



GAS FREE INSPECTION AND CERTIFICATION

3.4

Introduction

As Gas Free Engineering Personnel you will be required to know the requirements for certifying a space gas free and placing the information obtained on a Navy Gas Free Certificate.

Enabling Objectives

- Describe procedures and safety precautions for gas free inspection, gas free testing, and post gas free inspection in accordance with NSTM Chapter 074 Vol. 3, Gas Free Engineering and OPNAVINST 5100.19, series.
- Determine test readings and describe the common characteristics of the Four Gas Analyzer in accordance with NSTM Chapter 074 Vol. 3, Gas Free Engineering and the Biosystems Phd Ultra Four Gas Analyzer Technical Manual.

Enabling Objectives

- Determine test readings and describe the common characteristic of the Toxic Gas Detectors, Draeger Model 31 and Accuro in accordance with NSTM Chapter 074 Vol. 3, Gas Free Engineering and the Model 31 and Accuro Manufactures technical Manuals.
- Use Gas Free Test Equipment in accordance with NSTM Chapter 074 Vol. 3, Gas Free Engineering and applicable Manufactures Technical Manual.


Enabling Objectives

- Perform procedures using respiratory equipment during simulated gas free operations using safety precautions and procedures to include; Inspect, Don, Operate and Stow equipment in accordance with NSTM Chapter 074 Vol. 3, Gas Free Engineering and the SAR/SCBA technical manual, NAVSEA 0910-LP-708-0000.

Enabling Objectives

- Write a Gas Free Certificate using the information obtained during a Gas Free Inspection in accordance with NSTM 074 Vol 3.

PRE-INSPECTION PROCEDURES



Determine
Authorization to Certify
Is This a Liability
Issue?
Notification Requirements

CERTIFICATION & LIABILITY

- The Shipboard GFE Can Certify a Space for any Crewmember

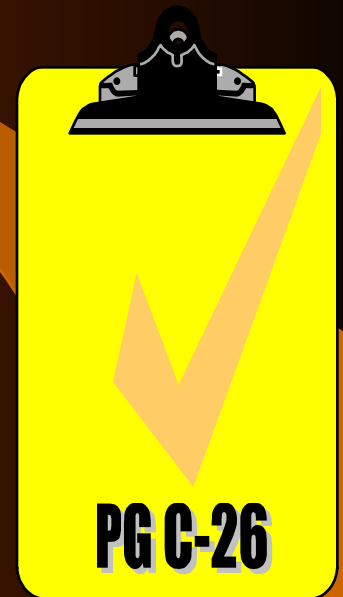
- CO's Authorization is Required for IDLH Spaces

- $O_2 < 19.5\%$ or $> 22\%$
- Explosivity $> 10\%$ of LEL
- Toxics above PEL
- Sewage, Fuel, or Oil Tanks



“SAMPLE GAS FREE ENGINEERING PROCEDURAL WORKING GUIDE”

- Use as a guide so you don't forget anything!
- 📄 Pre-Inspection Procedures
- 📄 Closed Compartment Opening & Testing Procedures
- 📄 Post-Inspection Procedures




CLOSED COMPARTMENT OPENING REQUEST FORM

- **Helps You Organize Your Time**
- **Prioritize Your Workload**
- **Provides Planning For:**
 - **Safety Observers**
 - **Equipment Movement**
 - **Space & Equipment Tag Outs**

● **TALK TO THESE PEOPLE**

● **NSTM 074V3 Appeddix C 13, 29**



**Closed
Compartment
Opening Request
Form**

PRE-INSPECTION PROCEDURES

Review Records for Possible Hazards

Gas Free Log

MSDS

DC Book/Plates

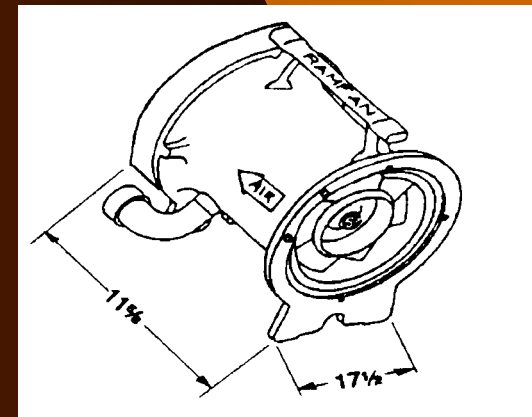
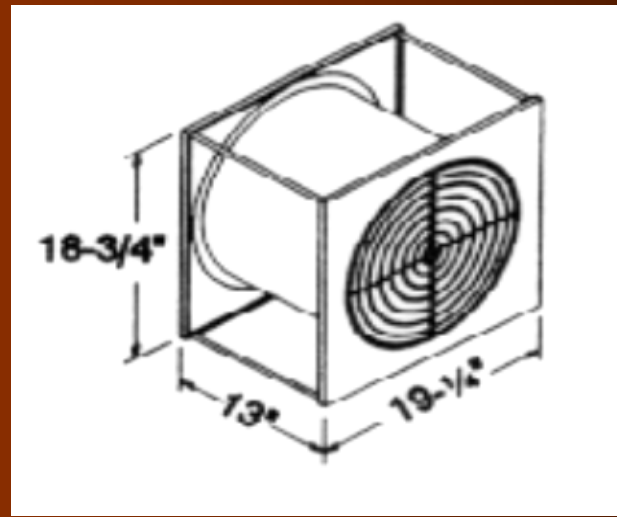
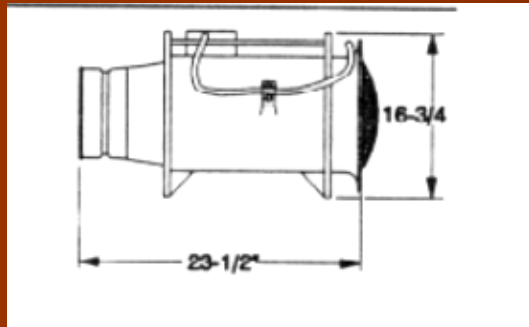
**Compartment Sounding
Logs**

**Personnel Responsible for
the Space**



PRE-INSPECTION PROCEDURES

- Assign personnel
 - Compartment Testing
 - Fire Watches
 - Attendants
- Determine Ventilation Requirements



PRE-ENTRY PROCEDURES

- ↘ Tag Out Space
- ✧ Safety Equipment
 - a) Respiratory Equipment
 - b) Lifelines
 - c) Harness
 - d) Communications
 - e) Protective Clothing
- ✧ Rescue Control Point Designated
- ✧ Inspection Equipment
- ✧ Ventilation



