Time:

#### **Liquefied Petroleum Gas (LPG) Fuel Systems**

## **Key Concepts:**

## **Main Teaching Points:**

- 1) Each candidate must understand LPG is heavier than air and will flow to lower parts of boat:
  - difficult to remove,
  - highly explosive, and
  - used for fuel burning appliance on PC
  - appliances must be installed in accordance with manufactures instructions.

### 2) Candidates examining LPG systems shall ensure:

- adequate ventilation,
- appliances are fully secured
- cylinder(s) are in a well ventilated area—recommended top of cabin / outside on main deck.
- cylinders DOT approved and valve outlets capped on spares.
- Ensure that there is adequate ventilation when a gas-burning appliance is in use with a pilot light.
- Make sure that the appliance is fully secured to guard against leakage due to unexpected movement of the vessel.
- examination criteria for gas fuel piping pg 100 PCCC Manual

#### **Notes**

**Ouick Points** 

Characteristics of
LPG
Examining LPG
Systems

#### **References linked to LP:**

Handout-- Liquefied Petroleum Gas and Compressed Natural Gas Systems in Yachts and Small Craft -- Alpha Survey

Safe Boating Guide Pg.55 http://www.tc.gc.ca/BoatingSafety/sbggsn/menu.htm

PCCC manual Pg 99

## **Rationalization:**

# Suggested Activities:



Method of Evaluation & Condition	Skill / Knowledge and Standard		
Each candidate can be evaluated for these points by written examination or oral questioning during vessel examination.	Candidates examining LPG systems shall ensure: <ul> <li>adequate ventilation,</li> <li>appliances are fully secured</li> <li>cylinder(s) are in a well ventilated area—recommended top of cabin / outside on main deck.</li> <li>cylinders DOT approved and valve outlets capped on spares.</li> <li>examination criteria for gas fuel piping pg 102 PCCC Manual</li> </ul>		
Knowledge			
Each candidate can be evaluated for these points by written examination or oral questioning during vessel examination.	Each candidate must understand LPG is heavier than air and will flow to lower parts of boat:  • difficult to remove,  • highly explosive, and  • used for fuel burning appliance on PC.  Appliances must be installed in accordance with manufactures instructions.		