

Action Request Print: 080501182

Status REVIEW REQUESTED

Important to Safety

Priority/Urgency: 3C

AR Restraint: 0.0

Def. Tag Hung? No

Sig Code: 4

Operable Determination: Y

Lcoar/Edmr Flag:

Project Code: N/A

Nomel Flag: N Committee Closure Required:

Originated by: (b)(6)

Pax:

Dept: M5210

on: 5/25/2008 05:21:49

Owner:

Org:

AR Due date:

Last updated by: (b)(6)

on: 5/25/2008 12:53:24

MRC Review Date:

Description (General Tab)

1. ENG #2 AMPHENOL CONNECTOR ATTACHING WIRE ASSY TO EGB WOODWARD GOVERNOR NEEDS TO BE REPLACED. THE SOLDER AT THE CONNECTOR IS DEGRADING AND IN FAIR FUNCTIONAL CONDITION. (SEE ATTACHED PICS)

2. BOTH ENGINES HAVE FIXED CONDUIT RUNNING FROM TERM BOXES 373 AND 375 ON EAST AND WEST END OF MOTORS. FROM THE TERM BOX'S THE RIGID CONDUIT RUNS THROUGH SEVERAL 90 DEGREE RIGID 90 DEGREE BODIES ALL THE WAY UP TO THE GOVERNORS WITH ONLY THREE INCHES OF WIRE ASSEMBLY TO PLAY WITH BEFORE CONNECTING TO GOVERNORS. REQUEST ENGINEER EVALUATION OF RUNNING FLEX CONDUIT AT LEAST OVER THE LAST SEVERAL FEET FROM THE FIRST (T) CONDUIT BODY. (SEE ATTACHED PICS)

3. ENGINE #1 THE LAST TWO 90 DEGREE BODY AND T BODY ARE VERY LOOSE MOVE EASILY. UNABLE TO TIGHTEN WITH OUT REMOVING WIRE ASSEMBLY ATTACHED TO WOODWARD GOVERNOR.

Equipment (General Tab)

Type	ID	CRC	Functional Description
EQ-MEL	S22420MG003	Critical-A	"NEIL" EMERGENCY DIESEL GENERATOR 2MG003

Assignment Tab

Assignment	Reference	Assignee	Org	Status	Forecast	Due Date	Pri
1 - (MO) Maintenance Order (Reference)	2008052211000	(b)(6)	M5009	CLOSED	5/24/2008	5/25/2008	3C
2 - (MO) Maintenance Order	2008052215000	(b)(6)	M1110	CLOSED	5/25/2008	5/25/2008	2A
3 - (EOC) Extent of Condition	2G003 Loose con	(b)(6)	L4100	CLOSED		6/1/2008	3C
4 - (MO) Maintenance Order	2008052216000	(b)(6)	-1	CLOSED	5/25/2008	5/26/2008	2A
5 - (FS) Field Support	2G003 conduit	(b)(6)	L4100	WORKING		6/25/2008	3A

Approvals Tab

Userid	Timestamp	Comments
(b)(6)	5/26/2008 17:12:30	AR assignment #3 - EOC closed.
(b)(6)	5/26/2008 14:54:48	FS assignment created.
(b)(6)	5/26/2008 10:31:24	AR assignment #4 - MO closed.
(b)(6)	5/26/2008 04:09:24	AR assignment #4 - MO closed.
(b)(6)	5/26/2008 03:41:06	AR assignment #4 - MO closed.
(b)(6)	5/26/2008 01:15:40	AR assignment #2 - MO closed.
(b)(6)	5/25/2008 23:30:06	AR assignment #1 - MO closed.
(b)(6)	5/25/2008 21:48:03	MO assignment created.
(b)(6)	5/25/2008 15:17:33	EOC assignment created.
(b)(6)	5/25/2008 15:12:50	Operable flag was changed by (b)(6) from X to Y
(b)(6)	5/25/2008 13:22:46	MO assignment created.
(b)(6)	5/25/2008 12:53:23	MO assignment created.
(b)(6)	5/25/2008 05:28:11	Action Request Created

Notes Tab

CAS

Action Request Print: 080501182

User ID: (b)(6) Time: 5/25/2008 15:12:38

Text:

Indicate One:

☐ This is an Initial Functionality Assessment (IFA)

☒ This is an Immediate Operability Determination (IOD)

1. Deficiency Identification and the Affected Equipment

Conduit between electronic governor and the mechanical governor is loose and needs to be retightened or replaced prior to making 2G003 Operable.

