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FORMAL INVESTIGATION INTO THE CIRCUMSTANCES SURROUNDING THE ATTACK ON THE USS STARK (FFG 31) ON 17 MAY 1987.

VOLUME I
REPORT OF INVESTIGATION

#13

ENCLOSURE

[redacted]

[redacted]

COMMANDER
CRUISER-DESTROYER GROUP TWO
FPO MIAMI 34099-1262

5122
Ser00/S-0437
12 June 1987

[redacted]

From: Rear Admiral Grant Sharp, USN
To: Commander in Chief, U. S. Central Command

Subj: FORMAL INVESTIGATION INTO THE CIRCUMSTANCES SURROUNDING THE ATTACK ON THE USS STARK (FFG 31) ON 17 MAY 1987

Ref: (a) USCINCCENT Appointing Order of 19 May 1987

Encl: (1) Record of Proceedings (S) (w/List of Effective Pages) / Exhibits (S)
(2) USS ACADIA 031800Z Jun 87 (U)
(3) USS ACADIA 061610Z Jun 87(C)
(4) USS ACADIA 061048Z Jun 87 (U)
(5) COMNAVSEASYSCOM 022230Z Jun 87 (C)
(6) CDR BAMC FT SAM HOUSTON TX 052140Z Jun 87 (U)
(7) NAVSWC DAHLGREN VA 060025Z Jun 87 (S)
(8) Affidavit of CAPT G. R. Brindel, USN of 8 Jun 87 (U)
(9) COMIDEASTFOR 242157Z MAY 87 (C)
(10) COMIDEASTFOR 211945Z MAY 87 (C)
(11) USS WADDELL 181125Z MAY 87 (C)
(12) COMNAVSURFLANT Damage Assessment Team Leader Memo of 9 Jun 87 (U)
(13) Charge Sheet ICO of CAPT G. R. Brindel, USN (U)
(14) Charge Sheet ICO of LCDR R. J. Gajan, USN (U)
(15) Charge Sheet ICO of LT B. E. Moncrief, USN (U)
(16) Affidavit of LT J. W. Bryan, JAGC, USNR of 9 Jun 87 (U)
(17) Chronology of the Attack on USS STARK (FFG 31) (S)

1. (U) As directed by reference (a), a formal investigation was convened on 26 May 1987. The original record of proceedings and additional documents are forwarded as enclosures (1) through (17).

2. (U) The Investigating Officer, after inquiring into all facts and circumstances connected with the incident which occasioned the investigation, and having considered the evidence, submits the following executive summary of attack, preliminary statement, findings of fact, opinions and recommendations:

Executive Summary of the Attack

1. (U) On the evening of 17 May 1987, shortly after 2100 local and while on routine patrol in the central Persian Gulf, USS STARK (FFG 31) was hit by two Exocet anti-ship cruise missiles. The missiles were fired by a single Iraqi F-1 Mirage fighter. The

Classified by: Multiple Sources

[redacted]

attack was unprovoked and indiscriminate. STARK was--and had been--in international waters, well outside the Iraqi and Iranian declared war zones.

2. [redacted] The ship's Tactical Action Officer was aware that an Iraqi fighter was approaching. STARK had been alerted by AWACS nearly an hour prior to the attack that an Iraqi F-1 fighter, was proceeding southeasterly from Iraq, over water, toward the central Persian Gulf. The AWACS continued to report the Iraqi aircraft's position to STARK via NTDS Link 11 until the attack occurred. Contact was gained by STARK's AN/SPS-40 air search radar [redacted] About ten minutes prior to being hit by the first Exocet, STARK detected radar emissions from a Cyrano IV radar correlating to an F-1 Mirage fighter.

3. (U) After gaining radar contact and ESM, STARK's combat information center kept a constant, real-time track of the aircraft. The Iraqi fighter changed course and speed several times. Each change brought the fighter closer to STARK. When the aircraft was thirty miles away, the fighter turned east and flew toward STARK. Less than five minutes later, the ship was hit by two Exocet cruise missiles, the second missile arriving 30 seconds after the first.

4. (U) When the Iraqi fighter first began closing STARK's position, the Tactical Action Officer and other watch standers assumed the aircraft would fly benignly by, passing no closer than 11 nautical miles from STARK. The watch organized themselves to collect data for the Marine-Air Report they would later be required to submit. The Tactical Action Officer gave little or no credence to the possibility that the Iraqi fighter would indiscriminately attack STARK, even though it was known to be capable of firing Exocet with a nominal range of 38 nautical miles.

5. (U) The Executive Officer entered CIC on routine business approximately five minutes before the attack occurred; and, he remained in CIC near the TAO station until the first missile hit. He did not inform himself of the tactical situation; and, therefore, did not feel that there was anything remiss in the way the watch was responding to the Iraqi fighter. The Executive Officer took no steps to redirect the actions of the TAO nor did he direct that the Commanding Officer be summoned to CIC.

6. [redacted] In the waning minutes prior to the attack, the TAO attempted to increase STARK's combat readiness; but, it was too late.

[redacted] the positions of CIC Watch Officer (CICWO) and Weapons Control Officer (WCO) were combined and filled by a single officer. When the aircraft began its attack run, the position of Weapons Control Officer was vacant. Before the position could be properly manned, the Mirage had already fired both Exocets and the first Exocet was nearing its terminal phase. The Fire Control Technician assigned to operate the MK-92 STIR fire

[redacted]

control radar and Close In Weapon System (CIWS) had previously left CIC on personal business; and, at the time of the attack, that position was also vacant; [redacted] the STIR fire control radar was in stand-by and was thought to be masked by the ship's superstructure; the MK-92 CAS fire control radar was in search mode and was never used to lock-on to the aircraft until the missiles were seconds away from impact; the Super Rapid Blooming Offboard Chaff (SRBOC) was not armed until seconds before the first missile hit; and the CIWS was still in stand-by, having not been properly brought into the AAW manual mode.

7. [redacted] At the time of missile launch, the AN/SPS-49 two dimensional air search radar and the MK-92 CAS search radar were the only radars being used to track the aircraft. No fire control radars were locked-on and tracking the aircraft; [redacted]

8. [redacted]

9. [redacted] The Commanding Officer was aware that an Iraqi fighter was flying [redacted] southeasterly, over water, from Iraq [redacted] toward the central Persian Gulf. He had visited CIC approximately 50 minutes prior to the attack and was informed about the Iraqi aircraft being reported by AWACS. About 15 minutes before the attack occurred, the Captain was on the bridge; and, he asked the JOOD to find out why COONTZ was reporting the Iraqi fighter's position, [redacted] At that time, COONTZ had been reporting the aircraft's position every 3 to 5 minutes; and, according to the Commanding Officer's recollection of events that evening, his last known position of the Iraqi aircraft placed it approximately 120 miles northwest of STARK and closing the ship. The Captain was not advised when CIC gained radar contact on the Iraqi fighter. At about 2058 local, the Commanding Officer left the bridge and went to his cabin, where he remained until the first missile hit.

10. (U) STARK never fired a weapon nor employed a countermeasure, either in self defense or in retaliation. Thirty seven members of STARK's crew died as a result of the attack.

[redacted]

Preliminary Statement

1. (U) The investigation into the circumstances surrounding the attack on USS STARK (FFG 31) was conducted from two different perspectives. Rear Admiral David N. Rogers, USN, Deputy Director for Current Operations on the staff of the Joint Chiefs of Staff, headed a joint U.S.-Iraqi investigation conducted in Baghdad, Iraq, for the purpose of determining how, and under what circumstances, the Iraqi pilot executed the attack on STARK. Rear Admiral Grant Sharp, USN, Commander Cruiser Destroyer Group TWO, was appointed on 19 May 1987 by General George B. Crist, USMC, Commander in Chief, U.S. Central Command, to be the investigating officer for this formal investigation.

2. (U) The formal investigation was conducted in port Manama, Bahrain, first, aboard USS LASALLE (AGF 3), the flagship of Commander Middle East Force, and, later, aboard USS ACADIA (AD-42). In both cases, STARK was moored outboard the host ship.

3. (U) Rear Admiral Sharp, and an investigating team comprised of six officers, arrived in Bahrain on the evening of 20 May 1987. The investigation began on 21 May 1987; and, formal hearings were convened commencing 26 May 1987. STARK's Commanding Officer, Executive Officer, Tactical Action Officer and CIC Watch Officer were designated as parties to the investigation. Formal hearings were completed and the investigation was closed on the evening of 05 June 1987.

4. (U) Concurrent with the formal hearings, a staff delegation from the U.S. Congress House Armed Services Committee came to Bahrain and conducted an informal investigation into the circumstances surrounding the attack on STARK. Their informal investigation lasted approximately three days. Parties to the formal investigation, acting on advice of their counsel, chose not to make statements to the staff delegation.

5. (U) The investigation by Rear Admiral Sharp inquired into all the events which occurred prior to, during and following the attack. There were specific, technically complex issues that required the investigating officer to call upon the professional expertise of the Commander, Naval Sea Systems Command, Navy laboratories and intelligence agencies located in the United States and to also use on-scene assistance teams and technical representatives. Particular issues that fell within this category included:

a. (U) Capability of the F-1 Mirage fighter aircraft to carry two Exocet cruise missiles.

[redacted]

[redacted]

c. [redacted] Capability of the FFG-7 combat system, including the AN/SPS-49 air search radar and MK-92 Fire Control System, to detect an Exocet anti-ship cruise missile.

d. [redacted] Capability of the MK-15 Close In Weapon System (CIWS) to detect, acquire and engage an Exocet anti-ship cruise missile.

e. (U) Determination of the operational status, and operational modes employed, for each of the above systems as they existed in STARK on the night of 17 May 1987.

6. (U) As the investigation progressed, the statements and testimony of the witnesses were woven together, along with transcriptions of various radio telephone transmissions, to form a chronology of the attack. That chronology is attached as enclosure (17).

7. (U) In compiling the chronology, it was necessary to reconcile inconsistencies in time among different sources. The Narrow Band Secure Voice transmissions prior to the attack were recorded aboard USS STEPHEN W. GROVES (FFG 29). In order to weave these radio transmissions into the chronology, it was necessary, in some cases, to advance the times recorded in STEPHEN W. GROVES' records by one minute. In other situations, events began in one particular interval and carried over to the next minute interval. When this happened, the event was placed into the chronology as close as possible to other events which were known to be occurring simultaneously with the original event.

8. (U) Certain items relevant to the investigation were not available to the investigating officer. Requests were submitted asking that the information be provided to Commander in Chief, U.S. Central Command for inclusion in the report of investigation as appropriate. Those items include:

a. Copies of medical record entries and undated reports of condition of the two injured personnel transferred to the United States for treatment, requested by enclosure (2).

b. A detailed report of damage and cost to restore STARK to full mission capability, requested by enclosure (3).

c. Autopsy and pathology reports, requested by enclosure (4).

