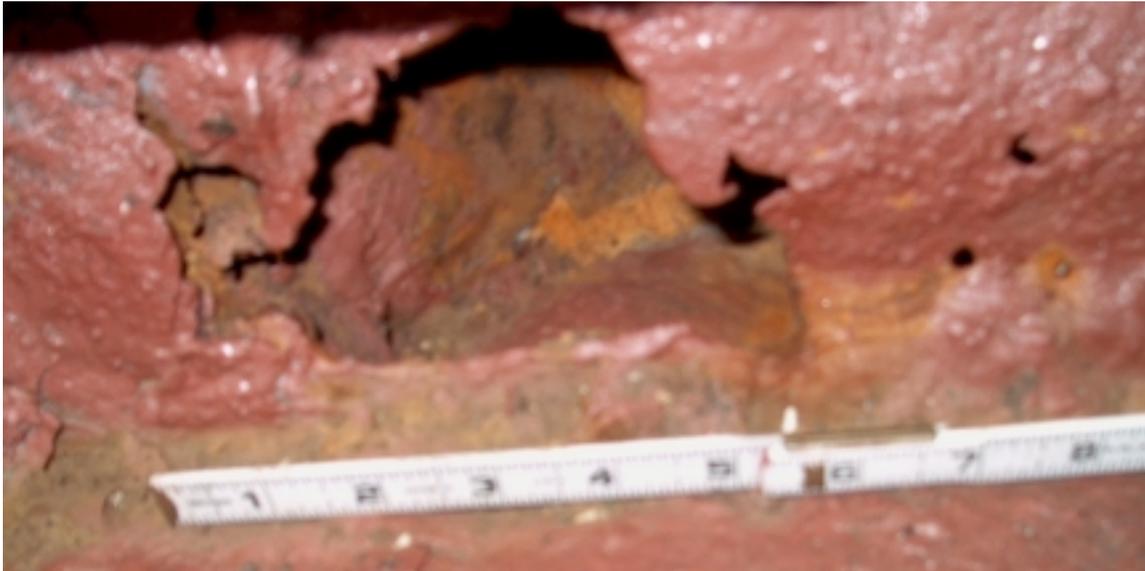


SHAFT AT TRANSVERSE WEB FRAME (316)
SHOWING HEAVY PAINT SEPARATION
AREA RECOMMENDED FOR PRESERVATION.

MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)					
SYSTEM SHELL & SUPPORTING STRUCTURE 110	ESWBS 11011	EIC A100	APL X-SYSTEMS	RIN N/L			
EQUIPMENT NAME HULL STRUCTURE 1102XY	IDENT/SERIAL N/A	LOCATION 5-292-0-E	WORK CENTER EMO4	JSN A356			
EQUIPMENT STATUS	PROBLEM STATUS	CATEGORY			EOC		
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD	1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4.S - SHIP'S FORCE *UNCORRECTED PROBLEMS	1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED			.9		
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS	CAUSE	DEFERRAL REASON			
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SPWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PIROR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE	1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE	1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE			
MAN HRS EXPENDED 2	MAN HRS REMAINING 400	COMPLETED ACTION TAKEN	S/F MANHOURS	PRIORITY			
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL		1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION		1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE			
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: (5-292-0-E), STBD SIDE, BETWEEN BHD (292) AND WF (300) UNDER HOT POTABLE WATER ACCUMULATOR TANK STRINGER (8) HAS HEAVY DETERIORATION AND LARGE HOLES. UNABLE TO DO U/T SURVEY, DUE TO LOCATION. REFER TO PICTURE PAGE FOR REFERENCE.							
RECOMMENDED REPAIRS: CUT OUT AND REPLACE APPROXIMATELY 8 LINEAR FEET OF 6X6 T-BEAM. PRESERVE AND PAINT TO MATCHL. FTSC IS TO CONDUCT RISK ASSESSMENT AND MAKE FINAL REPAIR RECOMMENDATIONS.							
CSMP SUMMARY: STRINGER 8 IS HEAVILY DETERIORATED.							
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/ M. MELVIN							
				TEST# MRC 1102/1			
ROOT CAUSE/AMPLIFICATION: H1				STEP# 1,2,3,4 & 5			
SYSTEM LEVEL IMPACT:							
PART NO.	NOMEMCLATURE			QTY	NSN	COST	
1							
2							
3							
4							
5							
6							
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE		
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ QED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP	

AUXILIARY MACHINERY ROOM 3 (5-292-0-E)



STBD SIDE UNDER HOT POTABLE WATER ACCUMULATOR TANK
STRINGER (8) HAS HEAVY DETERIORATION.



MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)					
SYSTEM Hull Structure		ESWBS 11011	EIC A100	APL X-SYSTEMS		RIN N/L	
EQUIPMENT NAME Shell & Supporting Structure		IDENT/SERIAL N/A		LOCATION 5-250-0-E	WORK CENTER EMO4	JSN A345	
EQUIPMENT STATUS		PROBLEM STATUS		CATEGORY		EOC	
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4. S - SHIP'S FORCE *UNCORRECTED PROBLEMS		1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED		.9	
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS		CAUSE	DEFERRAL REASON		
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PRIOR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE		1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE	1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE		
MAN HRS EXPENDED 2	MAN HRS REMAINING 600	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY		
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL		1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION			1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE		
DISCREPANCY DESCRIPTION: PER SEMAT II INSPECTION :							
Port side (5-250-0-E), between WF (264-270), from margin plate to stringer (11) approximately 70sf of rust and heavy paint							
Separation, there is lead ballast blocks between stringers (8-10). The transverse weld seam AFT of WF (270) approximately							
30SF of surface rust and paint separation.							
RECOMMEND REPAIR ACTIVITY:							
Recommend removal of lead ballast blocks for safety, needle-gun approximately 100sf of area, preserve and paint to match.							
FTSC IS TO CONDUCT RISK ASSESSMENT AND MAKE FINAL REPAIR RECOMMENDATIONS.							
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/M. MELVIN							
CSMP SUMMARY: APPROXIMATELY 100 SF OF SURFACE RUST AND PAINT SEPARATION.					TEST# MRC 1102/1		
ROOT CAUSE/AMPLIFICATION: H1					STEP# 1,2,3,4 & 5		
SYSTEM LEVEL IMPACT:							
PART NO.	NOMEMCLATURE			QTY	NSN	COST	
1							
2							
3							
4							
5							
6							
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE		
ASSESSOR / ACT / TECH ID# J. LaROCK / T. ILGENFRITZ QED SYSTEMS				TD	TL	LOGISTICIAN	
						TSP	

MAIN ENGINE ROOM (5-250-0-E)



PORT SIDE, SHOWING LEAD BALLAST



PORT SIDE, OVBD DISCHARGE ABOVE BALLAST
AREA RECOMMENDED FOR CLEANING AND PRESERVATION.

