



REPORT SUMMARY

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In addition to this summary, this report includes the following forms:

- 1 Equipment Selection Logic
- 2 Equipment Selection
- 3 Equipment Reliability and Maintainability
- 4 Functional Failure Analysis
- 5 Failure Effect Categorization
- 6 Maintenance Task Selection
- 7 Maintenance Task Summary
- 8 Maintenance Package Summary



Equipment Selection Questions

Label	Question
Safety	Could failure affect safety on ground or in flight?
Detectability	Could failure be undetectable or not likely to be detected during normal operation?
Operational	Could failure have significant operational impact?
Economic	Could failure have significant economic impact?



EQUIPMENT SELECTION

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#	Item Name	Part Number	Item Description	Could failure affect safety on ground or in flight?	Could failure be undetectable or not likely to be detected during normal operation?	Could failure have significant operational impact?	Could failure have significant economic impact?	MSI	Remarks
26	FIRE PROTECTION	None		Yes	Yes	Yes	Yes	26	
26.1	Detection	None		No	No	Yes	Yes	10	None
26.2	Extinguishing	None		Yes	Yes	Yes	Yes	20	None
26.10.11	Engine Fire Detection	None		No	No	Yes	Yes	11	
26.20.21	Engine Fire Extinguishing	None		Yes	Yes	Yes	Yes	21	
26.20.21.10	Fire Extinguisher bottle assembly.	AC2620G103		Yes	No	Yes	Yes	10	
26.10.11.10	Zone 1 Sensor.	AC2611G201		No	No	Yes	Yes	10	
26.20.21.20	Double Check Tee	35201020		No	Yes	Yes	Yes	20	
26.10.11.20	Zone 2 Sensor.	AC2611G202		No	No	Yes	Yes	20	
26.20.21.30	Discharge Pipe LH	AC2620G105		No	Yes	Yes	Yes	30	
26.20.21.40	Discharge Pipe RH	AC2620G104		No	Yes	Yes	Yes	40	
26.20.21.50	Pipe Assembly L/H with permaswage fittings	AC2620E120		No	Yes	Yes	Yes	50	
26.20.21.60	Pipe Assembly R/H with permaswage fittings	AC2620E122		No	Yes	Yes	Yes	60	



EQUIPMENT RELIABILITY AND MAINTAINABILITY

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#	Item Name	Part Number	Item Description	Qty per System	Qty per NHLA	Supplier	Similar To
26	FIRE PROTECTION	None					
26.1	Detection	None					
26.2	Extinguishing	None					
26.10.11	Engine Fire Detection	None		4	1	VORTOS Inc	Various
26.20.21	Engine Fire Extinguishing	None		4	1	RS Aerospace	Various
26.20.21.10	Fire Extinguisher bottle assembly.	AC2620G103		8	2	MSTR Scientific	Various
26.10.11.10	Zone 1 Sensor.	AC2611G201		16	4	VORTOS Inc	Various
26.20.21.20	Double Check Tee	35201020		4	1	MSTR Scientific	Various
26.10.11.20	Zone 2 Sensor.	AC2611G202		8	2	VORTOS Inc	Various
26.20.21.30	Discharge Pipe LH	AC2620G105		4	1	RS Aerospace	Various
26.20.21.40	Discharge Pipe RH	AC2620G104		4	1	RS Aerospace	Various
26.20.21.50	Pipe Assembly L/H with permaswage fittings	AC2620E120		4	1	RS Aerospace	New
26.20.21.60	Pipe Assembly R/H with permaswage fittings	AC2620E122		4	1	RS Aerospace	New



**FUNCTIONAL FAILURE ANALYSIS
Engine Fire Detection**

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26.10.11 - Engine Fire Detection

#	Function	#	Failure	#	Effect	#	Cause
1	Provides Fire Zone 1 & 2 fire detection/overheat signal to the airframe.	1	Fails to provide Fire Zone 1 & 2 fire detection/overheat signal to the airframe.	1	Loss of fire detection/overheat signal from loop A or B. Alternative loop is still available.	1	Loss of sensor pressure.
						2	Failure of responder.
						3	Engine fire detection wiring harness failure.
		2	Provides erroneous fire warning.	1	Erroneous fire warning. Nuisance occurrence leading to engine shutdown.	1	Fire detector, responder malfunction.
2	To provide fire loop failure signal.	1	Fails to provide fire loop failure signal.	1	Loss of fire loop failure detection signal.	1	Responder failure.
						2	Engine wiring harness failure.
		2	Provides erroneous fire loop failure signal.	1	Nuisance failure signal.	1	Responder failure.
						2	Engine wiring harness failure.

Item Name	26.10.11 - Engine Fire Detection
Function	1 - Provides Fire Zone 1 & 2 fire detection/overheat signal to the airframe.
Failure	1 - Fails to provide Fire Zone 1 & 2 fire detection/overheat signal to the airframe.
Effect	1 - Loss of fire detection/overheat signal from loop A or B. Alternative loop is still available.

