Technology, Modelling and Simulation
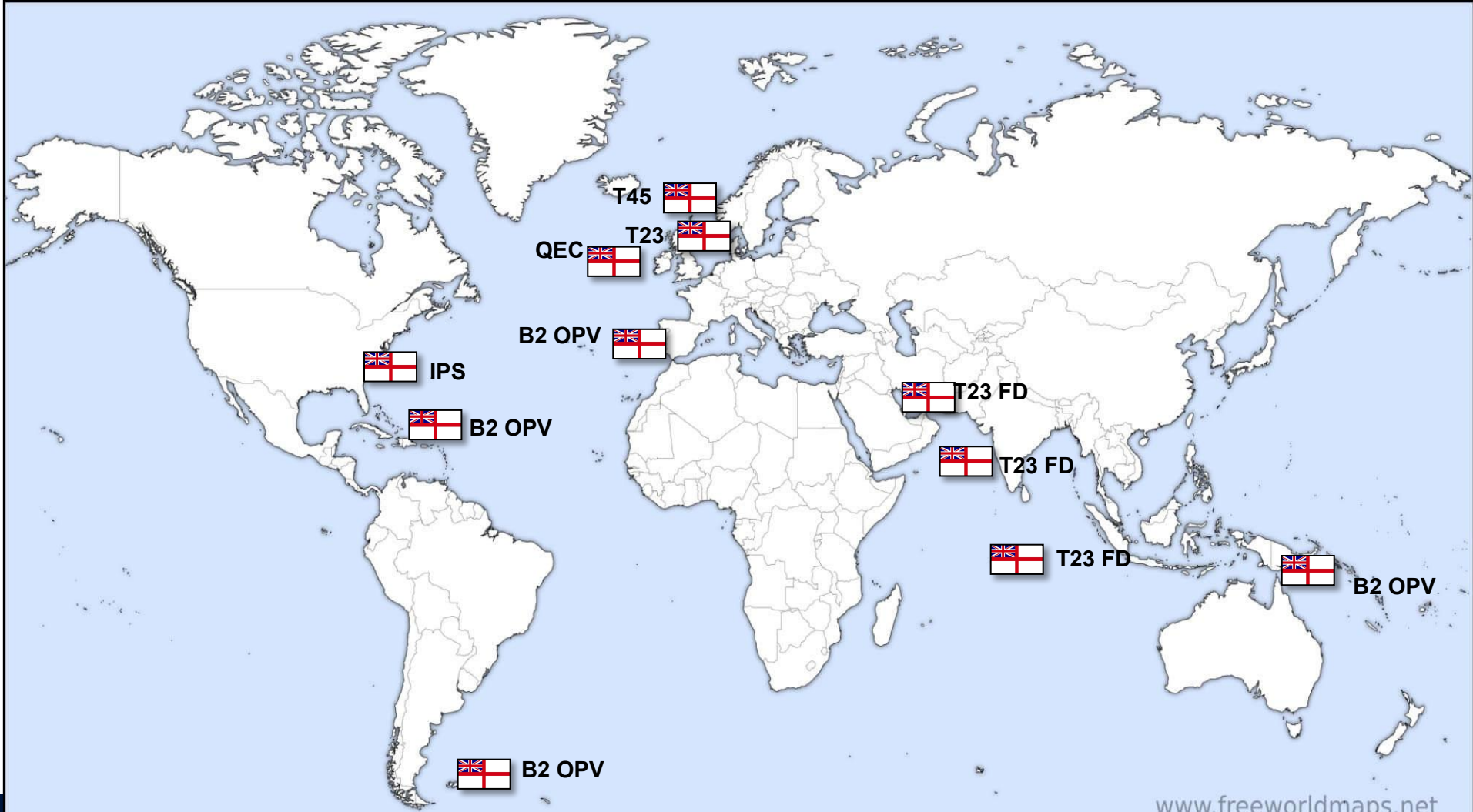

A FOST perspective

Overview

- Current FOST damage control training developments and challenges

- Delivering realistic collective training to a forward deployed Navy

- Aim towards a 75/25 live/synthetic training environment by 2025, 50/50 by 2030

Training Challenges

- Training objective has not changed
- Maximise potential
  - People
  - Platforms
- Evolving technology
  - Procurement cycle – maintaining the cutting edge
  - New Platform Cell
- Agility
- Blended training solutions
- Survivability vs Lethality

