Water Safety Information for Volunteer/Employee Training and Safety Briefings

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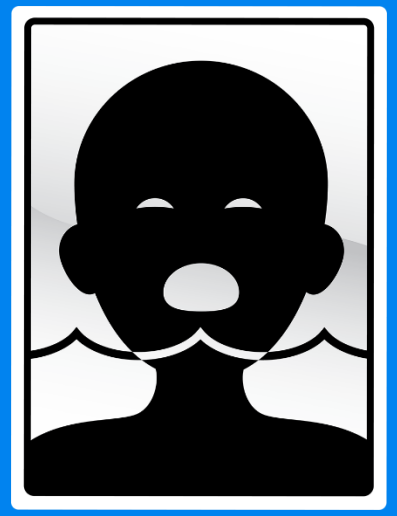
Four Signs of Someone Drowning

Head Back

Bobbing Up
and Down
Above and
Below the Surface



Mouth Open

Gasping for Air

Not Yelling

Can't Call
For Help

Arms Flapping

Slapping the Water
Surface Looking Like
They are Climbing an
Invisible Ladder

Link to a video that shows the signs of someone drowning, https://www.youtube.com/watch?v=9fyvtNewabM

Proper Rescue Techniques

Reach, Throw, Row, Go For Help

If the person is close, **Reach** out with a long object.

If you cannot reach the person, **Throw** them anything that floats.

If there is nothing to throw, **Row** a boat to the person in trouble.

Never place yourself in danger by going in for the person. Instead, **Go For Help!**

USACE Safety Manual Information Regarding Life Jackets

EM 385-1-1 15-Mar-2024

5-2.r (Page 83)

r. Personal Flotation Device (PFD). A piece of equipment designed to assist a wearer to keep afloat in water. The wearer may be either conscious or unconscious. Commonly referred to as a life jacket, life preserver, life belt, Mae West, life vest, life saver. (5-2.r)

5-3.d (Page 86)

d. Automatic-Inflatable Personal Floatation Device (PFDs) Users. Users of automatic-inflatable PFDs must be trained in the use, including restrictions, maintenance, care, cleaning, storage, inspection, and post-deployment procedures according to the manufacturer's instructions before use. Wearer must be a confident swimmer (that is, able to tread water and swim for 100'). (5-3.d)

5-5. and 5-6. (Page 87)

5-5. Inspection Requirements.

a. General. Keep a copy of the manufacturer's use, inspection, testing, and maintenance instructions at the jobsite and have it readily available to personnel using the PPE and safety equipment. (5-5.a)

b. Personal Protective Equipment (PPE). Test, inspect, and maintain PPE in a serviceable and sanitary condition according to the manufacturer's instructions. (5-5.b)

(1) At minimum, PPE must be visually inspected before each use.

(2) Do not use defective or damaged equipment, or equipment that has exceeded its useful life. Tag it as out of service and/or immediately remove it from the work site to prevent use.

(3) Previously used PPE must be cleaned, inspected, and repaired as necessary before issuing to another employee.

5-6. Activity Hazard Analysis (AHA) Requirements.
Develop AHAs according to paragraphs 1-6 or 2-6, as applicable. Each AHA must include all required PPE and safety equipment, including type, quantity, ratings, and any replaceable materials. Select PPE and safety equipment according to the specific protection in paragraph 8 of this chapter, or as otherwise stated in this manual.

5-8.g. (Page 97-99)

g. Personal Flotation Devices (PFD). PFDs are required when there are hazards associated with water, to include but not limited to drowning. (5-8.g)

(1) Employers must provide, and users must properly wear (that is, zipped, tied, latched) inherently buoyant Type III, Type V work vests, or better USCG-approved PFDs in the following circumstances (see figure 5-1):

(a) On floating pipelines, pontoons, rafts, or stages.

(b) On structures or equipment extending over or next to water except where guardrails, personal fall protection system, or safety nets are provided for employees (see chapter 21).

(c) Working alone at night where there are drowning hazards, regardless of other safeguards provided.

