

Safety



FIRE



General emergency alarm

"abandon ship!"

**Seven short blasts
followed by
one long blast.**



Fire *prevention* equipment,



fire *detection* equipment



**and
fire *fighting* equipment**



must regularly be checked and tested.

FIRE

If you cannot extinguish the fire on your own in two minutes, you must

. raise the fire alarm



(all passengers and crew and, if necessary, shore based stations and vessels in the *vicinity*, must be *alerted*.)



. try to *control* the fire;

. find out what is burning by the colour and *odour* of the smoke;

. take *precautions* against *toxic* smoke; (wind from abeam will reduce risk of *suffocation*);

. check the cargo plan for any dangerous goods.

fire fighting

ACTIONS:

- . Shut off any ventilation
- . shut off any *ignition source*
- . close all the *fire-retarding* doors
- . start the fire *extinguishing pumps*
- . extinguish the fire
- . keep *adjacent spaces* wet
- . prepare *first aid* equipment
- . hand out *breathing equipment*.



Symbols for fire control plan





**PUSH-BUTTON
FOR FIRE-ALARM**



**HORN FOR
FIRE ALARM**



**FIRE-ALARM
BELL**



**MANUALLY
OPERATED
CALL POINT**



FIRE AXE



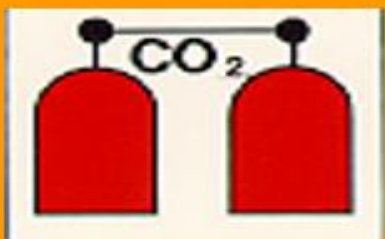
**SPACE
PROTECTED
BY AUTOMATIC
FIRE ALARM**



**SPACE PROTECTED
BY CO₂**



CO₂ HORN



**CO2 RELEASE
STATION**



HEAT DETECTOR



HALON HORN



**FOAM
INSTALLATION**



**FOAM GUN
(MONITOR)**



FOAM NOZZLE



**SPACE
PROTECTED
BY FOAM**



FOAM VALVE



FIRE PUMP



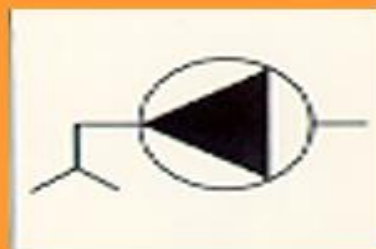
**WATER GUN
(MONITOR)**



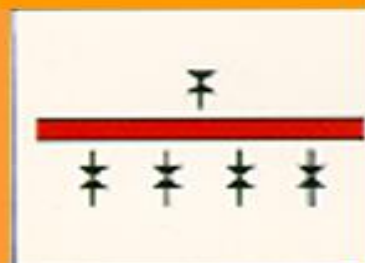
**SPACE
PROTECTED BY
DRENCHING
SYSTEM**



**WHEELED
FIRE EXTINGUISHER**



BILGE PUMP



**DRENCHING
INSTALLATION**



**EMERGENCY
BILGE PUMP**



**REMOTE CONTROLLED
PUMPS OR
EMERGENCY SWITCHES**



**VALVES FOR
DRENCHING
SYSTEM**



FIRE STATION



**SMOKE
DETECTOR**



**FIRE DEMPER
IN
VENT DUCT**



**REMOTE CONTROLLED
SKYLIGHTS**



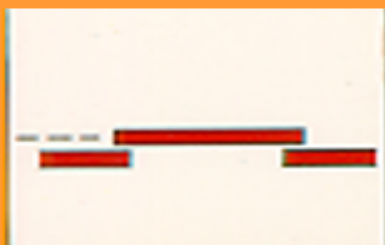
**REMOTE CONTROLLED
FUEL/LUBE OIL
VALVES**