PRE-ENTRY PROCEDURES

⌘ Personnel Needed for Test

- a) Two Test Personnel
- b) Safety Observer / Supply Air Operator
- c) Rescue Control Point Personnel

⌘ Secure Surrounding Area

⌘ **SMOKING LAMP OUT!!**



CLOSED COMPARTMENT OPENING AND TEST PROCEDURES

- SMOKING LAMP OUT!! Secure hot work in vicinity of space
- Perform required pre-operational checks of test equipment
- Muster personnel and don PPE & equipment



CLOSED COMPARTMENT OPENING AND TEST PROCEDURES

- Ventilation
 - Where to place duct?
 - How long to ventilate?
- Don required respiratory protection equipment
- Remove access cover or break piping system flange
- Inspect for hazards
- Drop Test
 - IDLH Space? If so, do NOT enter.
 - Re-ventilate two complete air changes



ENTRY PROCEDURES

1. **Drop Test** -- Is It IDLH ?
2. **Ventilation**
 - a) Where to Place Duct?
 - b) How Long to Ventilate?

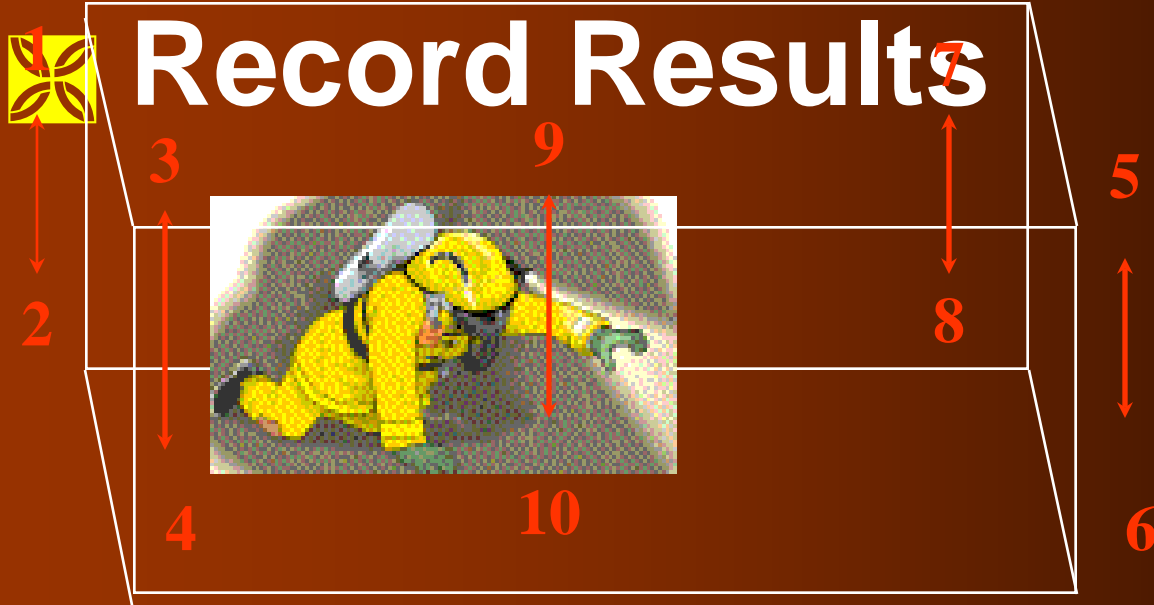


TESTING PROCEDURES

↘ Enter Space

↘ Visual Inspection

✂ 10 Point Test



WORK REQUIREMENTS

⇒ Hazards Produced by Work?

✧ Testing Frequency

a) Periodic

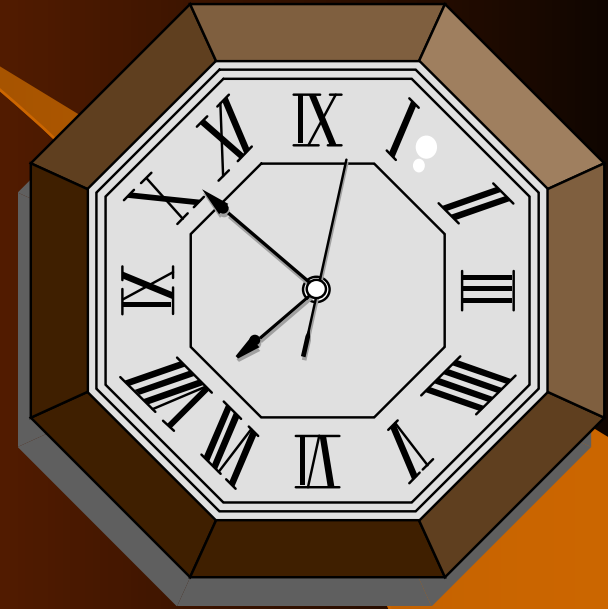
b) Continuous

✧ Updating if < 8 hours

✧ Retesting/Recertification

a) GFE/GFEA

b) GFEPO



SERIAL # _____

NAVY GAS FREE CERTIFICATION AND TEST LOG

INITIAL CERTIFICATION			TEST RESULTS			
SHIP/UNIT/ACTIVITY: _____			TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST
ITEM/COMPARTMENT/SPACE: _____			OXYGEN			
TYPE OF OPERATION TO BE CONDUCTED: _____			COMBUSTABLE GAS			
INITIAL DATE OF TEST: HOUR: _____ DATE: _____			TOXIC TYPE:			
INITIAL EXPIRATION: HOUR: _____ DATE: _____			TOXIC TYPE:			
VENTILATION REQUIRED: YES NO			TOXIC TYPE:			
TYPE: _____			TOXIC TYPE:			
INERTED GAS: _____ (gas)						
OR						
PRESSED UP WITH: _____ (liquid)						
REQUIREMENTS/CONCLUSIONS/PROHIBITED PRECAUTIONS/INSTRUCTIONS						
<div style="background-color: yellow; padding: 20px; border: 2px solid black; border-radius: 15px; display: inline-block;"> <h1 style="color: red; margin: 0;">Gas Free Certificate</h1> </div>			FIGHTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
			NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
			NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
			NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
			SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
GAS RELATED HOT WORK						
PQS QUALIFIED FIRE WATCHES ASSIGNED			SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
LOCATIONS	PRINT NAME/RATE	SIGNATURE (upon completion)	NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			
FINAL CHECKUP, WORK AREA AND ALL ADJACENT AREAS TO WHICH SPARKS AND HEAT MIGHT SPREAD WERE INSPECTED 30 MINUTES AFTER THE WORK WAS COMPLETED AND WERE FOUND TO BE FIRE SAFE. THE EQUIPMENT AND STRUCTURES WORKED ON WERE COOL TO THE TOUCH.			NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.			
TIME SECURED: _____			GFE PERSONNEL SIGNATURE _____			
I CERTIFY THAT I AM FAMILIAR WITH AND WILL COMPLY WITH ALL SAFETY PRECAUTIONS PERTINENT TO THIS TYPE OF WORK.			CO SIGNATURE, If required _____			
HOT WORK OPERATER SIGNATURE _____			RECERTIFICATION			
HOT WORK SUPERVISOR _____			1 st RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____			
FIRE MARSHAL _____			GFE PERSONNEL SIGNATURE _____			
			2 nd RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____			
			GFE PERSONNEL SIGNATURE _____			

