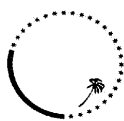


# BASIC SEA SAFETY

FOR PACIFIC ISLAND MARINERS



## Overhead Transparencies



SECRETARIAT OF THE PACIFIC COMMUNITY



GOVERNMENT OF TAIWAN/ROC

## **EMERGENCIES AT SEA**

- **Out of fuel**
- **Lost sight of land**
- **Vessel swamped**
- **Vessel instability**
- **Vessel leaking**
- **Vessel overloaded**
- **Engine failure**
- **Sudden change of weather**
- **Grounding on a reef**
- **Collision with another vessel**
- **Loss of steering**
- **Loss of propeller**
- **Capsize**

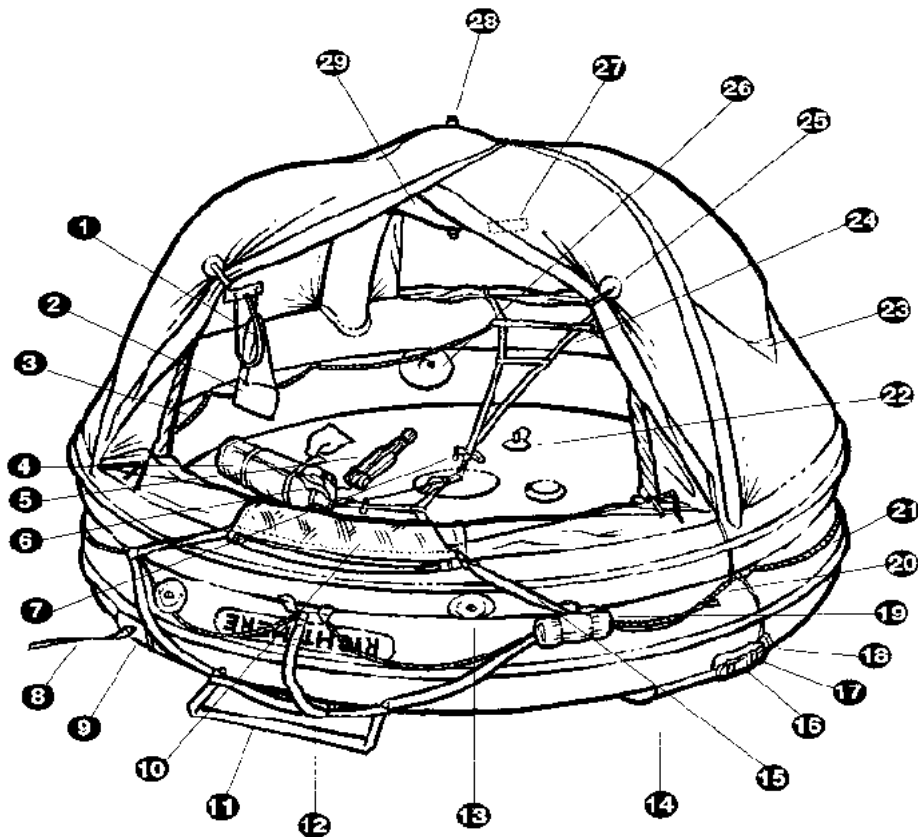
## **MAN OVERBOARD**

- **Shout “man overboard”**
- **Turn wheel towards side person went overboard**
- **Man overboard switch on GPS**
- **Life buoy or floating device**
- **Keep person in sight**
- **Use spotlight at night**
- **Retrieval method**
- **Rescuer to wear lifejacket and attached to boat with a line**

# LIFESAVING AIDS

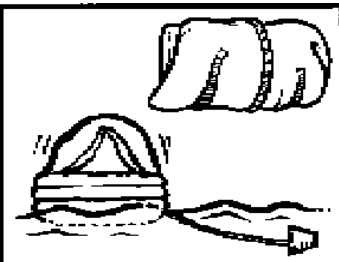
|  |   |
|--|---|
|  <p>SPARE FUEL</p>                              |  <p>ENGINE TOOLS AND SPARES</p> |
|  <p>ANCHOR AND ROPE</p>                         |  <p>SEA ANCHOR</p>              |
|  <p>ALTERNATIVE PROPULSION</p>                 |  <p>COMPASS</p>               |
|  <p>FLARES    SIGNALLING DEVICE    MIRROR</p> |  <p>FLOTATION DEVICE</p>      |
|  <p>WATER    WATER    IN CONTAINER</p>        |  <p>FOOD</p>                  |
|  <p>FIRST    AID KIT</p>                      |  <p>KNIFE</p>                 |
|  <p>BAILING DEVICE</p>                        |  <p>SHADE</p>                 |

# INFLATABLE LIFE RAFT

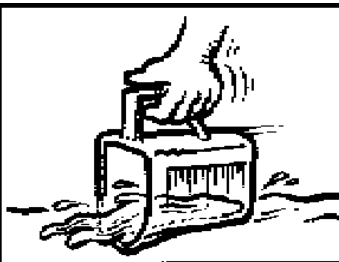


- |   |                                 |
|---|---------------------------------|
| 1: Rain catchment tube and bung                                       | 16: Sea light cell              |
| 2: Canopy instruction label and bag<br>(liferaft handbook inside bag) | 17: Plug                        |
| 3: Internal lifeline  | 18: Cell pocket                 |
| 4: Emergency pack   | 19: Drogue                      |
| 5: Paddles  | 20: Drogue line                 |
| 6: Lanyard  | 21: External life line          |
| 7: Quick release for hauling-in line                                  | 22: Floor inflation valve       |
| 8: Painter  | 23: Rain catchment              |
| 9: Painter patch  | 24: Hauling-in line             |
| 10: Window in inner door  | 25: Canopy furling tapes        |
| 11: Boarding ladder & righting strap                                  | 26: Safety and topping-up valve |
| 12: Inflation hose  | 27: Knife (stuck on Arch tube)  |
| 13: Deflation plug  | 28: External light              |
| 14: Water stabilising pocket  | 29: Internal light              |
| 15: Canopy furling tapes  |                                 |