CONTROL STATION



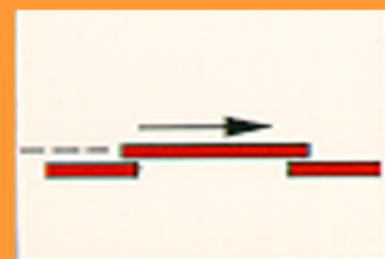
**PORTABLE
FOAM APPLICATOR**



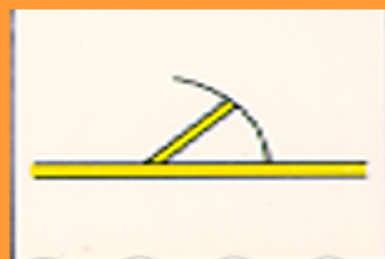
**A-CLASS
FIRE DOOR**



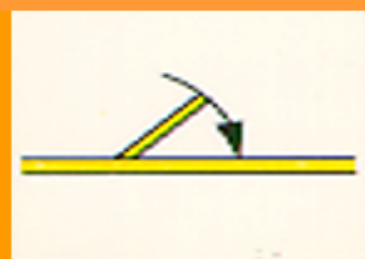
**A-CLASS
SELF-
CLOSING
FIRE DOOR**



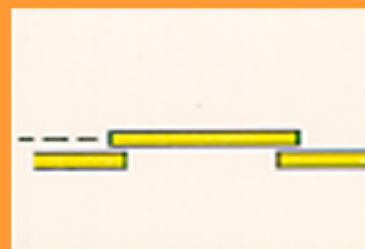
**SLIDING
A-CLASS
SELF-CLOSING
FIRE DOOR**



**B-CLASS
FIRE DOOR**



**B-CLASS
SELF CLOSING
FIRE DOOR**



**B-CLASS
SLIDING
FIRE DOOR**



GAS DETECTOR



FLAME DETECTOR



FIRE ALARM



**SPRINKLER
INSTALLATION**



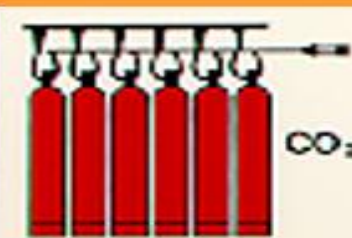
**SPACE
PROTECTED BY
SPRINKLER
INSTALLATION**



**SPRINKLER
HORN**



**SPRINKLER
SECTION
VALVE**



CO2 BATTERY



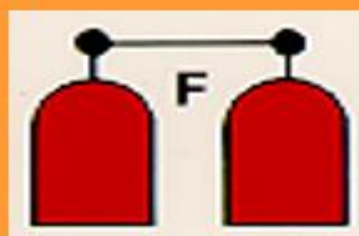
**POWDER
INSTALLATION**



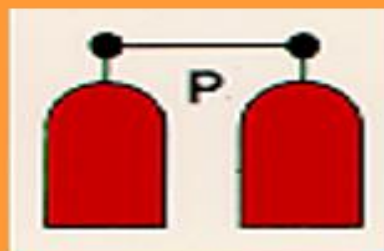
**POWDER
HOSE AND HANDGUN**



**POWDER
MONITOR
(GUN)**



**FOAM
RELEASE
STATION**



**POWDER
RELEASE
STATION**



**FIRE MAIN
WITH
FIRE VALVES**



**CLOSING APPLIANCE
(EXTERIOR INLET/
OUTLET VENTILATION)**



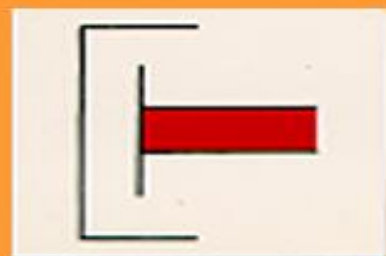
**REMOTE VENTILATION
SHUT-OFF**



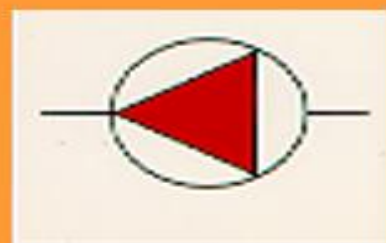
MAIN VERTICAL ZONE



**HOSE BOX WITH
SPRAY/JET
FIRE NOZZLE**



**SHORE
CONNECTION**



FIRE PUMP



**WATER FOG
APPLICATOR**



**LOCKER WITH
FIREMAN'S
OUTFIT**



**LOCKER
WITH
ADDITIONAL
BREATHING APPARATUS**



**LOCKER WITH
ADDITIONAL
PROTECTIVE CLOTHING**



PRIMARY ESCAPE



SECONDARY ESCAPE



**A-CLASS
DIVISION**



**EMERGENCY
GENERATOR**



**INERT GAS
INSTALLATION**



**EMERGENCY
SWITCHBOARD**



**HIGH EXPANSION
FOAM
SUPPLY-TANK**



**CO2/NITROGEN
BULK
INSTALLATION**



STC-ROTTERDAM

A large, intense fire is burning on a ship at night. The fire is bright orange and yellow, with thick black smoke rising from it. The ship's structure is visible in the background, partially obscured by the fire. The overall scene is dark, with the fire providing the primary light source.

Abandon ship!

If the fire is *massive* and *advanced*, and cannot be extinguished, the ship must be *abandoned*.

