DEPARTMENT OF THE NAVY
COMMANDER
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE SUITE 250
NORFOLK, VA 23551-2487

5720
Ser N01P1(2015-11-001840)/003
2 February 2015

Mr. David Larter
Navy Times
6883 Commercial Drive
Springfield, VA 22159

Dear Mr. Larter:

Thank you for your Freedom of Information Act Request, received at U.S. Fleet Forces Command (USFF) on December 22, 2015 and assigned Cast File Number USFF 2015-11-001840, wherein you request a copy of the investigation report into the fire onboard the USS HUE CITY (CG 66) which occurred on April 14, 2014.

Your request was processed under applicable provisions of the FOIA statute, as amended, and the implementing Navy Department directive (SECNAVINST 5720.42F). After a review of the responsive document, it was determined that certain portions were exempt from disclosure under the following FOIA exemptions:

- 5 USC 552(b)(3), information that a statute specifically exempts from disclosure by terms that permit no discretion on the issue, in this case, 10 USC 130b, which prohibits the release of names of personnel in overseas, sensitive or routinely deployable units.

- 5 USC 552(b)(6), information (name, SSN, DOB, home address, home phone number) in personnel and medical files, as well as similar personal information in other files, that, if disclosed to a requester, other than the person about whom the information refers, would result in a clearly unwarranted invasion of personal privacy.

- 5 USC 552(b)(5), internal advice, recommendations and subjective evaluations that are reflected in deliberative records pertaining to the decision-making process of an agency.

The releasable portion of the investigation is provided on the enclosed CD-Rom and also available for down loading in section four of the following link:
http://www.public.navy.mil/usff/foia/Pages/reading-main.aspx.

Because your request has been denied in part, you are advised of your right to appeal this determination, in writing, to:

5720
Ser N01P1(2015-11-001840)603
2 February 2015

Office of the Judge Advocate General
Department of the Navy
Attn: FOIA Appeals, Code 14
1322 Patterson Avenue SE, Suite 3000
Washington Navy Yard, DC 20374-5066

Your appeal must be postmarked within 60 calendar days from the date of this letter to be considered. A statement as to why your appeal should be granted and the enclosed copy of this letter should be attached. Both the appeal letter and the envelope should bear the notation, "Freedom of Information Act Appeal."

I am the official responsible for the partial denial of your request.

Any questions concerning this matter should be directed to Linda Alvers, N01P1, at (757) 836-3630 or by email at linda.alvers@navy.mil.

Sincerely,

J. E. HANZLIK, JR.
By direction

Copy to:
Case file
Serial file

DEPARTMENT OF THE NAVY
COMMANDER
U.S. FLEET FORCES COMMAND
1562 MITSCHER AVENUE, SUITE 250
NORFOLK, VA 23551-2487

5800
Ser N00/046
15 Jul 14

FINAL ENDORSEMENT on (b)(3), (b)(6) ltr 5830 of 8 May 14

From: Commander, U.S. Fleet Forces Command
To: File

Subj: COMMAND INVESTIGATION OF THE FIRE THAT OCCURRED ONBOARD USS HUE CITY (CG 66) ON 14 APRIL 2014

Ref: (l) COMUSFLTFORCOM 241800ZOCT13
(m) COMUSFLTFORCOM 011909ZJUL14

1. Pursuant to reference (a), I have reviewed the subject investigation.

2. On 14 April 2014 while at sea, USS HUE CITY (CG 66) experienced a fire in an uptake trunk (01-196-2-T). The cause of the fire was a slow build-up of heat in rag bales which had been improperly stowed in the space by a working party on 19 March 2014. The fire caused significant damage to the uptake trunk and the immediately surrounding spaces. The estimated cost to repair the damage is approximately $18M. The ship's crew fought the fire for approximately one hour before the fire was extinguished. Although the damage to USS HUE CITY was significant, the ship's crew prevented what could have been catastrophic damage and loss of life through their quick reaction and effective firefighting.

3. I approve the findings of fact, opinions and recommendations as modified by the first and second endorsements.

4. Recommendation (1) is forwarded to Commander, Naval Sea Systems Command (COMNAVSEASYSCOM) for action. COMNAVSEASYSCOM is requested to report to me the results of his investigation into the failure of the HUE CITY Damage Control Management System (DCMS) and proposed action to prevent future failures of shipboard DCMS within 30 days of the date of this endorsement.

5. Recommendation (2) is forwarded to Commander, Naval Surface Force Atlantic (CNSL). Report status of actions taken within 30 days of the date of this endorsement.

6. Commander, Carrier Strike Group EIGHT is directed to report actions taken per recommendations 3(a)-(g) within 30 days of the date of this endorsement.

7. Recommendation (4) addressing formal commendations for those crew members who distinguished themselves during the fighting of this fire is forwarded to Commander, Carrier Strike Group EIGHT for action he deems appropriate.

8. Recommendation (5) regarding accountability is forwarded to Commander, Carrier Strike Group EIGHT for action he deems appropriate.

9. As previously ordered, USFF N41 is reviewing policy and procedures for the pre-deployment procurement and load out of high usage consumable products and shall recommend actions to optimize shipboard stock levels based on resupply opportunities during transit to and operations in the respective AORs. USFF N41 is directed to coordinate his review with Commander, Naval Surface Forces Atlantic and Commander, Naval Surface Forces per para 1(c)(1)-(2) of the second endorsement.

10. It is disturbing to learn that HUE CITY had fire retardant variant coveralls (FRV) onboard but they had not been issued to crewmembers because the FRVs did not have name tapes and other insignia affixed to them. Fortunately, there were no serious crewmember injuries during the fighting of this fire. Per references (l) and (m), there is a process in place to ensure deploying ships are issued FRVs. Wearing of FRVs underway is not optional. Per reference (m), Commanding Officers must not wait for full receipt of an FRV order or delay issue due to insignia or name tags. FRVs are directed to be issued and worn immediately upon receipt. Any command found in violation of the order to wear FRVs will be held accountable.

11. This fire was preventable. The chain of events that led to the fire began with the poor decision to store bales of rags in an uptake trunk adjacent to gas turbine engine exhaust ducting. No one from the working party moving the bales into the uptake trunk, nor any crewmember who witnessed this action, spoke up about its potential dangers. Additionally, the Engineering Operational Sequencing System Master Light Off Checklist (EOSS MLOC) procedure to "Inspect and remove all fire hazards from engineering spaces (including uptake spaces)…" was not followed. Finally, the zone inspection program was deficient. Although the current CO made space ownership a priority and had made great strides in improving the ship's zone inspection program

since he assumed command 44 days prior to the fire, those efforts had not yet fully achieved the desired result.

12. This mishap demonstrates that safety is an all hands evolution. It is my number one priority. Operating ships at sea is an inherently dangerous activity. In order to operate safely at sea, we must have hands on leadership, effective maintenance and operating programs and rigorous attention to detail by the entire crew. We must do better.

WILLIAM E. GORTNEY

Copy to:
COMPACFLT
COMNAVSURFPAC
COMNETC
COMNAVSEASYSCOM
COMNAVSAFECEN
COMNAVSURFLANT
COMCARSTRKGRU EIGHT
COMAFLOATRAGRU ATLANTIC

DEPARTMENT OF THE NAVY
COMMANDER
NAVAL SURFACE FORCE ATLANTIC
BOX 168, 1751 MORRIS STREET
NORFOLK, VIRGINIA 23511-2808

5830
Ser N01L/ 090
13 JUN 2014

SECOND ENDORSEMENT on (b)(3), (b)(6) ltr 5830 of 8 May 14

From: Commander, Naval Surface Force Atlantic
To: Commander, U.S. Fleet Forces Command

Subj: COMMAND INVESTIGATION OF THE FIRE THAT OCCURRED ONBOARD USS HUÉ CITY (CG 66) ON 14 APRIL 2014

Ref: (j) COMNAVSURFLANT NORFOLK VA 031751Z Jun 14
(k) COMNAVSURFOR SAN DIEGO CA 032334Z Jun 14

1. After thorough review of the investigation, actions noted below are being taken to ensure our ships and Sailors are protected. I concur with the Investigating Officer's findings of fact, opinions, and recommendations as modified by Commander, Carrier Strike Group EIGHT, and as further modified below:

a. Opinions.

(1) While I concur fully with Opinion 11 that attributes the excessive number of rags to uncorrelated approval of five separate requisitions, I partially concur with Opinion 12 that states "the supply release process failed to catch the excessive total quantity of rags ordered, therefore providing no check or balance." I recommend modifying Opinion 12 to state "the supply release process failed to catch the excessive total quantity of rags ordered, showing a need for the Surface Supply Community to establish a standard operating procedure to better balance meeting customer requirements with common sense checks."

b. Recommendations.

(1) I recommend modifying Recommendation 3.h to include the following context. "It is difficult to verify if the quantity of every customer requisition is excessive, and depending on the level of experience in S-1, Supply may not recognize an excessive customer order. Rather than depending on random screening to catch excessive orders, centralize management of products used ship-wide, to include commonly used consumables such as rags, copier paper, cleaning gear, and toilet paper. This will improve efficiency and limit over-purchasing quantities

of common items. This process is used successfully on many ships, and puts the requirement to order common consumables with one division, thus increasing the chances that ships' Supply will note an excessive order."

c. Actions.

(1) My team and I will work with Commander, Naval Surface Forces to review current Surface Supply guidance with the goal of determining the most effective mechanism to ensure centralized management of common consumables such as rags.

(2) Additionally, my Supply team will participate in the Fleet Forces review of the "Readiness Kill Chain," as applied to Supply, to see if there are supply chain issues that drive a perception that some items are hard to get so the ship should order more than needed before deployment. This perception is alluded to in Finding of Fact 10, which discusses a previous Commanding Officer's concern about running out of toilet paper.

(3) Although the investigation showcases HUÉ CITY Sailors' firefighting efforts, which resulted in no significant injuries, it has come to my attention through review of this incident that HUÉ CITY had fire retardant variant coveralls (FRV) onboard but had not issued them to the crew because the FRVs did not have name tapes and other insignia affixed to them. To maximize Sailor safety, via reference (j), I directed waterfront leaders to issue FRVs to our Sailors without delay. Furthermore, I instituted a formal FRV distribution tracking process. This process is managed by my Supply Officer with back-up from my Comptroller to clear any inventory or funding impediments to ensure full distribution to all Surface Force Sailors.

(4) Moreover, my Readiness Assessors (N44) will continue to inspect uptake spaces during READ-E 2, 5, 6, and 7 visits and, by copy of this endorsement, Commander, Afloat Training Group Atlantic (ATG) will conduct inspections of uptake spaces during Light Off Assessments and Basic Phase Tier 1 engineering events. My team will ensure these inspections are codified in applicable Type Commander (TYCOM) and ATG instructions and/or manuals to provide for continuity of this practice in perpetuity.

(5) Also, I will work with Commander, Naval Education and Training Command (CNETC) to ensure mishap case studies, to include lessons learned from this investigation, are included in Surface Warfare Officers School Command training, Senior Enlisted engineering training, and the continuum of Surface Warfare

Officer training from the Basic Division Officer Course through Prospective Executive Officer/Prospective Commanding Officer pipeline training. This training will focus on the severe consequences that result from a lack of procedural compliance.

