## FIRE PREVENTION AND CONTROL (Draft 2: 6/12)

Goal: The purpose of this training is to provide information and skills to prevent fires and in the case of fire minimize risk to people and vessel.

Objectives: After successful completion of the course, participants should be able to:

- 1. Identify at least five potential hazard areas aboard a vessel and how to protect each area from fire.
- 2. Identify the four elements needed to make a fire (fire triangle/chain reaction).
- 3. Identify or demonstrate the distinction between class A, B, C, D and K fires.
- 4. Describe the various extinguishing agents used for five different classes of fire.
- 5. Identify at least two advantages and two disadvantages of at least six types of extinguishing agents.
- 6. Identify at least one hazard of at least six common marine fire fighting agents.
- 7. Identify the risks to the firefighter due to the byproducts of combustion.
- 8. Define the three ways of heat transfer.
- 9. Describe the three phases of fire development.
- 10. Identify the five common portable extinguishers available for shipboard fires.
- 11. Demonstrate the five steps to using a portable fire extinguisher (APASS).
- 12. Select the appropriate fire extinguisher agent for at least three classes of fire.
- 13. Identify at least six tactical considerations when fighting a shipboard fire
- 14. Demonstrate acceptable methods of application of the portable CO<sub>2</sub>, foam and dry chemical extinguishers.
- 15. Identify the requirements for fixed CO<sub>2</sub> and Halon systems.
- 16. Identify the types of alarms required for fixed fire fighting systems.
- 17. Identify in a case study at least three "lessons learned" in a casualty report of a fishing vessel fire.
- 18. Identify at least ten potential hazardous materials aboard own vessel.
- 19. Extinguish a small class A, B or C fire as local facilities and regulations allow.
- 20. Identify at least three inspection points to look for in at least three types of fire extinguishers.
- 21. Identify the role of the "Boundary man" in a fire fighting team.
- 22. List at least three shipboard policies to prevent fires at sea.

Additional objectives F/Vs over 79 feet, if applicable per 46 CFR Part 28:

- 1. Extinguish fire with applicable extinguishing appliances and agents where allowed by law and environmental conditions
- 2. Extinguish simulated fire using appropriate extinguishing agent for class of fire.
- 3. Don a fireman's suit and SCBA correctly within four minutes. (NFPA standard is two minutes for suit & SCBA for firefighter 1 level)
- 4. Enter a enclosed space wearing SCBA and extinguish simulated fire
- 5. Perform a rescue in a space wearing SCBA
- 6. Identify six steps in the maintenance of a SCBA.
- 7. Identify six steps in the proper donning of an SCBA