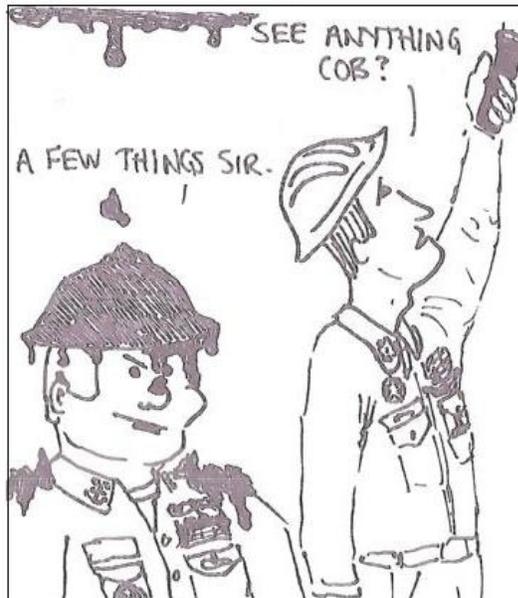
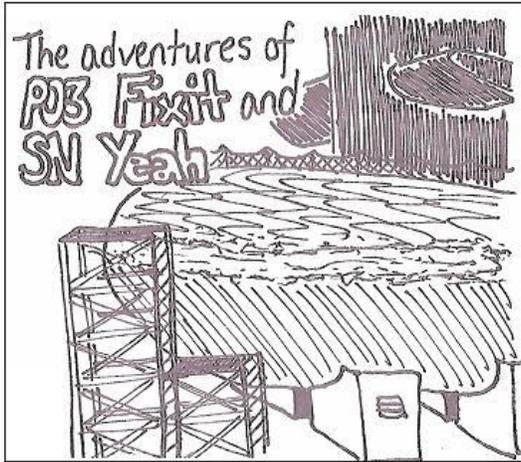


FLASH

Factual Lines About Submarine Hazards

Submarine Division of the Naval Safety Center

January - March 2011



Cartoonist MM1(SS) John Turner

We at the Naval Safety Center look forward to your questions and feedback. In the spirit of "ASK THE FLASH," we have opened the FLASH up for write-in articles and cartoons. You can find the Naval Safety Center classified web page at <https://www.csp.navy.smil.mil/NSC-SUB> and the Naval Safety Center videos on You Tube at <http://www.youtube.com/user/dsteber1849>

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. The data is provided to assist you in our mishap prevention program and give advance notice of other safety-related information.

This newsletter is NOT authoritative.

Page	Article Name
1	Cartoon and Cover Page
2	Table of Contents / What NSC Submarine Division can do for Your Command! [CDR Webb]
3	What NSC Submarine Division can do for Your Command Cont. PMS Monitoring [EMCM Valdepeña]
4	PMS Monitoring Cont. / Band-It Kit Strong-back Training 101 [MMCS Sisk]
5	Band-It Kit Strong-back Training 101 Cont. Future Changes to Damage Control Tool Roll and Material Bags Physical Security Equipment (AT/FP) [FTC Cahill]
6	Physical Security Equipment Cont. / Thermometers and Locker Daily PMS [MMC Ingram]
7	Thermometers and Locker Daily PMS Cont. / Atmospheric Contaminants [HMC Harris]
8	Atmospheric Contaminants Cont. / Overheating Circuit Breakers [ETCS May]
9	Overheating Circuit Breakers Cont. / E-Blast News [FTC Cahill]
10	E-Blast News Cont.
11	Effective Submarine Safety Advisories / Contact Information

Safety Officer

CDR Carville Webb

What NSC Submarine Division can do for Your Command!

The Naval Safety Center (NSC) Submarine Survey team provides support to the force that is seldom fully taken advantage of! Currently, NSC conducts Safety Surveys for submarines every 36 months and between 1 and 365 days prior to an INSURV, I expect this to change to a single 18-24 month survey requirement prior to the end of the year.

Assist Visits/Free Looks are recommended 1-2 weeks after entering dry dock, following any extended availability, as follow-up to a Safety Survey and whenever your command or ISIC requests support. Assist Visits are very popular with new COs, XO's and COBs. My team works in conjunction with your safety leaders to develop a full report on safety related programs, material and training with very little disruption to the crew. Additionally, an assist visit accomplishes the command's annual self-assessment requirements and strongly supports fulfilling the DON Safety Vision and reporting identified in message DTD 121425Z FEB 10.