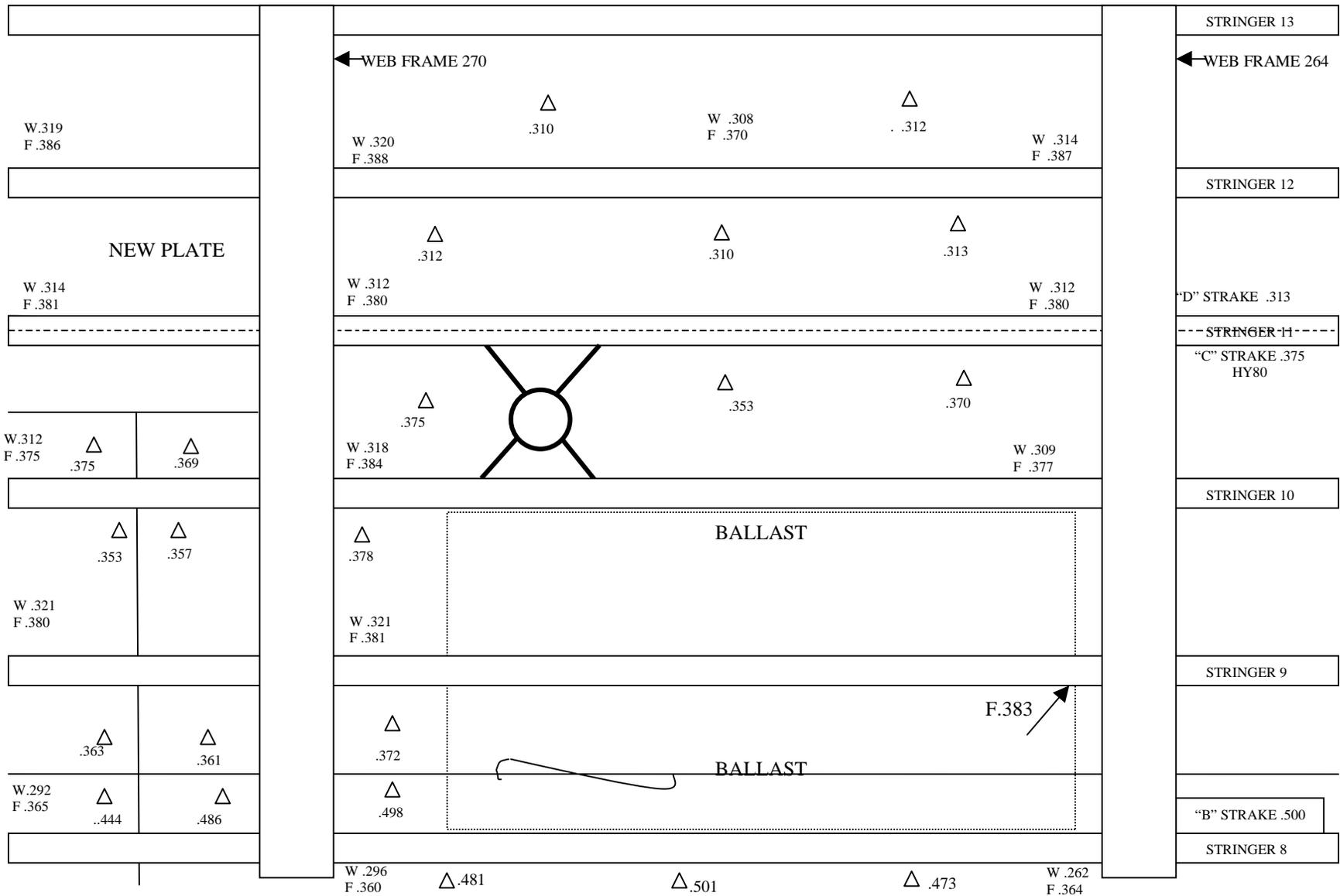
MAIN ENGINE ROOM (5-250-0-E)



PORT SIDE, AT TRANSVERSE WELD SEAM AFT OF WF (270)



TRANSVERSE WELD SEAM, REFER TO DRAWING FOR U/T READINGS.



△	SHELL PLATE
W	STRINGER WEB
F	STRINGER FLANGE

USS STEPHEN W. GROVES (FFG-29)
 MAIN ENGINE ROOM
 (5-250-0-E) PORT SIDE

J. LaROCK / T. ILGENFRITZ
 QED SYSTEMS INC
 06/27/01

MATERIAL ASSESSMENT FORM

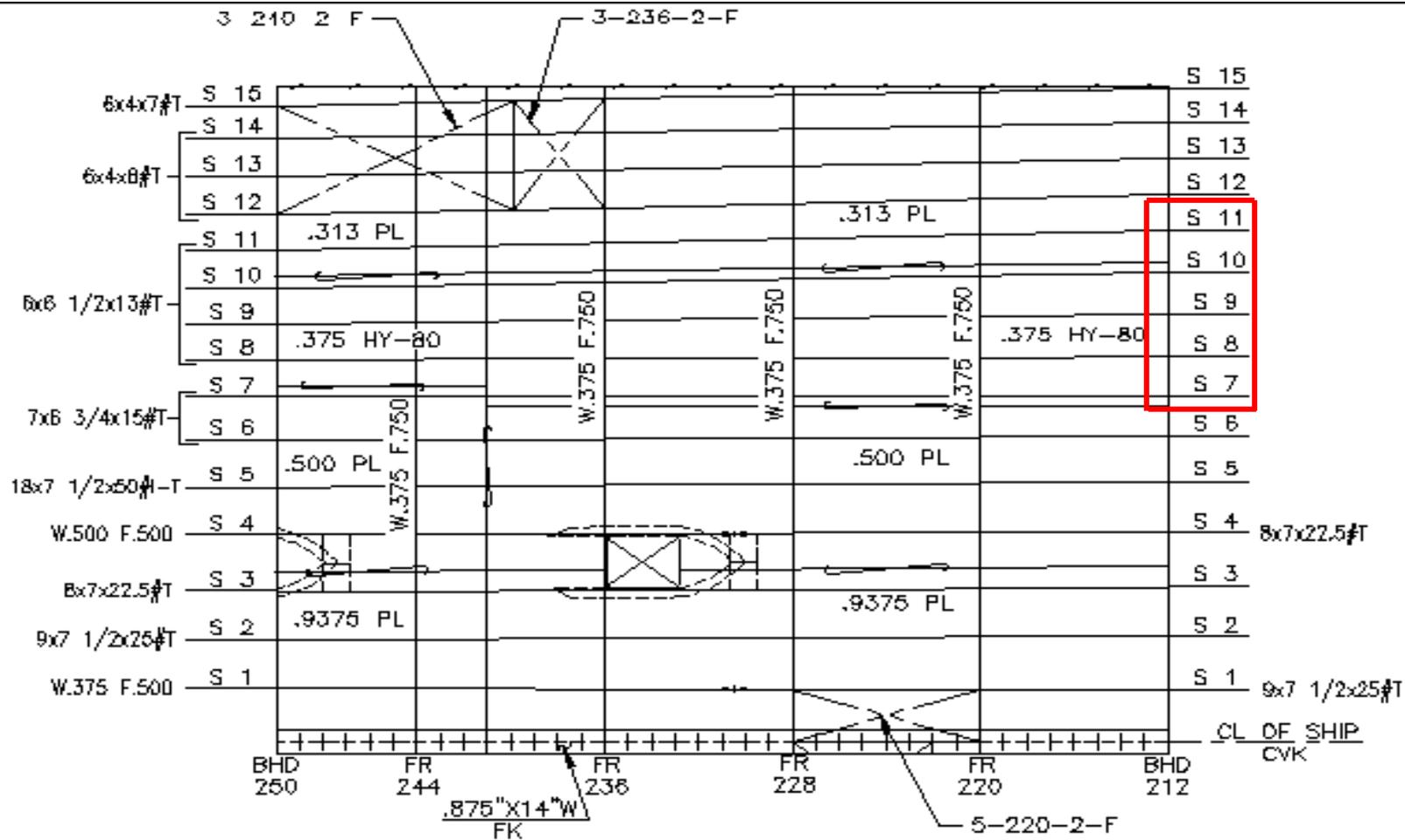
ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)					
SYSTEM SHELL & SUPPORTING STRUCTURE 110		ESWBS 11011	EIC A100	APL X-SYSTEMS	RIN N/L		
EQUIPMENT NAME HULL STRUCTURE 1102XY		IDENT/SERIAL N/A	LOCATION 5-212-0-E	WORK CENTER EMO4	JSN A305		
EQUIPMENT STATUS		PROBLEM STATUS		CATEGORY		EOC	
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4. S - SHIP'S FORCE *UNCORRECTED PROBLEMS		1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED			
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS		CAUSE	DEFERRAL REASON		
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PIROR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE		1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE	1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE		
MAN HRS EXPENDED 2	MAN HRS REMAINING 100	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY		
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL			1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION		1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE		
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: PORT SIDE, (5-212-0-E) WHERE BHD (212) MEETS SHELL PLATE, FROM STRINGER (7-11), APPROXIMATELY 10SF OF SURFACE RUST AND PAINT SEPARATION.							
RECOMMENDED REPAIRS: NEEDLE-GUN APPROXIMATELY 10SF PRESERVE AND PAINT TO MATCH AREA.							
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/ M. MELVIN							
CSMP SUMMARY: 10 SF OF RUST AND PAINT SEPARATION .				TEST# MRC 1102/1			
ROOT CAUSE/AMPLIFICATION: H1				STEP# 1,2,3,4 & 5			
SYSTEM LEVEL IMPACT:							
PART NO.	NOMEMCLATURE			QTY	NSN	COST	
1							
2							
3							
4							
5							
6							
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE		
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ OED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP	