9. (U) There are some inconsistencies among the exhibits because, as the investigation progressed, there were discoveries that increased the level of knowledge of the investigating team with regard to specific events and circumstances. The findings of fact, opinions and recommendations contain the investigating officer's best estimate of the evidence on record at the end of the formal investigation.

[redacted]

10. (U) Enclosures (5) through (17) contain information relevant to the investigation, but obtained or prepared after the adjournment of the investigation hearing.

11. (U) All times listed in the findings of fact and opinions are local time.

Findings of Fact.

A. U [redacted] Attack and Response: This section incorporates the body of facts concerning the mission, rules of engagement, combat systems equipment, combat systems doctrine and actions associated with the attack on STARK.

1. (U) STARK received an operations, ROE and Intel Brief from COMIDEASTFOR Staff in Djibouti 28 February 1987 prior to inchopping to Middle East Force. The brief addressed Rules of Engagement (ROE) and the potential threat to U. S. Navy ships in the Persian Gulf. (CAPT Grieve, p 13.)

2. [redacted] The CMEF Intelligence Briefer [redacted] (CDR Brown, p 33.)

3. U [redacted] The ROE briefer highlighted that the probability of deliberate attack on U.S. warships was low, but that indiscriminate attack in the Persian Gulf was a significant danger. (CAPT Grieve, p 13.)

4. [redacted] The ROE briefer stated that ships [redacted] in order to limit the possibility of indiscriminate attack. (CAPT Grieve, p 11.)

5. U [redacted] MEF ROE at the time of the attack were contained in CMEF OPORD 4000-85 and in COMIDEASTFOR 210719Z AUG 86. They provided, in pertinent part, that:

a. [redacted]

b. [redacted]

[redacted]

e. [redacted] shall be requested, via channel 16, 121.5 MHz, 243.0 MHz or any other available means, to provide identification and intentions.

f. [redacted]

g. [redacted]

h. [redacted]

(1) [redacted]

(2) [redacted]

i. [redacted]

(Exhibits 8, 9.)

6. (U) ROE modifications have been issued subsequent to the 17 May 1987 attack on STARK. (Exhibit 103, 123.)

7. (U) CMEF OPERATION ORDER 4000 requires ships to submit air warning reports called Marine-Air Reporting System (MAREPS) to CMEF whenever a ship issues a warning to an unidentified aircraft. (Exhibit 8, p 9.)

8. (U) MAREPS messages from STARK indicate that the ship had not locked-on with fire control radar to any aircraft prior to the attack since reporting to CMEF. (Exhibit 9, p 1.)

9. (U) CMEF sends updated Persian Gulf intelligence to ship's in MEF by two message systems: the weekly intentions message and the bi-monthly or as-necessary Force Intelligence Advisory. STARK received both these types of messages. (CDR Brown, p 38.)

10. [redacted] CMEF message 141902Z MAY 87 stated that the Iraqis had [redacted] in the central Persian Gulf and that CMEF expected the trend to continue [redacted] STARK received this message prior to the attack. (Exhibit 13.)

11. CMEF bi-monthly Force Intelligence Advisory message 161305Z May 87 discussed the Iraqi This message, which was received by STARK before the attack, highlighted the possibility of an indiscriminate attack. (Exhibit 14.)

12. The CMEF Assistant Intelligence Officer discussed the Iraqi during a CMEF Intelligence briefing 16 May 1987. STARK's Commanding Officer attended this brief. (LCDR Kelly, p 58.)

13. (U) STARK got underway from Manama, Bahrain, at approximately 0800 on 17 May 1987 and proceeded enroute to Radar Picket Station-South (RPS-South). (Exhibit 37, p 1; CAPT Grieve, p 11.)

14.

(Exhibit 20, 21.)

15. The Iraqi

STARK was the ship that reported
(Exhibit 19, LT Moncrief, p 320.; ENS Wright, p 289.)

16. (U) On the evening of 17 May 1987, at approximately 2109, while on routine patrol in the central Persian Gulf as a naval unit assigned to the operational command of Commander Middle East Force (CMEF), STARK was hit by two EXOCET cruise missiles. Both missiles approached the ship from approximately 270 degrees true (330 degrees relative). (Exhibit 32, sec 4 of 5, p 1.)

17. (U) Both EXOCET cruise missiles were launched by a single Iraqi F1 'Mirage' fighter aircraft. (Exhibit 119, p 1.)

18. (U) At the time of the attack, STARK was in international waters, in position 26-47N/051-55E, well outside the Iraqi and Iranian declared war zones. (Ship position was reconstructed by plotting the satellite navigation position obtained at 2100 and dead reckoning along a course of 300 degrees true for 9 minutes using the speed recorded in the Engineering Bellbook. (Exhibit 17, 36.)

19. (U) Lieutenant Basil E. Moncrief, JR., U.S. Navy, was on watch in STARK's Combat Information Center (CIC), and had been for over an hour prior to the attack, serving as the TAO. (LT Moncrief, p 322.)

20. (U) ENS Jeffrey Wright, U.S. Navy was on watch in STARK's CIC, and had been for over an hour prior to the attack, serving as the CICWO and WCO. (ENS Wright, p 289.)

21.

22. From the time that the AWACS initially alerted Stark of the Iraqi aircraft, until the time of the first missile hit, the AWACS provided STARK with a NTDS data link over which the geographic position of the Iraqi aircraft was displayed. (OS1 Duncan, p 101-108.)

23. The AWACS assigned NTDS track number 2202 to the track associated with the Iraqi aircraft. (Exhibit 28, p 1.)

24.

Exhibit 27, p 1.)

25.

(OS1 Duncan, p 101.)

26. The officer and enlisted watchstanders in STARK's CIC were aware that signified an Iraqi military aircraft. (OS1 Duncan, p 101.)

27. At about 2010, STARK's asked the AWACS, to confirm the identity of track number 2202. The AWACS confirmed, that track number 2202 was an Iraqi military aircraft. (LT Moncrief, p 325.)

28. USS COONTZ (DDG 40) was assigned by CMEF to perform duties was tasked to relay the position of the Iraqi aircraft. (Exhibit 32, sec 1, p 1.)

29. Commencing at about 2012, shortly after the AWACS began reporting the aircraft's position via the data link, COONTZ began periodically reporting the Iraqi aircraft's position to CMEF (Exhibit 131.)

30. COONTZ was inport Manama, Bahrain, and all her radars were secured. All position information reported to COMIDEASTFOR by COONTZ was based on data link from the AWACS, not on information derived from COONTZ's own radar systems. (Exhibit 32, sec 1.)

31. COONTZ routinely reported that track number 2202 was an Iraqi aircraft (Exhibit 131, p 5,6,7.)

[redacted]

32. (U) COONTZ's radio transmissions to COMIDEASTFOR were monitored in STARK's CIC. (Exhibit 131, p 10, 11.)

33. (U) At about 2015, STARK's Commanding Officer stopped in CIC and was briefed that there was an Iraqi aircraft flying over water in the northern Persian Gulf, heading south. The Commanding Officer, in CIC, told LT Moncrief (TAO) to keep a close eye on track 2202. He reminded the TAO that a number of recent Iraqi sorties had been going further south. The Commanding Officer then departed CIC. (CAPT Brindel, p 391, 392.)

34. (U) At about 2024, USS STARK commenced a full power run, on course 300 degrees true. (Exhibit 37, p 5.)

35. (U) At about 2031, the Commanding Officer arrived on the bridge. (Exhibit 37, p 5.)

36. (U) At about 2050, FC3 Caulkins, who was the WCC-1 (CAS) and CIWS Operator in CIC, departed CIC to go to the head. He did not notify either the TAO or the CICWO. FC2 Collins, who was the senior Fire Control Technician on watch, gave permission for FC3 Caulkins to go to the head. (FC2 Collins, p 136.)

37. (U) At about 2055, the CO, on the bridge, asked the JOOD why CIC did not have radar video on the Iraqi aircraft. (CAPT Brindel, p 392.)

38. (U) At about 2055, the bridge called CIC on the 21MC requesting to know why STARK did not hold radar video on NTDS track 2202. In response to this, OS1 Duncan reached over the shoulder of OS3 Renner, who was the CIC Air Detector Tracker, and switched the SPS-49 air search radar to the mode. (OS1 Duncan, p 102.)

39. (U) At about 2057, after CCS reported that the full power demonstration was short and not entirely successful, the Commanding Officer left the bridge and went to his cabin. (CAPT Brindel, p 392.)

40. [redacted] At about 2058, CMEF asked all MIDEASTFORCE ships whether they held any track data on the current Iraqi track 2202. USS COONTZ responded negatively. (Exhibit 131, p 8.)

41. [redacted] At about 2058, AWACS detected the Iraqi aircraft turning east which would cause it to pass approximately 11 NM from STARK's current position.) USS COONTZ continued to report the contact to CMEF. (Exhibit 32, Sec 3, p 1; exhibit 131, p 9, 10, 11, 12, 13.)

42. (U) At about 2100, OS3 Vaughan, who was the CIC Surface Detector Tracker, reported a surface contact to the bridge phone-talker/status board keeper. The contact was bearing 297 degrees

[redacted]

true, range was 23,700 yds, on course 122, speed 3 knots. Petty Officer Vaughan reported again at time 2104. The contact was bearing 295 at 21,100 yds on a course of 120, speed 3 knots. CPA of 200 degrees true at 1000 yds. This contact was later evaluated as a false contact by using the MK 92 CAS as a second source of confirmation . (OS3 Vaughan, p 179, 180.)

43. [redacted] At about 2101, OS1 Duncan was at the ASAC console. He had detected radar video about three minutes earlier on the SPS-49 [redacted] OS1 Duncan correlated the video as being track 2202, but entered a new 'Air Unknown' symbol on the video (NTDS track number of the new symbol is unknown). He then directed OS3 Renner to assume responsibility for tracking the new radar contact. OS1 Duncan remained at the ASAC console and prepared to record data for a MAREP regarding the aircraft. Commencing at 2101, OS3 Renner maintained a continuous real time track of the aircraft using the SPS-49 radar until impact of the first missile. (OS1 Duncan, p 102108.)

44. (U) At about 2102, OS1 Duncan told LT Moncrief that the air contact would have a 4 NM CPA. (OS1 Duncan, p 106.)

45. [redacted] At approximately 2102, EW2 Kummrow, the enlisted Electronic Warfare Technician on watch in STARK's CIC, first detected radar emissions [redacted] correlated the radar signal to a CYRANO IV, the air intercept radar carried in the Iraqi F-1 Mirage fighter aircraft. (EW2 Kummrow, p 148.)

