TASK GROUP INSTRUCTION
AIM REV 20.11.4.0 (OCTOBER 2020)

TGI NO.:	COMPONENT NAME:	TYPE:	PHASE:	REPEAT:	CHANGE:
	AFT INTAKE	AY	A	0	0

SHIP/HULL NO.:	SHIP/HULL NAME:	SYSTEM:	PROJ/WO NO:	CASREP CAT:
DDG-76	USS HIGGINS		KB3	

CU PHASE TITLE:
F/O – INSPECT, REPAIR, AND PRESERVE IN NO. 2 GTM AND SSGTG NO. 2 INTAKE

PREPARING ACTIVITY:

	CODE	PHONE	DATE
PREPARED BY: MISAKI KANEHIRA	231A	315-243-9883	30-APR-2026
APPROVED BY: YUUJI NAKAMURA	231A	315-243-6041	30-APR-2026
CONCURRED BY:	CODE	PHONE	DATE
CONCURRED BY:	CODE	PHONE	DATE
CONCURRED BY:	CODE	PHONE	DATE
CONCURRED BY:	CODE	PHONE	DATE

REASON FOR WORK/NEED FOR CHANGE:

CHANGE INSTRUCTIONS:

SPECIAL REQUIREMENTS:

SURFMEPP
This work affects a fire zone boundary. Fabrication and/or staging of a non-flammable closure is required

WORK CERTIFICATION SIGNATURES

COMPLETION OF WORK REVIEW:	BADGE NO.:	SHOP/CODE:	PHONE:	DATE:

ACCEPTANCE OF COMPLETED WORK

PHYSICAL INSPECTION REQUIRED: ☐YES ☒NO	PHYSICAL INSPECTION COMPLETED:	BADGE NO.:	SHOP/CODE:	PHONE:	DATE:
RECORDS REVIEW:		BADGE NO.:	SHOP/CODE:	PHONE:	DATE:

FOUO: Public availability to be determined under 5 USC 552

38KB312389A02

LIST OF EFFECTIVE PAGES									
SHT NO.	CHG NO.	SHT NO.	CHG NO.	SHT NO.	CHG NO.	SHT NO.	CHG NO.	SHT NO.	CHG NO.
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M-1									

1. **SCOPE/PURPOSE**

1.1 Title: Engine Room No. 2 Gas Turbine Module (GTM) and Ship Service Gas Turbine Generator (SSGTG) No. 2 Dirty Side Intake; inspect, repair, and preserve