Failure Effect Categorization		Answers and Explanations
<p>1 - Is the occurrence of a functional failure evident to the operating crew during the performance of their normal duties?</p> <p>Yes No</p>		<p>1 Yes Functional Failure will be evident to operating crew through instrument/warning panel indications.</p>
<p>2 - Does the Functional Failure or secondary damage resulting from the Functional Failure have a direct adverse effect on operating safety?</p> <p>Yes No</p>		<p>2 No No direct adverse effect on operating safety. Crew will switch to alternate loop.</p>
<p>3 - Does the combination of a Hidden Functional Failure and one additional failure of a system related or backup function have an adverse effect on operating safety?</p> <p>Yes No</p>		<p>3 Question 3 - Not Applicable</p>
<p>4 - Does the Functional Failure have a direct adverse effect on operating capability?</p> <p>Yes No</p>		<p>4 No Aircraft can continue safe flight, and may be dispatched with one loop per engine in non-operational status.</p>
<p>- 5 - Evident Safety</p> <p>- 6 - Evident Operational</p> <p>- 7 - Evident Economic</p> <p>- 8 - Hidden Safety</p> <p>- 9 - Hidden Economic</p>		<p>Category - 7 - Evident Economic</p> <p>Remarks</p>

Item Name	26.10.11 - Engine Fire Detection
Function	1 - Provides Fire Zone 1 & 2 fire detection/overheat signal to the airframe.
Failure	2 - Provides erroneous fire warning.
Effect	1 - Erroneous fire warning. Nuisance occurrence leading to engine shutdown.

Failure Effect Categorization		Answers and Explanations
<p>1 - Is the occurrence of a functional failure evident to the operating crew during the performance of their normal duties?</p> <p>Yes No</p>		<p>1 Yes Functional Failure will be evident to operating crew through instrument/warning panel indications.</p>
<p>2 - Does the Functional Failure or secondary damage resulting from the Functional Failure have a direct adverse effect on operating safety?</p> <p>Yes No</p>		<p>2 No No direct adverse effect on operating safety. Engine will be shutdown.</p>
<p>3 - Does the combination of a Hidden Functional Failure and one additional failure of a system related or backup function have an adverse effect on operating safety?</p> <p>Yes No</p>		<p>3 Question 3 - Not Applicable</p>
<p>4 - Does the Functional Failure have a direct adverse effect on operating capability?</p> <p>Yes No</p>		<p>4 Yes Aircraft may have altitude or range restrictions, or may be required to divert to an alternate destination.</p>
<p>- 5 - Evident Safety</p> <p>- 6 - Evident Operational</p> <p>- 7 - Evident Economic</p> <p>- 8 - Hidden Safety</p> <p>- 9 - Hidden Economic</p>		<p>Category - 6 - Evident Operational</p> <p>Remarks</p>

Item Name	26.10.11 - Engine Fire Detection
Function	2 - To provide fire loop failure signal.
Failure	1 - Fails to provide fire loop failure signal.
Effect	1 - Loss of fire loop failure detection signal.

Failure Effect Categorization		Answers and Explanations
<p>1 - Is the occurrence of a functional failure evident to the operating crew during the performance of their normal duties?</p> <p>Yes No</p>		<p>1 Yes Functional Failure will be evident to operating crew through pre-flight ground test</p>
<p>2 - Does the Functional Failure or secondary damage resulting from the Functional Failure have a direct adverse effect on operating safety?</p> <p>Yes No</p>		<p>2 No No direct adverse effect on operating safety. Crew will switch to alternate loop.</p>
<p>3 - Does the combination of a Hidden Functional Failure and one additional failure of a system related or backup function have an adverse effect on operating safety?</p> <p>Yes No</p>		<p>3 Question 3 - Not Applicable</p>
<p>4 - Does the Functional Failure have a direct adverse effect on operating capability?</p> <p>Yes No</p>		<p>4 No Aircraft can continue safe flight, and may be dispatched with one loop per engine in non-operational status.</p>
<p>- 5 - Evident Safety</p> <p>- 6 - Evident Operational</p> <p>- 7 - Evident Economic</p> <p>- 8 - Hidden Safety</p> <p>- 9 - Hidden Economic</p>		<p>Category - 7 - Evident Economic</p> <p>Remarks</p>

Item Name	26.10.11 - Engine Fire Detection
Function	2 - To provide fire loop failure signal.
Failure	2 - Provides erroneous fire loop failure signal.
Effect	1 - Nuisance failure signal.

Failure Effect Categorization		Answers and Explanations
<p>1 - Is the occurrence of a functional failure evident to the operating crew during the performance of their normal duties?</p> <p>Yes No</p>		<p>1 Yes Functional Failure will be evident to operating crew through pre-flight ground test</p>
<p>2 - Does the Functional Failure or secondary damage resulting from the Functional Failure have a direct adverse effect on operating safety?</p> <p>Yes No</p>		<p>2 No No direct adverse effect on operating safety. Crew will switch to alternate loop.</p>
<p>3 - Does the combination of a Hidden Functional Failure and one additional failure of a system related or backup function have an adverse effect on operating safety?</p> <p>Yes No</p>		<p>3 Question 3 - Not Applicable</p>
<p>4 - Does the Functional Failure have a direct adverse effect on operating capability?</p> <p>Yes No</p>		<p>4 No Aircraft can continue safe flight, and may be dispatched with one loop per engine in non-operational status.</p>
<p>- 5 - Evident Safety</p> <p>- 6 - Evident Operational</p> <p>- 7 - Evident Economic</p> <p>- 8 - Hidden Safety</p> <p>- 9 - Hidden Economic</p>		<p>Category - 7 - Evident Economic</p> <p>Remarks</p>



MAINTENANCE TASK SELECTION

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Item Name	26.10.11 - Engine Fire Detection	FEC -3- Hidden Safety and Environmental Consequences
Function	1 - Provides Fire Zone 1 & 2 fire detection/overheat signal to the airframe.	
Failure	1 - Fails to provide Fire Zone 1 & 2 fire detection/overheat signal to the airframe.	
Effect	1 - Loss of fire detection/overheat signal from loop A or B. Alternative loop is still available.	
Cause	1 - Loss of sensor pressure.	

