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|  | **DEPARTMENT OF THE NAVY**NAVAL SURFACE FORCE
UNITED STATES PACIFIC FLEET
2841 RE NDOVA ROAD
SAN DIEGO, CALIFORNIA 92155-5490 | **IN REPLY R**E**FER TO**5200Ser N00.1/017 26 Jan 23 |

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| FINAL ENDORSEMENT on | (b) (5) | USN, ltr of 12 Dec 22 |

From: Commander, Naval Surface Force, U.S. Pacific Fleet To: File

Subj: PRELIMINARY INQUIRY INTO THE NEAR-MISS COLLISION BETWEEN USS HARPERS FERRY (LSD 49) AND USS MOMSEN (DDG 92)

1. On 29 November 2022, USS HARPERS FERRY (LSD 49) (HFY) and USS MOMSEN (DDG 92) (MOM) were transiting in San Diego Bay when they came close to colliding. The near-miss was well documented by harbor cameras, installed navigation systems, and accounts by those involved, The vessels were able to maneuver past each other safely, and neither ship was damaged.
2. This near-miss collision between warships reminds us of the inherent risk present during operations at sea. We must reduce and mitigate those risks through a diligent and focused performance during special evolutions or transits in restricted waters. This preliminary inquiry is an opportunity to critically assess processes and implement lessons learned to ensure this type of incident does not occur again.
3. Except for those items noted below, I approve the findings of fact, opinions, and recommendations of the preliminary inquiry officer (PIO). I concur with the preliminary inquiries' conclusion that the near-miss collision was preventable and resulted from an accumulation of failures, including Bridge Resource Management (BRM) implementation, Bridge-to-Bridge (BTB) communications, Rules of the Road adherence, watch team execution, navigation planning, and risk management.
4. The following corrections, modifications, and annotations are made to the PTO's opinions:
5. Modify opinion 4 to include the following: HFY's Navigation Brief contained MOM's movements to Naval Air Station North Island (NASN1), This information and the visual observation of another warship already berthed at the fuel farm, should have informed HFY's bridge team that MOM was not proceeding to the fuel farm.
6. Modify opinion 10 to include the following: The investigation could not ascertain whether or not the HFY Master Helmsman or Helm Safety Officer ever announced "Orders to the Helm" to signify their confusion as to who had the Conn.
7. Modify opinion 22 to include the following: Had HFY been on the outbound side of the channel, passage would have been more manageable; however, the overarching guidance that vessels should not meet in a turn remains relevant,

**Subj: PRELIMINARY INQUIRY INTO THE NEAR-MISS COLLISION BETWEEN USS HARPERS FERRY (LSD 49) AND USS MOMSEN (DDG 92)**

**27**

1. **Modify opinion 33 to remove FP 33. FF 33 pertains to MOM's Voyage Management System (VMS) rate of turn and movement in the channel.**
2. **Modify opinion 40 to include: HFY watch standers should have correlated the SECURITE call to the briefed harbor movements.**
3. **Modify opinion 51 sentence to say: "Seeing MOM's STBD bow convinced HFY CO that PIP passage was not possible."**
4. **Non-concur with opinion 53. Since the whistle signals were separated by a period of time, it is doubtful they would have sounded like five short, and MOM should have responded with either two short to signal agreement or five short to indicate doubt.**
5. **Modify opinion 57 to include the following: Situational awareness of the pilots in their tractors is not as significant as the CO in the pilothouse, and the CO is ultimately responsible for determining an appropriate meeting situation. However, the expert knowledge of the harbor, provided by the pilot, should be taken into account during the CO's determination, particularly** for **a non-homeported ship such** as **MOM.**

**i, Modify opinion 60 to remove FF 150. FF 150 pertains to HYDROPACs, which would not have contained HFY's movements.**

**5. The following corrections, modifications, and annotations are made to the PIO's recommendations:**

1. **Modify recommendation I** .a **to include the following: TYCOM should review and modify the NAVDORM verbiage pertaining to CICWO duties as necessary. TYCOM will not direct ships on how to tailor communication (COMMS) plans or which station has the guard on specific circuits. The COMMS plan should be briefed.**
2. **Modify recommendation 1.b to state the following: Formalize the TACOM watch via TYCOM guidance and develop a formal PQS or JQR. Non-concur with 1.b.i. TYCOM will clarify TACOM duties,**
3. **Modify recommendation 1.b.iii to refer to Tactical Communications Personnel Qualification (TACOM PQS) or Job Qualification Requirement (JQR) vice BMO.**
4. **Modify recommendation 2.a to remove the following: "COs should direct CODs to provide an audible SITREP to the bridge team anytime a deviation of 50 yards or more will occur during an approved S&A Voyage Plan. SITREPs should be relayed to CIC via best available means." Include the following: TYCOM should review the requirement to announce VMS alarms in the pilothouse.**
5. **Non-Concur with recommendation 3. Portions of this recommendation are included in paragraph 7 of this endorsement.**