(6) To assist with the training efforts described above, and to help Sailors throughout the Fleet, working with Commander, Naval Safety Center and via TYCOM channels, my team will collect all ship class advisories as a result of safety mishaps and consolidate them into a single site online for ease of access and review. I will then mandate review of these class advisories by key waterfront leaders bi-annually to prevent repeat mishaps.

(7) Finally, via reference (k), VADM Copeman and I directed waterfront leaders on both coasts to adhere to approved existing ship stowage practices, and specifically highlighted actions that would have prevented this incident and similar past events from occurring. As I emphasized to Surface Force Atlantic leaders, this direction is about more than uptakes and improper storage. This is about basic block and tackling needed from the deck-plate level up to the Commanding Officer level. We are charged with taking care of our people, knowing our ships, and setting the culture of procedural compliance with a questioning attitude and an eye towards safety and warfighting.

P. A GUMATAOTAO

Copy to:
COMNAVSURFPAC
COMNETC
COMNAVSAFECEN
COMAFLOATRAGRU ATLANTIC

DEPARTMENT OF THE NAVY
Commander, Carrier Strike Group EIGHT
Unit 60104
FPO AE 09501-4308

5830
Ser N02/052
4 Jun 14

FIRST ENDORSEMENT on (b)(3), (b)(6) ltr 5830 dtd 08 May 14

From: Commander, Carrier Strike Group EIGHT
To: Commander, U.S. Fleet Forces Command
Via: Commander, Naval Surface Forces Atlantic

Subj: COMMAND INVESTIGATION OF THE FIRE THAT OCCURRED ONBOARD USS HUÉ CITY (CG 66) ON APRIL 2014

Encl: (87) (FOUO) Email chain dtd 19 May 2014 from CAPT W. N. Chidester (including Command Philosophy) to (b)(3), (b)(6) (b)(3), (b)(6)
(88) (FOUO) Emailed document by (b)(3), (b)(6) to (b)(3), (b)(6) (b)(3), (b)(6) on 22 May 14
(89) (FOUO) Emailed document by CMDCM J. Carter to (b)(3), (b)(6) (b)(3), (b)(6) on 21 May 2014
(90) (FOUO) Email chain from (b)(3), (b)(6) of NAVSAFECEN to (b)(3), (b)(6) dtd 27 May 2014
(91) (FOUO) Email chain from (b)(3), (b)(6) ATG Atlantic CO, Engineering assessment

1. After a thorough review, subject investigation is forwarded. I concur with the Investigating Officer's Findings of Fact and Opinions, with additional Findings of Fact and an additional Opinion included below.

Findings of Fact:

218. Shortly after assuming command, CAPT Chidester directed XO and DHs to develop a plan stressing fundamentals. [Encls (87) & (88)]

219. CAPT Chidester directed "Every Space, Every day" to his subordinate leaders prior to the fire. This message was repeated by the triad frequently. [Encls (87), (88), and (89)]

220. Prior to the fire, CAPT Chidester directed an overhaul of training, PQS (ordered a complete review of Watch Team Replacement Plan), and 3M programs to realign with applicable standards. [Encls (87), (88), and (89)]

221. The Safety Center assessors noted that the safety culture had changed positively under CAPT Chidester's command, compared to an assessment in 2013. [Encl (90)]

222. ATG Atlantic Engineering Assessors said that there was a "night and day difference" between the two COs, and that CAPT Chidester was making an immediate and positive impact on the engineering department. [Encl (91)]

223. CAPT Chidester directed and started a baseline zone inspection on 14 Apr 14 prior to the fire. [Encls (87) - (89)]

224. CAPT Chidester directed his schedule be included in the Plan of the Day to underscore his priorities to the crew. [Encl (88)]

Opinion:

33. CAPT Chidester's actions and leadership were unable to prevent the fire during his short time in command. Given additional time, his changes affecting procedural compliance and safety culture onboard HUÉ CITY would have prevented the fire. [Findings 54, and 218 - 224]

2. I modify Recommendation Five by removing it and replacing it with the following: (These recommendations do not preclude any other appropriate administrative actions)

Recommendation #5. Recommend taking the following actions with regard to individual USS HUÉ CITY (CG 66) Sailors:

a. Recommend no action be taken against any member of the working party, other than specifically cited below.

b. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

c. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

d. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

e. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

(b)(6), (b)(3), (b)(5)

f. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

g. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

h. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

i. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

j. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

k. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

l. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

m. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

n. Based on the actions that CAPT Chidester took since assuming command, recommend that he remain in command and receive a letter of instruction from Commander, Carrier Strike Group EIGHT to assist in improving his performance.

K. A. KIMBERLY
Acting

5830
08 MAY 2014

From: (b)(3), (b)(6) Investigating Officer
To: Commander, Carrier Strike Group EIGHT

Subj: COMMAND INVESTIGATION OF THE FIRE THAT OCCURRED ONBOARD USS HUÉ CITY (CG 66) ON 14 APRIL 2014

Ref: (a) JAGINST 5800.7F (JAGMAN), Chapter II, of 26 Jun 12
(b) OPNAVINST 5100.19E, Navy Safety and Occupational Health Manual for Forces Afloat, of 30 May 07
(c) NAVSEA Technical Manual (NSTM) 555-10.3
(d) USS HUÉ CITY (CG 66) Engineering Operational Sequencing System (EOSS)
(e) COMNAVSURFPAC/COMNAVSURFLANT INST 3540.3, Engineering Department Organization and Regulations Manual (EDORM), of 11 Apr 08
(f) United States Navy Regulations, Chapter 8, 1990 CH-1
(g) OPNAVINST 3120.32D, Standard Organization and Regulations of the U.S. Navy (Navy SORM) of 16 Jul 12
(h) COMNAVSURFPAC/COMNAVSURFLANT INST 3502.3, Surface Force Readiness Manual, of 9 Mar 12
(i) CUSFFC msg 111920Z Apr 14

Encl: (1) (FOUO) Your ltr 5830 Ser N02/040 of 16 Apr 14, appointing me as investigating officer
(2) (FOUO) USS HUÉ CITY (CG 66) Deck log of 14 Apr 14
(3) (FOUO) USS HUÉ CITY (CG 66) Engineering logs of 13-14 Apr 14
(4) (FOUO) USS HUÉ CITY (CG 66) Bell log excerpt of 14 Apr 14, from 1800-2359(L)
(5) (FOUO) USS HUÉ CITY (CG 66) CSOOW log of 14 Apr 14
(6) (FOUO) USS HUÉ CITY (CG 66) CIC log of 14 Apr 14
(7) 01-level diagram of the uptake trunk, 01-196-2-T, as drawn by the Investigating Officer on 22 Apr 14
(8) (FOUO) 01- to 04-level diagram of the uptake trunk, as excerpted from digital Damage Control (DC) plates and compiled by (b)(3), (b)(6) on 25 Apr 14
(9) (FOUO) Excerpt from S9CGO-B9-SIB-010/CG 66 (CG 47 CL)
(10) (FOUO) (b)(3), (b)(6) Independent Duty Corpsman, statement of 23 Apr 14
(11) (FOUO) (b)(3), (b)(6) R-Division LCPO, statement of 23 Apr 14
(12) (FOUO) (b)(3), (b)(6) Fire Marshal, statement of 23 Apr 14
(13) (FOUO) (b)(3), (b)(6) statement of

23 Apr 14

(14) (FOUO) USS HUE CITY Uptake Fire Failure Review Board Findings Brief for SEA 00 of May 2014

(15) USS HUÉ CITY (CG 66) Plan of the Day of 19 Mar 14

(16) (FOUO) CAPT Wyatt Chidester, USN, Commanding Officer, USS HUÉ CITY (CG 66), statement of 25 Apr 14

(17) (FOUO) (b)(3), (b)(6) Main Propulsion Assistant, statement of 24 Apr 14

(18) (FOUO) (b)(3), (b)(6) Top Snipe, statement of 22 Apr 14

(19) (FOUO) (b)(3), (b)(6) Former MP Division LPO, statement of 28 Apr 14

(20) (FOUO) (b)(3), (b)(6) statement of 23 Apr 14

(21) (FOUO) (b)(3), (b)(6), MER 2 WCS, statement of 24 Apr 14

(22) (FOUO) (b)(3), (b)(6) Auxiliaries Division, statement of 24 Apr 14

(23) (FOUO) (b)(3), (b)(6) MER 1 ERO, statement of 23 Apr 14

(24) (FOUO) Memorandum for the Record; Notes of (b)(3), (b)(6) (b)(3), (b)(6) Special Assistant, of 24 Apr 14

(25) (FOUO) LCDR John Liddle, USN, Executive Officer, statement of 25 Apr 14

(26) (FOUO) (b)(3), (b)(6) MER LCPO, statement of 24 Apr 14

(27) (FOUO) (b)(3), (b)(6) MER LPO, statement of 24 Apr 14

(28) (FOUO) (b)(3), (b)(6) MER 1 WCS, statement of 25 Apr 14

(29) Requisitions for all rag bales delivered 19 Mar 14

(30) Shipping Manifest for rag bales delivered 19 Mar 14

(31) (FOUO) (b)(3), (b)(6) Auxiliaries Division, statement of 23 Apr 14

(32) (FOUO) (b)(3), (b)(6) Chief Engineer, statement of 24 Apr 14

(33) Sample tag for rag bales, NSN 792000148966666

(34) (FOUO) (b)(3), (b)(6) statement of 23 Apr 14

(35) SERMC Design Service Request #13-251-24827 of 17 Jul 13

(36) (FOUO) Memorandum for the Record; Notes of (b)(3), (b)(6) (b)(3), (b)(6) Special Assistant, of 28 Apr 14