(d) On vessels or floating plants, unless inside an enclosed cabin or cockpit.

(e) Whenever there is a drowning hazard.

(2) Automatic-inflatable PFDs Type V or better, USCG-approved for Commercial Use, may be worn by workers in lieu of paragraph 5-8.g(1), provided the following criteria is met:

(a) Personnel must be trained according to paragraph 5-3.d.

5-8.g. (Page 97-99) continued

(b) In-water testing is performed prior to use for all first-time users so that wearers become familiar with the feel and performance of the PFD.

(c) PFDs must be inspected, maintained, stowed, and used according to the manufacturer's instructions. PFDs used in heavy construction or maintenance activities, or where hot work (for example, welding, brazing, cutting, soldering) is performed, must be designed, tested, and certified by the manufacturers for this type of work. An AHA must be developed for the intended activity and must identify the most appropriate PFD for the hazard(s) identified. (See para 5-6)

Note. The standard commercial auto-inflatable PFD often does not meet these requirements.

(d) PFDs must provide a 30-pound minimum buoyancy, post-deployment, and must have a status indicator window.

(e) PFDs are worn by workers over 16 years of age who weigh 90 lbs. (40.8 kg) or more.

(f) All auto-inflatable PFDs must be worn at all times a drowning hazard exists. The USCG-approval for auto-inflatable PFDs is contingent upon the PFD being worn, not stowed.

5-8.g. (Page 97-99) continued

(3) All wearable PFDs must be international orange, orange/red, or ANSI 107 yellow-green in color.

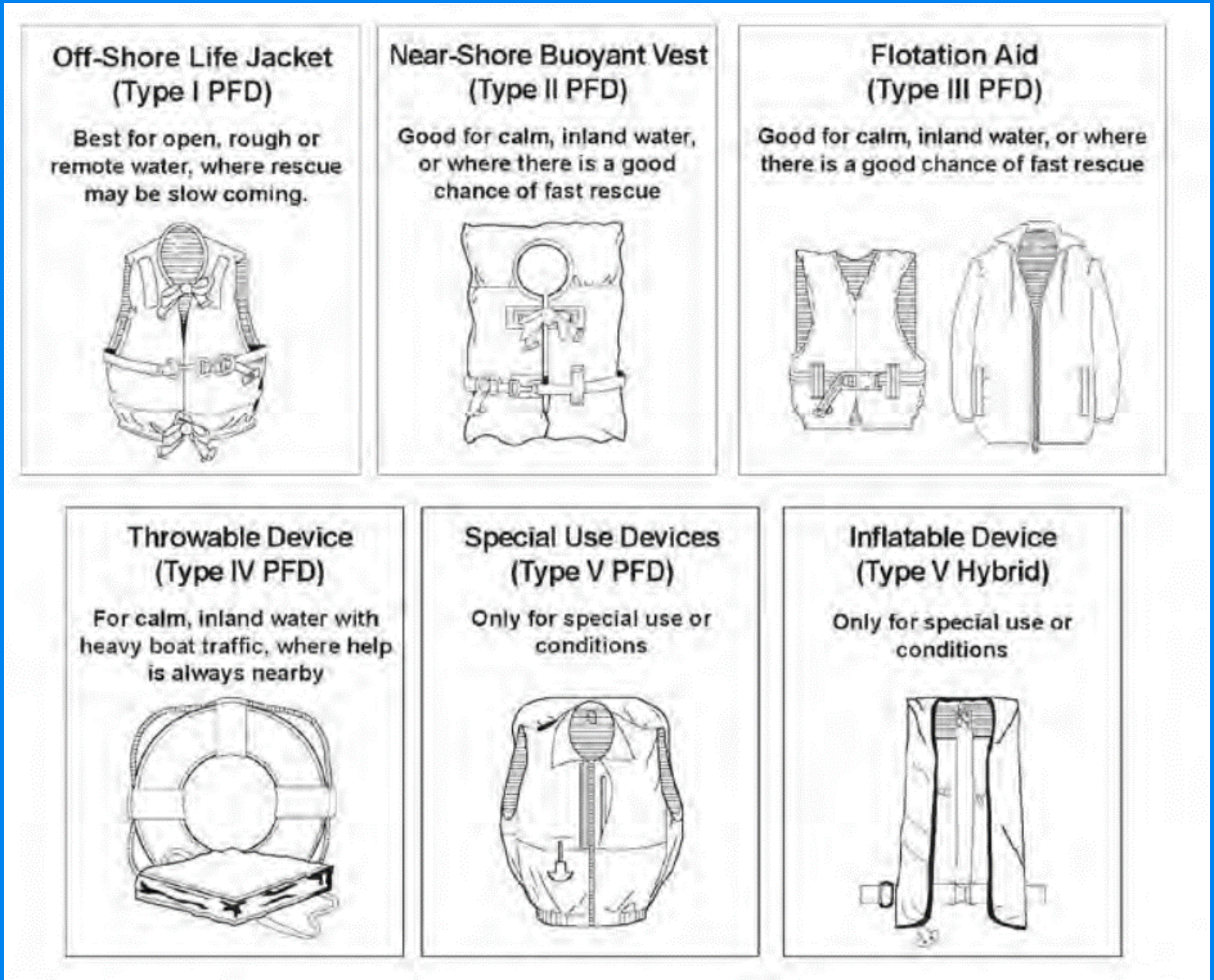
(a) Each inherently buoyant PFD must have at least 31 in^2 (200 cm^2) of retroreflective material attached to its front side and at least 31 in^2 (200 cm^2) on its back side, per USCG requirements (see 46 CFR Part 25.25-15).