1.2 Location of Work:

1.2.1 Intake Engine Room No. 2, Port (Dirty Side) (02-284-0-Q)

1.2.2 Intake Engine Room No. 2, Starboard (Stbd) (Dirty Side) (02-284-0-Q)

1.2.3 Intake Engine Room No. 2, Port (Dirty Side) (02-275-0-Q)

1.2.4 Intake Engine Room No. 2, Stbd (Dirty Side) (02-275-0-Q)

1.2.5 Intake Engine Room No. 2, Port (Dirty Side) (03-274-0-Q)

1.2.6 Intake Engine Room No. 2, Stbd (Dirty Side) (03-274-0-Q)

1.2.7 Ship Service Gas Turbine Generator (SSGTG) Intake (Dirty Side) (01-260-1-Q)

1.2.8 Intake Trunk (A) Engine Room No. 2 (1-289-2-Q)

1.2.9 Intake Engine Room No. 2, Port and Stbd (Clean Side) (02-284-0-Q)

1.2.10 Intake Engine Room No. 2 (01-276-0-Q)

1.2.11 Intake Engine Room No. 2, Port and Stbd (Clean Side) (02-275-0-Q)

1.2.12 Intake Engine Room No. 2, Port and Stbd (03-274-0-Q)

1.2.13 SSGTG Intake (Clean Side) (01-260-1-Q)

1.2.14 SSGTG Intake Trunk (1-260-1-Q)

1.3 Identification:

1.3.1 Quantity (One EA), Dirty Side of No. 2A GTM Intake in 02-284-0-Q

1.3.2 Quantity (One EA), Dirty Side of No. 2B GTM Intake in 02-275-0-Q

1.3.3 Quantity (One EA), Dirty Side of No. 2B GTM Intake in 03-274-0-Q

1.3.4 Quantity (One EA), Dirty Side of SSGTG No. 2 Intake in 01-260-1-Q

1.4 Security Classification: None.

1.5 Initial Condition: None.

1.6 Contractor work start date: 29/JUN/2026

1.7 Contractor work completion date: 8/DEC/2026

2. REFERENCES:

REF. NO.	DOCUMENT /DRAWING NUMBER	DOCUMENT/DRAWING TITLE	REV	CHG NO.	COPY REQ'D (Y/N)	SOURCE DOC (Y/N)	PARA	SEC	PG	CHP
1	NSI FY-26	NAVSEA Standard Items	-	1	N					
2	LI FY-26	Local Standard Items	-	ORG	N					
3	MP LM23-KB312389-EM02ZBY2	2A /2B GTM & NR.2/NR.3 SSGTG INTK SYS FOD PRTN FOR INTK DIRTY SIDE PARTIALLY RPR	-		Y				ALL	
4	DWG 100-6218930	UNIT STRUCTURAL ARR DWG-ASSY UNIT 2450	Y		Y				3-12	
5	DWG 150-6218967	UNIT STRL ARR DWG ASSY UNIT 4510	V		Y				SEE NOTE	
6	DWG 150-6218969	UNIT STRUCTURAL ARR DWG ASSY 4610	V		Y				3-9	
7	DWG 150-6218971	UNIT STRL ARR DWG ASSY UNIT 4630	Y		Y				SEE NOTE	
8	TM SYSTEMS & SPECIFICATIONS	SSPC Painting Manual Volume 2	-		N					
9	TM T9074-AS-GIB-010/271	Requirements for Nondestructive Testing Methods	1		N					
10	TM S9086-DA-STM-010/CH-100	Hull Structures	4		N					
11	MIL MIL-STD-2035	Nondestructive Testing Acceptable Criteria	A		N					

3. APPENDICES:

3.1. Appendix "J" TGI Job Summary Information Sheet
3.2. Appendix "M" TGI Material List
3.3. Appendix "D" Deficiency Form

4. GENERAL REQUIREMENTS:

4.1 Not Applicable.

5. PROCEDURE:

5.1 Accomplish the requirements of 2.3.

(V)(G) "GAS TURBINE MAINTENANCE PROCEDURE"

5.2 Accomplish a visual inspection of the current ship condition, listed in 1.3.1 through 1.3.4 and located in 1.2.1 through 1.2.7, using 2.4 through 2.7 for guidance.

5.2.1 Ensure to inspect each deck, bulkhead, overhead surface, steel channel, stiffener, penetration, pipe hanger and vibration damping.

5.2.2 Mark each corroded, damaged and/or deteriorated area.

5.2.3 Submit one legible copy, in hard copy or approved transferable media, of a report with a sketch listing results of the requirements of 5.2 to the SUPERVISOR.

5.3 Power tool clean to bare metal each location reported in 5.2.3, located in 1.2.1 through 1.2.7, to include each exposed longitudinal, vertical, and traverse stiffener, for up to 600 square feet. Accomplish each requirement of Surface Preparation Specification SSPC-SP 11 of 2.8, as designated by the SUPERVISOR.

5.4 Accomplish a visual inspection of each surface power tool cleaned to bare metal in 5.3, listed in 1.3.1 through 1.3.4, located in 1.2.1 through 1.2.7 for structural integrity, deterioration, pitting, each crack, and area of damage or distortion, using 2.4 through 2.7 for guidance.

5.4.1 Mark each corroded, damaged and/or deteriorated area.

5.4.2 Submit one legible copy, in hard copy or approved transferable media, of a report with a sketch listing results of the requirements of 5.4 to the SUPERVISOR.

5.5 Accomplish each ultrasonic thickness measurement (UTM) up to 100 locations in each location reported in 5.4.2, listed in 1.3.1 through 1.3.4, located in 1.2.1 through 1.2.7 in accordance with Paragraph 6.7 of 2.9 and 2.10, as designated by the SUPERVISOR, using 2.4 through 2.7 for guidance. The acceptance criteria must be in accordance with 2.11.

5.5.1 Submit one legible copy, in hard copy or approved transferable media, of a report listing results of the requirements of 5.5 to the SUPERVISOR.

5.5.2 Ensure a sketch showing each location of each UTM reading, original material thickness, existing material thickness, and percentage of material thickness reduction.

5.6 Accomplish the following repairs reported in 5.2.3, 5.4.2 and 5.5.1, listed in 1.3.1 through 1.3.4, located in 1.2.1 through 1.2.7 as designated by the SUPERVISOR, using 2.4 through 2.7 for guidance. See 5.9.5 and 5.9.6.