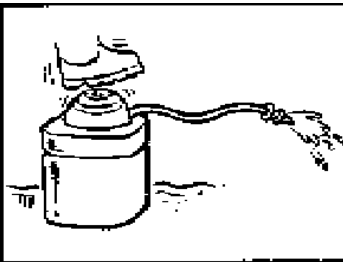
# LIFERAFT EQUIPMENT



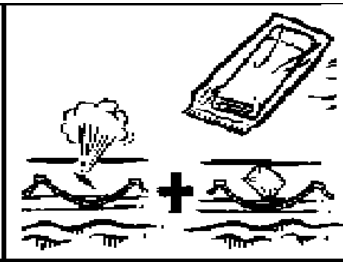
Sea anchors



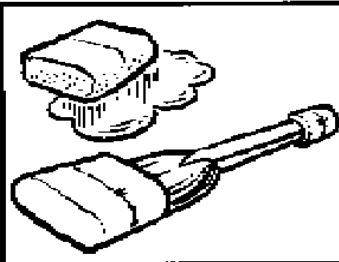
Buoyant bailer



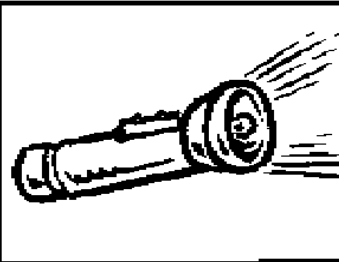
Pump or bellows



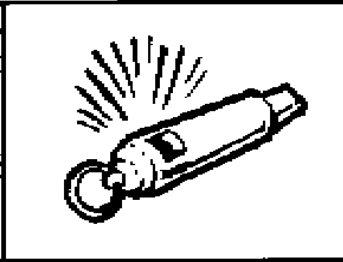
Puncture repair kit



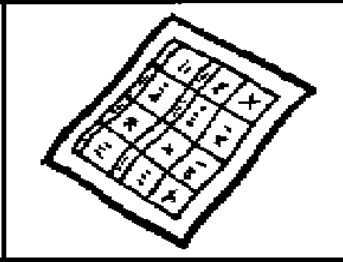
Paddles & sponges



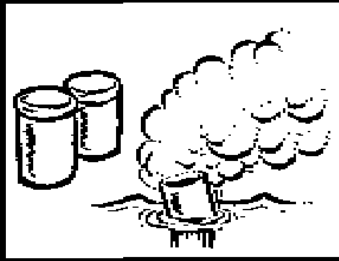
Torch



Whistle



Rescue signal table



Buoyant smoke signals



Instructions for immediate use

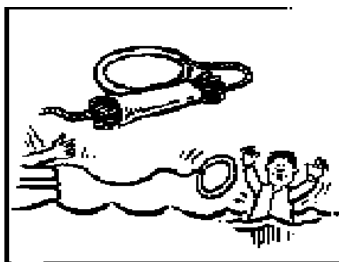


Thermal protective aid



Sea-sickness bag

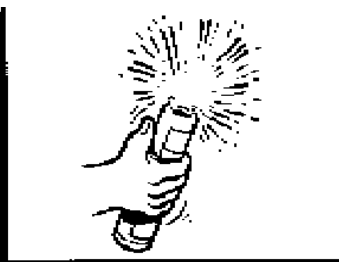
# LIFERAFT EQUIPMENT



Buoyant rescue quoit



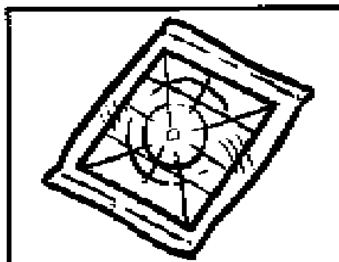
Parachute distress rockets



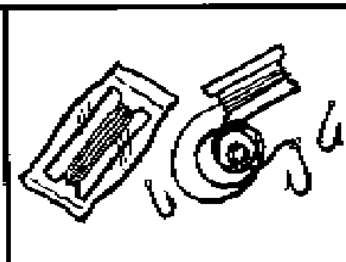
Hand flares



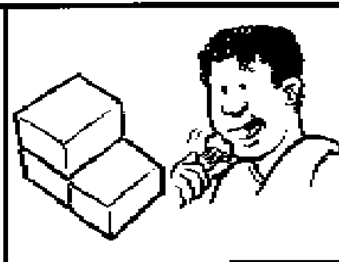
Safety knife



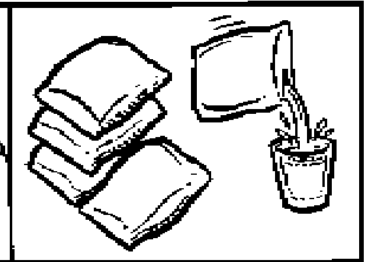
Heliograph



Fishing kit



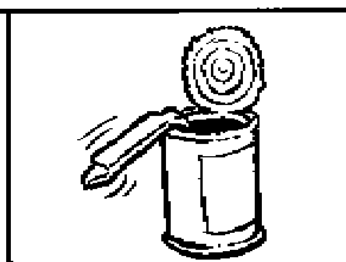
Food ration



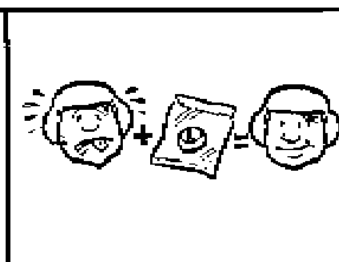
Water ration



Graduated drinking vessel



Tin openers

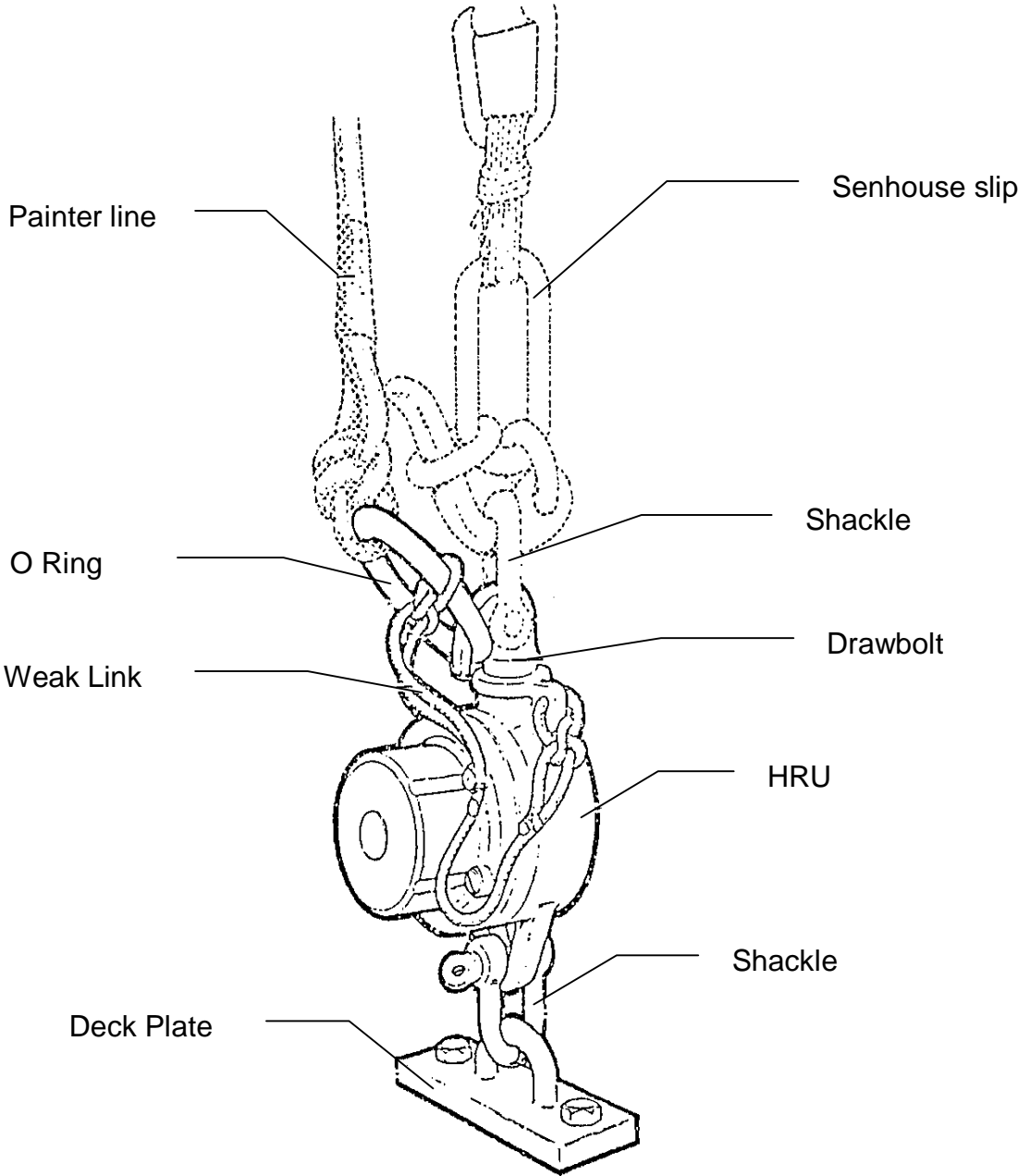


Sea-sickness tablets


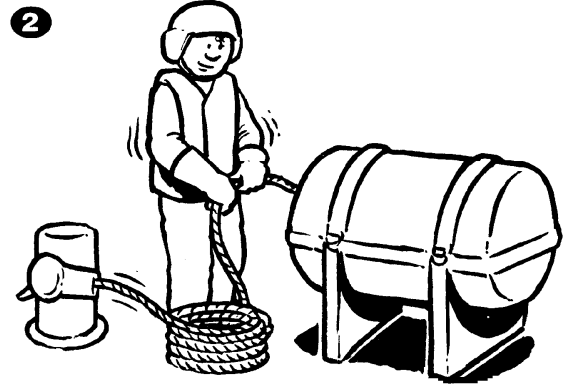

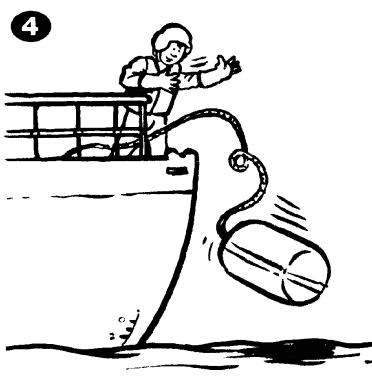
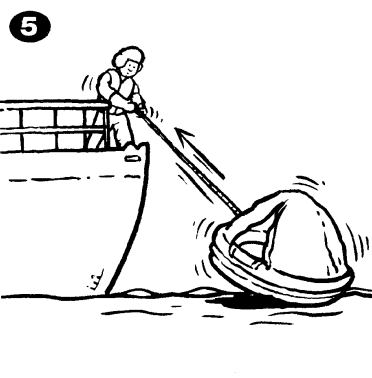