AUXILIARY MACHINERY ROOM 2 (5-212-0-E)



PORT SIDE, WHERE BHD (212) MEETS SHELL PLATE
U/T READINGS ARE NOTED IN DRAWINGS

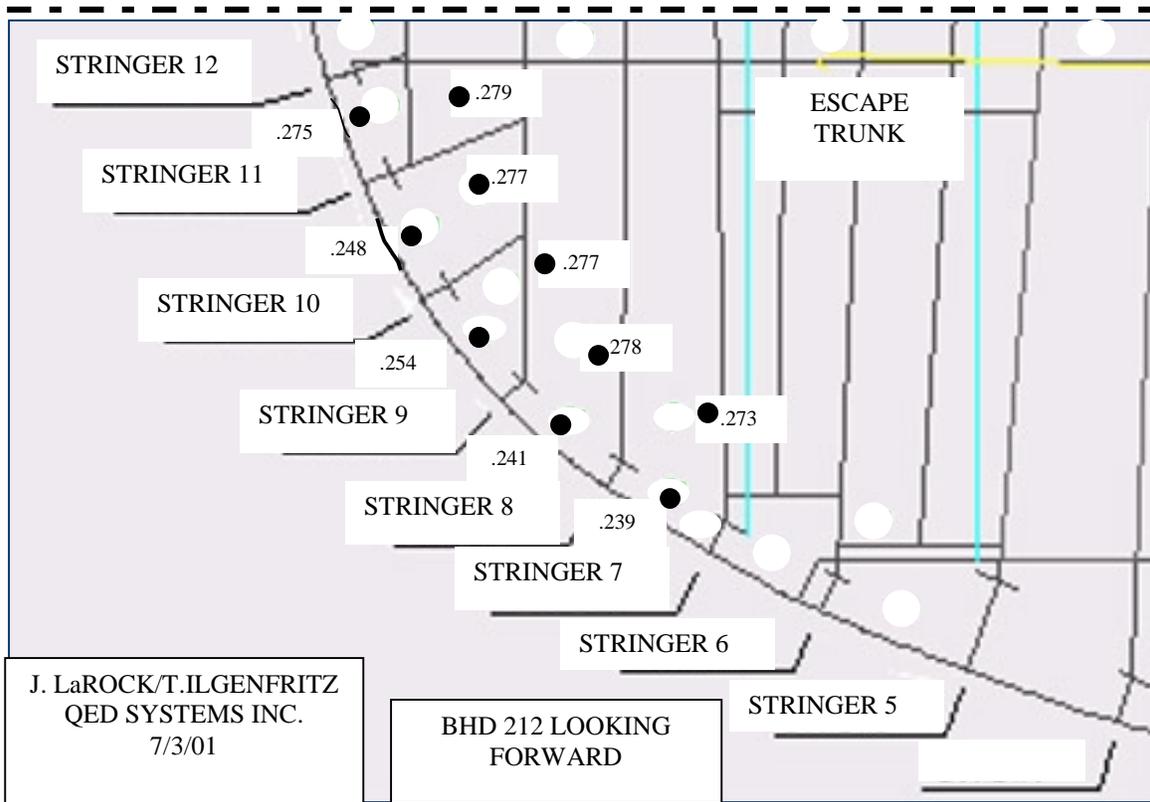
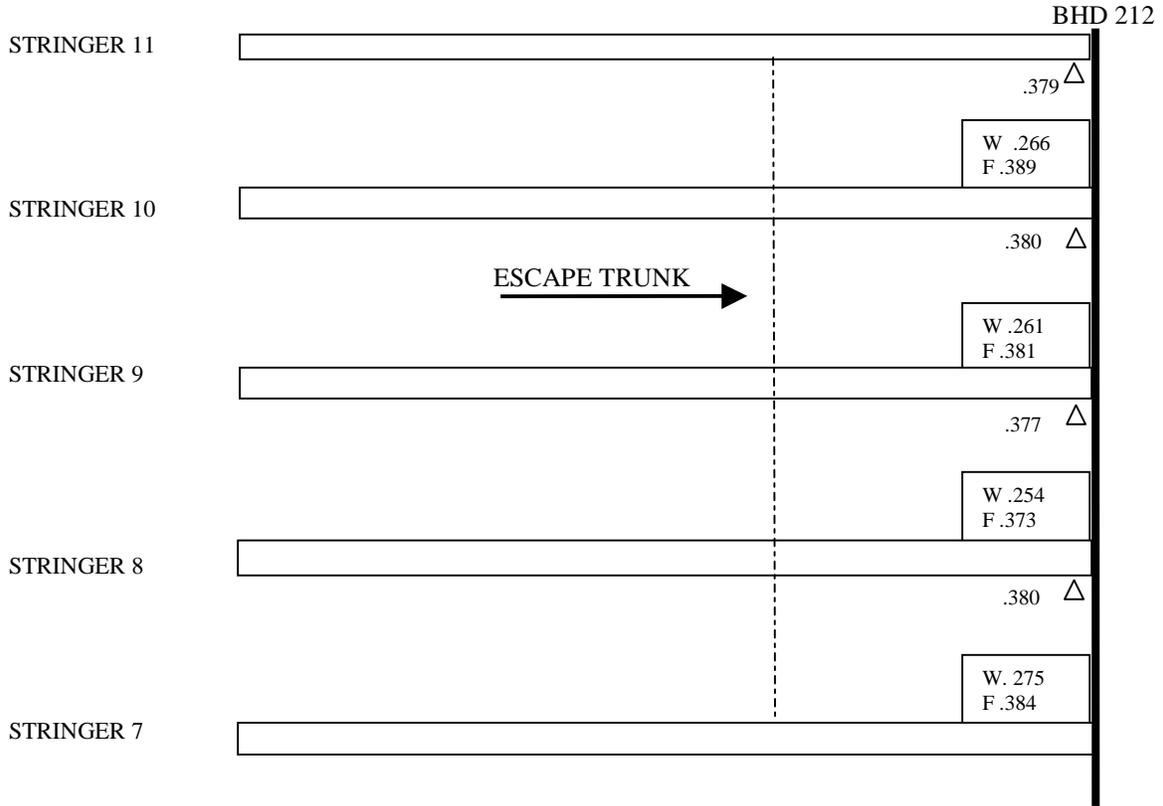




USS STEPHEN W GROVES
 AUXILIARY MACHINERY ROOM 2 (5-212-0-E)
 PORT SIDE

RED BOX INDICATES AREA WHERE U/T
 READINGS WERE TAKEN
 SEE PAGE 31

USS STEPHEN W GROVES (FFG-29)
 AUXILIARY MACHINERY ROOM 2
 (5-212-0-E) PORT SIDE



MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)					
SYSTEM SHELL & SUPPORTING STRUCTURE 110		ESWBS 11011	EIC A100	APL X-SYSTEMS	RIN N/L		
EQUIPMENT NAME HULL STRUCTURE 1102XY		IDENT/SERIAL N/A	LOCATION 5-180-0-E	WORK CENTER EMO4	JSN A346		
EQUIPMENT STATUS		PROBLEM STATUS	CATEGORY			EOC	
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4.S - SHIP'S FORCE *UNCORRECTED PROBLEMS	1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE	4. D - DOWN 5. L - LIMITED	.9		
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS	CAUSE	DEFERRAL REASON			
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PRIOR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE	1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE	1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE			
MAN HRS EXPENDED 2	MAN HRS REMAINING 10	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY		
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL		1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION			1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE		
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: STBD SIDE, (5-180-0-E) INSIDE THE SSDG ENCLOSURE BETWEEN STRINGERS (10-11) 34" AFT OF WF (196) SHELL HAS SMALL PIT'S. U/T READINGS ARE WITHIN THE 25% ALLOWABLE THICKNESS.							
RECOMMENDED REPAIRS: RECOMMEND SHIP'S FORCE, CLAD WELD AREA, PRESERVE AND PAINT TO MATCH.							
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/ M. MELVIN							
CSMP SUMMARY: SHELL HAS SMALL PIT'S				TEST# MRC 1102/1			
ROOT CAUSE/AMPLIFICATION: H1				STEP# 1,2,3,4 & 5			
SYSTEM LEVEL IMPACT:							
PART NO.	NOMEMCLATURE			QTY	NSN	COST	
1							
2							
3							
4							
5							
6							
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE		
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ OED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP	

