



VIRGINIA SHIP
REPAIR ASSOCIATION

VSRA
21st ANNUAL
SAFETY & HEALTH
SEMINAR

26 October 2016



VIRGINIA SHIP
REPAIR ASSOCIATION

Hot Work

The Good – The Bad

“THE UGLY”

MARMC Environmental
Health & Safety Director
Frank S. Walker
email: frank.s.walker@navy.mil
phone: (757)641-5933



THE GOOD

"VSRA"

The Strength Behind the Fleet

The Strength Behind VSRA?

YOU



THE GOOD

"SSRAC"

Standard Specifications for Ship
Repair and Alteration Committee

"NAVSEA STANDARD ITEMS"

THE GOOD

"OSHA"

To protect workers' safety and health, on December 29, 1970 President Nixon signed into law the Occupational Safety and Health Act .

The purpose of the legislation was to "assure so far as possible every working man and woman in the Nation safe and healthful working conditions"

WHAT IS HOT WORK?

OSHA 1917.152(a)

Definition. "Hot work" means riveting, welding, flame cutting or other fire or spark-producing operation.

Expanding on OSHA's definition, hot work means welding, brazing, cutting, soldering, thawing pipes, using heat guns, or the use of spark-producing power tools, such as drilling or grinding.

1.1 Title: Confined Space Entry, Certification, Fire Prevention and Housekeeping; accomplish

3.2 Provide a written notice for each job or separate area of hot work aboard ship.



VIRGINIA SHIP
REPAIR ASSOCIATION

VSRA Hot Work Permit

(Permit developed in 2016 by VSRA members)

Special thanks to Tom Binner and Dawn Kriz for leading this port wide safety effort.



HOT WORK PERMIT

References: NFPA 51B / 306 / OSHA 1915
NAVSEA Standard Form 009-07 & 009-08

This Hot Work Permit is effective for 24 hours unless a shorter period of time is specified, or conditions change. Loss of gas free status in the location(s) below cancels this Hot Work Permit.

**Permit Expiration
Date & Time:**

Insert Company Name / Logo

FORM NUMBER:

Section I: Hot Work Permit Supervisor Request

Start Date:	Start Time:	Permit Expiration Date & Time:	Note: This Hot Work Permit is effective for a maximum of 24 hours from start date & time.	
Ship or Vessel:	Trade:			
Compartment Name:	Compartment Type: <input type="checkbox"/> Confined <input type="checkbox"/> Enclosed <input type="checkbox"/> Open			
Compartment #:	Location in Compartment: <input type="checkbox"/> Deck <input type="checkbox"/> Bulkhead <input type="checkbox"/> Overhead <input type="checkbox"/> Stanchion			
Ship's Contract #:	Rigging System: <input type="checkbox"/> Upper LVL <input type="checkbox"/> Mid LVL <input type="checkbox"/> Lower LVL			
Ship's Item #:	Marine Chemist Certificate (MCC) Shipyard Competent Person (SCP) Required in Space or Adjacent Space or System: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Risc Watch Count:	Safety/MCC/SCP Instructions / Gas Free Scope & Log:			
Lock Out Tag Out Required? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Adjacent/Affected Space Name & Compartment Number:	Current Gas Free Status:	Entry with Restrictions? (List Restrictions):	Type of Work:	
Scope of Work:	<input type="checkbox"/> Not Required <input type="checkbox"/> Safe for Workers <input type="checkbox"/> Not Safe for Workers <input type="checkbox"/> Safe for Hot Work <input type="checkbox"/> Limited Hot Work <input type="checkbox"/> Inerted Atmosphere <input type="checkbox"/> Enter with Restrictions <input type="checkbox"/> Not Safe for Hot Work	<input type="checkbox"/> Grinding <input type="checkbox"/> Brazing <input type="checkbox"/> Welding <input type="checkbox"/> Stainless Welding <input type="checkbox"/> Air Arcing <input type="checkbox"/> Cutting	<input type="checkbox"/> Sizing <input type="checkbox"/> Brush & Roll <input type="checkbox"/> Spray <input type="checkbox"/> Other (List below):	
Sign Name:	Sign Signature:	Sign Badge:	Sign Phone #:	

Section II: Hot Work Operator (HWO) / Fire Watch (FW) / Permit Authorizing Individual (PAI) Shift Condition Verification

[II.A] HWO to complete. Each FW to validate, and PAI to verify conditions 1-11 below prior to the start of hot work.	HWO Verify Each Shift						PAI Verify (Initials)		
	1st		2nd		3rd		Shift		
	SAT	N/A	SAT	N/A	SAT	N/A	1st	2nd	3rd
1. Compliant fire extinguisher(s) (real, pin, tag, & charged).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
2. Work areas clear of combustibles (5FT) & clear of flammable liquids (50 FT).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
3. The SCP log has been updated daily or as often as necessary to maintain atmospheric conditions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
4. MCC Gas Free Log/Gas Free Work Scope specified, read & verified by each HWO & FW.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
5. Qualified FW assigned (must have proof of qualification).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
6. HWO ensures FW has immediate access, and established communications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
7. Ensure proper working ventilation established in all required areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
8. Paint removed a minimum of 4 inches from hot work on all affected surfaces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
9. Lagging removed a minimum of 12 inches from the area of hot work & remaining lagging is covered.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
10. No hot work within 50 feet of dust collector, fuel oil or flammable liquid storage locker.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
11. HWO verifies Lockout Tagout(s) (if required).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
[II.B] Each FW must verify HWO II.A conditions and fill in the rows below. PAI must validate and authorize PRIOR to work start.									
Shift	Name (Last, First) & Company Name	Badge #	Signature	Time	Comments				

Directions: (1) Provide a copy to: PAI, Supervisor & Ship's Designated Representative. (2) Post a copy at worksite.

FORM 009-07-13 REVISED 01/2013
Page 1



HOT WORK PERMIT

References: NFPA 51B / 306 / OSHA 1915
NAVSEA Standard Form 009-07 & 009-08

This Hot Work Permit is effective for 24 hours unless a shorter period of time is specified, or conditions change. Loss of gas free status in the location(s) below cancels this Hot Work Permit.

**Permit Expiration
Date & Time:**

Insert Company Name / Logo

FORM NUMBER:

[II.C] After validating II.A conditions, HWO must fill in the rows below. PAI must validate and authorize PRIOR to work start.