(37) HUÉCITYNOTE 1301, Collateral Duty List, of 17 Apr 14

(38) Excerpt from HUÉCITYINST 3540.3B, USS HUÉ CITY (CG 66) EDORM, § 2-1, of 3 Jan 14
(39) (FOUO) (b)(3), (b)(6) Damage Control Assistant, statement of 23 Apr 14
(40) (FOUO) (b)(3), (b)(6) MP Division Officer, statement of 25 Apr 14
(41) MOB-D Certification of 17-21 Mar 14
(42) MOB-E Certification of 24-25 & 31 Mar 14
(43) (FOUO) Excerpt from NAVSAFECEN memo of 13 Aug 13, listing post-survey discrepancies
(44) USS HUÉ CITY (CG 66) Underway Watch Bill for Condition I General Quarters, of 11 Apr 14
(45) Flying Squad Watch bill (non-RADM, undated)
(46) USS HUÉ CITY (CG 66) Underway Watch Bill for Condition III Deployment, of 11 Apr 14
(47) (FOUO) Summary of Interview with (b)(3), (b)(6) USN, Chief Engineer, of 27 Apr 14
(48) (FOUO) Memorandum for the Record; Notes of (b)(3), (b)(6) (b)(3), (b)(6) Special Assistant, of 28 Apr 14
(49) (FOUO) (b)(3), (b)(6) DCTT Team Leader, statement of 23 Apr 14
(50) (FOUO) (b)(3), (b)(6) 3MC, statement of 24 Apr 14
(51) (FOUO) Summary of Interview with (b)(3), (b)(6) (b)(3), (b)(6) Oil Lab LPO, of 27 Apr 14
(52) HUÉCITYINST 4790.6, Zone Inspection Bill of 18 Oct 10
(53) HUÉCITYINST 1300.2, Division in the Spotlight (DITS) Instruction, of 29 Sep 10
(54) USS HUÉ CITY DITS Report for MP division, 6-18 Nov 13
(55) (FOUO) Summary of Interviews with (b)(3), (b)(6) USN, former Commanding Officer, of 27 Apr 14
(56) Master Safety DPO space inspection list (unlabeled)
(57) MP Division Safety PO Quarterly Space Inspection Sheet of 28 Dec 13
(58) MP Division Safety PO Quarterly Space Inspection Sheet of 21 Apr 14
(59) (FOUO) Memorandum for the Record; Notes of (b)(3), (b)(6) (b)(3), (b)(6) Investigating Officer, of 27 Apr 14
(60) (FOUO) LOEP for Workcenter EM01 Force Revision 2-14 of 31 Jan 14
(61) (FOUO) MIP 2591/002-14 of Jan 14, as lined out by MP Division
(62) (FOUO) MIP 6300/001-14 of Jan 14
(63) (FOUO) MIP Series 6300/001, MRC 14 8WMR N, S-1

of Jan 14

(64) (FOUO) MIP Series 2591, MRC 23 6JTG N, 36M-1 of Feb 13

(65) Sked 3.2 printout of MRC 23 6JTG N, showing last maintenance dates for both GTM 2A and GTM 2B

(66) USS HUÉ CITY Engineering Department Light-Off Orders and Pre-light-off checklists for 24 Mar 14

(67) USS HUÉ CITY Engineering Department Light-Off Orders and Pre-light-off checklists for 31 Mar 14

(68) USS HUÉ CITY Engineering Department Light-Off Orders and Pre-light-off checklists for 11 Apr 14

(69) EOSS Procedure MLOC/0647/010909, as photocopied from USS HUÉ CITY (CG 66) EOSS binder on 24 Apr 14 (includes grease pencil line-outs by ship's company)

(70) USS HUÉ CITY (CG 66) Plan of the Day of 11 Apr 14

(71) (FOUO) Timeline of the fire, compiled by the Investigating Officer as a demonstrative aid, synching handwritten logs, bell logs, and statements

(72) (FOUO) Eleven photos of DC plates post-fire; taken by (b)(3), (b)(6) on 17 Apr 14

(73) (FOUO) (b)(3), (b)(6) Pilot, Proud Warrior 710, statement of 23 Apr 14

(74) (FOUO) (b)(3), (b)(6) MER 1 ERO, statement of 23 Apr 14

(75) (FOUO) (b)(3), (b)(6) Officer of the Deck, statement of 23 Apr 14

(76) (FOUO) (b)(3), (b)(6) MER 2 ERO, statement of 23 Apr 14

(77) (FOUO) (b)(3), (b)(6) statement of 24 Apr 14

(78) (FOUO) Summary of Interview with (b)(3), (b)(6) (b)(3), (b)(6) of 27 Apr 14

(79) Photo of deck inside uptake trunk 01-196-2-T, showing the "shadows" left by fifteen burnt rag-bale stacks between GTM-2B exhaust ducting and Nr 1 GTG intake plenum; taken by (b)(3), (b)(6) on 18 Apr 14

(80) Photo of Nr 1 GTG intake plenum, as destroyed by the fire; taken by (b)(3), (b)(6) on 19 Apr 14

(81) Photo taken during the overhaul of the debris in the uptake trunk, showing significant amount of burnt material and rags; taken by (b)(3), (b)(6) on 14 Apr 14

(82) Photo of deck inside uptake trunk between the deck gear locker and the GTM-2A exhaust ducting, showing

burnt rags and burlap debris; taken by (b)(6) (b)(3), (b)(6) of the Failure Review Board investigation on 20 Apr 14

(83) Photo of burnt wire used to wrap rag bales, as found in the uptake trunk; taken by (b)(6) of the Failure Review Board investigation on 19 Apr 14

(84) Eighty (80) photographs of the damage on USS HUÉ CITY (CG 66), along with photographs of the same spaces on USS GETTYSBURG (CG 64) for comparison, as compiled by (b)(3), (b)(6) from various sources, with index

(85) (FOUO) Voluntary statement (OPNAV 5580/2) of (b)(3), (b)(6)

(86) Bale requisition documents of 4 Feb 14

Preliminary Statement

1. This reports completion of the command investigation convened by enclosure (1) and conducted in accordance with reference (a) into the causes of the fire onboard USS HUÉ CITY (CG 66) on 14 April 2014. The originals of enclosures (2), (3), (5), and (6) are on file with USS HUÉ CITY (CG 66). Original statements are enclosed.

2. In conducting my investigation, I was assisted on site by the following team: (b)(3), (b)(6) COMNAVSURFLANT N14; (b)(3), (b)(6) COMCARSTRKGRU EIGHT N1; (b)(6) (b)(3), (b)(6) COMDESRON FOURTEEN N00L; and (b)(3), (b)(6) COMDESRON FOURTEEN N43A. My team provided the necessary subject matter expertise, legal and administrative support, and varying points of view to complete this report. (b)(3), (b)(6) COMCARSTRKGRU EIGHT SJA provided remote support.

3. Time. I required no extension of time to complete this investigation.

4. Evidence. All available evidence was reviewed and collected by the Investigating Officer (IO) and the special assistants. An existing casualty to the NTCSS server limited direct access to some electronic data needed to meet the requirements of JAGMAN appendix A-2-s. In those cases, the data was obtained via team member review of existing paper records, and documented via statements or memoranda for the record.

5. Timeline. The timeline in this report is based upon a compilation of witness statements, ship's records, and other evidence. Where times are inexact due to memory faults or late logging, I have inserted findings at the place I believe they most logically fall. The few uncertainties in the timeline did not affect my ability to come to necessary conclusions about the causes of the fire. All times cited in this report are local (+4R) unless otherwise specified.

6. State of evidence. I began my investigation on Friday morning, 18 April 2014, just after the ship's return to homeport in Mayport, Florida. My team and I were able to view the fire scene intact, but a great deal of evidence was lost and/or left un-photographed during the overhaul, cleaning, and jettisoning of smoldering debris. This did not significantly affect my ability to come to necessary conclusions about the causes of the fire.

7. Witnesses. I personally interviewed all key fact witnesses. After the third day of interviews, I delegated certain additional interviews to the other members of the team. My team and I found all witnesses to be open, truthful, and forthcoming with information to the best of their memory.

8. Rights. In the course of my investigation, I decided to read Article 31(b), UCMJ, rights to several Officers, Chief Petty Officer, and Petty Officers. All elected to waive their rights and continue to speak with me.

9. Other investigations. My investigation took place alongside two others: a Safety Investigation Board headed by (b)(3), (b)(6) (b)(3), (b)(6) and a NAVSEA Failure Review Board headed by RDML Lawrence Creevy, USN, and co-chaired by (b)(3), (b)(6) (b)(3), (b)(6) and (b)(3), (b)(6). The latter focused on fire forensic analysis and the structural analysis of resultant damage. We had no significant interaction with the safety board other than minor de-confliction discussions each day. We provided some of the information we collected to the NAVSEA Failure Review Board and the Safety Investigation Board. We were the first to talk to each major witness, and the first on scene on 18 April 2014. The Failure Review Board remained ongoing at the time this investigation was complete; its preliminary findings are included as Enclosure (14).

10. Commendations. Overall, this fire was fought by a team that showed a high degree of professionalism and courage. The men and women who responded to this casualty at sea demonstrated adaptive and intelligent reactions to a highly complex, confusing situation. Their firefighting actions were focused, timely, deliberate, coordinated, and reasonable. At the end of this report, I give several recommendations for commendation with my other recommendations.

Executive Summary

1. On Monday, 14 April 2014, between 1800 and 2200, USS HUÉ CITY (CG 66) fought a major fire while at sea. At that time, the ship was approximately 200 nautical miles northeast of Bermuda, four days into a transit to the Baltic Sea. The fire's primary fuel source was approximately sixty-five (65) to eighty-five (85) bales of mostly cotton rags wrapped in burlap, which had been improperly stowed in a little-accessed uptake trunk, 01-196-2-T.

2. The proximate cause of the fire was a slow build-up of heat in the rag bales, which were stacked up to four bales high and had come in contact with the Gas Turbine Engine Two Bravo (GTM-2B) exhaust ducting. GTM-2B was run intermittently over the three days prior to the fire. Immediately prior to the fire, GTM-2B had run continuously for just over twenty (20) hours. The slow build-up of heat essentially turned the cotton bales into piles of smoldering organic fuel.

3. I cannot rule out other ignition causes beyond all doubt. However, the theory above clearly and convincingly fits all known facts, and, most importantly, matches the observations of the first responders to enter the uptake trunk. I found no evidence supporting any other theory, whether intentional (i.e., arson), mechanical (e.g., sparks), or negligent (e.g., cigarette).

4. The bales had been placed in the uptake trunk by a working party on 19 March 2014, when an abnormally large shipment of rags, filling multiple engineering work-center requisitions, was received and all the normal storage spaces had been filled. I identify below who knew of the improper stowage, as well as who could have or should have known.

5. Once the fire caught, I believe it smoldered and burned in the uptake trunk for several hours before discovery. As the heat built, it rose and eventually melted the aluminum decking and catwalks through three levels overhead, creating a three- and eventually four-level "chimney" that heated bulkheads, both through the outer skin of the ship and through the inboard bulkheads. The fire came to the crew's attention in several different ways, all within a period of approximately ten minutes.

a. First, as a "burning plastic" smell and black smoke coming from the stack, as observed by the OOD and the embarked aircrew.

b. Second, as the smoke travelled through the generator intake, it "over-temped" the Number One Gas Turbine Generator (Nr 1 GTG), and manifested itself in Central Control Station (CCS) as a GTG loss.

c. Third, as watch-standers investigated the GTG loss, the smoke entered Nr 1 GTG via the intake plenum and into the GTG module, where it mimicked some symptoms of a class Bravo fire, emerging as black smoke in the GTG module and as a visible haze above the module in Main Engine Room One (MER 1).

d. Fourth, as it provided conduction heating laterally through the inboard bulkheads and adjoining spaces, it appeared in the passageways on several decks nearly simultaneously as either a series of class Charlie fires or "White Smoke" reports.

6. The fire was eventually extinguished without significant injury or any loss of life by multiple teams combating both active fires and hotspots on five different levels of the ship. It was extinguished within approximately 60 minutes of discovery, with additional cooling and investigation for another 45 minutes before the uptake trunk was accessed for overhaul. The ship secured from General Quarters (GQ) approximately two hours later.

