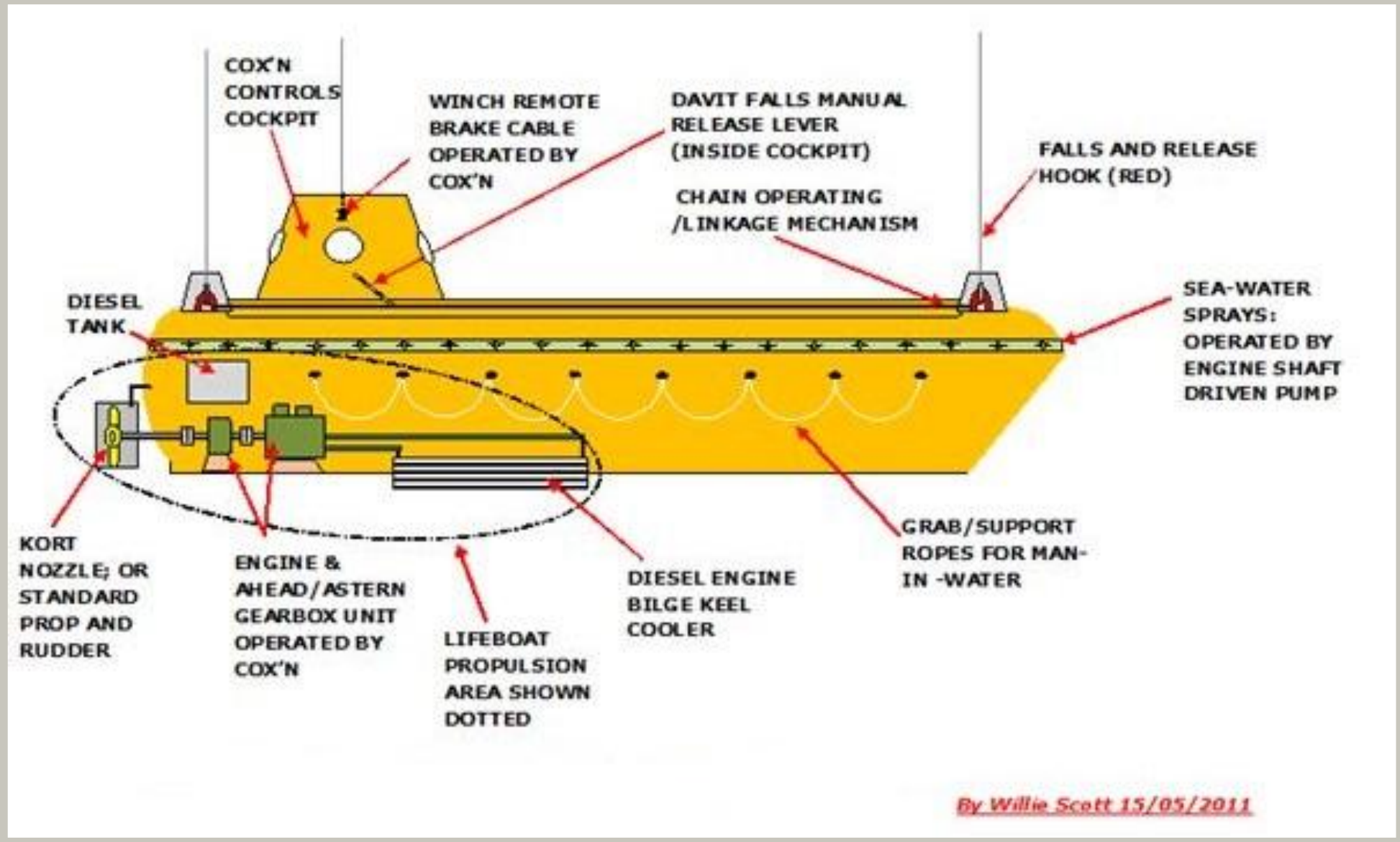
Shipboard lifeboat

A PRESENTATION BY URIUMOV O., GROUP 121/1

1. Enclosed lifeboat

- A **lifeboat** is a small, rigid or inflatable boat carried for emergency evacuation in the event of a disaster aboard a ship.
- **Enclosed** lifeboats are the preferred lifeboats fitted on modern merchant ships, due to their superior protection against the elements (especially heat, cold and rough seas).
- All **tanker** freefall lifeboats are equipped with a water-spraying system for fire protection and an air supply system.