Question	Yes	No	Explanation
7A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
7B: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
7C: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
7D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
1	Detailed Inspection of Engine Fire Detection Loops.	Assigned	IN	2000 Flight Hour					



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Item Name	26.10.11 - Engine Fire Detection	FEC -3- Hidden Safety and Environmental Consequences
Function	1 - Provides Fire Zone 1 & 2 fire detection/overheat signal to the airframe.	
Failure	1 - Fails to provide Fire Zone 1 & 2 fire detection/overheat signal to the airframe.	
Effect	1 - Loss of fire detection/overheat signal from loop A or B. Alternative loop is still available.	
Cause	2 - Failure of responder.	

Question	Yes	No	Explanation
7A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
7B: Is an inspection or functional check to detect degradation of function applicable and effective?		X	Task is not applicable because the rate of reduction in failure resistance is not predictable. System built in test is contin
7C: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
7D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)



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Item Name	26.10.11 - Engine Fire Detection	FEC -3- Hidden Safety and Environmental Consequences
Function	1 - Provides Fire Zone 1 & 2 fire detection/overheat signal to the airframe.	
Failure	1 - Fails to provide Fire Zone 1 & 2 fire detection/overheat signal to the airframe.	
Effect	1 - Loss of fire detection/overheat signal from loop A or B. Alternative loop is still available.	
Cause	3 - Engine fire detection wiring harness failure.	

Question	Yes	No	Explanation
7A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
7B: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
7C: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
7D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
2	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour					



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Item Name	26.10.11 - Engine Fire Detection	FEC -2- Evident Economic Consequences
Function	1 - Provides Fire Zone 1 & 2 fire detection/overheat signal to the airframe.	
Failure	2 - Provides erroneous fire warning.	
Effect	1 - Erroneous fire warning. Nuisance occurrence leading to engine shutdown.	
Cause	1 - Fire detector, responder malfunction.	

Question	Yes	No	Explanation
6A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
6B: Is an inspection or functional check to detect degradation of function applicable and effective?		X	Task is not applicable because the rate of reduction in failure resistance is not predictable.
6C: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
6D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
6E: Is there any task or combination of tasks that will be applicable and effective?		X	

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
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Item Name	26.10.11 - Engine Fire Detection	FEC -2- Evident Economic Consequences
Function	1 - Provides Fire Zone 1 & 2 fire detection/overheat signal to the airframe.	
Failure	2 - Provides erroneous fire warning.	
Effect	1 - Erroneous fire warning. Nuisance occurrence leading to engine shutdown.	
Cause	2 - Failure of engine wiring harness.	

Question	Yes	No	Explanation
6A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
6B: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
6C: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
6D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
6E: Is there any task or combination of tasks that will be applicable and effective?		X	

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
2	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour					



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Item Name	26.10.11 - Engine Fire Detection	FEC -3- Hidden Safety and Environmental Consequences
Function	2 - To provide fire loop failure signal.	
Failure	1 - Fails to provide fire loop failure signal.	
Effect	1 - Loss of fire loop failure detection signal.	
Cause	1 - Responder failure.	

Question	Yes	No	Explanation
7A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
7B: Is an inspection or functional check to detect degradation of function applicable and effective?		X	Task is not applicable because the rate of reduction in failure resistance is not predictable.
7C: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
7D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)



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Item Name	26.10.11 - Engine Fire Detection	FEC -3- Hidden Safety and Environmental Consequences
Function	2 - To provide fire loop failure signal.	
Failure	1 - Fails to provide fire loop failure signal.	
Effect	1 - Loss of fire loop failure detection signal.	
Cause	2 - Engine wiring harness failure.	

Question	Yes	No	Explanation
7A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
7B: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
7C: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
7D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
2	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour					



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Item Name	26.10.11 - Engine Fire Detection	FEC -3- Hidden Safety and Environmental Consequences
Function	2 - To provide fire loop failure signal.	
Failure	2 - Provides erroneous fire loop failure signal.	
Effect	1 - Nuisance failure signal.	
Cause	1 - Responder failure.	

Question	Yes	No	Explanation
7A: Is a lubrication or servicing task applicable and effective?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Task is not applicable because there is no consumable to replenish.
7B: Is an inspection or functional check to detect degradation of function applicable and effective?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Task is not applicable because the rate of reduction in failure resistance is not predictable.
7C: Is a restoration task to reduce failure rate applicable and effective?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Task is not applicable because item does not show degradation at an identifiable age.
7D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Task is not applicable because item does not show degradation at an identifiable age.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
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Item Name	26.10.11 - Engine Fire Detection	FEC -3- Hidden Safety and Environmental Consequences
Function	2 - To provide fire loop failure signal.	
Failure	2 - Provides erroneous fire loop failure signal.	
Effect	1 - Nuisance failure signal.	
Cause	2 - Engine wiring harness failure.	

