DEPARTMENT OF THE NAVY

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From: Commander, Naval Surface Force, U.S. Atlantic Fleet
To: Commander in Chief, U.S. Atlantic Fleet

Subj: DAMAGE CONTROL EFFORTS IN USS COLE (DDG 67)

Ref: (a) CINCLANTFLT ltr 5800 Ser N02L/276 of 7 Dec 00
(b) JAGMAN

Encl: (1) CAPT James L. McClane, USN, ltr of 19 Dec 00 w/encls
(2) COMNAVSURFLANT ltr 5830 Ser N02L/00343 of 8 Dec 00

1. Enclosure (1) is forwarded in response to reference (a). I have thoroughly reviewed enclosure (1) and, as supplemented below, concur in its findings, opinions and lessons learned. The basic letter of enclosure (1) provides a comprehensive executive summary of the events following the explosion. Enclosure (1) to the basic inquiry report is a timeline of the events immediately following the explosion and enclosure (8) to the basic inquiry report contains key findings of fact and opinions.

2. Reference (a) requested that I inquire into the facts and circumstances surrounding the actions of the crew during the damage control efforts on 12 October; the personnel qualifications in USS COLE; USS COLE's damage control training program; the effectiveness of installed damage control equipment; and lessons learned from the incident. By enclosure (2), I directed Captain James L. McClane, Commander, Afloat Training Group Atlantic, to conduct the inquiry. The inquiry was not a formal investigation under reference (b). We focused on the period from 12 October until 17 October 2000, because USS COLE began to take actions to prepare the ship for movement from Yemen, with extensive industrial and technical support on board. The report focuses on damage control efforts and equipment internal to the ship, with a limited focus on ship's design regarding survivability, structural integrity and stability in order to ascertain the basic facts needed to answer the tasking in reference (a).

3. Subject matter experts conducted group and individual interviews with USS COLE crewmembers and officers who were primarily involved in the damage control efforts following the explosion and reviewed available logs, records and damage control documentation. Information gathered during interviews was confirmed through available documents when possible. Some

documents, such as PQS and other training records, remain unavailable, as they were lost due to damage from the explosion and subsequent flooding.

4. It is clear from the inquiry that the Commanding Officer and the leadership in USS COLE had developed an aggressive and effective damage control training program during the Inter-deployment Training Cycle (basic and advanced ship training). This focus continued in the weeks following deployment, up until the time of the explosion. This inquiry found the training prepared the crew to successfully deal with the effects of the explosion. Among the key aspects of USS COLE's training program, documented in the findings of fact, were the following:

a. Basic damage control training was an important element of Indoctrination Division in USS COLE, with a concerted effort to provide First Aid and Emergency Escape Breathing Device (EEBD) training, and to qualify personnel in basic damage control through hands-on experience;

b. The chain of command placed a high priority on back-to-basics, realistic, progressive hands-on damage control training during her Atlantic transit, culminating in advanced damage control exercises. The training regimen featured a weekly damage control day that included repair locker training, emphasizing individual and team skills development in the morning and a Damage Control Training Team (DCTT) or Integrated Training Team (ITT) complex scenario in the afternoon;

c. Following the Atlantic crossing, USS COLE's damage control training further intensified during transits between Mediterranean port visits. It included repair locker training, again stressing individual hands-on skills, training the entire damage control organization with DCTT led efforts, and culminating the training with ship-wide ITT led scenarios over a three-day period. The ship also routinely conducted damage control training that included loss of communications. It was their practice to impose communications losses during each DCTT/ITT scenario, one system at a time;

d. Ship-wide EGRESS/EEBD/SCBA training in USS COLE, conducted in the months before the explosion, was reported by the crew as a major reason that many lives were saved;

e. All USS COLE crewmembers received a full day of first aid training during Indoctrination Division Training. First aid training was fully integrated into damage control exercises.

USS COLE had earlier developed a preplanned mass casualty response that included multiple triage sites. This training contributed to the provision of valuable medical care and safe evacuation of the wounded to debarkation points and further evacuation from the ship.

f. The inquiry specifically reports that the Executive Officer, LCDR John C. Peterschmidt and Chief Petty Officer Mark P. Darwin (assigned as Assistant DCTT Leader and Repair Division Leading Chief Petty Officer in the absence of a DC Chief) were responsible for the vitality of USS COLE's ship-wide damage control training program. This focus and level of effort is required to maintain a vigorous damage control program to support continuous personnel turnover. During the time between completion of IDTC Basic Phase (November 1999) and 12 October 2000, 48 percent of officers and 38.6 percent of enlisted crew members turned over in Cole.