(b) Each auto-inflatable PFD must have at least 31 in^2 (200 cm^2) of retroreflective material attached to its front side and at least 31 in^2 (200 cm^2) on its bladder that is visible when deployed (with the exception of Work Vests, which are allowed to have a total of 31 in^2 (200 cm^2) front and back, combined).

(4) Equip each PFD with a USCG-approved automatically activated light. Lights are not required for PFDs on projects performed exclusively during daylight hours.

(5) Before and after each use, inspect PFDs for defects that would alter its strength or buoyancy.

FIGURE 5-1 Personal Flotation Devices, EM 385-1-1 15-Mar-2024 (Page 105)



Off-Shore Life Jackets

These life jackets provide the most buoyancy. They are effective for all waters, especially open, rough, or remote waters where rescue may be delayed. They are designed to turn an unconscious wearer to a face-up position in the water.

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Near-Shore Buoyancy Vests

These life jackets are intended for calm, inland waters or where there is a good chance of quick rescue. This type will turn some unconscious wearers to a face-up position in the water, but the turning is not as pronounced as with an off-shore life jacket.

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Flotation Aids

These life jackets are good for users in calm, inland waters, or anywhere there is a good chance of quick rescue. The wearer may have to tilt their head back to remain in a face-up position in the water. This type has the same minimum buoyancy as near-shore buoyancy vests, but generally will not turn an unconscious wearer to a face-up position in the water. Float coats and vests (fishing, paddling, etc) designed with features suitable for various sports activities are examples of this type.

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Inflatable Life Jackets

Provide the performance of a near-shore buoyancy vest or flotation aid (as marked on its label). After inflated they may or may not turn an unconscious wearer to a face-up position in the water. The belt-style inflatable life jacket must be worn in front of the user so it can be inflated properly in front of them.

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Throwable Devices

These flotation devices are intended for use anywhere. They are designed to be thrown to someone in the water and grasped and held by the user until rescued. They are not designed or intended to be worn and a user should not place this type on their back. A throwable device should not replace a wearable life jacket, but should be used as an extra flotation aid with a wearable life jacket.