AUXILIARY MACHINERY ROOM 1 (5-180-0-E)



STBD SIDE, INSIDE SSDG ENCLOSURE BETWEEN STRINGERS (10-11)
34" AFT OF WF 196



ARROWS INDICATE LOCATION OF PITTING

MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)				
SYSTEM SHELL & SUPPORTING STRUCTURE 110		ESWBS 11011	EIC A100	APL X-SYSTEMS	RIN N/L	
EQUIPMENT NAME HULL STRUCTURE 1102XY		IDENT/SERIAL N/A	LOCATION 5-51-0-Q	WORK CENTER EMO4	JSN A316	
EQUIPMENT STATUS		PROBLEM STATUS		CATEGORY		EOC
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4.S - SHIP'S FORCE *UNCORRECTED PROBLEMS		1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED		.9
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS	CAUSE	DEFERRAL REASON		
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PRIOR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE	1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE	1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE		
MAN HRS EXPENDED 2	MAN HRS REMAINING 200	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY	
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL		1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION			1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE	
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: (5-51-0-Q) FWD EDUCATOR ROOM,, ENTIRE						
BILGE AREA HAS RUST AND HEAVY PAINT SEPARATION. APPROXIMATELY 60 SF.						
RECOMMENDED REPAIRS: NEEDLE-GUN APPROXIMATELY 60 SF (ENTIRE BILGE AREA), PRESERVE AND PAINT TO MATCH AREA.						
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/ M. MELVIN						
CSMP SUMMARY: ENTIRE BILGE AREA HAS RUST AND PAINT SEPARATION.				TEST# MRC 1102/1		
ROOT CAUSE/AMPLIFICATION: H1				STEP# 1,2,3,4 & 5		
SYSTEM LEVEL IMPACT:						
PART NO.	NOMEMCLATURE			QTY	NSN	COST
1						
2						
3						
4						
5						
6						
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE	
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ QED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP

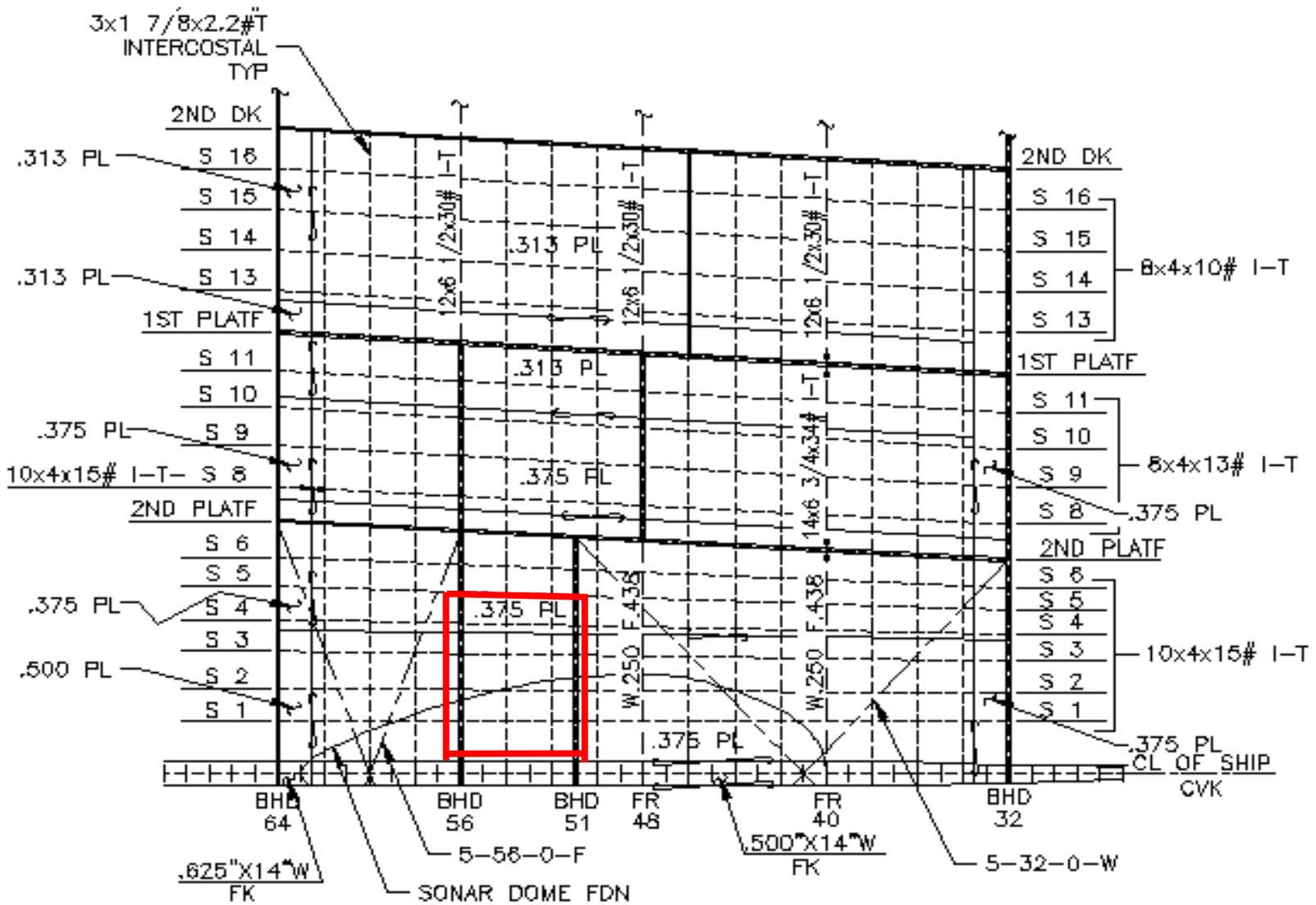
FORWARD EDUCTOR ROOM (5-51-0-Q)