Shift	Name	Badge #	Signature	Time	Qualification Date	Comments

[II.D] PAI must verify the conditions listed in II.A are satisfactory and fill in the rows below to authorize the start of hot work.

Shift	Name	Badge #	Signature	Time	Comments

Section III: PAI Surveillance (Conduct a minimum of ONE Surveillance per shift while work is in progress to ensure conditions have not changed).

Shift	Time	PAI Name	PAI Badge#	PAI Signature	Comments

Section IV: Hot Work Supervisor (HWS) End of Shift Inspection

An inspection of the hot work area must be conducted 30 minutes after completion of the hot work & the final action required to close this permit (1915.504(c)(2)(v)). Remain in the hot work area for at least 30 minutes after completion of the hot work, unless the employer or its representative surveys the exposed area and makes a determination that there is no further fire hazard.

Signature	Date	Time	Comments

Section V: Ship's Force Notification Acknowledgement

Ship's Force Signature:	This notice is effective for 24 hours unless a shorter period of time is specified. Loss of gas free status in the location(s) above cancels this Hot Work Permit.

Section VI: Permit Closure

HWO or PAI Signature:	This section closes out the Hot Work Permit. Once signed, the permit shall be removed and turned into the appropriate entity for retention as noted below.

PLEASE NOTE: Upon completion of work, remove and retain this form for Objective Quality Evidence (OQE) in accordance with company policy.

Directions: (1) Provide a copy to: PAI, Supervisor & Ship's Designated Representative. (2) Post a copy at worksite.

FORM 009-07-13 REVISED 01/2013
Page 2

NSI 009-07

1.1 Title: Confined Space Entry, Certification, Fire Prevention and Housekeeping; accomplish

3.2.1 The notice shall state a description of the work to be done, the specific location, to include compartment number, of the **hot work**, and compartments adjacent to decks, bulkheads, and similar structures upon which **hot work** is to be accomplished, the time hot work will commence, current gas-free status of the area (if required), **the absence or existence of combustible material within 35 feet in any direction of the operation** (or further, if affected by the operation), and if combustible material exists, what action shall be taken to protect the material from fire, the provision and assignment of a **fire watch**, and the affirmation that conditions at the work site (ventilation, temporary lighting, accesses) permit the **fire watch**(es) to have a clear view of and immediate access to all areas included in the **fire watch**.

NSI 009-07

1.1 Title: Confined Space Entry, Certification, Fire Prevention and Housekeeping; accomplish

3.2.2 The notice shall affirm that a suitable, fully-charged fire extinguisher shall be available at the job site and provide for an inspection of the area 30 minutes after completion of the hot work or the cessation of hot work at the job site unless the contractor's Hot Work Supervisor surveys the affected work area and determines that there is no further fire hazard as the final action to complete the notice.

NSI 009-07

1.1 Title: Confined Space Entry, Certification, Fire Prevention and Housekeeping; accomplish

3.2.3 The notice shall be signed by a supervisor specifically designated as responsible for coordination of the hot work and the fire watch requirement for each shift where hot work is being conducted.

PAI – Permit Authorizing Individual

NSI 009-07

1.1 Title: Confined Space Entry, Certification, Fire Prevention and Housekeeping; accomplish

3.3 Provide trained fire watches, at all affected areas where hot work is being accomplished. Provide fire extinguishing equipment as described in 2.2, 2.4, and 2.5.

NSI 009-07

1.1 Title: Confined Space Entry, Certification, Fire Prevention and Housekeeping; accomplish

3.3.1 The program utilized to train fire watches shall be in accordance with the requirements of 2.2 and 2.4, and include steps to be taken by the fire watch and hot work operator prior to accomplishment of hot work, proper selection and use of fire extinguishing equipment and other safety equipment, relationship between the fire watch and hot work operator, proper fire reporting procedures and other sounding of fire alarms, and reporting of fires to the ship's Quarterdeck. This training shall include theory and practical (hands-on) fire suppression techniques. This training shall be provided to all newly assigned fire watches, with annual updates provided to personnel. Provide visible means of identifying trained fire watches, i.e., badge, sticker, vest, etc.

NSI 009-07

1.1 Title: Confined Space Entry, Certification, Fire Prevention and Housekeeping; accomplish

3.3.2 Each fire watch attending worker(s) accomplishing hot work shall be equipped with a fully-charged and operable fire extinguisher, have immediate access and an unobstructed view of the affected hot work area to which they are assigned and shall remain at the job site for 30 minutes from the time the hot work is completed unless the contractor's Hot Work Supervisor surveys the affected work area and determines that there is no further fire hazard.

NSI 009-07

1.1 Title: Confined Space Entry, Certification, Fire Prevention and Housekeeping; accomplish

3.3.2.1 The fire watch shall not accomplish other duties while hot work is in progress.

3.3.3 Where several workers are accomplishing hot work at one site, the fire watch shall have a clear view of and immediate access to each worker accomplishing hot work.

3.3.3.1 No more than 4 workers shall be attended by a single fire watch.

3.3.4 In cases in which hot material from hot work may involve more than one level, as in trunks, machinery spaces, and on scaffolding, a fire watch shall be stationed at each level unless positive means are available to prevent the spread or fall of hot material.

NSI 009-07

1.1 Title: Confined Space Entry, Certification, Fire Prevention and Housekeeping; accomplish

3.3.5 In cases where hot work is to be accomplished on a bulkhead or deck, combustible material shall be removed from the vicinity of the hot work on the opposite side of the bulkhead, overhead, or deck, and a fire watch shall be posted at each location.

3.3.5.1 If multiple blind compartments are involved in any hot work job, fire watches shall be posted simultaneously in each blind area.



Energized Welder Found Unattended During Second Shift Walk Through, No Hot Work Was Authorized For This Location.



Why does this matter?



Contrary to:
29CFR1915.56
(d)(3)

Finding: In
excess of 30
welding
machines
found
energized
during lunch
hours.



WELDING ROD ATTACHED
"ENERGIZED"

10/23/2015 10:43

5/8/15

- Employees gloves became wet from sweating and when he touched the stinger of his welding machine he received a shock.



7/2/15

- Employee stated that while climbing **Out** of tank 7-K-O-W employee touched a welding lead and was shocked.



7/9/15

- A welder was tacking up a “T” beam in the 6-107-0-W tank while another employee held the beam in place. At some point during the operation, the welding rod accidentally contacted the employee holding the beam, resulting in an electrical shock.