46. (U) At about 2103, when the F-1 was 43 NM from USS STARK, OS1 Duncan requested permission from LT Moncrief to transmit a standard warning to the F-1. The warning was to be transmitted on the Military Air Distress frequency. LT Moncrief responded to OS1 Duncan and said, 'No, wait'. (OS1 Duncan, p 106.)

47. (U) At about 2104, LCDR Gajan, STARK's XO, entered CIC. He was looking for LT Moncrief to discuss administrative matters relating to the Ship Control Department. The XO noticed that LT Moncrief was busy and so he waited near the chart table to observe events in CIC. (LCDR Gajan, p 349, 350.)

48. (U) At about 2104, FC2 Collins sent OSSN Smith from CIC to find FC3 Caulkins in order to get FC3 Caulkins back into CIC and on watch. (FC2 Collins, p 136.)

49. [redacted] At about 2104, CMEF Duty Officer transmitted the following message to STARK 'USS STARK this is COMIDEASTFORCE, are you copying the details on track number 2202 at this time, over.' LT Moncrief replied, 'Affirmative, break, time 1802Z intercept Cyrano IV radar video on track 2202. Evaluated Iraqi F-1 break holding radar video on track 2202, bearing 269, range 27 NM over.' [redacted]

[redacted]

(This report was transmitted less than a minute after COONTZ reported a LAT/LONG position of track 2202 that correlated to 259 degrees true 38.5 NM from STARK.: (Exhibit 131, p 10.)

50. (U) At about 2105, the Iraqi F-1 turned toward STARK. The range from STARK to the F-1 was approximately 32.5 NM. CPA to STARK would be nearly overhead. No one in CIC noticed this turn and that the aircraft was virtually on a constant bearing, decreasing range. (Exhibit 22; exhibit 134, encl 1, 2.)

51. (U) At about 2107, the Iraqi aircraft launched the first Exocet cruise missile at STARK. Weapon release point was approximately 22.5 NM from STARK. (Exhibit 134, Encl 1, 2.)

52. (U) At about 2107, SN Williams, the Forward Lookout, sighted and reported to the bridge a bright light on the horizon about 15 degrees off the port bow. Initially it was identified as a surface contact. (SN Williams, p 257.)

53. (U) At about 2107, FC2 Collins detected radar video on the CAS. The CAS was in search mode. He correlated this video to the Iraqi F-1. (FC2 Collins, p 135.)

54. (U) At about 2107, the TAO observed on radar the change in course executed by the Iraqi F-1 (the actual course change occurred approximately one minute before). He realized that the CPA would be very close. He directed ENS Wright to call the Captain; and, he directed OS1 Duncan to issue warnings to the Iraqi aircraft. (LT Moncrief, p 326.)

55. (U) At about 2107, ENS Wright attempted to call the CO in his cabin, but received no response. ENS Wright then called the bridge; the Captain was not there either. (ENS Wright, p 290.)

56. [redacted] At about 2107, LT Moncrief told ENS Wright to man the Weapons Control Officer (WCO) console. ENS Wright stepped over to the WCO console; but the XO was sitting at the console. ENS Wright asked the XO to get up so that he could sit down and assume duties as WCO. ENS Wright then sat down at the console and began to initialize the WCO mode. (ENS Wright, p 290.)

57. (U) At about 2108, the F-1 fired the second Exocet cruise missile at STARK. Weapon release point was approximately 15.5 NM from STARK. (Exhibit 140, p 1.)

58. (U) At about 2108, at the direction of the TAO, OS1 Duncan made the following radio transmission to the Iraqi F-1 via Military Air Distress frequency: "Unknown aircraft this is U.S. Navy warship on your 078, (pause), for 12 miles, request you identify yourself, over." This transmission is not in accordance with CMEF msg DTG 210719Z Aug 86 (ROE) (Exhibit 140, p 1.)

59. (U) CMEF message DTG 210719Z Aug 86 delinates the exact wording of radio telephone transmissions CMEF units must make to

approaching potentially hostile or unidentified air contacts. The first warning should be a requst for identity and intentions with the following transmission: "Unidentified air/surface contact on course--------, speed---------, (altitude----------), you are approaching a U.S. Navy warship operating in international waters bearing ----------, range ---------- from you. Request you establish communications, identify yourself and state your intentions." (Exhibit 16)

60. [redacted] At about 2108, EW2 Kummrow, [redacted] was listening to the CYRANO IV radar when he heard a radar lock-on. [redacted] EW2 Kummrow increased the volume of the speaker on the SLQ-32 console. The constant, high-pitched sound of the radar lock-on being received by the SLQ-32 was then heard throughout CIC. Virtually every watch stander in CIC except OS3 Renner momentarily turned his head toward the SLQ-32. About ten seconds later, EW2 Kummrow heard the radar lock-on signal cease. He then heard the same search signal that was originally coming from the CYRANO IV. (EW2 Kummrow, p 149.)

61. [redacted] At about 2108, EWSN Copus requested permission from LT Moncrief to go topside to arm the SRBOC launchers. EWSN Copus then departed from CIC, armed the launchers in about 45 seconds and returned to CIC. Launcher Control was in CIC. [redacted] (EWSN Copus, p 160.)

62. [redacted] Again, at about 2108, at the direction of the TAO, OS1 Duncan issued the following warning to the Iraqi F-1 via the Military Air Distress circuit: "Unknown aircraft this is U.S. Navy warship on your 076 at 12 miles, (pause), request you identify yourself and state your intentions, over." This transmission is not in accordance with CMEF msg DTG 210710Z Aug 86. (Exhibit 140.)

63. [redacted] In accordance with CMEF msg DTG 210719Z Aug 86, the following warning will be transmitted if the contact: (1) Fails to communicate and continues to close or; (2) responds only with identity and his intentions are unclear or judged potentially hostile or; (3) Responds with his identity and non-hostile intentions but subsequently maneuvers in a threatening manner. Unidentified aircraft/surface contact (use identity if known) on course-----, speed------, (altitude---------), you are approaching a U.S. Navy warship bearing--------, range -------- from you. Your identity is not known/your intentions are unclear (one or both), you are standing into danger and may be subject to United States defensive measures. Request you remain clear of me. Request you alter your course immediately to ----------to remain clear." (Exhibit 9, p 1.)

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[redacted]

64. [redacted] At about 2108, LT Moncrief stepped to the Close-In Weapon System (CIWS) console. [redacted]

(LT Moncrief, p 328.)

65. [redacted] FC2 Collins, sitting at the WCC-1 console, watched LT Moncrief [redacted]

(FC2 Collins, p 137, Exhibit 111, p 1.)

66. (U) Neither LT Moncrief nor FC2 Collins brought CIWS into the [redacted] mode. CIWS was in 'stand-by' mode during the entire attack. (Exhibit 97, p 2; Exhibit 111.)

67. (U) At about 2108, LT Moncrief told FC2 Collins to lock-on to the Iraqi F-1 with STIR. FC2 Collins advised him that he could not comply because the aircraft was in the STIR blind zone. FC2 Collins recommended that they lock on to the F-1 with CAS. LT Moncrief agreed with FC2 Collins, saying 'Fine'. The XO concurred, saying, 'Let him know who we are.' (LT Moncrief, p 330, LCDR Gajan, p 353.)

68. (U) At about 2109, SN Williams called 'MISSILE INBOUND, MISSILE INBOUND' on the JL sound-powered circuit. This information was passed to the bridge and to the JL phonetalker in CIC, but not to the TAO in CIC. The Junior Officer of the Deck (JOOD), LTJG Hansen, also saw the missile homing in on STARK. (SN Williams, p 258 , LTJG Hansen, p 250.)

69. (U) At about 2109, FC2 Collins locked on to the Iraqi aircraft with CAS. The aircraft was approximately 10 NM away. (FC2 Collins, p 137.)

70. [redacted]

(EW2 Kummrow, p 149, 150.)

71. [redacted] At about 2109, LCDR Gajan made the following radio transmission 'COMIDEASTFOR this is USS STARK, we have been locked-on to twice.....' (ceased transmission). (Exhibit 131, p 11.)

72. (U) At about 2109 the first Exocet missile hit USS STARK. (LT Moncrief, p 330.)

73. (U) At about 2109 General Quarters was sounded from the bridge. LTJG Hansen observed the second missile inbound; grabbed the 1MC and said, 'Inbound Missile, Port Side'. (LTJG Hansen, p 250.)

74. (U) At about 2109, LT Hayward (Support Officer) departed CIC. As he stepped out the door he saw Captain Brindel coming out of

his stateroom. The Commanding Officer then entered CIC. (LT Hayward, p 219, CAPT Brindel, p 393.)

75. (U) At about 2109, the second Exocet missile hit STARK, approximately 20 to 30 seconds after the first. (LT Hayward, p 219, CAPT Brindel, p 393.)

76. [redacted]

(Exhibit 30.)

77. [redacted]

At the time of the attack, only one WCC operator was on watch in CIC. (Exhibit 30, p 2-22, 23.)

78. [redacted] The Commanding Officer's Battle Orders required that one officer fill the WCO and CICWO watchstations simultaneously.

(Exhibit 30, p 2-17-18 thru 2-23-25).

79. [redacted]

At the time of the attack, launcher control was in CIC. (Exhibit 33, encl (2), p 2.)

80. [redacted]

The .50-caliber guns were not loaded and the Gunner's Mate assigned to man them was lying down. (Exhibit 33, encl (2), p 3; SN Williams, p 258.)

81. [redacted]

The WCO believed he was in CONDITION III/White and so had not initialized his console into the CONDITION III/Yellow readiness posture.

(Exhibit 33, encl 2, p 2, 3; ENS Wright p 290, 292.)

82. (U) From 2058, when the aircraft was first detected, until 2109 when the second missile hit, STARK never maneuvered to unmask batteries, course remained 300 degrees true. (LTJG Hansen, p 247.)

83. (U) No orders to assign weapons or engage the Iraqi fighter were issued by either the XO, the TAO or the WCO. (FC2 Collins, p 139)

[redacted]

84. [redacted] Weapons systems available to STARK but not employed included:

a. SM-1 MR missiles.
b. MK75 76mm gun

c. CIWS
d. 50 Caliber guns.
e. Super Rapid Blooming Off Board Chaff (SRBOC).

(FC2 Collins, p 126, 130, 137; exhibit 111, p 1.)

85. (U) No ordnance was fired in defense of STARK or in retaliation for the attack. (FC2 Collins, p 139; SN Williams, p 258.)

86. (U) Lieutenant Basil E. Moncrief, JR., U.S. Navy, was designated in writing by the Commanding Officer, USS STARK (FFG 31), as a qualified Tactical Action Officer (TAO). (Exhibit 50, p 1.)