Findings of Fact

Overview:

1. On 14 April 2014, sometime before 1819, a fire broke out in the unmanned Main Engine Room Number One Exhaust Uptake Trunk (01-196-2-T) (hereafter "uptake trunk") on USS HUÉ CITY (CG 66). [Encls (2) through (6)]

2. The location and geometry of the uptake trunk and the exhaust ducting running through it are shown in enclosed diagrams. [Encls (7), (8), & (9)]

3. The ship's crew and embarked personnel were at General Quarters for approximately 3.5 hours, of which 1.5 hours was spent actively engaging the fire or cooling hot spots. [Encl (2)]

4. No significant personnel injuries occurred during the firefighting efforts. One Sailor was seen for a sprained ankle and released to full duty. Several others were seen for minor respiratory irritation and responded well to standard treatments. [Encls (2) & (10)]

5. During the overhaul actions by ship's crew, approximately fifty (50) burned and partially burned bales of rags wrapped in burlap were removed from the uptake trunk. [Encls (11), (12), & (13)]

6. The forensic experts' report investigated all potentially reasonable theories about the cause of the fire in the uptake trunk including induction heating of the materials from the exhaust ducting, induction heating from bleed air piping, cigarette ignition of stored materials, self-heating/spontaneous combustion, and sparking due to preservation. The FRB's findings state that the most plausible cause is induction heating from the hot exhaust ducting, exacerbated by the insulation properties of the bales and degraded insulation in the exhaust ducting. [Encl (14)]

Fuel Source Origins / Improper Stowage:

7. On 19 March 2014, USS HUÉ CITY (CG 66) returned from conducting numerous basic phase training events in the

Jacksonville Operating Area, and a port visit in Savannah, Georgia. The ship moored on C-2 pier in Mayport, Florida. [Encls (15) through (24)]

8. That afternoon, a significant number of engineering personnel, to include most officers, chief petty officers, and first class petty officers, were assigned either to stand duty, participate in In-port Emergency Team (IET) exercises (sections 2 of 3 and 3 of 3), or develop the following week's Damage Control (DC) exercise training packages. [Encls (15), (18), (20), & (24) through (28)]

9. That same afternoon, 235 bales of rags were delivered to USS HUÉ CITY (CG 66) at berth C-2 by three stake trucks. Of those 235 bales, 180 were requisitioned separately by five different work-centers of the engineering department. The remaining 55 bales were ordered by the weapons department. [Encls (17), (18), (20), (22), (25), (26), (29), (30), & (31)]

10. When I asked several officers if the ship typically over-ordered materials, the only example anyone could cite was toilet paper. Toilet paper was routinely over-ordered due to the previous CO's concern, as he had run out once at a previous command. I found no evidence of systemic over-ordering. [Encls (18), (25), & (85)]

11. When interviewed, the former CO cited minor shortages on a previous deployment, but was unaware of any systemic over-ordering patterns. [Encl (55)]

12. The rag bales requisition distribution for the engineering department follows: EM01, 50 bales; EM02, 50 bales; ER01, 50 bales; EA01, 25 bales; and EB01, 5 bales. [Encls (29) & (30)]

13. The engineering-experienced personnel assigned to this team believe that seventy-five (75) bales in spaces or in storage would be the appropriate level needed for sustained operations. [Encls (36) & (48)]

14. The department requisitions are normally approved by the Chief Engineer (CHENG), or by the Main Propulsion Assistant

(MPA) in his absence, and are processed by the supply department. The Chief Engineer does not recall who approved this specific series of requisitions. [Encls (32) & (85)]

15. The bales were filled with a mix of cotton and synthetic cloth rags. Each bale is listed as weighing 52 pounds, volume 3.5 cubic feet, and is roughly cubic in shape, bound with wire. A copy of a sample tag from another bale is enclosed. [Encls (18), (33), & (84), Photos (73) through (76)]

16. Multiple Sailors in the engineering organization were surprised at the large quantity of rags delivered. [Encls (17), (18), (19), (23), (24), (26), & (28)]

17. The rags were loaded to the flight deck, where (b)(3), (b)(6) (b)(3), (b)(6) the senior enlisted engineer ("Top Snipe"), organized a working party from the engineering department to distribute the rag bales received. [Encl (18), (24), (26), & (31)]

18. As a result of the afternoon's busy schedule, the working party was comprised only of E-5 and below, and was tasked directly by (b)(3), (b)(6) [Encls (18), (19), (20), (21), (23), (24), (26), (31), (34), & (51)]

19. Most of the bales were distributed across the engineering spaces, to include both main engine rooms, both auxiliary machinery rooms, aft steering, shaft alley, gas turbine cooling room, and the oil lab, while others were passed to Deck Division. [Encls (18), (20), (21), (22), (23), & (31)]

20. At the conclusion of the initial distribution throughout the normal engineering storage spaces, approximately 75 additional bales of rags remained topside, now on the aft missile deck. [Encls (18), (23), & (31)]

21. (b)(3), (b)(6) personally surveyed Auxiliary Machinery Room Two, a normal rag storage area, but found no additional space. [Encl (18)]

22. After (b)(3), (b)(6) returned topside, someone informed him of a "storeroom" on the port side that could hold the rag bales. That "storeroom" was the uptake trunk, 01-196-2-T. [Encl (18)]

23. (b)(3), (b)(6) went and looked at the uptake trunk. He remembers seeing one or two bales of rags already in the uptake trunk. He believes they were older, and not from the requisition received that day. [Encl (18)]

24. (b)(3), (b)(6) cannot remember who first identified the uptake trunk to him as an available "storeroom." Having observed his demeanor closely over the course of two separate interviews, I find him credible. [Encl (18)]

25. (b)(3), (b)(6) then directed the working party to move the rest of the bales to the uptake trunk. [Encls (18), (20), & (31)]

26. In order to move the bales from the aft missile deck, it was necessary, due to brow positioning on the flight deck, to move the bales along a "conga line" that transited the starboard side to the midships quarterdeck passageway, then moved forward on the port main deck to the uptake trunk. [Encls (20), (21), (22), (23), (24), (31), & (34)]

27. The "conga line" consisted of the following Sailors, from aft to forward: (b)(3), (b)(6), (b)(3), (b)(6) (b)(3), (b)(6) (b)(3), (b)(6) (b)(3), (b)(6) (b)(3), (b)(6) (b)(3), (b)(6) (b)(3), (b)(6), (b)(3), (b)(6), (b)(3), (b)(6) (b)(3), (b)(6) and (b)(3), (b)(6) (b)(3), (b)(6) participated later in the working party, taking a place in the line on the starboard side. [Encls (18), (20), (21), (22), (23), (24), (28), (31), & (34)]

28. Because of his position in the line, (b)(3), (b)(6) did not personally see the bales being stacked in the uptake trunk. However, he knew from others in the working party that they were being taken to the "exhaust room." [Encl (21)]

29. At one point during initial rag bale movement to the storeroom (after a number of bales had already been moved), the

working party had a brief pause. During that pause, (b)(3), (b)(6) (b)(3), (b)(6) counted sixty-two (62) remaining bales left to move. [Encl (31)]

30. (b)(3), (b)(6), as the first person in the "conga line" to reach the uptake trunk with a bale in hand, fell into the position of stacking the bales in the uptake trunk. [Encls (20) & (22)]

31. (b)(3), (b)(6) believes he was the first person that day to enter the space physically holding a bale. When he entered the space, he saw what he believed to be some number of "old" bales (less than ten) present. [Encls (20) & (22)]

32. (b)(3), (b)(6) stacked approximately 65-75 bales into the uptake trunk, starting from the aft inboard corner adjacent to the Nr 1 GTG intake plenum, and moving forward along the bulkhead separating the uptake trunk from the 01 centerline passageway (often referred to in statements as the Unit Commander's Cabin (UCC) passageway). [Encl (20)]

33. (b)(3), (b)(6) stacked the bales four high, and then began to work outboard through the space. A diagram of (b)(3), (b)(6) (b)(3), (b)(6) description is attached to his statement. [Encls (20) & (22)]

34. (b)(3), (b)(6) recalls stacking the bales neatly, with approximately one foot of clearance from the large exhaust ducts, which he referred to as "the big pipes." He left that one-foot clearance gap because he was not sure what the ducts were. He did not place bales on the Nr 1 GTG intake plenum because it is a slanted arrangement. [Encl (20)]

35. Once the bales were stored, (b)(3), (b)(6) "got on with next business" and had no further discussions with anyone, up or down the chain of command, of the rag bale storage in the uptake trunk. The working party then moved on to haul Xerox paper. [Encls (18), (20), & (40)]

36. After the working party, some of the Sailors from the working party discussed the bale stowage with (b)(3), (b)(6) and (b)(3), (b)(6). [Encls (27) & (28)]

37. (b)(3), (b)(6) and (b)(3), (b)(6) had a brief discussion about the rag bales. [Encls (27) & (28)]

38. (b)(3), (b)(6) did not tell any officer or chief petty officer about the rag bales he knew were stored in the uptake trunk. [Encl (27)]

39. Flammable material is not authorized to be stored in uptake spaces. [Refs (b), (c), & (d)]

Description of the Uptake Trunk:

40. The uptake trunk is a three-story open compartment. [Encls (8) & (9)]

41. The deck of the uptake trunk is one portion of the Main Engine Room One (MER 1) overhead on the port side. [Encls (8) & (9)]

42. The bulkheads of the uptake trunk adjoin ship's internal spaces on the forward, aft, and inboard sides. The outboard bulkhead is the superstructure's outer skin on the port side. [Encls (8) & (9)]

43. The overhead of the uptake trunk is the deck of the 04 level mixing room. [Encls (8) & (9)]

44. The uptake trunk houses the exhaust ducting that rises straight up from GTM-2A, GTM-2B, and Nr 1 GTG, as well as an anti-icing bleed air header. [Encl (9)]

45. MER 1 exhaust ventilation is discharged into the uptake trunk. [Encl (9)]

46. The 04 level mixing room has large louvers on the port and starboard sides and supports the Boundary Layer Infrared Suppression System (BLISS) caps above. Exhaust ducting releases

exhaust gases, which are mixed with fresh air obtained via the louvers, and released through the BLISS caps above. [Encl (9)]

47. The layout of the uptake trunk can be effectively pictured, in layman's terms, as a four story wood-burning stove. The open space represents the fire box; the MER 1 exhaust ventilation represents the grating for oxygen supply; the mixing room is the chimney cap; and the deck of the mixing room is the damper. [Encls (8) & (9)]

48. The last Integrated Class Maintenance Plan (ICMP) inspection of the intakes and exhaust ducting was 17 July 2013. [Encl (35)]

49. The uptake trunk on USS HUÉ CITY (CG 66) is not a locked space. [Encl (18) & (36)]

50. The uptake trunk is not required to be locked by references (d) and (e), as it fits neither of the formal definitions in those references for "main propulsion space" nor "engineering auxiliary space." [Encl (36); Refs (d) & (e)]

51. Of the three Mayport cruisers personally surveyed by the team during this investigation, none lock their uptake trunks. [Encl (36)]

52. Of the four cruiser-experienced investigation teams' members, only one recalls locking uptake trunks at a previous command. [Encl (36)]