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Special-Use Devices

These life jackets provide the performance of an off-shore life jacket, near-shore vest, or flotation aid (as marked on its label). Varieties include deck suits, work vests, sailboarding vests, sailing vests with a safety harness, and child-style that has two arm bands, chest panel and buckles in the back. The child-style mentioned is a special-use device because it must be worn with the buckle located on the back of the wearer. Some styles of this type of life jacket provide significant protection against cold water immersion and hypothermia.

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Wear It Right

Five Key Steps to Choosing and Fitting a Life Jacket

1 Check the Label

The label will tell you:

- Whether the life jacket is U.S. Coast Guard approved
- The size of the life jacket
  (Sizes run from infant to 2XL)
- How the life jacket can be used

2 Check for Damage

Check that there are no broken parts and no mold or rips in the fabric.

3 Fasten Up

Fasten all buckles, zippers, and straps.
Adjust straps so that the life jacket fits snugly.

4 Check for Proper Fit

- Lift the shoulders of the life jacket.
- Make sure it does not slip above the chin or ears.
- It should feel snug, yet comfortable. A properly-fitted life jacket keeps your head and shoulders above water. You will be able to swim with it on, too.

5 Please Wear It!

A life jacket only works if it’s worn.

Make sure you have the right life jacket to wear before you go on, in, or near open water (lakes, rivers, etc.).

Test your life jacket in shallow water or a pool so you will know how it will float you.

Does Your Life Jacket Fit You Properly?

Life jackets come in sizes to fit babies through larger adults. They are intended to keep you afloat in lakes, rivers, and other bodies of water. Worn correctly, they work!

Life jacket should feel snug, yet comfortable. Lift up on the shoulders to make sure it doesn't slip above your chin or ears.

Check the label for U.S. Coast Guard approval, weight limit, and activity types.

Straps should be pulled tight and not twisted.

All buckles and zipper, if it has one, should be fastened.

Damaged life jackets should be discarded and replaced. Check often for mold, broken parts, holes, tears, and buoyancy.

Infant and some child life jackets have a strap between the legs. Be sure to fasten that for extra protection.

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BOBBER The Water Safety Dog™
www.Bobber.info

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Inflatable Life Jackets

It is important that you inspect and make sure all life jackets are in good condition. For inflatable life jackets it is critical that you inspect and maintain them to ensure they will work if you need them to save your life. Check your life jacket owner's manual and follow the manufacturer's recommendations on when to inspect it and how to maintain it.

Blow Up Your Life Jacket Every 2-6 months!

Inflate, Inspect for Leaks, Repack, and Wear It.

Inflatable Life Jackets: Everything You Need to Know Video

https://www.youtube.com/watch?v=g5eniRI0mXM&t=311s

This video includes:
General Information Regarding Inflatable Life Jackets
Brands & Styles
Care & Maintenance

How to Throw a Life Ring

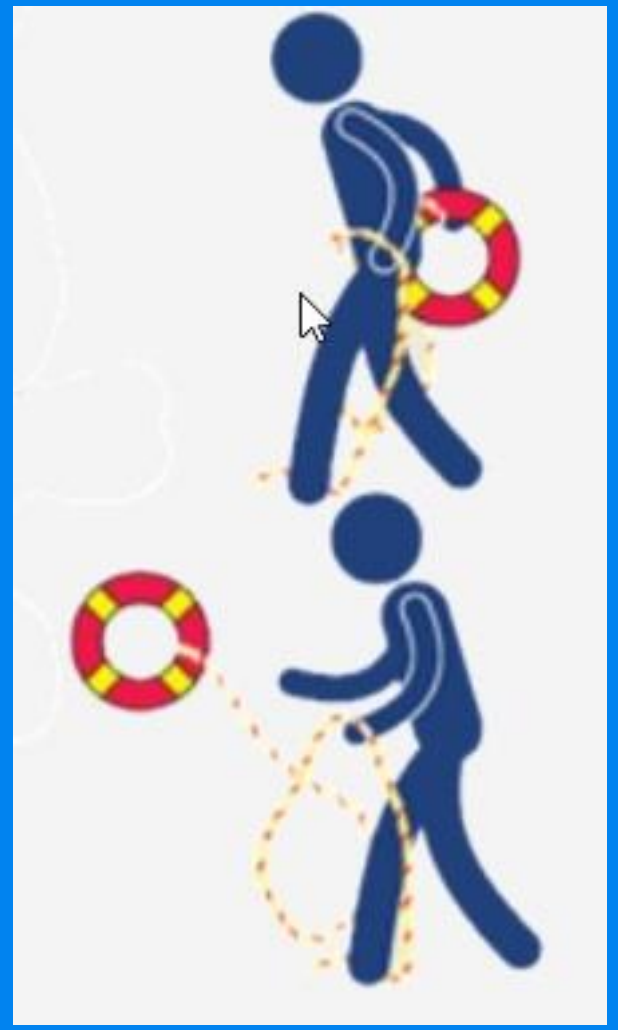
Before throwing life ring drop the end of the rope and stand on it.