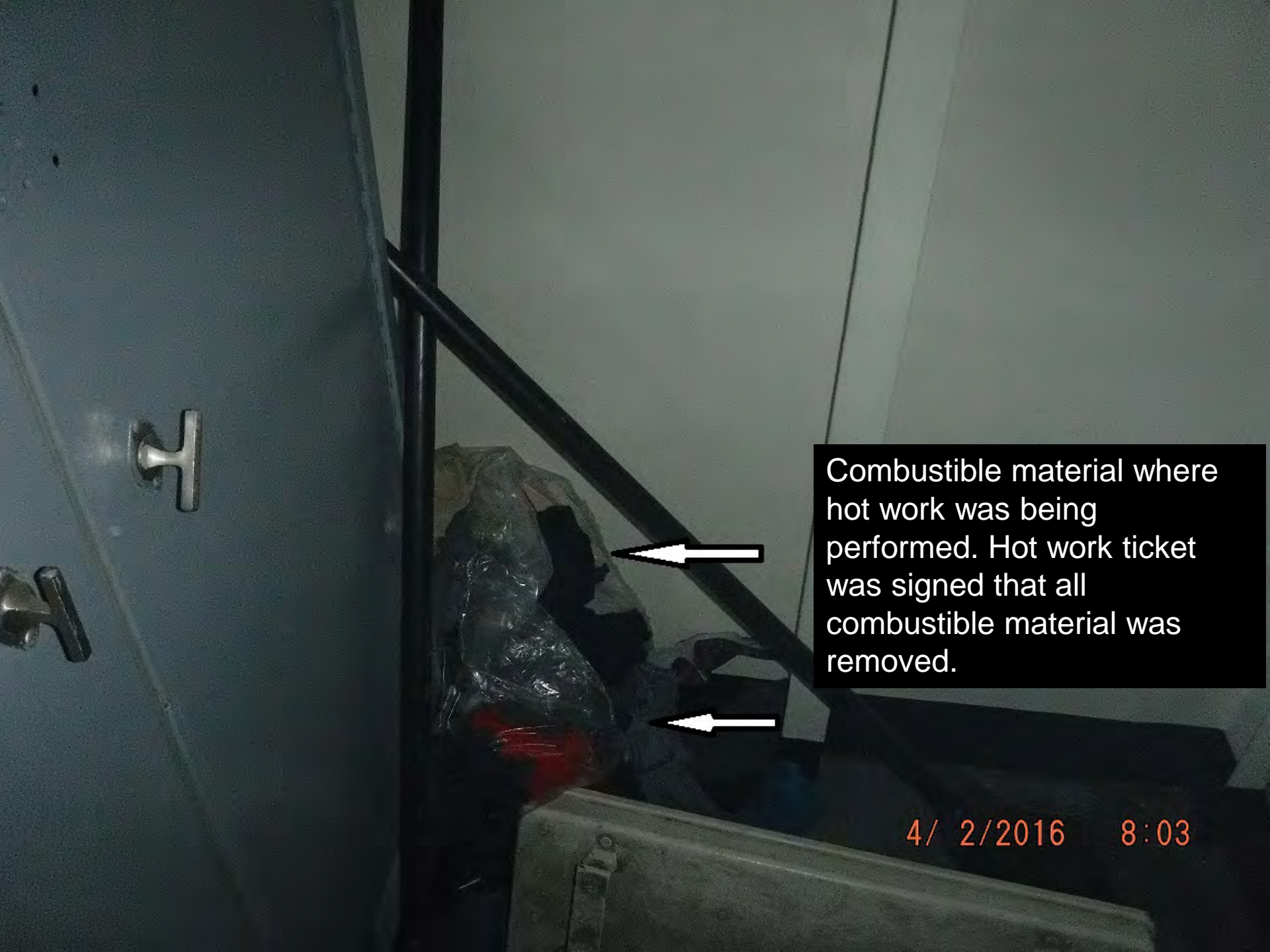
An Energized Welding Cable Ran Almost Half The Length Of the Ship And Was Found Unattended Dead Ended In A Tank, Had Two Locations Where Insulation Had Been Damaged And Bare Conductors Showing.



Energized Stinger Was Found Hanging In Berthing Area, Welder Had Left Compartment. PAI Had Not Signed Hot Work Ticket.



Ageis Rd #3		Plate and Frame#: 01-220-0-C		Ships Contract#: 0600		Company: 06 - Electric	
Adjacent/Affected Space Name: CPO Berthing				Adjacent/Affected Tac# and Frame#: 1-220-01-L			
Type of Hot Work: <input checked="" type="checkbox"/> Welding <input type="checkbox"/> Stainless Steel Welding* <input checked="" type="checkbox"/> Cutting <input checked="" type="checkbox"/> Grinding <input type="checkbox"/> Brazing <input type="checkbox"/> Air Arcing				Ship's Item Number: 321-90-001			
Brief Description of Work (i.e. welding foundation to deck):							
Gas Free Required in Space or Adjacent Space or System? <input type="checkbox"/> Yes <input type="checkbox"/> No				Gas Free Work Scope # 2 Of Firewatches		Gas Free Status <input type="checkbox"/> Not Required <input checked="" type="checkbox"/> Safe For Workers <input checked="" type="checkbox"/> Safe For Hot Work <input type="checkbox"/> Limited Hot Work <input type="checkbox"/> Inert Atmosphere	
Instruction beyond MCC / Gas Free Log / Safety:				Supervisor Name: James Jones		Supervisor Badge: 06-2835	
Start Date: 05/05/2015 Start Time: 7:45 AM				Finish Date: 5/6/2015 Finish Time: 7:45 AM		Supervisor Phone #: 757-672-4818	
Precautions taken that shall be in place PRIOR to start of work, by each hot worker, while permit is in effect							
Fully charged fire extinguisher(s) with intact tamper seal & cotter pin. <input checked="" type="checkbox"/> SATISFACTORY							
Area & adjacent area clean of combustibles 35ft OR containment preventing exposure. <input checked="" type="checkbox"/> SATISFACTORY							
Tanks, Voids, Cofferdams & Bilges clean of combustibles <input checked="" type="checkbox"/> SATISFACTORY or <input type="checkbox"/> NOT APPLICABLE							
MCC / Gas Free Log / Gas Free Work Scope read and verified by each hot worker and fire watch <input checked="" type="checkbox"/> YES or <input type="checkbox"/> NOT REQUIRED							
Qualified Fire Watch assigned in all required areas with proof of current qualification <input checked="" type="checkbox"/> SATISFACTORY							
Fire Watch able to observe all areas where fire hazard(s) exist, have immediate access and communication. <input checked="" type="checkbox"/> SATISFACTORY							
Has proper ventilation been established in all required areas? <input checked="" type="checkbox"/> YES or <input type="checkbox"/> NOT REQUIRED							
Paint and insulation removed at least 4 inches from hot work at all affected surfaces <input checked="" type="checkbox"/> >SATISFACTORY or <input type="checkbox"/> NOT REQUIRED							
Each Hot Worker to Print Name, Badge#, & Initial PRIOR to Start of Work to Verify Items 1-8 of this Section Remain SATISFACTORY							
PAI Name		PAI Badge#		PAI Signature		Time	
1st A. STATION		06-4345					
2nd							
3rd							
Ship's Force Signature/Acknowledgement of Notification							
This notice is effective for 24 hours unless a shorter period of time is specified or loss of gas free status. Loss of gas free status in the location(s) above cancels this hot work notice. An inspection of the area 30-35 minutes after completion of hot work is the final action required to close this notice.							
Form NOR-F-(96)-S68/2 REVISED 04/14 Upon completion of work, return this form to your lead supervisor for retention. Post a copy at worksite. Copy to: PAI, Supervisor & Ships Designated Representative.							