Subj: PRELIMINARY INQUIRY INTO THE NEAR-MISS COLLISION BETWEEN USS HARPERS FERRY (LSD 49) AND USS MOMSEN (DD O 92)

f Modify recommendation 4.a. to state: TACOM responsibilities should be formalized using TYCOM guidance, specifically the NAVDORM.

1. Modify recommendation 4.e to state: TYCOM should review verbiage in NAVDORM watch stander responsibilities to ensure optimum COMMS flow between bridge and C1C, including the 'safe for navigation reports.'
2. Non-concur with recommendation 5.b. TYCOM will review and modify NAVDORM APP-C to ensure external circuits are established and verified.
3. Non-concur with recommendation Si. The loss of IP Services impacts SIPR Chat and SATCOMM circuits and has minimal impact on an S&A Transit, which should rely primarily on LOS COMMS. BTB, Navy Red, and FLT TAC are all LOS voice circuits and should be used before SIPR Chat.
4. Modify recommendation 5.1 to include the following: Log discrepancies should be briefed quarterly at the shipboard Navigation Council vice Navigation Brief.
5. Modify recommendation 7 to include the following: TYCOM should coordinate with FCAs to verify each FCA has a standard Harbor Overview brief. Navigation Councils would provide a venue for Port OpsAarbor Pilots to brief their respective waterfront. Also, recommend Port Op.s/Harbor Pilots make the Harbor Overview brief available for download.

6. 1 direct and add the following matters:

1. No later than 10 February 2023, the COs and X0s of HFY and MOM identified in this PI will personally report to me and provide a self-assessment of the incident and what actions will be taken on the next special evolution to improve their respective performances and those of their crews,
2. CRISP N7 will provide oversight to HFY and MOM to ensure the CO is properly training the crew on their roles and responsibilities during sea and anchor detail,
3. HFY and MOM will formalize respective Tactical Communicators watch as described in recommendation 1.
4. MOM will formalize procedures for BTB communications in the CO's Standing Orders.
5. SURFOR units will clarify their Standing Orders in accordance with recommendation 4, as modified above.
6. SURFOR unit Navigation Briefs will address topics described in recommendation 5, as modified above.

Subj: PRELIMINARY INQUIRY INTO THE NEAR-MISS COLLISION BETWEEN USS HARPERS FERRY (LSD 49) AND USS MOMSEN (DD G 92)

1. **All SURFOR** Bridge Teams will review and receive a formal brief regarding areas of elevated risk in restricted waters. The brief will occur semi-annually in accordance with summer nav councils and will be included during BRM and Special Evolution Training (SET) sessions.
2. The HFY and MOM will practice evaluating target angles and bearing drift while in a turn during BRM and SET sessions.

TYCOM will review required attendees for BRM to determine if additional CIC watch standers are required.

1. TYCOM will formalize TACOIVI responsibilities in the NAVDORM,
2. TYCOM will review the NAVDORM and add necessary navigation equipment to be included as part of the Navigation Brief.

1. TYCOM will review the NAVDORM and make necessary modifications to Navigation Brief requirements for emergencies while transiting in restricted waters.

1. TYCOM will coordinate with FCA Port Ops to include recommended pilot boarding locations in the Harbor Movements message.
2. TYCOM will review the NAVDORM to verify harbor movements and likely meeting locations are included in the Navigation Brief.

7. No further action on this preliminary inquiry is necessary. This matter will be retained at Commander, Naval Surface Force, U.S. Pacific Fleet.