Hold life ring in your dominant hand and grasp rope with your other hand.

Communicate with the person by yelling “rope, rope, rope” or “throw, throw, throw”.

In an underhand motion throw life ring near the person and pull it towards them.

After they have ahold of life ring pull them slowly towards you using a hand over hand method.



Rescue Throw Bag Demonstration

Watch this video to learn how to properly throw a rescue throw bag.
https://m.youtube.com/watch?v=2zJOL40GOtc

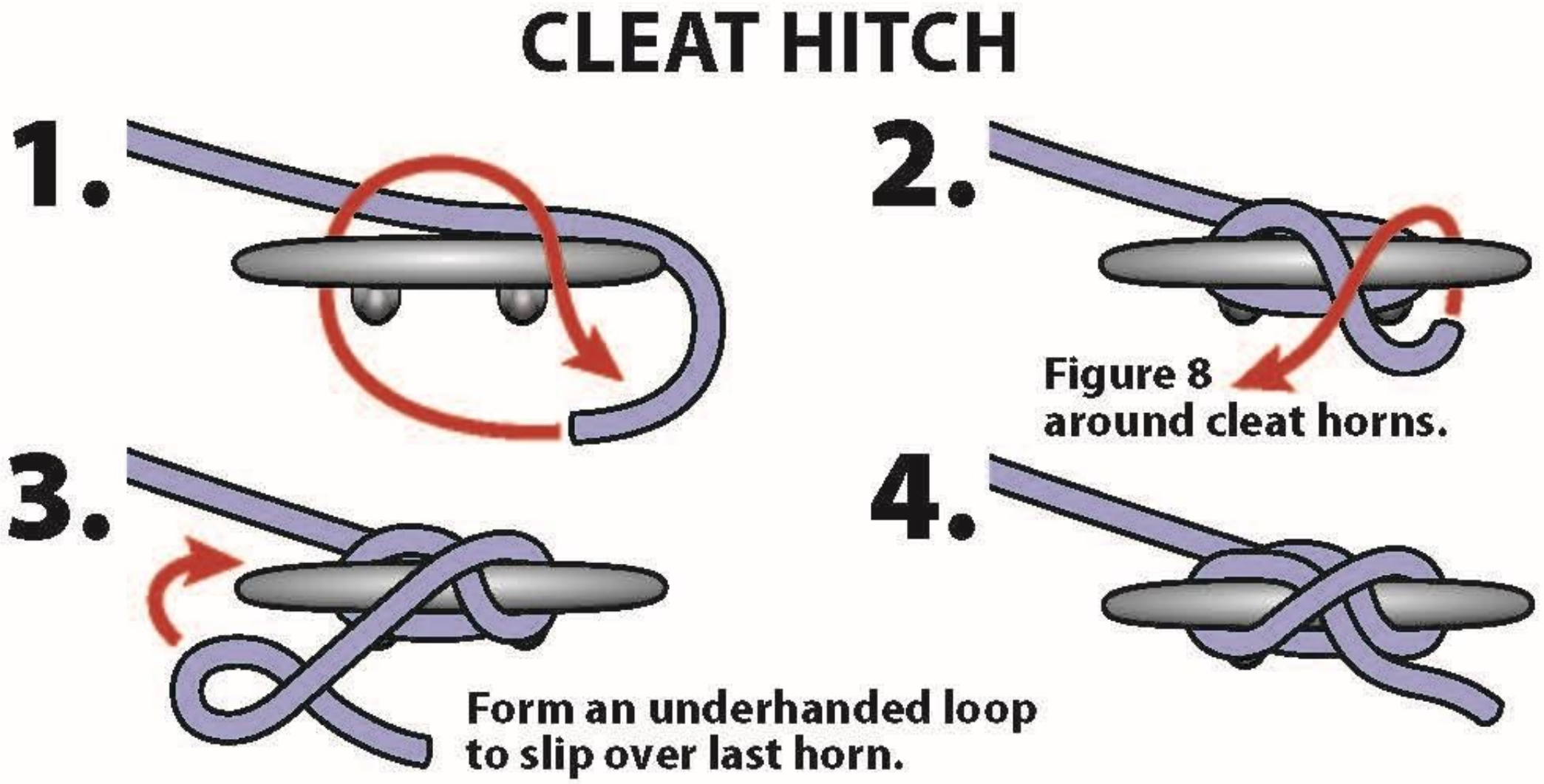
Volunteers/Employees must wear a life jacket whenever there is a drowning hazard, so that includes wearing one while on a dock.

