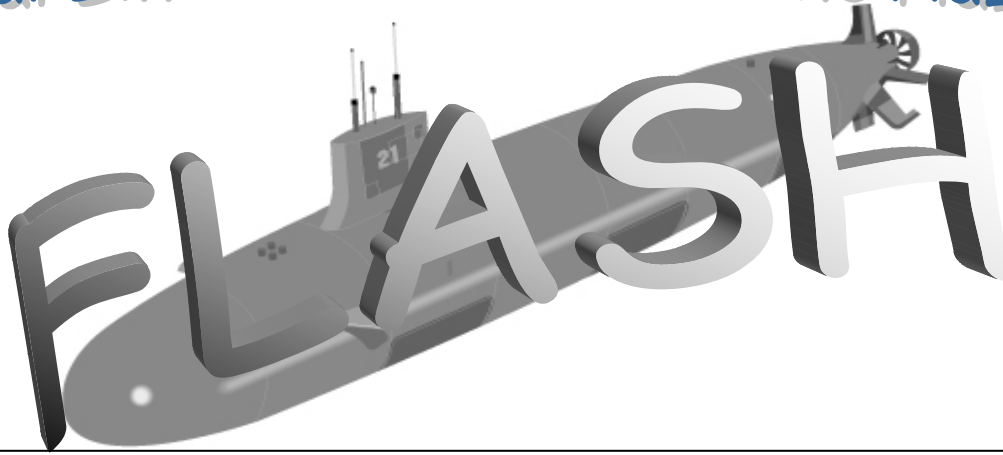


Submarine Division of the Naval Safety Center Factual Lines About Submarine Hazards



Jul-Sep 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*



SCBA BOTTLE DAMAGE

After surveying more than 50 ships this past fiscal year, I have noticed a growing trend in the number of SCBA bottles that meet the requirement of the 5519/016 R-2 MRC to have the bottles repaired. After numerous discussions with the DCPOs and their commands, I have found that there is not a clear idea on where to get the bottles repaired or hydrostatically tested. The 5519/016 U-1 MRC has the following website link that will give you a listing of the fifty

states and the approved companies that will perform the hydrostatic testing.

http://hazmat.dot.gov/sp_app/approvals/hydro/hydro_retesters.htm. On that list, some of the companies are also authorized to perform repairs to the SCBA bottles also. The following companies from that list are authorized to perform SCBA bottle repairs.

For the Norfolk area:

Hiller Systems, Inc.
833 Principal Lane
Chesapeake, VA 23320-3638
(757) 549-9123

Dive Quarters Inc.
1725 Laskin Rd.
Virginia Beach, VA 23454
(757)-422-3483

Divers Unlimited
3841 E Little Creek Rd.
Norfolk, VA 23518
(757) 480-3483

Universal Air Products
1135 Lance Rd.
Norfolk, VA 23502
(757)-461-0077
(800)-326-8406 (toll free)

Lynnhaven Dive Center, LLC
1413 N. Great Neck Rd.
Virginia Beach, VA 23454-1316
(757) 481-7949

For the Kings Bay area:
All-Saf Fire Protection Inc.
3005 Knight Ave.
Waycross, GA 31503
(912) 285-5550

For the Groton area:
Contact the Sub Base Fire department.

For the Bangor/Bremerton area:
Hydrolab
5000 Burwell Street
Bremerton, WA 98312
1-877-HYDROLAB (493-7652)
(360)-373-6141

For the Pearl Harbor area:
[Aala Ship Services](#)
869 N Nimitz Hwy
Honolulu, HI 96817
(808) 522-0550

[Oahu Fire Protection Inc](#)
96-1350 Waihona St
Pearl City, HI 96782
(808) 455-1295

For the San Diego area:
Marine Services Commercial Diving
Company Incorporated
609 Anita St
Chula Vista, CA 91911
(619) 422-8918

If you have any questions about these items or ideas of items to submit for the next FLASH article, feel free to call or e-mail me using the contact information listed in FLASH

Pneumatic Grease Gun ETCS (SS) May

Yes, those dreaded, monstrosities that we drag out periodically to grease the steering and diving system, torpedo tube system and other equipment. Too often they are **broken** out, used, and thrown back out of the way without being checked out correctly. Broken is the key. Our safety surveys reveal more than 90% of the pneumatic grease guns did not meet the requirements of the Submarine Greasing Handbook, NAVSEA T6350-AA-HBK-010.