2. For an IFA: Identify the Specified Function(s)

For an IOD: Identify the Specified Safety Function

EDG safety function is to provide an onsite power source to the emergency equipment in the event of a loss of offsite power.

The loose conduit provides a protective sheath for the wiring needed between the electronic and mechanical governors for EDG operation.

3. Conclusion:

For an IFA, determine FUNCTIONAL / NONFUNCTIONAL

For and IOD, determine OPERABLE / INOPERABLE

☒ Functional / Operable

☐ Nonfunctional / Inoperable

Basis (provide discussion):

Discussed with Electrical Engineering (Battish) and the concern is not that this condition renders the EDG Inoperable, but rather that the EDG (2G003) would be returned to service in a degraded condition which could eventually lead to failure of the wiring between the electronic and mechanical governors. The EDG's have been in service for over 25 years with the current conduit configurations and we have not seen any failures to date. The loose conduit is a long term wear issue which could eventually cause a failure of the wiring or amphenol plug connections due to the excessive vibrations when the EDG is running. Any EDG would be considered Operable with loose conduits, but should be repaired at earliest opportunity.

4. Extent of Condition (Required for Inoperable)

EOC Created (YES or N

O) ? Yes

Describe other train / unit findings (if performed):

Conduit on the 20 cylinder (engine #2) for 2G003 showed conduit to be intact and in no need of repair. Engineering will inspect the other 3 EDG's onsite and document the findings appropriately.

References Tab

End of Print

Date Printed: 5/27/2008 08:02:32

Maintenance Order (Reference)

Action Request #: 080501182 -- 01

Assignment Type: MO

Resp Org: M5009

Category: 90

CLOSED

Priority: 3C

Assignee:

Forecast Date: 5/24/2008 00

Reference: 2008052211000

Due Date: 05/25/08

AR Restraint:

REQ For OPER:

General Tab Information:

Originator: (b)(6)

M5210

(b)(6)

Added: (b)(6)

5/25/2008 12:53:

Updated: (b)(6)

5/25/2008 23:30:

Problem Description:

Notification text -- NONE

DESCRIPTION -- 1. ENG #2 AMPHENOL CONNECTOR ATTACHING WIRE ASSY TO EGB WOODWARD GOVERNOR NEEDS TO BE REPLACED. THE SOLDER AT THE CONNECTOR IS DEGRADING AND IN FAIR FUNCTIONAL CONDITION. (SEE ATTACHED PICS)

2. BOTH ENGINES HAVE FIXED CONDUIT RUNNING FROM TERM BOXES 373 AND 375 ON EAST AND WEST END OF MOTORS. FROM THE TERM BOX'S THE RIGID CONDUIT RUNS THROUGH SEVERAL 90 DEGREE RIGID 90 DEGREE BODIES ALL THE WAY UP TO THE GOVERNORS WITH ONLY THREE INCHES OF WIRE ASSEMBLY TO PLAY WITH BEFORE CONNECTING TO GOVERNORS. REQUEST ENGINEER EVALUATION OF RUNNING FLEX CONDUIT AT LEAST OVER THE LAST SEVERAL FEET FROM THE FIRST (T) CONDUIT BODY. (SEE ATTACHED PICS)

3. ENGINE #1 THE LAST TWO 90 DEGREE BODY AND T BODY ARE VERY LOOSE MOVE EASILY. UNABLE TO TIGHTEN WITH OUT REMOVING WIRE ASSEMBLY ATTACHED TO WOODWARD GOVERNOR.

Reference Tab Information:

Text Tab Information:

-----ASSIGNMENT-TEXT-----

Approval Tab Information:

Notes Tab Information:

----- END OF REPORT -----

Maintenance Order

Action Request #: 080501182 -- 02

Assignment Type: MO

Resp Org: M1110

Category: 90

CLOSED

Priority: 2A

Assignee: (b)(6)

Forecast Date: 5/25/2008 00

Reference: 2008052215000

Due Date: 05/25/08

AR Restraint:

REQ For OPER:

General Tab Information:

Originator: (b)(6) M5210 (b)(6)
Added: 5/25/2008 13:22: Updated: (b)(6) 5/26/2008 01:15:

Problem Description:

Notification text -- Replace or Repair the loose flex conduit referenced in the AR.