Question	Yes	No	Explanation
7A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
7B: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
7C: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
7D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
2	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour					



**FUNCTIONAL FAILURE ANALYSIS
Engine Fire Extinguishing**

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26.20.21 - Engine Fire Extinguishing

#	Function	#	Failure	#	Effect	#	Cause
1	Store extinguishing agent under pressure.	1	Fails to maintain full quantity of agent at correct pressure.	1	Insufficient agent available in the Fire Extinguisher bottle for effective discharge.	1	Leakage from Fire Extinguisher bottle assembly.
						2	Uncommanded firing.
2	Release extinguishing agent on command.	1	Fails to release agent on command from primary fire extinguisher.	1	No, or insufficient, agent available for discharge. Secondary fire extinguisher must be used	1	Cartridge failure.
						2	Failure of fire extinguishing electrical harness.
		2	Fails to release agent on command from secondary fire extinguisher.	1	Loss of fire extinguisher redundancy.	1	Cartridge failure.
						2	Failure of fire extinguishing electrical harness.
3	Distribute extinguishing agent to fire hazard area.	1	Fails to distribute agent to fire hazard area.	1	No, or insufficient agent available in fire hazard area.	1	Damaged Fire Extinguisher bottle assembly.
						2	Two Way Check Tee and associated plumbing, leakage.
						3	Misaligned, damaged or blocked distribution pipe.
4	Provides low pressure indication, when a low pressure condition exists in the Fire Extinguisher bottle.	1	Fails to indicate when Fire Extinguisher bottle low pressure exists.	1	No indication of low pressure in Fire Extinguisher bottle.	1	Pressure switch hung in 'High Pressure' position.
						2	Failure of fire extinguishing electrical harness.
		2	False indication of low pressure in Fire Extinguisher container.	1	False indication of low pressure in Fire Extinguisher bottle.	1	Pressure switch hung in 'Low Pressure' position.
						2	Failure of fire extinguishing electrical harness.
5	Provides EMI & HIRF/L protection of Fire Extinguishing System.	1	Fails to provide EMI, HIRF/L protection of Fire Extinguishing System.	1	Loss of EMI, HIRF/L protection for Fire Extinguisher system.	1	Damage or failure of electrical harness.

Item Name	26.20.21 - Engine Fire Extinguishing
Function	1 - Store extinguishing agent under pressure.
Failure	1 - Fails to maintain full quantity of agent at correct pressure.
Effect	1 - Insufficient agent available in the Fire Extinguisher bottle for effective discharge.

Failure Effect Categorization		Answers and Explanations
<p>1 - Is the occurrence of a functional failure evident to the operating crew during the performance of their normal duties?</p> <p>Yes No</p>		<p>1 Yes Functional Failure will be evident to operating crew through instrument/warning panel indications.</p>
<p>2 - Does the Functional Failure or secondary damage resulting from the Functional Failure have a direct adverse effect on operating safety?</p> <p>Yes No</p>		<p>2 No No direct adverse effect on operating safety. Secondary Firex is available as a reserve.</p>
<p>3 - Does the combination of a Hidden Functional Failure and one additional failure of a system related or backup function have an adverse effect on operating safety?</p> <p>Yes No</p>		<p>3 Question 3 - Not Applicable</p>
<p>4 - Does the Functional Failure have a direct adverse effect on operating capability?</p> <p>Yes No</p>		<p>4 Yes Unscheduled maintenance will be required</p>
<p>5 - Evident Safety</p> <p>6 - Evident Operational</p> <p>7 - Evident Economic</p> <p>8 - Hidden Safety</p> <p>9 - Hidden Economic</p>		<p>Category - 6 - Evident Operational</p> <p>Remarks</p>

Item Name	26.20.21 - Engine Fire Extinguishing
Function	2 - Release extinguishing agent on command.
Failure	1 - Fails to release agent on command from primary fire extinguisher.
Effect	1 - No, or insufficient, agent available for discharge. Secondary fire extinguisher must be used

Failure Effect Categorization		Answers and Explanations
<p>1 - Is the occurrence of a functional failure evident to the operating crew during the performance of their normal duties?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>		<p>1 No Hidden Functional Failure will not be evident to operating crew.</p>
<p>2 - Does the Functional Failure or secondary damage resulting from the Functional Failure have a direct adverse effect on operating safety?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>		<p>2 Question 2 - Not Applicable</p>
<p>3 - Does the combination of a Hidden Functional Failure and one additional failure of a system related or backup function have an adverse effect on operating safety?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>		<p>3 No Hidden Functional Failure of primary firex in combination with engine fire will not have an adverse effect on operating safety. Additional failure of secondary firex is required to effect safety.</p>
<p>4 - Does the Functional Failure have a direct adverse effect on operating capability?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>		<p>4 Question 4 Not Applicable</p>
<p>5 - Evident Safety</p> <p>6 - Evident Operational</p> <p>7 - Evident Economic</p> <p>8 - Hidden Safety</p> <p>9 - Hidden Economic</p>		<p>Category - 9 - Hidden Economic</p> <p>Remarks</p>

Item Name	26.20.21 - Engine Fire Extinguishing
Function	2 - Release extinguishing agent on command.
Failure	2 - Fails to release agent on command from secondary fire extinguisher.
Effect	1 - Loss of fire extinguisher redundancy.

