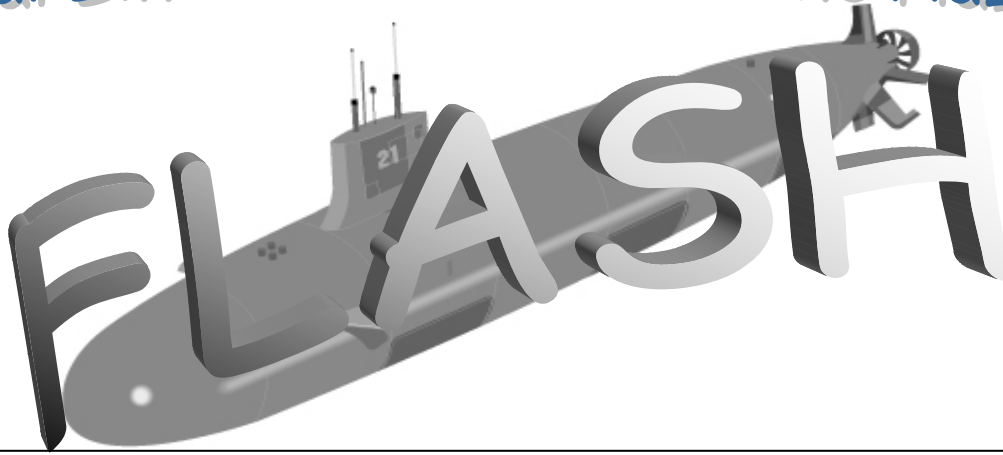


Submarine Division of the Naval Safety Center Factual Lines About Submarine Hazards



Jan-Mar 08

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Route for Safety's Sake

CO _____ XO _____ NAV _____ ENG _____ CSO _____ SUPPO _____ MDR _____

DCA _____ COB _____ EDMC _____ 3MC _____ CPOs _____ Ship's DCPO _____

When reading through these articles, remember this is not an all inclusive list and there are many other issues that should be addressed with regard to each section's attribute checklist. Each section owner is cautioned to review the Hazard Reviews for each section. For further

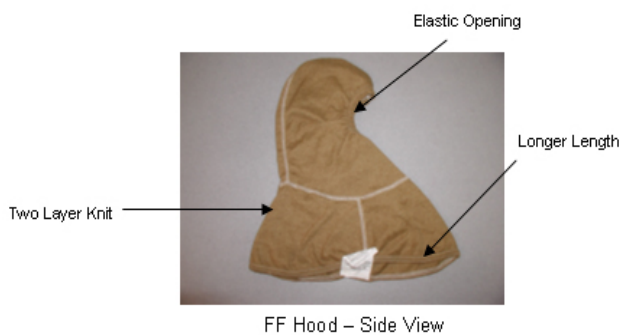
information or assistance in improving your safety and/or processes go to:

<http://safetycenter.navy.mil/afloat/downloads/default.htm> - submarine.

Damage Control *MMC (SS) Fannin*

During the past several surveys, I have noticed a direct correlation between the DCPOs having graduated from the DCPO course and the material condition of the damage control gear on board. Of the submarines surveyed the DCPOs who had not graduated from the course had severe level-of-knowledge issues and material discrepancies. This course is mandatory for the DCPO to be listed on the 1300 notice. Another common discrepancy is the proper fire fighting hood worn with the SCBA.

flash hoods and is lengthened for better neck and shoulder protection to the FFE wearer. It is one size fits all and weighs 4 ounces. The FF hood carries the National Fire Protection Association (NFPA) label in accordance with the NFPA Standard on Protective Ensemble for Structural Fire Fighting NFPA 1971-2000 edition, and it is certified for performance by Underwriters Laboratory. Additionally, it eliminates the requirement of wearing two anti-flash hoods under the FFE while wearing an SCBA/OBA. Only one FF hood is to be worn when wearing the FFE. **Note:** The existing anti-flash hood can still be worn for firefighting until stock is depleted. The new FF hood is not stocked in the supply system, the NSN (8415-01-462-7670) is assigned with an acquisition advice code "L" (local purchase) and should be locally procured from approved manufacturers such as:



