# Deck Hazard Review

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## MATERIAL REQUIRED FOR DECK SAFETY SURVEY

- 1. 4 SAFETY HARNESSES WITH SAFETY LANYARDS
- 2. 4 WORK LANYARDS WITH DECK TRAVELERS
- 3. 6 INHERENTLY BUOYANT LIFE JACKETS (Kapok or Sterns)
- 4. 6 AIULPS (MK 5)
- 5. 10 STEINKE HOODS (5 fwd/5 aft)
- 6. MAN-OVERBOARD BAG (with inventory list)
- 7. HELICOPTER TRANSFER KIT (with inventory list)
- 8. ESCAPE TRUNK TIMER
- 9. ESCAPE TRUNK TOOLS
- 10. SMALL BOAT HANDLING PARTY ITEMS
  - a. CRANIAL HELMETS
  - b. SWIMMERS KNIVES
  - c. SPIN AROUND LINE
- 11. LIFE RAFTS AND ACCESSORIES (weather permitting, have topside)
- 12. 3 HEAVING LINES
- 13. 43P1 WITH CURRENT AND PAST QUARTERLY
- 14. JACOBS LADDER
- 15. 6 MK 1 FLOAT COATS
- 16. SEIE SUIT CRASH BAGS (fwd and aft, with inventory)
- 17 SEIE SUIT MAINTENANCE LOGS
- 18 BRIDGE AND TOPSIDE LIFE BUOY RINGS (with lights and line)
- 19 2 INFLATABLE LIFE RINGS AND INFLATABLE RADAR REFLECTOR BALLS
- 20 2 REVERSE OSMOSIS DESALINATORS

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# ID# D-1

ITEM TITLE: ESCAPE APPLIANCES (STEINKE HOODS)

BASIC PROBLEM:

1. No reflective tape applied to Steinke hoods.

- 2. No shipping tags attached to Steinke hoods.
- 3. PMS not being accomplished.
- 4. Cracks in face plate.

#### HAZARD:

1. Rescuers may not see personnel.

- 2. Steinke hoods in need of preventive maintenance may be missed.
- 3. Steinke hood may fail when needed most.

#### REMARKS:

As per listed references, reflective tape must be applied to all escape appliances. As per MRC 3JMC of MIP H-409/001, a shipping tag is required to be attached to each escape appliance to show the inspection date of the individual Steinke hood. Equipment Guide Lists are also recommended to identify each escape appliance by location as per OPNAVINST 4790.4 series. NSTM chapter 594-4.2 discusses procedures to make repairs to the faceplate.

- 1. NSTM, Chap. 077-2.4.9.1
- 2. NSTM, Chap. 594-4.2
- 3. MIP H-409/001
- 4. AEL 2-330013020
- 5. OPNAVINST 4790.4 SERIES

## ID# D-2

ITEM TITLE: HELICOPTER TRANSFER KIT

BASIC PROBLEM:

- 1. A complete kit is not being maintained as per AEL.
- 2. Reflective tape is not being correctly applied to cranial helmets.
- 3. Team member not qualified or proficient in signaling techniques.
- 4. Red and green wand/light missing for night time ops.

#### HAZARD:

1. Ship will not be able to do a safe, efficient helicopter transfer.

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#### REMARKS:

Recommend ships inventory the kit using the AEL instead of the Operation Procedure that is less comprehensive. Reflective tape must be used as per listed references. Specify a qualified signal person for the helicopter transfer team on the Watch, Quarter, and Station bill.