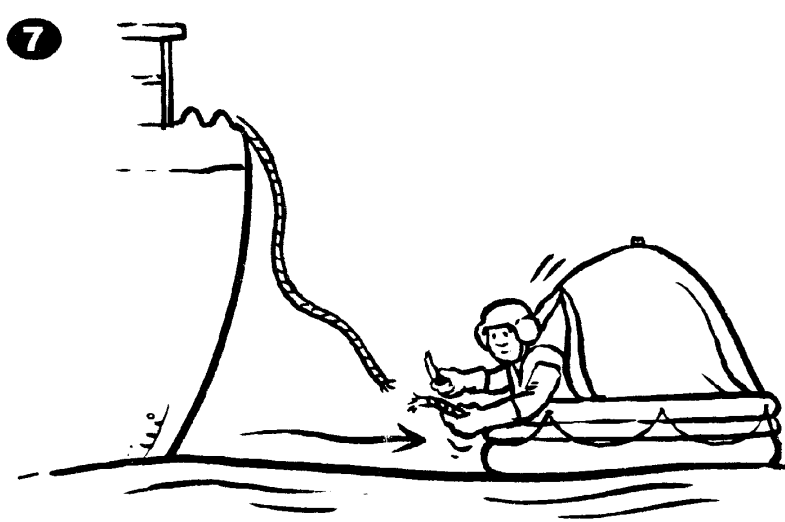


First aid outfit

# HYDROSTATIC RELEASE

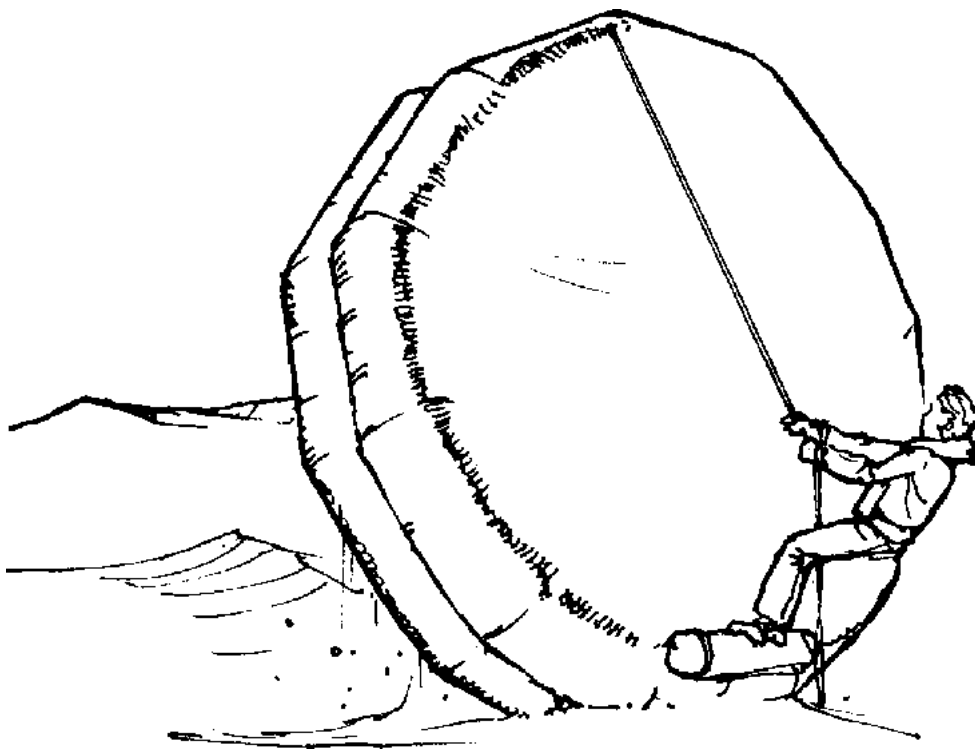


# LAUNCHING A LIFERAFT

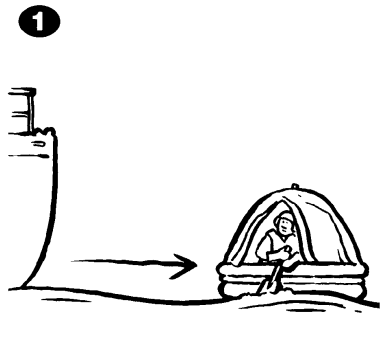
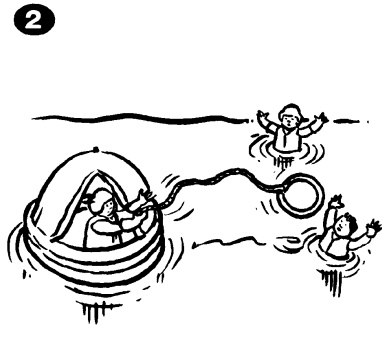

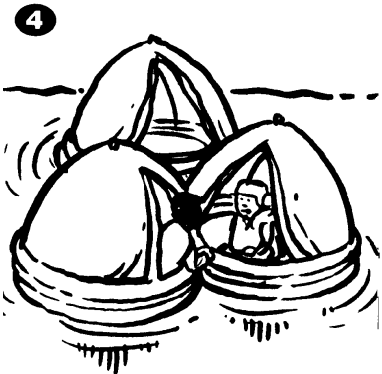
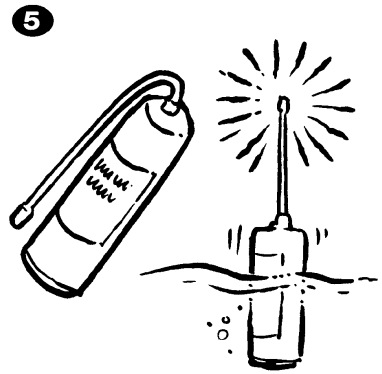
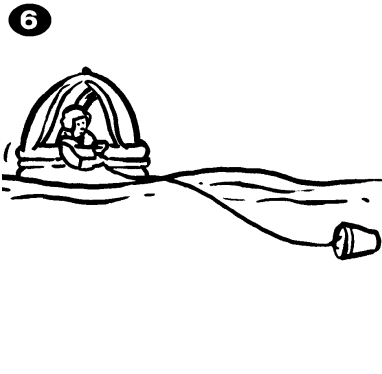
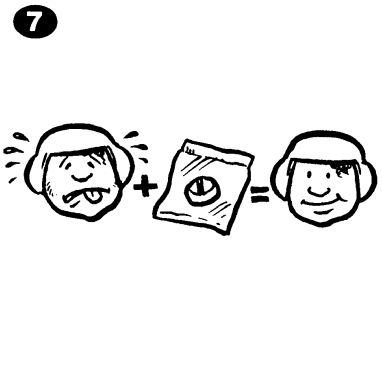


|   |  |  |
|---|--|--|
|  <p><b>1</b></p>   |  <p><b>2</b></p>   |  |
| <p>Check painter is tied somewhere secure</p>   | <p>Pull out sufficient line to reach ship's side</p>   |  |
|  <p><b>3</b></p>  |  <p><b>4</b></p>   |  <p><b>5</b></p> |
| <p>Release senhouse slip</p>  | <p>Carry to side of vessel, check for obstructions and throw in</p>                                  | <p>Pull painter to inflate raft</p>  |
|  <p><b>6</b></p> |  <p><b>7</b></p> |  |
| <p>Pull raft alongside and climb in without getting wet</p>   | <p>7. If necessary, cut painter with knife kept in arch and move away</p>                            |  |