87. (U) ENS Jeffrey Wright, U.S. Navy, was designated in writing as a qualified Weapons Control Officer (WCO) and Combat Information Center Watch Officer (CICWO). (Exhibit 49, p 1.)

88. (U) The Executive Officer was authorized in writing to direct the TAO in time of danger or emergency. He could relieve the TAO and should do so should it, in his judgment, be necessary. (Exhibit 38, p 4-16.)

89. (U) The Executive Officer took no action to inform himself of the tactical situation after he entered CIC. (LCDR Gajan, p 350, 351, 352.)

90. (U) The Executive Officer took no steps to redirect the actions of the TAO. (LCDR Gajan, p 350, 351, 352.)

91. (U) The Commanding Officer was never informed that the ship had gained radar contact or ESM on the Iraqi aircraft; however, the Commanding Officer did know at approximately 2045 that an Iraqi Military aircraft was approximately 120 NM northwest of STARK, flying southeasterly over water, toward STARK. (CAPT Brindel, p 393.)

92. (U) Thirty seven enlisted members of STARK's crew died as a direct result of the attack. (Exhibits 128, 65.)

93. (U) The claim by the government of Iraq that, at the time of the attack, STARK was located inside the Iranian declared war zone, is not correct. STARK was 20 NM outside the Iranian declared war zone. (Exhibit 17, 36.)

94. [redacted] The MK-92 CAS radar, in search mode (lower CAS), was operated
in accordance with the Captain's Battle Orders. (Exhibit 33, Encl 2, p 2.)

[redacted]

95. [redacted]

(Exhibit 134.)

96. [redacted] The MK-92 STIR radar, according to the Captain's Battle Orders, was to be operated in Condition III (Exhibit 33, Encl 2, p 2.)

97. [redacted]

(Exhibit 134.)

98. (U) The MK-92 STIR radar was operational and in stand-by; but, was not used to track either the Iraqi F-1 or the Exocet. (FC2 Collins, p 127, 136, 137.)

99.

100.

101. (U) There was a misperception on the part of STARK personnel that CIWS could not be fired for training or preaction calibration unless the ship was in an area approved for gunnery services. (LT Barbour, p 360.)

102.

103. (U) The maintenance requirement card (MRC) for PAC firing requires a periodicity of B-1M; CIWS was out of periodicity for PAC firing. (Exhibit 92, p 4.)

104. [redacted]

(EW2 Kummrow, p 152.)

105. [redacted]

(Exhibit 85.)

106. [redacted]

the operator had placed the console in the "INHIBIT ALL", which will cause the Audible Alarm not to sound (Exhibit 85.)

107. [redacted]

(Exhibit 85.)

108. (U) The scheduled combat systems PMS for the week of 27 April 1987 and 4 May 1987 were completed with the exception of three scheduled PMS actions. (Exhibit 88, p 2.)

109. [redacted] (OS2 Jacobs, p. 266; OS3 Renner, 208.)

110. [redacted]
(CAPT Brindel, p 404.)

111.

112.

113.

B. (U) Post Attack Actions: This section incorporates the facts concerning post attack matters involving search and rescue (SAR), medical response, casualties, damage control, damage and required repairs.

1. (U) Search and Rescue (SAR), Medical Response, and Casualties.

1.1 (U) Five men went through a hole in the skin of the ship forward on the port side and were later picked out of the water. Those men were OSSN Timothy B. Porter, OSSN William W. McLeod, FC3 William G. Morandi, OS2 Timothy S. Gable and GMM1 Gary Mahone. (Exhibits 64, 67, 68, 69, 70, 128.)

1.2 (U) All five men who went overboard were in Combat Systems Berthing when the missiles hit. (Exhibits 67, 68, 69, 70, 129.)

1.3 (U) Water and smoke entered Combat Systems Berthing from the hatch on the port side, which is the primary egress from the space to Ship's Control Berthing. (Exhibit 67.)

1.4 (U) When crewmen attempted to exit the compartment via the emergency escape scuttle, it opened only about an inch: it was not dogged. (Exhibits 67, 68, 69, 70.)

1.5 (U) ET3 WEAVER, OS2 Gable and GMM1 Mahone helped others don the EEBDs. (Exhibits 67, 129.)

1.6 (U) Visibility in the Ship's Control Berthing was very limited due to the thick smoke in the compartment and the lack of lighting. (Exhibits 68, 69, 70, 129.)

1.7 (U) OSSN Porter, OSSN McLeod, FC3 Morandi, and OS2 Gable received electric shocks before escaping from the ship. (Exhibits 67, 68, 69, 70.)

1.8 (U) All five survivors used EEBDs to breathe before going into the water. (Exhibits 67, 68, 69, 70, 129.)

1.9 (U) OSSN Porter, OSSN McLeod, FC3 Morandi and GMM1 Mahone fell out of the ship accidentally. (Exhibits 67, 68, 69, 129.)

1.10 (U) OS2 Gable jumped out of the ship intentionally. (Exhibit 70.)

1.11 (U) OS2 Gable and OSSN Porter found each other in the water and together they found one life ring with a strobe light attached and another life ring with a smoke float attached. (Exhibits 67, 70.)

1.12 (U) LT William T. Summers had thrown the life rings overboard. (Exhibit 67.)

1.13 (U) OS2 Gable and OSSN Porter heard calls from two different directions. When calls from one direction stopped, the men moved toward the others. (Exhibit 70.)

1.14 (U) OSSN McLeod and FC3 Morandi used their EEBDs for flotation devices. (Exhibits 68, 69.)

1.15 (U) The four men were picked up by a BDF SAR helo at 2650N/05146E. (Exhibits 67, 68, 69, 70; encl 11.)

1.16 (U) GMM1 Mahone stayed afloat alone by swimming on his back until he was spotted by a BDF SAR helo at 2651N/05147E around 0900 and picked up at 0919 by the USS WADDELL. (Exhibit 129; encl 11.)

[redacted]

1.17 (U) Search and rescue and medical response began at about 2145, 17 May, when LCDR T. A. Miller, MC, USN, ASU Bahrain received a beeper call and reported to ASU. (Exhibit 64.)

1.18 (U) HC-2 Detachment 2 was notified at about 2150. (Exhibits 62, 63.)

1.19 (U) LCDR Miller utilized one hospital corpsman, HM2 Kaforski, to assist in getting medical supplies to the airport for further transfer to STARK. Another corpsman, HM1 D. Camacho, stayed at ASU to arrange additional supplies and other details. (Exhibit 64.)

1.20 (U) Medical equipment taken to STARK on the first helo consisted of trauma boxes which had previously been prepared for mass casualty situations. Those boxes contained IV fluids, battle dressings, emergency medical instruments and medications. (Exhibit 64.)

1.21 (U) LT Scott Haney, DC, USS LASALLE, took another set of trauma boxes to establish a casualty receiving area at the Bahrain International Airport (BIA) at 2300. (Exhibit 64.)

1.22 (U) The HC-2 Detachment 2 helo departed BIA at 2300. (Exhibit 63.)

1.23 (U) Reaction time from first notification until lift-off was 1 HR 15 MIN. (Exhibits 62, 63.)

1.24 (U) Air crew for the flight were:

LT W. E. Ramsburg - Pilot in command. HAC right seat.
LT K. A. Ohlson - HAC left seat.
ADC D. L. Roy - 1st crew.
AMHAN C. R. Low - 2nd crew. Wet swim.
(Exhibits 62, 63.)

1.25 (U) The helo carried extra OBAs and cannisters. (Exhibit 62.)

1.26 (U) USS WADDELL acted as on-scene commander. (Exhibit 62.)

1.27 (U) Radio communications were hampered by many units using frequency 243.0. (Exhibits 62, 63.)

1.28 (U) The first vector sent to the helo was to a merchant ship six miles from STARK. (Exhibits 62, 63.)

1.29 (U) An attempt to establish the bearing to STARK using VHF ADF failed due to the helo's ADF providing an inaccurate indication. (Exhibit 62.)

1.30 (U) The aircrew located STARK when they noticed STARK's beacon. (Exhibits 62, 63.)

1.31 (U) The deck edge lighting worked, but lighting was otherwise inadequate for normal night operations. (Exhibits 62, 63.)

1.32 (U) LCDR Miller was lowered to the deck around 2145 along with medical supplies, OBAs and cannisters. (Exhibit 64.)

1.33 (U) HM2 Kaforski stayed on the helo to assist any injured who might be pulled out of the water. (Exhibit 64.)

1.34 (U) Before LCDR Miller arrived, HM1 David D. Dickerson, USS STARK, had set up a casualty receiving area in the hangar because smoke and fire had rendered STARK's medical department inoperative. (Exhibit 64.)

1.35 (U) Initial triage revealed two severe burn patients and several individuals with relatively minor injuries. (Exhibit 64.)

1.36 (U) When LCDR Miller arrived, the patients had already been receiving treatment from HM1 Dickerson even though Dickerson himself had multiple shrapnel wounds. (Exhibit 64.)

1.37 (U) After leaving LCDR Miller on STARK, the HC-2 crew conducted SAR operations for approximately 1 HR 45 MIN with no findings. (Exhibit 62.)

1.38 (U) When the HC-2 helo returned to STARK, the decision was made for the helo to return to BIA and not MEDEVAC the two burn patients because so much equipment would have had to be relocated in order for the helo to hover. (Exhibit 64.)

1.39 (U) At daybreak, fires onboard STARK were controlled enough to allow crew and equipment to move forward so the helo could hover over the flight deck. (Exhibit 64.)

1.40 (U) The two burn patients were MEDEVACed via the hoist. (Exhibit 64.)

1.41 (U) When LCDR Miller left with the patients the medical situation on STARK was stable and LASALLE was enroute to provide assistance. (Exhibit 64.)

1.42 (U) The two burn patients went to Salmaniya Medical Center. The four men rescued from the water by the BDF SAR helo were taken to the Bahrain Air Force Base and then to BDF Hospital. (Exhibits 64, 132.)

1.43 (U) The fifth man was recovered from the water by WADDELL in good condition. (Exhibits 64, 129, 132.)

1.44 (U) After evacuating the two burn victims to BIA, the HC-2 helo continued to conduct SAR operations until 2100 18 May. (Exhibit 62.)

1.45 (U) Only five individuals incurred injuries requiring line of duty/misconduct determinations. All five incurred their injuries as a direct result of the attack. Three individuals incurred injuries which are potentially permanently disabling. Two men incurred injuries which caused them to miss more than 24 hours of duty. (Exhibit 64.)

1.46 (U) [redacted] incurred second degree burns to 23% of his body surface including both lower legs and the left arm. He also incurred some inhalation injury and multiple fragment wounds including a large fragment wound to the left buttocks area and an additional fragment wound to the right foot. (Encl 6.)