Global Forward Deployed & Embedded Training - 2022

Forward Deployed

Challenges
- Live training assets in UK
- Managing workforce turnover
- Training intensity
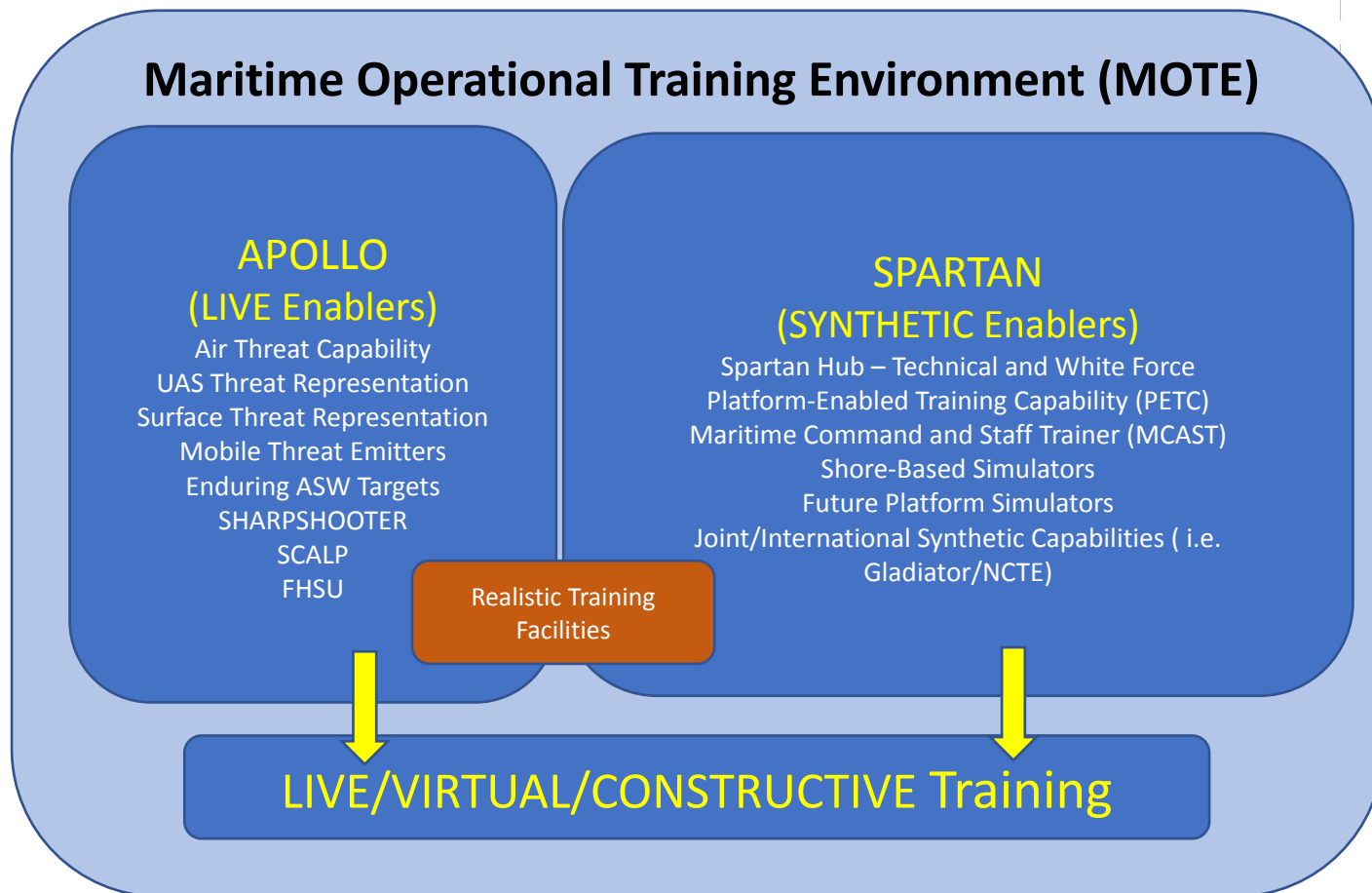- Training environment
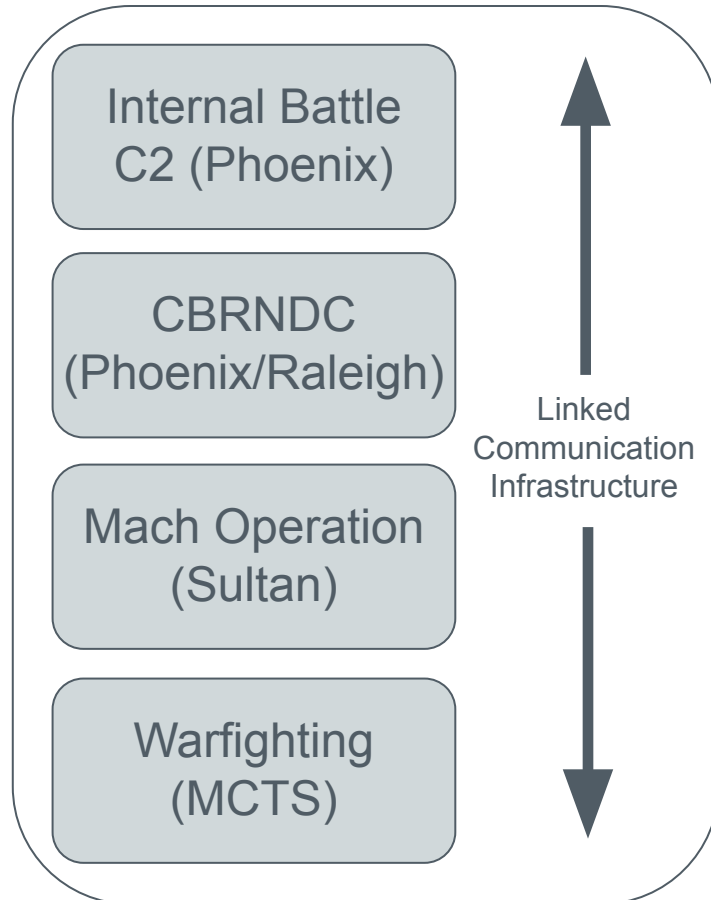- Assurance levels