OHT 4.2.2

# RIGHTING A LIFERAFT



# SURVIVAL AFTER LAUNCHING

|   |   |   |
|---|---|---|
|    |    |    |
| <p>1. Move away from sinking ship by paddling or by using sea anchor rolled into a ball and thrown in direction you want to go. Once clear, wind will blow you faster</p> | <p>2. Look for survivors. Use quoit to reach them</p>                               | <p>3. Lift survivors into raft from under arms</p>                                    |
|    |  |  |
| <p>4. Keep life raft together</p>   | <p>5. Set off EPIRB</p>   | <p>6. Set the sea anchor</p>  |
|    |  |  |
| <p>7. Take sea-sickness tablets</p>   | <p>8. Collect and ration fresh water</p>  | <p>9. Use flares and radar reflector to aid detection</p>                             |

## **SURVIVAL AFTER LAUNCHING**

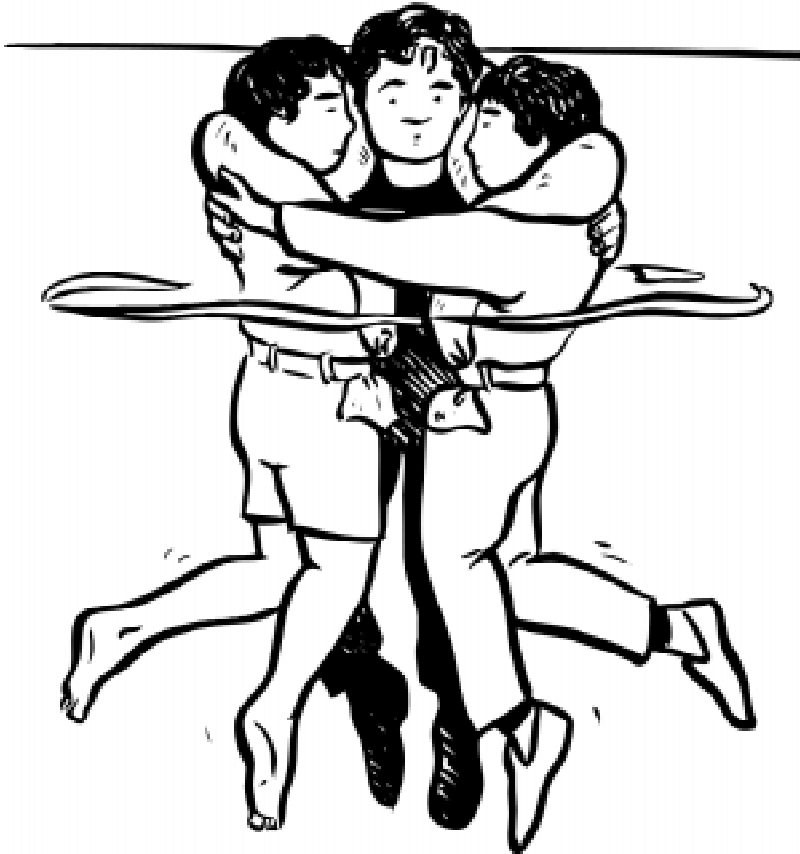
- **Read instruction card**
- **Skipper in charge**
- **Seasickness tablets to everyone**
- **Check sea anchor**
- **Bale out water**
- **Check buoyancy chambers**
- **Don't drink sea water**
- **Collect rain water**
- **Post lookouts**
- **Use flares correctly**
- **No water rations for 24 hrs**
- **Beware of salty food (fish, birds)**
- **Watch for sharks**
- **Positive attitude**

OHT 4.4.1

# H.E.L.P POSITION



# HUDDLE POSITION



## **DISTRESS SIGNALS**

### **Sight**

- **Flames from a burning object (oil in a drum is an example)**
- **A square object above or below a round object**
- **Slow and repeated raising of the arms outstretched**
- **International code flags N and C**

### **Sound**

- **Explosive sound (like a gun) fired at intervals of about one minute**
- **Continuous sounding of a fog signaling device (whistle, horn...)**