5.6.1 Base metal buildup, a total of 50 square inches.

5.6.1.1 Ensure each base metal buildup area does not exceed 2 inches in diameter.

5.6.1.2 Estimate the base metal buildup to be one quarter inch thick for pricing purposes.

5.6.1.3 Fill each local pit and groove with metal prior to the application of each principal build-up layer.

5.6.1.4 Each surface must be ground smooth to metal.

5.6.2 Remove existing and install new, a total of 15 square feet of deck, overhead, and bulkhead.

5.6.3 Remove existing and install new, a total of 10 linear feet of longitudinal, vertical, and transverse stiffener.

5.6.4 Vee out and weld a total of 4 linear feet of cracked, split, broken or damaged intake weld.

5.6.5 Chip and grind each surface flush in way of each repair.

5.6.6 Template exact size, configuration, and location from each existing shipboard condition.

5.6.7 Accomplish the requirements of 009-012 of 2.1, including Table 2, Columns A and D, Lines One through 7.

5.6.8 Accomplish the requirements 009-025 of 2.1 for an air hose test of each new weld seam. Allowable leakage: None.

5.7 Accomplish the requirements of 009-032 of 2.1, including Table 3, Line(s) 20, located in 1.2.1 through 1.2.7, for coating removed in 5.3.

5.7.1 Power tool clean to bare metal for each area. Accomplish each requirement of Surface Preparation Specification SSPC-SP 11 of 2.8.

5.8 Accomplish the requirements of 009-032 of 2.1 for new and disturbed surface.

5.9 Notes:

5.9.1 Planner: Code 231A M. Kanehira, 243-9883
Planner: Code 231A R. Nanba, 243-6141

5.9.2 Work Integration Manager (WIM): Code 333 T. Yaginuma, 080-6522-9560.

5.9.3 This TGI meets the intent of DDG CSWT File No. 251-044.

5.9.4 Work per this instruction involves cutting an access (or removal of a door) through a fire zone bulkhead, through the hull of the ship above the turn of the bilge, through ventilation components (ducting, plenums, etc.), or through any air-tight, fume-tight or watertight bulkhead normally used to control air flow in the event of a shipboard fire. A non- flammable closure is required in accordance with COMNAVDEASYSCOM MSG R 261400Z JUL 12. The closure, if not continuously in use, shall be staged near the access, readily visible and accessible, so that any emergency responder can install the closure to affect proper air flow onboard the ship.

5.9.5 Removal and installation of interferences, and gas free operation, preservation of boundary spaces relating to front loading structure repair are not included in this TGI. They will be covered by a DL in the future based on Contractor submitted condition report.

5.9.6 Materials for structure members relating to front loading repair will be provided in the future as a DL based on Contractor submitted condition report.

5.9.7 WPC will copy the following pages in reference.

REF. 2.5: Sheets 5A-11, 6-11, 7B-11, and 3-11.
REF. 2.7: Sheets 5B-2, 5-4, 3-9, and 7B-7.

5.9.8 JCNs EM02-ZBY2, EM02-ZBY3, EM02-ZBY4, and EM02-ZBY5 are related to this TGI.

5.10 Government Furnished Material (GFM): None

5.11 SRF-JRMC will provide the following service work: (TGI No. 38KB312389S02)

5.11.1 [C740] Provide crane and crane rigging service.

5.11.2 [X99E] Provide utility service, electrical.

5.11.3 [X99M] Provide utility service, including low pressure air supply, water supply, and steam supply.

5.11.4 [C106.1] Provide safety inspection for SRF-JRMC employees.

5.11.5 [C106.2] Provide gas free inspection for SRF-JRMC employees.

5.11.6 [C133] Provide QA inspection for (G) symbol(s).

5.11.7 [C250] Provide on-site engineering support for front loading.

5.11.8 [C285] Provide inspection for (G) symbol(s).

APPENDIX "J"
TGI JOB SUMMARY INFORMATION SHEET

SYSTEM:	PLANT NO.:	COMPONENT NAME:	TYPE:	PHASE:	REPEAT:	CU PH VERSION:	CASREP CAT:
		AFT INTAKE	AY	A	0	0	

CU PHASE TITLE:
F/O – INSPECT, REPAIR, AND PRESERVE IN NO. 2 GTM AND SSGTG NO. 2 INTAKE

PRIMARY COMPONENT:

COMPONENT UNIT LIST (FOR ASSEMBLIES):
#2B GTM INTAKE IT #2A GTM INTAKE IT CMPT 01-260-1-Q MS CMPT 02-284-0-Q MS CMPT 02-275-0-Q MS CMPT 03-274-0-Q MS #2 SSGTG INTAKE IT

ATTACHMENT LIST:

ZONE MANAGER:	ZONE:	COMPARTMENT:	LEVEL:	FRAME:	SIDE:
FUJINO ,YUUKI					

JO:	KO:	TOTAL MAN HRS:	TOTAL MAT'L COST	TOTAL DURATION:	PLANNING ACCEPTANCE:
38KB312389	A02				

CU PHASE DESCRIPTION:
The purpose of this TGI is to inspect, repair, and preserve in engine room No. 2 gas turbine module (GTM) and ship service gas turbine generator (SSGTG) No. 2 dirty side intake