STBD SIDE, BILGE POCKET



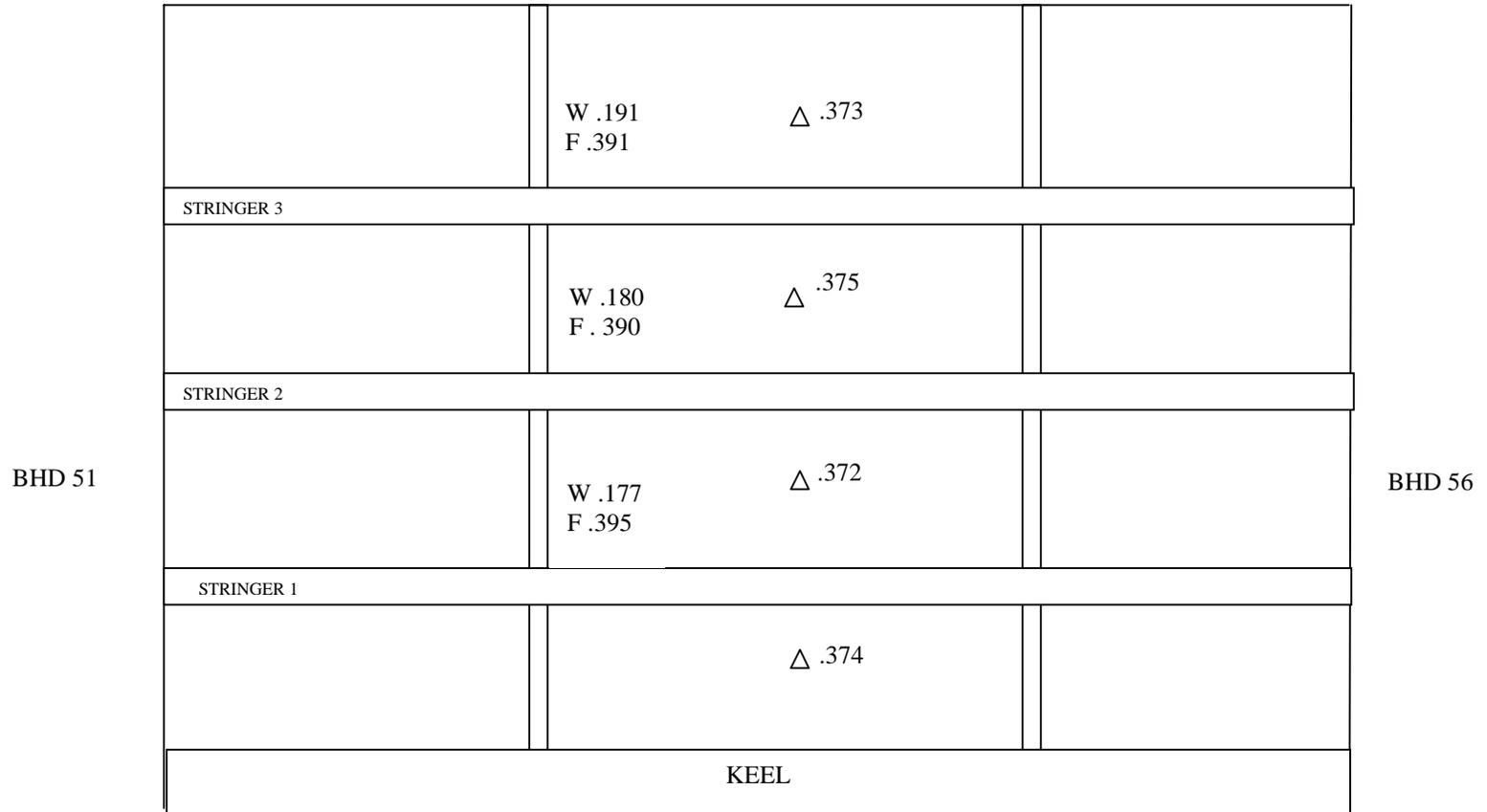
STBD SIDE, BILGE POCKET FULL OF WATER.



USS STEPHEN W GROVES (FFG-29)
EDUCATOR ROOM (5-51-0-Q)
STBD SIDE

RED BOX INDICATES AREA WHERE U/T
READINGS WERE TAKEN
SEE PAGE 36

4TH DECK



USS STEPEN W GROVES (FFG-29)
 EDUCATOR ROOM (5-51-0-Q)
 Side view looking starboard

J.LAROCK / T.ILGENFRITZ
 QED SYSTEMS INC.
 07/03/01

MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)				
SYSTEM SHELL & SUPPORTING STRUCTURE 110		ESWBS 11011	EIC A100	APL X-SYSTEMS	RIN N/L	
EQUIPMENT NAME HULL STRUCTURE 1102XY		IDENT/SERIAL N/A	LOCATION 4-100-0-E	WORK CENTER EMO4	JSN A324	
EQUIPMENT STATUS		PROBLEM STATUS		CATEGORY		EOC
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4. S - SHIP'S FORCE *UNCORRECTED PROBLEMS		1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED		.9
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS	CAUSE	DEFERRAL REASON		
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PIROR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE	1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE	1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE		
MAN HRS EXPENDED 2	MAN HRS REMAINING 120	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY	
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL		1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION			1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE	
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: APU WELL STBD SIDE, (4-100-0-E) ENTIRE BILGE POCKET HAS HEAVY RUST AND PAINT SEPARATION. APPROXIMATELY 40 SF						
RECOMMENDED REPAIRS: NEEDLE-GUN APPROXIMATELY 40 SF OF BILGE POCKET, PRESERVE AND PAINT TO MATCH AREA.						
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/ M. MELVIN						
CSMP SUMMARY: STBD BILGE POCKET HAS SURFACE RUST AND PAINT SEPARATION.				TEST# MRC 1102/1		
ROOT CAUSE/AMPLIFICATION: H1				STEP# 1,2,3,4 & 5		
SYSTEM LEVEL IMPACT:						
PART NO.	NOMEMCLATURE			QTY	NSN	COST
1						
2						
3						
4						
5						
6						
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE	
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ QED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP

AUXILIARY PROPULSION UNIT ROOM (4-100-0-E)



STBD SIDE, AREA VIEW OF BILGE POCKET



MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)				
SYSTEM SHELL & SUPPORTING STRUCTURE 110		ESWBS 11011	EIC A100	APL X-SYSTEMS	RIN N/L	
EQUIPMENT NAME HULL STRUCTURE 1102XY		IDENT/SERIAL N/A	LOCATION 4-48-1-Q	WORK CENTER EMO4	JSN A347	
EQUIPMENT STATUS		PROBLEM STATUS		CATEGORY		EOC .9
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		0. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4. S - SHIP'S FORCE *UNCORRECTED PROBLEMS		0. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED		
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS	CAUSE	DEFERRAL REASON		
0. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	0. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PIROR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	0. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE	0. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE	0. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE		
MAN HRS EXPENDED 2	MAN HRS REMAINING 48	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY	
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL		1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION			1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE	
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: SONAR COOLING RM, STBD SIDE (4-48-1-Q), APPROXIMATELY 6SF OF STRINGERS AND SHELL PLATE BETWEEN BHD (56) AND FIRST VERTICAL STIFFNER UP TO THIRD STRINGER OFF THE DECK AND APPROXIMATELY 6SF OF DECK HAVE SURFACE RUST AND PAINT SEPARATION.						
RECOMMENDED REPAIRS: NEEDLE-GUN APPROXIMATELY 12 SF OF AREA, PRESERVE AND PAINT TO MATCH.						
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/ M. MELVIN						
CSMP SUMMARY: DECK AND STRINGERS FROM BHD (56) AND FIRST VERTICAL STIFFNER HAVE RUST.				TEST# MRC 1102/1		
ROOT CAUSE/AMPLIFICATION: H1				STEP# 1,2,3,4 & 5		
SYSTEM LEVEL IMPACT:						
PART NO.	NOMEMCLATURE			QTY	NSN	COST
1						
2						
3						
4						
5						
6						
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE	
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ QED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP

SONAR COOLING ROOM (4-48-1-Q)



AREA VIEW LOOKING STBD



STBD SIDE, WHERE BHD (56) MEETS THE DECK AND SHELL PLATE

MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)					
SYSTEM SHELL & SUPPORTING STRUCTURE 110		ESWBS 11011	EIC A100	APL X-SYSTEMS	RIN N/L		
EQUIPMENT NAME HULL STRUCTURE 1102XY		IDENT/SERIAL N/A	LOCATION 3-84-0-E	WORK CENTER EMO4	JSN A319		
EQUIPMENT STATUS		PROBLEM STATUS		CATEGORY		EOC .9	
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4. S - SHIP'S FORCE *UNCORRECTED PROBLEMS		1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED			
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS	CAUSE	DEFERRAL REASON			
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PIROR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE	1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE	1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE			
MAN HRS EXPENDED 4	MAN HRS REMAINING 300	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY		
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL		1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION			1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE		
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: PORT SIDE, (3-84-0-E) BETWEEN BHD (100) AND WF (90)							
FIRST STRINGER OFF THE DECK, HAS RUST AND PAINT SEPARATION. APPROXIMATELY 20 SF OF SHELL INCLUDING THE STRINGER.							
RECOMMENDED REPAIRS: NEEDLE-GUN APPROXIMATELY 20 SF OF SHELL AND STRINGER FROM WF (90) TO BHD (100), PRESERVE AND PAINT AREA TO MATCH.							
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/ M. MELVIN							
CSMP SUMMARY: SHELL AND STRINGER ARE RUSTED WITH PAINT SEPARATION.				TEST# MRC 1102/1			
ROOT CAUSE/AMPLIFICATION: H1				STEP# 1,2,3,4 & 5			
SYSTEM LEVEL IMPACT:							
PART NO.	NOMEMCLATURE			QTY	NSN	COST	
1							
2							
3							
4							
5							
6							
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE		
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ QED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP	

A/C MACHINERY ROOM (3-84-0-E)