NSC teaches the Submarine Safety Officer (SSO) Course. All Squadron Safety Officers, Unit Safety Officers, Assistant Safety Officers, Junior Officers, Chiefs and First Class Petty Officers who have not attended the SSO Course are highly encouraged to participate. The training is filled with current safety program requirements, lessons learned, and fleet best practices to properly prepare your leaders for success. This two-day class is taught VTC or face-to-face in your homeport.

NSC in cooperation with COMSUBLANT N4 provides PMS Monitoring training for leadership. This training is intended for JO/CPO/LPO's and is directed at changing the negative trends associated with PMS accomplishment and monitoring noted by fleet-wide inspection and survey teams. The training is a two hour classroom Power Point presentation that encourages group discussion on best practices, significant fleet safety issues and proper monitoring techniques.

NSC has developed a two day hands-on maintenance school for Deck LPO and 1ST LT. This training is conducted onboard a host unit using the units gear with up to eight students from the

surrounding area. The training covers Safety Harnesses, Lanyards, MK-1 commercial and Sterns Inherently Buoyant life vests, Life Rings and Distress Markers, Man Overboard bag, HELLO Transfer kit and SEIE Crash bag. Each topic will include actual performance of 100% verbatim PMS procedural compliance, tools, SKED, HAZMAT, EGL's, parts, TFBR's, PPE, and Best Practices.

NCS provides a 5-day Damage Control Continuum (DCC). This school is conducted onboard a host unit using the units DC gear with up to eight primary DCPO's from the surrounding area. The training covers all DCPO maintenance and can be counted as accomplished MRC's by the host ship. Each topic includes actual performance of 100% verbatim PMS procedural compliance, tools, SKED, HAZMAT, EGL's, parts, TFBR's, PPE, and Best Practices.

Submarine Division focus goals for 2011 are Deck Equipment Readiness, Electrical Safety, and PMS Verbatim Compliance. Contact NSC if your command requires training material or support in any of these areas, I look forward to working with your team.

Submarine Advisor for Class "A" Safety Investigations

EMCM(SW/AW) Frank Valdepeña

PMS Monitoring

A substantial number of Safety Program discrepancies on Submarines are the result of not properly following MRCs. Verbatim compliance of the MRC is required! If a particular step can't be followed, a TFBR must be submitted to resolve the issue. In an effort to improve PMS performance and monitoring, training has been developed addressing PMS completion and monitoring. The training can be found on the Submarine Safety Officer curriculum, topic 6, on DKO. Another initiative is monitoring Ship's Force covered PMS spot-check evolutions. Listed below are the concentration areas for PMS monitors and common deficiencies found:

6641/102 (Q-1) Portable PKP Fire Extinguisher - Record card not filled IAW Figure 2 & 3. Wrong S/N card utilized.

7000/X04 (D-1) Submarine Small Arms Ammunition Lockers and (D-2) Submarine Pyrotechnic Lockers - Operating instructions and safety precautions for flooding systems not displayed conspicuously or printing was not clear or legible IAW step 1.a.(1).(d). Temperature card not posted on inside of locker door IAW step 1.a.(7).(e).

5490/003 (Q-1R) Visually Inspect Manual Reverse Osmosis Desalinators- Desalinators not stored in a plastic bag, therefore, can't complete step 1.b. "Remove unit from plastic bag". Mold found on the seawater intake, reject, or fresh water hoses; contrary to step 1.e, and 48M-1 was not completed.

5940/004 (R-1) Inspect Cloth Helmet Assembly- Cracks were found in the cranial impact shell, contrary to step 1.b. Contrary to step 1.c., reflective tape was cracked, peeled or deteriorated and was not replaced IAW MRC U-1.

3000/029 (A-11R) Surge Suppressor- Resistance was greater than 1 ohm from ground to metal part of surge suppressor, contrary to step 2.c., and note 3 was not followed (i.e. plastic surge suppressors).

4311/011 (M-2) Announcing System (AN/WIC-2B(V) 4331B- Corrosion found on battery, contrary to completion of step 1.b. Thick coat or no coat of petrolatum found on terminals, contrary to step 1.i.