Failure Effect Categorization		Answers and Explanations		
<p>1 - Is the occurrence of a functional failure evident to the operating crew during the performance of their normal duties?</p> <p>Yes</p> <p>No</p>		1	No	Hidden Functional Failure will not be evident to operating crew.
<p>2 - Does the Functional Failure or secondary damage resulting from the Functional Failure have a direct adverse effect on operating safety?</p> <p>3 - Does the combination of a Hidden Functional Failure and one additional failure of a system related or backup function have an adverse effect on operating safety?</p>		2		Question 2 - Not Applicable
<p>4 - Does the Functional Failure have a direct adverse effect on operating capability?</p> <p>Yes</p> <p>No</p>		3	Yes	Hidden Functional Failure in combination with an engine fire may have an adverse effect on operating safety.
<p>5 - Evident Safety</p> <p>6 - Evident Operational</p> <p>7 - Evident Economic</p> <p>8 - Hidden Safety</p> <p>9 - Hidden Economic</p>		4		Question 4 - Not Applicable
		Category - 8 - Hidden Safety		
		Remarks		

Item Name	26.20.21 - Engine Fire Extinguishing
Function	3 - Distribute extinguishing agent to fire hazard area.
Failure	1 - Fails to distribute agent to fire hazard area.
Effect	1 - No, or insufficient agent available in fire hazard area.

Failure Effect Categorization		Answers and Explanations
<p>1 - Is the occurrence of a functional failure evident to the operating crew during the performance of their normal duties?</p> <p>Yes No</p>		<p>1 No Hidden Functional Failure will not be evident to operating crew.</p>
<p>2 - Does the Functional Failure or secondary damage resulting from the Functional Failure have a direct adverse effect on operating safety?</p> <p>3 - Does the combination of a Hidden Functional Failure and one additional failure of a system related or backup function have an adverse effect on operating safety?</p>		<p>2 Question 2 - Not Applicable</p>
<p>Yes No</p> <p>4 - Does the Functional Failure have a direct adverse effect on operating capability?</p> <p>Yes No</p> <p>- 5 - Evident Safety - 6 - Evident Operational - 7 - Evident Economic - 8 - Hidden Safety - 9 - Hidden Economic</p>		<p>3 Yes Hidden Functional Failure in combination with an engine fire may have an adverse effect on operating safety.</p>
		<p>4 Question 4 - Not Applicable</p>
		<p>Category - 8 - Hidden Safety</p>
		<p>Remarks</p>

Item Name	26.20.21 - Engine Fire Extinguishing
Function	4 - Provides low pressure indication, when a low pressure condition exists in the Fire Extinguisher bottle.
Failure	1 - Fails to indicate when Fire Extinguisher bottle low pressure exists.
Effect	1 - No indication of low pressure in Fire Extinguisher bottle.

Failure Effect Categorization		Answers and Explanations
<p>1 - Is the occurrence of a functional failure evident to the operating crew during the performance of their normal duties?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>		<p>1 No No, failure will not be evident to operating crew.</p>
<p>2 - Does the Functional Failure or secondary damage resulting from the Functional Failure have a direct adverse effect on operating safety?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>		<p>2 Question 2 - Not Applicable</p>
<p>3 - Does the combination of a Hidden Functional Failure and one additional failure of a system related or backup function have an adverse effect on operating safety?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>		<p>3 No Hidden Functional Failure of primary firex in combination with engine fire will not have an adverse effect on operating safety. Additional failure of secondary firex is required to effect safety.</p>
<p>4 - Does the Functional Failure have a direct adverse effect on operating capability?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>		<p>4 Question 4 Not Applicable</p>
<p>- 5 - Evident Safety</p> <p>- 6 - Evident Operational</p> <p>- 7 - Evident Economic</p> <p>- 8 - Hidden Safety</p> <p>- 9 - Hidden Economic</p>		<p>Category - 9 - Hidden Economic</p> <p>Remarks</p>

Item Name	26.20.21 - Engine Fire Extinguishing
Function	4 - Provides low pressure indication, when a low pressure condition exists in the Fire Extinguisher bottle.
Failure	2 - False indication of low pressure in Fire Extinguisher container.
Effect	1 - False indication of low pressure in Fire Extinguisher bottle.

Failure Effect Categorization		Answers and Explanations
<p>1 - Is the occurrence of a functional failure evident to the operating crew during the performance of their normal duties?</p> <p>Yes</p> <p>No</p>		<p>1 Yes Functional Failure will be evident to operating crew through instrument/warning panel indications.</p>
<p>2 - Does the Functional Failure or secondary damage resulting from the Functional Failure have a direct adverse effect on operating safety?</p> <p>Yes</p> <p>No</p>		<p>2 No No direct adverse effect on operating safety, redundancy in system, second bottle available.</p>
<p>3 - Does the combination of a Hidden Functional Failure and one additional failure of a system related or backup function have an adverse effect on operating safety?</p> <p>Yes</p> <p>No</p>		<p>3 Question 3 - Not Applicable</p>
<p>4 - Does the Functional Failure have a direct adverse effect on operating capability?</p> <p>Yes</p> <p>No</p>		<p>4 Yes Unscheduled maintenance will be required</p>
<p>- 5 - Evident Safety</p> <p>- 6 - Evident Operational</p> <p>- 7 - Evident Economic</p> <p>- 8 - Hidden Safety</p> <p>- 9 - Hidden Economic</p>		<p>Category - 6 - Evident Operational</p> <p>Remarks</p>

Item Name	26.20.21 - Engine Fire Extinguishing
Function	5 - Provides EMI & HIRF/L protection of Fire Extinguishing System.
Failure	1 - Fails to provide EMI, HIRF/L protection of Fire Extinguishing System.
Effect	1 - Loss of EMI, HIRF/L protection for Fire Extinguisher system.