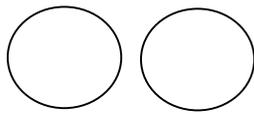
PORT SIDE VIEW OF STRINGER AND SHELL



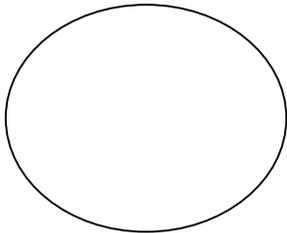
TOP VIEW OF FIRST STRINGER OFF THE DECK BETWEEN WF (90) AND BHD (100)

BHD 100

WF 92



A/C CONDENSER



.312
△

W .236
F .277

.313
△

.311
△

W .220
F .261

.306
△

.311
△

.309
△

W .220
F .266

W .217
F .277

.278
△

.296
△

.276
△

THIRD DECK

USS STEPHEN W. GROVES (FFG-29)
A/C MACHINERY ROOM (3-84-0-E)
PORT SIDE

J. LaROCK/ T. ILGENFRITZ
QED SYSTEMS INC.
07/03/01

MATERIAL ASSESSMENT FORM

ITEM NUMBER		SHIP USS STEPHEN W. GROVES (FFG-29)				
SYSTEM SHELL & SUPPORTING STRUCTURE 110		ESWBS 11011	EIC A100	APL X-SYSTEMS	RIN N/L	
EQUIPMENT NAME HULL STRUCTURE 1102XY		IDENT/SERIAL N/A	LOCATION 3-84-0-E	WORK CENTER EMO4	JSN A318	
EQUIPMENT STATUS		PROBLEM STATUS		CATEGORY		EOC
1. SAT - SATISFACTORY 2. UNSAT - UNSATISFACTORY 3. TNA - TEST NOT ATTEMPTED 4. TNC - TEST NOT COMPLETED 5. NOB - EQUIPMENT NOT ONBOARD		1. C - CORRECTED 2. A - AWAITING PARTS 3. T - AWAITING TECH ASSIST* 4. S - SHIP'S FORCE *UNCORRECTED PROBLEMS		1. S - PERSONNEL SAFETY 2. Z - EQUIPMENT SAFETY 3. H - HARDWARE 4. D - DOWN 5. L - LIMITED		.9
TYPE/AVAILABILITY	WHEN TO BE ACCOMPLISHED	STATUS	CAUSE		DEFERRAL REASON	
1. DEPOT 2. IMA 3. TECH ASSIST 4. SHIP'S FORCE 5. SFWL	1. IMMEDIATELY 2. PRIOR TO NEXT UNDERWAY 3. PIROR TO NEXT DEPLOYMENT 4. DURING POST DEPLOYMENT AVAILABILITY	1. OPERATIONAL 2. NON-OPERATIONAL 3. REDUCED CAPABILITY 0. NOT APPLICABLE	1. ABNORMAL ENVIRONMENT 2. MANUFACTURER/INSTALLATION DEFECTS 3. LACK OF KNOWLEDGE 4. COMMUNICATION PROBLEMS 5. INADEQUATE INSTRUCTION/PROCEDURE 6. INADEQUATE DESIGN 7. NORMAL WEAR AND TEAR 0. NOT APPLICABLE		1. S/F BACKLOG/OPERATIONAL PRIORITY 2. LACK OF MATERIAL 3. NO FORMAL TRAINING ON THIS EQUIPMENT 4. FORMAL TRAINING INADEQUATE IN THIS EQUIPMENT 5. INADEQUATE SCHOOL PRACTICAL TRAINING 6. LACK OF FACILITIES/CAPABILITIES 7. NOT AUTHORIZED FOR S/F ACCOMPLISHMENT 8. FOR S/F OVERHAUL OR AVAILABILITY WORK LIST 9. LACK OF TECHNICAL DOCUMENTATION 0. OTHER OR NOT APPLICABLE	
MAN HRS EXPENDED 2	MAN HRS REMAINING 300	COMPLETED ACTION TAKEN		S/F MANHOURS	PRIORITY	
SAFETY HAZARD: 1. SERIOUS - CORRECT AS SOON AS POSSIBLE 2. SERIOUS - SUSPENSION OF EQUIPMENT/SYSTEM/SPACE REQUIRED 3. SERIOUS - WAIVER OF EQUIPMENT/SYSTEM 4. SAFETY ITEM - MINOR 5. COMBUSTIBLE MATERIAL		1. MAINTENANCE ACTION COMPLETED: PARTS DRAWN FROM SUPPLY 2. MAINTENANCE ACTION COMPLETED: REQUIRED PARTS NOT DRAWN FROM SUPPLY 3. MAINTENANCE ACTION COMPLETED: NO PARTS REQUIRED 4. CANCELLED - DEFERRAL WILL BE REMOVED FROM CSMP 7. MAINTENANCE ACTION COMPLETED: 3-M CAPABILITY UTILIZED 0. NONE OF THE ABOVE, DESCRIBE IN REMARKS/DESCRIPTION SECTION			1. MANDATORY 2. ESSENTIAL 3. HIGHLY DESIRABLE 4. DESIRABLE	
DISCREPANCY DESCRIPTION: PER SEMAT II UNDERWATER HULL ASSESSMENT: PORT SIDE, (3-84-0-E) FOUNDATION UNDER THE A/C						
UNIT NO. 1 AND SURROUNDING TANK TOP/DECK HAS SURFACE RUST AND PAINT SEPARATION, APPROXIMATELY 50 SF						
U/T READINGS WERE FOUND SATISFACTORY. REFER TO DRAWING FOR U/T HISTORY						
RECOMMENDED REPAIRS: NEEDLE-GUN APPROXIMATELY 50 SF OF TANK TOP/DECK INCLUDING FOUNDATION, PRESERVE AND PAINT TO MATCH.						
SSPORT C221 POC: F. PRAISSMAN (757) 396-4001 EXT 2130, TPOC: B. WILLIAMS/ M. MELVIN						
CSMP SUMMARY: TANK TOP/DECK AND FOUNDATION UNDER A/C UNIT ARE RUSTY W/ PAINT SEPARA				TEST # MRC 1102/1		
ROOT CAUSE/AMPLIFICATION: H1				STEP # 1,2,3,4 & 5		
SYSTEM LEVEL IMPACT:						
PART NO.	NOMEMCLATURE			QTY	NSN	COST
1						
2						
3						
4						
5						
6						
FIRST CONTACT HURST	RATE HTC	SECOND CONTACT GERMAN		RATE ENS	PHONE	
ASSESSOR / ACT / TECH ID# J. LaROCK/ T. ILGENFRITZ QED SYSTEMS INC.			TD	TL	LOGISTICIAN	TSP

A/C MACHINERY ROOM (3-84-0-E)