1.47 [redacted] incurred second degree burns to 42% of his body area including both legs and both arms. He had numerous small puncture wounds to the legs; and he also had an injury to both corneas which healed by 23 May 1987. (Encl 6.)

1.48 [redacted] incurred shrapnel wounds to the right upper arm, right shoulder and the right side of the chest and neck. The piece of shrapnel in the neck was removed. Shrapnel in the arm, shoulder and chest would have required more extensive surgery to remove so it was left in place. The shrapnel does not cause any discomfort or impairment but may later cause symptoms to develop. (Exhibits 64, 124.)

1.49 [redacted] incurred superficial cuts to his feet and hands with first degree burns to the feet. He was held at ASU for treatment until he returned to light duty on 30 May 1987. (Exhibits 64, 126.)

1.50 [redacted] incurred superficial cuts to the feet and returned to full duty 30 May 1987. (Exhibits 64, 125.)

1.51 (U) Recovery and identification of the attack victims began when three bodies were brought to the helo hanger onboard STARK. (Exhibits 65, 66.)

1.52 (U) LT Scott C. Haney, DC, led a team in a collection and identification process. (Exhibit 65.)

1.53 (U) Around 1500, 18 May 1987, the team began locating, identifying and transferring bodies. (Exhibit 65.)

1.54 (U) Team members included: LT Scott C. Haney, DC, Team Leader, USS LASALLE; LT Peter W. McGeory, CHC, USS LASALLE; HM1 Mohan, USS LASALLE; HM1 Dickerson, USS STARK; and an unnamed MAA from USS STARK. (Exhibit 65, 66.)

1.55 (U) The team bagged and tagged the bodies where they found them; LT McGeory acted as a recorder. (Exhibits 65, 66.)

1.56 (U) HM1 Dickerson and the MAA Petty Officer were the only STARK crewmembers utilized in the recovery and identification process. (Exhibits 65, 66.)

1.57 (U) The team dealt with only one body at a time and searched only one space at a time. (Exhibit 66.)

1.58 (U) If the two STARK Petty Officers could not agree on a visual identification, the team made a preliminary identification from other clues such as clothing stencils, jewelry engraving or initials, outer clothing stencils and the position in the compartment in relation to known bunk assignments. Some bodies were not identifiable locally. (Exhibit 65.)

1.59 (U) Twenty-three bodies were recovered and moved to LASALLE on 18 May. (Exhibits 65, 66.)

1.60 (U) Twelve bodies were recovered and moved to LASALLE 19 May. Another bag of body parts collected 20 May. (Exhibit 65.)

1.61 (U) The majority of bodies and parts were found in berthing space 2-100-01-L. (Exhibit 65.)

1.62 (U) Three bodies wearing EEBDs were found in the Ship's Control Berthing compartment (second deck) near the hatch connecting the 2nd and 3rd decks. (Exhibit 65.)

1.63 (U) Three bodies were found outside RICER. (Encl 16.)

1.64 (U) Three bodies were found in the Combat Systems Berthing compartment (third deck). (Exhibit 65.)

1.65 (U) Two bodies had been found face down in the water on the deck of the Combat Systems Berthing area by GMM1 Mahone soon after the missiles hit and before he escaped. (Exhibit 129.)

1.67 (U) Three bodies in the Chiefs' Quarters appeared to have been killed by the heat or flame of the first missile. (Exhibit 65.)

1.68 (U) All bodies were transferred from STARK to LASALLE as they were found. (Exhibits 65, 66, 132.)

1.69 (U) On 20 May all bodies and remains were transferred from LASALLE to the AV-UNIT at BIA for loading onboard a C-141 for transfer to the U.S. Army Mortuary, Frankfurt, Germany. (Exhibits 65, 66, 132.)

1.70 (U) Bahraini officials waived the normal procedures for removing remains from Bahrain. (Exhibit 132.)

[redacted]

1.71 (U) Identification procedures used in the U.S. Army Mortuary, Frankfurt, Germany revealed that the remains of 35 people were received. The names of those 35 people are:

NAME	RANK	SOCIAL SECURITY NUMBER:
BOLDUC, DORAN H.	SN	
BROWN, BRADDI O.	BM1	
CAULKINS, JEFFREY L.	FC3	
CAOUETTE, MARK R.	SN	
CILETTA, JOHN A. JR.	SN	
CLINEFELTER, BRIAN M.	SR	
DANIELS, ANTONIO A.	OS3	
DEANGELIS, CHRISTOPHER	ET2	
DUNLAP, JAMES S.	IC3	
ERWIN, STEVEN T.	STGSN	
FARR, JERRI B.	RM2	
FOSTER, VERNON T.	QMCS	
GRISSETT, DEXTER D.	RMSA	
HANSEN, WILLIAM R.	FC3	
HOMICKI, DANIEL	GMG3	
JANUSIK, KENNETH D.	OSSN	
KENDALL, STEVEN E.	OS3	
KISER, STEPHEN	EMCS	
LOCKETT, RONNIE G.	SM1	
MACMULLEN, THOMAS J.	GMM1	
MOLLER, CHARLES T.	EW3	
PHELPS, JEFFREY L.	SA	
PIERCE, RANDY E.	DS1	
PLONSKY, JAMES	GMG3	
QUICK, KELLY R.	ET3	
RYALS, EARL P.	SMSN	
SHIPPEE, ROBERT L.	FCCS	
SIBLEY, JEFFREY C.	SMSA	
STEPHENS, LEE	OS3	
STEVENS, JAMES R.	TM2	
SUPPLE, MARTIN J.	ET3	
TWEADY, GREGORY L.	FC1	
ULMER, VINCENT L.	SN	
WATSON, JOSEPH P.	EW3	
WEAVER, WAYNE R.	ET3	
WILSON, LLOYD A.	IC2	

(Exhibit 128.)

1.72 (U) One person, OSSN Terance Weldon, USN, is still missing at the time of this report and is presumed dead. (Exhibit 65.)

1.73 (U) OSSN Weldon was not identified by U.S. Army Mortuary, Frankfurt, Germany as being among the remains recovered. (Exhibit 128.)

1.74 (U) OSSN Weldon was not killed in the initial blast. (Exhibit 67.)

[redacted]

2. DAMAGE CONTROL

2.1 (U) STARK commenced a full power build-up at 0024; the material condition of readiness was YOKE. (Exhibit 37.)

2.2 (U) Engineering plant status at time of the hit was: NR 4, 5 firepumps OOC; 1A/B main engines on line; following auxiliaries in operation: NR 1, 3, 4 SSDG parallel in a ring bus; NR 1, 2, 3 firepumps; NR 1 HPAC; NR 1 LPAC; NR 1, 3, SFC (400Hz); NR 2 SFC in Standby. (Exhibit 37.)

2.3 (U) The first missile entered the port side of the ship at frame 110 but did not explode. Parts of the missile traveled through the ship and created a hole in the starboard hull exiting 20' forward of frame 172. The warhead was found on the second deck at frame 171. The second missile entered the ship at about the same location as the first missile and exploded about three feet inside the skin of the ship. (Exhibit 79.)

2.4 (U) Structural damage from the two missile hits is evidenced in the photographs and findings of exhibit 84. The structural damage of the ship's hull, bulkheads and superstructure on the port side frame 110 was caused by the explosion, blast and fragmenation of the second warhead. (Exhibits 79, 91.)

2.5 (U) Structural damage resulting from parts of the two missiles traveling through the ship from frame 100 to frame 140 is as follows: a severed eight inch stanchion; penetration of miscellaneous joiner bulkheads; penetration of transverse bulkheads at frame 140; compromised watertight integrity; cracked arresting stakes; and destruction of firemain cut-out valve 2-106-2, severing the port firemain. (Exhibits 90, p 1, 91.)

2.6 (U) Immediate fire damage caused by the rapid burning of the unexpended fuel from the two missiles included the following spaces: ship's control berthing (2-100-01-L), CPO Quarters (2-152-0-L), Barber Shop (2-140-1-Q), RCN Lounge (2-100-01-L), I. C. Gyro Rm (2-79-0-C), and the port side bridge wing. (Exhibit 90 p 2.)

2.7 (U) Each missile injected approximately 300 pounds of propellant into the berthing complex. The combustion of 600 pounds of burning propellant resulted in a near instantaneous heat release of approximately 12 million BTU's. (Exhibit 90, p 2.)

2.8 (U) The first missile (dud), was more damaging than the second missile (detonation) because it injected burning propellant further inside the ship. The second missile's warhead detonated just inside the ship and vented some of its thermal energy back out through the exterior of the ship. (Exhibit 90, p 3.)

2.9 (U) The fire originated in ship's control berthing (2-100-01-L) and spread to Ricer (1-100-0-Q) and CIC (01-113-0-C). (Exhibit 90, p 3.)

[redacted]

2.10 (U) The engineering plant status immediately after the missiles hit was as follows: 1A/B main engines on line; following auxiliaries in operation: NR 1 and NR 3 SSDG in parallel, NR 4 SSDG secured due to arcing in NR 4 SWBD; no fire pumps on the line; status of other auxiliaries unknown. (Exhibit 133.)

2.11 (U) Smoke quickly filled spaces from the bow aft to frame 212. (Exhibit 133.)

2.12 (U) Immediately after the first missile hit, the Executive Officer proceeded to the bridge, saw flames on the port side of the bridge and ordered the jettisoning of the Stinger missiles and 50 caliber ammunition located on the 03 level due to the danger of ignition from intense heat. (Exhibit 94.)

2.13 (U) Several Stark crewmembers threw life rings and strobe lights over the side when they heard 'Man Overboard' shouted. (Exhibit 133, p 2.)

2.14 (U) Immediate effects in other parts of the ship included an explosion in the foward section of the CPO Mess that filled the compartment with smoke; officers' country filled with smoke; the decks forward of the explosion in flames; fire spreading through the mess line and the starboard passageway forward of the mess line; smoke filled Repair 5 and Repair 2 areas; and firemain pressure was reduced to 60 psi due to a ruptured firemain forward. (Exhibit 133, p 2.)

2.15 (U) Radio communications were lost. PRC radios from aircrew survival vests were used to establish communications with USS WADDELL, the on-station AWACS, and the AWACS controller on military air distress (MAD) frequency 243.0 mhz. (Exhibit 133, p 2.)

2.16 (U) The Engineer Officer was in Central Control Station (CCS) when the first missile hit. CCS experienced a loss of communications almost immediately, although X1J communications with the bridge (relaying orders to after steering) were maintained until the bridge was abandoned due to intense heat. 2J7 communications with main spaces were never lost, and 2JZ communication with Damage Control Central and repair lockers 3 and 5 was maintained from CCS. When GQ sounded, NR-3 SSDG was started and main engines were put on Battle Override. Main spaces were manned by junior personnel so that senior personnel could fight fires. Repair 2 effectiveness was degraded due to a number of senior personnel killed. After the first hit, the ship shifted to Battle Override and started setting Zebra on the firemain due to loss of firemain pressure. After the second hit, non-vital equipment was secured. (Exhibit 133, p 2.)