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S. My point of contact on this matter is AGC, USN, Force Judge

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Advocate, at or e-mail

(b) (5)

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**R. I. KITCHENER**

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| Copy to:COMCARSTRICGRU THREE COMEXSTKGRU THREE COMDESRON THREE ONE COMPHIBRON FIVEUSS HARPERS FERRYUSS MOMSEN |  |
| (b) (5), **(b)** (5) |

12 Dec 22

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| From: To: | (b) (6), (b) (7)(C) JSN, Investigating OfficerVADM Roy Kitchener, Commander, Naval Surface Force, J.S. Pacific Fleet |

Subj: PRELIMINARY INQUIRY INTO THE NEAR MISS COLLISION BETWEEN USS HARPERS FERRY (LSD 49) AND USS MOMSEN (DDG 92)

Ref: (a) JAGMAN

1. COMNAVSURFPACINST 3530.46 (NAVDORM)
2. COMNAVSURFPACINST 3502.7B (SFTRM)
3. COMNAVSURFPACINST 3505.10 (Navigation, Seamanship, and Ship-Handling)
4. Department of Homeland Security Navigation Rules (COLREGS)

End: (1) Appointing Order dtd 30 Nov 22

1. Investigating Officer generated Timeline of Events
2. Interviews aboard USS HARPERS FERRY of 30 Nov 22 2 Dec 22
3. Interviews aboard USS MOMSEN of 2 Dec 22 - 3 Dec 22
4. Interview with San Diego Pilot of 5 Dec 22
5. MOMSEN - Deck Log
6. HARPERS FERRY - Deck Log
7. MOMSEN - VMS screenshots
8. HARPERS FERRY - VMS screenshots

(1C) MOMSEN 29 Nov 22 Watchbill

(11 ) HARPERS FERRY 29 Nov 22 Watchbill

1. MOMSEN Bridge-to-Bridge Transcript log
2. MOMSEN RD 674 Transcript log
3. MOMSEN SITREP of 29 Nov 22
4. HARPERS FERRY - SITREP of 29 Nov 22
5. YouTube video - "Warship Chicken" of 30 Nov 22
6. HARPERS FERRY - EDT log of 29 Nov 22
7. HARPERSEERRY1NST 3121.1A HEY CO's Standing Orders
8. HARPERSFERRY1NST 3530.40 - HFY NAVBILL
9. MOMSENINST 3121.1 V - MOM CO's Standing Orders
10. MOMSENINST 3530.4 MOM NAVBILL
11. Twitter post by (et'SanDiegoWebCam of 29 Nov 22
12. MOMSEN TACOM JQR
13. MOB-N RE Trackers
14. SURFPAC NAVFUNDS report of 27 Nov 22
15. MEMORANDUM - Email with SURFPAC N7 regarding navigation requirements
16. MOMSEN - Navigation Brief of 28 Nov 22
17. HARPERS FERRY - Navigation Brief of 28 Nov 22
18. HARPERS FERRY - RADM Watchstander Quals
19. MOMSEN RADM - Watchstander Quals

Preliminary Statement

2

1. Per reference (a), 1 conducted a Preliminary Inquiry into the facts and circumstances surrounding the near miss collision between USS MOMSEN (DDG 92) and USS HARPERS FERRY (LSD 49) in the San Diego narrow channel on 29 November 2022. Access to witnesses and evidence were complicated by movements on and off the USS MOMSEN and the USS HARPERS FERRY and corn**"** •

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Is currently underway, but the requirements of enclosure (1) have been me I .IAGC, Region Legal Service Office Southwest provided advice and assistance.

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(b) (5), (b.) (7)(C)

1. In summary, the investigation concludes that the near miss was a result of: 1) failure by MOMSEN to adhere to procedures maintaining a proper watch on bridge-to-bridge as it pertained to the Tactical Communicator Position, 2) failure by MOMSEN to maintain a proper watch on bridge-to-bridge. 3) failure by HARPERS FERRY and MOMSEN to communicate via secondary communication channels 4

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**(b)** (5)

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|  | (b) (5) |  |

and 7) failure by HARPERS FERRY and MOMSEN Combat Information Centers (C1C) to provide forceful backup to the pilothouse.

