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

- Spare Fuel
- Engine Tools and Spares
- Anchor and Rope
- Sea Anchor
- Alternative Propulsion
- Compass
- Flares
- Signalling Device
- Flotation Device
- Water in Container
- Food
- First Aid Kit
- Knife
- Bailing Device
- Shade
INFLATABLE LIFE RAFT

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

<table>
<thead>
<tr>
<th>Sea anchors</th>
<th>Buoyant bailer</th>
<th>Pump or bellows</th>
<th>Puncture repair kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paddles &amp; sponges</td>
<td>Torch</td>
<td>Whistle</td>
<td>Rescue signal table</td>
</tr>
<tr>
<td>Buoyant smoke signals</td>
<td>Instructions for immediate use</td>
<td>Thermal protective aid</td>
<td>Sea-sickness bag</td>
</tr>
</tbody>
</table>
LIFERAFT EQUIPMENT

Buoyant rescue quot
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

Painter line

O Ring

Weak Link

Deck Plate

Senhouse slip

Shackle

Drawbolt

HRU

Shackle
### LAUNCHING A LIFERAFT

1. Check painter is tied somewhere secure
2. Pull out sufficient line to reach ship’s side
3. Release senhouse slip
4. Carry to side of vessel, check for obstructions and throw in
5. Pull painter to inflate raft
6. Pull raft alongside and climb in without getting wet
7. If necessary, cut painter with knife kept in arch and move away
RIGHTING A LIFERAFT
SURVIVAL AFTER LAUNCHING

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

2. Look for survivors. Use quoit to reach them

3. Lift survivors into raft from under arms

4. Keep life raft together

5. Set off EPIRB

6. Set the sea anchor

7. Take sea-sickness tablets

8. Collect and ration fresh water

9. Use flares and radar reflector to aid detection
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
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 RANGES
MF/HF (SSB) RADIO
MF/HF (SSB) RANGES

DAY TIME

NIGHT TIME
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

OXYGEN

HEAT

FUEL
CAUSES OF FIRES

1. Poor housekeeping
2. Oil leaks and oil soaking into exhaust lagging
3. Hot surfaces, eg exhaust pipes, engine parts
4. Defective exhaust lagging
5. Welding or metal cutting
6. Auto ignition, eg oil dripping on a hot surface
7. Electrical fire (or smoke)
## CAUSES OF FIRES

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>** combustible materials</td>
<td>** matches and smoking</td>
<td>** defective electrical connections</td>
</tr>
<tr>
<td>![1] Combustible materials</td>
<td>![2] Matches and smoking</td>
<td>![3] Defective electrical connections</td>
</tr>
<tr>
<td>![4] Combustible materials</td>
<td>![5] Oil or gas stoves (gas bottles)</td>
<td></td>
</tr>
<tr>
<td>![6] Hot surfaces, ovens, frying pans, flues</td>
<td>![7] Defective electrical connections</td>
<td></td>
</tr>
</tbody>
</table>
CO₂ EXTINGUISHER
(red with black band)
DCP - Dry Chemical Powder
(Red with a white band)
FOAM EXTINGUISHER
(Blue – not for electrical fires)

- Strike Knob
- Piercer
- CO₂ Gas Container
- Foam Concentrate in Plastic Bag
- Water
OHT 7.5.1

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
OHT 7.5.2

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