Opportunities
- Embed:
  - Rapport
  - Time with crew
- Organic training organisation
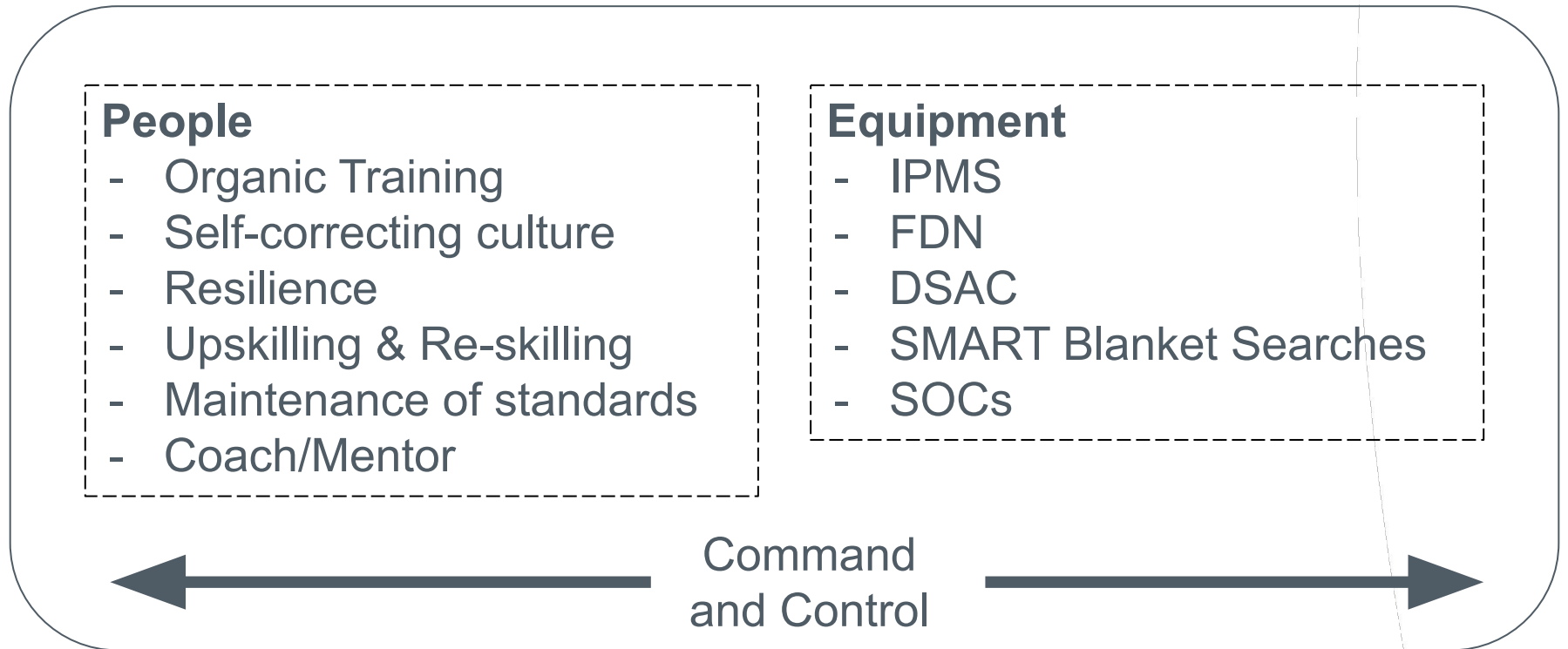- Technology
- Synthetic Training