SERIAL # _____

NAVY GAS FREE CERTIFICATION AND TEST LOG

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: _____

ITEM/COMPARTMENT/SPACE: _____

TYPE OF OPERATION TO BE CONDUCTED: _____

INITIAL DATE OF TEST: HOUR: _____ DATE: _____

INITIAL EXPIRATION: HOUR: _____ DATE: _____

VENTILATION REQUIRED: YES NO

TYPE: _____

INERTED GAS: _____ (gas)

OR

PRESSED UP WITH: _____ (liquid)

REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS

GAS RELATED HOT WORK

PQS QUALIFIED FIRE WATCHES ASSIGNED

LOCATIONS	PRINT NAME/RATE	SIGNATURE (upon completion)

FINAL CHECKUP, WORK AREA AND ALL ADJACENT AREAS TO WHICH SPARKS AND HEAT MIGHT SPREAD WERE INSPECTED 30 MINUTES AFTER THE WORK WAS COMPLETED AND WERE FOUND TO BE FIRE SAFE. THE EQUIPMENT AND STRUCTURES WORKED ON WERE COOL TO THE TOUCH.

TIME SECURED: _____

I CERTIFY THAT I AM FAMILIAR WITH AND WILL COMPLY WITH ALL SAFETY PRECAUTIONS PERTINENT TO THIS TYPE OF WORK.

HOT WORK OPERATOR SIGNATURE: _____

HOT WORK SUPERVISOR: _____

FIRE MARSHAL: _____

TEST RESULTS

TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST
OXYGEN			
COMBUSTABLE GAS			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			

NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE: _____

CO SIGNATURE, if required: _____

RECERTIFICATION

1st RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE: _____

2nd RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE: _____

SERIAL # **06-00051**

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: _____

ITEM/COMPARTMENT/SPACE: _____

TYPE OF OPERATION TO BE CONDUCTED: _____

INITIAL DATE OF TEST: HOUR: _____ DATE: _____

INITIAL EXPIRATION: HOUR: _____ DATE: _____

VENTILATION REQUIRED: YES NO

TYPE: _____

INERTED GAS: _____ (gas)

OR

PRESSED UP WITH: _____ (liquid)

REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS

SERIAL # 06-00051

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: USS NEVERSAIL

ITEM/COMPARTMENT/SPACE: _____

TYPE OF OPERATION TO BE CONDUCTED: _____

INITIAL DATE OF TEST: HOUR: _____ DATE: _____

INITIAL EXPIRATION: HOUR: _____ DATE: _____

VENTILATION REQUIRED: YES NO

TYPE: _____

INERTED GAS: _____ (gas)

OR

PRESSED UP WITH: _____ (liquid)

REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS

SERIAL # 06-00051

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: USS NEVERSAIL

ITEM/COMPARTMENT/SPACE: 5-51-0-E

TYPE OF OPERATION TO BE CONDUCTED: _____

INITIAL DATE OF TEST: HOUR: _____ DATE: _____

INITIAL EXPIRATION: HOUR: _____ DATE: _____

VENTILATION REQUIRED: YES NO

TYPE: _____

INERTED GAS: _____ (gas)

OR

PRESSED UP WITH: _____ (liquid)

REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS

SERIAL # 06-00051

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: USS NEVERSAIL

ITEM/COMPARTMENT/SPACE: 5-51-0-E

TYPE OF OPERATION TO BE CONDUCTED: Cleaning

INITIAL DATE OF TEST: HOUR: _____ DATE: _____

INITIAL EXPIRATION: HOUR: _____ DATE: _____

VENTILATION REQUIRED: YES NO

TYPE: _____

INERTED GAS: _____ (gas)

OR

PRESSED UP WITH: _____ (liquid)

REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS

SERIAL # 06-00051

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: USS NEVERSAIL

ITEM/COMPARTMENT/SPACE: 5-51-0-E

TYPE OF OPERATION TO BE CONDUCTED: Cleaning

INITIAL DATE OF TEST: HOUR: 0800 DATE: 30 May 99

INITIAL EXPIRATION: HOUR: 1200 DATE: 30 May 99

VENTILATION REQUIRED: YES NO

TYPE: _____

INERT _____ (gas)

OR

PRESSED UP WITH: _____ (liquid)

REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS

This time MUST NOT exceed 8 hours.

SERIAL # 06-00051

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: USS NEVERSAIL

ITEM/COMPARTMENT/SPACE: 5-51-0-E

TYPE OF OPERATION TO BE CONDUCTED: Cleaning

INITIAL DATE OF TEST: HOUR: 0800 DATE: 30 May 99

INITIAL EXPIRATION: HOUR: 1200 DATE: 30 May 99

VENTILATION REQUIRED: YES NO

TYPE (2) Ram fans, exhausting from 5-51-0-E to weather deck

(1) Ram fan, supplying air from weather deck to 5-51-0-E.

INERTED GAS: _____ (gas)

OR

PRESSED UP WITH: _____ (liquid)

REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS

SERIAL # 06-00051

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: USS NEVERSAIL

ITEM/COMPARTMENT/SPACE: 5-51-0-E

TYPE OF OPERATION TO BE CONDUCTED: Cleaning

INITIAL DATE OF TEST: HOUR: 0800 DATE: 30 May 99

INITIAL EXPIRATION: HOUR: 1200 DATE: 30 May 99

VENTILATION REQUIRED: YES NO

TYPE (2) Ram fans, exhausting from 5-51-0-E to weather deck

(1) Ram fan, supplying air from weather deck to 5-51-0-E.

