

Emergency Egress: It Can Save Your Life

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If you had to evacuate one of your shipboard spaces because of a Class Bravo fire, are you trained and knowledgeable enough to escape?

NSTM says that once the EEOW or space supervisor decides to evacuate a space, Halon and AFFF bilge sprinkling should be activated. All personnel should don their emergency escape breathing devices (EEBDs) and escape through the nearest safe exit. If life-threatening conditions make it hard for the watchstander to locate and immediately don an EEBD, he should use the belt-worn supplemental emergency egress device (SEED). SEEDs are not required in CVN nuclear-machinery spaces since the lack of hot surfaces makes an out-of-control Class Bravo fire very unlikely.”

An engineering-space watchstander would use the SEED to reach the nearest exit and obtain an EEBD, when possible, if one isn't already shouldered. The watchstander should don the EEBD when out of danger from heat or flames or when the SEED cannot provide a breathable atmosphere. A SEED doesn't protect the eyes and nose and has a short operating time—use it to quickly escape a fire.

Following are some factors to consider when using these devices.

- How quickly are conditions deteriorating?
- How long will it take to reach a breathable atmosphere?
- What are operating times for each device?
- What are the capabilities and limitations of each device?

When using a SEED to escape a fire, breathe only through the mouth, not through the nose. Do not wear an EEBD or a SEED when fighting a fire—they're only for escape.

The above procedures are effective only if the equipment is readily available, you know how to use it, you know your way out of a smoke-filled space, and you are able to egress without injuring yourself.

NSTM 077, Personnel Protective Equipment, requires personnel working in engineering-machinery spaces to wear SEEDs. Meanwhile, carry an EEBD when a fire or leaking flammable liquid is reported. By adhering to the NSTM 077 procedures, crew members make sure the devices are available when needed.

It's not just for engineers!

The Surface Force Training Manual and applicable ComNavAirLant/AirPac instructions give specific egress training guidance.

- All hands must complete egress training within 96 hours of reporting aboard ship and every six months thereafter. Training consists of blindfolded escape from working, berthing and watch-station spaces. Training also includes actual activation and donning of a training EEBD. Personnel who must wear a SEED while performing their duties will receive SEED training with EEBD training.
- All personnel also must attend OBA or self-contained-breathing-apparatus refresher training within three months of reporting aboard ship and every six months thereafter.



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← TO HANGAR DECK

EXIT

COOPER US NAVY

Illustration by DM1(AW) Eulogio Devera, USS Nimitz

Incorporate Operational Risk Management

Because blindfolded egress training can be dangerous, you should apply ORM to make the training safer. Here are some risks to consider before training starts: lack of familiarization with the space being egressed; egressing in the wrong direction; running into equipment in a space; falling down ladders or into the bilges; losing grips on handrails; and insufficient training with OBAs, SCBAs, EEBDs, and SEEDs.

Good supervision during training minimizes these and other risks. Supervisors also must make sure personnel do not attempt to climb vertical ladders in escape-trunks while blindfolded. Conduct EEBD training once personnel are safely in the escape trunk.

For blindfolds, flash gear worn backward is effective. One ship directed personnel receiving egress training to bring their flash gear so trainers knew it had been issued.

It is a good idea for senior personnel conducting egress training to scan their spaces for material discrepancies that could hamper real-life egress. Photoluminescent markings (exit and directional signs for medical, ladders, fire equipment, etc.) should be correctly placed, and they should be in good condition. Check ladders for missing bolts and make sure treads and chains are in good repair; be sure escape scuttles are clearly labeled and not blocked; and be sure all required signs are posted. Also check the availability of portable fire-fighting equipment and that its PMS is current. Required photoluminescent markings are critical because they allow Sailors to familiarize themselves with their surroundings. This familiarity, when combined with egress training, will enable Sailors to better “feel” their ways to safety in an emergency egress situation.

The Navy expects every Sailor to be familiar with basic firefighting procedures so they can help



Safety observers must know the training route before conducting egress training. All hands involved with the training must follow the ship's instruction and applicable Navy guidelines before conducting egress training.

fight a fire. We must make sure they are trained for that job, which includes knowing how to safely escape from a burning space. 🚒



For More Info...

For further guidance refer to OpNavInst. 5100.19D, NavOSH Program Manual for Forces Afloat, Chapters B7 and C9; NSTM Chapter 300, Electrical Plant General, Revision 5; Miscellaneous Shipboard Electrical Equipment, MIP 3000 series; Paragraph 555-10.3.6.2 of NSTM 555, Surface Ship Firefighting (Vol. 1); Paragraph D-106d of the Surface Force Training Manual (ComNavSurfPac/LantInst. 3502.2). The belt-worn supplemental emergency egress device (SEED) is described in Chapter 077 of the NSTM. See also Paragraphs 4102A, 4102A1, 4200E3, and 4301B5 and the fast cruise information in ComNavAirLant/AirPaInst. 3500.20C. Information can also be found in the NavAirPac/AirLant Aircraft Carrier Training and Readiness Manual.