2.17 (U) HT1 O'Keefe working with air detachment crewmen, attempted to start a P-250 when CCS reported a loss of firemain, but the ship was still going too fast to keep the suction hose in the water. (Exhibit 133, p 2.)

2.18 (U) Zebra was set at 2120. (Exhibit 37, p 3.)

2.19 (U) The Commanding Officer positioned himself on the bridge to monitor firefighting efforts both fore and aft. The Executive Officer positioned himself on the flight deck to direct firefighting efforts aft of the missile hit. (Exhibit 133, p 3.)

2.20 (U) The Commanding Officer made the decision to treat the missile hit as a major conflagration. (Exhibit 133, p 3, Exhibit 94.)

2.21 (U) Damage Control Central (DCC) was manned although the flight deck was used as a central control and information point. (Exhibit 133, p 3.)

2.22 (U) The DCA arrived in DCC at 2130, 21 minutes after the missiles hit. (Exhibit 133, p 3.)

2.23 (U) At 2138, firemain pressure of 120 psi was restored aft of frame 180 by starting NR 1, 2, and 3 fire pumps and isolating the firemain at frame 180 and 232. This action prevented firemain supply from reaching missile magazine sprinkling system. (Exhibit 133, p 4, Exhibit 37.)

2.24 (U) The Commanding Officer ordered all engines stopped at 2303 so the P-250 on the foc'sle could maintain suction. He also ordered the flooding of the missile magazine; but this could not be accomplished due to the loss of firemain forward. Instead, to cool the missiles, a hose was used from the 02 level. (Exhibit 133, p 4.)

2.25 (U) The lack of communications between the foc'sle and the after part of the ship, combined with a hole on the port side and a white hot deck on the starboard break, forced LT Moncrief to physically go up and over the bridge wing at the starboard UNREP station to make reports to the Commanding Officer and to get OBA cannisters and gas for his P-250 pump. (Exhibit 133, p 4.)

2.26 (U) Firefighting efforts were coordinated from the flight deck aft, facilitated by the movement of firefighting equipment to the flight deck and the organization and rotation of 4-6 man hose teams. Initial efforts centered on the wardroom and CPO Quarters, although initial attempts were frustrated by intense heat and smoke in both areas and a shortage of OBAs and cannisters. (Exhibit 133, p 4.)

2.27 (U) STARK experienced a maximum list of approximately 16 degrees. (Exhibit 133, p 4.)

2.28 (U) STARK received a salvage tug was alongside at 2330. The Executive Officer directed the salvage tug forward to cool STARK's

starboard side with water cannons in the vicinity of the missile magazine. The tug also provided a 2 1/2' hose which was used to cool missiles inside the magazine. (Exhibit 133, p 5.)

NOTE: The following events occured on Monday 18 May 1987:

2.29 (U) A class 'B' fire in AMR1 was reported at 0029 and was extinguished at 0058 with Halon. (Exhibit 133, p 5.)

2.30 (U) Desmoking efforts included running STARK's main engines with their module doors open to create negative ventilation and help desmoke the mess decks. (Exhibit 133, p 5.)

2.31 (U) STARK exhausted its supply of OBA cannisters aft at 0114. (Exhibit 133, p 5.)

2.32 (U) The COMIDEASTFOR helicopter ('Desert Duck') was used to deliver LCDR (Doctor) Miller and extra OBA canisters, and to transport injured personnel. (Exhibit 133, p 5.)

2.33 (U) High temperature alarms were activated in the 76 MM magazine and the MK 13 MOD 4 missile magazine. Although the CO ordered the MK 13 MOD 4 Missile magazine sprinkler system activated, loss of firemain forward rendered the system inoperable. (Exhibit 133, p 11.)

2.34 (U) At about 0134, WADDELL arrived on the scene and delivered medical and damage control supplies to Stark via motor whaleboat. (Exhibit 133, p 5.)

2.35 (U) When STARK's angle of list reached sixteen degrees, the XO organized a dewatering party and directed that holes be cut in the bulkheads above the main deck to dewater spaces and prevent any increased angle of list. (Exhibit 133, p 6.)

2.36 (U) Stark did not have enough men to support reflash watches until Rescue and Assistance teams from Waddell and Conyngham arrived. (Exhibit 133, p 5.)

2.37 (U) Firefighting efforts included cutting holes in the deck to insert applicators into spaces made inaccessible by fire and blast damage. Dewatering efforts included punching holes in bulkheads to provide exit routes for water. (Exhibit 133, p 7.)

2.38 (U) Forward spaces were flooded from a firemain rupture after NR1 firepump had been restarted to regain firemain pressure. (Exhibit 133, p 7.)

2.39 (U) Combat Systems berthing were flooded to the overhead as a result of free communication through the port side of the ship into ship's Control Berthing. (Exhibit 133, p 8.)

2.40 (U) WADDELL, CONYNGHAM, REID, and USS LASALLE provided OBA cannisters to Stark. (Exhibit 133, p 5.)

[redacted]

2.41 (U) WADDELL, CONYNGHAM, LASALLE and REID provided Rescue and Assistance teams to STARK. (Exhibit 133, p 6.)

2.42 (U) STARK maintained electrical power throughout the entire damage control evolution. (Exhibit 133.)

2.43 (U) STARK was towed by CONYNGHAM to a position in Sitra Anchorage alongside LASALLE. (Exhibit 133, p 8.)

2.44 (U) Small fires continued to ignite onboard STARK for up to 48 hours after the missiles hit. (Exhibit 133, p 15.)

2.45 (U) No serious injuries or loss of life were incurred during STARK's damage control effort. (Exhibit 133.)

2.46 (U) All of STARK's officers and Chief Petty Officers were general damage control (DC) qualified. (Exhibit 82, p 1.)

2.47 (U) Even though STARK crewmembers may have been general DC qualified at a previous command, STARK required full requalification upon reporting aboard. (Exhibit 82, p 2.)

2.48 (U) All PQS charts were posted at their respective repair lockers. Each man in each repair locker was qualified for his assigned position. (Exhibit 82, p 2.)

2.49 (U) Damage control PMS accomplishment rate for 1st quarter 1987 as of the week of 11-13 May was 96% (accomplishment factor). NAVSAFECEN validated this percentage with five damage control spot checks after the incident. All checks were satisfactory. (Exhibit 133, p 3.)

2.50 (U) Repair party training was conducted on a regular basis. (Exhibit 82, p 4.)

2.51 (U) COMNAVSURFLANTINST 3541.1B does not provide specific repair party manning requirements, the ship's manning document required 18 men in Repair 2, 18 in Repair 3 and 19 in Repair 5. STARK had twenty four fully qualified men assigned to each repair locker. (Exhibit 82, p 4.)

2.52 (U) All repair lockers had inventory lists posted. (Exhibit 82, p 4.)

2.53 (U) COMNAVSURFLANTINST 3541.1B requires OBA's and canisters in each shipboard repair locker and refers the ship to its own AEL to determine individual Repair Locker allowance requirements. STARK's AEL refers to the SNSL (stock number sequence list) for OBA allowance and indicates an allowance of six canisters per OBA. STARK's SNSL listed an allowance of 18 OBA's and therefore 108 OBA canisters. STARK had 34 OBA's and 331 canisters on board at the time of the attack. (Exhibit 82, p 4.)

[redacted]

2.54 (U) EEBD's worked and saved lives, but wet hands required e men to use their teeth to open them. (Exhibit 114.)

3. Damage and Required Repairs

3.1 [redacted] The following areas are a total loss in terms of structural and fire damage resulting from the two missile hits:

(Exhibit 84, 88.)

3.2 [redacted] The following are severe structural and fire damaged areas which will require major structural work and replacement of most equipment/furnishings:

(Encl 9; exhibit 88.)

3.3 [redacted] The following are moderate structural and fire damaged areas which will require overhaul/replacement of some equipment and furnishings:

(Encl 9; exhibit 88.)

3.4 [redacted] The following areas suffered minor damage and will require some overhaul and refurbishment:

(Encl 9; exhibit 88.)

3.5 [redacted]

(Encl 9.)

3.6 [redacted]

(Exhibit 88, 90.)

3.7 [redacted]

(Exhibit 88.)

3.8 [redacted] Main Propulsion damage is as follows:

[redacted]

(Exhibit 90.)

3.9 [redacted] Based on the COMNAVSURFLANT Damage Assessment Team findings, SUPSHIP Jacksonville FL and PERA Philadelphia PA estimate an initial cost of $77,000,000 excluding the cost of Government furnished equipment (GFE) which is $65,000,000. Therefore, the total ROM estimate is $142,000,000. This should be considered a class 'F' estimate, which is accurate within 40%. (Encl 5, 12.)

OPINIONS

A. Attack and Response. This section incorporates the opinions concerning the mission, rules of engagement, combat systems equipment, combat systems doctrine and actions associated with the attack on STARK.

1. [redacted] The damage to STARK inflicted by the Iraqi F-1 was caused by four principle factors:

a. (U) Failure in general, of the Commanding Officer and watch team to appreciate and respect the hazards to STARK inherent in the Iraqi air campaign in the Persian Gulf; and failure, specifically, of the Commanding Officer and watch team to recognize the Iraqi F-1 threat and to effectively utilize the ship's combat systems to respond to that threat.

b. (U) Improper watch manning and watch standing.

c. (U) Failure of the Commanding Officer and watch team to institute a proper state of weapons readiness; and

d. (U) Improper understanding by the Commanding Officer and watch team of the use of fire control radar as a measure short of deadly force in warning the threat and securing the safety of STARK.

2. (U) The Persian Gulf was, on and prior to 17 May 87, a relatively uncomplicated air threat environment and STARK was, during the evolving action, confronted with a single air problem.

3. (U) Contextual information, both background and current, adequate for understanding of the operating environment, was provided to STARK by CMEF; and, the prospect of indiscriminate attack was sufficiently identified and stressed.

4. [redacted] Tactical information sufficient to prepare for the evolving air problem was available from AWACS and STARK's

shipboard sensors. identified the aircraft as an F-1 and AWACS provided data accurate to the following specifications:

a.
b.
c.

5. The Rules of Engagement that were in existence on 17 May 1987 were sufficient to enable STARK to properly warn the Iraqi aircraft, in a timely manner, of the presence of a U.S. warship; and, if the warning was not heeded, the Rules of Engagement were sufficient to enable STARK to defend herself against hostile intent and imminent danger without absorbing the first hit.

6.

7.

a.

b.