Ship Status Prior to Fire:

53. The Commanding Officer (CO) is ultimately responsible for the safety, well-being, and efficiency of his command. He is responsible for ensuring that periodic inspections of the spaces are conducted for material condition and cleanliness and that flammable material is stored in a safe manner. [Ref (f)]

54. CAPT Wyatt Chidester, USN, took command of USS HUÉ CITY (CG 66), following a one-day turnover, on 28 February 2014, relieving CAPT Daniel Uhls, USN. [Encl (16)]

55. The Executive Officer (XO) is responsible for carrying out the CO's policies, including maintaining good order and discipline in the command. The XO is also responsible for the

implementation and oversight of the Zone Inspection program. Further, the XO is responsible for exercises and training – specifically, the oversight of the Damage Control Training Team (DCTT) program. [Encls (25), (37), & (38); Ref (g)]

56. LCDR John Liddle, USN, assumed his duties as XO in USS HUÉ CITY (CG 66) in August 2013. [Encl (25)]

57. The Chief Engineer (CHENG) is designated as the Damage Control Officer on surface ships. He is specifically responsible for the proper performance and functions of Damage Control (DC) and firefighting. [Encl (38); Ref (g)]

58. (b)(3), (b)(6) assumed his duties as CHENG in USS HUÉ CITY (CG 66) in October 2013, but, between TAD and leave, was effectively absent until late December 2013. [Encl (32)]

59. The Damage Control Assistant (DCA) is responsible for the supervision and organization of the ship's damage control and firefighting organization, as well as the Damage Control Petty Officer (DCPO) program. [Encl (38); Ref (g)]

60. (b)(3), (b)(6) reported onboard as DCA in USS HUÉ CITY (CG 66) in December 2012. [Encl (39)]

61. The Fire Marshal is responsible for assisting the CHENG and DCA in training Sailors and in the prevention and the fighting of fires. This includes daily inspections of the ship; preparing, routing and following up on fire hazard reports and corrections; and training fire teams and DCPOs. [Encl (38); Ref (g)]

62. (b)(3), (b)(6) reported onboard as the leading damage controlman and Fire Marshal in USS HUÉ CITY (CG 66) in May 2012. [Encl (12)]

63. The Main Propulsion Assistant (MPA) is responsible to the Chief Engineer for the material condition and operation of the ship's propulsion engines and the electrical generators. The MPA also acts as the Assistant Chief Engineer. [Encl (38); Ref (g)]

64. (b)(3), (b)(6) reported onboard as MPA in USS HUÉ CITY (CG 66) in May 2013. [Encl (17)]

65. The Main Propulsion Officer (MPO) is responsible for the maintenance and administration of Main Propulsion (MP) Division and its work-centers. [Encl (38)]

66. (b)(3), (b)(6) reported to USS HUÉ CITY (CG 66) in December 2011, and assumed duties as MPO in June 2012. [Encl (40)]

67. USS HUÉ CITY's Unit Level Training (ULT) Tier 1 occurred over an 11-week period. A standard cruiser ULT Tier 1 occurs over a three month period and is based, currently, on a 27-month cycle. [Encl (24); Ref (h)]

68. At the start of the Tier 1 training allotment, several Tier 1 events had already been completed. [Encl (24)]

69. USS HUÉ CITY (CG 66) completed Mobility-Damage (MOB-D) certification on 21 March 2014. [Encls (24) & (41)]

70. USS HUÉ CITY completed Mobility-Engineering (MOB-E) certification on 31 March 2014. Tagout reassessment was completed by Afloat Training Group (ATG) Mayport, Florida on 10 April 2014. [Encls (24), (36), & (42)]

71. Naval Safety Center conducted a safety survey of USS HUÉ CITY (CG 66) on 13 August 2013, noting 168 total discrepancies. This number is above average for the CG-47 class. [Encl (43)]

72. USS HUÉ CITY (CG 66) was certified to deploy by Commander, United States Fleet Forces Command message of 11 April 2014. [Ref (i)]

DC Status:

73. As of 14 April 2014, 100 percent of required personnel were qualified for their assigned positions within General Quarters (GQ) repair lockers, with the exception of under instruction (U/I) assignments under qualified watch-standers. [Encl (44)]

74. Condition II DC repair locker assignments are the same as General Quarters. [Encl (25)]

75. The at-sea fire party watch-bill provided was not produced via RADM. As NTCSS was unavailable, the investigation team could not validate qualifications. [Encl (45)]

76. The Condition III watch-bill combines Flight Quarters with underway watch sections, but is incomplete (e.g., flight deck fueling team and JP-5 pump room operator are not identified). [Encl (46)]

77. The crew's training records (various dates) and the Fleet Training, Management and Planning System (FLTMPS) report of 23 April 2014 indicate that 85 percent of required personnel had attended General Shipboard Fire Fighting, 100 percent of required personnel had attended Advanced Shipboard Fire Fighting, and 100 percent of required personnel had attended Damage Control Repair Party Leader training. [Encl (24)]

78. The ship conducted twenty-two (22) DC drills between 1 January 2014 and 14 April 2014. [Encl (24)]

79. The last DC drill conducted, the MOB-E 1.4 Main Space Fire Drill for engineering certification, was held on 31 March 2014. [Encls (24), (36), (42), & (47)]

80. On 14 April 2014, the DC plates were up to date. However, the electronic Damage Control Management System (DCMS) was non-operational and had not been operational for a significant period. [Encls (12), (39), & (48)]

81. During the fire, the Damage Control Training Team (DCTT) organization became the executive level and/or additional watch-station personnel in many positions, as they had trained to do. [Encls (11), (12), (25), & (49)]

Administrative Oversight of the Uptake Trunk:

82. As of 14 April 2014, (b)(3), (b)(6) (CHENG), (b)(3), (b)(6) (MPA), and (b)(3), (b)(6) (MPO) had never entered the uptake trunk. [Encls (17), (32), & (40)]

83. (b)(3), (b)(6) (MPO) did not know that work-center EM01 owned the uptake trunk. [Encl (40)]

84. The following Main Propulsion (MP) Sailors were aware that work-center EM01 did own the uptake trunk, and were the last MP Sailors to enter the trunk (excepting (b)(3), (b)(6) and the junior enlisted in the 19 March 2014 working party).

a. (b)(3), (b)(6) MP Division Leading Chief Petty Officer (LCPO), entered the uptake trunk in July 2013 for general inspection; [Encl (26)]

b. (b)(3), (b)(6) former MP Division Leading Petty Officer (LPO), entered the uptake trunk last in 2012 during INSURV; [Encl (19)]

c. (b)(3), (b)(6) MP LPO, entered the uptake trunk in August 2013 (believed for a PMS check); [Encl (27)]

d. (b)(3), (b)(6) MP Division Safety Petty Officer; entered the uptake trunk in December 2013 to perform a tasked space safety inspection; [Encl (51)]

e. (b)(3), (b)(6) EM01 workcenter supervisor (WCS), entered the uptake trunk on 3 February 2014 to complete Preventative Maintenance System (PMS) check 2591/002 36M-1. [Encl (28)]

85. USS HUÉ CITY's current Zone Inspection instruction is dated 18 October 2010. [Encls (24), (25), & (52)]

86. The 2010 Zone Inspection instruction includes a space responsibility enclosure list. That list does not identify the uptake trunk (01-196-2-T) and responsible division. [Encls (24) & (52)]

87. The 2010 Zone Inspection instruction describes an independent schedule inspection performed in geographic ship segments. [Encls (24) & (52)]

88. The XO modified the Zone Inspection program in September or October 2013. Unsatisfied with the 2010 instruction, he combined Zone Inspection with the Division in the Spotlight (DITS) program. [Encls (18), (24), (25), & (52)]

89. USS HUÉ CITY's current DITS instruction is dated 29 September 2010. [Encls (24) & (53)]

90. The 2010 DITS instruction does not detail the addition and changes to the Zone Inspection instruction process as directed by the XO in September/October 2013. [Encls (24), (25), & (53)]

91. Review of Zone Inspection records identified no Zone Inspection Discrepancy Lists (ZIDL) for the uptake trunk. [Encl (24)]

92. Main Propulsion Division conducted Zone Inspection in concert with the DITS program on 6-18 November 2013. The uptake trunk was not inspected during that event. [Encls (25) & (40)]

93. There is no Zone Inspection report corresponding to the 6-18 November 2013 DITS inspection. [Encls (24), (25), & (54)]

94. The former Commanding Officer, CAPT Uhls, did not participate in the zone inspections after the ship's 2012 deployment. [Encls (25) & (55)]

95. CAPT Uhls delegated inspections to the Executive Officer and the Maintenance and Material Management Coordinator (3MC), then inspected the follow-up reports. [Encl (55)]

96. The current Commanding Officer, CAPT Chidester, participates in the zone inspections, and has done so since assuming command. [Encls (16) & (25)]

97. The Damage Control Assistant and Fire Marshal inspected fan rooms on 12 April 2014, identifying several issues with stowage that were resolved. They did not, however, enter the uptake trunk. [Encl (25) & (39)]

98. The safety program manager had informally instituted a quarterly inspection requirement, conducted by the divisional safety petty officer for each space. The inspection requirement is not formally documented in an instruction. [Encls (36) & (48)]

99. The uptake trunk is on the list of spaces for quarterly safety inspection. [Encls (36), (48), & (56)]

100. Prior to the fire, the MP Division Safety Petty Officer, GSM1(SW) Kaiser, last inspected the uptake trunk in December 2013. [Encls (36), (48), (57), & (58)]

101. The MP Division Safety Petty Officer did not inspect the uptake trunk or other MP Division spaces in CY14 Q1. [Encls (36), (48), (57), & (58)]

102. During my investigation, I found that the EM01 Work-center Preventative Maintenance System (PMS) binder contained the following errors:

a. The List of Effective Pages (LOEP) was for the EM02 Work-center vice the correct EM01 Work-center; [Encls (59) & (60)]

b. Of the two Maintenance Index Pages (MIP) I spot-checked:

(1) The MIP page for MIP 5000/017 was missing and tagged with a "Post-it" noting that the MIP was lined out in SKED but not the LOEP; [Encls (59) & (60)]

(2) MIP 2591/002 was present, but had incorrectly lined out check U-1 (a pre-dockside availability exhaust check); [Encls (59) & (61)]

c. The 6300/001 S-1 Maintenance Requirement Card (MRC) Location Guide List (LGL) does not list the uptake trunk. [Encls (40), (59), (62), & (63)]

103. EM01 PMS records show that the last maintenance (2591/002 36M-1) in the uptake trunk was accomplished by (b)(3), (b)(6) on 3 February 2014. [Encls (28), (64), & (65)]

104. On 3 February 2014, (b)(3), (b)(6) saw no unauthorized material in the uptake trunk. [Encl (28)]

Period Between Rag Onload and Fire:

105. Twenty (20) bales of rags were received between 3 February (the last time the uptake trunk was formally accessed) and 19 March 2014. Those twenty bales were purchased on an emergent need on 4 February 2013, and were therefore unlikely to have been placed in excess storage areas. [Encls (85) & (86)]