Failure Effect Categorization		Answers and Explanations
<p>1 - Is the occurrence of a functional failure evident to the operating crew during the performance of their normal duties?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>		<p>1 No Hidden Functional Failure will not be evident to operating crew.</p>
<p>2 - Does the Functional Failure or secondary damage resulting from the Functional Failure have a direct adverse effect on operating safety?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>		<p>2 Question 2 - Not Applicable</p>
<p>3 - Does the combination of a Hidden Functional Failure and one additional failure of a system related or backup function have an adverse effect on operating safety?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>		<p>3 No Hidden Functional Failure in combination with EMI occurrence will not have an adverse effect on safety.</p>
<p>4 - Does the Functional Failure have a direct adverse effect on operating capability?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>		<p>4 Question 4 - Not Applicable</p>
<p>- 5 - Evident Safety</p> <p>- 6 - Evident Operational</p> <p>- 7 - Evident Economic</p> <p>- 8 - Hidden Safety</p> <p>- 9 - Hidden Economic</p>		<p>Category - 9 - Hidden Economic</p> <p>Remarks</p>



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -2- Evident Economic Consequences
Function	1 - Store extinguishing agent under pressure.	
Failure	1 - Fails to maintain full quantity of agent at correct pressure.	
Effect	1 - Insufficient agent available in the Fire Extinguisher bottle for effective discharge.	
Cause	1 - Leakage from Fire Extinguisher bottle assembly.	

Question	Yes	No	Explanation
6A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
6B: Is an inspection or functional check to detect degradation of function applicable and effective?		X	Task is not applicable because the rate of reduction in failure resistance is not predictable.
6C: Is a restoration task to reduce failure rate applicable and effective?	X		Restoration through hydrostatic test and replacement of burst disc & fill valve is applicable and effective. Requirements to be complied in accordance with Operator national requirements.
6D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
6E: Is there any task or combination of tasks that will be applicable and effective?		X	

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
5	Remove Fire Bottles for Hydrostatic Test & Refurbishment.	Assigned	RS	14 Year					



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -2- Evident Economic Consequences
Function	1 - Store extinguishing agent under pressure.	
Failure	1 - Fails to maintain full quantity of agent at correct pressure.	
Effect	1 - Insufficient agent available in the Fire Extinguisher bottle for effective discharge.	
Cause	2 - Uncommanded firing.	

Question	Yes	No	Explanation
6A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
6B: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
6C: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
6D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
6E: Is there any task or combination of tasks that will be applicable and effective?		X	

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
1	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour					



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -9- Hidden Economic
Function	2 - Release extinguishing agent on command.	
Failure	1 - Fails to release agent on command from primary fire extinguisher.	
Effect	1 - No, or insufficient, agent available for discharge. Secondary fire extinguisher must be used	
Cause	1 - Cartridge failure.	

Question	Yes	No	Explanation
9A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
9B: Is a check to verify operation applicable and effective?		X	Task is not cost-effective based on the cost of the task vs. the economic effects of possible multiple failures.
9C: Is an inspection or functional check to detect degradation of function applicable and effective?		X	Task is not applicable because the rate of reduction in failure resistance is not predictable.
9D: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
9E: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?	X		Component is Life Limited, a discard task is applicable and effective.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
2	Discard Fire Extinguisher Cartridge.	Assigned	DS	10 Year					



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -9- Hidden Economic
Function	2 - Release extinguishing agent on command.	
Failure	1 - Fails to release agent on command from primary fire extinguisher.	
Effect	1 - No, or insufficient, agent available for discharge. Secondary fire extinguisher must be used	
Cause	2 - Failure of fire extinguishing electrical harness.	

Question	Yes	No	Explanation
9A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
9B: Is a check to verify operation applicable and effective?		X	Task is not cost-effective based on the cost of the task vs. the economic effects of possible multiple failures.
9C: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
9D: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
9E: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
1	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour					



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -4- Hidden Economic Consequences
Function	2 - Release extinguishing agent on command.	
Failure	2 - Fails to release agent on command from secondary fire extinguisher.	
Effect	1 - Loss of fire extinguisher redundancy.	
Cause	1 - Cartridge failure.	

Question	Yes	No	Explanation
8A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
8B: Is a check to verify operation applicable and effective?		X	Task is not cost-effective based on the cost of the task vs. the economic effects of possible multiple failures.
8C: Is an inspection or functional check to detect degradation of function applicable and effective?		X	Task is not applicable because the rate of reduction in failure resistance is not predictable.
8D: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
8E: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?	X		Component is Life Limited, a discard task is applicable and effective.
8F: Is there any task or combination of tasks that will be applicable and effective?	X		Component is Life Limited, a discard task is applicable and effective.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
2	Discard Fire Extinguisher Cartridge.	Assigned	DS	10 Year					



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -4- Hidden Economic Consequences
Function	2 - Release extinguishing agent on command.	
Failure	2 - Fails to release agent on command from secondary fire extinguisher.	
Effect	1 - Loss of fire extinguisher redundancy.	
Cause	2 - Failure of fire extinguishing electrical harness.	

Question	Yes	No	Explanation
8A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
8B: Is a check to verify operation applicable and effective?		X	Task is not cost-effective based on the cost of the task vs. the economic effects of possible multiple failures.
8C: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
8D: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
8E: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
8F: Is there any task or combination of tasks that will be applicable and effective?	X		GVI for condition and security is applicable and effective.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
1	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour					



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -4- Hidden Economic Consequences
Function	3 - Distribute extinguishing agent to fire hazard area.	
Failure	1 - Fails to distribute agent to fire hazard area.	
Effect	1 - No, or insufficient agent available in fire hazard area.	
Cause	1 - Damaged Fire Extinguisher bottle assembly.	