DESCRIPTION -- 1. ENG #2 AMPHENOL CONNECTOR ATTACHING WIRE ASSY TO EGB WOODWARD GOVERNOR NEEDS TO BE REPLACED. THE SOLDER AT THE CONNECTOR IS DEGRADING AND IN FAIR FUNCTIONAL CONDITION. (SEE ATTACHED PICS)

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3. ENGINE #1 THE LAST TWO 90 DEGREE BODY AND T BODY ARE VERY LOOSE MOVE EASILY. UNABLE TO TIGHTEN WITH OUT REMOVING WIRE ASSEMBLY ATTACHED TO WOODWARD GOVERNOR.

Reference Tab Information:

Text Tab Information:

-----ASSIGNMENT-TEXT-----

Approval Tab Information:

Code	To Status	From	By	Timestamp	Pax
CHG-RFO			(b)(6)	5/25/2008 13:22:46	
Required for Operability has changed for assignment: 2 Type: MO old value was "null"					

Notes Tab Information:

----- END OF REPORT -----

Extent of Condition

Action Request #: 080501182 -- 03

Assignment Type: EOC

Resp Org: L4100

Category: 90

CLOSED

Priority: 3C

Assignee: (b)(6)

Forecast Date:

Reference: 2G003 Loose conduit

Due Date: 06/01/08

AR Restraint:

REQ For OPER:

General Tab Information:

Originator: (b)(6)

M5210

(b)(6)

Added:

5/25/2008 15:17:

Updated:

(b)(6)

5/26/2008 17:12:

Problem Description:

Notification text -- Perform an Extent of Condition (EOC) evaluation for an identified deficiency to determine if the deficiency currently exists elsewhere.

DESCRIPTION -- 1. ENG #2 AMPHENOL CONNECTOR ATTACHING WIRE ASSY TO EGB WOODWARD GOVERNOR NEEDS TO BE REPLACED. THE SOLDER AT THE CONNECTOR IS DEGRADING AND IN FAIR FUCTIONAL CONDITION. (SEE ATTACHED PICS)

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3. ENGINE #1 THE LAST TWO 90 DEGREE BODY AND T BODY ARE VERY LOOSE MOVE EASILY. UNABLE TO TIGHTEN WITH OUT REMOVING WIRE ASSEMBLY ATTACHED TO WOODWARD GOVERNOR.

Reference Tab Information:

Text Tab Information:

-----ASSIGNMENT-TEXT----- Perform an Extent of Condition (EOC) evaluation for an identified deficiency to determine if the deficiency currently exists elsewhere. Do not use this assignment to determine cause; use a DCE, ACE or RCE as appropriate to determine the cause.

If the EOC is being used to not delay completion of an Immediate Operability Determination (STA Review Template) or a Prompt Operability Determination (OA Assignment), consider only "other train / other unit" applications.

For all other EOC uses, determine and evaluate scope as necessary.

Refer to SO123-XV-52 and SO123-XV-50.39.

1. Affected Equipment (See AR description or, if the AR description is incomplete or incorrect, describe)

2G003 Engine #1 is the affected equipment. Extent of condition applies to 2G003 Engine #2, 2G002, 3G002 and 3G003.

2. Deficiency Identification (See AR Description or, if the AR description is incomplete or incorrect, describe)

Loose conduit was found on 2G003. The cables to amphenol connector at the mechanical governor are routed thru this conduit.

3. Discussion of findings, including the basis for the conclusion:

Systems engineering has inspected the similar conduits on 2G003 Engine #2, 2G002, 3G002 and 3G003. The conduit on

Action Request Assignment Report

Date Printed: 05/27/08 08:02:37

2G003 Engine #2 was inspected on 5/25/08 and the conduits on 2G002, 3G002 and 3G003 were inspected on 5/26/08. No similar deficiency exists on 2G003 Engine #2, 2G002, 3G002 and 3G003. At present all similar conduits are tight.