106. USS HUÉ CITY (CG 66) executed Light-Off Orders and Engineering Operational Sequencing System (EOSS) procedure Master Light-Off Checklist (MLOC) for underway operations on 24 March, 31 March, and 11 April 2014. [Encls (66), (67), & (68)]

107. USS HUÉ CITY's Engineering Light-Off Orders pre-light-off checklist, while similar to the EOSS MLOC:

a. Omits both parentheticals in line 5.g. of the MLOC, which states in the original, "Inspect and remove all fire hazards from engineering spaces (including uptake spaces). Stow all equipment not in use (missile hazard)"; [underscore mine] [Encls (18), (25), (26), (36), (59), & (66) through (69)]

b. Does not list the uptake trunk in the list of spaces applicable for all associated EOSS MLOC requirements. [Encls (18), (25), (26), (36), (59), (66), (67), & (68)]

108. Between 19 March and 13 April 2014, the maximum period in which the ship ran GTM-2B continuously was 14 hours. [Encl (36)]

109. With the exception of a single 14-hour run date, GTM-2B was run for fewer than eight (8) hours each time it was run between 19 March and 13 April 2014. [Encl (36)]

110. On Friday, 11 April 2014, USS HUÉ CITY (CG 66) left her homeport of Mayport, Florida, en route to the Baltic Sea. [Encls (16) & (70)]

111. At 2215L on 13 April 2014, GTM-2B was started and ran continuously, in a trail shaft configuration, until secured during the General Quarters (GQ) on 14 April 2014. [Encls (2), (16), (26), & (36)]

14 April 2014 - Date of Fire:

112. The times below in Findings 114 through 180 all refer to 14 April 2014. All times are local. Where times are inexact due to memory faults or late logging, I have inserted findings at the place I believe they most logically fall. The findings below are an overview. I provide an additional level of detail in Enclosure (71).

113. The damage control plates were photographed after the fire by (b)(3), (b)(6) and provided an additional source of data for validating the timeline below and refreshing the memory of witnesses. [Encl (72)]

114. At 1800, USS HUÉ CITY (CG 66) sets flight quarters to recover helicopter Proud Warrior 710 for hot pump and relaunch. [Encls (2), (73), & (75)]

115. Around 1808, the MER 1 Engine Room Operator (ERO) regulates the MER 1 lube oil temperature, as directed by the Engineering Officer of the Watch (EOOW). [Encl (74)]

116. At 1809, USS HUÉ CITY (CG 66) sets green deck. Proud Warrior 710 lands. [Encls (2) & (75)]

117. Around 1818, after the helicopter lands, an aircrewman and the pilot smell a plastic burning scent and see black smoke. The pilot reports to the Landing Signals Officer, who reports to the Officer of the Deck (OOD). [Encls (73) & (75)]

118. While on the starboard bridge wing, the OOD observes black smoke billowing from the top of the MER 1 stack. In the initial moment, the OOD believes the smoke may be a possible engine start authorized by the prior OOD. [Encl (75)]

119. From the port bridge wing, the Junior Officer of the Deck (JOOD) reports a burning smell to the OOD. The OOD dismisses the engine start theory and reports a possible fire to Central Control Station (CCS). [Encls (26), (50), & (75)]

120. At 1819, the fire alarm in Deck Gear Locker Nr 1 (01-196-4-A) activates and is acknowledged by the Propulsion Auxiliaries Control Console (PACC) Operator, (b)(3), (b)(6) [Encls (4) & (26)]

121. At 1821, the fire alarm activates again and is acknowledged. [Encls (4) & (26)]

122. Also at 1821, the OOD calls back to CCS with another report of continued smoke and ash. [Encls (16), (26), (50), & (75)]

123. About this time, multiple watch-standers hear a loud noise and associated deck shudder in Main Engine Room 1 (MER 1). [Encls (14), (74) & (76)]

124. Also at 1821, the EOOW reports a loss of Nr 1 GTG over the 1 Main Circuit (1MC) and orders watch-standers to investigate. [Encls (2), (3), (4), (12), (16), (25), (26), (50), (74), (75), & (76)]

125. The MER 1 ERO, (b)(3), (b)(6) reports black smoke coming from the fifth and tenth stage drains and reports a possible class Bravo fire in Nr 1 GTG. [Encls (50) & (74)]

126. The at-sea fire party is called away to respond to the suspected class Bravo fire. [Encl (50)]

127. (b)(3), (b)(6) investigates the casualty to Nr 1 GTG. Nr 1 GTG shows a high Turbine Inlet Temperature, although (b)(3), (b)(6) cannot see any flame. (b)(3), (b)(6) accordingly asks for and receives permission to manually activate CO^2 flooding. [Encls (12), (25), (26), (50), (74), & (76)]

128. At 1822, (b)(3), (b)(6) orders (b)(3), (b)(6) to manually release CO^2. [Encls (4), (74), & (76)]

129. At 1823, (b)(3), (b)(6) sees that the black smoke has turned white. He reports the suspected class Bravo fire out. [Encls (26), (50), (74), & (76)]

130. At 1824, the EOOW logs the suspected class Bravo fire out. [Encls (3) & (50)]

131. At 1824, the PACC Operator acknowledges three fire alarms from Deck Gear Locker Nr 1 (01-196-4-A). [Encls (4) & (26)]

132. At 1828, white smoke is reported in the 03 level passageway. [Encls (2), (5), (12), (26), (39), (50), & (77)]

133. At 1829, a class Charlie fire in a power panel on the 03 level is reported over the 1MC. [Encls (5), (12), (39), (50), & (75)]

134. Around this time, the helicopter pilot sees ash, small particles of debris, threads, and foam land on the helicopter. An immediate aircraft shutdown is ordered. [Encls (16) & (73)]

135. At 1831, fire alarms in Forward Decontamination passageway (01-188-4-L) and the 03 level passageway (03-174-0-L) activate. [Encl (4)]

136. The OOD returns to the port side bridge wing. She observes the port side of the superstructure under the mixing room louvers smoking and sees white smoke coming from the louvers. [Encl (75)]

137. At 1832, fire alarms sound in the 2M shop (03-188-2-Q) and 01 passageway (01-174-0-L). [Encl (4)]

138. Sailors from 03 and 04 levels lay out three firefighting hoses and one potable water hose on the 04 level. [Encls (11), (16), (75), (77), & (78)]

139. Having taken lead of a team of Sailors who had been exercising on the 04 level, (b)(3), (b)(6) reports seeing flames through the louvers. He asks the CO for permission to engage. Permission is granted. [Encls (16), (75), (77), & (78)]

140. At 1835, a class Alfa fire is reported in the Unit Commander's Cabin (UCC) passageway on the 01 level. DCA orders Condition II DC. [Encls (25) & (39)]

141. About this time, (b)(3), (b)(6) is investigating in MER 1. He sees an orange glow through the MER 1 exhaust vents, and points it out to the MPA, (b)(3), (b)(6) and (b)(3), (b)(6) (b)(3), (b)(6) [Encls (17), (18), (39), (74), & (76)]

142. At 1836, (b)(3), (b)(6) and (b)(3), (b)(6) try to activate the MER 1 exhaust vent dampers, but pull the wrong KIDDE-head. They secure MER 1 supply and exhaust fan motors. [Encl (18)]

143. At 1837, a fire alarm in the radio passageway (02-220-2-L) activates. [Encl (4)]

144. At 1837, General Quarters (GQ) ordered. [Encls (2), (3), (5), (6), (16), (25), (36), (39), (50), & (75)]

145. At 1838, the JP-5 service pump is secured. 412 gallons of fuel have been transferred to the helicopter. [Encls (3), (51), & (75)]

146. At 1839, River City 2 is set. [Encl (2)]

147. At 1840, firefighters are engaging the suspected class Alfa fire in the UCC passageway (01 level). [Encl (39)]

148. Around 1840, (b)(3), (b)(6) investigates the 03 level fire, thinking that because Nr 1 GTG failed and the motor controllers for the blow in doors were collocated, there could be a connection. He finds that the smoke is too thick to stay in the 03 passageway and he exits through the door in aft 03 passageway to the 03 weather decks. [Encl (74)]

149. At 1840, Sailors on the quarterdeck begin cooling the superstructure from the 01 level port side. [Encls (16), (25), & (75)]

150. At 1842, the EOOW stops and locks the port shaft in accordance with LUSU. [Encls (4), (25), & (26)]

151. At 1844, 02 and 03 level investigators are inspecting for hot spots. The suspected class Alfa fire in Forward Decontamination Station is reported out. One hot spot is found and cooled. [Encls (2) & (39)]

152. At 1844, GTM-2B is stopped. [Encls (3) & (17)]

153. At 1845, GTM-1A is started. [Encls (3) & (17)]

154. At 1845, the suspected class Alfa fire in the UCC passageway is reported out. [Encl (39)]

155. At 1850, the CO orders all radars secured, so that hose teams en route from repair 3 can combat fire from the 05 level above the pilot house. [Encls (16) & (78)]

156. Around 1850, (b)(3), (b)(6) and his team (b)(3), (b)(6) (b)(3), (b)(6) (b)(3), (b)(6) and (b)(3), (b)(6) relieve the first team in the UCC passageway. They cool hotspots in lagging. [Encl (49)]

157. The rake proves ineffective in pulling down lagging. (b)(3), (b)(6) calls for a halligan tool. [Encl (49)]

158. At 1855, material conditions Zebra and Circle William are set forward. [Encls (3), (16), & (39)]

159. At 1856, investigators report temperature readings of 185 degrees in the 2M shop. [Encl (3)]

160. At 1857, investigators report bubbling paint in the MER 1 overhead. [Encl (3)]

161. At 1858, a possible class Alfa fire is reported in the Navigation Storeroom (02-188-2-A), based on deck bubbling in the 03 level 2M shop. Investigators continue looking for hot spots in MER 1, Forward Decontamination Station, 2M Shop, Pilot House, and MER 1 stack system. [Encls (2), (3), (12), & (25)]

162. Around 1900, (b)(3), (b)(6) attempts to enter the locked Navigation Storeroom. He calls for an axe. [Encls (12) & (39)]

163. At 1908, the deck log records a class Alfa fire in the Navigation Storeroom. [Encl (2)]

164. At 1909, (b)(3), (b)(6) reports to DCA that there is no class Alfa fire in the Navigation Storeroom. [Encls (12) & (39)]

165. At 1913, investigators report a 300 degree bulkhead temperature in the Navigation Storeroom. Sailors begin moving charts to cool the bulkhead. [Encls (2) & (39)]

166. At 1916, investigators report suspected class Alfa fire in the UCC passageway (01-174-1-L). Reflash is reported in the UCC passageway. [Encl (39)]

167. At 1918, reflash in the UCC passageway is reported out. [Encl (39)]

168. About this time, (b)(3), (b)(6) and his team remove lagging on the outboard bulkhead in the UCC passageway, and discover a hole in the bulkhead that opens directly into the uptake trunk. The hole is approximately one foot in diameter. [Encls (39) & (49)]

169. (b)(3), (b)(6) sees a flame in the forward port corner of the uptake trunk, around the location of Deck Gear Locker Nr 1. He attacks it with a solid stream from the hose. [Encl (49)]