Location of Work:
Intake Engine Room No. 2, Port (Dirty Side) (02-284-0-Q)
Intake Engine Room No. 2, Starboard (Stbd) (Dirty Side) (02-284-0-Q)
Intake Engine Room No. 2, Port (Dirty Side) (02-275-0-Q)
Intake Engine Room No. 2, Stbd (Dirty Side) (02-275-0-Q)
Intake Engine Room No. 2, Port (Dirty Side) (03-274-0-Q)
Intake Engine Room No. 2, Stbd (Dirty Side) (03-274-0-Q)
Ship Service Gas Turbine Generator (SSGTG) Intake (Dirty Side) (01-260-1-Q)
Intake Trunk (A) Engine Room No. 2 (1-289-2-Q)
Intake Engine Room No. 2, Port and Stbd (Clean Side) (02-284-0-Q)
Intake Engine Room No. 2 (01-276-0-Q)
Intake Engine Room No. 2, Port and Stbd (Clean Side) (02-275-0-Q)
Intake Engine Room No. 2, Port and Stbd (03-274-0-Q)
SSGTG Intake (Clean Side) (01-260-1-Q)
SSGTG Intake Trunk (1-260-1-Q)

TGI NO.:	AFT INTAKE	AY	A	0
SHIP:	DDG-76	CHG/VER:		0/0

APPENDIX "M"
TGI MATERIAL LIST

SYSTEM:	PLANT NO.:	COMPONENT NAME:	TYPE:	PHASE:	REPEAT:	CU PH VERSION:	CASREP CAT:
		AFT INTAKE	AY	A	0	0	

CU PHASE TITLE:
F/O – INSPECT, REPAIR, AND PRESERVE IN NO. 2 GTM AND SSGTG NO. 2 INTAKE

MATERIAL REFERENCES			
REF NO.	DOCUMENT/DRAWING NUMBER	DOCUMENT/DRAWING TITLE	REV

JOB ORDER:	KEY OP:
38KB312389	A02

MATERIAL LIST

ITEM NO.	PC NO.	REF NO.	M / C	DESCRIPTION	STOCK NUMBER	GENERIC MATL TYPE	LVL	QA	HAZ MAT	DOC NO.	QTY REQD/ UNIT	QTY USED/ UNIT

NOTES:

FOUO

☐ NUCLEAR

APPENDIX "D"
DEFICIENCY FORM

☐ NON-NUCLEAR

1. SHIP/HULL NO.:	2a. DL or DR No. (Circle One)	2b. REVISION:	3a. COMPONENT NAME:	3b. TYPE:	3c. PHASE:	3d. REPEAT:
DDG-76			AFT INTAKE	AY	A	0

4a. ICN:	4b. KEY OP:	5. LOC SPACE/LVL:	FRAME:	P/S/C:	6. CAUSED BY:
38KB312389	A02				

7. DESCRIPTION:

8. ORIGINATOR:	NAME:	BADGE:	SHOP/CODE:	DATE:	PHONE NO.:

9. CORRECTIVE ACTION:

10. EVALUATOR:	NAME:	BADGE:	SHOP/CODE:	DATE:	PHONE NO.:

FOR NON-NUCLEAR USE ONLY

11. RFD/RFW REQ'D ☐ LAR REQ'D ☐ ILS MOD REQ'D ☐

SRD/PLAN REV REQ'D ☐

DWG NO.: _____ S/A NO.: _____

12. ISOLATION SATISFACTORY:	SIGN:	BADGE:	SHOP/CODE:	DATE:	PHONE NO.:
13. SUBSAFE OQE RECORD? YES ☐ NO ☐	SIGN:	BADGE:	SHOP/CODE:	DATE:	PHONE NO.
14. CORRECTIVE ACTION COMPLETE:	SIGN:	BADGE:	SHOP/CODE:	DATE:	PHONE NO.
15. INSPECTION REQ'D? :YES ☐ NO ☐	INSPECTION COMPLETE/SIGN:	BADGE:	SHOP/CODE:	DATE:	PHONE NO.
16. RECORDS REVIEW COMPLETE (DR ONLY)	SIGN:	BADGE:	SHOP/CODE:	DATE:	PHONE NO.

DL's ISSUED (DR ONLY)								

☐ NUCLEAR **Deficiency Form Continuation Sheet** ☐ NON-NUCLEAR

1. SHIP/HULL NO.:	2a. DL or DR No. (Circle One)	2b. REVISION:	3a. COMPONENT NAME:	3b. TYPE:	3c. PHASE:	3d. REPEAT:
DDG-76			AFT INTAKE	AY	A	0