MOTE Collective Training

Maritime Operational Training Environment (MOTE)

APOLLO
(LIVE Enablers)
Air Threat Capability
UAS Threat Representation
Surface Threat Representation
Mobile Threat Emitters
Enduring ASW Targets
SHARPSHOOTER
SCALP
FHSU

Realistic Training Facilities

SPARTAN
(SYNTHETIC Enablers)
Spartan Hub – Technical and White Force
Platform-Enabled Training Capability (PETC)
Maritime Command and Staff Trainer (MCAST)
Shore-Based Simulators
Future Platform Simulators
Joint/International Synthetic Capabilities (i.e. Gladiator/NCTE)

LIVE/VIRTUAL/CONSTRUCTIVE Training

Blended Training in the DCFF arena

Internal Battle C2 (Phoenix)

CBRNDC (Phoenix/Raleigh)

Mach Operation (Sultan)

Warfighting (MCTS)

Linked Communication Infrastructure

- Staggered approach
- Standalone training can evolve into fused training
- Ability to vary complexity
- Reduce training burden on ships
- Time efficient
- Safe training environment

FOST 2023

People
- Organic Training
- Self-correcting culture
- Resilience
- Upskilling & Re-skilling
- Maintenance of standards
- Coach/Mentor

Equipment
- IPMS
- FDN
- DSAC
- SMART Blanket Searches
- SOCs

Command and Control

Picture → Priority → Action → Review → Picture

COMMAND AIM

DSAC – QEC – Case Study

- DSAC/IPMS
- System integration
- Common operating philosophy (T26/T31)
- CBRNDC in the digital age
- Staged response to DCFF incidents
- Minimise impact on FD operations

Conclusions

- Final outcome of training delivery unchanged
- Agility in training will be required to meet future demands
  - Forward Deployed
  - Introduction of new platforms and technologies
- A interconnected live / synthetic training environment central to future plans – MOTE
- Technology represents an opportunity to enhance training
- Live DCFF training remains central to a collective training solution