- 1. NWP 3-04.1M PARA 8.6 and 5.3.3
- 2. OP 61-20
- 3. AEL 2-330023065

### ID# D-3

ITEM TITLE: MAN-OVERBOARD BAG

BASIC PROBLEM:

1. Bag is not complete as per ship's instruction, Casualty Procedure or AEL.

2. Confusion over what is to be in the bag.

#### HAZARD:

1. Possible inability to rescue a man overboard.

#### **REMARKS:**

The man-overboard bag is required to be inventoried quarterly and after each use. A seal should be placed on the bag's zipper to identify if the bag has been open since the last inventory. Moreover, there is a lot of confusion about what is required to be in the man-overboard bag. The AEL and the MRC leave the contents of the man overboard bag to the discretion of the Commanding Officer. In Casualty Procedure CP62-14, the First Lieutenant is required to ensure that the man-overboard bag is complete as per addendum 2. Because a man-overboard is never a planned evolution, I recommend using the CP addendum as a minimum requirement for the man-overboard bag's contents. This will ensure that you have material required by the approved procedure. Add to this inventory any additional items your CO may desire. The goal is to have a man-overboard bag that can be handled without difficulty by one man. Lastly, remember to perform any situational maintenance required on the contents of the bag prior to sealing it.

- 1. AEL 2-330023011 (SSBN), BAG, MAN OVERBOARD
- 2. AEL 2-330023061 (SSN), BAG, MAN OVERBOARD
- 3. CP 62-14(SSN 688 AND 726 CLASS), (CP62-13 SSN21 CLASS)

### ID# D-4

ITEM TITLE: MK 4 LIFE RAFTS

BASIC PROBLEM:

1. Ships are not maintaining the MK 4 life raft(s) in an operationally sound condition.

2. Repair glue is not in Hazmat tracking program (SHIMS).

HAZARD:

- 1. Under inflation
- 2. Unusable life raft

#### REMARKS:

Preventive maintenance on the MK 4 life raft is scheduled every 24 months. This is a very long time between scheduled maintenance for a deck division. Personnel can come and go without performing maintenance on the life raft. Consequently, maintenance experience is rare. Therefore, extra attention to this piece of life saving equipment is needed to ensure it is maintained in good condition with complete rescue contents. Life raft scheduled maintenance requires test fixtures and a manometer to complete correctly. It is never correct to just perform a 24hour drop test on the life raft. If a manometer is not used, the raft may not be sufficiently tight. This test fixture is provided by the local submarine maintenance activity. periodicity for testing the CO2 cylinder is every 5 years. other scheduled maintenance occurring every 2 years, the cylinder can easily go out of testing periodicity. Finally, care must be taken to ensure that the raft is not damaged in its stowage location.

- 1. NAVAIR 13-1-6.1
- 2. AEL 2-820393001
- 3. MIP H-411-001

## ID# D-5

ITEM TITLE: RING BUOY & DISTRESS MARKER LIGHT

#### BASIC PROBLEM:

- 1. Improper line attaching ring buoy to distress marker light.
- 2. Buoy and light missing reflective tape.

#### HAZARD:

- 1. Improper line will not float as will the polyethylene line.
- 2. Incorrect placement of reflective tape will not provide the required visibility.

#### **REMARKS:**

As per the listed reference, the distress marker light should be attached to the ring buoy with 4 feet of 1/4 inch diameter polyethylene line (NSN 4020-00-247-9224). Also reflective tape (2" wide) shall be installed by ship force on both the buoy and the light.

## REFERENCES:

1. NSTM, Chap. 077-2.4.3.

# ID# D-6

ITEM TITLE: SEIE SUIT AND ACCESSORIES

#### BASIC PROBLEM:

- 1. Maintenance log not being utilized IAW PMS.
- 2. SEIE suits not being rotated from engine room.
- 3. Stowage lockers not being secured at sea/underway IAW PMS.
- 4. No maintenance being performed on reverse osmosis desalinator.

### HAZARD:

- 1. Heat will damage suit if not rotated from engine room.
- 2. Suits are being misplaced due to lockers not being secured.
- 3. Desalinator will not work due to routine maintenance not being performed.

