GF REPORTS AND RECORDS
LT 7.8

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 FREE RELATED HOT WORK

POS QUALIFIED FIRE WATCHES ASSIGNED

LOCATIONS	PRINT NAME/RATE	SIGNATURE* (UPON COMPLETION)

TIME SECURED _____

*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.

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	1ST RETEST	2ND RETEST
OXYGEN			
COMBUSTIBLE GAS			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			

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			
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 _____

CO SIGNATURE, if required _____

RECERTIFICATION

1ST RETEST/UPDATE

TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE _____

2ND RETEST/UPDATE

TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE _____

OPNAV 5100/16 (5-91) S/N 0107-LF-011-7400

Enabling Objectives

- Describe the purpose and function of:
  - Closed Compartment Opening Request
  - Hot Work Request
  - Navy Gas Free Certificate and Test Log
  - National Fire Protection Association (NFPA) Gas Free Certificate

Enabling Objectives cont'd

- Complete the following:
  - Closed Compartment Opening Request
  - Hot Work Request
  - Navy Gas Free Certificates and Test Log
- Describe:
  - What forms may be use by the NFPA Marine Chemists or Competent Person

Enabling Objectives cont'd

- Describe the criteria for assigning each of the following on a Gas Free Certificate:
  - Not Safe for Personnel/Not Safe for Hot Work
  - Not Safe for Personnel w/o PPE/Not Safe for Hot Work
  - Safe for Personnel/Safe for Hot Work
  - Not Safe for Personnel Inside/Safe for Hot Work Outside

Last Enabling Objective

- Describe:
  - Distribution requirements for completed Navy Gas Free Certificates

Please take out your NSTM 074 VOL 3 and find Appendix C

Gas Free Engineering Notebook

- Contains:
  - Ship's Gas Free Inst.
  - **Active Gas Free Chits**
  - **Inactive Gas Free Chits**
    - 1 year

Navy Reports and Records

- Navy:
  - Closed Compartment Opening Request
  - Hot Work Authorization
  - Navy Gas Free Certificate

*Should be Included as Enclosures in a GFE Instruction, Available in Gas Free Log, Readily Available

Civilian Reports and Records

- Civilian:
  - NFPA Gas Free Certificate
  - OSHA - 74 Form
  - Gas Free Tags

Closed Compartment Opening Request

- Pg C-13 or C-29
- Can be Locally Produced
- GFE Management Tool
- Initial Info and Planning for Gas Free Test

Should be Submitted ***AT LEAST 24 HRS*** Prior to Evolution

Closed Compartment or Space

- Any Space not well Ventilated
  - Storerooms
  - Double Bottoms
- Spaces which Have Been…
  - Vacated
  - Closed
  - Sealed

CLOSED COMPARTMENT OPENING REQUEST
USS _____
(_____)

FROM: _____ DIVISION OFFICER EXT._____
TO: GAS FREE ENGINEER
VIA: CHIEF ENGINEER

1. PERMISSION IS REQUESTED TO ENTER: _____
   _____.
2. REASON FOR ENTRY: _____
   _____.
3. TOXIC MATERIALS TO BE USED: _____
   _____.
4. TIME/DATE TO BE OPENED: _____.
5. TIME/DATE TO BE CLOSED: _____.
6. NAMES AND RATES OF PERSONNEL TO ENTER SPACE:
   _____
   _____
7. SAFETY OBSERVER AT ACCESS: _____.
   (NAME AND RATE)
8. TAGOUTS REQUIRED TO SUPPORT WORK:
   _____.
   _____.

_____
DIVISION OFFICER

ENDORSEMENT

FROM: GAS FREE ENGINEER
TO: _____ DIVISION OFFICER

1. APPROVED/DISAPPROVED: _____
   _____.
2. MISCELLANEOUS REQUIRMENTS:
   _____
   _____
   _____
   _____
   _____
   _____.
3. NOTES:
   (A) NO ENTRY OR HOT WORK IS AUTHORIZED UNTIL SPACE HAS BEEN INSPECTED AND CERTIFIED BY GAS FREE ENGINEER OR A DESIGNATED ASSISTANT.

_____
GAS FREE ENGINEER

CLOSED COMPARTMENT OPENING REQUEST

USS _____

(_____)

FROM: ___*Deck*_____ DIVISION OFFICER EXT. *200*
TO: GAS FREE ENGINEER
VIA: CHIEF ENGINEER

1. PERMISSION IS REQUESTED TOENTER: _____
   _____.
2. REASON FOR ENTRY: _____
   _____.
3. TOXIC MATERIALS TO BE USED: _____
   _____.
4. TIME/DATE TO BE OPENED: _____.
5. TIME/DATE TO BE CLOSED: _____.
6. NAMES AND RATES OF PERSONNEL TO ENTER SPACE
   _____
   _____
7. SAFETY OBSERVER AT ACCESS: _____.
   (NAME AND RATE)
8. TAGOUTS REQUIRED TO SUPPORT WORK:
   _____.
   _____.

_____
DIVISION OFFICER

ENDORSEMENT

FROM: GAS FREE ENGINEER
TO: _____ DIVISION OFFICER

1. APPROVED/DISAPPROVED: _____
   _____.
2. MISCELLANEOUS REQUIRMENTS:
   _____
   _____
   _____
   _____
   _____
   _____.
3. NOTES:
   (A) NO ENTRY OR HOT WORK IS AUTHORIZED UNTIL SPACE HAS BEEN INSPECTED AND CERTIFIED BY GAS FREE ENGINEER OR A DESIGNATED ASSISTANT.

_____
GAS FREE ENGINEER

CLOSED COMPARTMENT OPENING REQUEST
USS _____
(_____)

SERIAL NUMBER: ***98-00001***

FROM: ***Deck*** DIVISION OFFICER EXT. ***200***
TO: GAS FREE ENGINEER
VIA: CHIEF ENGINEER

1. PERMISSION IS REQUESTED TO ENTER: _____
CHAIN LOCKER _____.
2. REASON FOR ENTRY: _____
_____.
3. TOXIC MATERIALS TO BE USED: _____
_____.
4. TIME/DATE TO BE OPENED: _____.
5. TIME/DATE TO BE CLOSED: _____.
6. NAMES AND RATES OF PERSONNEL TO ENTER SPACE
_____
_____
7. SAFETY OBSERVER AT ACCESS: _____.
(NAME AND RATE)
8. TAGOUTS REQUIRED TO SUPPORT WORK:
_____.
_____.

_____
DIVISION OFFICER

ENDORSEMENT

FROM: GAS FREE ENGINEER
TO: _____ DIVISION OFFICER

1. APPROVED/DISAPPROVED: _____
_____.
2. MISCELLANEOUS REQUIRMENTS:
_____
_____
_____
_____
_____
_____.
3. NOTES:
(A) NO ENTRY OR HOT WORK IS AUTHORIZED UNTIL SPACE HAS BEEN INSPECTED AND CERTIFIED BY GAS FREE ENGINEER OR A DESIGNATED ASSISTANT.

_____
GAS FREE ENGINEER

Compartment to be Opened

- Allows GFE to Evaluate Whether Authority is Needed (IDLH)
- Allows GFE to Research Previous Inspections of that Compartment

CLOSED COMPARTMENT OPENING REQUEST
USS _____
(_____)

FROM: _____Deck___ DIVISION OFFICER EXT._200_____
TO: GAS FREE ENGINEER
VIA: CHIEF ENGINEER

1. PERMISSION IS REQUESTED TO ENTER: _____
   _____CHAIN LOCKER_____.
2. REASON FOR ENTRY: _____CLEAN/INSPECT_____
   _____.
3. TOXIC MATERIALS TO BE USED: _____
   _____.
4. TIME/DATE TO BE OPENED: _____.
5. TIME/DATE TO BE CLOSED: _____.
6. NAMES AND RATES OF PERSONNEL TO ENTER SPACE
   _____
   _____
7. SAFETY OBSERVER AT ACCESS: _____.
   (NAME AND RATE)
8. TAGOUTS REQUIRED TO SUPPORT WORK:
   _____.
   _____.

_____
DIVISION OFFICER

ENDORSEMENT

FROM: GAS FREE ENGINEER
TO: _____ DIVISION OFFICER

1. APPROVED/DISAPPROVED: _____
   _____.
2. MISCELLANEOUS REQUIRMENTS:
   _____
   _____
   _____
   _____
   _____
   _____.
3. NOTES:
   (A) NO ENTRY OR HOT WORK IS AUTHORIZED UNTIL SPACE HAS BEEN INSPECTED AND CERTIFIED BY GAS FREE ENGINEER OR A DESIGNATED ASSISTANT.

_____
GAS FREE ENGINEER

Reason for Entry

- Allows GFE to Prioritize by Event
- Ensures GFE Knows Exactly what is Going to be Taking Place in Space
  - Events that can Change Atmospheric Conditions

CLOSED COMPARTMENT OPENING REQUEST

USS _____

(_____)

FROM: ____*Deck*___ DIVISION OFFICER EXT.__*200*_
TO: GAS FREE ENGINEER
VIA: CHIEF ENGINEER

1. PERMISSION IS REQUESTED TOENTER: _____
   _____*CHAIN LOCKER*_____.
2. REASON FOR ENTRY: *CLEAN/INSPECT*
   _____.
3. TOXIC MATERIALS TO BE USED: _____
   _____*ETHYLENE GLYCOL*_____.
4. TIME/DATE TO BE OPENED: _____.
5. TIME/DATE TO BE CLOSED: _____.
6. NAMES AND RATES OF PERSONNEL TO ENTER SPACE
   _____
   _____
7. SAFETY OBSERVER AT ACCESS: _____.
   (NAME AND RATE)
8. TAGOUTS REQUIRED TO SUPPORT WORK:
   _____.
   _____.

_____
DIVISION OFFICER

ENDORSEMENT

FROM: GAS FREE ENGINEER
TO: _____ DIVISION OFFICER

1. APPROVED/DISAPPROVED: _____
   _____.
2. MISCELLANEOUS REQUIRMENTS:
   _____
   _____
   _____
   _____
   _____
   _____.
3. NOTES:
   (A) NO ENTRY OR HOT WORK IS AUTHORIZED UNTIL SPACE HAS BEEN INSPECTED AND CERTIFIED BY GAS FREE ENGINEER OR A DESIGNATED ASSISTANT.

_____
GAS FREE ENGINEER

Toxic Materials to be Used

- **Allows GFE to Determine Respirator and Ventilation Requirements**
- **Allows GFE to Preplan for Re-testing**
- **Assists in Determination of Re-test Periodicity**
- **GFE Screen Illegal Materials**

CLOSED COMPARTMENT OPENING REQUEST

USS _____

(_____)

FROM: *Deck* DIVISION OFFICER EXT. *200*
TO: GAS FREE ENGINEER
VIA: CHIEF ENGINEER

1. PERMISSION IS REQUESTED TO ENTER: *CHAIN LOCKER*.
2. REASON FOR ENTRY: *CLEAN/INSPECT*.
3. TOXIC MATERIALS TO BE USED: *ETHYLENE GLYCOL*.
4. TIME/DATE TO BE OPENED: *0900 26JAN2004*.
5. TIME/DATE TO BE CLOSED: *0900 27JAN2004*.
6. NAMES AND RATES OF PERSONNEL TO ENTER SPACE
   _____
   _____
7. SAFETY OBSERVER AT ACCESS: _____.
   (NAME AND RATE)
8. TAGOUTS REQUIRED TO SUPPORT WORK:
   _____.
   _____.

_____
DIVISION OFFICER

ENDORSEMENT

FROM: GAS FREE ENGINEER
TO: _____ DIVISION OFFICER

1. APPROVED/DISAPPROVED: _____.
2. MISCELLANEOUS REQUIRMENTS:
   _____
   _____
   _____
   _____
   _____
   _____.
3. NOTES:
   (A) NO ENTRY OR HOT WORK IS AUTHORIZED UNTIL SPACE HAS BEEN INSPECTED AND CERTIFIED BY GAS FREE ENGINEER OR A DESIGNATED ASSISTANT.