5462/001 (Q-1R) Inspect Pneumatic Grease Gun Assembly- Chemical goggles not utilized. Grease gun is not configured IAW with Table 1. Relief is not set to the correct pressure IAW step

1.g.(6). Do not have all the tools required to complete the maintenance (i.e. caliper, micrometer, outside 0-1", necessary to complete steps 1.e.(5)(8) and (10).

5921/019 (R-2) Open Circuit Scuba Diving Outfit 5921XY- Germicidal solution not available as required by materials list item numbers 7, 8, 9, 10, or 11.

Future monitors will include 6641/004 (R-19) Fire Station Equipment. All items listed in the "Tools, parts, materials, test equipment" must be available unless lined out and initialed by the Division Officer. Keep in mind, any substituted item must be an acceptable substitute and meet or exceed the specifications of the original item. Ensure review of the HMUG (OPNAVINST 5100.28) and the Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat (OPNAVINST 5100.19E) is conducted to ensure all PPE required for maintenance completion is obtained. If there are any differences between the PPE required by the MRC, HMUG, and SOH; submit a TFBR requesting clarification.

Damage Control

MMCS(SS) Sisk

Band-It Kit Strong-back Training 101

Well, most of us know the three sizes of strong-backs contained in the Band-It kit 2", 3" and 4" but that is just the basics. Two requirements for all strong-backs are to have 1/8" rubber glued to the inner side of the strong-backs and the strong-backs need to have all sharp edges removed (photo below). Older strong-backs were cut at sharp angles creating a very sharp edge. The concern isn't that you will cut yourself; it is the fact that the sharp edge will cut the strapping material when the proper tension is reached. If your strong back has sharp edges, it must be ground smooth for DC use. Remember to use proper PPE and tool techniques when grinding! Labeling the strong-back is also important. The size of pipe the strong-back is intended to be used on is stenciled on the back for easy identification during a casualty.

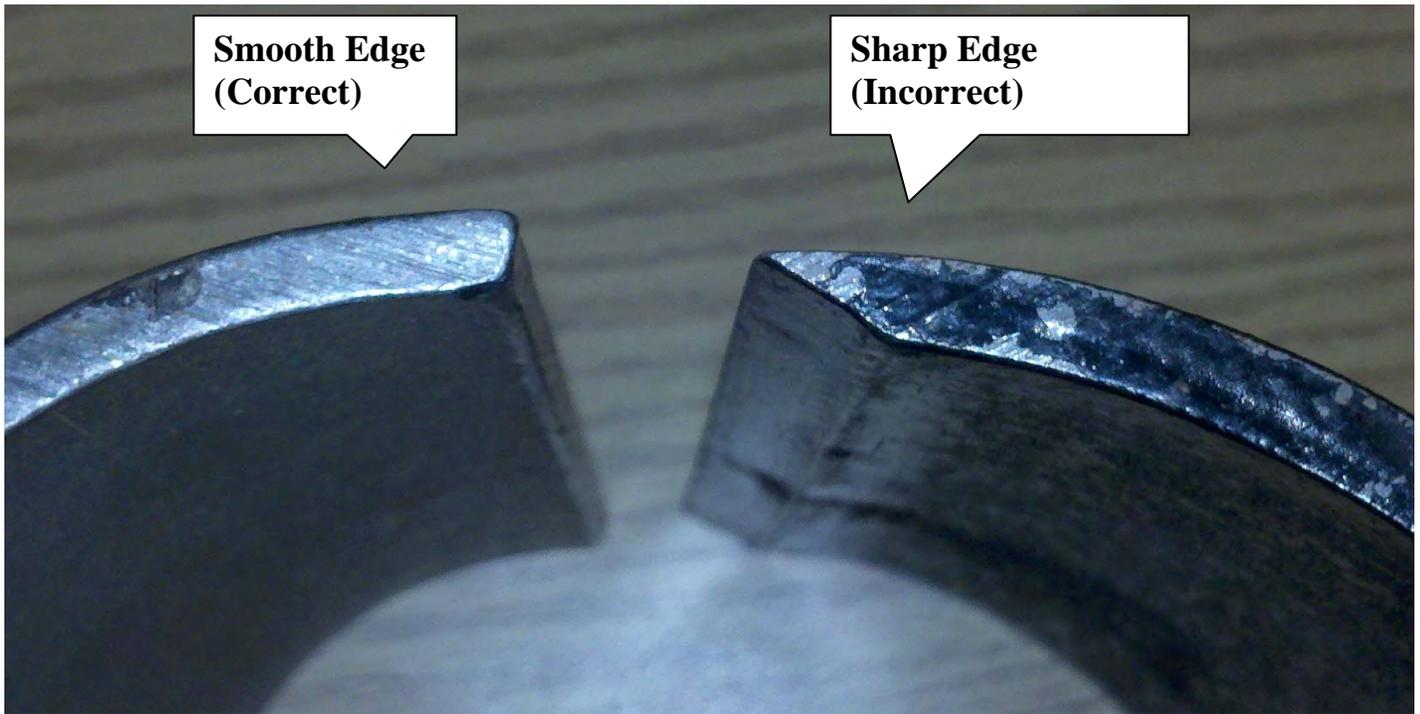
Something that many of you may have often wondered is why do we get a 5" strong-back when a 4" strong-back is ordered? Well, the size of pipe they are cut from is not the same size of pipe they are intended to be used on. For instance, the strong-back used on 4" pipes is actually cut from a 5" inside diameter pipe and when shipped to you the label on the silver package even indicates 5". When you think about it, it makes perfect sense. If the pipe was cut from a 4" inside diameter pipe, it would not fit properly on a 4" pipe due to the outside diameter being larger thus creating a gap in the center and not stopping the leak. So, when you order new strong-backs, remember that the stock material size is 1" larger than what needs to be labeled on the back of the strong-back. Everyone needs to take a hard look at your strong-backs and determine if you have the proper sizes and they are labeled correctly. Here is the ordering information for new strong-backs:

Damage Control Band-It Kit AEL 2-880043002

4710-00-468-8857, Part # 8802H955109 Item 6, Size 3" ID x 7" long.

4710-00-468-8858, Part # 8802H955109 Item 7, Size 4" ID x 7" long.

4710-00-468-8859, Part # 8802H955109 Item 8, Size 5" ID x 7" long.



If you have any questions about these items or ideas of items to submit at the next Damage Control conference, feel free to call or e-mail me using the contact information listed at the end of FLASH.

Future Changes to Damage Control Tool Roll and Material Bags

Many Damage Control Tool Rolls still contain (2) Line Volt Indicators, AUL-Model 1410, NSN 6625-00-132-1196. Virginia Class Tool Rolls are issued with (1) Fluke 77 Multi-meter SCAT 4245, NSN 6625-01-336-3372. IAW AEL 2-880043004, Note 3, all submarines are authorized to replace (2) Line Volt Indicators with (1) Fluke 77 Multi-meter SCAT 4245 and MIP 6641/009, MRC A-5 lists the Fluke 77 in the Damage Control Tool Roll inventory. Recommend all Submarines replace the Line Volt Indicators with Fluke 77's to conform to current requirements.

Most of you have noticed that the lead sheet for the Damage Control Material Bag is not on the PMS (MIP 6641/009 R-1) Inventory list. Recommend double bagging the lead sheet and placing in the Damage Control Locker for damage control use.

Force Protection

FTC (SS) Cahill

Physical Security Equipment (AT/FP)

AEL 2-320024503 has been updated with Revision Date of DEC 10.

The following is an executive summary of changes with documentation explanation:

1. Body Armor distribution message DTG 300029Z Sep 10 from COMSUBPAC Pearl Harbor HI address outfitting boats with correct armor. Body Armor verification of Plates NAVADMIN 228/10 with DTG of 121224Z Jul 10. Body Armor Care and Replacement of Plates message DTG 051758Z Apr 10 from COMNAVSEASYS COM Washington DC.

2. Expandable Batons can cause deadly force. Before issuing this equipment, ensure there is a process to verify proper qualifications for use.
3. OC Spray Carrier requirement is deleted.
4. Chemical Detector requirement is deleted.
5. Metal Detector usage- Before issuing this equipment; ensure there is a process to verify personnel understand how to use the equipment.
6. Light Weight Helmets- Before issuing this equipment, ensure there is a system set-up to track authorized and un-authorized or damaged equipment while waiting for replacements (Not applicable to boats with proper allowances).
7. Tactical Float Vest- Before issuing this equipment, ensure proper PMS requirements of MIP 5832/023 have been met.
8. X-Ray Security Radio requirement is deleted.
Check with local Squadron personnel for proper disposition of deleted equipment.