FF Hood – Side View

Fire Fighting Hoods -The firefighter's hood can be identified by its large, flared bib and gold color (similar to the color of the fire protective gear). The FF hood is manufactured from a two-layer knit, the outer layer PBI/Kevlar and the inner layer PBI/FR Rayon. The FF hood is worn as part of the firefighting ensemble (FFE). It is provided to protect the head, ears, neck and face, except the eyes, from heat and short duration flash. The FF hood is more durable, offers more protection than the current anti-

Fire Brigade Mgf. Inc.
P.O. Box 3571
Shawnee, OK 74802-3571
1-800-352-0126
Style No. FB 227 PBI Gold
Cost \$33.00

Majestic Fire Apparel, Inc.
P.O. Box 248
Leighton, PA 18235-0248
610-377-6273
Style No. PAC IX
Cost \$32.00

Life Liners, Inc.
10 Park Place
Morristown, NJ 07960
973-829-0642
Style No. PK9790ES
Cost \$32.00

DECK

FTCS (SS) Lauber

NAVSEA has authorized the replacement of the chemical pill auto-inflator with the new CONAX inflator. This is at **NO COST** to the ship. The following is the message sent by NAVSEA to type commanders.

250930Z FEB 08
FM COMNAVSEASYS COM WASHINGTON
DC//05P//
MSGID/GENADMIN,USMTF,2007/COMNAV
SEASYS COM WASHINGTON DC//
SUBJ/MK-1 LIFE PRESERVER INFLATION
ASSEMBLY REPLACEMENT OF//
REF/A/MSGID:MSG/NAVSURFWARCENDIV
INDIAN HEAD /271803ZNOV2006//
REF/B/MSGID:MSG/NAVSURFWARCENDIV
INDIAN HEAD/101339ZDEC2007//
REF/C/MSGID:DOC/NAVAIR 11-100-1.1CD/-
// AMPN/REF A IS MESSAGE
ANNOUNCING AVAILABILITY OF NEW
INFLATION ASSEMBLY FOR USE WITH
THE MK-1 LIFE PRESERVER FOR
DEPLOYING AIRWINGS. REF B IS A
MESSAGE ANNOUNCING AVAILABILITY
OF NEW INFLATION ASSEMBLY FOR ALL
EXISTING MK-1 LIFE PRESERVERS. REF C
IS TECHNICAL/SAFETY MANUAL FOR
CARTRIDGE AND PROPELLANT ACTUATED
(CAD AND PADS).// POC/MR. MARK
CAMPBELL/CIV/UNIT:COMNAVSEASYS
COM/NAME:WASHINGTON DC

/TEL:202-781-3619/TEL:DSN 326-
3619/EMAIL:MARK.R.CAMPBELL@NAVY.MIL
//
GENTEXT/REMARKS/1. BASED ON REFS A
AND B, THE FOLLOWING GUIDANCE WAS
PROVIDED TO THE USERS OF THE MK-1
LIFE PRESERVER:
A. A NEW CONAX AUTO INFLATOR
(MODEL FLU-12, NSN 1377-01-302-2560)
WAS
APPROVED FOR USE WITH EXISTING MK-1
LIFE PRESERVERS.
B. SHIPS WERE REQUESTED TO REPLACE
THE EXISTING CHEMICAL PILL
INFLATOR/CHEMICAL PILLS (NSN 4220-
01-470-9906/NSN
4220-01-470-9908) AND THE EXISTING
CONAX INFLATOR (NSN 4220-01-302-
2560) WITH THE NEW CONAX INFLATOR
(NSN 1377-01-302-2560).
2. THE NEW CONAX INFLATOR IS A NO
COST ITEM TO THE SHIPBOARD USER
AND IS BEING SUPPLIED TO THE FLEET
FROM A DIFFERENT SUPPLY AGENCY
THAN THE ONE SUPPLYING THE MK-1 LIFE
PRESERVER. THEREFORE, DUE TO
LOGISTIC REASONS, WE HAVE DIRECTED
THE COMMERCIAL MANUFACTURERS OF
THE MK-1 LIFE PRESERVER TO NO LONGER
SUPPLY THE CHEMICAL PILL AUTO
INFLATOR WITH THE COMPLETELY
ASSEMBLED MK-1 LIFE PRESERVER AFTER
THEIR CURRENT SUPPLIES OF THE

