

Newspaper Article 8: Fire!

(Part 1)

Fire Prevention

Fire aboard ship has always been a dreaded and, often, a fatal experience. For large ships, it is the second largest hazard for crew and passengers. For us small guys, it can be just as serious.

In this article we are going to discuss steps we can take to prevent a fire. Next week we will look at some responses to a fire.

PREVENTION! There are actions to take, or to avoid, that can manage the risk of an onboard fire. First, let's look at the boat's actual fuel. Since most of our boats burn gasoline, we will address that issue. (Diesel is also flammable but not as easily ignited. Once burning, though, it creates an intense blaze.)

The chance of a fuel fire is heightened when refueling. There are some precautions we can take to prevent a fire during this process, realizing that it is the fumes from gasoline that are highly flammable. So let's deal with fumes.

- If your boat has an enclosed cabin, close all of the windows and doors before refueling. That way no fumes can get into that part of your boat.
- Frequently check your fuel lines and connections for leaks and worn spots.
- Be sure all electrical devices are turned off, as well as your engine.
- When gasoline passes through the hose, it generates static electricity. If that 'sparks' with the fumes at the fuel tank fill point, an explosion can occur. To dissipate the static electricity, keep the metal nozzle of the hose in contact with the metal part of the refueling opening, hopefully grounding the system.
- Try not to spill any fuel during the process. Not only does this add to the danger of fire but you are legally responsible for your fuel spills.
- Once fueling is complete, securely fasten the gas cap.
- Open up all windows and doors to ventilate.
- If you have an inboard or inboard/outboard engine it is time to run the bilge blower. That is a fan located in the bottom of the bilge where gasoline fumes can accumulate, gas being heavier than air. Run the fan for four minutes. (It is also good advice to run this blower before ANY engine start, since even a small leak can produce lots of fumes.)
- Obviously, no smoking anywhere near the boat is the rule when fueling.

Use your nose! Gasoline has a distinct odor and even a small amount can be smelled at some distance. If you smell gas, shut everything down and find the source.

Another fire hazard is cooking fires, either from propane tanks, stoves or grills. Be sure all connections are tight. It makes sense to have one of your fire extinguishers close to the galley.

As to the proper number and size of the fire extinguishers on your boat, there are some laws on the subject. Boats less than 26' must have at least one B-1 extinguisher. Boats between 26' and less than 40' must have two B-1s or one B-2.

When buying your extinguishers buy the ones that have "ABC" printed on them. They will put out combustible material and liquids (such as gasoline or grease), and electrical fires.

The number indicates the capacity – II is larger than I. As to how many and what size to buy, more and larger is the way to go.

To learn more about this subject and other important boating safety topics, enroll in the next boating safety class presented by the Coast Guard Auxiliary and the Army Corps of Engineers on September 27th. For details contact:

(Part 2)

Fire Response: Putting out the Fire

Last week we discussed how to prevent a fire from occurring on your boat. This week we are going to discuss how to respond to a fire.

Fire on a boat, of any size, is more of a threat than the same fire on land. On land we can simply walk away. On our boat away from land, we enter another potentially threatening environment – the water. In either event, the captain must make a fast and clear decision.

Fight or flee? If the fire is a fuel fire (that is, some part of the gasoline system has been breached), recognize the situation as very dangerous. If the fire is small and does not threaten the main or auxiliary fuel tanks, trying to put out the fire with your fire extinguisher might be advisable. However, be careful; gasoline fires can go from small to huge in a matter of seconds!

At the same time you are fighting the fire, have someone put out the anchor and everyone put on their life jackets. Most fires are in the mid-section or rear of the boat and the anchor will keep the bow into the wind with the smoke and flame going astern.

Jane and I have already made the decision that if we have a gasoline fire aboard we are “out of here”! We will don life jackets and abandon ship. It’s now the insurance company’s problem. You must make your own decision; if you can make it in advance that’s good, and then stick to it.

Propane fires are a close second. I would probably try to extinguish the fire IF I could shut off the propane tank at the tank without getting burned. Your call.

If the fire is gasoline or propane fueled and you have abandoned ship, be careful if the fire seems to have gone out of its own accord. Think twice before re-boarding. The fire may still be smoldering and could explode anew at any time.

If the fuel fire occurs when you are secured to the fuel dock, there are other things you can do. If the fire starts from a spark where the filler hose is going into the gas tank, DO NOT pull the hose out of the tank! Stop the flow of gas and go for the fuel shutoff switch on land and the larger extinguisher on dock. (Know ahead of time where these are located.)

Other fires, such as grease flare-ups on a grill or stove, present challenges but are usually more easily extinguished. First, turn off the flame. If you can smother the fire, that’s good. Otherwise, use your fire extinguisher and don’t stop until the extinguisher is empty. (That won’t be long with a B-I size.) DO NOT TRY TO EXTINGUISH A GREASE FIRE WITH WATER!

To operate the extinguisher on any type fire (Of course, you have already read the instructions on the extinguisher.), detach the extinguisher from its bracket, pull the safety pin and then squeeze the trigger. Spray the fire with a back and forth movement directed at the base of the fire.

If the fire is wood, paper or other combustibles, your chances of putting it out are good. But watch out if the fire is close to fuel; it could spread and be uncontrollable real fast.

Just as soon as you can after initial suppression efforts are underway, put on your life preserver in preparation for the last resort – abandoning the ship!