_____
GAS FREE ENGINEER

Time and Date Opened/Closed

- Needed to Establish Retest Schedule (max 8 hours)
- Allows for Efficient Management of Time and Resources

CLOSED COMPARTMENT OPENING REQUEST

USS _____

(_____)

FROM: Deck DIVISION OFFICER EXT. 200
TO: GAS FREE ENGINEER
VIA: CHIEF ENGINEER

1. PERMISSION IS REQUESTED TO ENTER: CHAIN LOCKER.
2. REASON FOR ENTRY: CLEAN.
3. TOXIC MATERIALS TO BE USED: ETHYLENE GLYCOL.
4. TIME/DATE TO BE OPENED: 0900 27JAN2004.
5. TIME/DATE TO BE CLOSED: 0900 26JAN2004.
6. NAMES AND RATES OF PERSONNEL TO ENTER SPACE
   BM3 DUGAN
   SN BLUTARSKI
7. SAFETY OBSERVER AT ACCESS: _____.
   (NAME AND RATE)
8. TAGOUTS REQUIRED TO SUPPORT WORK:
   _____.
   _____.

_____
DIVISION OFFICER

ENDORSEMENT

FROM: GAS FREE ENGINEER
TO: _____ DIVISION OFFICER

1. APPROVED/DISAPPROVED: _____.
2. MISCELLANEOUS REQUIRMENTS:
   _____
   _____
   _____
   _____
   _____
   _____.
3. NOTES:
   (A) NO ENTRY OR HOT WORK IS AUTHORIZED UNTIL SPACE HAS BEEN INSPECTED AND CERTIFIED BY GAS FREE ENGINEER OR A DESIGNATED ASSISTANT.

_____
GAS FREE ENGINEER

Names and Rates of Personnel to Enter

- Allows GFE to Check Personnel on Equipment Knowledge (Respiratory and Ventilation)

- Ensure Responsible Person is in Charge

CLOSED COMPARTMENT OPENING REQUEST
USS _____
(_____)

FROM: Deck DIVISION OFFICER EXT. 200
TO: GAS FREE ENGINEER
VIA: CHIEF ENGINEER

1. PERMISSION IS REQUESTED TO ENTER: CHAIN LOCKER.
2. REASON FOR ENTRY: CLEAN.
3. TOXIC MATERIALS TO BE USED: ETHYLENE GLYCOL.
4. TIME/DATE TO BE OPENED: 0900 26JAN2004.
5. TIME/DATE TO BE CLOSED: 0900 27JAN2004.
6. NAMES AND RATES OF PERSONNEL TO ENTER SPACE
   BM3 DUGAN
   SN BLUTARSKI
7. SAFETY OBSERVER AT ACCESS: BM2 CISNEROS.
   (NAME AND RATE)
8. TAGOUTS REQUIRED TO SUPPORT WORK:
   _____.
   _____.

_____
DIVISION OFFICER

ENDORSEMENT

FROM: GAS FREE ENGINEER
TO: _____ DIVISION OFFICER

1. APPROVED/DISAPPROVED: _____.
2. MISCELLANEOUS REQUIRMENTS:
   _____
   _____
   _____
   _____
   _____
   _____.
3. NOTES:
   (A) NO ENTRY OR HOT WORK IS AUTHORIZED UNTIL SPACE HAS BEEN INSPECTED AND CERTIFIED BY GAS FREE ENGINEER OR A DESIGNATED ASSISTANT.

_____
GAS FREE ENGINEER

Safety Observer

- Not Optional
- Included in all Operational Briefs

- Will Maintain Comms between Scene and Rescue Control Point

CLOSED COMPARTMENT OPENING REQUEST

USS _____

(_____)

FROM: *Deck* DIVISION OFFICER EXT. *200*
TO: GAS FREE ENGINEER
VIA: CHIEF ENGINEER

1. PERMISSION IS REQUESTED TO ENTER: *CHAIN LOCKER*.
2. REASON FOR ENTRY: *CLEAN*.
3. TOXIC MATERIALS TO BE USED: *ETHYLENE GLYCOL*.
4. TIME/DATE TO BE OPENED: *0900 26JAN2004*.
5. TIME/DATE TO BE CLOSED: *0900 27JAN2004*.
6. NAMES AND RATES OF PERSONNEL TO ENTER SPACE
   BM3 DUGAN
   SN BLUTARSKI
7. SAFETY OBSERVER AT ACCESS: *BM2 CISNEROS*.
   (NAME AND RATE)
8. TAGOUTS REQUIRED TO SUPPORT WORK:
   ANCHOR WINDLASS

_____
DIVISION OFFICER

ENDORSEMENT

FROM: GAS FREE ENGINEER
TO: _____ DIVISION OFFICER

1. APPROVED/DISAPPROVED: _____.
2. MISCELLANEOUS REQUIRMENTS:
3. NOTES:
   (A) NO ENTRY OR HOT WORK IS AUTHORIZED UNTIL SPACE HAS BEEN INSPECTED AND CERTIFIED BY GAS FREE ENGINEER OR A DESIGNATED ASSISTANT.

_____
GAS FREE ENGINEER

Tag outs

- Ensures Space is Safe and Prepared for Entry
- Allows GFE to Spot Check

CLOSED COMPARTMENT OPENING REQUEST

USS _____

(_____)

FROM: Deck DIVISION OFFICER EXT. 200
TO: GAS FREE ENGINEER
VIA: CHIEF ENGINEER

1. PERMISSION IS REQUESTED TO ENTER: CHAIN LOCKER.
2. REASON FOR ENTRY: CLEAN/INSPECT.
3. TOXIC MATERIALS TO BE USED: ETHYLENE GLYCOL.
4. TIME/DATE TO BE OPENED: 0900 26JAN2004.
5. TIME/DATE TO BE CLOSED: 0900 27JAN2004.
6. NAMES AND RATES OF PERSONNEL TO ENTER SPACE
   BM3 DUGAN
   SN BLUTARSKI
7. SAFETY OBSERVER AT ACCESS: BM2 CISNEROS
   (NAME AND RATE)
8. TAGOUTS REQUIRED TO SUPPORT WORK:
   ANCHOR WINDLASS

_____
DIVISION OFFICER

ENDORSEMENT

FROM: GAS FREE ENGINEER
TO: Deck DIVISION OFFICER

1. APPROVED/DISAPPROVED: _____.
2. MISCELLANEOUS REQUIRMENTS:
   VENTILATE 24 HOURS PRIOR TO ENTRY
3. NOTES:
   (A) NO ENTRY OR HOT WORK IS AUTHORIZED UNTIL SPACE HAS BEEN INSPECTED AND CERTIFIED BY GAS FREE ENGINEER OR A DESIGNATED ASSISTANT.

_____
GAS FREE ENGINEER

Hot Work Authorization Request

- Allows Divisions to Request Hot Work Services
- Management Tool to Optimize Use of Time, Personnel and Resources
- Hot Work Certificates:
  - Page C-16
  - Gas Free Certificate
  - Locally Prepared

HOT WORK AUTHORIZATION REQUEST

FROM: HOT WORK SUPERVISOR
TO: GAS FREE ENGINEER

DATE: 22 JAN 04

1. IT IS REQUESTED THAT AUTHORIZATION BE GRANTED TO PERFORM WELDING/BURNING ON BUNKS
IN COMPARTMENT 1-118-0-L
FROM 0800 24 JAN 04 (date and time) TO 1600 24 JAN 04 (date and time).

2. FIRE WATCHES ASSIGNED: FN TIMMY (NAME AND RATE)
EN3 SHMUCKATELLI (NAME AND RATE)
GSEFN ANDERSON (NAME AND RATE)

3. HOT WORK OPERATOR ASSIGNED: HT2 WATTS (NAME AND RATE)

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

Nathan W. Watts HT2
HOT WORK OPERATOR

Russell S. King, HT1
HOT WORK SUPERVISOR

THE LOCATION WHERE THIS WORK IS TO BE DONE HAS BEEN INSPECTED, NECESSARY PRECAUTIONS HAVE BEEN TAKEN AND PERMISSION HAS BEEN GRANTED FOR THIS WORK.

PERMIT EXPIRES: 1600 24 JAN 04
(Time and date)

SPECIAL PRECAUTIONS:

GAS FREE ENGINEER/FIRE MARSHALL

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 SAFE. THE EQUIPMENT AND STRUCTURES WORKED ON WERE COOL TO THE TOUCH.

TIME SECURED: 1430 24 JAN 04

FN Timmy
EN3 Shmuckatelli GSEFN Anderson
FIRE WATCH(S)

Navy Gas Free Certification and Test Log

- Records the Conditions Existing within a Space at Time Test is Conducted
- Intended to Eliminate Need for Hot Work Request Form
- Available Through Stock System
  - **OPNAV 5100/16(5-91)**
  - **Stock #: 0107-LF-0011-7400**

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:

_____

_____

_____

_____

TEST RESULTS

TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1ST RETEST	2ND RETEST
OXYGEN			
COMBUSTIBLE GAS			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			

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			
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 _____

CO SIGNATURE, if required _____

GAS FREE RELATED HOT WORK

PQS QUALIFIED FIRE WATCHES ASSIGNED

LOCATIONS	PRINT NAME/RATE	SIGNATURE* (UPON COMPLETION)

TIME SECURED _____

*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.

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 _____

RECERTIFICATION

1ST RETEST/UPDATE

TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE _____

2ND RETEST/UPDATE

TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE _____

SERIAL # 98-00001

INITIAL CERTIFICATION

SHIP/UNIT/ACTIVITY: USS NAVIN R. JOHNSON

ITEM/COMPARTMENT/SPACE: CHAIN LOCKER (5-84-0-Q)

TYPE OF OPERATION TO BE CONDUCTED: CLEAN AND INSPECT

INITIAL DATE OF TEST: HOUR: 1300 DATE: 26 JAN 04

INITIAL EXPIRATION: HOUR: 2100 DATE: 26 JAN 04

VENTILATION REQUIRED: YES NO

TYPE: DILUTION - 1 RAMFAN EXHAUSTING FROM SPACE THROUGH WTD 4-92-1 TO WEATHER. CONTINUOUS OPERATION WHILE PERSONNEL IN SPACE.

INERTED GAS: _____ (gas)
OR N/A
PRESSED UP WITH: _____ (liquid)

REQUIREMENTS/CONCLUSIONS/PRESCRIBED PRECAUTIONS/INSTRUCTIONS:

ALL PERSONNEL USE RHINE AIR PUMP, AND COVER-ALLS. RE-INSPECT EVERY TWO HOURS. SAFETY OBSERVER MAINTAIN COMMS WITH WORKERS AND RESCUE CONTROL POINT (AT DC CENTRAL) USING WIFCOM.

SERIAL # 98-00001

INITIAL CERTIFICA

SHIP/UNIT/ACTIVITY: USS NAVIN R. JOHN O

ITEM/COMPARTMENT/SPACE: CHAIN LOCKER (

TYPE OF OPERATION TO BE CONDUCTED: CLEA

INITIAL DATE OF TEST: HOUR: 300

INITIAL EXPIRATION: HOUR: 2100

VENTILATION REQUIRED: YES

TYPE: DILUTION - 1 RA IFAN EXHAUS

THROUGH WTD 4-92-1 TO WEATHER

OPERATION WHILE PERSONNEL IN

INERTED GAS:
OR
PRESSED UP WITH: N/A

REQUIREMENTS/CONCLUSIONS/PRESCRIBED PREC

ALL PERSONNEL USE RHINE AIR PU

ALLS. RE-INSPECT EVERY TWO HO

OBSERVER MAINTAIN COMMS WITH

RESCUE CONTROL POINT USING W

3 Ventilation Options:

Local Exhaust Ventilation:

Ex.: Welding,

Painting,

Using Solvents

Dilution Ventilation

Ex.: Reducing Toxins,

Controlling Flammable Vapors

General Exhaust Ventilation

Ex.: Providing Cool Comfort Air in a Hazard-Free Atmosphere

SERIAL # 98-00001

INITIAL CERTIFICA

SHIP/UNIT/ACTIVITY: USS NAVIN R. JOHNSO

ITEM/COMPARTMENT/SPACE: CHAIN LOCKER (

TYPE OF OPERATION TO BE CONDUCTED: CLE

INITIAL DATE OF TEST: HOUR: 1300

INITIAL EXPIRATION: HOUR: 2100

VENTILATION REQUIRED: YES

TYPE: DILUTION - 1 RAMFAN EXHAUS

THROUGH WTD 4-92-1 TO WEATHER

OPERATION WHILE PERSONNEL IN

INERTED GAS:
OR
PRESSED UP WITH: N/A

REQUIREMENTS/CONCLUSIONS/PRESCRIBED PREC

ALL PERSONNEL USE RHINE AIR PU

ALLS. RE-INSPECT EVERY TWO HO

OBSERVER MAINTAIN COMMS WITH

RESCUE CONTROL POINT USING W

REQUIREMENTS/ CONCLUSIONS

- **Observe “2 Person Rule”**
- **Personal Protective Equipment**
- **Respiratory Equipment**
- **Rescue Control Point**
- **Communications Requirements**
- **Continuous or Periodic Testing**

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:

_____

_____

_____

_____

TEST RESULTS

TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1ST RETEST	2ND RETEST
OXYGEN			
COMBUSTIBLE GAS			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			

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			
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 _____

CO SIGNATURE, if required _____

GAS FREE RELATED HOT WORK

PQS QUALIFIED FIRE WATCHES ASSIGNED

LOCATIONS	PRINT NAME/RATE	SIGNATURE* (UPON COMPLETION)

TIME SECURED _____

*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.