Question	Yes	No	Explanation
8A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
8B: Is a check to verify operation applicable and effective?		X	Task is not cost-effective based on the cost of the task vs. the economic effects of possible multiple failures.
8C: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
8D: Is a restoration task to reduce failure rate applicable and effective?	X		Restoration through hydrostatic test and replacement of burst disc & fill valve is applicable and effective. Requirements to be complied in accordance with Operator national requirements.
8E: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
8F: Is there any task or combination of tasks that will be applicable and effective?	X		GVI and a Restoration Task are applicable and effective.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
4	General Visual Inspection of Engine Fire Extinguishing System.	Assigned	IN	4000 Flight Hour					
5	Remove Fire Bottles for Hydrostatic Test & Refurbishment.	Assigned	RS	14 Year					



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -4- Hidden Economic Consequences
Function	3 - Distribute extinguishing agent to fire hazard area.	
Failure	1 - Fails to distribute agent to fire hazard area.	
Effect	1 - No, or insufficient agent available in fire hazard area.	
Cause	2 - Two Way Check Tee and associated plumbing, leakage.	

Question	Yes	No	Explanation
8A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
8B: Is a check to verify operation applicable and effective?	X		An operational check to verify operation is applicable and effective.
8C: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
8D: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
8E: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
8F: Is there any task or combination of tasks that will be applicable and effective?	X		Periodic Op Ck and GVI are applicable and effective.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
3	Operational Check of Fire Extinguisher Distribution System.	Assigned	OP	10 Year					
4	General Visual Inspection of Engine Fire Extinguishing System.	Assigned	IN	4000 Flight Hour					



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -4- Hidden Economic Consequences
Function	3 - Distribute extinguishing agent to fire hazard area.	
Failure	1 - Fails to distribute agent to fire hazard area.	
Effect	1 - No, or insufficient agent available in fire hazard area.	
Cause	3 - Misaligned, damaged or blocked distribution pipe.	

Question	Yes	No	Explanation
8A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
8B: Is a check to verify operation applicable and effective?	X		An operational check to verify operation is applicable and effective.
8C: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
8D: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
8E: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
8F: Is there any task or combination of tasks that will be applicable and effective?	X		Periodic Op Ck and GVI are applicable and effective.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
3	Operational Check of Fire Extinguisher Distribution System.	Assigned	OP	10 Year					
4	General Visual Inspection of Engine Fire Extinguishing System.	Assigned	IN	4000 Flight Hour					



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -9- Hidden Economic
Function	4 - Provides low pressure indication, when a low pressure condition exists in the Fire Extinguisher bottle.	
Failure	1 - Fails to indicate when Fire Extinguisher bottle low pressure exists.	
Effect	1 - No indication of low pressure in Fire Extinguisher bottle.	
Cause	1 - Pressure switch hung in 'High Pressure' position.	

Question	Yes	No	Explanation
9A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
9B: Is a check to verify operation applicable and effective?		X	Task is not cost-effective based on the cost of the task vs. the economic effects of possible multiple failures.
9C: Is an inspection or functional check to detect degradation of function applicable and effective?		X	Task is not applicable because the rate of reduction in failure resistance is not predictable.
9D: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
9E: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -9- Hidden Economic
Function	4 - Provides low pressure indication, when a low pressure condition exists in the Fire Extinguisher bottle.	
Failure	1 - Fails to indicate when Fire Extinguisher bottle low pressure exists.	
Effect	1 - No indication of low pressure in Fire Extinguisher bottle.	
Cause	2 - Failure of fire extinguishing electrical harness.	

Question	Yes	No	Explanation
9A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
9B: Is a check to verify operation applicable and effective?		X	Task is not cost-effective based on the cost of the task vs. the economic effects of possible multiple failures.
9C: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
9D: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
9E: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
1	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour					



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -2- Evident Economic Consequences
Function	4 - Provides low pressure indication, when a low pressure condition exists in the Fire Extinguisher bottle.	
Failure	2 - False indication of low pressure in Fire Extinguisher container.	
Effect	1 - False indication of low pressure in Fire Extinguisher bottle.	
Cause	1 - Pressure switch hung in 'Low Pressure' position.	

Question	Yes	No	Explanation
6A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
6B: Is an inspection or functional check to detect degradation of function applicable and effective?		X	Task is not applicable because the rate of reduction in failure resistance is not predictable.
6C: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
6D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
6E: Is there any task or combination of tasks that will be applicable and effective?		X	

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -2- Evident Economic Consequences
Function	4 - Provides low pressure indication, when a low pressure condition exists in the Fire Extinguisher bottle.	
Failure	2 - False indication of low pressure in Fire Extinguisher container.	
Effect	1 - False indication of low pressure in Fire Extinguisher bottle.	
Cause	2 - Failure of fire extinguishing electrical harness.	

Question	Yes	No	Explanation
6A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
6B: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
6C: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
6D: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
6E: Is there any task or combination of tasks that will be applicable and effective?		X	

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
1	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour					



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Item Name	26.20.21 - Engine Fire Extinguishing	FEC -9- Hidden Economic
Function	5 - Provides EMI & HIRF/L protection of Fire Extinguishing System.	
Failure	1 - Fails to provide EMI, HIRF/L protection of Fire Extinguishing System.	
Effect	1 - Loss of EMI, HIRF/L protection for Fire Extinguisher system.	
Cause	1 - Damage or failure of electrical harness.	