1. Three major events prevented this near miss from being a collision: 1) the decisive actions taken by the MOMSEN Commanding Officer (CO) to maneuver to port, 2) the Officer of the Deck (OOD) onboard HARPERS FERRY assuming CONN (Conning Officer) and maneuvering to port when he felt the point of extremis was reached, and 3) the decision by both the MOMSEN CO and **HARPERS FERRY OOD** to shift rudders at approximately the same time to complete a successful maneuver to safe waters.
2. For brevity and clarity an consolidate timeline of major events is provided in the findings of facts. A full timeline of events and occurrences onboard both vessels is provided in Enclosure (2) for your review.
3. In the course of my investigation, I interviewed thirty-three individuals from the USS HARPERS FERRY and the USS MOMSEN, in addition to one civilian pilot. All individuals were advised of the voluntary **nature** of the interview and agreed to provide answers to questions without any incidents of note. Transcripts of all interviews are found in enclosures (3) through (5).
4. In the course of this investigation, 1 reviewed and collected all reasonably available evidence through administrative means. 1 additionally looked to references (b) through (e) to weigh actions against procedural compliance. The original deadline for this report was 5 Dec 2022, but an extension was requested and granted until 13 Dec 2022.
5. Additional supporting materials were reviewed but deemed not to be significant to the P1 report, **and** are provided to you in separate correspondence for further review as necessary.
6. For ease in presentation of the findings of facts, the following are noted: I) all ZULU times have been converted to local PST; 2) the USS MOMSEN RD 674 logs were in ZULU with an additional 9 minute error. This was verified by conducting a time check with GPS between the RD 674 control unit to determine how many minutes and seconds needed to be corrected for. **All** times associated with the RD 674 have also been corrected to local PST times; 3) the video posted to Twitter and YouTube capturing the near miss of 29 November 2022 had a 4 second offset when verified against gathered documentation. All times referenced to the video have been corrected accordingly; 4) unless specifically cited below, all courses are in course over ground (COG) and all speeds are in speed over ground (SOG). In certain circumstances, such as when discussing target angle, heading is specifically cited,

Findings of Fact

**3**

**CONSOLIDATED MAJOR EVENTS OF 29 NOVEMBER 2022**

1. At 0830, USS MOMSEN (MOM) was underway and set sea and anchor (S&A) detail for entry into San Diego harbor. [End (6)]
2. At 0911, USS HARPERS FERRY (FIFY) got underway from Naval Base San Diego (NBSD) having previously set S&A detail, came to maximum engineering reliability throughout the ship, and set the restricted maneuvering doctrine. The Pilot disembarked shortly after departure from NFISD, [End (7)]
3. Set and Drift is logged throughout both MOM and HFY's transits but was negligible throughout the evolutions. **(Ends (6), (7), (8), (9)]**
4. **The watch team for** both vessels was as follows for their respective S&A details: [Encls (I 0), (11)]

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|  | **WATCHSTATION CO X0 CMC OOD OOD JOOD** |  |  |  |  |  | **USS HARPERS FERRY USS MOMSEN** CDR Eric Winn CDR Eric Roberts |  |  |
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|  | **TACOM** UII **CICWO TAO HELM SAFETY PILOTING MASTER HELM LEE HELM SHIPPING OFFICER *Civilian Pilot*** |
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1. Between 0830 and 1015, MOM made various communications with both San Diego tractor far pilot pickup and degaussing on bridge-to-bridge (BTB) VHF Channels (CH) 12 and 13. [Ends (), (12), (13)]
2. MOM came to Full Power with all GTEs online

(b) (5)

MOM made various course and speed changes in support of their approach to San Diego Harbor before steading up at 0951 on Course 353, speed 10 knots, inbound to San Diego. [Encls (6), (12), (13)]

1. Between 0911 and 1009, HFY made various course and speed changes in support of their departure from San Diego. [End (7)]
2. HFY maneuvered outside **the he Naval Station North** Island

(NASN I) carrier piers to provide more sea room to USS TRIPOLI who was inbound to NBSD. This navigation deviation was not fully understood by all watchstanders. [End (3)]
3. **MOM prepared to render honors to HFY due to embarked CPR-5. MOM 10 led the preparation efforts but spent most time observing watchstanders and clearing bridgewings for turns. MOM CO had no concerns with the level of support MOM X0 provided. [Ends** (4-1), (4-2)]
4. At 1009 HFY came left to course 225 and rendered honors with **LISS TRIPOLI [Ends (3), (7). (9)]**

**11, After HFY rendered honors with USS TRIOPOL1, HFY X0 spent most of the remaining transit observing watchstanders and clearing bridgewings. While he remembered many of the actions discussed related to the events that morning, he did not recount many interactions with the HFY CO. [End (3)]**

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| **12. At 1012, HFY arranged a port-to-port (PTP) passage with MOM ove** (14), (15)j | **(5) (5), (5) (1) (A)** | [Ends **(12), (13),** |
|  |

1. At 1015:05, MOM established **communications with San Diego Tractor 7 o A** (b) )**) :0 arrange

receipt of a tug and pilot alongside MOM's starboard (STBD) bow at 5 knots (kts). [Ends (5), (12), (13)]**
2. **No further comm** (h) (5),(b)(1) (A)