2. Construction



3. Materials

- The totally enclosed lifeboat is made of such a material that is **not affected by fire**.
- The boat hull is **strengthened in the keel area** to withstand the impact forces
- The hull of lifeboat is made of the **fire reinforced plastic** (F. R. P. — Fire retardant). The space between the inside and outside hull is filled with **polyurethane foam** which will supply sufficient buoyancy for the boat.

4. Capacity

- Totally enclosed lifeboats are available in different sizes, ranging from a capacity of **22** persons to **150** persons.
- Lifeboat capacity is specified and listed on the ship's **"Safety equipment certificate"**.
- Fact: The *Titanic*'s boats had a capacity of 1,178 people on a ship capable of carrying 3,330 people.

5. Type of engine

- Each lifeboat is powered by an inboard diesel engine that drives a fixed-pitch propeller. These engines have power that ranges from **20** to **560** hp.
- All engines are built in accordance with the International Convention of Safety at Sea (SOLAS) and the International Maritime Organization (IMO), and where the approval procedures require the engine to start at a temperature of **minus 15** to **minus 25** degree centigrade; as well as 360 degree rotation tests, and engine performance submerged in water to the mid crankshaft level.

6. Launching procedure

Fully Enclosed Lifeboat Launching From Stowed Position

Procedures for Launching in a Safe Atmosphere (Solas Chapter III, Regulation 28)

1 INITIAL ACTIONS

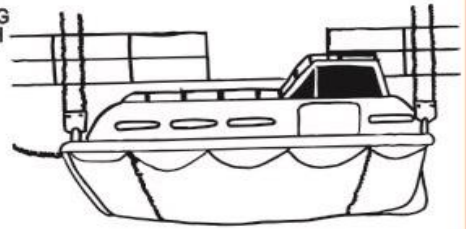
- MAKE SURE HARBOUR SECURING PINS ARE REMOVED.
- DISCONNECT POWER CHARGE CABLE.
- CLOSE DRAIN PLUGS.
- PLACE E.P.I.R.B. AND S.A.R.T. ON BOARD
- BOARD WHEN ORDERED TO, TAKE A SEAT AND BUCKLE SEAT BELT

ACTIONS FOR LAUNCHING 2

- RELEASE GRIPES AND SECURING WIRES.
- SECURE HATCHES.
- IF IN A SAFE ATMOSPHERE: OPEN VENTS.
- IF IN A DANGEROUS ATMOSPHERE: CLOSE VENTS
- THE BOAT CREW MUST WEAR INFLATABLE LIFEJACKETS

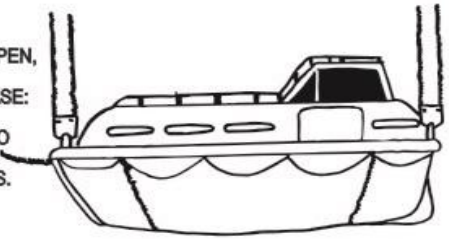
3 LOWER TO WATER

- ENSURE THE LAUNCHING AREA IS CLEAR
- OPERATE BRAKE RELEASE
- BE AWARE THAT BOAT MAY SWING DURING LAUNCH
- LOWER BOAT AT A STEADY RATE



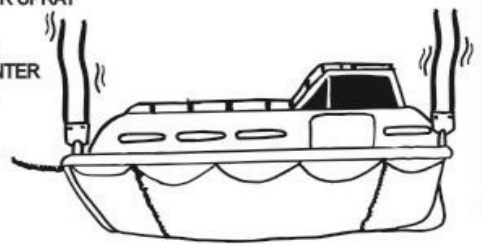
ENTERING WATER 4

- LET THE BOAT SETTLE IN THE WATER
- KEEP BRAKE OFF
- RELEASE FALLS
- IF FALLS DO NOT OPEN, OPERATE EMERGENCY RELEASE:
  A) BREAK GLASS.
  B) MOVE LEVER TO GREEN ZONE.
  C) RELEASE FALLS.



5 LETTING GO

- START ENGINE
- IF IN A DANGEROUS ATMOSPHERE:
  A) OPEN AIR SUPPLY
  B) OPEN WATER SPRAY VALVES.
- WHEN READY RELEASE PAINTER
- STEER AWAY FROM SHIP



FINAL ACTIONS 6

- RESCUE ANY SURVIVORS IF SAFE TO DO SO
- ONCE CLEAR OF SHIP, STREAM SEA ANCHORS
- OPERATE E.P.I.R.B. AND S.A.R.T.