INERTED GAS: Gas name (Dry Nitrogen) or N/A (as applicable) (gas)

OR

PRESSED UP WITH: _____ (liquid)

REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS

SERIAL # 06-00051

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: USS NEVERSAIL

ITEM/COMPARTMENT/SPACE: 5-51-0-E

TYPE OF OPERATION TO BE CONDUCTED: Cleaning

INITIAL DATE OF TEST: HOUR: 0800 DATE: 30 May 99

INITIAL EXPIRATION: HOUR: 1200 DATE: 30 May 99

VENTILATION REQUIRED: YES NO

TYPE (2) Ram fans, exhausting from 5-51-0-E to weather deck

(1) Ram fan, supplying air from weather deck to 5-51-0-E.

INERTED GAS: N/A (gas)

OR

PRESSED UP WITH: Water or N/A (as applicable) (liquid)

REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS

SERIAL # 06-00051

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: USS NEVERSAIL

ITEM/COMPARTMENT/SPACE: 5-51-0-E

TYPE OF OPERATION TO BE CONDUCTED: Cleaning

INITIAL DATE OF TEST: HOUR: 0800 DATE: 30 May 99

INITIAL EXPIRATION: HOUR: 1200 DATE: 30 May 99

VENTILATION REQUIRED: YES NO

TYPE (2) Ram fans, exhausting from 5-51-0-E to weather deck

(1) Ram fan, supplying air from weather deck to 5-51-0-E.

INERTED GAS: N/A (gas)

OR

PRESSED UP WITH: N/A (liquid)

REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS

All personnel inside space (no more and no less than 2) must wear SAR/SCBA, clean coveralls and chemical gloves. One safety observer station directly outside the space using con-space comms with personnel inside space. One attendant and one CPA operator shall also be outside assisting with the SAR/SCBA. Any questions or changes call the GFE (254)

INITIAL CERTIFICATION			TEST RESULTS															
SHIP/UNIT/ACTIVITY: <u>USS NEVERSAIL</u>			TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST												
ITEM/COMPARTMENT/SPACE: <u>5-51-0-E</u>																		
TYPE OF OPERATION TO BE CONDUCTED: <u>Cleaning</u>			OXYGEN															
INITIAL DATE OF TEST: HOUR: <u>0800</u> DATE: <u>30 May 99</u>			COMBUSTABLE GAS															
INITIAL EXPIRATION: HOUR: <u>1200</u> DATE: <u>30 May 99</u>			TOXIC TYPE:															
VENTILATION REQUIRED: <u>YES</u> NO			TOXIC TYPE:															
TYPE: <u>(2) Ram fans, exhausting from 5-51-0-E to weather deck</u>			TOXIC TYPE:															
<u>(1) Ram fan, supplying air from weather deck to 5-51-0-E.</u>			TOXIC TYPE:															
INERTED GAS: <u>N/A</u> (gas)																		
OR			EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST												
PRESSED UP WITH: <u>N/A</u> (liquid)			NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK															
REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS			NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK															
All personnel inside space (no more and no less than 2) must wear SAR/SCBA, clean coveralls and chemical gloves. One safety observer station directly outside the space using con-space comms with personnel inside space. One attendant and one CPA operator shall also be outside assisting with the SAR/SCBA. Any questions or changes call the GFE (254)			SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK															
			SAFE FOR PERSONNEL/ SAFE FOR HOT WORK															
			NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE															
<p style="text-align: center;">GAS RELATED HOT WORK</p> <p style="text-align: center;">PQS QUALIFIED FIRE WATCHES ASSIGNED</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">LOCATIONS</th> <th style="width: 30%;">PRINT NAME/RATE</th> <th style="width: 40%;">SIGNATURE (upon completion)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table> <p>FINAL CHECKUP, WORK AREA AND ALL ADJACENT AREAS TO WHICH SPARKS AND HEAT MIGHT SPREAD WERE INSPECTED 30 MINUTES AFTER THE WORK WAS COMPLETED AND WERE FOUND TO BE FIRE SAFE. THE EQUIPMENT AND STRUCTURES WORKED ON WERE COOL TO THE TOUCH.</p> <p>TIME SECURED: _____</p> <p>I CERTIFY THAT I AM FAMILIAR WITH AND WILL COMPLY WITH ALL SAFETY PRECAUTIONS PERTINENT TO THIS TYPE OF WORK.</p> <p>HOT WORK OPERATER SIGNATURE: _____</p> <p>HOT WORK SUPERVISOR: _____</p> <p>FIRE MARSHAL: _____</p>			LOCATIONS	PRINT NAME/RATE	SIGNATURE (upon completion)										<p>NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.</p> <p>GFE PERSONNEL SIGNATURE: _____</p> <p>CO SIGNATURE, If required: _____</p>			
LOCATIONS	PRINT NAME/RATE	SIGNATURE (upon completion)																
			RECERTIFICATION															
			1 st RETEST/UPDATE	TIME: _____	DATE: _____	EXPIRES: _____												
			GFE PERSONNEL SIGNATURE: _____															
			2 nd RETEST/UPDATE	TIME: _____	DATE: _____	EXPIRES: _____												
			GFE PERSONNEL SIGNATURE: _____															

GAS RELATED HOT WORK

POS QUALIFIED FIRE WATCHES ASSIGNED

LOCATIONS

PRINT NAME/RATE

SIGNATURE (upon completion)

FINAL CHECKUP, WORK AREA AND ALL ADJACENT AREAS TO WHICH SPARKS AND HEAT MIGHT SPREAD WERE INSPECTED 30 MINUTES AFTER THE WORK WAS COMPLETED AND WERE FOUND TO BE FIRE SAFE. THE EQUIPMENT AND STRUCTURES WORKED ON WERE COOL TO THE TOUCH.

TIME SECURED_____

I CERTIFY THAT I AM FAMILIAR WITH AND WILL COMPLY WITH ALL SAFETY PRECAUTIONS PERTINENT TO THIS TYPE OF WORK.