Question	Yes	No	Explanation
9A: Is a lubrication or servicing task applicable and effective?		X	Task is not applicable because there is no consumable to replenish.
9B: Is a check to verify operation applicable and effective?		X	Task is not cost-effective based on the cost of the task vs. the economic effects of possible multiple failures.
9C: Is an inspection or functional check to detect degradation of function applicable and effective?	X		GVI for condition and security is applicable and effective.
9D: Is a restoration task to reduce failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.
9E: Is a discard task to avoid failures or to reduce the failure rate applicable and effective?		X	Task is not applicable because item does not show degradation at an identifiable age.

#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Total Duration per Incident	Total Cost per Incident	Cost per Operating Time	Average Availability (%)
1	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour					



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#	Task Name	Status	Type	Assigned Interval	Labor (Crew Name)	Zone	Access	Item	F-F-E-C
1	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	1.1.1.2
2	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	2.1.1.2
3	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	2.2.1.2
4	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	4.1.1.2
5	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	4.2.1.2
6	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	5.1.1.1
7	Detailed Inspection of Engine Fire Detection Loops.	Assigned	IN	2000 Flight Hour		400		26.10.11 - Engine Fire Detection	1.1.1.1
8	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour		400		26.10.11 - Engine Fire Detection	2.2.1.2
9	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour		400		26.10.11 - Engine Fire Detection	1.1.1.3
10	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour		400		26.10.11 - Engine Fire Detection	2.1.1.2
11	Discard Fire Extinguisher Cartridge.	Assigned	DS	10 Year		400		26.20.21 - Engine Fire Extinguishing	2.1.1.1
12	Discard Fire Extinguisher Cartridge.	Assigned	DS	10 Year		400		26.20.21 - Engine Fire Extinguishing	2.2.1.1



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13	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour		400		26.10.11 - Engine Fire Detection	1.2.1.2
14	Operational Check of Fire Extinguisher Distribution System.	Assigned	OP	10 Year		400		26.20.21 - Engine Fire Extinguishing	3.1.1.2
15	Operational Check of Fire Extinguisher Distribution System.	Assigned	OP	10 Year		400		26.20.21 - Engine Fire Extinguishing	3.1.1.3
16	General Visual Inspection of Engine Fire Extinguishing System.	Assigned	IN	4000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	3.1.1.1
17	General Visual Inspection of Engine Fire Extinguishing System.	Assigned	IN	4000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	3.1.1.2
18	General Visual Inspection of Engine Fire Extinguishing System.	Assigned	IN	4000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	3.1.1.3
19	Remove Fire Bottles for Hydrostatic Test & Refurbishment.	Assigned	RS	14 Year		400		26.20.21 - Engine Fire Extinguishing	3.1.1.1
20	Remove Fire Bottles for Hydrostatic Test & Refurbishment.	Assigned	RS	14 Year		400		26.20.21 - Engine Fire Extinguishing	1.1.1.1



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#	Name	Status	Type	Assigned Interval	Labor (Crew Name)	Zone	Access	Item	F-F-E-C
1 - 2000 Flight Hours									
1	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	1.1.1.2
2	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	2.1.1.2
3	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	2.2.1.2
4	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	4.1.1.2
5	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	4.2.1.2
6	General Visual Inspection of Engine Fire Extinguishing System Wiring Harness Assembly.	Assigned	IN	2000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	5.1.1.1
7	Detailed Inspection of Engine Fire Detection Loops.	Assigned	IN	2000 Flight Hour		400		26.10.11 - Engine Fire Detection	1.1.1.1
2 - 4000 Flight Hours									
8	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour		400		26.10.11 - Engine Fire Detection	2.2.1.2
9	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour		400		26.10.11 - Engine Fire Detection	1.1.1.3
10	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour		400		26.10.11 - Engine Fire Detection	2.1.1.2
13	General Visual Inspection of Engine Wiring Harness Assembly.	Assigned	IN	4000 Flight Hour		400		26.10.11 - Engine Fire Detection	1.2.1.2
16	General Visual Inspection of Engine Fire Extinguishing System.	Assigned	IN	4000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	3.1.1.1



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17	General Visual Inspection of Engine Fire Extinguishing System.	Assigned	IN	4000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	3.1.1.2
18	General Visual Inspection of Engine Fire Extinguishing System.	Assigned	IN	4000 Flight Hour		400		26.20.21 - Engine Fire Extinguishing	3.1.1.3
3 - 10 Years									
11	Discard Fire Extinguisher Cartridge.	Assigned	DS	10 Year		400		26.20.21 - Engine Fire Extinguishing	2.1.1.1
12	Discard Fire Extinguisher Cartridge.	Assigned	DS	10 Year		400		26.20.21 - Engine Fire Extinguishing	2.2.1.1
14	Operational Check of Fire Extinguisher Distribution System.	Assigned	OP	10 Year		400		26.20.21 - Engine Fire Extinguishing	3.1.1.2
15	Operational Check of Fire Extinguisher Distribution System.	Assigned	OP	10 Year		400		26.20.21 - Engine Fire Extinguishing	3.1.1.3
4 - 14 Years									
19	Remove Fire Bottles for Hydrostatic Test & Refurbishment.	Assigned	RS	14 Year		400		26.20.21 - Engine Fire Extinguishing	3.1.1.1
20	Remove Fire Bottles for Hydrostatic Test & Refurbishment.	Assigned	RS	14 Year		400		26.20.21 - Engine Fire Extinguishing	1.1.1.1