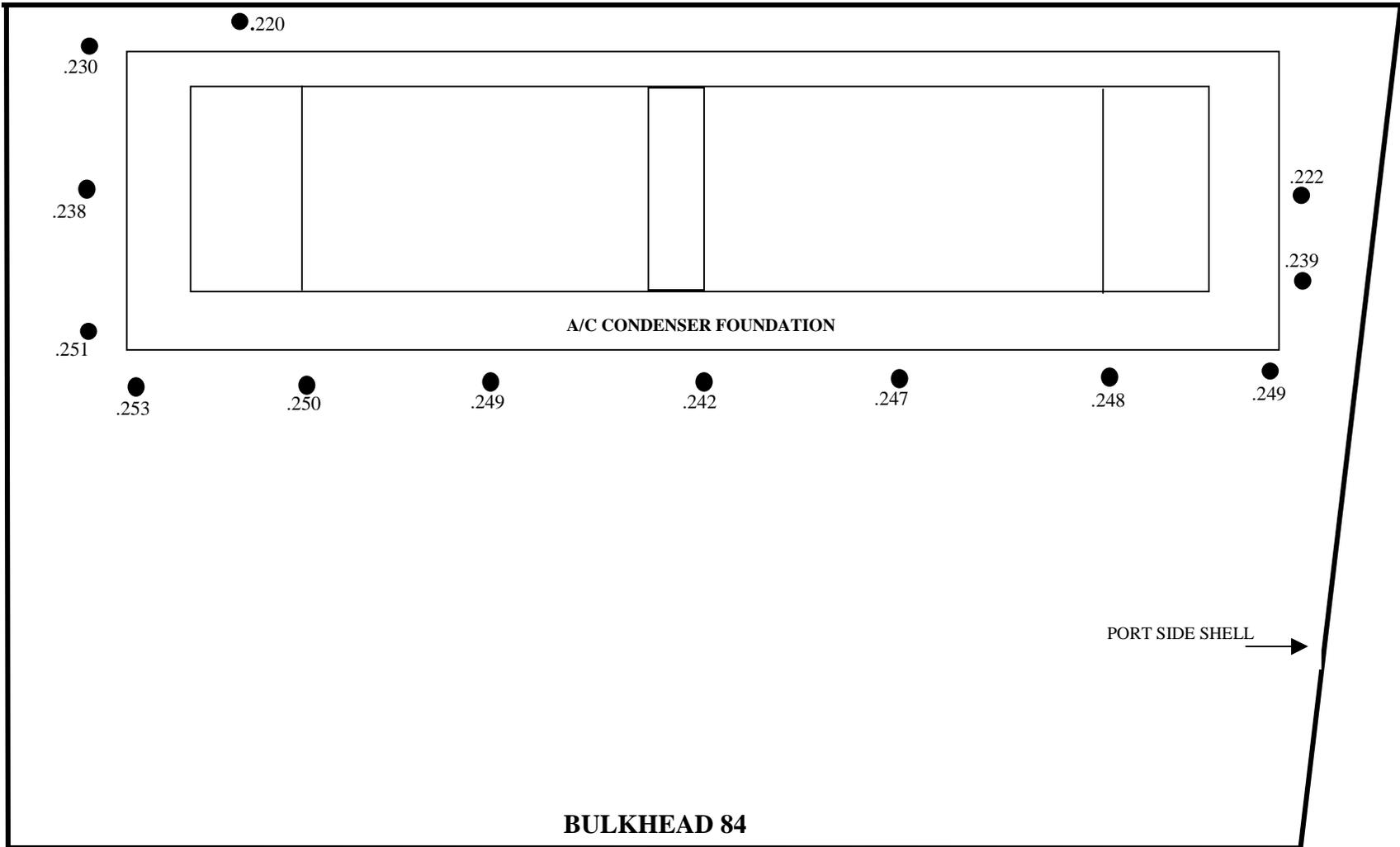


A/C UNIT NO.1 FOUNDATION LOOKING PORT FWD OF BHD (100)



TANK TOP/ DECK UNDER A/C UNIT NO. 1

BHD 100



USS STEPHEN W GROVES (FFG-29)
A/C MACHINERY ROOM (3-84-0-E)
Top view

J. LaROCK / T. ILGENFRITZ
QED SYSTEMS INC.
07/03/01

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
3RD DECK					
3-20-0-Q	N	N	Y		SPACE REQUIRES GAS FREE
3-32-2-A	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)
3-32-1-K	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)
3-36-1-A	Y	Y	N		
3-36-2-T	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)
3-40-2-A	Y	Y	N		
3-46-1-A	Y	Y	N		
3-48-2-A	Y	Y	N		
3-53-2-A	Y	Y	N		
3-56-0-A	Y	Y	N		
3-64-2-V	NOT DURING SHIP CHECK	N	Y		SPACE REQUIRES GAS FREE
3-64-1-V	NOT DURING SHIP CHECK	N	Y		SPACE REQUIRES GAS FREE

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
3RD DECK					
3-84-0-E	Y	Y	N	FRS 94-100 STBD SIDE SHELL, DECK TO OVERHEAD FR 95, PORT SIDE, ON TANK TOP	ACCESSIBLE HIDDEN LAGGED 100% (100% OF PORT SIDE SHELL ASSESSABLE) ACCESSIBLE HIDDEN LAGGED 100% (NOT ACCESSIBLE AREA - STBD FWD BHD 84 TO FRAME 93, 5'-6" OFF DECK ELECT PANELS)
3-93-1-Q	SPACE DOES NOT EXIST ON THIS SHIP				
3-100-0-L	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (NOT ACCESSIBLE AREA PORT AND STBD FROM FRAME 115 TO AFT BHD 140, 6' 3" OFF DECK - BUNKS)
3-100-1-L	Y	Y	N		LAGGING 100% AND SS 50% (SS INSTALLED 49" OFF DECK, FRAME 100 TO 113)
3-113-0-L	Y	Y	N	FR 113-124, STBD SIDE OF SHELL, DECK TO OVERHEAD	LAGGING 100% AND SS 50% (SS INSTALLED 49" OFF DECK, FRAME 113 TO 123)
3-140-2-L	Y	Y	N		LAGGING 100% AND SS 50% (SS INSTALLED 49" OFF DECK, FRAME 140 TO 155)

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
3RD DECK					
3-140-1-L	Y	Y	N		LAGGING 100% AND SS 50% (SS INSTALLED 49" OFF DECK, FRAMES 140 TO 155)
3-144-0-L	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (NOT ACCESSIBLE AREA, PORT & STBD FRAME 165 TO 180, 6'3" OFF DECK BUNKS)
3-156-2-Q	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF PORT SIDE SHELL ASSESSABLE)
3-154-1-Q	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)
3-180-2-C	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)
3-180-5-A	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)
3-196-2-A	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)
3-236-1-F	Y	N	Y		SPACE REQUIRES GAS FREE
3-236-2-F	Y	N	Y		SPACE REQUIRES GAS FREE
3-240-1-F	Y	N	Y		SPACE REQUIRES GAS FREE

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
3RD DECK					
3-240-2-F	Y	N	Y		SPACE REQUIRES GAS FREE
3-272-2-F	Y	N	Y		SPACE REQUIRES GAS FREE
3-272-1-F	Y	N	Y		SPACE REQUIRES GAS FREE
3-278-1-F	Y	N	Y		SPACE REQUIRES GAS FREE
3-278-2-F	Y	N	Y		SPACE REQUIRES GAS FREE
3-286-2-F	Y	N	Y		SPACE REQUIRES GAS FREE
3-286-1-F	Y	N	Y		SPACE REQUIRES GAS FREE
3-292-8-F	Y	N	Y		SPACE REQUIRES GAS FREE
3-316-1-J	Y	N	Y		SPACE REQUIRES GAS FREE
3-322-1-J	Y	N	Y		SPACE REQUIRES GAS FREE
3-328-0-A	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
4TH DECK					
4-H-0-V	Y	N	Y		SPACE REQUIRES GAS FREE
4-20-0-W	Y	N	Y		SPACE REQUIRES GAS FREE
4-27-0-V	N	N	Y		SPACE REQUIRES GAS FREE FR 27 FR 32 P/S FROM 3' UP 26' 4 1/16
4-32-0-Q	Y	N	N		
4-48-2-L	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)
4-48-1-Q	Y	Y	N	FR 49-55 STBD SIDE OF SHELL, 4'-0' OFF DECK	ACCESSIBLE HIDDEN LAGGED 100% (NOT ACCESSIBLE AREA FRAME 50 TO AFT BHD 56, 4'-0' OFF DECK HEATEX & PPG)
4-56-2-A	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)
4-56-0-M	Y	Y	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
4TH DECK					
4-64-0-Q	Y	N	N		
4-100-0-E	Y	Y	N	FR 100-101 STBD SIDE OF SHELL 6'BELOW GRATING	ACCESSIBLE HIDDEN LAGGED 100% (100% OF PORT & STBD SHELL ASSESSABLE)
4-100-0-Q	Y	Y	N	TANK TOP FOR 5-140 & 5-164-2F	STAINLESS STEEL 100% (100% OF PORT SIDE SHELL ASSESSABLE)
4-140-3-A	Y	N	N		ACCESSIBLE HIDDEN LAGGED 100%(100% OF SHELL ASSESSABLE)
4-152-1-A	Y	N	N		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)
4-160-0-Q	Y	N	N		100% OF PORT AND STBD SHELL ASSESSABLE
4-172-1-E	Y	Y	N	FR 174-180 STBD OF SHELL 6" BELOW GRATING BETWEEN L7-L9	100% OF PORT & STBD SHELL ASSESSABLE