170. From 1924 to 1933, fire-teams cool the Forward Decontamination Station, MER 1, and the UCC passageway. An investigator reports a Forward Decontamination Station temperature of 200 degrees. Firefighting water cooling into the 04 level is stopped in order to investigate. [Encls (2) & (3)]

171. At 1947, all fires appear out. Hot bulkheads remain throughout the ship. (b)(3), (b)(6) continues to investigate. Repair Lockers 2 and 3 are ordered to concentrate on overhaul. [Encls (2), (12), & (39)]

172. At 1949, 01 and 03 level passageway doors are opened for natural ventilation. [Encls (2) & (39)]

173. From 1955 to 2005, fire-teams identify and cool hot spots on the 04 level, 2M shop, and Navigation Storeroom. [Encls (2), (3), (39)]

174. Around 2000, (b)(3), (b)(6) (b)(3), (b)(6) and (b)(3), (b)(6) reach the two doors on the 01 level that open into Deck Gear Locker Nr 1 and the uptake trunk. Details of the overhaul of that space are laid out in the next section below, Findings 182 through 198. [Encls (11), (12), & (39)]

175. By 2019, a full overhaul team is en route to the UCC passageway (01-174-0-L) to support (b)(3), (b)(6) and (b)(3), (b)(6) (b)(3), (b)(6) [Encl (2)]

176. From 2022 to 2045, the hot spot in the MER 1 overhead cools from 125 degrees to 113 degrees, and continues to decrease. [Encls (39) & (49)]

177. At 2103, de-smoking is complete. [Encl (2)]

178. At 2149, engineering log records secure from General Quarters. [Encl (3)]

179. At 2150, engineering log records set modified Zebra. [Encl (3)]

180. At 2159, deck log records secure from General Quarters. [Encls (2) & (39)]

181. By 0200 the next day (15 April 2014), the CO estimates the overhaul is complete. [Encl (16)]

Overhaul process:

182. After 2000 on 14 April 2014, (b)(3), (b)(6) was the first person into the uptake trunk as part of the overhaul. He entered via the Deck Gear Locker Nr 1's water-tight door. [Encl (11) & (12)]

183. When (b)(3), (b)(6) opened the Deck Gear Locker Nr 1 door, water flowed out. The water level was approximately two-and-one-half to three feet above deck level. A slight port list was noted. [Encls (11) & (16)]

184. Concurrently, (b)(3), (b)(6) opened the uptake trunk hatch. [Encl (11)]

185. After (b)(3), (b)(6) entered Deck Gear Locker Nr 1, he climbed over the accommodation ladder H-frame. [Encl (11)]

186. He then entered the uptake trunk proper by stepping through the melted (now missing) bulkhead that had previously separated the locker from the uptake trunk. [Encl (11)]

187. (b)(3), (b)(6) entered the uptake trunk via the uptake trunk hatch opened by (b)(3), (b)(6). He took up a position behind (b)(3), (b)(6), who had by then entered the uptake trunk proper. [Encl (12)]

188. As he entered the trunk via its normal hatch, (b)(3), (b)(6) (b)(3), (b)(6) saw two or three bales of rags just inside the hatch, located between GTM-2A and GTM-2B exhaust ducting. [Encls (12) & (13)]

189. Once (b)(3), (b)(6) and (b)(3), (b)(6) entered the uptake trunk, they saw bales of rags stacked four high throughout the space. Both estimate they saw about fifty (50) bales. [Encls (11), (12), & (26)]

190. The top two layers of bales were burned about half-way through across the pile. The bottom two layers were less burned. [Encl (11), (12), & (13)]

191. Bags in the after end of the space appeared more burned than the forward end of the space. Bales closer to the exhaust ducting were more burned than those closer to the bulkhead adjoining the UCC passageway. (b)(3), (b)(6) marked the "most burned" sections with cross-hatching on the diagram attached to his statement. [Encls (11) & (12)]

192. The locations of the bales are depicted both in the diagram attached to (b)(3), (b)(6) and (b)(3), (b)(6) statements, and in Enclosure (79), which shows the "shadows" of the burnt bales, post-cleanup. [Encls (11), (12), & (79)]

193. (b)(3), (b)(6) saw the bales leaning up against the remains of the Nr 1 GTG plenum. [Encls (11) & (80)]

194. Mixed with the burnt bales were many chunks of melted aluminum. The aluminum debris ranged from as small as a softball to larger debris weighing more than 45 pounds. A large piece of copper nickel piping was also identified. [Encls (11), (12), (13), & (28)]

195. The remains of the burned bales of rags were removed from the uptake trunk to the weather decks using axes and rakes. The lowest tier of bales was sodden and heavy from the absorbed fire-fighting water. [Encls (11), (12), & (13)]

196. Many of the bales fell apart when removed from the space. [Encls (11), (12), (13), & (28)]

197. Toward the end of the overhaul and bale removal, (b)(3), (b)(6) (b)(3), (b)(6) removed deck drain covers to assist with dewatering. [Encl (12)]

198. Almost all of the debris was jettisoned, including all chunks of metal, all bales, and all but a few isolated rags, small piles of ash, and bale wrapping wire. [Encls (11), (12), (16), (18), (25), (39), (81), (82), & (83)]

Description of the damage:

199. A full investigation of the damage sustained is in progress by the NAVSEA Failure Review Board and repair organization. The full scope of repairs and the corresponding dollar value has yet to be defined. For command investigation purposes, the following general comments follow.

200. Eighty (80) photographs are included as Enclosure (84), along with a separate index containing photographic details. Where appropriate, pictures of undamaged spaces on USS GETTYSBURG (CG 64) are provided to illustrate the extent of the damage on USS HUÉ CITY (CG 66). The following are highlights only.

201. The 01, 02, and 03 level port side exterior superstructure is charred and warped. [Encl (84), Photos (1) through (5)]

202. Nr 1 GTG assessment is in progress. This team found no signs of a class Bravo fire in the Nr 1 GTG module. Over-temperature conditions, however, will require the GTG to be changed out. [Encl (84), Photos (29) through (33)]

203. On the 01 level, the uptake trunk is effectively destroyed. [Encl (84), Photos (6) through (9), (40) through (48), & (50) through (66)]

a. So are Nr 1 GTG intake plenum (melted areas), the half-bulkhead forward of Nr 1 GTG exhaust ducting, and Deck Gear Locker Nr 1. [Encl (84), Photos (6) through (9), (40) through (48), & (50) through (66)]

b. Nr 1 GTG's intake plenum shows both signs of melting and of having been punctured (likely by the falling catwalks and aluminum decking). [Encl (84), Photos (6) through (9), (40) through (48), & (50) through (66)]

c. Additionally, the uptake trunk's bulkhead sheathing and structure show signs of heat deformation and areas of melting. [Encl (84), Photos (6) through (9), (40) through (48), & (50) through (66)]

204. Deck Gear Locker Nr 1's shared bulkheads with the uptake trunk are destroyed. The structural bulkheads are scorched. The installed light and alarm with associated wiring are destroyed. [Encl (84), Photos (10) through (23)]

205. All gear in Deck Gear Locker Nr 1 was fire damaged, and requires replacement. Two sets of block and tackles and their associated rope were destroyed and jettisoned. [Encl (84), Photos (10) through (23)]

206. The aft bulkhead of the decontamination station, shared with the uptake trunk and Deck Gear Locker Nr 1, is scorched. [Encl (84), Photos (8), (9), (17), & (23)]

207. On the 02 level, the intake trunk bulkheads are burned and show heat damage. [Encl (84), Photo (49)]

208. The aft bulkhead of the Navigation Storeroom is warped and holed. [Encl (84), Photos (67) & (68)]

209. The port bulkhead in the passageway running aft from CIC is noticeably warped. [Encl (84), Photos (67) & (68)]

210. On the 03 level, the uptake trunk's bulkheads are burned and heat damaged. [Encl (84), Photos (72)]

211. The deck in the 2M shop is warped and the port bulkhead of the passageway aft of the 2M shop is scorched. [Encl (84), Photos (69) through (72)]

212. On the 04 level, the deck of the mixing room is destroyed and the louvers on the port side of the stack are warped. [Encl (84), Photos (34) & (35)]

213. All catwalks in the uptake trunk are destroyed or compromised. [Encl (84), Photos (36) through (39)]

214. I-beam support structures at the 02 and 03 levels have been destroyed. [Encl (84), Photos (36) through (39)]

215. GTM-2A and GTM-2B exhaust's structural support is compromised. [Encl (84), Photos (34) through (39)]

216. The MER 1 overhead in the vicinity of the GTM-2A exhaust trunk is scorched. [Encl (84), Photos (24) through (27)]

217. GTM-2B Exhaust lagging is damaged from hotspot investigation and cooling. [Encl (84), Photo (28)]

Opinions

1. The fire and its magnitude were the result of a series of human acts that could have been prevented by USS HUÉ CITY (CG 66) Sailors. Specifically, I highlight two particularly troubling points:

a. The improper storage of at least 65 bales of rags in uptake trunk 01-196-2-T; [Findings (7) through (39)] and

b. The failure to fully execute EOSS procedure MLOC. [Findings (105) through (109)]

2. Because the engineering department who owned the uptake trunk was the same department that stored the rag bales there, locking the trunk might have delayed, but would not necessarily have prevented the improper storage and the subsequent fire. [Findings (7) through (39), (49), (50), (51), & (82) through (104)]

3. The proximate cause of the fire was a slow build-up of heat in rag bales improperly stowed up to four bales high and that had come in contact with the hot GTM-2B exhaust ducting (either in the original stacking in the uptake trunk, 01-196-2-T, or through ship's normal movement). This heating was enhanced by the insulation properties of the bales and because of missing insulation within the exhaust ducting itself. [Findings (6) through (39), & (111)]

4. The slow build-up of heat essentially turned the cotton bales directly touching the exhaust ducting into piles of smoldering organic fuel. Once the first bales began to smolder, it was only a matter of time before the fire spread to the other bales throughout the uptake trunk 01-196-2-T. [Findings (6) & (111)]

5. The fire in uptake trunk 01-196-2-T was likely burning well before the ship's force became aware of the first symptoms: (a) the tell-tale smoke from the stack, (b) the shutdown of Nr 1 GTG, and (c) the built-up heat within the contained uptake trunk. [Finding (6)]

6. The loud sound and shudder in MER 1 reported by (b)(3), (b)(6) (b)(3), (b)(6) immediately before the Nr 1 GTG shutdown was caused by

disrupted air flow to Nr 1 GTG compressor, thereby inducing a compressor surge, most likely from the failure of the GTG intake plenum either from the heat or from impact of failed structure above. FRB inspection results show findings consistent with the compressor shudder to include rotor-casing impact marks. [Findings (6), (14), (123), (124), (125), (127), (203), (212), (213), & (214)]

7. No class Bravo fire occurred in Nr 1 GTG. Rather, Nr 1 GTG shutdown was most likely due to the intake of smoke and hot gases from the uptake trunk via the failed GTG intake plenum, which quickly exceeded the high turbine inlet temperature set point. The black smoke seen in the module was most likely a result of ingested smoke from the compromised GTG inlet plenum. [Findings (125), (127), (128), (129), (202), & (203)]