CHEMICAL PILL INFLATOR ARE EXHAUSTED. WE PROJECT THAT THEIR SUPPLIES WILL LAST NO LATER THAN 31 MAR 08. REQUEST USERS REPLACE ALL INFLATION ASSEMBLIES ON EXISTING AND NEW MK-1'S WITH THE NEW CONAX INFLATOR (NSN 1377-01-302-2560) PRIOR TO THEIR NEXT SCHEDULED DEPLOYMENT. REQUISITION IAW REF C USING ROUTE CODE NCB AND SIGNAL CODE Y6. REFER TO PMS MIP 5832/014 FOR DISPOSAL INSTRUCTIONS OF OLD AUTO INFLATORS AND CHEMICAL PILLS. USERS ALSO NEED TO ORDER THE BATTERY THAT IS REQUIRED FOR THE NEW CONAX INFLATOR. THE NSN FOR THE BATTERY FOR THE NEW CONAX INFLATOR IS 6135-01-372-5191. USERS SHALL ENSURE THAT THE NEW COMPLETELY ASSEMBLED MK-1 LIFE PRESERVER HAS ALL THE NECESSARY PARTS.

3. CURRENT MK-1 LIFE PRESERVER PMS ADDRESSES MAINTENANCE FOR BOTH THE CHEMICAL PILL AND THE CONAX INFLATORS. THE PMS WILL BE REVISED TO CONTAIN ONLY THE MAINTENANCE FOR THE CONAX INFLATOR.

4. REQUEST WIDEST DISSIMINATION.//

If your command is having a difficult time ordering the new CONAX, below is a sample requisition.

Here is a sample requisition when ordering the new auto inflator:

AOA/NCB/F/1377013022560/EA/QTY_/_/
UIC_/_/_/ JULIAN DATE/SERIAL
#/ _/SUPAD_/B/26/N2E/821/03/RDD.

-SUPAD must be a valid UIC and not the squadron designator.

-RDD must contain a valid date. No "999" or "777".

You can forward the requisition via email to Mr. Fred Young at NOLSC, Mechanicsburg for processing, Fred.Young@navy.mil. Please provide him with the complete shipping address and point of contact to ensure the FED-EX package is delivered properly. If you need further assistance, please let me know.

Thank You,
Sandra Yandell
301-744-2248
DSN 354-2248
Sandra.yandell@navy.mil

Electrical Shock Hazards ETCS (SS) May

A number of 688-class ships have discovered voltage present on the shaft of the operating switches for ventilation fans six and seven. The controllers for these fans are a different design than other ventilation fans. The voltage may

vary with switch position, but values of greater than 30 volts have been experienced. The exact cause of this problem is unknown.

Check the shaft of fans six and seven operating switched for voltage to ground in all positions. Since voltage is expected, Safety precautions IAW NSTM 300 are required.

For any switch that has voltage present, continued operation of fans with the defective switch is permitted provided you take adequate safety precautions. IAW tech note 13-02, the minimum precautions include a CO temporary

standing order identifying the problem and requiring caution tags to be hung on the switch, rubber gloves when operating the switch, and the exposed metal on switch shaft covered with insulating material.

**Reference COMSUBPAC TECHNICAL NOTE
13-02
COMSUBFOR 131714Z MAY 08**

Safety Officer LCDR Webb

During recent surveys it has become apparent that many new submarine safety officers do not have a good starting point for the administration of safety programs. The safety officer and general material check lists found at www.safetycenter.navy.mil are a good start. A full self assessment of all safety programs is required annually and required to be maintained for 2 years. Here is my recommendation for a safety officer binder that would minimize administrative burden and maximize program support. You can maintain this information digitally or in paper, what ever works best for you.