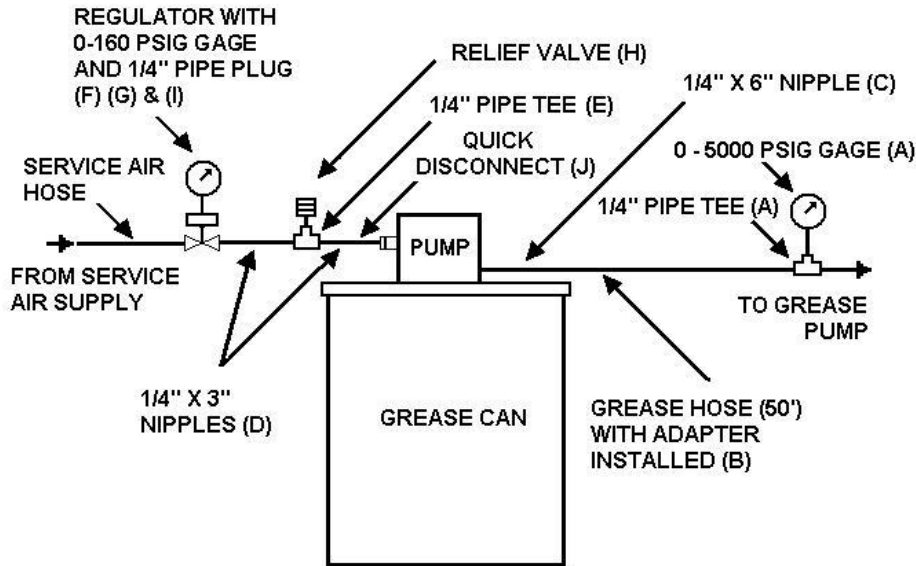
Gauges are smashed, regulators don't work, or they are not even installed.

Figure (1) from reference (a) shows the correct configuration for the grease gun. It is important to rig it correctly to ensure the safety of the operator and to prevent the grease lines from rupturing due to over pressurization. You can find guidance on setting up your pneumatic grease gun based on gun type and supply air pressure on page 2-7 of reference (b). Each

component has a role in preventing injury or equipment damage.

Ref(a) MIP 5661/ 908-87 Q-10, Q-11
 (b) Submarine Greasing Handbook,
 NAVSEA T6350-AA-HBK-010 REV 4

OPNAVINST 5100.19E requires the labeling of all hand guns and oil cans to show the contents. Labeling helps control hazmat and prevent misuse of the wrong compound.



- (A) Gage (2-12" Shatterproof 0-5000 psig)
 - (B) 50' Grease hose (with 1/4" NPT x 1/2" 27 NS taper male adapter)
 - (C) 1/4" x 6" pipe nipple
 - (D) 1/4" x 3" pipe nipple
 - (E) 1/4" pipe tee (2)
- Note: Refer to Table 4-1 for NSNs

- (F) Low pressure air regulator
- (G) Low pressure gage (0-160 psig)
- (H) Low pressure air relief valve
- (I) 1/4" pipe plug
- (J) Service air quick-disconnect type fittings

Part Nomenclature	NSNs
Gage 2.5", 0-5000 PSIG	9C 6685-01-330-6733
Hose 50 FT. (with 1/4" NPT 1/2"-27 NS taper double male adapter)	9C 4720-00-066-4759
Pipe Nipple 1/4" X 6"	9C 4730-00-196-1541
Pipe Nipple 1/4" X 3" (2) ea	9C 4730-00-196-1487
Pipe Tee 1/4" (2) ea	9C 4730-00-263-5264
Regulator Low Pressure Air (With 0-200 PSIG Gage)	9C 4820-01-250-8597
Relief Valve Low Pressure Air	9C 4820-00-454-7586
Pump	9C 4930-01-223-3730
Quick-disconnect type fittings, service air	(Male) 9C 4730-00-766-9028 (Female) 9C 4730-00-766-9029

Extract from Ref b

HAZREP SSB

CDR Covington

The Naval Safety Center is leading an initiative to establish a more open environment in the afloat community that both encourages and rewards the reporting of hazards, near mishaps, and lessons learned to establish leading indicators, maximize awareness, and prevent similar recurrences. The purpose of this article is to inform safety officers about the initiative.

A hazard report notifies other commands of significant hazardous conditions or near mishaps that have the potential to affect other fleet operators. According to OPNAVINST 5102.1D, hazard reports are required for:

(1) Afloat electrical shock incidents where the mishap did not result in any medical treatment or injury/fatality and where it was determined that the shock was caused by equipment design.

(2) Afloat man overboard mishaps while underway where the mishap did not result in a recordable/reportable injury/fatality.

Hazard reports are also submitted for previously unrecognized hazards so that another agency may determine the appropriate corrective action to eliminate the hazard and any other unusual hazard discovered during maintenance, repair, inspections, or evolutions where notifying other activities may prevent future mishaps.

Hazard and near mishap reports help fleet units identify their risks and mitigate those risks to allow them to accomplish their mission.