**communications o are recorded until approximately 1019:53, a period of**

**over 5 minutes. [End (13)]**

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| 1. Just prior to 1015:05, MOM TACOM manually shifted from (Ends (4-4), (4-9), (4-10)]
 | **(b) (5),** (5)(1)(A) |
|  |

(b) (5), (1)

1. MOM watchstanders believe they shifted back ti A' **following the communication with Tractor

7 at 1015:05, but this is unverifiable. [Ends (4-4), (4-9), (4-10)]**
2. MOM handheld BTB radios were not dialed tinilliMMIEnuls (4-4), **(4 -9), (4-10)]**
3. **At 1016:28, MOM is on cours**

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| (s) (5), (b) (1) | **[End (8)]** |

**19 At 1016:29, HFY is en cours**

**hortly after. [End (9)]**

**and speed over** *ground*

(b) (5), (b) )

(A) **HFY executed their turn to**

**(b)** (5), (b(

(1) (A)



1. **By HFY VMS, TRACTOR 7 is approaching the STBD bow of MOM for pilot embarkation onboard. [End** (9)]

**4**

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| 1. While on th
 |  | **HFY CO approached NAV at the chart table and informed her of his desire to** |

remain on the right **side of the channel to give plenty of sea room to MOM. HFY NAV was previously unaware of the PTP passing arrangement. [Ends (3-1),** (3-8)]

1. At approximately 1016:38, USS GRIDLEY **made illilinforming

all San Diego traffic that they are eastbound in** *theinb* (oujii d(AT)SS **to NASNI, HFY was approximately 24s** *a,} 5),* b

**from their planned wheel over point from cours: Of note, San Diego does not have a TSS,**

**[Ends (9), (16)]**

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| 1. At 1017:00, HFY sl standard rudder to cours
 | 1(6) (5): (b.) (1) | **d orders all engines ahead 1.13 for 5 knots and the HFY CONN orders left The turn will last until just** after **1019. [Encls (7), (17)]** |

1. **Based on relative reciprocal voyage plans and timing, HFY and MOM are projected to meet in the most dangerous portion of the San Diego harbor narrow channel, an area San Diego pilots call the Triangle (red buoys (FHB) 16, 16A, and green buoy (GB) 17) where pilots attempt to avoid meeting situations. [End (5)]**



bCE"). 0) (A)

to tut' Tractor 7's AIS symbology is alongside (vit)

(b) (5), (b)

25. At 1017:58, MOM is on tours: cu (Ai at a speed o

right of track. Distance

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|  | (b) (5), 0-4 (1) (A) |  |
| 26. At 1017:59, HFY is turning to port, passing tour [End (9)] |  | with RB I 6A on their port side. |

27. At 1018, the San Diego Pilot has embarked MOM. [Ends (5), (6)1

28, At 1018, HFY bridge becomes confused of MOM intentions based on the foIlowini: observation of tugs in the vicinity of MOM, confusion USS GRIDLEY (b',(1 (A) from

MOM for transit to NASNI pier, location of the Naval Fuel Farm, lack of awareness that MOM is taking a pilot, and MOM heading to port with no observed STBD movement. [Ends (3-4), (5), (9), (13)1

and maneuver to STBD side of the channel. HEY CO

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(b) (5), (b) (1) (A)

urn before endin

near RB 14,

(b) (5),4. **(b) (1) (A)** (A)

(h) (5). {b) {1)

29. HFY confusion leads HP( to initiate

Subse' uentl HFY OOD and OOD Ufl ret

(b) (5), **(b) (1)** (A)

(b) (5), (b) (1) (A)

[Ends (3-1), (3-4), (3-8), (3-11)]

1. HEY Standing Order 46 (PARA 4), states that the CICWO's responsibilities for navigation are to provide the OOD with the best possible navigation support, using all of CIC's capabilities, regardless of whether OOD asks for help. [End (18)]
2. At 1018, during the turn HFY NAV asked for verification from HFY CO regarding his desire

(b) (5), (b

to be right upon completion o the turn (1) (A)

stated he wanted to see what MOM was going to do first. [(3-1), (3-8)]

1. At 1018:28, MOM had cast off the tug to maneuver to STBD, and i of track, [Eitel

(8)]
2. MOM continued to move towards the center of the than (b) (5), (b) (1) (A) VMS depicted a turn to STBD at a rate of turn o

the STBD bow, [Ends (4), (5), (8)]