8. The "chimney effect" created by the geometry of the uptake trunk, as well as the MER 1 exhaust fan that discharged directly into the space, resulted in a fire that grew quickly in intensity once the 04-level deck was compromised. When the deck fell, it effectively opened the "damper" in the "chimney" which increased the rate of burn. [Findings (2), (40) through (47), & (212)]

9. The immediate actions of (b)(3), (b)(6) and his ad hoc fire party, by placing firefighting water through the louvers and then through other accesses into the mixing room, were critical to quickly containing and eventually extinguishing this fire. Their quick thinking significantly reduced both the magnitude of the fire and additional damage. [Findings (2), (138), & (139)]

10. Although the major fuel source was cooled primarily by the immediate efforts of the 04-level fire parties, (b)(3), (b)(6) (b)(3), (b)(6) team extinguished the areas of remaining fire in the uptake trunk via the bulkhead hole in the UCC passageway. [Findings (168), (169), & (170)]

11. The excessive number of rags arriving on 19 March 2014 was due to the uncorrelated approval of five separate requisitions by the Chief Engineer or his delegate, the MPA. [Findings (9) through (16)]

12. Additionally, the supply release process failed to catch the excessive total quantity of rags ordered, therefore providing no check or balance. [Findings (9) through (16), & (85)]

13. Because only twenty rags were received in the period between the last known access of the uptake trunk and the large rag on-load, and because those twenty were requisitioned as an emergent purpose, it is unlikely that "old" bales were actually in the trunk prior to the afternoon of 19 March 2014. Furthermore, although I do not doubt the credibility of those witnesses who reported seeing a few "old" bales, I believe they were mistaken. [Findings (84), (85), (86), (103), (104), & (105)]

14. (b)(3), (b)(6) did not follow proper procedures or set a good example for subordinates when he approved the storage of rag bales in the uptake trunk. Due to his rank and position, as well as the absence of any other engineering leadership, his decision was not questioned by the junior working party members. [Findings (8), (17) through (25), & (35)]

15. (b)(3), (b)(6) negligent decision, made in the spur of the moment during a hectic daily schedule, compounded by the hectic basic phase training events of the past and upcoming weeks, and then forgotten, hazarded the ship and her crew. [Findings (17), (35), & (199) through (217)]

16. Key MP Division individuals (i.e., (b)(3), (b)(6), (b)(3), (b)(6) and (b)(3), (b)(6)) who placed, or aided in the placement of, the rag bales in the uptake trunk, or otherwise knew of the presence of the rag bales, all knew or should have known that they were violating the rules for storage of flammable materials in engineering spaces. Specifically:

a. (b)(3), (b)(6), as a member of the working party and the work-center supervisor of MER 2, knew the dangers of placing a large amount of flammable material in an uptake trunk, yet took no action to halt or resolve the action. [Findings (27), (28), & (39)]

b. (b)(3), (b)(6) as work-center supervisor of MER 1, knew the dangers of placing a large amount of flammable material

in an uptake trunk, yet took no action to resolve the issue once aware. [Findings (36), (37), & (39)]

c. (b)(3), (b)(6), as MP Division Leading Petty Officer, knew the dangers of placing a large amount of flammable material in an uptake trunk, yet took no action to resolve the issue once aware. [Findings (36) through (39)]

17. Due to their junior rank and/or unfamiliarity with the space used to store the bales of rags, the remaining Sailors in the working party lacked the knowledge and experience to be fully aware of the hazards of their actions. [Findings (27) & (34)]

18. The engineering department neglected the uptake trunk by generally failing to account for its presence and their responsibility for it in numerous programs, including zone inspections, EOSS, 3M, and damage control exercises. [Findings (82) through (103)]

19. Though he was unaware of the improper storage in the uptake trunk, (b)(3), (b)(6) lack of oversight of all spaces and personnel was a contributing factor to the overall "neglect" of the uptake trunk and programs. [Findings (83) & (84)]

20. Though she was unaware of the improper storage in the uptake trunk, (b)(3), (b)(6) lack of oversight of all spaces and personnel was a contributing factor to the overall "neglect" of the uptake trunk and programs. [Findings (82), (83), (84), & (102)]

21. Required verbatim compliance with EOSS procedures, specifically procedure MLOC, which specifies removal of flammable hazards from spaces, including uptakes, would have uncovered the hazard and prevented the fire. Three distinct opportunities to discover the hazard and prevent the fire were lost due to non-compliance with EOSS in conjunction with the underway periods of 24 March, 31 March, and 11 April 2014. [Findings (106) through (110)]

22. The Zone Inspection program was deficient. [Findings (85) through (97)]

23. Given the short time from the receipt of materials to the fire, even a properly run Zone Inspection program would most likely not have uncovered the improper stowage of the rags. However:

a. A properly run Zone Inspection program would have raised departmental awareness of the uptake trunk and reinforced correct housekeeping habits; [Findings (9), (82) through (96), & (111)] and

b. Senior leadership involvement would have reemphasized its priority. CAPT Chidester's involvement, over the short period he was in command, had not yet achieved this result. [Findings (94) through (96)]

24. The XO was deficient in executing the modified Zone Inspection program. [Findings (55), (56), & (88) through (93)]

25. Although the XO's attempt to tie zone inspections into the more visible DITS program is laudable, inadequate execution of the program failed to cover all compartments, as evidenced by the lack of uptake trunk inspection in November 2013. [Finding (92)]

26. Lack of current documentation and space assignments provided no clear guidance as to execution of the Zone Inspection program. [Findings (85), (86), (89), & (90)]

27. Although again laudable for its proactive approach, the mandated quarterly safety inspection by safety petty officers is not formally documented and therefore provides insufficient guidance to the Sailors executing the program. As well, I found no formal follow-up mechanism to ensure inspections are executed as directed (a key example being the lack of inspection by the MP Division Safety PO in CY14 Q1). [Findings (98) through (101)]

28. Correct execution of MER 1 Main Space Fire Drills would have required setting a boundary in uptake trunk 01-196-2-T, a portion of the overhead for MER 1. Had this happened, it would have provided an opportunity to discover the hazard on 31 March 2014: by DCTT during their safety walkthrough and boundary checks, by ATG review, and by the person setting the boundary. This opportunity was lost. [Finding (79)]

29. Though he was unaware of the improper storage in the uptake trunk, (b)(3), (b)(6) lack of oversight of all spaces and personnel was a contributing factor to the overall "neglect" of the uptake trunk and programs. His lack of oversight for an incomplete EOSS process was another contributing factor. [Findings (63), (64), (82), (106), & (107)]

30. Though he was unaware of the improper storage in the uptake trunk, (b)(3), (b)(6) lack of oversight of all spaces and personnel was a contributing factor to the overall "neglect" of the uptake trunk and programs. His lack of oversight for an incomplete EOSS process was another contributing factor. [Findings (57), (58), (82), (106), & (107)]

31. Although not a hindrance to firefighting efforts, as the crew had trained only on the hard copy DC plates, the non-operational status of the DCMS provided no assistance to the damage control effort or to post-fire reconstruction and development of lessons learned. [Finding (80)]

32. Once alerted to the situation, the officers and crew of USS HUÉ CITY (CG 66) fought the fire ably and professionally, displaying tenacity, teamwork, and dedication. The efficient inclusion of DCTT members augmenting or acting as executive leadership in the damage control effort is a credit to the ship's performance. The overall efforts contained the damage to within the uptake trunk and immediate surrounding spaces. [Findings (73), (77), (78), (81), (112) through (181)]

Recommendations

1. Recommend that the Commander, Naval Sea Systems Command:

a. Investigate and repair the reported failure of the Damage Control Management System (DCMS) onboard USS HUÉ CITY (CG 66), and, once resolved, field changes to the fleet as required. [Opinion (31)]

2. Recommend that the Surface Force Type Commanders:

a. Direct all ships to conduct an inspection of all uptakes and fan rooms for improper storage, reporting results and compliance with storage directives. [Opinions (1) through (5), (11), (12), & (14) through (20)]

b. Direct all ships to conduct a line for line verification of EOSS procedure MLOC to their ship-generated Engineering Light-Off Orders and checklist to ensure verbatim compliance and complete space inspection adherence. [Opinions (21), (29), & (30)]

c. Direct all ships to report the status and issues with their installed Damage Control Management System (DCMS) or other automated damage control status system issues, for reporting to COMNAVSEASYSCOM. [Opinion (31)]

3. Recommend that the Commanding Officer, USS HUÉ CITY (CG 66):

a. Conduct a line-for-line validation of EOSS procedure MLOC with existing ship-generated Engineering Light-Off Orders and checklist to ensure verbatim compliance and complete space inspection adherence. [Opinions (21), (29), & (30)]

b. Update the zone inspection program so that it is compliant with the applicable instructions. As part of this program, the ship should inspect all spaces, including voids, for unauthorized storage. [Opinions (22) through (26)]

c. Update the Division in the Spotlight program so that it is compliant with the applicable instructions and inclusive of all ship-desired additional inspection categories. [Opinions (25) & (27)]

d. Document the requirements of the ship's Safety Petty Officer Program in order to provide guidance for the tasked personnel in execution of their duties. Consider adding a Duty Section Safety Petty Officer position and reporting requirement, similar to the Fire Marshal position, to add additional oversight in the daily ship's routine. [Opinion (27)]

e. Conduct a thorough review of the 3M program and process to ensure full compliance with applicable instructions. [Opinion (18)]

f. Review the watch-bill generation process to ensure all personnel and watch-stations are correctly documented as well as not over tasked by multiple assignments. [Opinion (18)]

g. Conduct a thorough review of Fire Marshal and Duty Fire Marshal procedures to ensure full and complete coverage of the ship with respect to fire hazards, proper stowage, and unauthorized materials. [Opinion (18)]

h. Consider centralizing the purchase of products used ship-wide (i.e., rags, office supplies, paper, cleaning gear) for efficiency and so as to limit over-purchasing quantities of common items. [Opinions (12) & (13)]

4. Recommend that the following Sailors, as well as others deemed appropriate, be formally commended for their superior efforts while fighting this fire at sea. [Opinions (6) through (10), & (32)]

a. (b)(3), (b)(6) ;

b. (b)(3), (b)(6) ;

c. (b)(3), (b)(6) ;

d. (b)(3), (b)(6) and all 04-level first responders;

e. (b)(3), (b)(6) ; and

f. (b)(3), (b)(6) .

5. Recommend the ISIC or higher authority consider taking the following actions with regard to individual USS HUÉ CITY (CG 66) Sailors:

a. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

b. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

b. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

c. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

d. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

(1) (b)(6), (b)(3), (b)(5)

(2) (b)(6), (b)(3), (b)(5)

(3) (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

(4) (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

e. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

f. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

g. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

h. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

i. (b)(6), (b)(3), (b)(5)
(b)(6), (b)(3), (b)(5)

j. (b)(6), (b)(3), (b)(5)

(b)(6), (b)(3), (b)(5)

J. M. DOREY