8. If properly employed, the combat system installed in STARK had the inherent capability to enable STARK to comply with the Rules of Engagement and defend against hostile intent and imminent danger without requiring the ship to absorb the first hit.

9. (U) The Commanding Officer failed to implement an effective means for supervising the readiness of his watchstanders as evidenced by the laxness that permitted the Weapons Control Console (Nr 2) operator to be absent from his watch station without proper authority and for the .50 caliber machine gun operator to be lying down at his post.

10. (U) LT Moncrief assumed that the Commanding Officer had been on the bridge earlier and had heard CIC report to the Bridge that they had detected a radar contact which correlated to the Iraqi aircraft. In making this assumption, LT Moncrief failed to comply

[redacted]

with the Commanding Officer's oral and standing orders which required him to inform the Captain when CIC gained radar contact on the Iraqi aircraft.

11. (U) The Commanding Officer had an inherent responsibility to keep himself informed concerning the Iraqi Air Contact but assumed that his personal initiative was unnecessary.

12. (U) LT Moncrief failed to consider the possibility that the Iraqi aircraft might indiscriminately attack Stark.

13. (U) LT Moncrief did not understand what countermeasures he was required to execute, as a function of range to the Iraqi aircraft and response time required by Stark's combat system, in order to comply with the Rules of Engagement.

14. (U) LT Moncrief was reluctant to lock-on with fire control radar to the Iraqi aircraft while the aircraft was 40 to 50 miles away from Stark because he felt that it might be interpreted by the Iraqi aircraft as a hostile act. This reluctance to use fire control radars for tracking unidentified aircraft was consistent with Stark's overall conservative command philosophy, which was typified by the practice of doing missile system DSOT's at night so that a training missile would not be seen on the launcher.

15. (U) USS Stark did not execute adequate and timely measures to properly warn the Iraqi aircraft of the presence of a U.S. warship. This failure integrated into Stark's planned sequence of progressive action ultimately resulted in Stark being overcome as the action evolved into crisis.

16. (U) The cumulative experience of the many ships that have been assigned to MIDEASTFOR since the outbreak of the tanker war indicates that, in many cases, locking-on to unidentified aircraft with fire control radars has resulted in the aircraft altering course to open its closest point of approach.

17. (U) The uniform understanding of the principal watchstanders (The TAO, WCO and Watch Supervisor) that Stark was in weapon status warning Condition 'White', placed Stark's system in a condition in which quick response could not be accomplished.

18. [redacted] Unused combat capabilities in Stark included the ability to: detect the Iraqi aircraft
issue voice warnings,
initialize
in order to improve
probabilty of detecting missile launch, initialize the AN/SLQ-32
and maneuver to unmask weapon systems
lock-on and track with the
MK-92 STIR fire control radar
put a SM-1 surface to air
missile on the rail, place the Close In Weapon System in AAW automatic, and arm the Super Rapid Blooming Offboard Chaff

[redacted]

[redacted] : detect the first Exocet launch

[redacted] shoot two surface to air missiles at the aircraft [redacted] launch SRBOC between the ship and the incoming missile.

[redacted] and engage the Exocet with SM-1 and the MK-75 gun when in range; probable shoot down of the aircraft, with the second Exocet still onboard, would occur at [redacted] and, the CIWS could engage the Exocet, if it was not already shot down or distracted.

19. [redacted] Stark's failure to employ the [redacted] MK-92 STIR fire control radar, SRBOC Chaff, the Close In Weapon System, along with the failure to lock-on with the MK-92 CAS fire control radar until seconds before missile impact, deprived the ship of its most capable systems to detect and destroy the first Exocet and eliminated the opportunity to shoot down the Iraqi F-1 before it launched its second missile.

20. (U) LCDR Gajan failed to inform himself of the tactical situation as it was developing after he entered CIC.

21. (U) LCDR Gajan failed to consider the possibility that the Iraqi aircraft might indiscriminately attack STARK.

22. (U) LCDR Gajan did not understand what countermeasures STARK was required to execute, as a function of range to the Iraqi aircraft and response time required by STARK's combat system, in order to comply with the Rules of Engagement.

23. (U) LCDR Gajan should have directed that the Commanding Officer be called into CIC immediately when he learned that there was an Iraqi F-1 inbound with at CPA that would bring the fighter within its maximum weapons release range.

24. (U) LCDR Gajan or LT Moncrief should have caused General Quarters to be sounded prior to the missile impact. They knew they had been locked-on to and had sufficient reason to assume the aircraft had hostile intent.

25. (U) LT Moncrief failed to defend STARK as his duty required.

26. (U) The Commanding Officer failed to train his Executive Officer, Tactical Action Officers and CIC watch teams adequately to recognize specific indications of hostile intent and to execute

[redacted]

specific and timely countermeasures to defend the ship. In particular, he failed to specify the defensive measures that must be taken, as a function of range to the threat and reaction time required by STARK's combat system, in order to defend against an Iraqi F-1 armed with Exocet anti-ship cruise missiles.

27. (U) The Commanding Officer failed fundamentally to appreciate the significance of the intelligence information provided to him regarding the recent trend in Iraqi ship attacks occurring south of the 27-30 north parallel, into the central Persian Gulf. This error, in turn, led to a cascade of failures which included: failure to train his watch teams effectively; failure to supervise his watch teams effectively; failure to keep his CIC, at Condition III/Warning Yellow, fully manned with the watch stations required by the Type Commander's Combat Systems Doctrine; failure to keep weapons readiness at the appropriate level; failure to impress upon his Executive Officer and Tactical Action Officers to implement the Rules of Engagement properly; and, failure to maintain his awareness of the tactical situation after being informed that an Iraqi aircraft, was [redacted] closing his ship. These cumulative failures led to the total collapse of his ship's defensive readiness posture.

28. (U) The Commanding Officer failed to provide combat oriented leadership, allowing STARK's anti-air warfare readiness to disintegrate to the point that his CIC team was unable to defend the ship.

29. (U) If the lookout and bridge watch had been alerted to look for possible missile launch and given the relative bearing, the missile would have been detected and identified correctly early enough to enable timely defensive action by the OOD if SRBOC was armed and the firing position for SRBOC launchers was on the bridge in accordance with the STARK's battle orders.

30

31. [redacted] In the particular case of ships assigned to MIDEASTFOR, COMIDEASTFOR must deploy his ships to widely dispered operation areas for conducting the MEF mission.

32. [redacted] In terms of command and control, as it relates to hostile intent, imminent danger and self-defense against indiscriminate attack, STARK held [redacted] tactical information from her sensors and NTDS link with AWACS [redacted]

33. (U) The missions and tasks of COMIDEASTFOR includes the planning and conduct of operations and training in the Persian Gulf and Red Sea in support of national interests; anti-air surveillance and early warning in support of ELF ONE; general maritime surveillance; liaison with U.S. diplomatic missions and foreign armed forces; and, other military operations as directed. It is evident that the missions assigned to COMIDEASTFOR preclude him from being able to be in close proximity with the ships in his force and his span of missions requires diverse staff efforts.

34. [redacted]

35. [redacted] While the structure of the task organization did not in any way contribute to STARK's inability to take defensive action, adjustments such as assignment of a TACDESRON to MIDEASTFOR will better position COMIDEASTFOR to respond to changing needs.

36. [redacted]

37. [redacted]

38. [redacted] STARK should have conducted routine PAC firings as required by the Preventive Maintenance System, especially after CIWS began intermittently to fail SOT number five.

[redacted]

39. [redacted]

40. [redacted]

a.

b.

c.

41. [redacted]

42. (U) There were no other surface ships within 10 NM of STARK at the time of the attack.

B. (U) Post Attack Actions: This section incorporates the opinions concerning post attack matters involving search and rescue (SAR), medical response, casualties, damage control, damage and required repairs.

1. (U) SAR, Medical Response, and Casualties.

1.1 (U) The team which had the task of finding, identifying, and preparing the remains prior to shipment performed its task with thoroughness, accuracy and with the appropriate dignity required under the circumstances.

1.2 (U) Bahraini Officials were extraordinarily helpful and cooperative in the effort to get the remains of the deceased to Germany for identification.

1.3 (U) OSSN Weldon was injured in the initial blast. He subsequently went into the water and expired there.

1.4 (U) Some men died from the electric shock.

1.5 (U) The injuries incurred by FC3 Wheeler, FC3 Bareford, HM1 Dickerson, FC3 McLeod and FC3 Porter were incurred in the line of duty and not due to their own misconduct.

[redacted]

2. (U) Damage Control.

2.1 (U) In view of the heavy personnel losses and major structural and fire damage sustained as a result of the missile attack, the officers and crew of USS STARK carried out an effective, organized and heroic damage control effort.

2.2 (U) STARK's successful damage control efforts were a direct result of an effective DC training program and a high state of DC material readiness.

2.3 (U) Intense heat and smoke were the primary impediments to firefighting efforts.

2-4 (U) The Commanding Officer's decision to fight fires/ flooding using major conflagration method was justified in view of the locations of the missile hits.

2.5 (U) The availability of infrared thermal heat imagers could have enabled USS STARK firefighters to pinpoint fire sources much earlier and significantly limit further damage.

2.6 (U) Heavy personnel casualties, acid smoke, intense heat, and lack of communications contributed significally to the confusion experienced in initial firefighting efforts.

2.7 (U) STARK's allowance of OBA(s) and canisters was inadequate.

2.8 (U) STARK would have sustained significantly greater levels of personnel injury and material damage if R&A augmentation had not been provided by area ships and helicopters.

2.9 (U) The decision to cut holes in deck and bulkheads to fight fires and drain water was critical to the success of the damage control effort.

3. Damages and Repairs: None.

RECOMMENDATIONS

A. Attack and Response: This section incorporates the body of recommendations concerning the mission, rules of engagement, combat systems equipment, combat systems doctrine and actions associated with the attack on STARK.

1.1 U [redacted] Require ships to develop before they deploy a set of battle orders that are tailored to the specific operating environment of the theater to which they are deploying. The battle orders must clearly address specific actions to be taken, including initiation range and closure rates, as a function of potential adversary weapons systems versus own ship's systems.

1.2 [redacted]

[redacted]

1.3 [redacted] Continued ROE and shipboard training should be tailored to the order of battle in the region into which naval units are deployed or about to be deployed; again, standoff relationships in time as well as distance must be drilled.

1.4 [redacted]

1.5 [redacted]

a. [redacted]

b. [redacted]

1.6 (U) Improve in-theater training, as follows:

a. (U)

b. [redacted]

c. [redacted]

d. (U)

e. [redacted]

[redacted]

1.7 (U) Continue technical studies initiated during the course of the investigation.

1.8 [redacted]

1.9 [redacted] Assign a Tactical Destroyer Squadron Commander to serve as the Officer in Tactical Command (OTC) of surface combatants assigned to MIDEASTFOR.