## **DISTRESS SIGNALS**

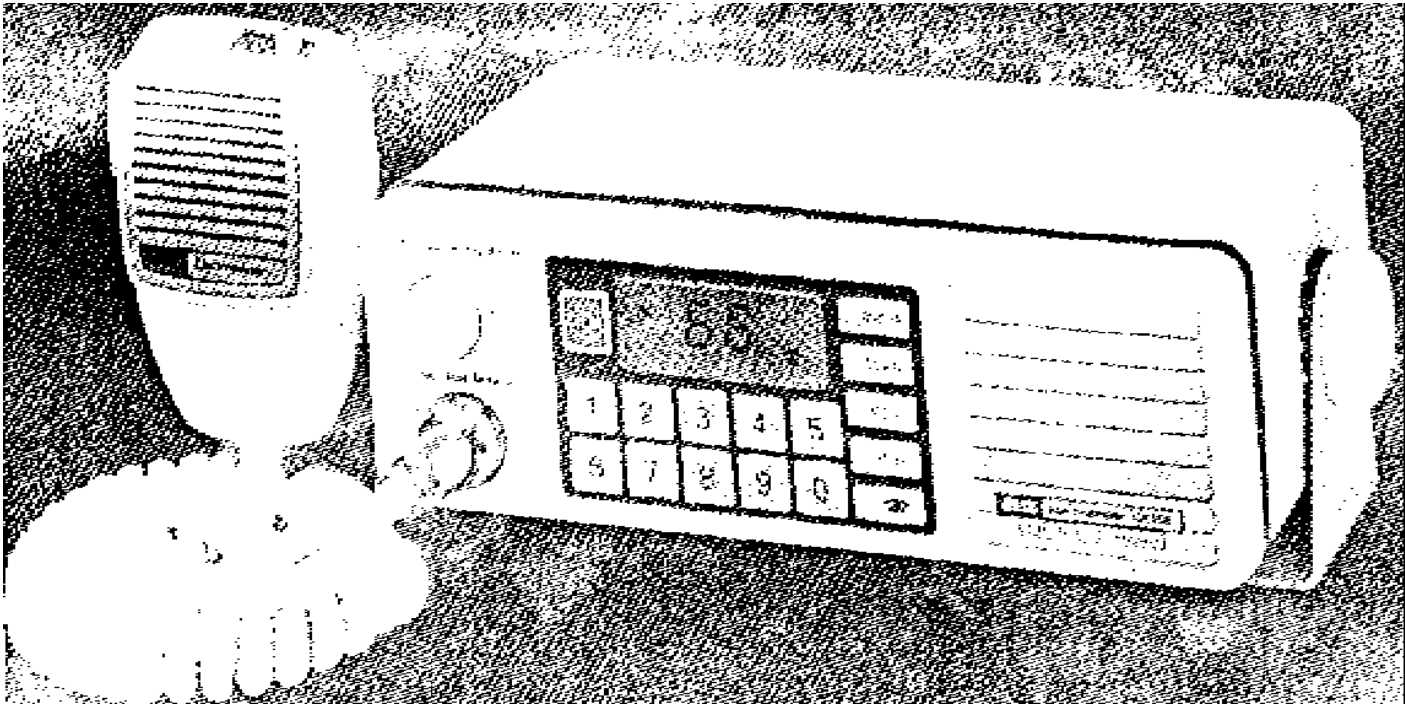
### **Pyrotechnics**

- **Hand held flare**
- **Parachute flare**
- **Orange smoke flare (daytime)**

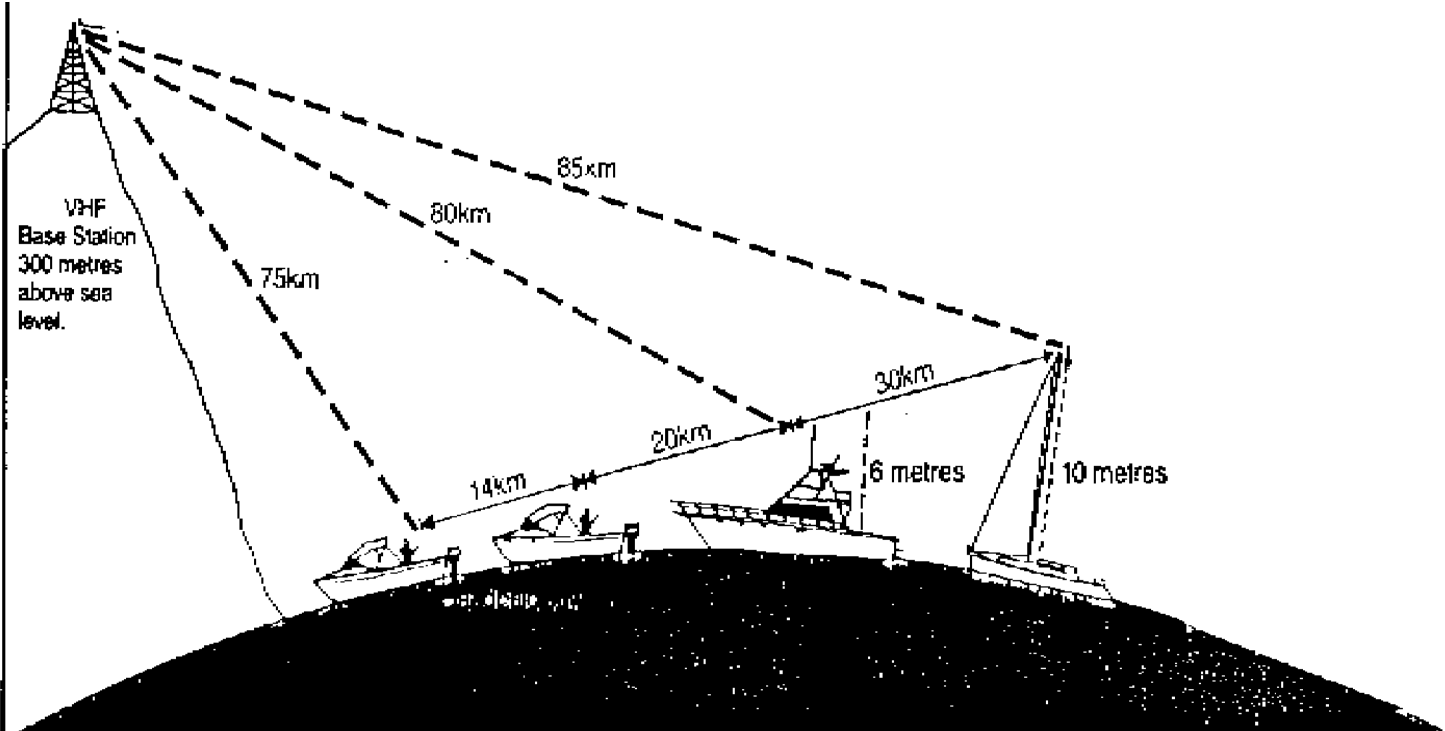
### **Radio**

- **Mayday on a VHF or MF/HF radio**
- **EPIRB**

# VHF RADIO



# VHF RANGES

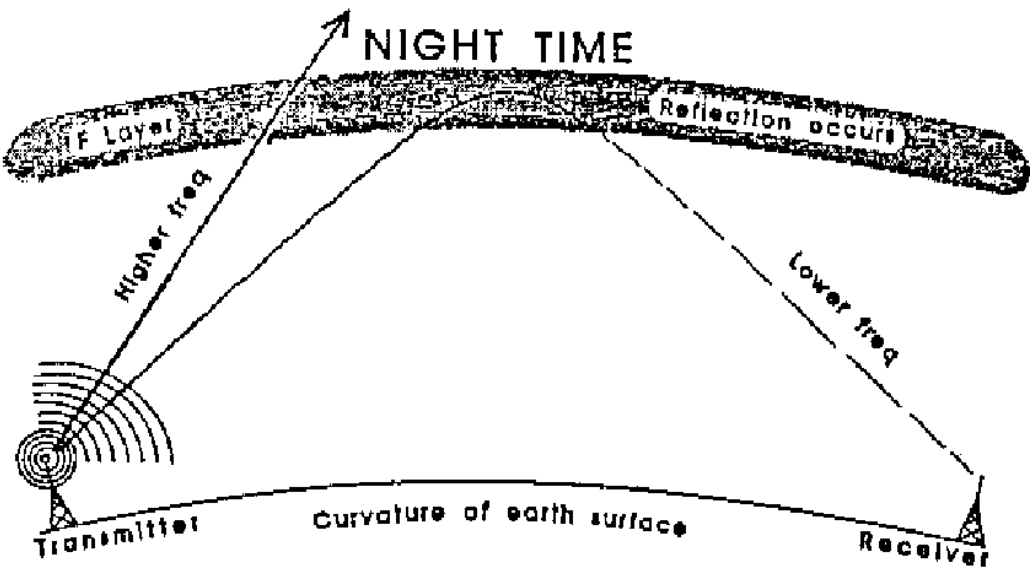
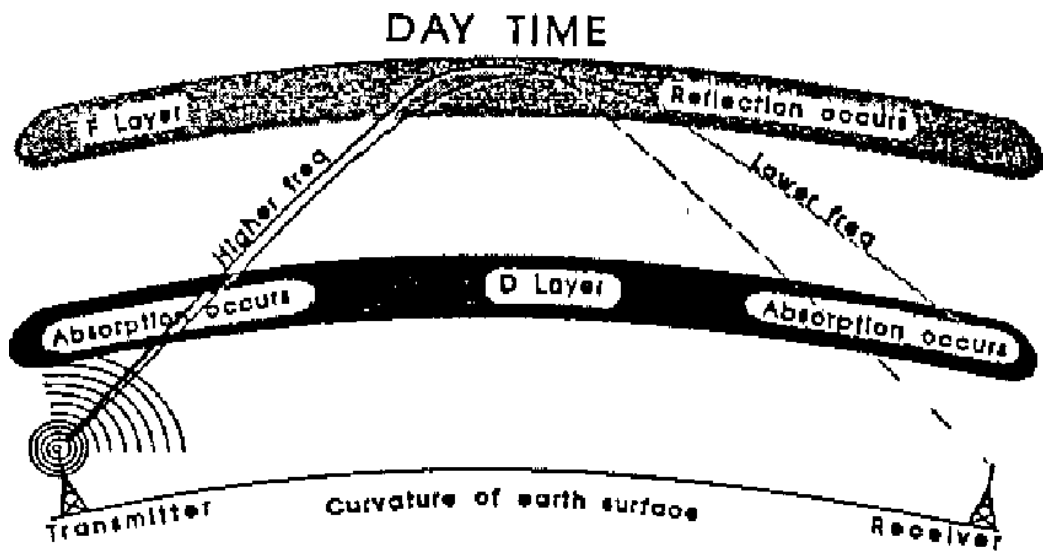