Combat Systems

MMC (SS) Ingram

Thermometers and Locker Daily PMS

During the past year, our surveyors have uncovered a persistent problem regarding the bi-metallic thermometers and improper recording of temperatures of the countermeasure and Ammunition lockers.

IAW paragraph 5-5.1.e of NAVSEA OP 4 Rev. 9, magazines shall be fitted with thermometers, temperature record cards, and holders. They must be capable of recording minimum and maximum temperatures. These thermometers shall be direct reading, bi-metallic thermometers with maximum and minimum index pointers, and a reset knob. They must meet the specifications of MIL-I-17244. The required temperature range is -40 to 180 degrees. Additionally, the thermometer must be a 3-inch, back-connected dial, with a 4-inch stem. To order the correct thermometer, use the following: NSN 6685-00-042-3218.

IAW NAVSEA OP 4 Rev. 9 par. 5-7, for pyrotechnic lockers, thermometers may have a range of 20 to 240 degrees. Once again, the thermometer must be a 3-inch, back-connected dial, but with a 2-inch stem (NSN 6685-01-216-7147). So verify you have received the correct type prior to calibration and installation.



INCORRECT thermometer well



Correct thermometer well

Do not perform an unauthorized alteration and cut the thermometer well to make room for the stem!

We should never forget that these bi-metallic thermometers must also be calibrated. Make the calibration shops do the right thing.

Now that we have cleared up the thermometer issue, let's talk about recording the temperatures. IAW paragraph 4000 of COMSUBLANT/COMSUBPACINST 8500.4, temperatures are required to be taken daily and recorded on magazine temperature record cards. Additionally, the temperature data is required to be recorded in the Weapons department log (i.e. Electronic Work log) for permanent record. Of course we use MIP 7000/X04 to perform our daily magazine inspections of the Small Arms Ammunition Locker (D-1), Pyrotechnic Locker (D-2), and Countermeasures Device Locker (D-3). Verify pyrotechnics have a 1" square or circle IAW D-2.

Questions? Comments! Give me a call at (757) 444-3520 ext. 7146 or e-mail me at isaac.ingram@navy.mil

HAZMAT

HMC(SS) Harris

Atmospheric Contaminants

Recent safety surveys have recognized commands are erroneously combining the Atmosphere Control Program and Submarine Hazardous Material Control and Management (HMC&M). The two programs have similar requirements and terminology, but they are totally different. Meeting the requirements of one program does not necessarily satisfy those of the other.

The HMC&M requires all hazardous material onboard to be documented on the Submarine Material Control Log according to the material's usage category (X-Prohibited, R-Restricted, L-Limited, and P-Permitted). Commands are meeting this requirement.

The Nuclear Powered Submarine Atmosphere Control Manual uses a similar usage category system (X-Prohibited, R-Restricted, L-Limited, and G-Permitted) and items in the X, R, and L category are required to be entered into the Atmosphere Contaminant Log and labeled with an Atmosphere Contaminant Tag. This is where commands are having difficulty dividing the two programs. The Submarine Material Control Log is being mistaken as meeting the requirement to maintain an Atmosphere Contaminant Log. The directions for maintaining the Atmosphere Contaminant Log, making log entries, and reviewing are found in Chapter 7-4 of the Atmosphere Control Manual. The placement of a hazardous material label on an item does not satisfy the requirement to attach an Atmosphere Contaminant Tag. Hazardous material in the X, R, and L category will have both (a hazardous material label and a contaminant tag). An example of an Atmosphere Contaminant Tag and an Atmosphere Contaminant Log are provided:

NAME OF ITEM: _____
DATE: _____
CLASSIFICATION: _____
STORAGE LOCATION: _____
SIGNATURE OF MED DEPT/REP: _____

ATMOSPHERE CONTAMINANT TAG

switchboard front cover is removed or opened. For circuit breakers with motor operators, remove the motor operator to see the circuit breaker nameplate and serial number.

Ships force should complete the inspection during their next in-port period.

1. Report breaker type, serial number, SPD part number (ETN), and date of manufacture to ISIC. ISIC's will report completion of inspection and conditions found to the TYCOM for submittal to PMS 392T.

2. Coordinate with the ISIC to replace any circuit breakers that have not been repaired.

3. If the breakers cannot be replaced immediately, the ship should coordinate with the PMT to conduct thermal imaging of affected circuit breakers as soon as practicable. If the thermal imaging indicates higher than normal operating temperatures, the breakers should be placed on limited service until replaced.