HOT WORK OPERATER SIGNATURE_____

HOT WORK SUPERVISOR_____

FIRE MARSHAL_____

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: USS NEVERSAIL
 ITEM/COMPARTMENT/SPACE: 5-51-0-E
 TYPE OF OPERATION TO BE CONDUCTED: Cleaning
 INITIAL DATE OF TEST: HOUR: 0800 DATE: 30 May 99
 INITIAL EXPIRATION: HOUR: 1200 DATE: 30 May 99
 VENTILATION REQUIRED: YES NO
 TYPE: (2) Ram fans, exhausting from 5-51-0-E to weather deck
(1) Ram fan, supplying air from weather deck to 5-51-0-E.
 INERTED GAS: N/A (gas)
 OR
 PRESSED UP WITH: N/A (liquid)
 REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS
All personnel inside space (no more and no less than 2) must wear
SAR/SCBA, clean coveralls and chemical gloves. One safety
observer station directly outside the space using con-space comms
with personnel inside space. One attendant and one CPA operator
shall also be outside assisting with the SAR/SCBA. Any questions or
changes call the GFE (254)

GAS RELATED HOT WORK

PQS QUALIFIED FIRE WATCHES ASSIGNED

LOCATIONS	PRINT NAME/RATE	SIGNATURE (upon completion)

FINAL CHECKUP, WORK AREA AND ALL ADJACENT AREAS TO WHICH SPARKS AND HEAT MIGHT SPREAD WERE INSPECTED 30 MINUTES AFTER THE WORK WAS COMPLETED AND WERE FOUND TO BE FIRE SAFE. THE EQUIPMENT AND STRUCTURES WORKED ON WERE COOL TO THE TOUCH.

TIME SECURED: _____

I CERTIFY THAT I AM FAMILIAR WITH AND WILL COMPLY WITH ALL SAFETY PRECAUTIONS PERTINENT TO THIS TYPE OF WORK.

HOT WORK OPERATER SIGNATURE _____

HOT WORK SUPERVISOR _____

FIRE MARSHAL DC1(SW) BRYANT

TEST RESULTS

TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST
OXYGEN			
COMBUSTABLE GAS			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			

NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE _____

CO SIGNATURE, If required _____

RECERTIFICATION

1st RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE _____

2nd RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE _____

TEST RESULTS

TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST
OXYGEN			
COMBUSTABLE GAS			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			

TEST RESULTS

TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST
OXYGEN	20.2%		
COMBUSTABLE GAS			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			

TEST RESULTS

TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST
OXYGEN	20.2%		
COMBUSTABLE GAS	0%		
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			

TEST RESULTS

TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST
OXYGEN	20.2%		
COMBUSTABLE GAS	0%		
TOXIC TYPE: CO	8 PPM		
TOXIC TYPE: CO ²	700 PPM		
TOXIC TYPE: H ² S	0 PPM		
TOXIC TYPE:			

TEST RESULTS

TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST
OXYGEN	20.2%		
COMBUSTABLE GAS	0%		
TOXIC TYPE: CO	8 PPM		
TOXIC TYPE: CO ²	700 PPM		
TOXIC TYPE: H ² S	0 PPM		
TOXIC TYPE:			

Unity:

.40

**Don't forget
about "Unity"**

INITIAL CERTIFICATION			TEST RESULTS			
SHIP/UNIT/ACTIVITY: <u>USS NEVERSAIL</u>			TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST
ITEM/COMPARTMENT/SPACE: <u>5-51-0-E</u>			OXYGEN	20.2		
TYPE OF OPERATION TO BE CONDUCTED: <u>Cleaning</u>			COMBUSTABLE GAS	0		
INITIAL DATE OF TEST: HOUR: <u>0800</u> DATE: <u>30 May 99</u>			TOXIC TYPE: CO	8 PPM		
INITIAL EXPIRATION: HOUR: <u>1200</u> DATE: <u>30 May 99</u>			TOXIC TYPE: CO ²	700 PPM		
VENTILATION REQUIRED: <u>YES</u> NO			TOXIC TYPE: H ₂ S	0 PPM		
TYPE: <u>(2) Ram fans, exhausting from 5-51-0-E to weather deck</u> <u>(1) Ram fan, supplying air from weather deck to 5-51-0-E.</u>			TOXIC TYPE:			
INERTED GAS: <u>N/A</u> (gas)						
OR						
PRESSED UP WITH: <u>N/A</u> (liquid)						
REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS						
<u>All personnel inside space (no more and no less than 2) must wear</u> <u>SAR/SCBA, clean coveralls and chemical gloves. One safety</u> <u>observer station directly outside the space using con-space comms</u> <u>with personnel inside space. One attendant and one CPA operator</u> <u>shall also be outside assisting with the SAR/SCBA. Any questions or</u> <u>changes call the GFE (254)</u>						
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PQS QUALIFIED FIRE WATCHES ASSIGNED						
LOCATIONS	PRINT NAME/RATE	SIGNATURE (upon completion)				
FINAL CHECKUP, WORK AREA AND ALL ADJACENT AREAS TO WHICH SPARKS AND HEAT MIGHT SPREAD WERE INSPECTED 30 MINUTES AFTER THE WORK WAS COMPLETED AND WERE FOUND TO BE FIRE SAFE. THE EQUIPMENT AND STRUCTURES WORKED ON WERE COOL TO THE TOUCH.						
TIME SECURED: _____						
I CERTIFY THAT I AM FAMILIAR WITH AND WILL COMPLY WITH ALL SAFETY PRECAUTIONS PERTINENT TO THIS TYPE OF WORK.						
HOT WORK OPERATER SIGNATURE _____						
HOT WORK SUPERVISOR _____						
FIRE MARSHAL: <u>DC1(SW) BRYANT</u>						
			RECERTIFICATION			
			1 st RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____			
			GFE PERSONNEL SIGNATURE _____			
			2 nd RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____			
			GFE PERSONNEL SIGNATURE _____			

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK	DBB		
NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			

NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE _____

CO SIGNATURE, If required _____

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK	DBB		
NOT SAFE FOR PERSONNEL WITH NOT S			
SAFE NOT SAFE FOR HOT WORK			
SAFE SAFE FOR HOT WORK			
NOT S INSID WORK OUTSIDE			

There is danger of poisoning due to toxic materials.