5. USS COLE's damage control readiness was severely tested in the minutes and hours following the explosion. Within 15-20 minutes, triage was well underway, initial casualty evacuation was in progress and USS COLE's damage control organization was functioning effectively at General Quarters. Key elements of the ship's response included:

a. Within the first 20 minutes:

1) Command leadership was aggressively coordinating the effort to evacuate casualties and save the ship;

2) Initial reports of damage effects had been sent to Damage Control Central (DCC) and corrective actions had commenced;

3) Within 10 minutes of the explosion, injured crewmembers were receiving medical attention from ship's medical personnel or other crewmembers; and

4) Having taken immediate steps to treat and evacuate casualties, while minimizing the potential for fire, the main damage control effort shifted focus to stopping flooding and removing water from the ship.

b. Within two hours, 40 casualties had been treated and

evacuated from the ship, enabled by the prompt actions of numerous crewmembers rigging an accommodation ladder and a makeshift brow as means of debarkation.

c. Within 24 hours:

1) Starting 4½ hours after the explosion, the crew took 19 hours to rig casualty power. Delays were incurred due to the length of the cable runs (in excess of 250 feet), damaged or missing casualty power terminals, destroyed casualty power cables and inaccurate casualty power diagrams on the damage control plates; and

2) Flooding was under control, lighting and some essential auxiliary services had been partially restored, and the ship was stabilized. Leadership and the damage control team had also scoped the accessible portion of the damage.

6. Enclosures (5) and (7) to the inquiry report, while not all inclusive, document numerous acts of personal heroism and great individual initiative on the part of USS COLE crew. Indicative of their dedication and resourcefulness are:

a. Petty Officer First Class Margaret K. Lopez, who despite serious burns to 20% of her body, using only her flashlight to guide her, swam into the darkened oil laboratory to search for the Main Propulsion Assistant after the initial explosion;

b. Chief Petty Officer Eric S. Kafka was in the Chief Petty Officers (CPO) Mess at the time of the explosion. Despite sustaining injuries to his leg and lungs, he made his way through the smoke and debris to obtain a Self-contained Breathing Apparatus (SCBA), then searched for survivors in the vicinity of the damaged mess line, guiding one Sailor to a battle dressing station. He then obtained emergency lighting from Repair 5 and returned to the CPO Mess to rescue several remaining personnel. Once the CPO Mess was evacuated, he reported to Repair 2 and assumed Damage Investigator duties and in the process, safely evacuated several more personnel from spaces in the forward part of the ship;

c. Petty Officers Ernesto Garcia, Michael L. Hayes, William Z. Merchen and Christopher M. Regal, along with Firemen Sean H. Powell and Daniel J. Sullivan were all involved in evacuating injured personnel from the CPO Mess, the area of the greatest concentration of injured personnel. To gain access to the space, Petty Officer Regal knocked down a false bulkhead then

took charge of the initial effort to evacuate the wounded. Once injured personnel were rescued, this group assisted in the dewatering and shoring effort in Auxiliary Machinery Room One and Main Engine Room Two; and

d. The Command Master Chief, Master Chief Petty Officer James G. Parlier, a Hospital Corpsman, and Chief Petty Officer Clifford A. Moser, the ship's Independent Duty Corpsman, rendered life saving medical treatment to more than 20 shipmates whose injuries ranged from lacerations to multiple fractures. They directed a junior corpsman and ship's company in life saving techniques and personally prepared many injured crewmembers for evacuation to medical treatment facilities ashore.

7. The ship's installed and portable damage control equipment, not damaged by the explosion, performed as designed with few exceptions.

a. The P-100 dewatering/firefighting pumps were not effective.

b. The crew's efforts to gain control of the firemain system were hampered by faults in the Data Multiplexing System.

In aggregate, the ship's installed and portable damage control equipment enabled the crew to save their ship and prevent further loss of life.

8. The scope of this inquiry does not include a detailed analysis of ship survivability, structural integrity or stability. A NAVSEA Incident Analysis Team (IAT) for USS COLE has been assembled to conduct such a study. In assessing structural integrity and stability of USS COLE, the IAT will document weapon effects, shipboard damage, mission degradation, analyze ship design, and develop procedural recommendations to improve ship and crew survivability.

It is essential that this study be completed, and include an assessment of all sources of flooding, the effectiveness of the P-100 pump, and the compatibility of current litters aboard ARLEIGH BURKE Class destroyers (requirement for movement of stretcher-borne wounded through airlocks).

9. The inquiry report contains a compilation of lessons learned, gleaned from enclosures (5) through (8). The

importance of training emerges as the most critical lesson learned. The success of the crew in their damage control efforts is largely attributable to the emphasis the command placed on damage control training throughout the IDTC and deployment. Lives were saved and injuries minimized due to the medical training provided during indoctrination and casualty drills.

10. The explosion that damaged USS COLE was a tragedy that tested the very heart of our damage control philosophy and procedures. It is apparent that the design of the ship itself factored heavily in its survival in the minutes immediately following the explosion. It is also clear that the command leadership and the damage control organization were the driving force behind the training that enabled the crew to save their ship, shipmates, and prevent further damage or injury. This event validates the overall emphasis we place on damage control training. The men and women of USS COLE - well led, properly trained and equipped - were able to overcome the most demanding circumstances following the explosion, and at the end of the day, they were able to do what needed to be done - save their ship and shipmates.

J. B. FOLEY III