1. At 1018:29, HEY was continuing their port turn past tours IB 16A off

the port quarter. MOM AIS shows them just south of RB 14 and GB 15. [End (9)]
2. At 1019;03, HFY CO directed the HFY CONN to order all back 1/3 and right full rudder. [Ends (3- ), (3-4), (3-8), (3-9), (17)]

35. HFY CO believed in hindsight the right full rudder was not the correct order to make. [End (3-1)]

(b) (5), (b) **(1)** (A)

37. At 1019:13, MO's rate of turn is now

but has only moved appro **(b) (5), (b) (1) (A)** of track and the SPS-73 plots HE (b) (5), **(b) (1) IA)**

and the ship's heading has continued rilh n the last 30 seconds. The ship is now (b) (5), A)

End (8)]

1. At 1019:14, HEY is continuing to port past cows **(b) (5). (b) (1) (A)**with a distance o MOM. MOM AlS track indicates the ship is north of RB 14 and GB 15 and continuing to close the middle of the channel, [Ends (7). (9)1

to

(b) (5), (b) (1)

(A)

5

1. HEY OOD and NAV express disagreement throughout the next several rudder and speed changes in which the CO changed his mind, came to ALL STOP, then ordered back 1/3 again. HEY CONN receives orders from HFY CO, 00D, and NAV. HEY CONN becomes confused who to take orders from. [Ends (3-I), (3-4), (3-7), (3-8), (3-9)]

40\_ Interviews show at this time there was disagreement and confusion on the HFY bridge. [Ends (3-1), (3-4), (3-7), (3-8), **(3-9)]**

1. Interview showed HFY CO gave orders to increase decision space. [Ends (3-1), (3-4), (3-7), (3-8), (3-9)]
2. HFY Standing Orders do not specifically address communications from NAV to the CONN. [End 1 8)]
3. HFY CC) stated he knew COLREGS Rule 34 to sound five short blasts applied, but did not believe there was enough time to sound it. [End (3-1)]
4. HFY CO became more convinced that MOM is heading to **the** Naval Fuel Farm based on their target angle. [End (3-1)]
5. HFY CO, DOD, and NAV see a tar et an le on MOM that indicates the are not maneuvering for a PTP passage. 1-IFY C [Encl (3-1)]
6. HFY was limited in a maneuvering to port due to the proximity to **RB** 16 on the port beam. [Ends (3-1), (3-4), (3-8)]
7. HFY Navigation Bill PARA ***4*** states that the navigational draft, measured to the deepest projection beneath the keel [End (19)]
8. The MOM bridge was unaware of the concern on the bridge of HFY, and continued their transit plan. TRACTOR 7 is alongside and the pilot is embarking, The CO moved to the STBD bridgewing to observe the pilots embarkation. [Ends **(4-1), (4-4), (4-8), (5)]**
9. After pilot came aboard, MOM executed their STBD turn. MOM CO immediately noticed that FIFY's bearing drift was not to the left as ex.ected. This is the first moment he sus sects something in the arranged meeting had changed\_ (b) (1) (A} [End

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| (4-1)]50. Per MOM Standing Order 43 (PARA 8), MOM's draft is [End (20)] | (b) (5), (b)
(1) (A) | and Navigation draft | (5) (5), (b) (1)
(A) |

51. Per MOM-lavi

approximate'

ation Bill (PARA 5), the Safety Depth shall be set(b) (5), (b) (1) (A)based at

I")5), (to

f MOM's navigational draft, which i ( (10) (A) [End (21)]

(b) (5), (b)

) (A) **4**

52. MOM CO discusses the position of HFY in the channel with his bridge team and believes them to be in the middle of the channel and continuing left. **MOM** CO doubled HFY maneuvering intentions. MOM NAV recommended to the MOM **CO to sound five** short blasts. [Ends (4-1), (4-8)]

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53, When maneuvering intentions are in doubt, Rule 34 applies and 5 short blasts is appropriate. Rule 34 also allows for BTB coordination. **[Ref (e)]**

1. **MOM CO declined** to sound 5 short blasts because he thought it would add to the confusion of the situation, especially given the decreasing range between the two ships and maneuverings that might occur after sounding it. MOM CO was afraid HFY would come right at precisely the time he would come left [Encl (4-1)]

(b) (5). (b) (1) (A)

1. MOM DOD directed the TACOM to contact I-IFY o It is about this time that the

(5) (5), (5) (1) (A)

**MOM** CO attempts to clarify previously agreed to PTP passage o [Ends (3-1), (4-1), (5)]