OHT 6.1.3

# MF/HF (SSB) RADIO



# MF/HF (SSB) RANGES

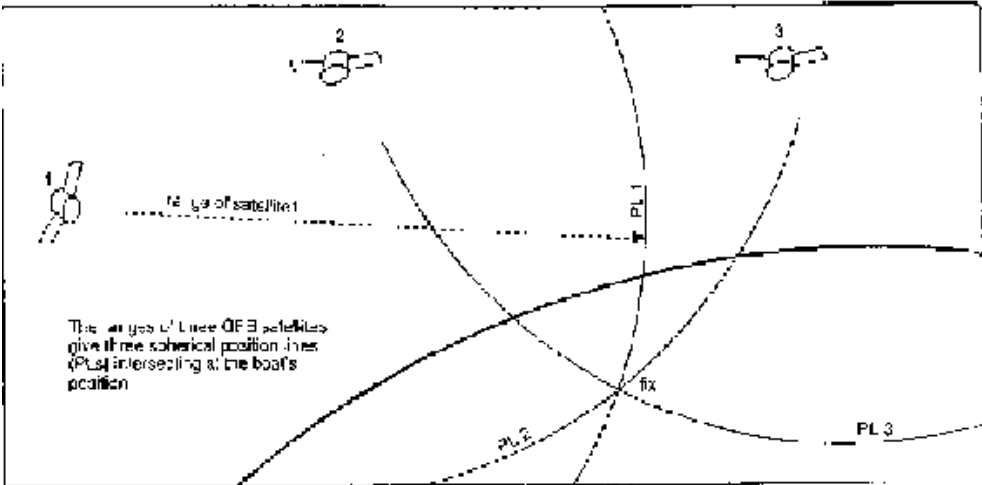
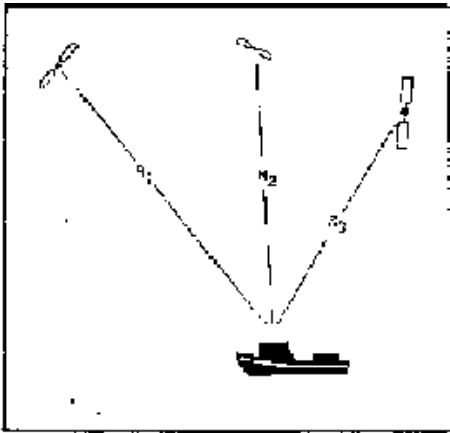
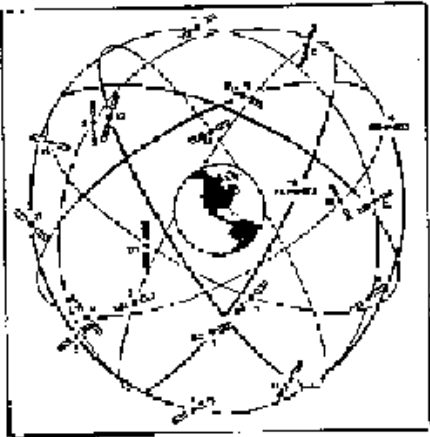


## **DISTRESS MESSAGE**

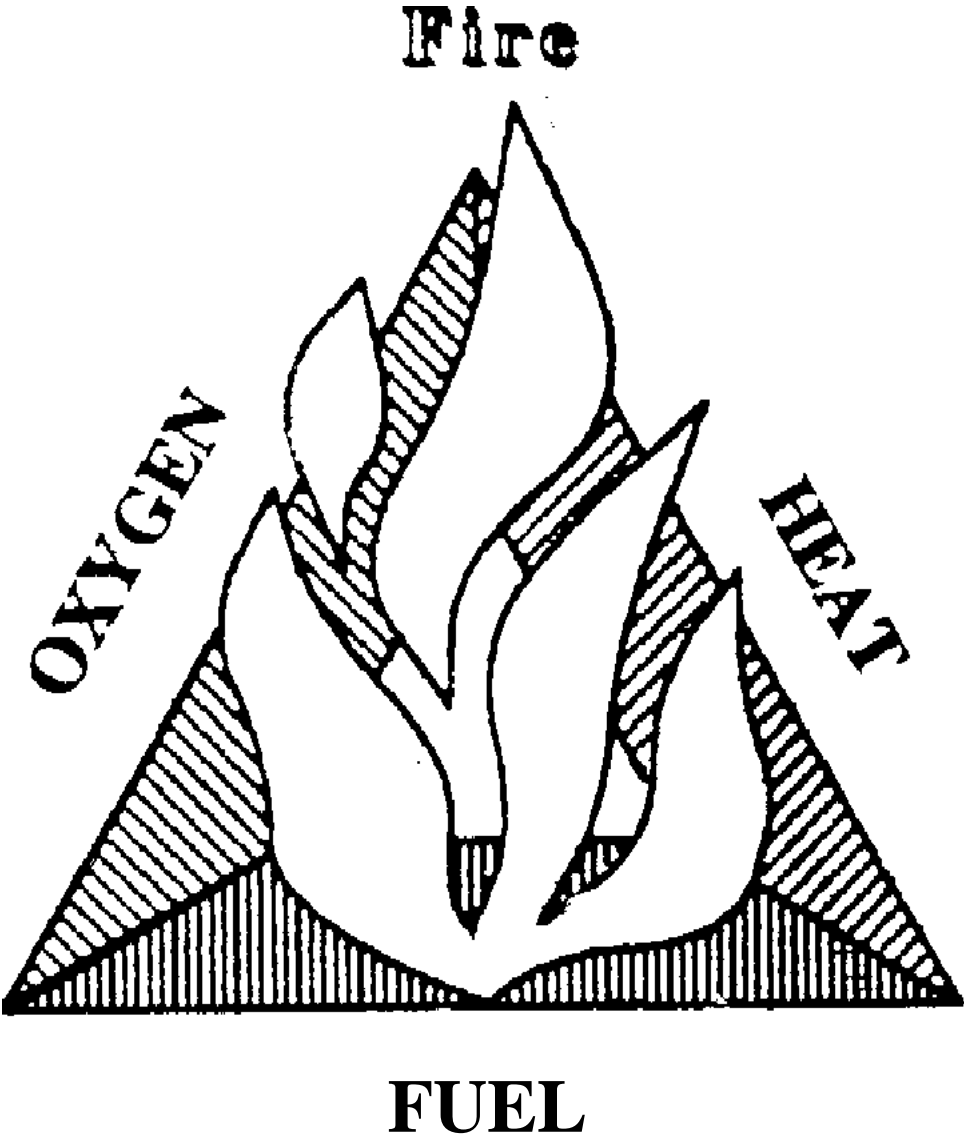
- **Mayday three times**
- **Position**
- **Problem**
- **People (and other information)**

**MAYDAY MAYDAY MAYDAY  
THIS IS GEMINI GEMINI GEMINI  
MAYDAY GEMINI  
OUR BOAT IS ON FIRE AND  
SINKING  
WE ARE AT POSITION  
12 DEGREES 20 MINUTES  
SOUTH  
175 DEGREES 30 MINUTES  
EAST  
FOUR CREW ON BOARD  
WEATHER FIFTEEN KNOTS  
FROM THE SOUTHEAST  
WE REQUIRE URGENT HELP**

# GPS SYSTEM



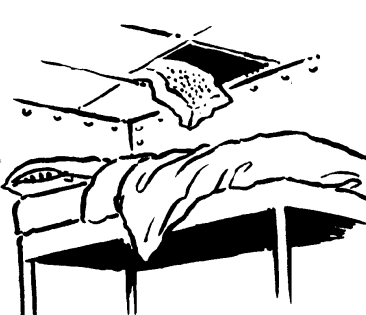
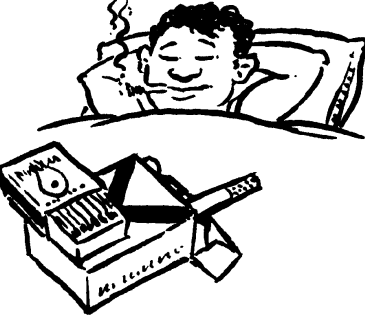
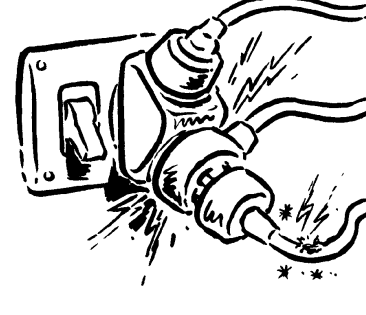
# FIRE TRIANGLE