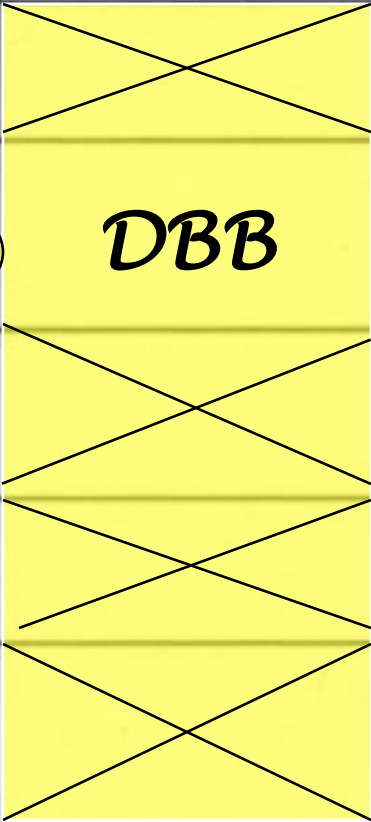
Danger of suffocation due to oxygen deficiencies.

There is a danger of fire or explosion

NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE _____

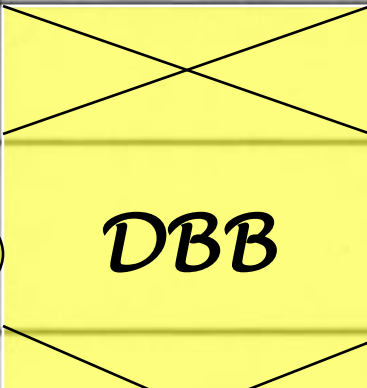
CO SIGNATURE, If required _____

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK	 DBB		
NOT SAFE FOR PERSONNEL/ WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			

NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE _____

CO SIGNATURE, If required _____

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL/ WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
SAFE FOR HOT WORK			
NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED			

Toxic materials, vapors or gases may be present or evolve in the space

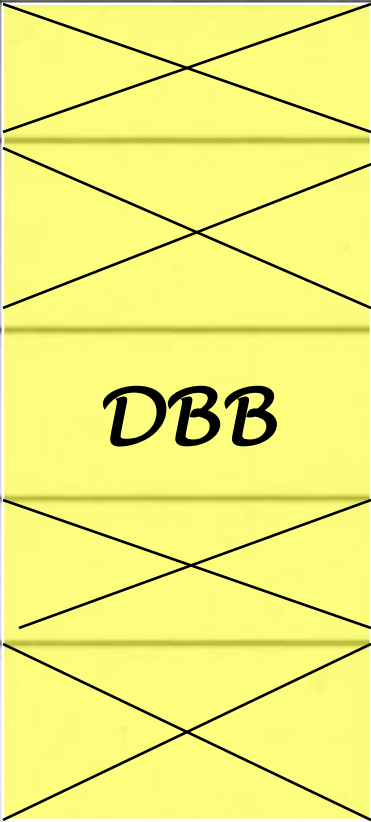
Flammable vapors may be present or may evolve but at levels less than 10% of the LEL

There is a danger of fire, explosion or excessive toxic levels in the presence of hot work

Toxic materials, vapors or gases may be present or evolve in the space

Flammable vapors may be present or may evolve but at levels less than 10% of the LEL

There is a danger of fire, explosion or excessive toxic levels in the presence of hot work

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK	 <i>DBB</i>		
NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			

NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE _____

CO SIGNATURE, If required _____

Toxic materials, vapors or gases do not, or are not likely to exceed PEL

Oxygen content is safe for personnel

SAFE FOR PERSONNEL/
NOT SAFE FOR HOT WORK

DBB

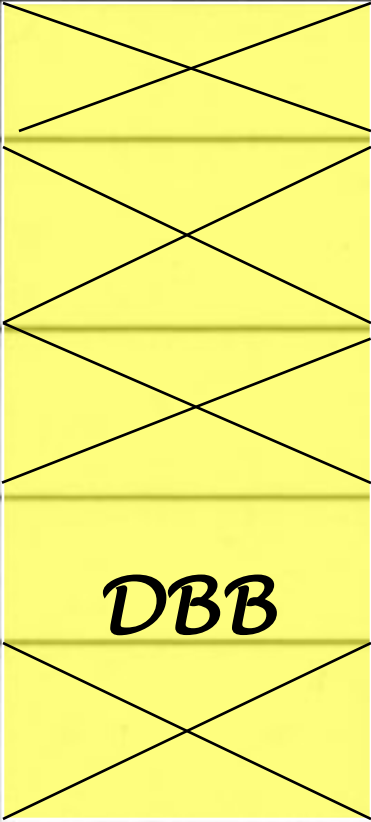
There is a danger of fire or explosion, or excessive toxicants in the presence of hot work

WORK OUTSIDE

NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE _____

CO SIGNATURE, If required _____

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK	 DBB		
NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			

NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE _____

CO SIGNATURE, If required _____

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
NO WI NO			
SAFE FOR PERSONNEL NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK	DBB		
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			

Oxygen, Explosive and toxics are below levels and will not likely exceed unsafe levels

NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE _____

CO SIGNATURE, If required _____

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE	<i>DBB</i>		

NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE _____

CO SIGNATURE, If required _____

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			

SERIAL # _____

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: _____
ITEM/COMPARTMENT/SPACE: _____
TYPE OF OPERATION TO BE CONDUCTED: _____
INITIAL DATE OF TEST: HOUR: _____ DATE: _____
INITIAL EXPIRATION: HOUR: _____ DATE: _____
VENTILATION REQUIRED: YES NO
TYPE: _____

INERTED GAS: Dry Nitrogen
OR Water
PRESSED UP WITH: _____
REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS

NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE _____

CO SIGNATURE, If required _____

EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK	DBB		
NOT SAFE FOR PERSONNEL/ WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			

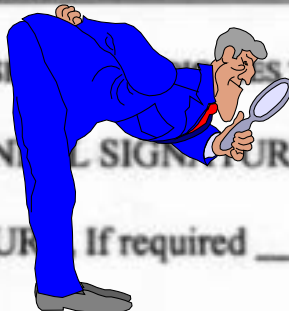
NOTE: THIS INSPECTION REPORT DESCRIBES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE _____