1. 1301 notice showing safety officer, traffic safety officer and recreation athletics and home safety officer, ORM manager and ORM instructors (one senior enlisted and one officer)
2. Safety officer certificate (from class or online course completed in the interim)
3. Copy of ship's indoctrination sheet with the following items highlighted to show initial training for all hands in:
 - a. PPE
 - b. Electrical Safety
 - c. Hazard Reporting
 - d. ORM
 - e. General Ergonomics Awareness

- f. Safety and Occupational Health Training
 - g. Heat Stress Training
 - h. HM Training
 - i. Hearing Conservation Initial Training
 - j. Environmental Protection
4. Training (2 years of records)
 - a. Electrical safety and PPE (annually)
 - b. Hearing conservation refresher training (annually)
 - c. Safety and occupational health training (annually)
 - d. Traffic safety briefs prior to major holidays, extended weekends and liberty periods
 - e. Recreation, Athletics and Home Safety training (quarterly)
 - f. Training from safety stand-down (annually and when needed)
 - g. Zone inspectors training prior to safety inspection of the ship (annually)
 - h. ORM training (periodic)
 5. Safety Council
 - a. Minutes for quarterly meeting initialed and reviewed by CO (2 years)
 - b. CO designated as chairman
 - c. Minutes verify compliance with A0203h of OPNAVINST 5100.19E

6. Hazard Reports with applicable corrections and controls

7. Mishap Reports (5 year file)

8. List of identified hazards (including)

- a. Date, time location and description
- b. Risk Assessment Code assigned by the safety officer
- c. Recommended corrective action
- d. Action taken
- e. Verification and date of hazard corrected
- f. CO's approval for interim controls to RAC

1 or 2 hazards

g. Safety officer approval for interim control in effect for more than 60 days

9. SOH records

a. Copy of previous inspection/survey reports

b. Discrepancy sheets from assistance visits

c. Internal annual safety zone inspection (maintain 2 years)

d. Mishap reports (5 year file)

e. Copy of internal annual SOH program assessment with determined trends and planned course of action (recommend review by DHs, XO and CO) (retain for 2 years)

10. SOH material for distribution to the command

a. Plan Of the Day notes

b. FLASH articles

c. All hands email or command webpage safety notes

Drydock Safety LT Koch

Recent safety surveys of submarines in the shipyard dry-dock have shown significant topside safety discrepancies. The root cause of this problem comes down to a lack of understanding in shipyard requirements.

Without this knowledge, supervisors cannot effectively enforce the standard and what is allowed becomes the standard. In general, the shipyard shops that establish the topside guard rail system do a good job. However, over time topside becomes more of a jobsite and workers, without safety staging training, manipulate the area to best suit their convenience. Normally, submarines count on the shipyard safety officer to catch and correct these problems and offer him little backup. To this end, submarine crews must ensure that all our supervisors are equipped with the knowledge to keep our Sailors safe.

While in dry-dock, the shipyard will establish a topside guardrail system called a "Pigpen." This will consist of an upper guard rail

between 42 and 45 inches, a midrail halfway between the deck and the upper rail and a third rail ten inches above the deck. This guardrail system provides fall protection hence, anyone working outside of this system is required to wear a lanyard and a life vest if waterborne. To protect against falling tools and equipment while in dry-dock, a toeboard is used. The toeboard is at minimum a 1 x 4 inch lumber not more than one half inch off the deck however, if extended to a height of 12 inches substitutes for the third rail. It is important to review the governing documents (Code of Federal Regulations 29 art. 1915 and 1926) and the specific instruction provided by the shipyard as they may have additional safety requirements.

There are many shipyard-related programs like dry-dock topside safety, hotwork, and tank entry with which operational Sailors have little experience. To this end, it is vital that you make use of the training offered by your shipyard safety officers and close this

level of knowledge gap. Due to these common problems we have seen, We highly recommend all ships request an assist visit from the Naval Safety Center at 30-60 days into an availability to help keep your Sailors safe.