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 _____

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	1ST RETEST	2ND RETEST
OXYGEN	19.5 <O_2<22	20.8%		
COMBUSTIBLE GAS	LEL <10	0 %LEL		
TOXIC TYPE:	H2S PEL 10 IDLH 100	0 ppm		
TOXIC TYPE:	CO PEL 50 IDLH 1200	0 ppm		
TOXIC TYPE:				
TOXIC TYPE:	UNITY:	0		

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	X		
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK			
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE			

TEST RESULTS			
TESTS CONDUCTED AS REQUIRED			INITIAL TEST
OXYGEN	$19.5 < O_2 < 22$		19 %
COMBUSTIBLE GAS	LEL<10		11 %LEL
TOXIC TYPE:	H2S	PEL 10 IDLH 100	11 0 ppm
TOXIC TYPE:	CO	PEL 50 IDLH 1200	1300 ppm
TOXIC TYPE:			
TOXIC TYPE:			

EXISTING CONDITIONS	INITIAL TEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK	X
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	

NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK

- Oxygen deficient or rich
- IDLH Atmosphere
- Danger of Fire or Explosion in Presence of Hotwork

TEST RESULTS		
TESTS CONDUCTED AS REQUIRED		INITIAL TEST
OXYGEN	19.5 <O_2<22	20 %
COMBUSTIBLE GAS	LEL<10	2 %LEL
TOXIC TYPE:	H2S PEL 10 IDLH 100	6 ppm
TOXIC TYPE:	CO PEL 50 IDLH 1200	25 ppm
TOXIC TYPE:		
TOXIC TYPE:	UNITY:	>1

EXISTING CONDITIONS	INITIAL TEST
NOT SAFE FOR PERSONNEL/ NOT SAFE FOR HOT WORK	
NOT SAFE FOR PERSONNEL WITHOUT PROTECTION/ NOT SAFE FOR HOT WORK	X
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	

NOT SAFE FOR PERSONNEL W/O PROTECTION / NOT SAFE FOR HOT WORK

- **Provides provisional entry into space.**
- **Toxics exceed PEL or Unity, but less than IDLH**
- **Explosives less than 10%**
- **Hot work prohibited or not requested**

TEST RESULTS		
TESTS CONDUCTED AS REQUIRED		INITIAL TEST
OXYGEN	$19.5 < O_2 < 22$	20 %
COMBUSTIBLE GAS	LEL<10	2 %LEL
TOXIC TYPE:	H2S PEL 10 IDLH 100	4 ppm
TOXIC TYPE:	CO PEL 50 IDLH 1200	20 ppm
TOXIC TYPE:		
TOXIC TYPE:	UNITY:	<1

EXISTING CONDITIONS	INITIAL TEST
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	X
SAFE FOR PERSONNEL/ SAFE FOR HOT WORK	
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE	

SAFE FOR PERSONNEL/ NOT SAFE FOR HOTWORK

- Toxics below PEL
- Sufficient oxygen
- Danger of explosion or excessive toxicants in presence of hot work or hot work not requested

TEST RESULTS		
TESTS CONDUCTED AS REQUIRED		INITIAL TEST
OXYGEN	19.5 <O_2<22	20 %
COMBUSTIBLE GAS	LEL≤10	0 %LEL
TOXIC TYPE:	H2S PEL 10 IDLH 100	1 ppm
TOXIC TYPE:	CO PEL 50 IDLH 1200	10 ppm
TOXIC TYPE:		
TOXIC TYPE:	UNITY:	<1

EXISTING CONDITIONS	INITIAL TEST
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	X
NOT SAFE FOR PERSONNEL INSIDE/SAFE FOR HOT WORK OUTSIDE	

SAFE FOR PERSONNEL/ SAFE FOR HOTWORK

- Oxygen between 19.5% And 22%
- Toxics below PEL
- All flammables removed
- Boundary spaces protected

Pressed up w/ WATER

OR

Inerted w/ Nitrogen, Carbon Dioxide, etc.

EXISTING CONDITIONS	INITIAL TEST
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	X

NOT SAFE FOR PERSONNEL INSIDE/ SAFE FOR HOTWORK OUTSIDE

- **Pressed up or Inerted**

☺THIS IS AN EMERGENCY PROCEDURE AND NOT ONE USED ROUTINELY

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 FREE RELATED HOT WORK

PQS QUALIFIED FIRE WATCHES ASSIGNED

LOCATIONS	PRINT NAME/RATE	SIGNATURE* (UPON COMPLETION)

TIME SECURED _____

*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.

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 _____

OPNAV 5100/16 (5-91) S/N 0107-LF-01-7400

TEST RESULTS

TESTS CONDUCTED AS REQUIRED	INITIAL TEST	1ST RETEST	2ND RETEST
OXYGEN			
COMBUSTIBLE GAS			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			

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			
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 _____

CO SIGNATURE, if required _____

RECERTIFICATION

1ST RETEST/UPDATE

TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE _____

2ND RETEST/UPDATE

TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE _____

GAS FREE RELATED HOT WORK

PQS QUALIFIED FIRE WATCHES ASSIGNED

LOCATIONS	PRINT NAME/RATE	SIGNATURE* (UPON COMPLETION)
2-120-0-C	FN TIMMY	I.B.Timmy
2-040-0-Q	EN3 SMITH	D. Smith
3-080-0-E	GSEFN JACK	J Jack

TIME SECURED 1718

*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.

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

HOT WORK OPERATOR SIGNATURE J

HOT WORK SUPERVISOR J Phillips

FIRE MARSHAL W Curry

O'Band

o

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 FREE RELATED HOT WORK

PQS QUALIFIED FIRE WATCHES ASSIGNED

LOCATIONS	PRINT NAME/RATE	SIGNATURE* (UPON COMPLETION)

TIME SECURED _____

*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.

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	1ST RETEST	2ND RETEST
OXYGEN			
COMBUSTIBLE GAS			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			
TOXIC TYPE:			

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			
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 _____

CO SIGNATURE, if required _____

RECERTIFICATION

1ST RETEST/UPDATE

TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE _____

2ND RETEST/UPDATE

TIME: _____ DATE: _____ EXPIRES: _____

GFE PERSONNEL SIGNATURE _____

NOTE: THIS INSPECTION INDICATES THE CONDITIONS WHICH EXISTED AT THE TIME 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 _____

When is CO's Signature Required?

- Gas Freeing an IDLH Space
- Gas Freeing for Civilian Contractors
- Gas Freeing for Foreigner Overseas
- Hot Work within 5 ft of a Magazine

Distribution

- All Accesses to the Space
- GFE Files (original)
- Division Requesting Services
- DC Central
- Officer of the Deck (Inport or Underway)

* **Must be Kept for 1 yr Minimum**

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

LOG OF INSPECTIONS AND TESTS BY COMPETENT PERSON

(See other side for instructions)

Date

Job. No.

Vessel SUSAN TWO Type TANK VESSEL MSA 260 Berth #3 Dry Dock Report No.

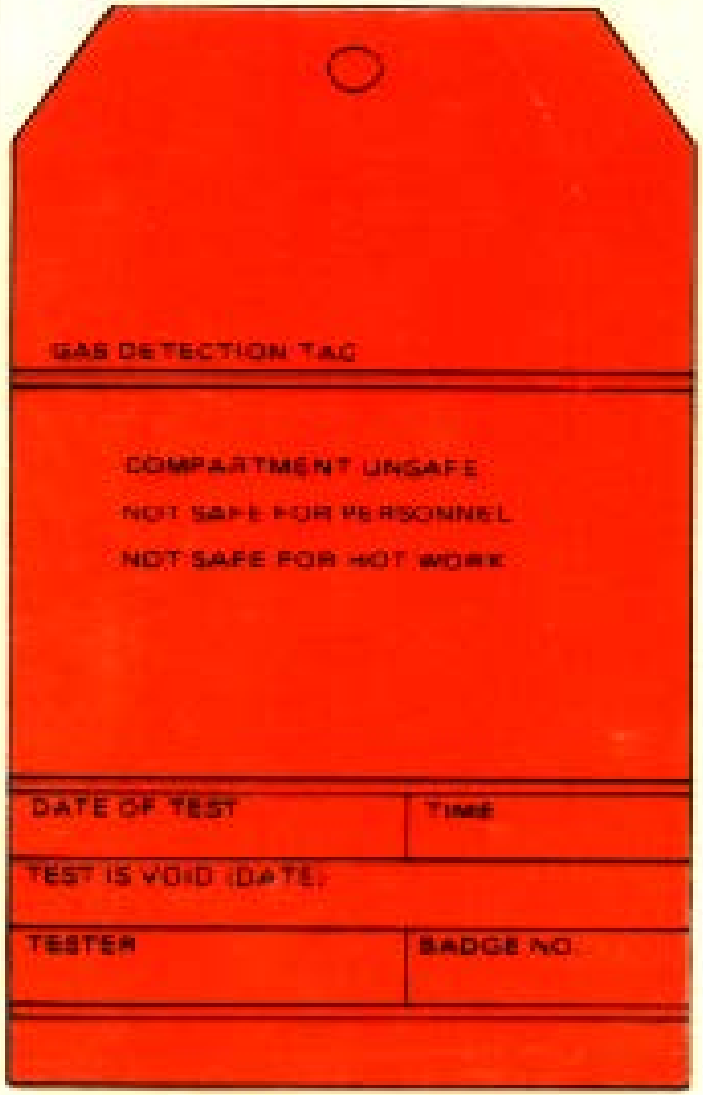
Name of Space (Last Cargo)	Operation	Date	Time	Result of Test (Instrument Used)	Instructions	Initial
#1 TANK	Repair	9/13/88	0700	O_2 - 21% LEL - 0%	Safe for Workers Safe for Hot Work	JD
#2 P, S TANK	"	9/13/88	0700	"	Maintain Ventilation	JD
#3 P, S TANK	"	9/13/88	0700	"		JD

GAS DETECTION TAGS/ NFPA GAS FREE CERTIFICATE

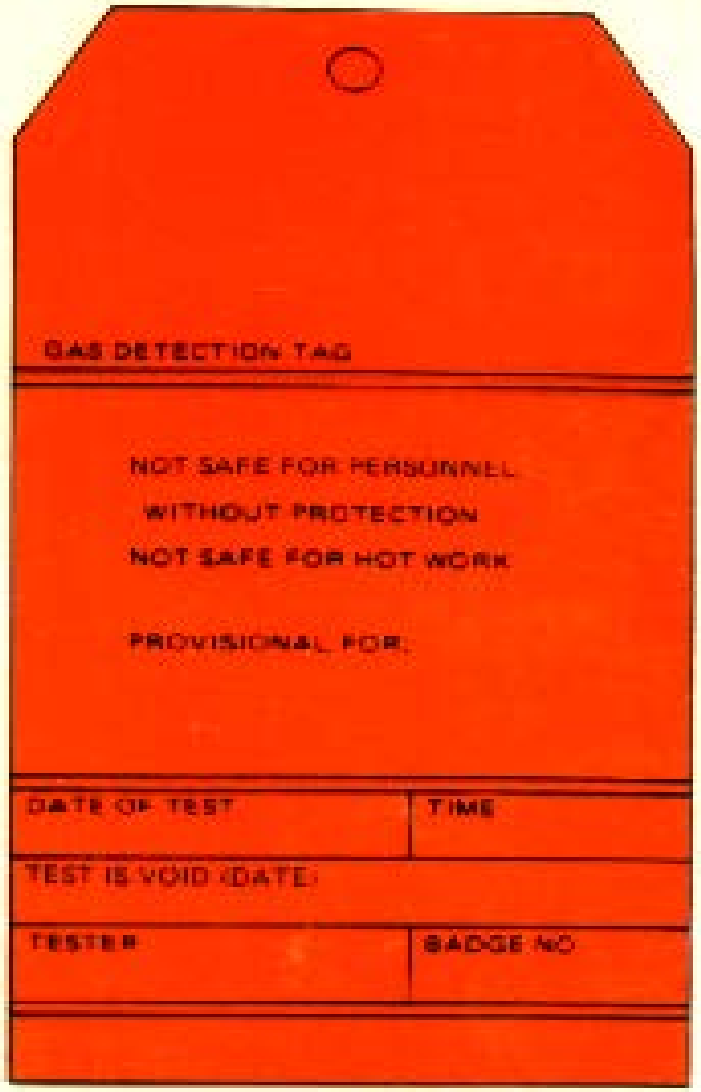
- **CIVILIAN CONTRACTOR FORMS**
  - **Used to record Gas Free results**
  - **NOT valid for your ships personnel**
  - **ONLY if it is for QA**