4. Submit a quality deficiency report (QDR) with the original REQN number. If the circuit breaker was not requisitioned by ships force, coordinate with installing activity to determine REQN number. If circuit breaker was not obtained through supply system, then no REQN number required. The failure description on the QDR should state that the circuit breaker has been recalled by the manufacturer and is being returned for free, OEM inspection. REF: COMNAVSEASYSKOM Washington DC 281201Z DEC 10.

E-Blast News

FTC (SS) Cahill

February 2011

View the PDF version of this email

at http://www.public.navy.mil/navsafecen/Documents/media/e-blast/February_eblast.pdf.

To control risks and avoid hazards, Navy and Marine Corps units often devise new strategies and adopt "best practices" from commercial industry. These efforts produce a wide range of successes.

Visit http://www.public.navy.mil/navsafecen/Pages/osh/Success_Stories/safety_success_stories_home.aspx to view some examples of innovative problem-solving strategies, new technologies, and award-winning safety programs. Check back with us periodically for new stories. Our website also highlights the challenges, improvements, and the savings in cost, time and labor of selected stories in an easy-to-read format with links to the stories

at <http://www.public.navy.mil/navsafecen/Documents/SuccessStories2/CostSavings.pdf>. A conservative estimate is that for every dollar invested in safety, the return is between three and ten dollars.

"Deck plate Dialogue": When people can't control their drinking, and when their buddies don't know what to do with them, the results can be fatal. From April 2005 through November 2010, 74 Sailors and Marines died in alcohol-related off-duty mishaps. Thirty-one cases were "acute ethanol intoxication"--a fatal overdose of

alcohol. http://www.public.navy.mil/navsafecen/Documents/media/deckplate_dialogue/DD_Jan11_toxic_in_intoxicated.pdf to read the latest "Deck plate Dialogue" and learn more about this hazard. The archive is at http://www.public.navy.mil/navsafecen/Pages/media/deckplate_dialogue.aspx.

CMC Safety Broadcast: Common threads among PT fatalities. Did you know that of the last nine PT fatalities in the Navy, two were participating in the PFA at the time of the mishap, and five were participating in command-sponsored PT.

Visit http://www.public.navy.mil/navsafecen/Documents/cmc/broadcasts/BCST_003_11.pdf to read

more about PT fatality common threads and how you can prevent fatal PT mishaps in your command. Our CMC's web page is at http://www.public.navy.mil/navsafecen/Pages/cmc/cmc_toolbox.aspx.

Admin Note: In the near future, NAVADMIN 373/10 will change message processing across the Fleet. In spring 2011, the Navy will transition from Legacy DMS architecture to alternate methods of conveying official information. As this transition date nears, the Naval Safety Center will transmit an ALSAFE message with the new command email address and changes to applicable Safety Center instructions. This ALSAFE will also be posted on our website at <http://www.public.navy.mil/navsafecen/Pages/messages/alsafe.aspx>.

Mark your calendars, the 19th Annual Safety Professional Development Conference (PDC) will be held 7-11 March 2011 at the Doubletree Hotel San Diego-Mission Valley.

Visit <https://www.portal.navy.mil/RegisterPDC/Pages/default.aspx> to register. (A CAC card is required to access the registration website.) Hosted by NAVSAFENVTRACEN for Navy, Marine Corps, Army, Air Force, and Coast Guard personnel, this year's theme is "Safety: A Joint Vision" recognizing the synergistic effects of collaborative efforts. The Doubletree Hotel is now full. We suggest you contact the Town and Country Hotel at (619) 291-7131 or the Mission Valley Marriott at (619) 692-3800 for room reservations.

Effective COMNAVSAFECEN Submarine Safety Advisories

2010

02-10 201149Z Jul 10

Afloat Electrical Safety

06-10 081904Z Dec 10

Asbestos Removal Protection

2011

01-11 121837Z Jan 11

Effective COMNAVSAFECEN Afloat Safety
Advisories for Surface Ships and
Submarines

To download advisories, you must be on a ".mil" domain terminal and have a PKI certificate. Go to AKO/DKO Secure Site at <https://www.us.army.mil/> and sign-up for an account, if not already done. In the search box, type Naval Safety Center and click on the link for the home page. At the home page in the bottom left, click on folder labeled secure, then afloat, then messages, and download applicable information.

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