REMARKS: Preliminary MIP (H-409-TBD) has been issued for the desalinator from SUBMEPP under letter serial 1814.6/300 dated 15 AUG 2003. The final PMS should arrive in SFR 1/04. The SEIE PMS is very specific about what records you have to keep for the SEIE suits and very few boats are keeping the maintenance log. The SEIE locker can not contain anything but the SEIE suits. They must be locked while in port and at sea closed with a tamper proof seal.

### REFERENCES:

NSTM, Chap. 077-2.4.3.

MIP 5832/010

MIP H-409-TBD

## ID# D-7

ITEM TITLE: ESCAPE EQUIPMENT

### BASIC PROBLEM:

1. Escape trunk battle lanterns are not properly modified.

## HAZARD:

1. Battle lantern could implode due to unbalanced pressure in the escape trunk.

#### REMARKS:

As per listed reference, the battle lantern shall be modified with wire mesh screen or protective cover over the lens in case of breakage. Also, two 1/8 inch holes shall be drilled in the body and properly sealed with a non hardening plastic sealer (MIL-I-3064) to relieve unbalanced pressure between the lantern case and the escape trunk.

## REFERENCE:

1. CINCLANTFLT/CINCPACFLTINST 4790.3 VOL. IV Chapter 18 APP. A

## ID# D-8

ITEM TITLE: AUTO INFLATABLE UTILITY LIFE PRESERVERS (AIULP MK 5)

#### BASIC PROBLEM:

- 1. Auto Inflatable Utility Life Preservers are not well maintained for satisfactory operation.
- 2. Incorrect lock wire being used.
- 3. Batteries expired.
- 4. Bladder stabilizing straps missing.
- 5. Incorrect weight CO2 bottle being used.

#### HAZARD:

1. The auto-inflatable life preserver may fail to inflate or provide proper buoyancy for an unconscious individual.

#### REMARKS:

The use of Equipment Guide Lists (EGL) is recommended to properly identify each auto-inflatable life preserver by location as per OPNAVINST 4790.4 series. Maintenance of the auto-inflation units requires periodic inspection of the batteries and carbon dioxide cylinders to ensure the life preserver will inflate automatically. MIP 5832 requires the periodic replacement of auto-inflation unit batteries 3 years after the date of manufacture. The AIULP MK 5 is equipped with a water activated distress marker light. Periodic inspection of the marker light battery is required to ensure proper operation. The marker light assembly must be replaced 3 years after the date of manufacture or if the battery appears damaged as per MIP 5832. The moisture prevention plugs must remain inserted in these batteries to prevent inadvertent operation or damage. Bladder stabilizing straps must be properly fastened to the fabric cover to ensure proper buoyancy for the wearer as per MIP 5832 and AIULP MK 5 Technical Manual SS710-AB-MMO-010.

- 1. OPNAVINST 4790.4C
- 2. MIP 5832/012
- 3. AUTO INFLATABLE UTILITY LIFE PRESERVER MK 5 Technical Manual SS710-AB-MMO-010.

## ID# D-9

ITEM TITLE: MOORING LINE TATTLE-TALE LINES

#### BASIC PROBLEM:

1. Tattletales broken or missing from SUBRON or SSSU provided mooring lines.

2. Tattletales broken or missing from ships force owned mooring lines.

#### HAZARD:

1. Crew can't gage tension on mooring lines without working tattletales.

2. Personnel may be injured from parting mooring lines because tension can't be judged without a working tattletale.

#### REMARKS:

Many submarine crews think that just because the SUBRON or SSSU provides their mooring lines they don't have to maintain them. If they are being used on your ship, you must maintain them. MRC R-11D requires a daily inspection of the tattle tales. If you are provided defective mooring lines in incumbent upon the submarine crew to request the issuing activity to repair or replace the mooring line as soon as possible. A mooring line with a broken or defective tattle tale should be considered a major safety hazard and replaced at the first opportunity. It may be someone else's mooring line but it will be your mishap report if anyone or anything is injured by that line parting.

- 1. NSTM, Chap. 582
- 2. MIP 5821/021 MRC R-11D