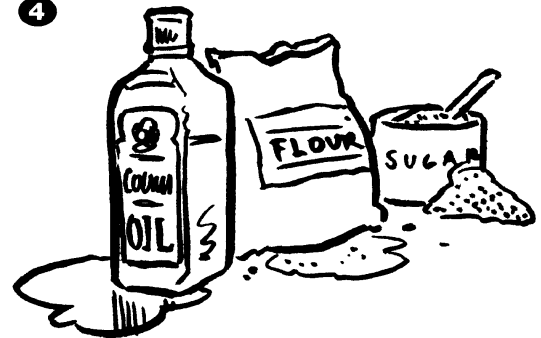
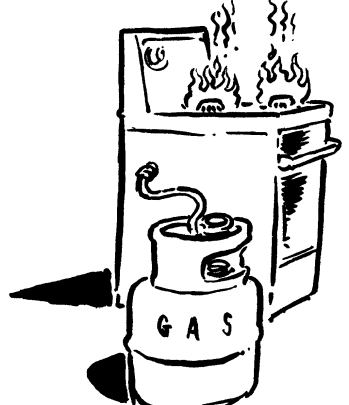



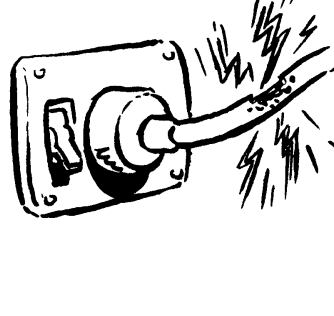
# CAUSES OF FIRES

|  |   |  |
|--|---|--|
|  <p>1</p>   |  <p>2</p>   |  |
| <p>Poor housekeeping</p>   | <p>Oil leaks and oil soaking into exhaust lagging</p>   |  |
|  <p>3</p> |  <p>4</p>  |  <p>5</p> |
| <p>Hot surfaces, eg exhaust pipes, engine parts</p>  | <p>Defective exhaust lagging</p>  | <p>Welding or metal cutting</p>  |
|  <p>6</p> |  <p>7</p> |  |
| <p>Auto ignition, eg oil dripping on a hot surface</p>                                       | <p>Electrical fire (or smoke)</p>   |  |

# CAUSES OF FIRES

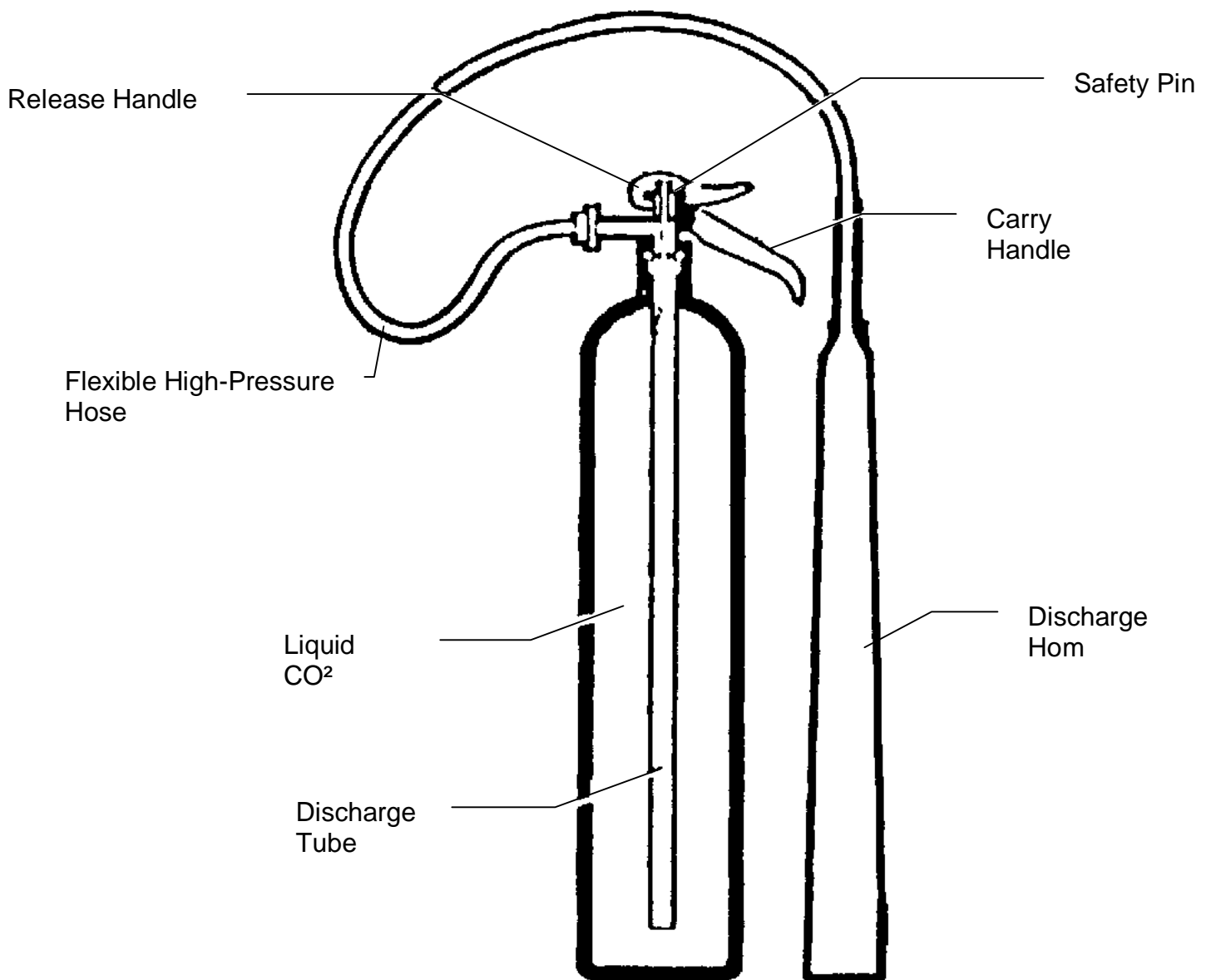
|  |  |  |
|--|--|--|
| <p>1</p>  | <p>2</p>  | <p>3</p>  |
| <p>Combustible materials</p>   | <p>Matches and smoking</p>   | <p>Defective electrical connections</p>  |

|  |   |
|--|---|
| <p>4</p>  | <p>5</p>  |
| <p>Combustible materials</p>   | <p>Oil or gas stoves (gas bottles)</p>  |