Combustible material where
hot work was being
performed. Hot work ticket
was signed that all
combustible material was
removed.

4/ 2/2016 8:03

5-140-0-W

Subject/Affected Tack and Frame#: N/A

Ship's Item #: 631-11-002

Type of Hot Work: ☒ Welding ☐ Stainless Steel Welding* ☐ Cutting ☒ Grinding ☐ Brazing ☐ Air Arcing
☐ Other:

Brief Description of Work (i.e. welding foundation to deck): Weld, Burn, And Grind

Gas Free Required in Space or Adjacent Space or System?
☐ Yes ☒ No

Gas Free Work Scope #: N/A

of Firewatches: 2

Gas Free Status: ☒ Not Required ☐ Safe for Workers ☐ Safe for Hot Work
☐ Not Safe for Workers ☐ Limited Hot Work
☐ Inerted Atmosphere

Instruction beyond MCC / Gas Free Log / Safety:

Start Date: 03 MAY 2016 Start Time: 0600 Supervisor Name: Rolando Rodriguez Supervisor Badge: 102031
 Finish Date: 04 MAY 2016 Finish Time: 0600 Supervisor Signature: [Signature] Supervisor Phone: 757-663-3516

Precautions taken that shall be in place PRIOR to start of work, by each hot worker, while permit is in effect

	Time	Time	Time	Time	Time	Time
1. Fully charged fire extinguisher(s) with intact tamper seal & cotter pin. <input checked="" type="checkbox"/> SATISFACTORY	0750					
2. Area & adjacent area clean of combustibles 35ft OR containment preventing exposure. <input checked="" type="checkbox"/> SATISFACTORY		3				
3. Tanks, Voids, Cofferdams & Bilges Clean of Combustibles <input checked="" type="checkbox"/> SATISFACTORY or <input type="checkbox"/> NOT APPLICABLE						
4. MCC/Gas Free Log/Gas Free Work Scope read and verified by each hot worker and fire watch <input type="checkbox"/> YES or <input checked="" type="checkbox"/> NOT REQUIRED						
5. Qualified Fire Watch assigned in all required areas with proof of current qualification <input checked="" type="checkbox"/> SATISFACTORY						
6. Fire Watch able to observe all areas where fire hazard(s) exist, have immediate access and communication. <input checked="" type="checkbox"/> SATISFACTORY						
7. Has proper ventilation been established in all required areas? <input type="checkbox"/> YES or <input checked="" type="checkbox"/> NOT REQUIRED						
8. Paint and insulation removed at least 4 inches from hot work at all affected surfaces <input checked="" type="checkbox"/> SATISFACTORY or <input type="checkbox"/> NOT REQUIRED						

Each Hot Worker to Print Name, Badge, & Initial PRIOR to Start of Work to Verify Items 1-8 of this Section Remain SATISFACTORY

Print Name: ROLANDO RODRIGUEZ Budget: 11539 Initials: [Signature]

5/4/2016 9:40

PAI Name: Rolando Rodriguez PAI Badge: 102031 PAI Signature: [Signature] Time: 0750 Comments:

1st
2nd
3rd

Ship's Force Signature/Acknowledgement or Notification: [Signature]

This notice is effective for 24 hours



Firewatch below where sparks are falling? Sparks landing on a bag of trash - which is combustible material.

4/22/2016 9:05

Area where hot work was being conducted.

Compressed gas cylinders.

Bag of trash

Bucket the pipe was on top of being cut.

Job box that was open.

2015. 11. 21 9:21



Compartment had smoke from hot work operation, it was determined the smoke was from plasma cutting with insufficient exhaust ventilation. While safety personnel were investigating to determine the origin of smoke, sparks were observed falling through the hole from the compartment above due to grinding operations. *No Fire Watch was in the compartment.*



Hot work
underway

HOT WORK PERMIT
Reference: NFPA 51B / 106 / OSHA 1915
NAFSEA Standard Item 009-07 & 009-08

This Hot Work Permit is effective for 24 hours unless a shorter period of time is specified, or conditions change. Loss of gas free status in the location(s) below cancels this Hot Work Permit.

TECNICO CORP
Program No. 00000

Permit Expiration 0600
Date & Time: 9/14

Section I: Hot Work Permit Supervisor Request

Start Date: 9/13 Start Time: 0600 Permit Expiration Date & Time: 0600

Ship or Vessel: USS KEARSARGE Trade: SHEET METAL

Compartments Name: CREW AND TROOP SCULLERY

Compartments #: 1-65-4-Q

Ship's Contract #: 5100934

Ship's Item #: 651-11-006

Fire Watch Count: 1

Lock Out/Tag Out Required? ☒ Yes ☐ No

Adjoining/Allied Spaces, Name & Compartment Numbers: N/A

Current Gas Free Status:
☐ Not Required
☒ Safe for Workers
☐ Not Safe for Workers
☐ Safe for Hot Work
☐ Limited Hot Work
☐ Inerted Atmosphere
☐ Enter with Restrictions
☐ Not Safe for Hot Work

Enter with Restrictions? (List Restrictions): N/A

Type of Work:
☒ Grinding
☐ Brazing
☒ Welding
☐ Seamless Welding
☐ Air Arcing
☒ Cutting
☐ Blast
☐ Brush & Roll
☐ Spray
☐ Other (list below)

Scope of Work: REMOVE AND REPLACE BULKHEADS/OVHD

Supv Name: PAUL SIMMONS Supv Signature: [Signature] Supv Badge: 2886 Supv Phone #: 757-435-7139

Section II: Ship's Force (S/F) Notification Acknowledgement (S/F acknowledges receipt and/or assistance of request as submitted/planned)

Ship's Force Signature: _____ Date: _____

Section III: Hot Work Operator (HWO) / Fire Watch (FW) / Permit Authorizing Individual (PAI) Shift Condition Verification

(HWO to complete, Each FW to validate, and PAI to verify conditions 1-11 below prior to the start of hot work.)