3. Post Attack Actions: This section incorporates the recommendations concerning post attack matters involving search and rescue (SAR), medical response, casualties, damage control and required repairs.

1. Sar, Medical Response, and Casualties.

1.1 (U) Improve training on EEBDs through out the Fleet by having shipboard personnel rehearse the actions necessary to break open a box, rip a package, don the hood and pull the lanyard.

1.2 (U) Develop and practice drills to teach blind escape procedures when spaces have been rearranged by explosion.

1.3 (U) Develop techniques for avoiding electric shock when confronted with arcing cables.

1.4 (U) Develop training for using an EEBD as a flotation device.

2. Damage Control.

2.1 (U) Recommend ships set modified material condition Zebra when the threat level dictates Condition Three.

2.2 (U) Develop waterproof, heat resistent, hand-held radios, for use during shipboard damage control efforts and distribute fleet-wide.

2.3 (U) Backfit FFG-7 class ships with firemain jumper stations.

2.4 (U) Distribute thermal imagers and provide necessary shipboard training.

2.5 (U) Continue the exclusive use of low-smoke electrical cable in future ship construction and retrofit whenever feasible.

2.6 (U) Develop quick-opening EEBD container bags that are resistant to grease, water and other friction-reducing solvents.

2.7 (U) Increase the diameter of deck scuttles to allow easier escape and reentry by personnel with DC equipment.

2.8 (U) Ensure everyone is trained and/or qualified for No. 1 hoseman and OBA man on minimum-manned ships.

2.9 (U) Ensure all Air detachment personnel complete shipboard firefighting training before embarking aboard ship.

2.10 (U) Develop portable OBA canister stowage racks to facilitate transfer of large numbers of cannisters to crucial firefighting control areas.

2.11 (U) Develop stronger and more rip resistant OBA breathing tubes.

2.12 (U) Prohibit the wearing of Corfam shoes and polyester clothing aboard ship.

2.13 (U) Develop slip-on arm coverings connected by an adjustable strap across the back for firefighters who arrive wearing short-sleeved shirts.

2.14 (U) Develop battle helmets closer in design to civilian firefighting helmets to protect the back of the neck against scalding water and falling debris.

2.15 (U) Design boots with higher tops to keep out water and with better sole insulation against hot decks.

2.16 (U) Install smoke curtains fleet-wide.

2.17 (U) Develop high-capacity lightweight smoke removal equipment with long and durable extension cords.

2.18 (U) Install deck drains in topside compartments to drain firefighting water over the side.

2.19 (U) Install high-intensity halogen-type bulbs in DC helmet lights.

2.20 (U) Design auxiliary DC lockers with DC plates, 2JZ and local communications for topside spaces near vital ship control areas.

2.21 (U) Develop rubber matting for electronic spaces that is not slippery when wet.

2.22 (U) Install high volume fire suppression systems in vital shipboard electronics spaces.

2.23 (U) Install a dedicated firemain jumper for each ammunition magazine sprinkler system.

2.24 (U) Increase shipboard OBA and OBA canister allowances consistent with storage constraints.

2.25 (U) Review submersible pump electrical connections

throughout the fleet and ensure total inter-operability among different ship types.

3. Damage and Required Repairs: None.

C. Valor and Achievements

1. (U) The following USS Stark crewmembers were awarded the Navy/Marine Corps Medal on 30 May 1987 by VADM W. F. McCauley, Commander, Naval Force, U. S. Atlantic Fleet:

LT	Carl S. Barbour, USN
FC2	Lance C. Collins, USN
LT	William A. Conklin, USN
HM1	David D. Dickerson, USN
GSM1	Randy E. Engram, USN
LCDR	R. J. Gajan, USN
MA1	Dwayne R. Massey, USN
LT	Basil E. Moncrief, USN
HT1	Michael J. O'Keefe, USN
GMM3	Mark W. Samples, USN

2. (U) The following USS Stark personnel were awarded the Purple Heart:

FC3	Lawrence Bareford, USN	
SN	Doran H. Bolduc, USN	(DECEASED)
BM1	Braddi O. Brown, USN	(DECEASED)
FC3	Jeffrey L. Calkins, USN	(DECEASED)
SN	Mark R. Caouette, USN	(DECEASED)
SN	John A. Ciletta, Jr., USN	(DECEASED)
SR	Brian M. Clinefelter, USN	(DECEASED)
OS3	Antonio A. Daniels, USN	(DECEASED)
ET2	Christopher Deangelis, USN	(DECEASED)
IC3	James S. Dunlap, USN	(DECEASED)
STGSN	Steven T. Erwin, USN	(DECEASED)
RM2	Jerri B. Farr, USN	(DECEASED)
EMCS	Stephen Kiser, USN	(DECEASED)
QMCS	Vernon T. Foster, USN	(DECEASED)
RMSA	Dexter D. Grissett, USN	(DECEASED)
FC3	William R. Hansen, USN	(DECEASED)
GMG3	Daniel Homicki, USN	(DECEASED)
OSSN	Kenneth D. Janusik, USN	(DECEASED)
OS3	Steven E. Kendall, USN	(DECEASED)
SM1	Ronnie G. Lockett, USN	(DECEASED)
GMM1	Thomas J. MacMullen, USN	(DECEASED)
EW3	Charles T. Moller, USN	(DECEASED)
SA	Jeffrei L. Phelps, USN	(DECEASED)
DS1	Randy E. Pierce, USN	(DECEASED)
GM3	James Plonsky, USN	(DECEASED)
ET3	Kelly R. Quick, USN	(DECEASED)
SMSN	Earl P. Ryals, USN	(DECEASED)
FCCS	Robert L. Shippee, USN	(DECEASED)
SMSA	Jeffrey C. Sibley, USN	(DECEASED)
OS3	Lee Stephens, USN	(DECEASED)

[redacted]

TM2	James R. Stevens, USN	(DECEASED)
ET3	Martin J. Supple, USN	(DECEASED)
FC1	Gregory L. Tweady, USN	(DECEASED)
SN	Vincent L. Ulmer, USN	(DECEASED)
EW3	Joseph P. Watson, USN	(DECEASED)
ET3	Wayne R. Weaver, USN	(DECEASED)
OSSN	Terance D. Weldon, USN	(DECEASED)
FC3	James Wheeler, USN	
IC2	Lloyd A. Wilson, USN	(DECEASED)

3. (U) The fact that USS Stark suffered no deaths or serious injuries in connection with their damage control efforts is directly attributable to the clear thinking, exceptional courage and extraordinary heroism displayed by many of its officers and crewmembers.

4. (U) The men who contributed significantly to USS Stark's defense and damage control efforts should be recognized and awarded for their outstanding performance.

5. (U) Recommend the following officers and crewmembers of USS Stark be recognized for their performance with the appropriate award listed below:

a. The Navy Cross (Posthumously):

ET3 Wayne R. Weaver, II, USN

b. The Silver Star (Posthumously):

SN Mark R. Caovette, USN

c. The Purple Heart:

HM1	David D. Dickerson, USN
OS2	Timothy S. Gable, USN
LCDR	R. J. Gajan, USN
GMM1	Gary Mahone, USN
MR3	Timothy R. Martineau, USN
OSSN	William W. McLeod, USN
FC3	William G. Morandi, USN
STG3	David G. Nadeau, USN
OSSN	Timothy B. Porter, USN
LT	William D. Conklin, USN
OSC	Larence Barrow, USN

d. The Meritorious Service Medal:

LTJG	Michael W. Tookar, USN
LT	William T. Summers, USN

e. The Navy Commendation Medal:

GSM2	Franklyn D. Anderson, USN
MS2	Francis J. Burke, USN

HT3	David A. Burno, USN
OS2	Timothy S. Gable, USN
LTC3	William A. Hanson, USN
FA	John M. McClelland, USN
ENS	Richard A. McDunigale, USN
MR3	Timothy R. Martineau, USN
FC3	William G. Morandi, USN
HT2	Michael W. Nicholas, USN
ENC	Carrol A. Putnam Jr., USN
LT	Michael R. Reed, USN
LT	Mathew E. Schellhorn, USN
AEAN	K. W. Shahan, USN
ENS	Jeffrey B. Wright, USN
EM1	Anthony R. Yonaitis, USN

f. The Navy Achievement Medal:

GSMC(SW)	Jose Y. Basco, USN
SM2	Gilberto A. Berrios, USN
EN3	Luther M. Berryman Jr., USN
LTJG	Franklin D. Brangaccio, USN
QM2	Frederick Carl Brown, USN
LTJG	Vincent G. Diantonio, USN
OS2	David M. Foisy, USN
SN	Phillip A. Forrest, USN
ENS	Thomas A. Forrest, USN
FN	William D. Foss, USN
EN2	Wayne E. Fox, USN
GSE3	Alfred E. Green, USN
GSE3	John T. Haley, USN
RM2	Randall W. Hanes, USN
RM2	Larry C. Hardin, USN
SK1	James J. Holt, USN
FN	Steven E. Hunter, USN
EN3(SW)	Richard K. Kelly, USN
HT3	Eric E. Longest, USN
AMS3	Barry L. Loyd, USN
FN	Thomas R. Marshall, USN
EM1(SW)	Edgardo U. Mateo, USN
HT3	Salome Naranjo Jr., USN
HT3	Michael L. Romanetto, USN
SN	Walter T. Taylor, USN
GSM3	Mark D. Wasnock, USN
SA	Robert H. Williams Jr., USN
LT	Ronald L. Wheeler, USN
FN	Derrick L. Wilson, USN

6. The award recommendations will be submitted by the investigating officer to COMNAVSURFLANT for consideration.

D. Accountability:

1. Detach Captain Glenn R. Brindel, USN, Commanding Officer, USS STARK for cause in accordance with MILPERSMAN 3410100.5.

[redacted]

2. That the charges preferred in enclosure (13) against Captain Glenn R. Brindel, USN, be referred to a General Court-Martial.

3. Detach Lieutenant Commander Ray J. Gajan, USN, Executive Officer, USS STARK for cause in accordance with MILPERSMAN 3410100.5.

4. That the charges preferred in enclosure (14) against Lieutenant Commander Ray J. Gajan, USN, be referred to Admiral's Mast.

5. Detach Lieutenant Basil E. Moncrief, USN, for cause in accordance with MILPERSMAN 3410100.5.

6. That the charges preferred in enclosure (15) against Lieutenant Basil E. Moncrief, USN, be referred to a General Court-Martial.

7. A claim should be made against the Government of Iraq for all damages that resulted from the attack on STARK, including:

a. Personal compensation for injured and deceased service members, and:

b. The cost to restore STARK to full mission capability and to repair or replace all items damaged, including personal possessions of crew members.

GRANT SHARP