ROLL CALL

***At the assembly station
(muster station)
all the names of the
persons on board
must be called out
to see if anyone is missing.***



Lifeboat and davit



Free-fall davit



PERSON OVER BOARD

When a person has fallen overboard, you must

- . call out “MAN (OR WOMAN) OVER BOARD!”**
- . throw a lifebuoy into the water**
- . keep your eyes on the person in the water**
- . indicate to others the person’s position.**

M.O.B.



Symbols relating to life-saving appliances and arrangements.

The safety officer is responsible for the maintenance of all the *life-boats, rafts, M.O.B. boat, life buoys, life belts, flares and rockets and the emergency transmitter.*





**RELEASE GRIPES FROM
GRAVITY OR *LUFFING*
DAVIT.**



**LOWER LIFEBOAT
TO WATER.**



**LOWER LIFERAFT
TO WATER.**



**LOWER RESCUE BOAT
TO WATER.**



SECURE HATCHES.



FASTEN SEAT BELTS.



START WATER-SPRAY.



START ENGINE.



START AIR SUPPLY.



RECOMMENDED SYMBOLS INDICATING THE LOCATION OF:

emergency equipment, e.g.



assembly stations (muster stations), e.g.

and escapes, e.g.





LIFE-BOAT



**RESCUE
BOAT**



LIFE-RAFT



**DAVIT-LAUNCHED
LIFE-RAFT**



**LIFE-BUOY
WITH LIFELINE**



**LIFE-BUOY
WITH LIGHT**



**LIFE-BUOY
WITH
LIGHT AND
SMOKE**



LIFE-JACKET



**CHILD'S
LIFE-JACKET**



**RADAR
TRANSPONDER**



**SURVIVAL CRAFT
DISTRESS SIGNAL**



**MUSTER STATION
(OR: ASSEMBLY
STATION)**



**EMBARKATION
LADDER**



**EVACUATION
SITE**



**IMMERSION
SUIT**



**EMERGENCY
POSITION
INDICATING
RADIO BEACON**



**EMERGENCY
EXIT**



EXIT



**SURVIVAL CRAFT
PORTABLE RADIO**



**ROCKET
PARACHUTE
FLARES**



**LINE-THROWING
APPLIANCE**





explosive



flammable



toxic

DANGEROUS GOODS



**oxidizing
agent**








**harmful or
irritating**



corrosive

Emergency response in case of spill or leak:

- . evacuate the area 
- . prevent *exposure* to skin and eyes
- . use a breathing apparatus 
- . use a waterspray to reduce the *vapour*
- . do not smoke; do not use *flares* or 
open flames
- . shut off any *source of ignition* 
- . stop *leakage*; let leakage *evaporate*;
scoop away the remainder 
- . cover *contaminated* goods with tarpaulins.



Emergency response in case of a fire:

. SMALL FIRE:

use dry chemical or carbon
dioxide CO_2

. MASSIVE OR ADVANCED FIRE:

use water spray, *hose* spray or
monitor-nozzles to cool the area;
evacuate the area.



Emergency response in case of exposure to dangerous goods

CALL A PHYSICIAN AND PRACTISE FIRST AID:

- . carefully remove *contaminated* clothes**
- . eyes: *flush* with *luke-warm*, low pressure running water for at least 15 minutes**
- . skin: in case of *frost-bite*, *thaw* frosted parts**
- . inhalation: remove patient into fresh air; give *oxygen* or *artificial respiration***
- . ingestion: with certain chemicals patients are not allowed to *vomit*.**

DANGEROUS GOODS LABELS



Orange coloured labels

**Indicate
dangerous goods that must be
separated from
flammable liquids
by an intermediate space or
on deck by at least 12 metres.**



Red coloured labels

Indicate

dangerous goods that must be separated from

flammable solids,



spontaneously combustible agents



or agents that are

dangerous when wet



**by a longitudinal intermediate space
or on deck by at least 24 metres.**

Green coloured labels

**Indicate
dangerous goods that must be
stored at a safe distance from
*explosive goods.***



Yellow coloured labels

Indicate
dangerous goods that may not be
stored near
flammable gas,
non-flammable compressed gas
or
toxic gas.





explosive



flammable



toxic



**oxidizing
agent**



**harmful or
irritating**



corrosive



MARINE POLLUTANT

1



explosive

2



**non flammable
compressed gas**

3



**flammable
liquid or gas**

4



flammable solid

4



**spontaneously
combustible**

4



**dangerous
when wet**



5

oxidizing agent



6

toxic agent



6

**infectious substance
(bio-hazard)**



7

Radio active



8

corrosive



9

**miscellaneous
dangerous goods
and articles**