	HWO Verify						PAI Verify (Initials)		
	1st		2nd		3rd		Shift		
	SAT	N/A	SAT	N/A	SAT	N/A	1st	2nd	3rd
1. Compliant fire extinguisher(s) [seal, pin, tag, & charged].	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
2. Work areas clear of combustibles (35FT) & clear of flammable liquids (50 FT).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
3. The SCF tag has been updated daily or as often as necessary to maintain atmospheric condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
4. MCC/Gas Free Log/Gas Free Work Scope specified, read & verified by each HWO & FW.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
5. Qualified FW assigned (must have proof of qualification).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
6. HWO ensures FW has immediate access, and established communications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
7. Ensure proper working ventilation established in all required areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
8. Paint removed a minimum of 4 inches from hot work on all affected surfaces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
9. Logging removed a minimum of 12 inches from the area of hot work & remaining logging is covered.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
10. No hot work within 50 feet of a dust collector, fuel oil or flammable liquid storage locker.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
11. HWO notifies Location/Tag-pile (if required).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

(HWO to complete, Each FW to validate, and PAI to verify conditions before work begins.)

Shift	Name (Last, First) & Company Name	Badge #	Signature	Time	Comments

9/14/2016 10:16

Provide a copy to: PAI Supervisor & Ship's Designated Representative. (2) Post a copy at work site.

[illegible]

8:46

Vent duct obstructing emergency fire hose.





Discrepancy #13



This needs to be corrected ASAP.



MARMC
REPORTED
Fire Metrics

Fire Metrics

2013: 7 fires reported

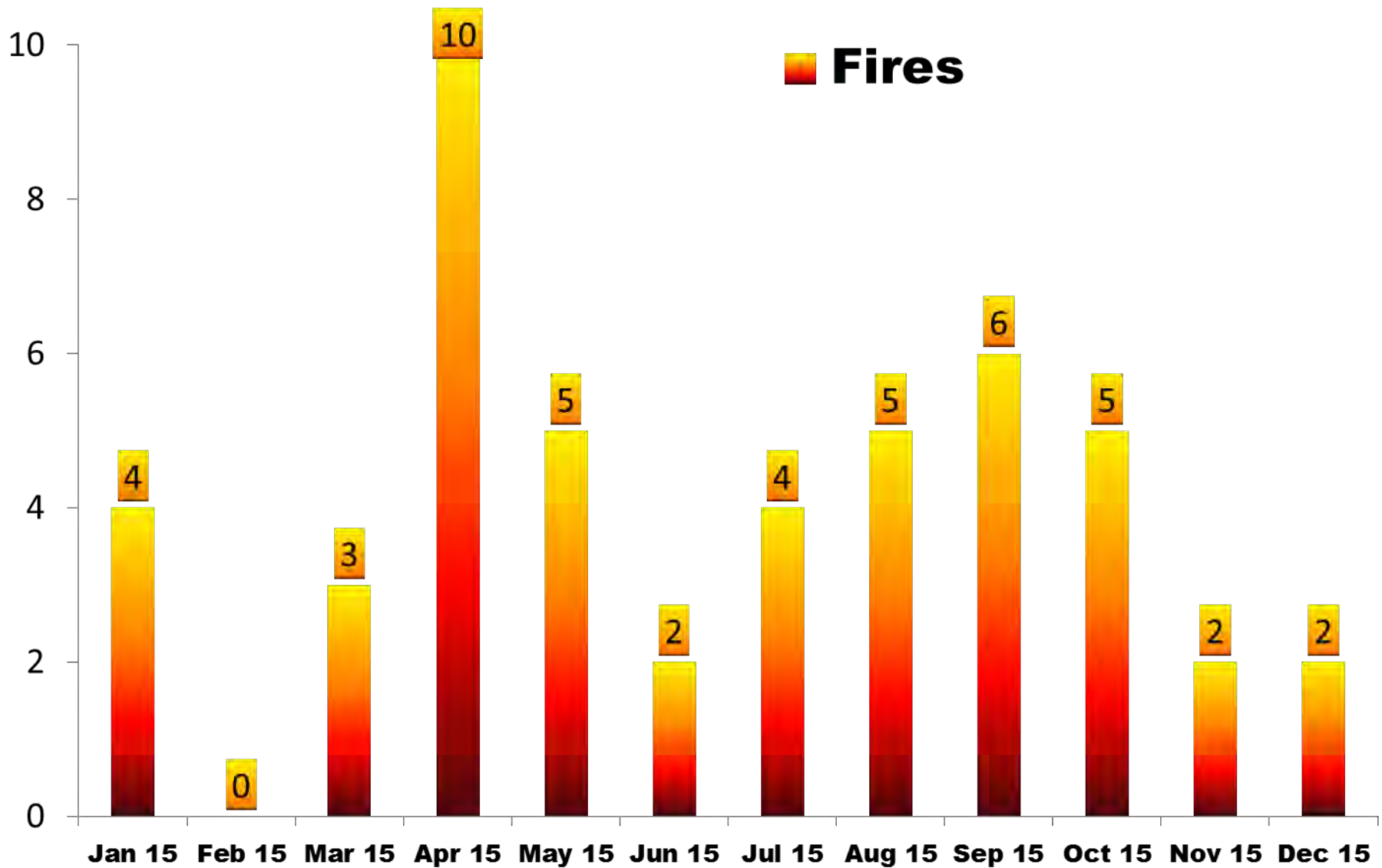
2014: 31 fires reported

How many shipboard fires
were reported in 2015?