Form OSHA-74
February 1973

GAS DETECTION TAGS

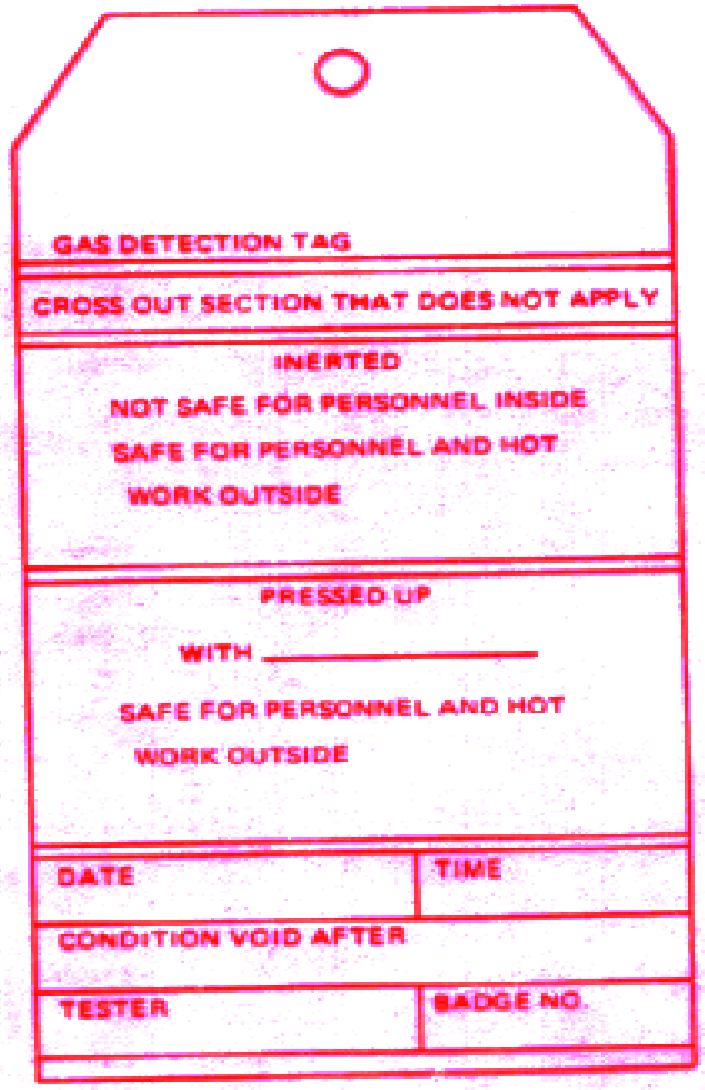


1 – RED BACKGROUND
BLACK LETTERING

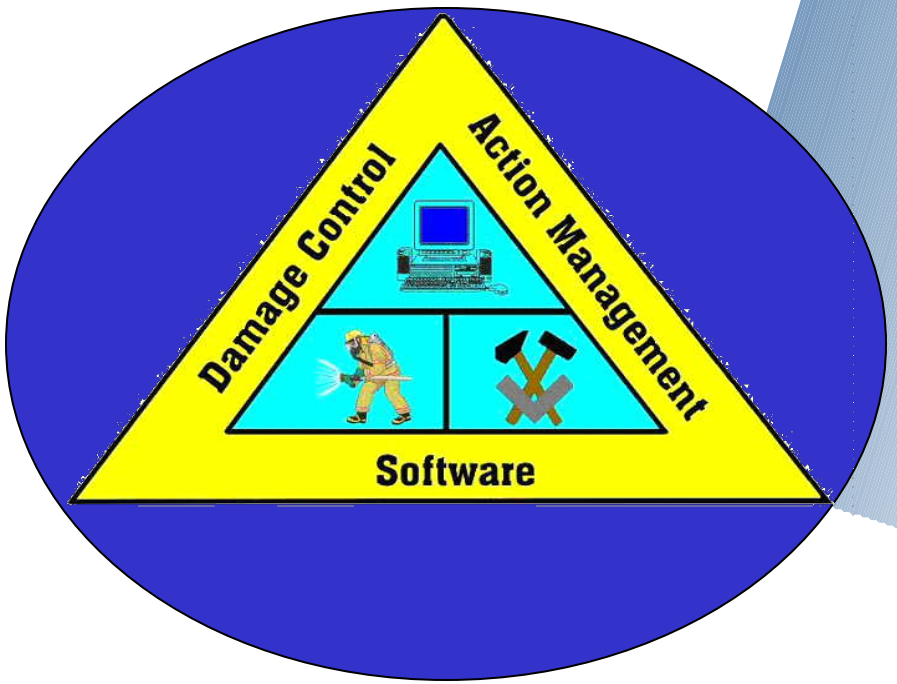


2 - ORANGE BACKGROUND
BLACK LETTERING

GAS DETECTION TAGS



5-WHITE BACKGROUND
RED LETTERING



DCAMS

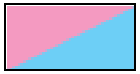
GFE/FM MODULE

KEY

LIQUID LOAD COLOR CODE FOR eDCAMS OVERLAYS

“TANKS”

PINK – JP-5 TANKS NOT REQUIRED TO BE BALLASTED

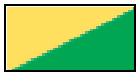


PINK /BLUE – JP-5 TO BE BALLASTED

PINK STRIPES – JP-5 SERVICE TANKS

YELLOW STRIPES– FUEL OIL SERVICE TANKS AND SETTLING TANKS

YELLOW – FUEL OIL TANKS NOT REQUIRED TO BE BALLASTED



YELLOW/GREEN – FUEL OIL TANKS TO BE BALLASTED

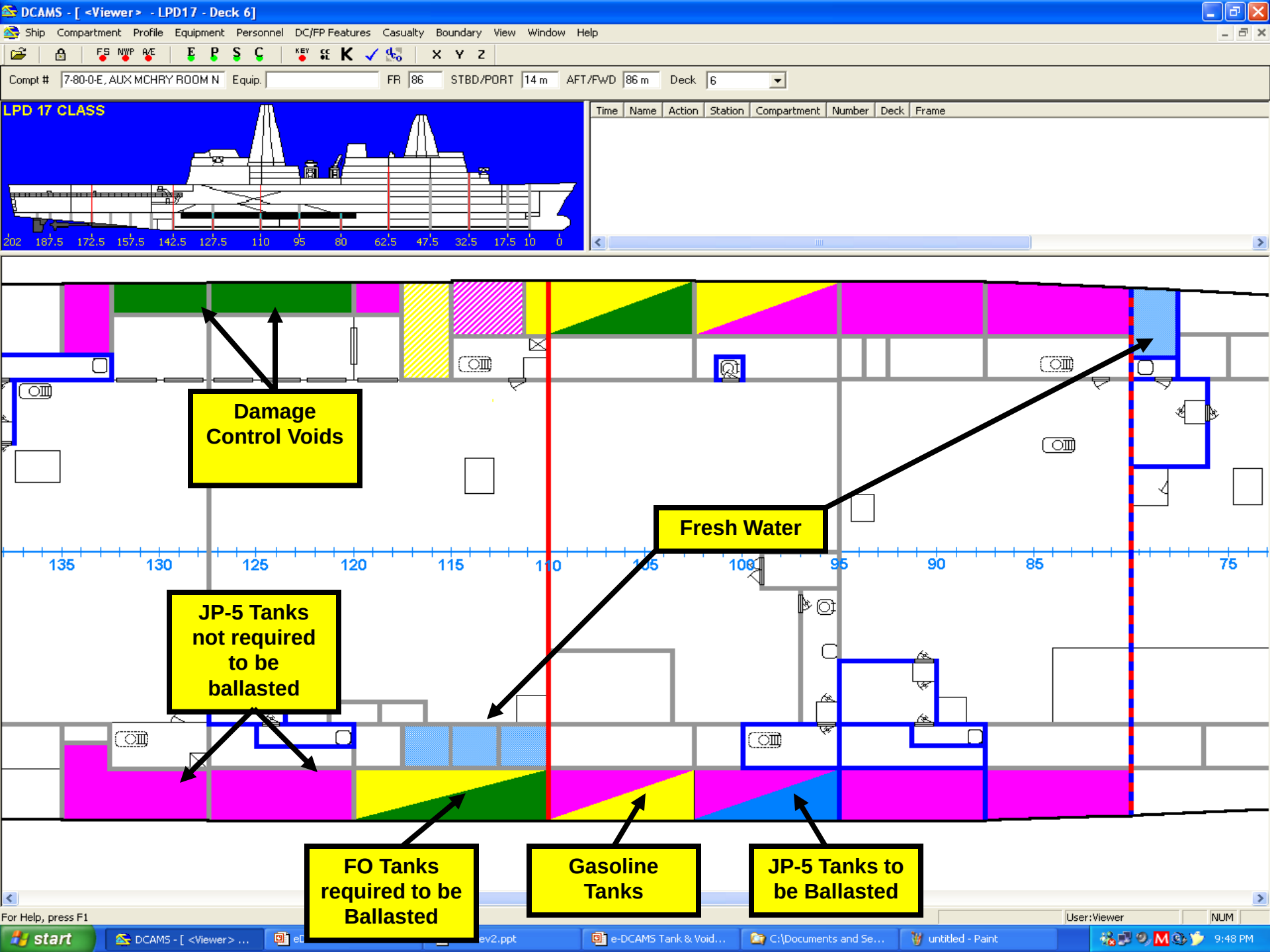
BLUE – FRESH WATER TANKS

YELLOW/PINK – GASOLINE TANKS

BLUE STRIPES – RESERVE FEED WATER TANKS

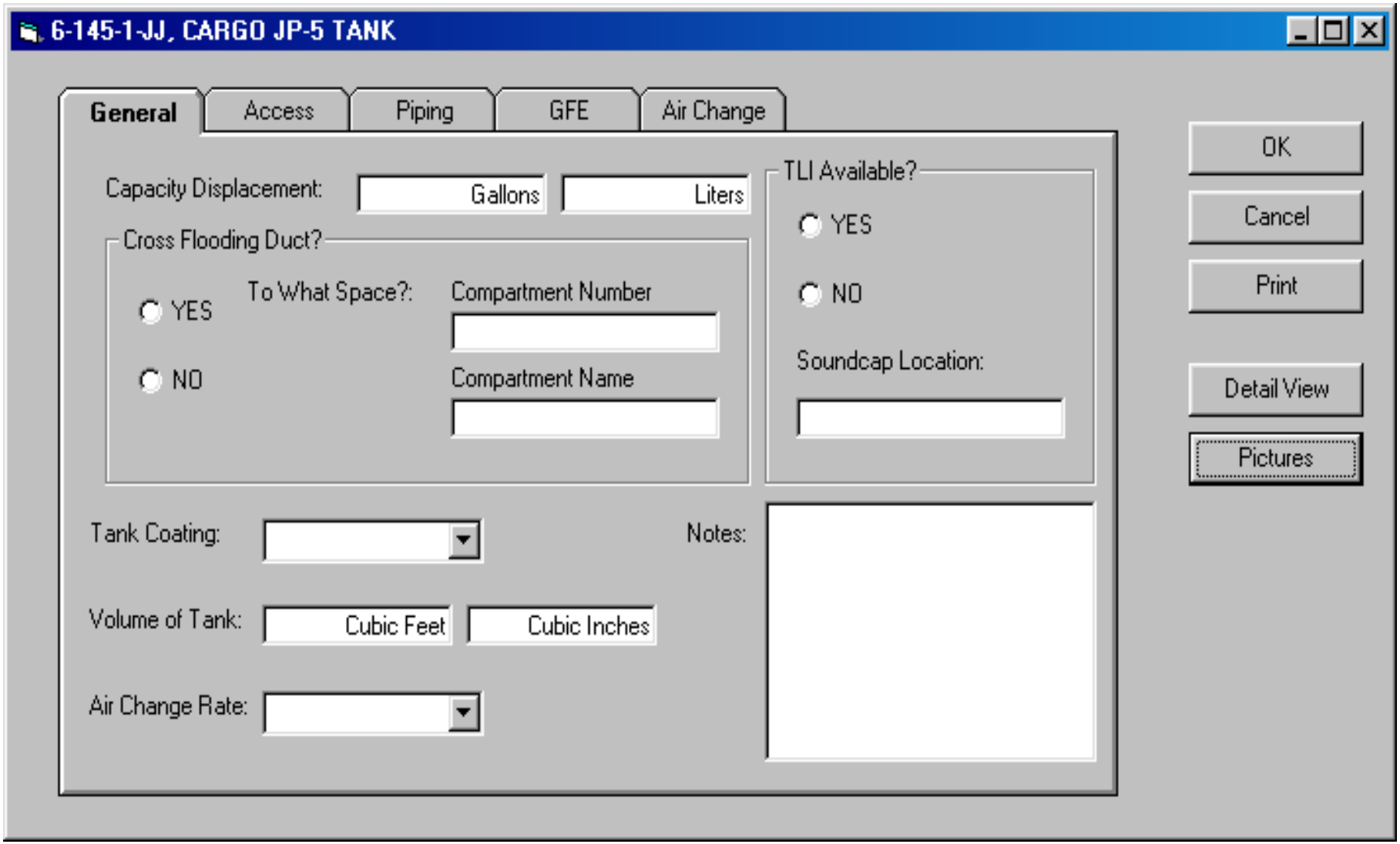
GREEN – DAMAGE CONTROL VOIDS

VOIDS OR OTHER SPACES (OVERLAY TO BE DETERMINED)