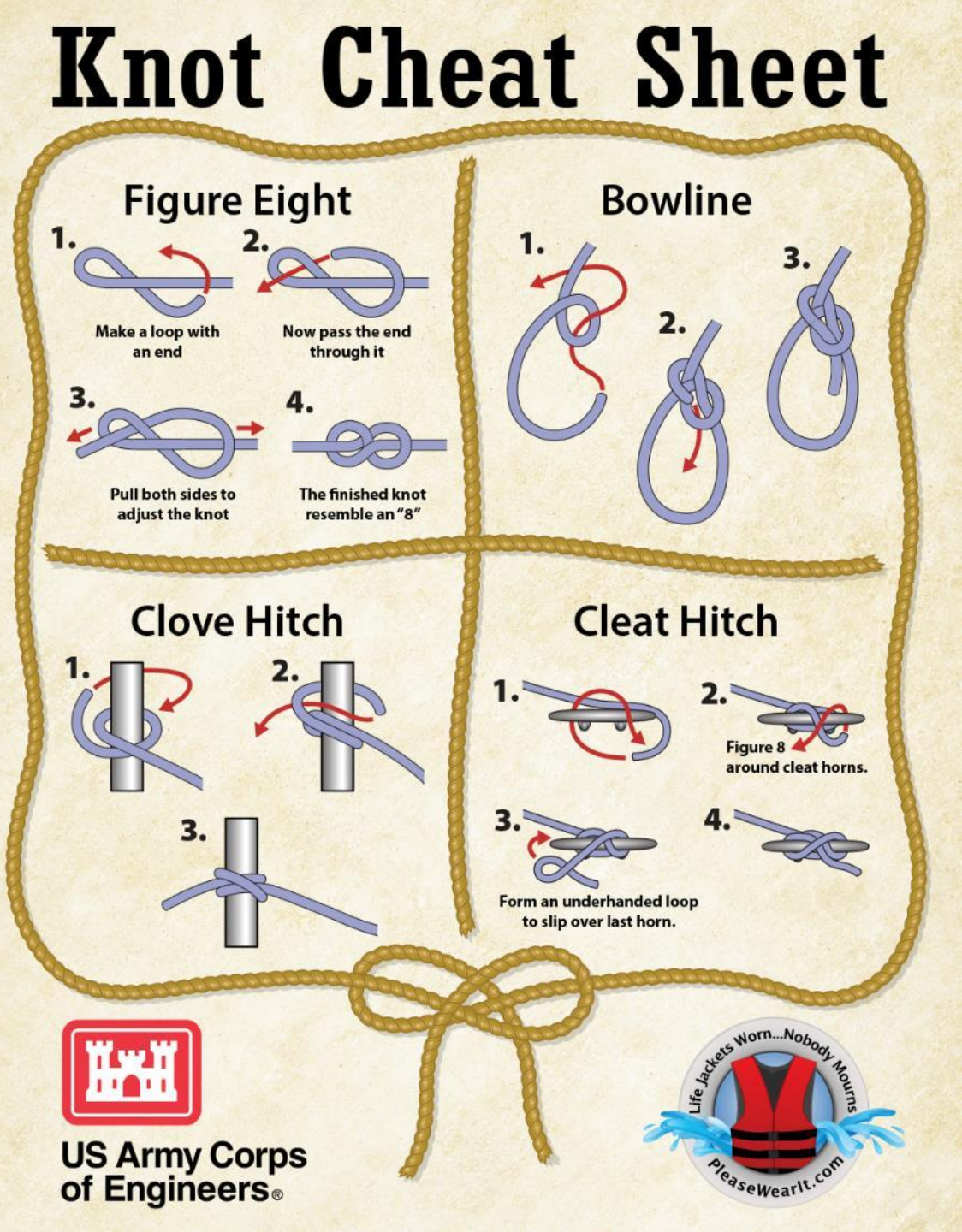
USACE Safety Manual Information Regarding Vessel Engine Cutoff Device