Prepared by (b)(6) 5/26/08
Approved by (b)(6) 5/26/08

Approval Tab Information:

Code	To	Status	From	By	Timestamp	Pax
CHG-RESTR				(b)(6)	5/26/2008 17:12:31	
				AR Restraint has changed for assignment: 3 Type: EOC old value was "0.0"		
C	90		20	(b)(6)	5/26/2008 17:12:24	89425
CHG-RESTR					5/26/2008 17:10:40	
				AR Restraint has changed for assignment: 3 Type: EOC old value was ""		
A	20		10	(b)(6)	5/26/2008 17:10:34	89067
CHG-ASGN					5/26/2008 04:44:35	
				Assignee has changed for assignment: 3 Type: EOC old value was (b)(6)		
CHG-ASGN				(b)(6)	5/26/2008 04:44:34	
				The following email text was added by (b)(6)		
				3G002 inspected and was Sat. 2G002 and 3G003 have barriers installed and were not accessible. Please inspect on days if available and complete EOC. Revise last sentence of EOC Text to include your findings.		
				Thanks,		
				(b)(6)		
CHG-ASGN				(b)(6)	5/25/2008 16:07:30	
				Assignee has changed for assignment: 3 Type: EOC old value was (b)(6)		

Notes Tab Information:

----- END OF REPORT -----

Maintenance Order

Action Request #: 080501182 -- 04

Assignment Type: MO

Resp Org: -1

Category: 90

CLOSED

Priority: 2A

Assignee:

Forecast Date: 5/25/2008 23

Reference: 2008052216000

Due Date: 05/26/08

AR Restraint:

REQ For OPER:

General Tab Information:

Originator:

(b)(6)

M5210

(b)(6)

Added:

5/25/2008 21:48:

Updated:

(b)(6)

5/26/2008 10:31:

Problem Description:

Notification text -- NONE

DESCRIPTION -- 1. ENG #2 AMPHENOL CONNECTOR ATTACHING WIRE ASSY TO EGB WOODWARD GOVERNOR NEEDS TO BE REPLACED. THE SOLDER AT THE CONNECTOR IS DEGRADING AND IN FAIR FUNCTIONAL CONDITION. (SEE ATTACHED PICS)

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Reference Tab Information:

Text Tab Information:

-----ASSIGNMENT-TEXT-----

Approval Tab Information:

Notes Tab Information:

----- END OF REPORT -----

Field Support

Action Request #: 080501182 -- 05

Assignment Type: FS

Resp Org: L4100

Category: 10

WORKING

Priority: 3A

Assignee: (b)(6)

Forecast Date:

Reference: 2G003 conduit

Due Date: 06/25/08

AR Restraint:

REQ For OPER:

General Tab Information:

Originator: (b)(6)

M5210

(b)(6)

Added:

5/26/2008 14:54:

Updated:

(b)(6)

5/27/2008 06:58:

Problem Description:

Notification text -- Evaluate whether additional design changes and/or PMs are necessary for 2G003 conduit support installed per MO 08052216

DESCRIPTION -- 1. ENG #2 AMPHENOL CONNECTOR ATTACHING WIRE ASSY TO EGB WOODWARD GOVERNOR NEEDS TO BE REPLACED. THE SOLDER AT THE CONNECTOR IS DEGRADING AND IN FAIR FUNCTIONAL CONDITION. (SEE ATTACHED PICS)

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Reference Tab Information:

Text Tab Information:

-----ASSIGNMENT-TEXT----- The FS

(Field Support) may serve as a feedback record (formalized email), as a record of field support efforts, or to document engineering assessments, but should not be used as a standalone record of changes to design documents, calculations, or operational methods. Changes of this nature need to be processed per the appropriate assignment type, (PRO, DOC, CLC, etc). This includes creating MO assignments and notifying maintenance when existing MOs are not required. For issues of potential consequence, peer checks of conclusions reached in the FS assignment are encouraged.

Scope Definition/Clarification:

Applicability to other Systems/Components/Processes (extent of condition assessment):

Cause of issue/problem (initiate a TND/ACE/RCE assignment, reference SO123-XV-50, attachment 4 if applicable):

Conclusion with basis/facts:

Identify other needed actions and list the tracking AR Assignment Numbers:

Document/describe any communication with requestor upon completion, as appropriate:

Approval Tab Information:

Notes Tab Information:

----- END OF REPORT -----

Job : 6
Date: 5/27/2008
Time: 8:02:34 AM

Job : 6

Date: 5/27/2008

Time: 8:02:34 AM