DCAMS - [<Viewer> - LPD17 - Deck 6]
Ship Compartment Profile Equipment Personnel DC/FP Features Casualty Boundary View Window Help
Compt # 7-80-0-E, AUX MCHRY ROOM N Equip. FR 86 STBD/PORT 14 m AFT/FWD 86 m Deck 6
LPD 17 CLASS
202 187.5 172.5 157.5 142.5 127.5 110 95 80 62.5 47.5 32.5 17.5 10 0
Time Name Action Station Compartment Number Deck Frame
Damage Control Voids
Fresh Water
135 130 125 120 115 110 105 100 95 90 85 75
JP-5 Tanks not required to be ballasted
FO Tanks required to be Ballasted
Gasoline Tanks
JP-5 Tanks to be Ballasted
For Help, press F1
User:Viewer
NUM
start
DCAMS - [<Viewer> ...
e-DCAMS Tank & Void...
C:\Documents and Se...
untitled - Paint
9:48 PM

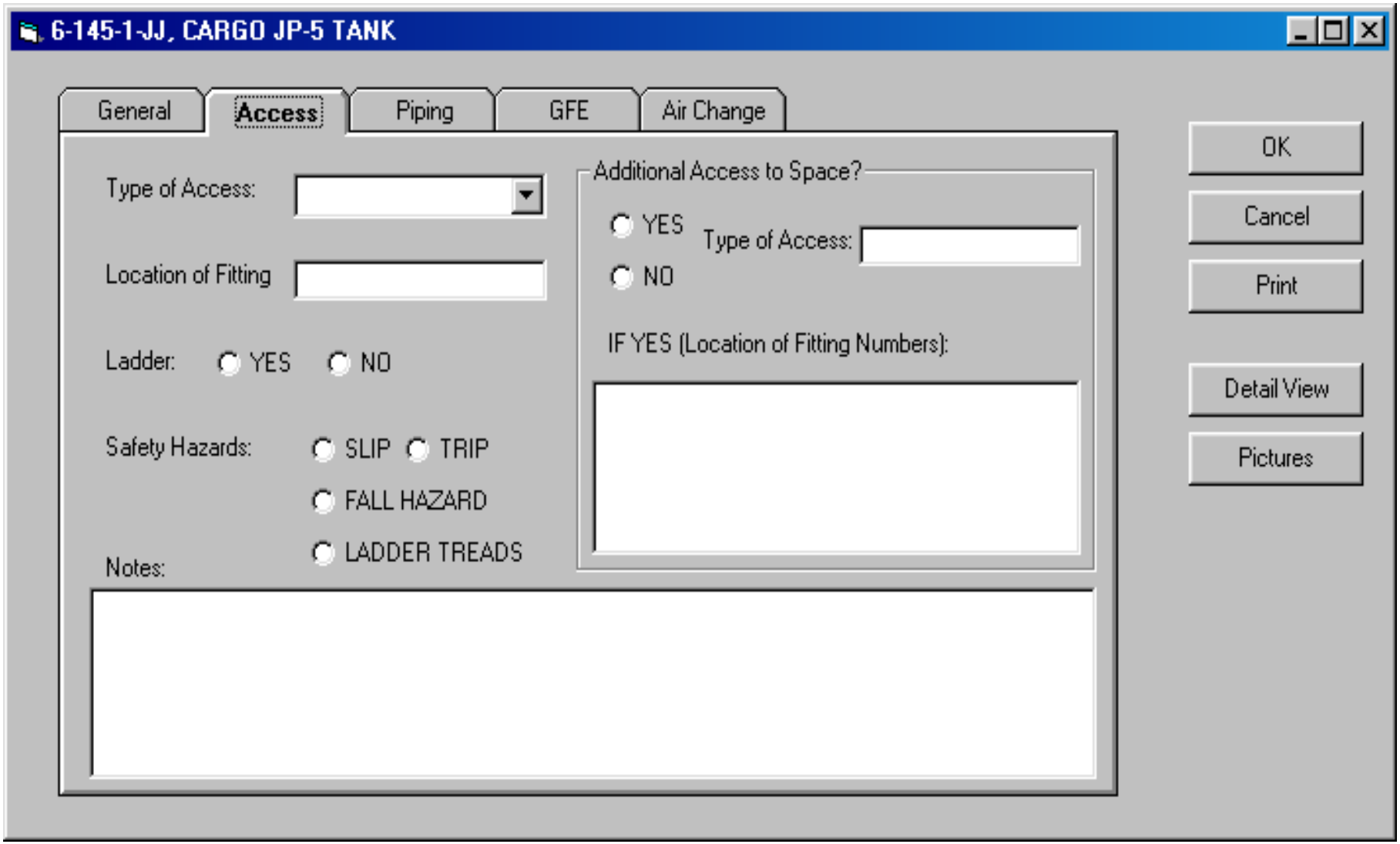
TANK & VOID COMPARTMENT INFO

TAB 1 0f 5



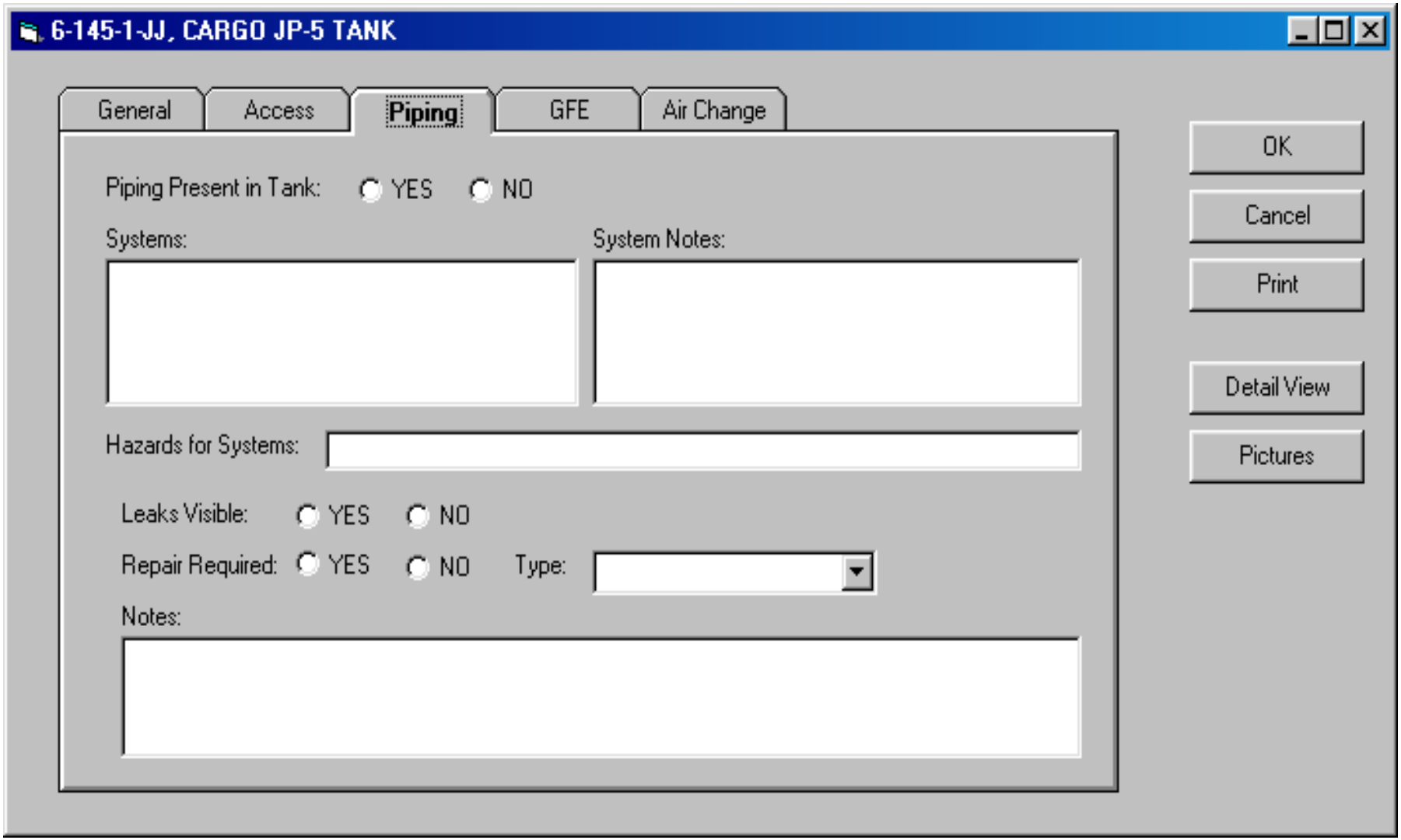
TANK & VOID COMPARTMENT INFO

TAB 2 0f 5



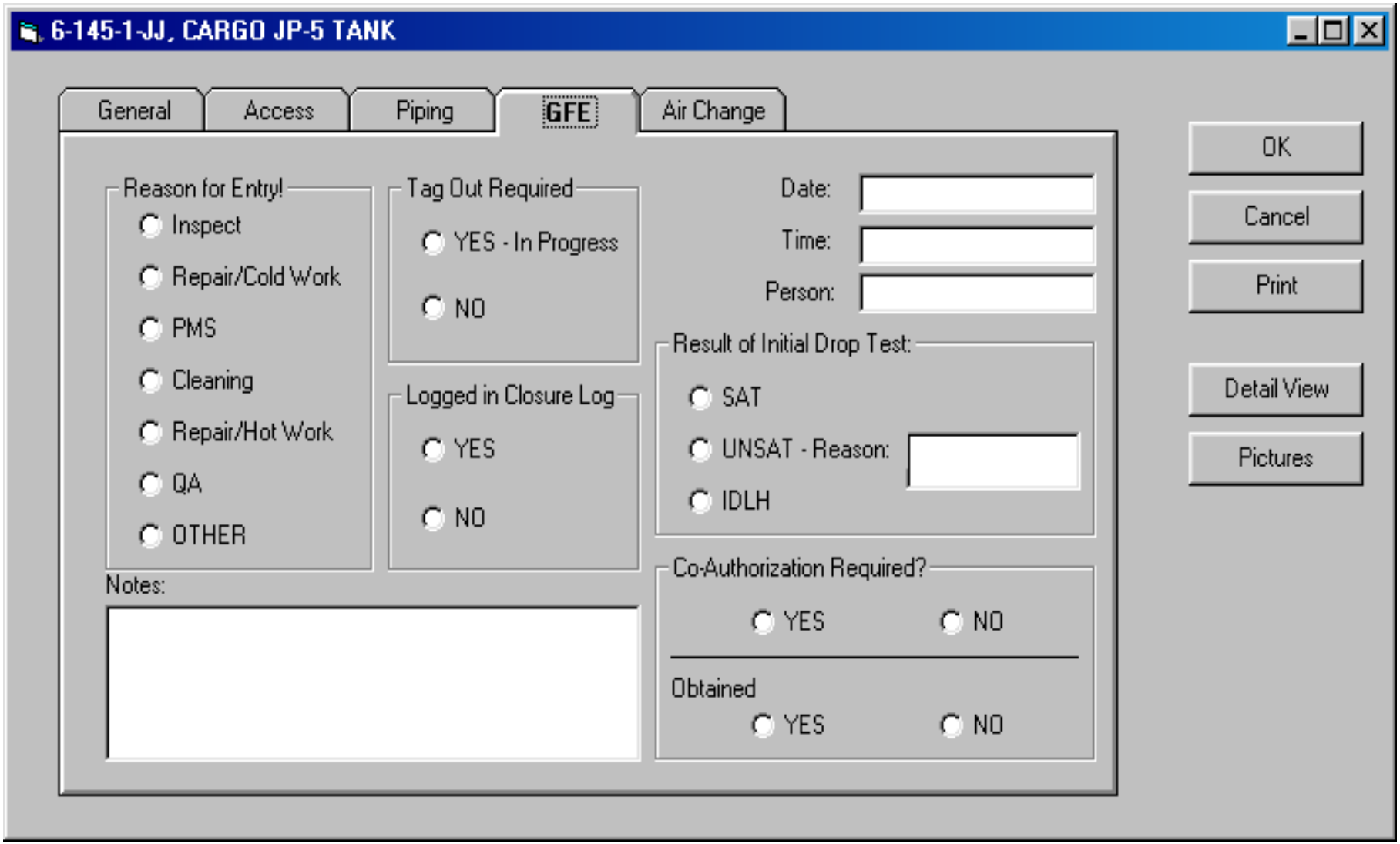
TANK & VOID COMPARTMENT INFO

TAB 3 0f 5



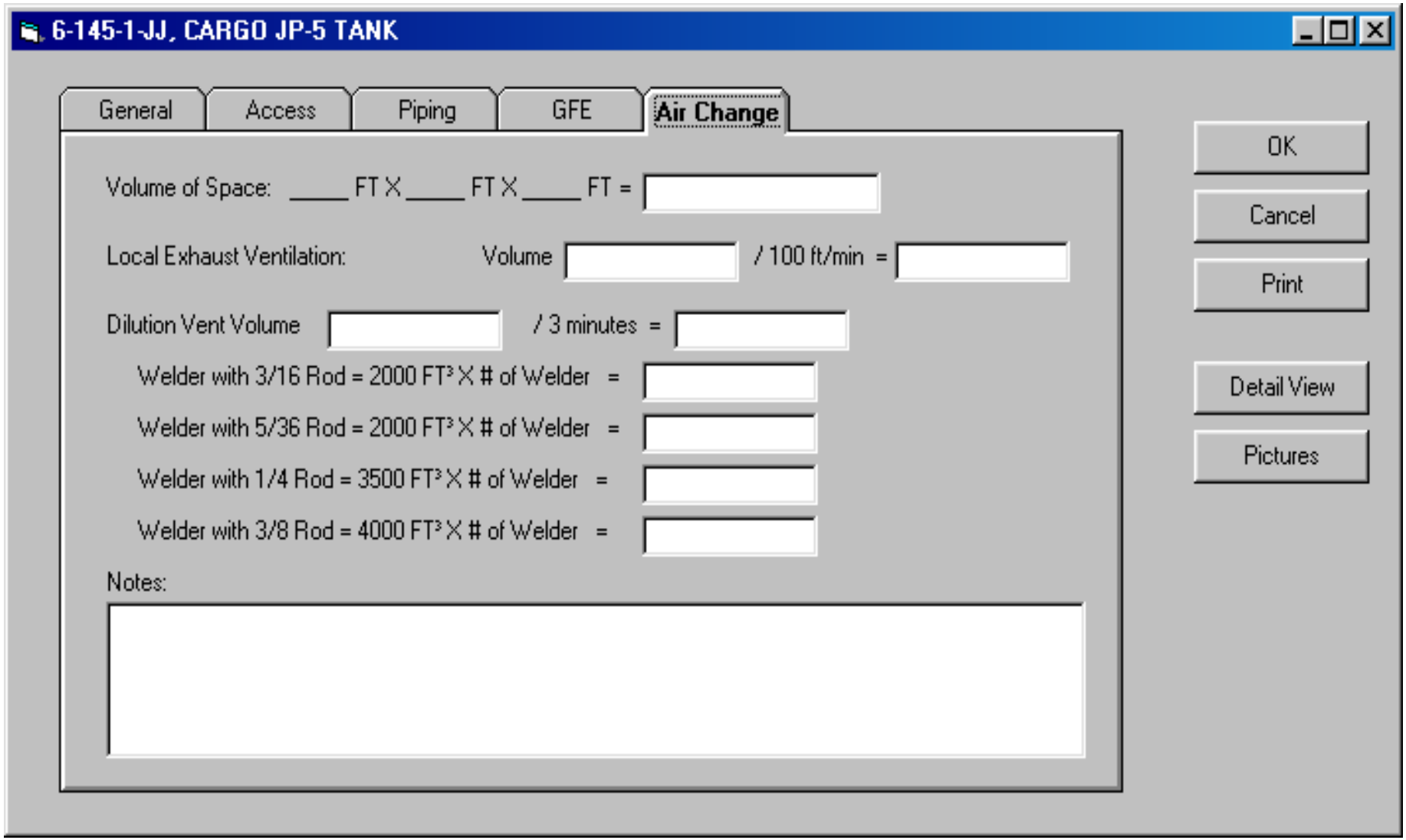
TANK & VOID COMPARTMENT INFO

TAB 4 0f 5



TANK & VOID COMPARTMENT INFO

TAB 5 0f 5



SAFETY / FIRE MARSHALL ICONS

GAS FREE ENGINEERING

HOT WORK

COLD WORK

IDLH

PAINTING

VENTILATION

HAZMAT IN USE

WARNING

AREA SECURE

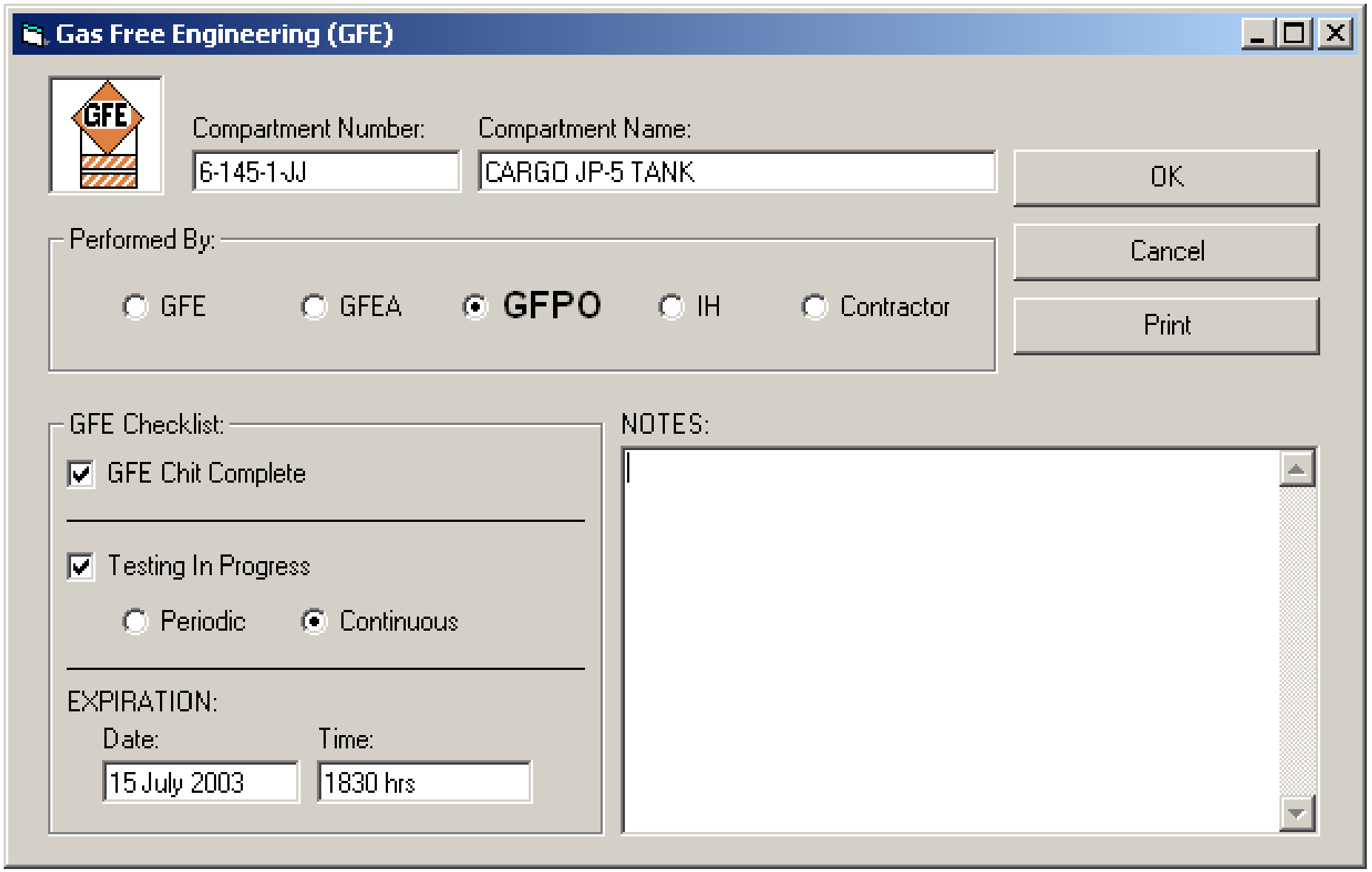
STOP

FIELD ACTIVITY

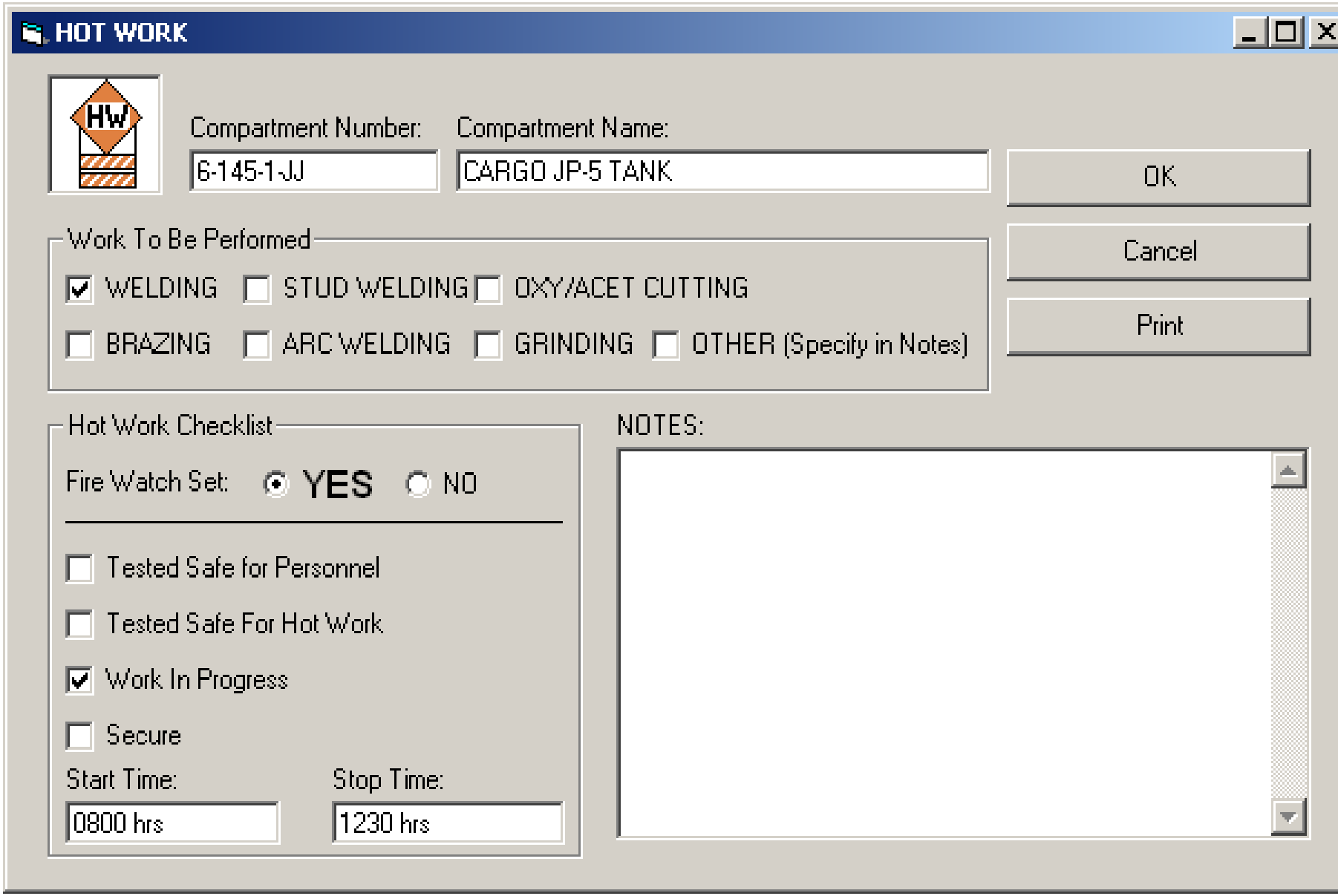
CONTRACTORS

SHIPS FORCE

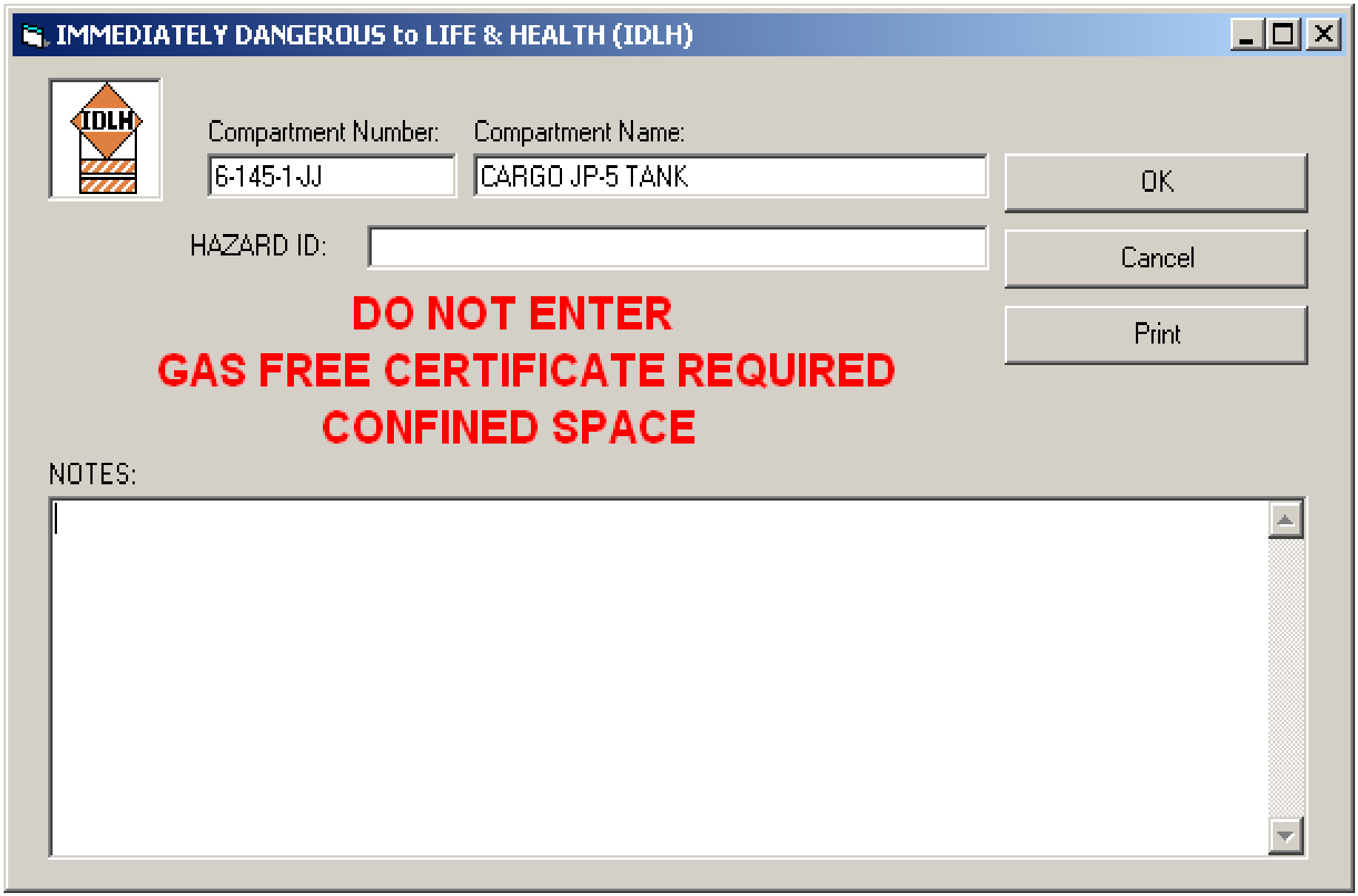
GAS FREE ENGINEERING