EM 385-1-1 15-Mar-2024
19-5.g (Page 410)

g. All motorboat operators must inspect and use the vessel engine cutoff device (kill switch) and safety lanyard and attach the safety lanyard to their person (exclusive use of wireless kill-switch devices are not authorized. (19-5.g)

Knot Tying


CLEAT HITCH
1.
2.
Figure 8
around cleat horns.
3.
4.
Form an underhanded loop
to slip over last horn.



Links to Instructional Videos

Figure Eight Knot

https://www.youtube.com/watch?v=NjA5E2Oeq7g

Bowline Knot

https://www.youtube.com/watch?v=21EKnQaDo8k

Clove Hitch Knot

https://www.youtube.com/watch?v=L0VPM1h399c

Cleat Hitch Knot

https://www.youtube.com/watch?v=2CLt4BEBMRk

COLD WATER KILLS ARE YOU NEXT?

Falls are involved in19% of all water - related fatalities

Cold water causes an involuntary gasp (or torso) reflex

Cold Water Shock - 1 Min
Cold Incapacitation - 10 mins
Hypothermia - 1 Hour

It takes less than ½ cup of water in your lungs to drown

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COLD WATER FACT:

Body heat can be lost 25 times faster in cold water than cold air.

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COLD WATER FACT:

Dress for water temperature, not air temperature.

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COLD WATER FACT:

Wearing a life jacket significantly increases your chances of survival.

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Link to Cold Water Boot Camp video regarding importance of life jackets.
https://www.youtube.com/watch?v=KDUUyC34ZTA

COLD WATER KILLS

1 minute - Cold Shock
10 minutes - Incapacitation
1 hour - Hypothermia

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Link to Cold Water Boot Camp video regarding the 1-10-1 Rule.
https://www.youtube.com/watch?v=4ZBqQeeS7kY&t=10s

HELP & Huddle Positions

HELP position

Huddle position

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What to Do if You Fall Through the Ice

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STAY CALM

The shock of plunging into cold water more than likely will cause you to gasp and possibly hyperventilate. Resist this if you can – the shock will wear off in 1-3 minutes and you have 15-45 minutes to escape before you lose consciousness.

