



Warship Damage Control

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Introduction

- Jack Gracie
- 2nd Year Naval Architecture and Ocean engineering
- 3 years Royal Navy
- Experience in Warship damage control

Road map

- Aspects of Warship damage control
- Prepare for the inevitable
- Initial reactions
- Damage control
- War vs Peace
- Command response
- Train to fight

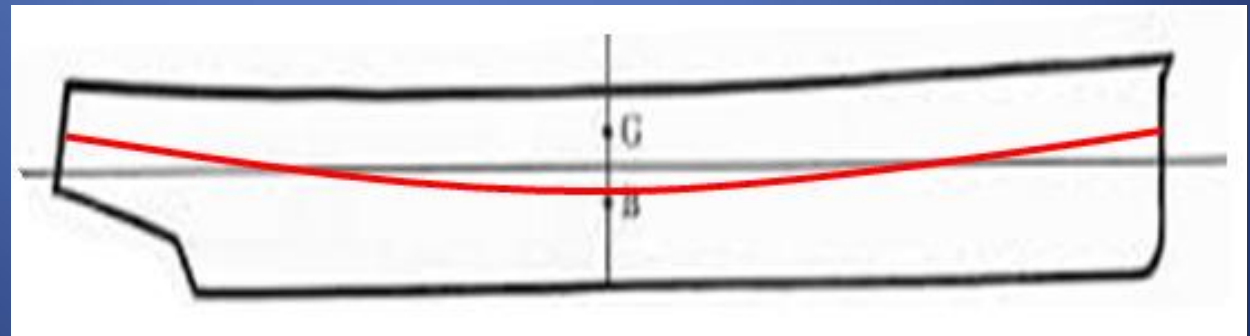
What is the difference

- Collins English dictionary
 - ‘Warship’ : A vessel armed, armoured, and otherwise equipped for naval warfare.
 - ‘Vessel’: A passenger or freight-carrying ship, boat, etc.

- What does this mean?

Aspects of Warship Damage Control

- Water tight integrity States
- X-ray, Yankee, Zulu
- Red opening's
- Emergency stations



Aspects of Warship Damage Control

- Manpower control states
- 1, 2, 3
- Gas control states
- Alpha



Prepare for the inevitable

- Monitoring of systems
- Location of SPE
- Location of EDBA
- Maintenance of DC equipment
- Whole crew training and knowledge
- Kill cards/ compartment cards



Equipment

- SPE's
- HPSW
- AFFF (Aqueous Film Forming Foam)
- Water pumps
- Wooden wedges, GRP domes
- Timber
- Anything

Initial Reactions

Incident Fire or Flood

- LVA-Pipe
- HQ1
- DC Stateboard
- Continual aggressive attack
- Isolations made
- Command briefed – not only on internals

Flood

- Find and stem the flow of water
- Reduce effect of free surface
- Shoring
- Evacuation of compartments

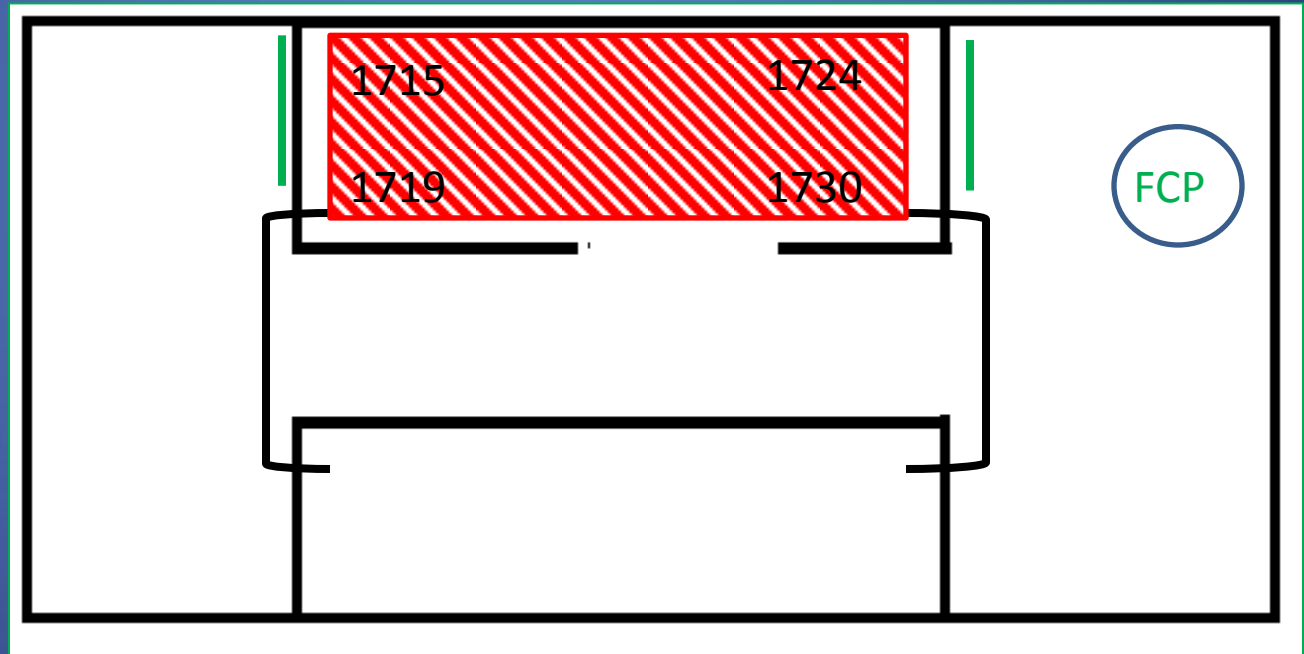


Fire

- Use of extinguishers
- Initial attack
- BA Attack
- Fire team
- Containment teams deployed
- Inert gas Dump
- Sentry posted



DC state board



War vs Peace

- State 1 posture
- Command Aim
- Maintenance of life
- Loss of compartments/ability

Command Response

- Command decision
- Design redundancy
- Command advisors



Train to Fight

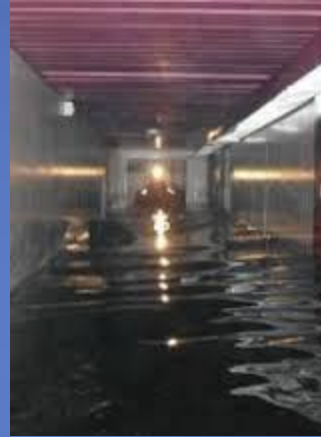
- Training is normally a weeks basic course at HMS Phoenix
- Covers Fire Fighting, Flood Fighting and CBRNDC
- Elements of Fire Triangle basic skills
- Intense flood fighting exercise in the DRIU



DRIU



Where the RN got it right



Questions