Hazard reports also identify hazards to fleet operators, and the corrective actions taken, so others may learn from the experience. Hazard and lesson learned reports are crucial for long term design and technological safety ship alteration improvements in a given class of ship or the implementation of new safety technology.

Safety professionals from Commander, U. S. Fleet Forces Command; Commander, U.S. Pacific Fleet; Commander, Naval Surface Forces; Commander, Naval Surface Forces Atlantic; Commander, Submarine Forces Command; Commander, Submarine Forces Pacific; Commander, Naval Air Forces Atlantic; Commander, Military Sealift Command; Commander, Navy Warfare Development Command; Commander, Naval Safety Center; Commander, Naval Sea Systems Command; DDG Class Squadron; and several ship safety officers are working together to break the barriers preventing the exchange of hazard, near mishap, and lessons learned reporting in the afloat community. The working group participates in monthly round-tables, examining current policy to create instruction and incentive revisions that will encourage and reward hazard, near mishap, and lesson learned reporting.

All safety officers should review hazard and near mishap reporting requirements listed in Chapter 4 of OPNAVINST 5102.1D. In the future, safety officers should look for instruction changes and new incentives concerning hazard, near mishap, and lessons learned reporting.

Eye wash stations

HMCS(SS/AW/SW) Bonneville

Over the past year, 22 of 42 eye wash stations were not operable, accessible, could not flush both eyes simultaneously or deliver 0.4 gallons of water per minute. This is significant! If one of our submariners gets something in their eye(s) and is not able to flush his eyes this could result in a permanent disability.

Make sure there are no physical obstructions that would prevent you from placing your eyes over the eye wash station eye caps. Remember, the person needing to use this is going to have their eyes closed, or at least experience difficulty seeing.

What are the requirements for the eye wash station?

1. Are eye and face wash units installed/available, in good condition, and near chemical hazards (acid/alkaline)? (battery well, O₂ generator, CO₂ scrubbers, sample sinks-also refrigerants and plants. REF: OPNAVINST 5100.19E para B0508A

2. Do eye and face wash stations:

(a) flush both eyes simultaneously

(b) deliver not less than 0.4 gallons of water per minute for 15 continuous minutes? REF: OPNAVINST 5100.19 SERIES B0508A

3. Are all eye wash stations and personal eye wash bottle locations distinctly marked with highly visible signs? (NSN 9905-01-345-4521) REF: OPNAVINST 5100.19E para B0508A(11)

4. Are approved personal 16oz. eye wash bottles (NSN 6515-01-393-0728) readily available, in sufficient quantities in lieu of permanent or portable eyewash stations in nucleonics/water chemistry rooms and secondary analysis stations? REF: OPNAVINST 5100.19E para B0508C

5. If the eyewash facility is not available near the battery well hatch, two plastic squirt-type bottles (of at least one quart capacity each) filled with fresh water should be staged near the hatch.

*This would also include situations where you had potable water secured or your eye wash station is not operable. REF: COMNAVSUBFORINST 5400.39, ARTICLE 4309.3E

Desalinator kits

MMC(SS) Lint

I have added a new check to the deck checklist. The submarines that have SEIE (submarine escape immersion ensemble), modification also have PMS FR 4-08 MIP 5940/001 for maintenance of the desalinators.

It comes with two cards. First is the Q-1R. The Q-1R provides a visual inspection of each unit. This card ensures the units are complete and in satisfactory condition.

Next is the 48M-1. The 48M-1 details a test maintenance procedure. I strongly recommend

you complete the 48M-1 on all of your desalinators upon receipt. The reason, the majority of the boats with the SEIE suit modification have desalinator kits that were manufactured at least six years ago. Completing the PMS now, versus 48 months from now, will ensure the equipment functions properly when needed.

Don't wait until you need it to find out the SEIE suits have problems and the desalinators do not function properly. Besides, if there are problems with either one, it's better to identify them now.



Desalinator kit

Effective COMNAVSAFECEN Submarine Safety Advisories

2007

31 7-07 081545Z AUG 07 Guidance on NAVSEA Approved Safety Harnesses and Climber Safety Sleeve Recall Interim Aloft Procedures

2008

39 1-08 101833Z JAN 08 Effective COMNAVSAFECEN Afloat Safety Advisories for Surface Ships and Submarines

34 3-08 211439Z OCT 08 SCBA Repair Facilities

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. To gain access to the secure site for the NAVAL SAFETY CENTER, please go to <https://www.dko.mil> <<https://webmail.east.nmci.navy.mil/exchweb/bin/redirect.asp?URL=https://www.dko.mil>> . Click on "register for DKO" under new user? title. This is a self registration step. You should now be able to go to the secure website. After you've done the above, the fastest and easiest way to find it is using the Naval Safety Center link: <https://www.us.army.mil/suite/page/418385> <<https://www.us.army.mil/suite/page/418385>>

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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