ORIENT YOURSELF

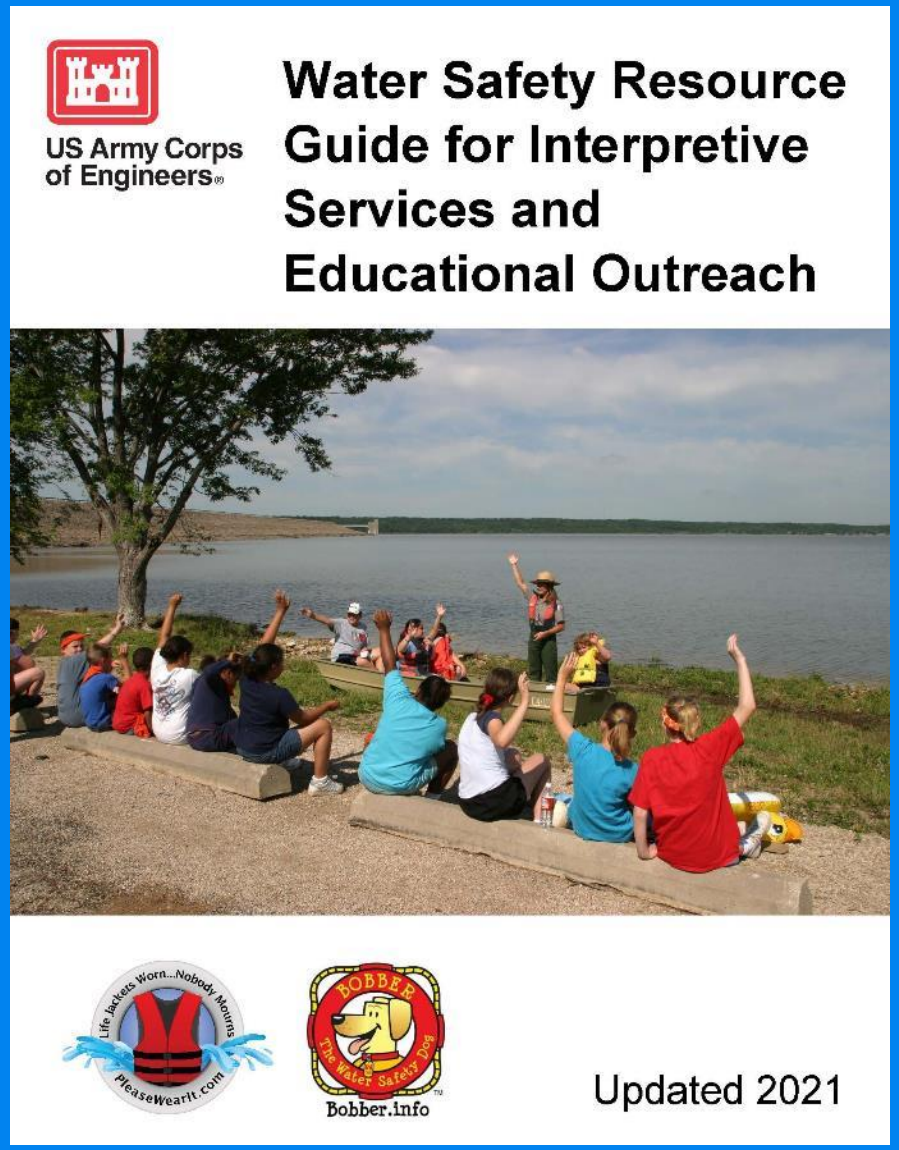
Get back to where you fell through. This ice held you before. Don’t try to pull yourself straight up; become horizontal by kicking your feet while using your elbows or sharp objects such as ice picks for traction.

LIE FLAT

Once out, roll away to prevent further cracking in the ice. Get to a warm, dry place and seek medical attention.

SAVING SOMEONE

If someone falls in, call 911. Then try coaching them through the self-rescue process. It is critical to keep yourself low and on solid ground. Then you may be able to extend a looped rope, ladder, or branch to help pull them out or throw them something that floats.



This resource guide includes several water safety interpretive programs that can be used as is or modified to use during volunteer/employee training and safety briefings.

https://corpslakes.erdc.dren.mil/employees/watersafety/pdfs/WaterSafetyResourceGuide-2021.pdf