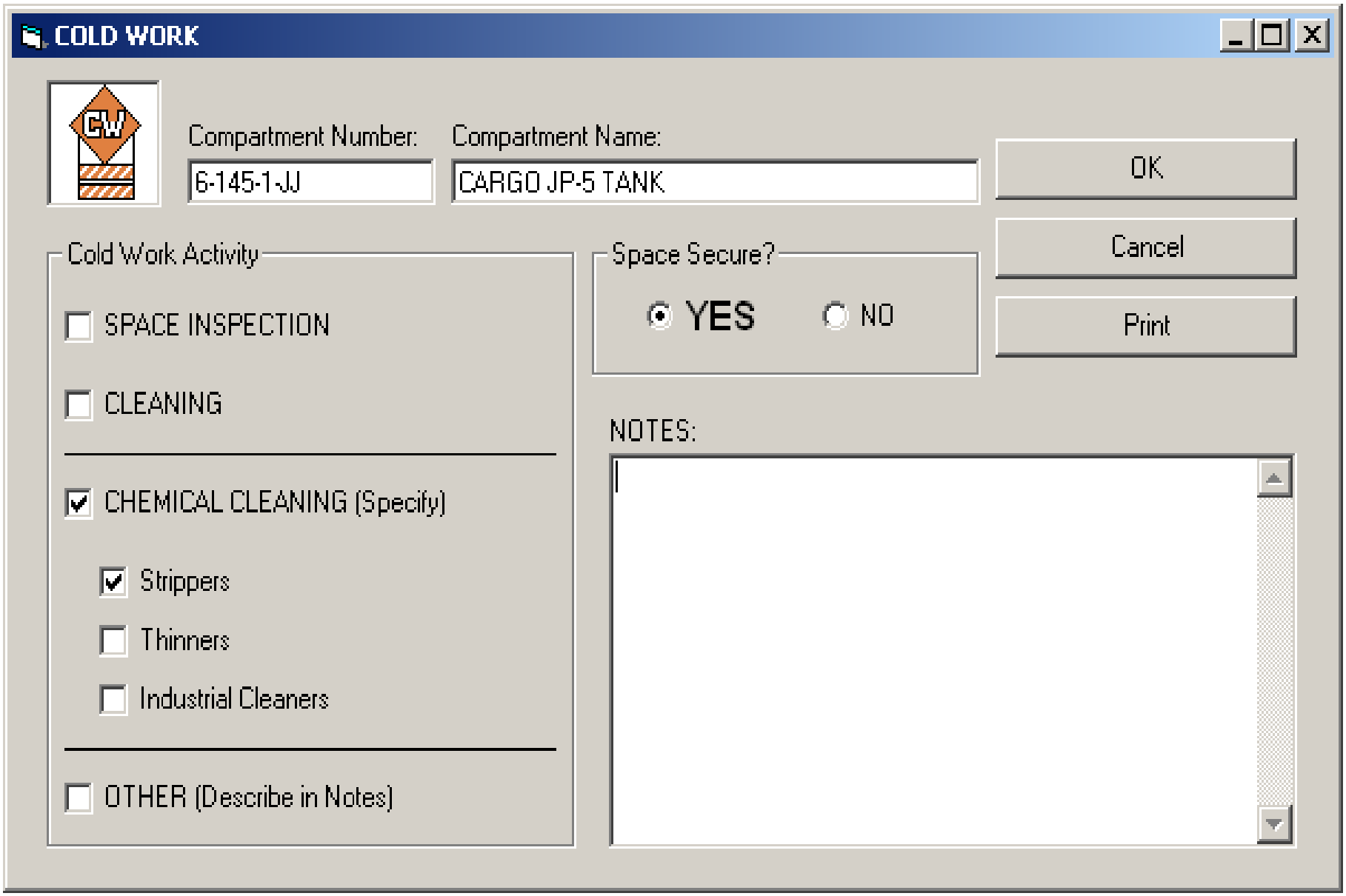
HOT WORK


HOT WORK
HW
Compartment Number:
6-145-1-JJ
Compartment Name:
CARGO JP-5 TANK
OK
Cancel
Print
Work To Be Performed
WELDING
STUD WELDING
OXY/ACET CUTTING
BRAZING
ARC WELDING
GRINDING
OTHER (Specify in Notes)
Hot Work Checklist
Fire Watch Set:
YES
NO
Tested Safe for Personnel
Tested Safe For Hot Work
Work In Progress
Secure
Start Time:
0800 hrs
Stop Time:
1230 hrs
NOTES:

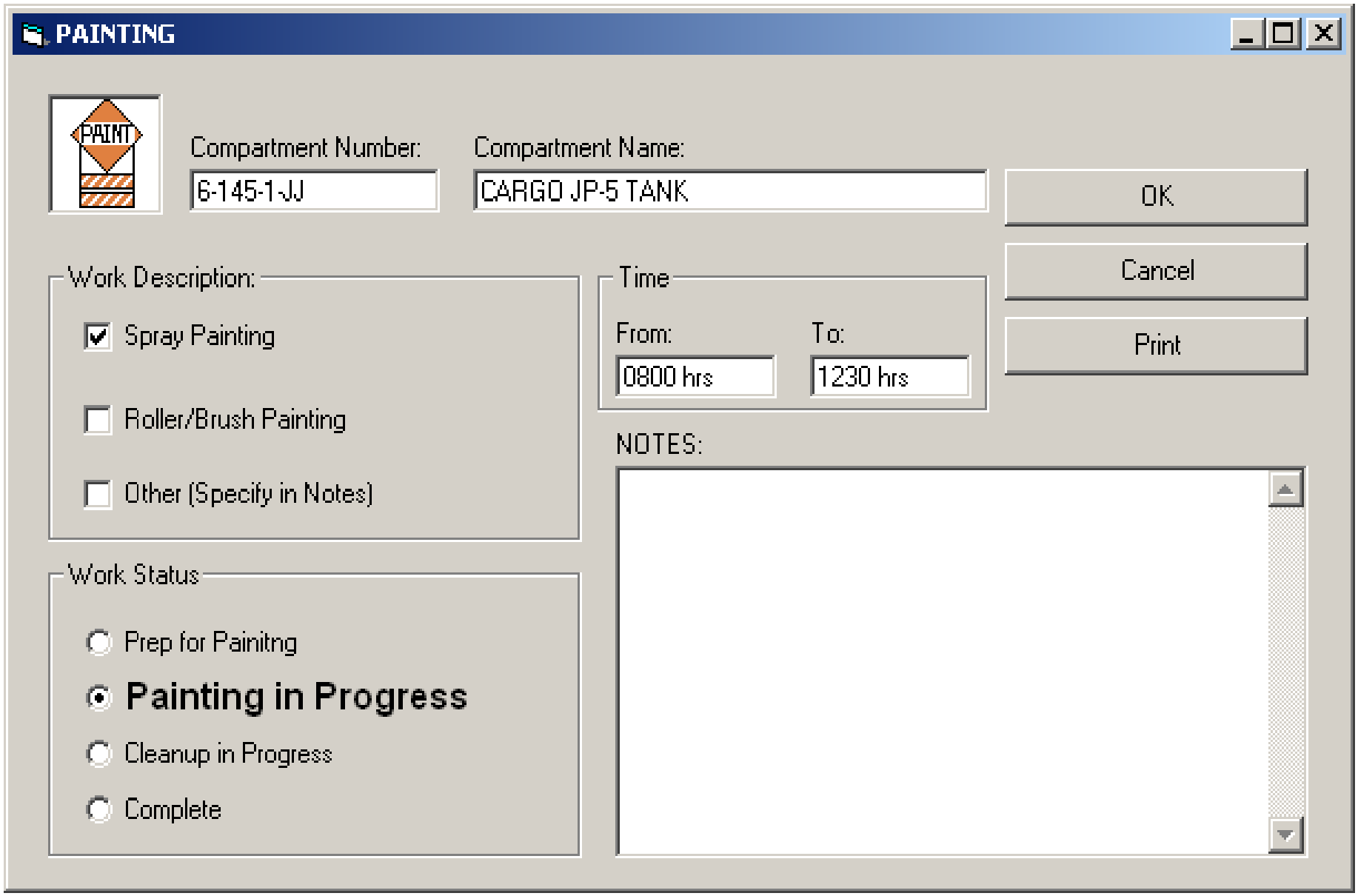
IDLH


IMMEDIATELY DANGEROUS to LIFE & HEALTH (IDLH)
IDLH
Compartment Number:
6-145-1-JJ
Compartment Name:
CARGO JP-5 TANK
OK
HAZARD ID:
Cancel
Print
DO NOT ENTER
GAS FREE CERTIFICATE REQUIRED
CONFINED SPACE
NOTES:

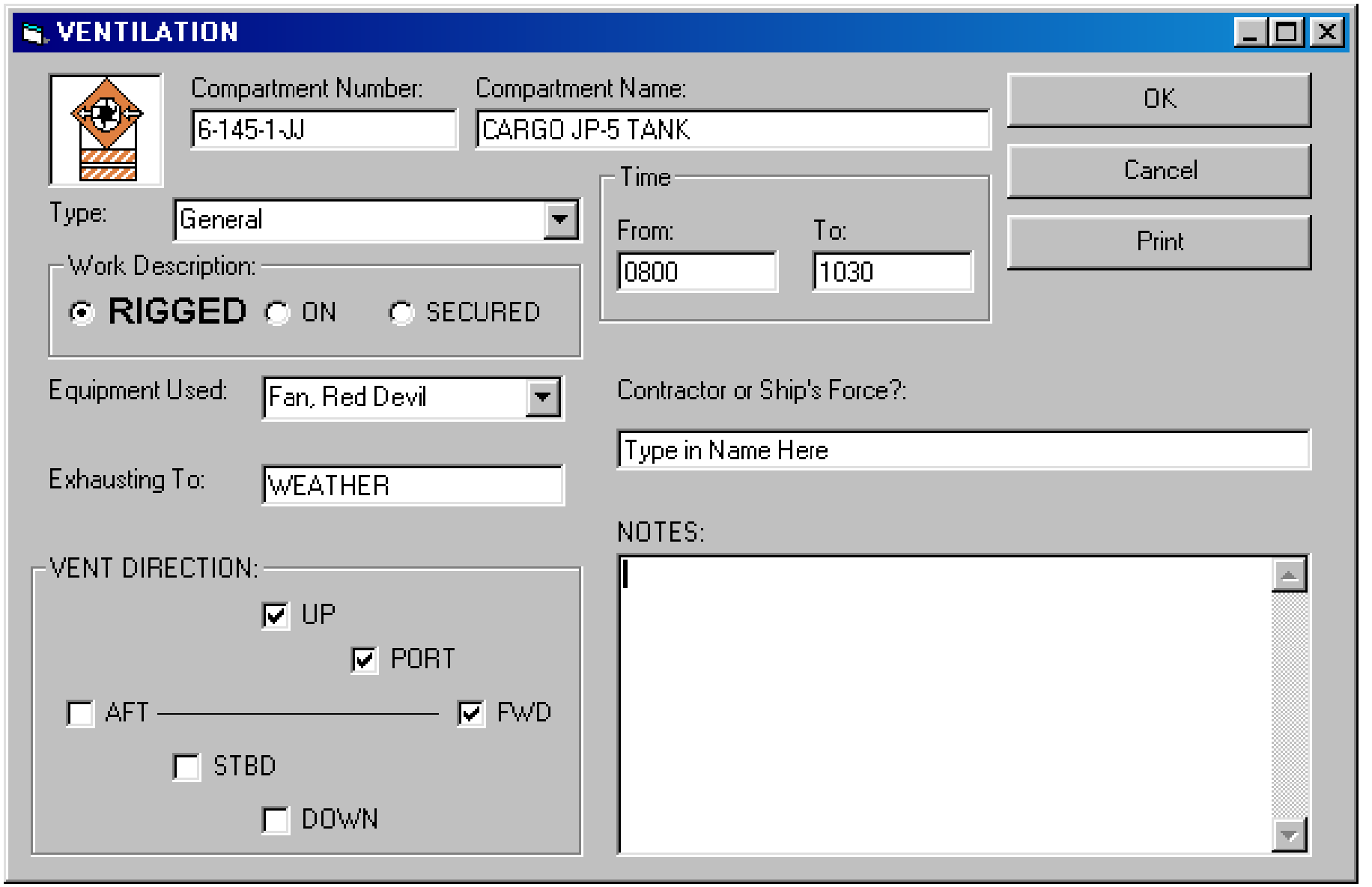
COLD WORK


COLD WORK
CW
Compartment Number:
6-145-1-JJ
Compartment Name:
CARGO JP-5 TANK
OK
Cancel
Print
Cold Work Activity
SPACE INSPECTION
CLEANING
CHEMICAL CLEANING (Specify)
Strippers
Thinners
Industrial Cleaners
OTHER (Describe in Notes)
Space Secure?
YES
NO
NOTES:

PAINTING


PAINTING
PAINT
Compartment Number:
6-145-1-JJ
Compartment Name:
CARGO JP-5 TANK
OK
Cancel
Print
Work Description:
Spray Painting
Roller/Brush Painting
Other (Specify in Notes)
Time
From:
0800 hrs
To:
1230 hrs
NOTES:
Work Status
Prep for Painitng
Painting in Progress
Cleanup in Progress
Complete

VENTILATION



HAZMAT IN USE

HAZMAT

Compartment Number: 6-145-1-JJ

Compartment Name: CARGO JP-5 TANK

OK

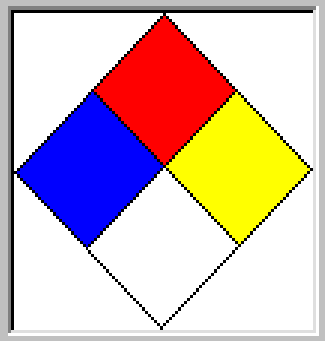
Cancel

Print

4 - Below 73 deg. F
3 - Below 100 deg. F
2 - Below 200 deg. F
1 - Above 200 deg. F
0 - Will Not Burn

Notes:

4 - Deadly
3 - Extreme Danger
2 - Hazardous
1 - Slightly Hazardous
0 - Normal Material



4 - May Detonate
3 - Shock & Heat May Detonate
2 - Violent Chemical Change
1 - Unstable if Heated
0 - Stable

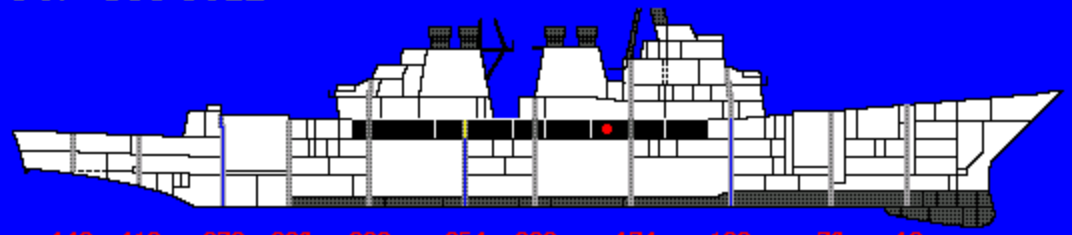
OXY - Oxidizer
Acid - Acid
Alk - Alkali
Cor - Corrosive
-W- - Water

DCAMS - [<Viewer> - DDG67 - Deck 1]

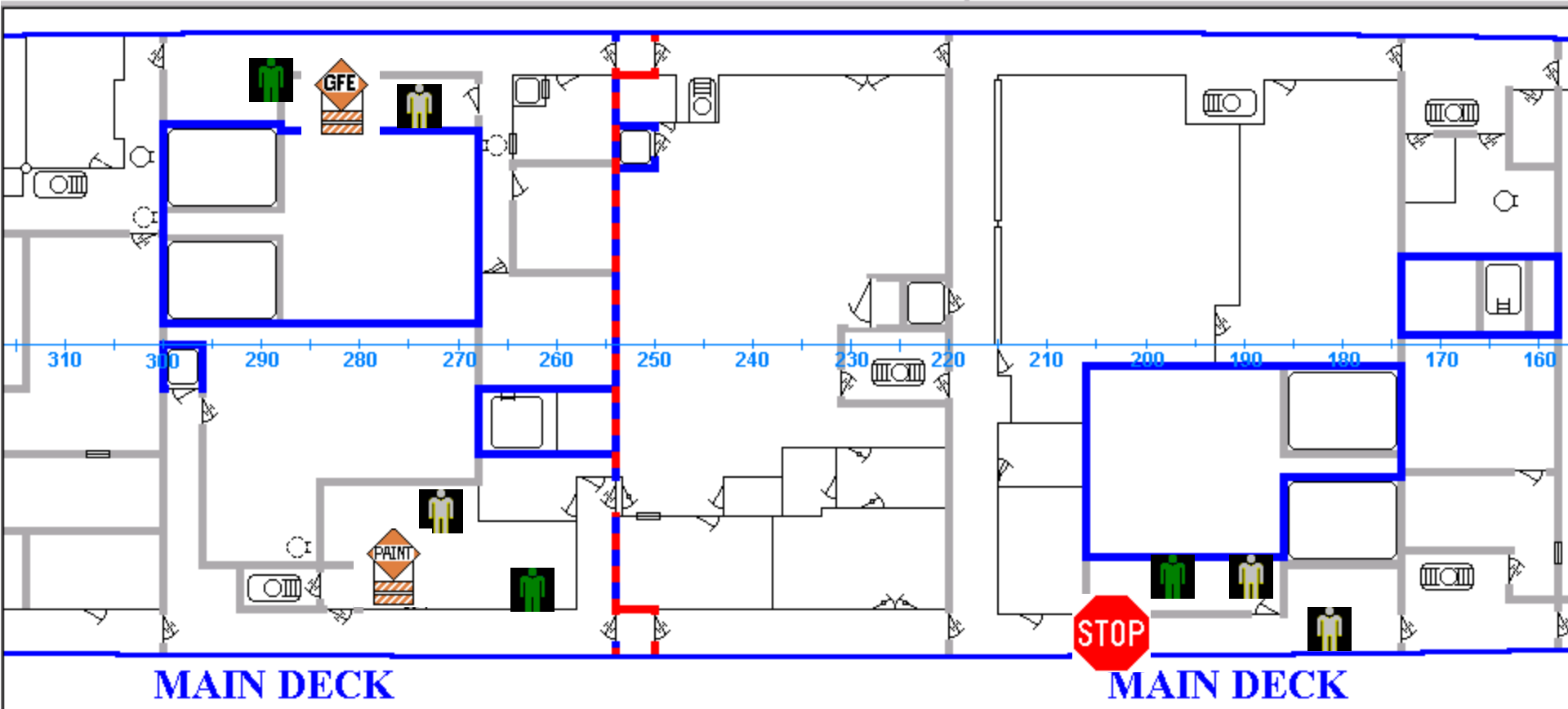
Ship Compartment Profile Equipment Personnel DC/FP Features Casualty Boundary View Window Help

Compt # Equip. FR STBD/PORT AFT/FWD Deck 1

DDG 67 - USS COLE



Time	Name	Action	Station	Compartment
1708	Fire	Added	DCRS 2	CREW/CHIEF PETTY
1709	Fire	Status Engaged	DCRS 2	CREW/CHIEF PETTY
1709	Fire	Status No	DCRS 2	CREW/CHIEF PETTY
1710	Attack Team	Added	DCRS 2	CPO MESSROOM & LC
1710	Casualties	Added	DCRS 2	CPO MESSROOM & LC



Questions…? Summary!

We discussed Forms, Records, Logs, Certificate Categories and Distribution

Review Questions…

- What are the Requirements for a Space to be Considered “**Safe for Personnel/Safe for Hot Work**”?

~ **19.5% < O2 < 22%**

~ **Toxics < PEL**

~ **All Flammables Removed**

~ **Boundary Spaces Protected**

Question # 2…

- When is the CO's Signature Required on a Gas Free Certificate?

~ **Gas Freeing for a Civilian**

~ **Gas Freeing an IDLH Space**

~ **Hot Work within 5 feet of a magazine**

Question # 3

- What is the Distribution for GFE Certificates?

~ Gas Free Log

~ DC Central

~ All Accesses to the Space

~ Division Requesting Work

~ OOD