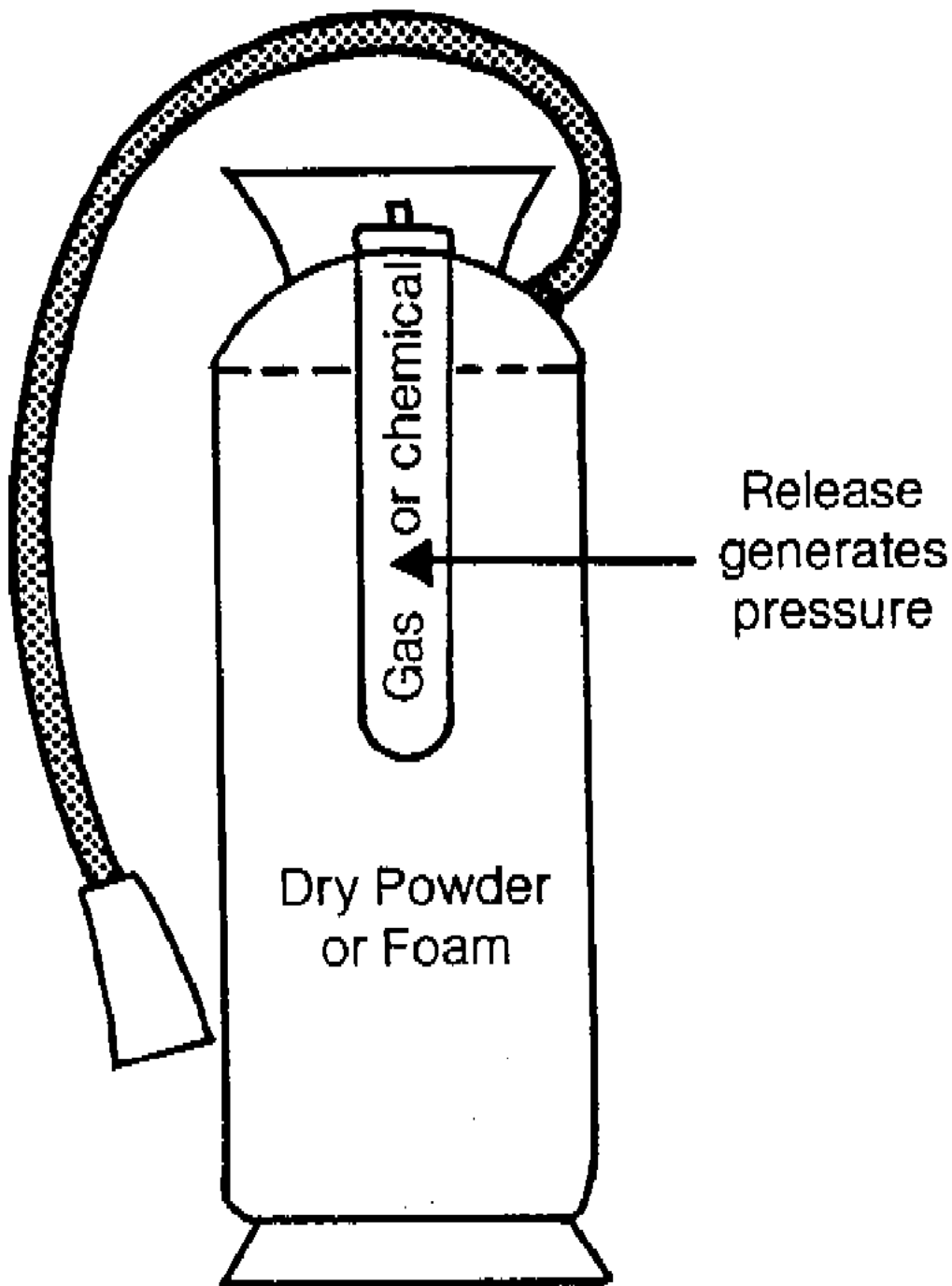
|  |   |
|--|---|
| <p>6</p>  | <p>7</p>  |
| <p>Hot surfaces, ovens, frying pans, flues</p>   | <p>Defective electrical connections</p>   |

OHT 7.4.1

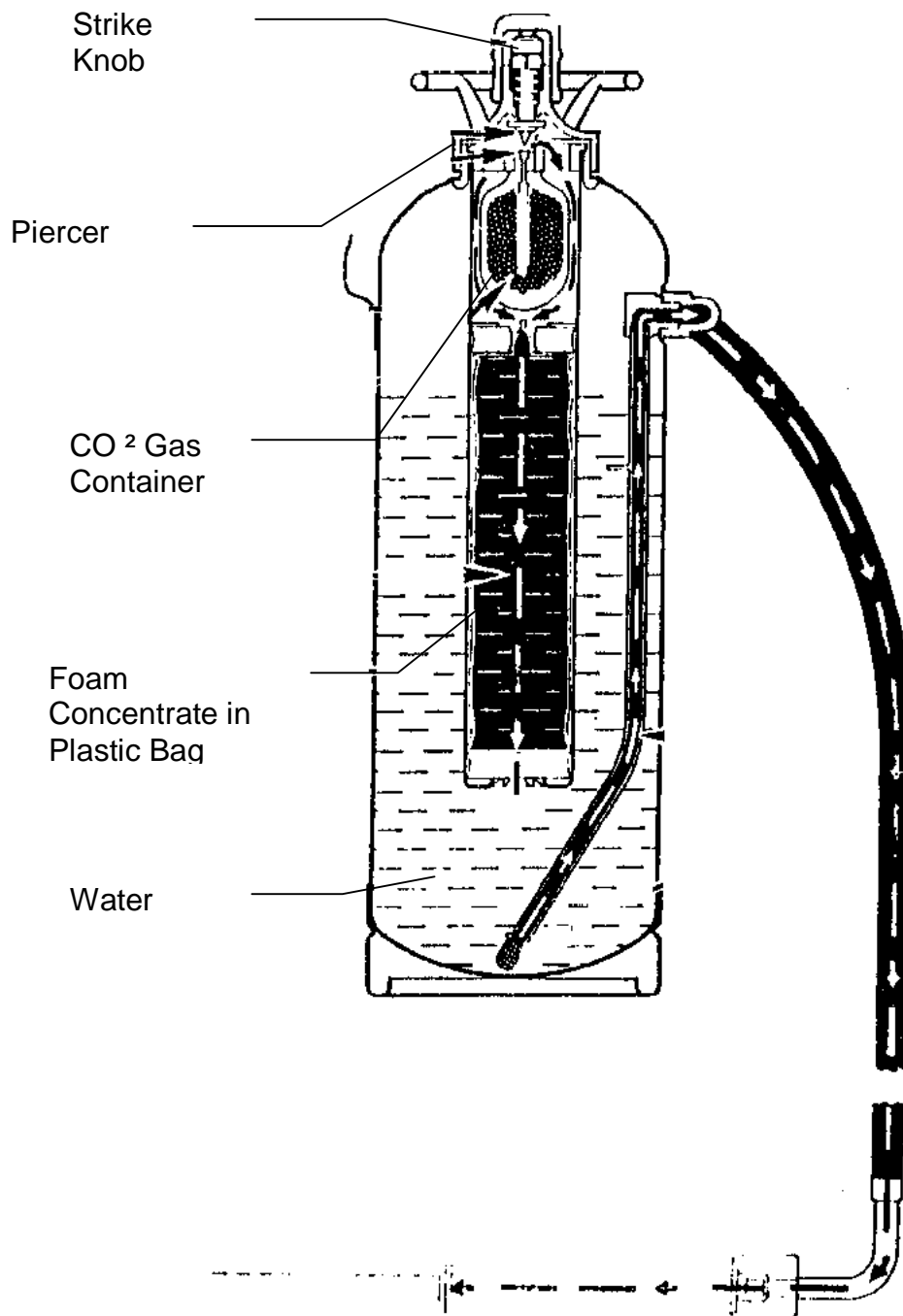
# CO<sub>2</sub> EXTINGUISHER (red with black band)



## DCP - Dry Chemical Powder (Red with a white band)



# FOAM EXTINGUISHER (Blue – not for electrical fires)



## **FIREFIGHTING SAFETY**

- **Raise the alarm immediately**
- **Tackle the fire quickly while it may be small**
- **Never tackle a larger fire alone**
- **Stop engines, shut off fuel and close hatches and doors**
- **Work as a team**
- **Shake extinguisher before use**
- **Cool, smother, remove fuel**
- **Extinguisher for electrical fires**
- **No water on burning liquid**
- **Have an escape route**
- **Care not to be asphyxiated or burnt**

## **FIREFIGHTING SAFETY**

- **Turn over any rubbish from the fire, wet it thoroughly**
- **Keep enclosed area shut until area has cooled down**
- **Cool around area with water**
- **Beware of re-ignition**

## **DANGERS ON A BOAT**

- **Electrical equipment**
- **Winches, line haulers**
- **Inadequate lashings, loose items not tied down or properly stored**
- **Slippery decks**
- **No railings**
- **Open hatches**
- **Using knives incorrectly**
- **Mooring lines and lifting lines breaking under strain**

## **DANGERS ON A BOAT**

- **Weakened wires and ropes**
- **Worn blocks and shackles**
- **Standing in the bight of a rope**
- **Incorrect handling of rope on a capstan**
- **Teeth and spikes when handling fish**
- **Entering confined spaces**
- **Not wearing appropriate safety gear**
- **Doors not latched open or shut**