Gear left adrift

Netting not replaced following work

No third rail for fall protection or toeboards for tools/equipment

MEDICAL HMCS(SS) Bonneville

Over the past four months, I have identified several deficiencies with the Respiratory Protection Program. Such as: submarines not knowing who the NSSC or squadron assigned as the respiratory protection manager, personnel continuing to use their respirator after they smell paint, personnel not wearing a respirator while painting, personnel being directed to switch out the particulate filter vice the organic vapor/respirator after they smell paint. I am including part of B0614 of OPNAVINST

5100.19E which provides guidance for submarine respiratory protection.

B0614. SUBMARINE RESPIRATORY PROTECTION

a. Respiratory protection program requirements are only applicable to submarine operations in port. When respiratory protection is required at sea, the installed emergency air breathing (EAB) system is the primary protection. Nuclear system welders may use

metal fume respirators with their welding goggles.

b. Submarine squadrons or naval submarine support commands (NSSCs) activities shall serve as the respiratory protection manager (RPM) activities for the submarines assigned. NSSC or squadron commander shall designate a RPM to provide support to all submarine units under their cognizance. Submarines shall designate an individual to serve as the respiratory protection assistant (RPA) for that unit.

c. Submarine respiratory protection programs shall comply with the following requirements:

(1) Proper respirator training is essential for personnel required to wear respirators and for supervisors of those wearing respirators. Required training shall be given and documented prior to respirator use and annually thereafter, and shall include the following topics:

(a) Proper fitting and wearing of the respirator, including how to perform user seal checks. Each person shall demonstrate their capability to don and doff each type of respirator to be worn in the performance of normal and emergency duties including situations in which the respirator malfunctions.

(b) Respirator capabilities and limitations including respirator and cartridge service life and warning signs of respirator failure.

(c) Nature and degree of respiratory hazards and the effects from exposure to the hazardous atmosphere.

(d) Proper respirator selection according to intended use.

(e) Respirator care, cleaning, maintenance and storage.

(f) Prohibition against facial hair.

(g) How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.

(h) Wearing of corrective glasses, goggles or other eye and face protection shall not interfere with the seal of the facepiece to the face.

(i) Wearing of contact lenses in contaminated atmospheres is permitted.

d. Respiratory protection managers (RPM) at submarine squadrons or NSSCs shall attend Respiratory Protection Program Management (RPPM) course (CIN A-493-0072). Courses are available from the Navy Occupational Safety and Health and Environmental Training Center (NAVOSHENVTRACEN).

(1) Personnel assigned to issue respiratory protective equipment shall be trained on respirator selection, and care and maintenance prior to assignment and annually thereafter. The training should be given by the facility RPM.

(2) Submarine personnel assigned as the RPA shall be trained by the NSSC or squadron designated RPM. Training shall include local guidance and program standard operating procedures, respirator selection, care and maintenance, fit-testing procedures, and respirator user training. Training shall be conducted upon initial assignment and annually thereafter.

(3) See chapter A5 for training aids to assist in respiratory protection training. Department heads, division officers, leading petty officers, and the MDR shall be trained annually on the recognition of work requiring respirators, respiratory protection procedures, and the proper use of respirators.

Effective COMNAVSAFECEN Submarine Safety Advisories

- [Advisory 7-07](#), 081545Z AUG 07 Guidance on NAVSEA Approved Safety Harnesses and Climber Safety Sleeve Recall Interim Aloft Procedures
- [Advisory 1-08](#), 101833Z JAN 08 Effective COMNAVSAFECEN Afloat Safety Advisories for Surface Ships and Submarines

To download, you must be on a .mil domain terminal and have a PKI certificate. Go to our secure web site by selecting the [Secure site](#) link. Once you are on the secure site, select the [Afloat Messages](#) link, and then select the [advisories](#) you need.

Warnings, Cautions and Notes

The Flash is a newsletter that provides safety-related information to the fleet. This information is a summary of research from selected mishaps and surveys done throughout the force. This data is provided to assist you in YOUR mishap prevention program and gives advance notice of other safety-related information.

This newsletter is NOT authoritative but will cite references when available.

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