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
5TH DECK					
5-FF-0-V	N	N	N		INACCESSIBLE VOID FR 18 - FR 32, P/S. FROM STEM UP 4FT. FR 5 - FR 18, P/S. FROM STEM UP ~6FT; FR E - 12, P/S. FROM STEM UP ~10FT
5-32-0-W	N	N	Y		SPACE REQUIRES GAS FREE
5-51-0-Q	Y	N	N		100% OF PORT & STBD SHELL ASSESSABLE
5-56-0-F	N	N	Y		SPACE REQUIRES GAS FREE
5-64-0-F	N	N	Y		SPACE REQUIRES GAS FREE
5-84-2-F	N	N	N		SPACE REQUIRES GAS FREE
5-84-1-F	N	N	N		SPACE REQUIRES GAS FREE
5-100-2-W	N	N	N		SPACE REQUIRES GAS FREE
5-100-1-W	N	N	N		SPACE REQUIRES GAS FREE
5-100-4-F	N	N	Y		SPACE REQUIRES GAS FREE
5-100-3-F	N	N	Y		SPACE REQUIRES GAS FREE
5-116-2-F	N	N	Y		SPACE REQUIRES GAS FREE
5-116-1-F	N	N	Y		SPACE REQUIRES GAS FREE

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
5TH DECK					
51/2-116-0-V	N	N	Y		INACCESSIBLE VOID FR 116 - FR 132, P/S FROM KEEL UP ~4FT
5-132-0-F	N	N	Y		SPACE REQUIRES GAS FREE
5-137-1-T	N	N	Y		SPACE REQUIRES GAS FREE
5-140-2-F	N	N	Y		SPACE REQUIRES GAS FREE
5-140-1-F	N	N	Y		SPACE REQUIRES GAS FREE
5-164-0-F	N	N	Y		SPACE REQUIRES GAS FREE
5-164-2-F	N	N	Y		SPACE REQUIRES GAS FREE
5-164-1-F	N	N	Y		SPACE REQUIRES GAS FREE
5-170-0-F	N	N	Y		SPACE REQUIRES GAS FREE
5-180-0-E	Y	Y	N	FRAME 180, PORT 15'-0" OFF CL, 8' SQFT	SHELL NON-ASSESSABLE ON PORT SIDE FRAME 180 TO 195, FRAME 204 TO 212, OVERHEAD TO BILGE, TANK & FND
5-180-01-E	Y	Y	N		100% OF STBD SHELL ASSESSABLE
5-192-2-F	N	N	Y		SPACE REQUIRES GAS FREE
5-201-1-F	N	N	Y		SPACE REQUIRES GAS FREE
5-201-3-F	N	N	Y		SPACE REQUIRES GAS FREE

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
5TH DECK					
5-204-2-F	N	N	Y		SPACE REQUIRES GAS FREE
5-204-1-F	N	N	Y		SPACE REQUIRES GAS FREE
5-212-0-E (UL)	Y	Y	N	FRS 215-220 PORT SIDE OF SHELL, U/L BETWEEN L13-L14	ACCESSIBLE HIDDEN LAGGED UPPER LEVEL. (NOT ACCESSIBLE AREA, PORT SIDE FRAME 220 TO 224, 5'-0" OFF U/L GRATING VOLTAGE REGULATOR)
5-212-0-E (LL)	Y				ASSESSABLE HIDDEN, LAGGED LOWER LEVEL, ACCESSIBLE AREA PORT FRAME 212 TO 228, L10 TO BILGE AREA, STBD FRAME 212 TO 228 L8 TO BILGE AREA. (NOT ACCESSIBLE AREA - PORT & STBD FRAME 228 TO 250, FROM U/L TO BILGE AREA FUEL OIL HEATER)
5-220-2-W	N	N	Y		SPACE REQUIRES GAS FREE
5-222-1-F	N	N	Y		SPACE REQUIRES GAS FREE

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
5TH DECK					
5-226-2-E	Y	Y	N		SHELL NON-ASSESSABLE FRAME 225 TO 229, 4'-2" OFF U/L GRATING, FRAME 235 TO 250, 6'-3" OFF U/L GRATING - AIR FLASK, MANIFOLD & FUEL TANK
5-226-1-E	Y	Y	N		SHELL NON-ASSESSABLE FRAME 225 TO 229, 4'-2" OFF U/L GRATING, FRAME 235 TO 250, 6'-3" OFF U/L GRATING, AIR FLASK, MANIFOLD & FUEL TANK
5-250-0-E	Y	Y	N	FR 271-272 PORT SIDE OF SHELL TOP OF L0 TANK TOP	LAGGED EXCEPT FOR BILGE AREA, AT 18" ABOVE GRATING INTO BILGE AREA, (SHELL NON-ASSESSABLE ON PORT 1'-0" AFT OF FRAME 270 TO FRAME 292, FROM 5'-0" OFF GRATING, STBD FRAME 265 TO 270 FROM 1'-0" FROM OVERHEAD TO 6" BELOW GRATING, 14" AFT OF FRAME 270 TO 273, 5'-0" OFF GRATING POWER PANELS)

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
5TH DECK					
5-250-0-E (CONT'D)	Y	Y	N	FR 250 PORT SIDE OF SHELL, BETWEEN L9-L12	
5-250-0-E (CONT'D)	Y	Y	N	FR 258-264 STBD SIDE OF SHELL, BETWEEN L9-L12	
5-250-1-F	N	N	Y		SPACE REQUIRES GAS FREE
5-250-2-F	N	N	Y		SPACE REQUIRES GAS FREE
5-270-0-F	N	N	Y		SPACE REQUIRES GAS FREE
5-276-0-F	N	N	Y		SPACE REQUIRES GAS FREE
5-290-2-F	N	N	Y		SPACE REQUIRES GAS FREE
5-292-0-E	Y	Y	N	FR 316-328 PORT SIDE OF SHELL BETWEEN L5-L9	ACCESSIBLE HIDDEN LAGGED, ASSESSABLE AREA PORT FRAME 292 TO 318, DK GRATING TO OVERHEAD (SHELL NON-ASSESSABLE ON PORT FRAME 318 TO 328, 2'-0" FROM GRATING TO OVERHEAD OF SPACE, STBD FRAME 292 TO 300, 3'-0" OFF GRATING

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
5TH DECK					
5-292-0-E (CONT'D)	Y	Y	Y	FR 316-328 PORT SIDE OF SHELL BETWEEN L5- L9	TO OVERHEAD, FRAME 305 TO 308, 3'-0" OFF GRATING TO OVERHEAD, FRAME 313 TO 328, 6'- 3" OFF GRATING & POWER PANELS
5-292-0-E (CONT'D)			Y	FR 292-328 PORT SIDE OF SHELL BETWEEN L1- L3	
5-292-1-W	N	N	Y		SPACE REQUIRES GAS FREE
5-292-2-W	N	N	Y		SPACE REQUIRES GAS FREE
5-292-3-W	N	N	Y		SPACE REQUIRES GAS FREE
5-308-2-W	N	N	Y		SPACE REQUIRES GAS FREE
5-308-1-W	N	N	Y		SPACE REQUIRES GAS FREE
5-328-0-J	N	N	Y		SPACE REQUIRES GAS FREE
5-328-2-W	N	N	Y		SPACE REQUIRES GAS FREE

SPACE NUMBER	SPACE ASSESSABLE	LAGGING INSTALLED ON BHD	IS THE SPACE INSPECTED DURING SEMAT 1	HISTORICAL HOT SPOT	COMMENTS
5TH DECK					
5-328-1-W	N	N	N		SPACE REQUIRES GAS FREE
5-344-0-J	N	N	N		SPACE REQUIRES GAS FREE
5-368-0-V	N	N	N		SPACE REQUIRES GAS FREE
5-386-0-V	N	N	N		INACCESSIBLE VOID FRAME 386 TO 392, P/S, FROM KEEL UP ~2FT; FRAME 392 TO 400, S, FROM KEEL UP ~2FT; FRAME 400 TO 408 P/S FROM KEEL UP ~2FT
5-392-0-V	N	N	N		SPACE REQUIRES GAS FREE
5-368-0-E	Y	Y	Y		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)
5-376-1-A	Y	Y	Y		ACCESSIBLE HIDDEN LAGGED 100% (100% OF SHELL ASSESSABLE)