CY 2015 - 48 Reported Fires

CNO 20

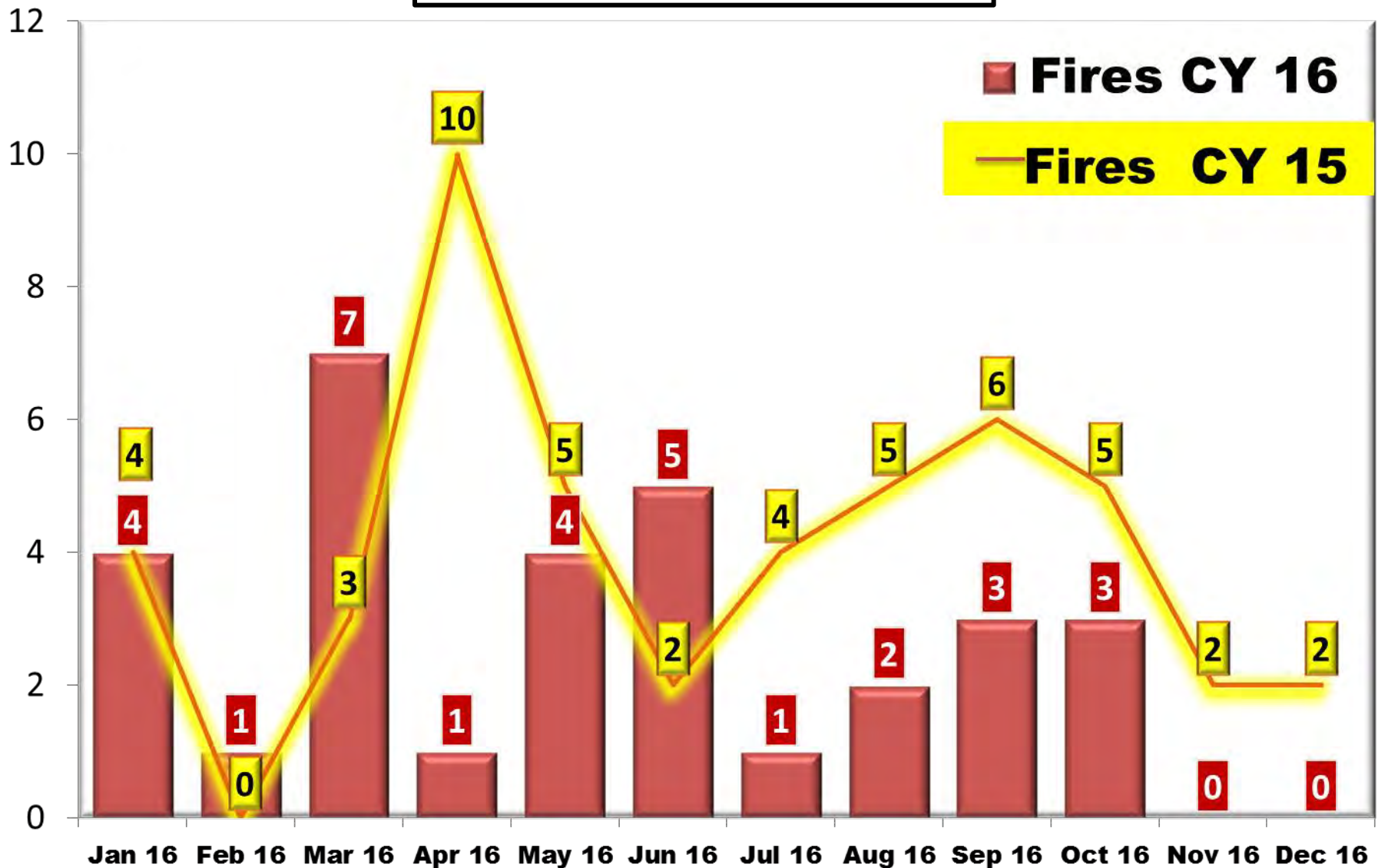
CMAVS 54



2016 YTD - 31 Reported Fires

CNO - 23
27 Fires

CMAVS - 19
4 Fires



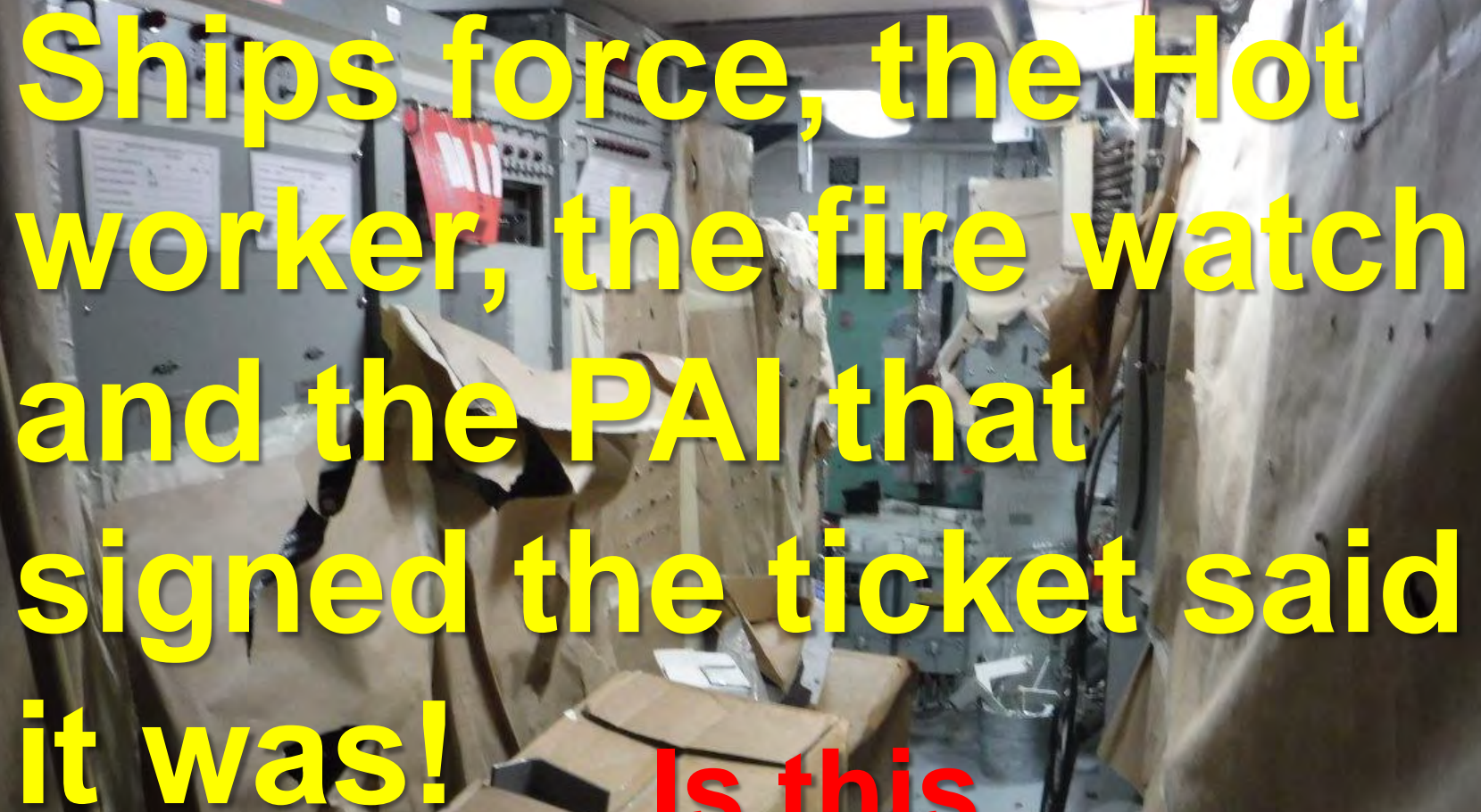
A large fire is burning in an industrial setting, with bright orange and yellow flames. In the background, there is a large, glowing orange mass, likely molten metal, and various industrial pipes and structures are visible. The scene is dimly lit, with the fire providing the primary light source.