DCC(SW) Bailey

CO SIGNATURE If required _____

Capt. Kirk or N /A



INITIAL CERTIFICATION			TEST RESULTS			
SHIP/UNIT/ACTIVITY: <u>USS NEVERSAIL</u>			TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST
ITEM/COMPARTMENT/SPACE: <u>5-51-0-E</u>			OXYGEN	20.2		
TYPE OF OPERATION TO BE CONDUCTED: <u>Cleaning</u>			COMBUSTABLE GAS	0		
INITIAL DATE OF TEST: HOUR: <u>0800</u> DATE: <u>30 May 99</u>			TOXIC TYPE: CO	8 PPM		
INITIAL EXPIRATION: HOUR: <u>1200</u> DATE: <u>30 May 99</u>			TOXIC TYPE: CO ₂	700 PPM		
VENTILATION REQUIRED: <u>YES</u> NO			TOXIC TYPE: H ₂ S	0 PPM		
TYPE: <u>(2) Ram fans, exhausting from 5-51-0-E to weather deck</u> <u>(1) Ram fan, supplying air from weather deck to 5-51-0-E.</u>			TOXIC TYPE:			
INERTED GAS: <u>N/A</u> (gas)						
OR						
PRESSED UP WITH: <u>N/A</u> (liquid)						
REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS			EXISTING CONDITIONS	INITIAL TEST	1 st RETEST	2 nd RETEST
<u>All personnel inside space (no more and no less than 2) must wear SAR/SCBA, clean coveralls and chemical gloves. One safety observer station directly outside the space using con-space comms with personnel inside space. One attendant and one CPA operator shall also be outside assisting with the SAR/SCBA. Any questions or changes call the GFE (254)</u>			NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK	DBB		
			NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
			SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
			SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
			NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			
GAS RELATED HOT WORK						
PQS QUALIFIED FIRE WATCHES ASSIGNED						
LOCATIONS	PRINT NAME/RATE	SIGNATURE (upon completion)				
FINAL CHECKUP, WORK AREA AND ALL ADJACENT AREAS TO WHICH SPARKS AND HEAT MIGHT SPREAD WERE INSPECTED 30 MINUTES AFTER THE WORK WAS COMPLETED AND WERE FOUND TO BE FIRE SAFE. THE EQUIPMENT AND STRUCTURES WORKED ON WERE COOL TO THE TOUCH.			NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.			
TIME SECURED: _____			GFE PERSONNEL SIGNATURE <u>DCC(SW) Bailey</u>			
I CERTIFY THAT I AM FAMILIAR WITH AND WILL COMPLY WITH ALL SAFETY PRECAUTIONS PERTINENT TO THIS TYPE OF WORK.			CO SIGNATURE, If required <u>Capt. Kirk</u>			
HOT WORK OPERATER SIGNATURE _____			RECERTIFICATION			
HOT WORK SUPERVISOR _____			1 st RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____			
FIRE MARSHAL <u>DC1(SW) BRYANT</u>			GFE PERSONNEL SIGNATURE _____			
			2 nd RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____			
			GFE PERSONNEL SIGNATURE _____			

POST INSPECTION PROCEDURES

↘ Gas Free Certificate

- a) Log Results
- b) Safe for Personnel?
- ☺ Requirements???
- c) Ventilation Requirements
- d) Posting Requirements

✧ Inventory

- a) Tool Check
- b) Trash, Rags, People...?

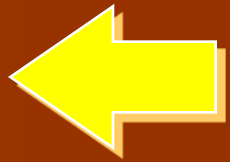


RETESTING



- Entry or Work Delay
- Expiration (8 Hours)
- Hazards Detected
- Ship Movement

RECERTIFICATION



(Do Over)

- Securing Ventilation
- New Operations or Materials
- Closing Space Or Temporary Shutdown

TEST RESULTS			
TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1ST RETEST	2ND RETEST
OXYGEN 19.5% < O2 < 22%	20.7%	20.9%	20.8%
COMBUSTIBLE GAS < 10% LEL	0	0	0
TOXIC TYPE: CO < 35 ppm	0	0	0
TOXIC TYPE: H2S < 10 ppm	0	0	0
TOXIC TYPE: N/A			
TOXIC TYPE: N/A			

EXISTING CONDITIONS	INITIAL TEST	1ST RETEST	2ND RETEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK	MLA	RKL	MAB
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			

NOTE: THIS INSPECTION INDICATES THE CONDITIONS WHICH EXISTED AT THE TIME TESTS WERE CONDUCTED.

GFE PERSONNEL SIGNATURE M L Anderson LTJG

CO SIGNATURE, if required N/A

RECERTIFICATION

1ST RETEST/UPDATE

TIME: 1600 DATE: 12 MAY 98 EXPIRES: 2400

GFE PERSONNEL SIGNATURE R K LaCount DCC (SW)

GFEA

2ND RETEST/UPDATE

TIME: 0000 DATE: 13 MAY 98 EXPIRES: 2000

GFE PERSONNEL SIGNATURE MA Bowen HT1 (SW)

A person wearing a blue short-sleeved shirt is seated at a desk in an office environment. They are looking down at a desk with various items, including a computer monitor and papers. The background shows office shelves and equipment.