**Could this
really happen?**

MARMC 2015 Major Fire Drill Scenario
**Slag and sparks from hot work ignites a
Class A fire in an adjacent space that
quickly gets out of control.**




It Already Has....

The background image shows a narrow, cluttered industrial corridor. On the left, there are several large cardboard boxes stacked haphazardly. In the center and right, there are various pieces of industrial machinery and equipment, some partially obscured by the boxes. The floor is covered with debris and more boxes. The overall scene suggests a workspace that is not properly maintained or prepared for safety-critical tasks.

**Ships force, the Hot
worker, the fire watch
and the PAI that
signed the ticket said
it was!**

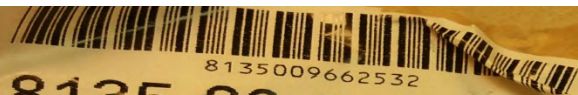
**Is this
space ready
for hot work?**



Is this
paper fire
resistant?

NO

SERVICE USE) FIRE RESIST



8135009662532

8135-00-966-2532

PAPER, KRAFT, TREATED

A-A-1894A TYPE II

1 ROLL 36 INCHES

CINCINNATI ASSOCIATED PAPER

CINCINNATI OH 4520

GS-15F-63876

WT 55 CU 1.9

Inside where the hot work was
being conducted.



09/10/2015



Area where hotwork
was being conducted

09/10/2015

Items that caught fire inside
the vent duct, tool bag , hard
hat and box of supplies



09/10/2015

No Fire Watch Was In This Compartment. Fire Watch Was Stationed On The Other Side Of The Access Cut And Instructed To Look Through The Opening For Fire.





Contrary to: NSI 009-07

Finding:

Unattended open
can of oil.

Spark producing
grinding and
Energized welding
machines are sitting
just 5 feet away.

SPARKS

**PLASTIC
SHEETING**

**NO
FIREFWATCH**

4/11/2016

8:41



SPARKS



9/28/2016 8:39



9/19/2016

8:47



GLOVE
STOP

ISSUE PENDING
NEEDS POSTING
NEEDS TO BE FILED

9/19/2016

8:47



Hot work area after I stopped hot work and asked for the hot work ticket. the pressure washing machine has a plastic fuel tank and its within 10 feet of the hot work. They didnt have a hot work ticket posted in the dry-dock, the supervisor stated that they were told that they didnt need a hot work ticket.

8/ 3/2016 7:51



07/08/2016



07/08/2016

Combustible material inside the
containment for stainless steel
hot work 2-414-0-Q

9/14/2016

9:55

Hot work being conducted in 5-338-1-F and
there is no fire watch in the dry-dock.




10/ 7/2016 8:40

Hot work being conducted while
sitting on combustible material
and melting the containment



8/19/2016 9:38



Hot work operators
grinding with combustible
material within 35 feet

8/ 3/2016 7:44

On **19 OCT 2016** at approximately 1129 SF reported a Class Alpha fire in compartment 05-32-2-L. Ships force combated the fire using a ship board CO2 extinguisher and a fire watch water bottle. The fire was put out at 1137. Norfolk Fire was on scene but did not assist with firefighting efforts.

Actions Taken: Several box fans from the repair locker were used to d-smoke the space. The scene was secured at 1300.

NCIS investigators and Mid-Atlantic Region fire investigators responded after the fire due to inconsistencies of the fire scene. The initial ships force and safety investigation revealed there was not any hot work in the area.

Class A Fire
19 OCT 2016

**Damaged two mattresses
and two pillows and the
bunk bottom**



Class A Fire
19 OCT 2016





Class A Fire
19 OCT 2016

Class A Fire
19 OCT 2016

**What remains of
the feather pillow**





Safety vs Production Time

It takes one minute to write a safety rule.

It takes one hour to present this safety brief.

It takes one week to plan a safety program.

It takes one month to put it into operation.

It takes one year to win a safety award.

It takes a lifetime to make a safe worker.

It takes ONE SECOND to destroy it all with an accident.



BREAKING

LIVE

CREWS RESPONDING TO SHIP FIRE IN PORTSMOUTH

HOT COCOA STAND

THREE TO FIVE CUPS

LAPD OFFICER TRAINING

Gunston Hall reports in-port fire

By David Larter 4:19 p.m. EST March 4, 2015



(Photo: NCC3 Leona Mynes/Navy)

f 15
CONNECT

t
FOLLOW

in
CONNECT

o
CONNECT

e
EMAIL

o
PHONE

A fire that broke out Tuesday afternoon on board the dock landing ship Gunston Hall damaged a second-deck storeroom and cable-ways, a Navy official said Wednesday.

Lt. Mike Hatfield, a spokesman for Expeditionary Strike Group 2, said that initial damage assessments indicated the blaze was a Class Alpha, meaning a fire that burns normal combustible materials such as wood or paper.

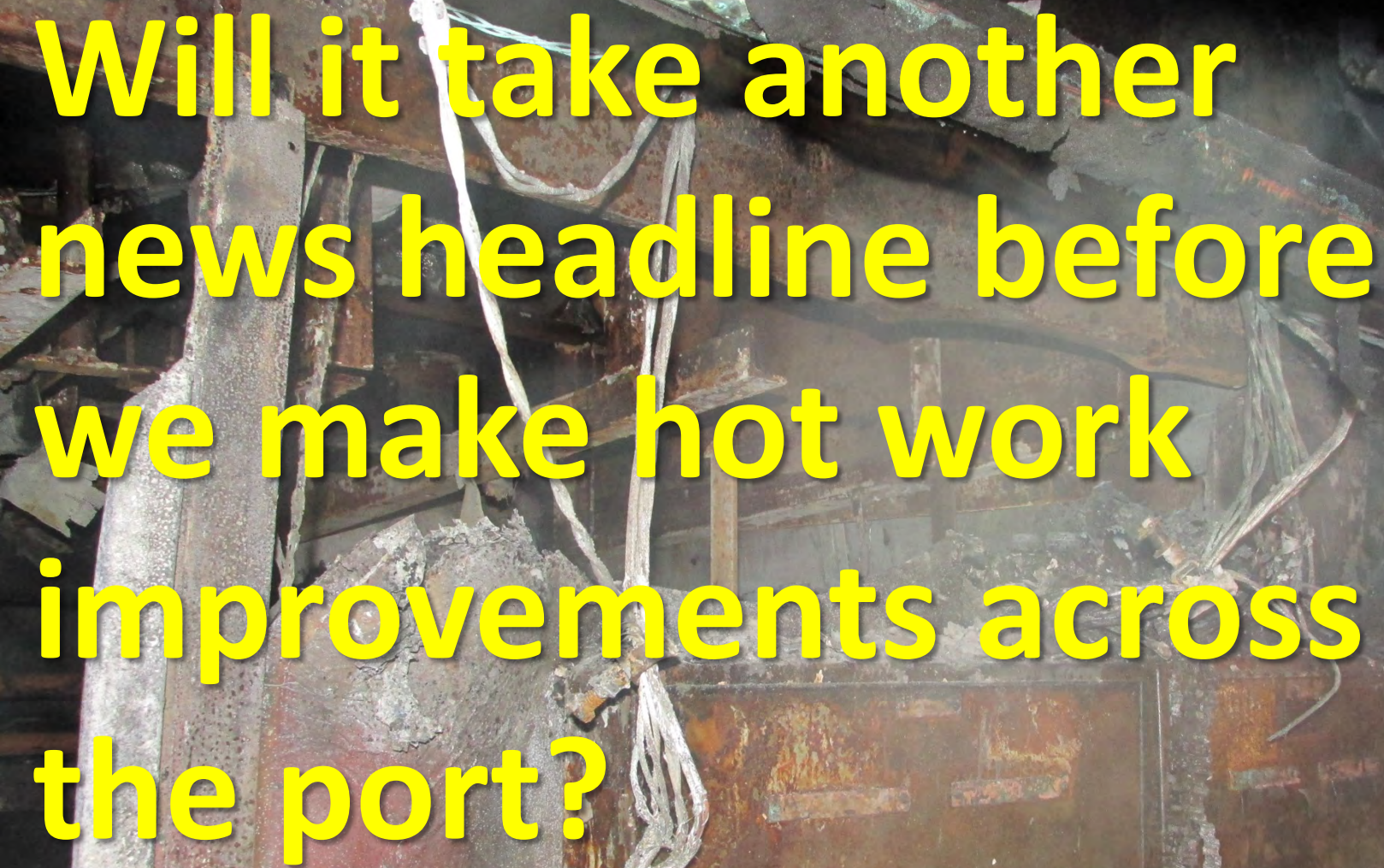
It is too soon to know the full extent of the damage or how much the repairs will cost, Hatfield said, but more in-depth damage assessments are underway.

The ship, which is pierside at NASSCO/Earl Industries shipyards in Portsmouth, Va., reported a fire started in a storeroom at around 1:30 p.m. The in-port duty section responded to the fire initially, followed by the Portsmouth fire department, according to a Navy press release.

The fire was reported out at 5:25 that evening after "multiple units" of the Portsmouth Fire Department responded, the release said.

One civilian firefighter was treated for smoke inhalation, according to a source who spoke on background Tuesday evening.

According to an initial report of the fire obtained by Navy Times, officials suspect that a plasma cutter was the source of the fire, but an investigation is underway to pinpoint the cause.



**Will it take another
news headline before
we make hot work
improvements across
the port?**

03/05/2015 16:38

What You Do Does Matter



WORKPLACE SAFETY RULES

Ain't nobody got time for that

You may ask - Why Are We Meeting Today?

The time and effort it took me to develop this brief is insignificant compared to the tremendous efforts VSRA members under take everyday repairing our nations war fighters.

This is not a “Point-The-Finger” presentation and is solely intended to improve communication and strengthen the partnership between MARMC C106 and VSRA professionals.

The Life You Save – May Be Your Own!

The events identified are critical safety findings and should be a wake up call that just because our personnel make the difficult look routine, it is not routine at all. We must be vigilant to ascertain safety is Priority #1 and to safeguard against creating these hazards.

Although not pleasant, we’ve learned several things through the experiences highlighted here that will enable us to provide a higher level of coordination and safety oversight on ship availabilities.

These findings are only the symptom of more costly shipboard safety issues...

YOUR SAFETY DIRECTORS ARE EXTREMELY FRUSTRATED

- ✓ **Determine the root causes in your organization why so many safety discrepancies are “Repeat Findings”.**
- ✓ **Is it lack of knowledge or lack of caring?**
 - **Does the culture match up with the training?**
- ✓ **Have you validated policy vs. procedures?**
 - **What is written vs. what is actually happening?**

Correcting these discrepancies was only a safety Band-Aid to the real problem in your organization.

July 05, 2016 12:45PM



Navy: Sailor in critical condition after falling down USS Kearsarge elevator shaft

Source: <http://goo.gl/BSHTyH>

A sailor aboard the USS Kearsarge was in critical condition Friday after falling down an elevator shaft that's used to move weapons aboard the amphibious assault ship, according to the Navy.

[CLICK TO VIEW THE SOURCE MATERIAL](#)



**MISSION FIRST
SAFETY ALWAYS**

“It’s MARMC and VSRA’s Responsibility”