**CAN GFEP0'S BE
ASSIGNED TO
RETEST OR CERTIFY
A SPACE?**

YES

● POSTING REQUIREMENTS



Gas Free Files



OOD



All Accesses to the Space



Division Requesting Services

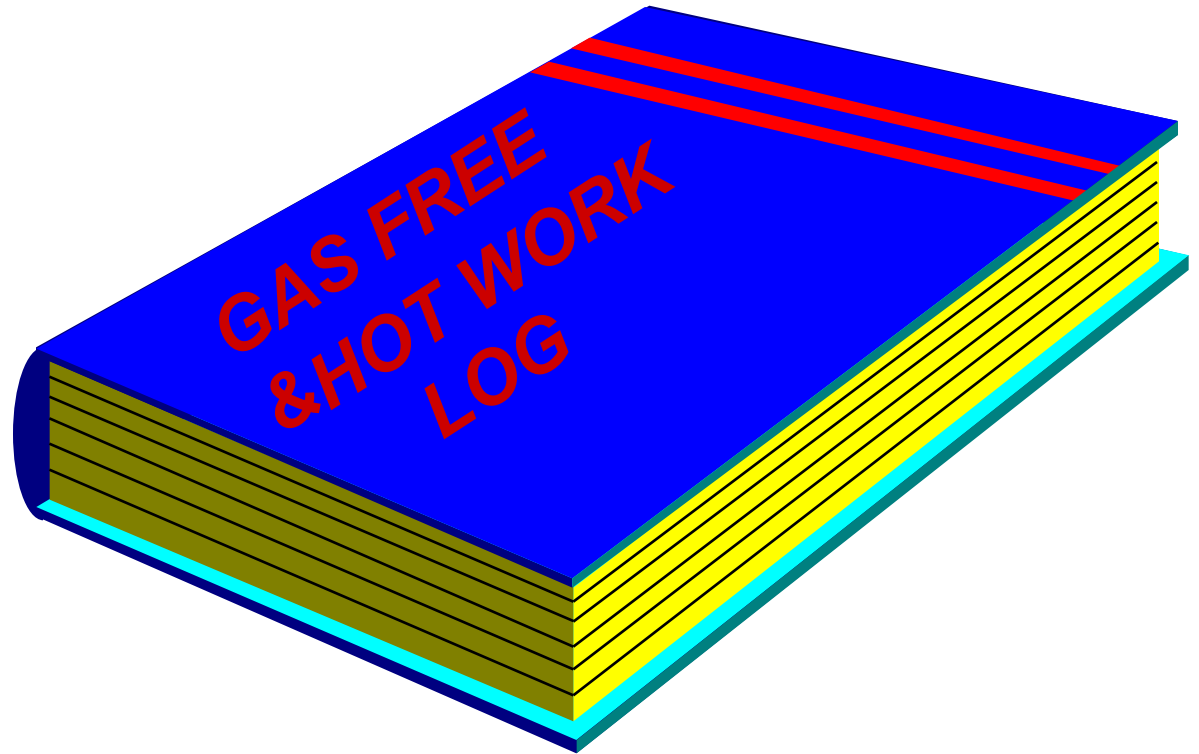


Damage Control Central

[illegible]

- ***Must Retain for At Least 1 Year***

FILE IN YOUR GAS FREE LOG



NAVY GAS FREE CERTIFICATION AND TEST LOG

INITIAL CERTIFICATION			TEST RESULTS			
SHIP/UNIT/ACTIVITY: _____			TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1 st RETEST	2 nd RETEST
ITEM/COMPARTMENT/SPACE: _____						
TYPE OF OPERATION TO BE CONDUCTED: _____			OXYGEN			
INITIAL DATE OF TEST: HOUR: _____ DATE: _____			COMBUSTABLE GAS			
INITIAL EXPIRATION: HOUR: _____ DATE: _____			TOXIC TYPE: _____			
VENTILATION REQUIRED: YES _____ NO _____			TOXIC TYPE: _____			
TYPE: _____			TOXIC TYPE: _____			
INERTED GAS: _____			TOXIC TYPE: _____			
OR						
PRESSED UP WITH: _____						
REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS: _____				INITIAL TEST	1 st RETEST	2 nd RETEST
			NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
			NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK			
			SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK			
			SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
			NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			
<p>NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED.</p> <p>GPE PERSONNEL SIGNATURE _____</p> <p>CO SIGNATURE, If required _____</p>						
RECERTIFICATION						
1 st RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____						
GPE PERSONNEL SIGNATURE _____						
2 nd RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____						
GPE PERSONNEL SIGNATURE _____						

GAS RELATED HOT WORK		
PQS QUALIFIED FIRE WATCHES ASSIGNED		
LOCATIONS	PRINT NAME/RATE	SIGNATURE (upon completion)
<p>FINAL CHECKUP, WORK AREA AND ALL ADJACENT AREAS TO WHICH SPARKS AND HEAT MIGHT SPREAD WERE INSPECTED 30 MINUTES AFTER THE WORK WAS COMPLETED AND WERE FOUND TO BE FIRE SAFE. THE EQUIPMENT AND STRUCTURES WORKED ON WERE COOL TO THE TOUCH.</p> <p>TIME SECURED _____</p> <p>I CERTIFY THAT I AM FAMILIAR WITH AND WILL COMPLY WITH ALL SAFETY PRECAUTIONS PERTINENT TO THIS TYPE OF WORK.</p> <p>HOT WORK OPERATOR SIGNATURE _____</p> <p>HOT WORK SUPERVISOR _____</p> <p>FIRE MARSHAL _____</p>		

Lesson Topic 3.4

REVIEW AND SUMMARY

Review and Summary

- Pre-Inspection Procedures
- Initial Oxygen test
- Initial Explosive test
- Initial Toxic test
- Preparing to enter space
- Gas Free Test and Inspection

SERIAL # _____

NAVY GAS FREE CERTIFICATION AND TEST LOG

INITIAL CERTIFICATION			TEST RESULTS				
SHIP/UNIT/ACTIVITY: _____ ITEM/COMPARTMENT/SPACE: _____ TYPE OF OPERATION TO BE CONDUCTED: _____ INITIAL DATE OF TEST: HOUR: _____ DATE: _____ INITIAL EXPIRATION: HOUR: _____ DATE: _____ VENTILATION REQUIRED: YES NO TYPE: _____ _____ _____ INERTED GAS: _____ (gas) OR PRESSED UP WITH: _____ (liquid) REQUIREMENTS/CONCLUSIONS/PREScribed PRECAUTIONS/INSTRUCTIONS _____ _____ _____ _____ _____			TESTS CONDUCTED AS REQUIRED OXYGEN COMBUSTABLE GAS TOXIC TYPE: TOXIC TYPE: TOXIC TYPE: TOXIC TYPE:		INITIAL TEST 	1 st RETEST 	2 nd RETEST
GAS RELATED HOT WORK							
PQS QUALIFIED FIRE WATCHES ASSIGNED							
LOCATIONS	PRINT NAME/RATE	SIGNATURE (upon completion)					
FINAL CHECKUP, WORK AREA AND ALL ADJACENT AREAS TO WHICH SPARKS AND HEAT MIGHT SPREAD WERE INSPECTED 10 MINUTES AFTER THE WORK WAS COMPLETED AND WERE FOUND TO BE FIRE SAFE. THE EQUIPMENT AND STRUCTURES WORKED ON WERE COOL TO THE TOUCH. TIME SECURED _____ I CERTIFY THAT I AM FAMILIAR WITH AND WILL COMPLY WITH ALL SAFETY PRECAUTIONS PERTINENT TO THIS TYPE OF WORK. HOT WORK OPERATER SIGNATURE _____ HOT WORK SUPERVISOR _____ FIRE MARSHAL _____			SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK SAFE FOR PERSONNEL/ SAFE FOR HOT WORK NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE		 	 	
NOTE: THIS INSPECTION INDICATES THE CONDITIONS THAT EXISTED AT THE TIME THE TESTS WERE CONDUCTED. GFE PERSONNEL SIGNATURE _____ CO SIGNATURE, If required _____							
RECERTIFICATION							
1 st RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____ GFE PERSONNEL SIGNATURE _____ 2 nd RETEST/UPDATE TIME: _____ DATE: _____ EXPIRES: _____ GFE PERSONNEL SIGNATURE _____							

Lesson Topic 3.4

THE END