



**Army**  
*Serving our Nation*

# CHIEF OF ARMY'S FUTURES ACTIVITY – AMPHIBIOUS WARFARE

**PURPOSE:** To introduce amphibious capability developments that will have significant impact on Army in the longer term

**METHOD:** Central presentation

**ENDSTATE:** Understand the potential for change to Army through introduction of the amphibious capabilities.



**Combat & Combat Support Development – Army**



# **Australia's Future Amphibious Warfare Capability**

LTCOL Jon Hawkins

*Joint Amphibious Capability Implementation Team*



# Scope

- ▶ Amphibious Deployment and Sustainment System - JP2048
- ▶ Australia's Amphibious Concept





2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

LPA1

LPA 2

LCM 2000

LCM8

DECISION POINT  
ROLE OF LCM2000

DECISION POINT  
FUTURE OF LCM2000

DECISION POINT  
FUTURE OF LCM8

LCM8  
Ship to Shore  
Connector roles

LCM1E -ADAS

LCM1E -ADAS

LCM1E - trg/Maint

Independent Watercraft tbc

POA 2014/15

LCM1E (tbc)

PHASE 5

POA 2012

POA 2013

POA 2015

LCM2000  
LIFE OF TYPE  
2016

LCM8  
LIFE OF TYPE  
2017

POA 2011

LCH

LCH





# JP 2048 – Amphibious Deployment and Sustainment (ADAS) System

Phase 1- LCM2000 Watercraft.

Phase 2 - Study

Phase 3 - LHD Watercraft

Phase 4 A/B - 2 x CANBERRA Class LHD

Phase 4 C - Strategic Sealift Capability

Phase 5 - Independent Watercraft





# Phase 3 – LHD Watercraft

- 23 kts unladen, 12 kts laden.
- Carries a M1A1 Abrams Main Battle tank

► Delivery 2012 /13-2014

► Navy crewed

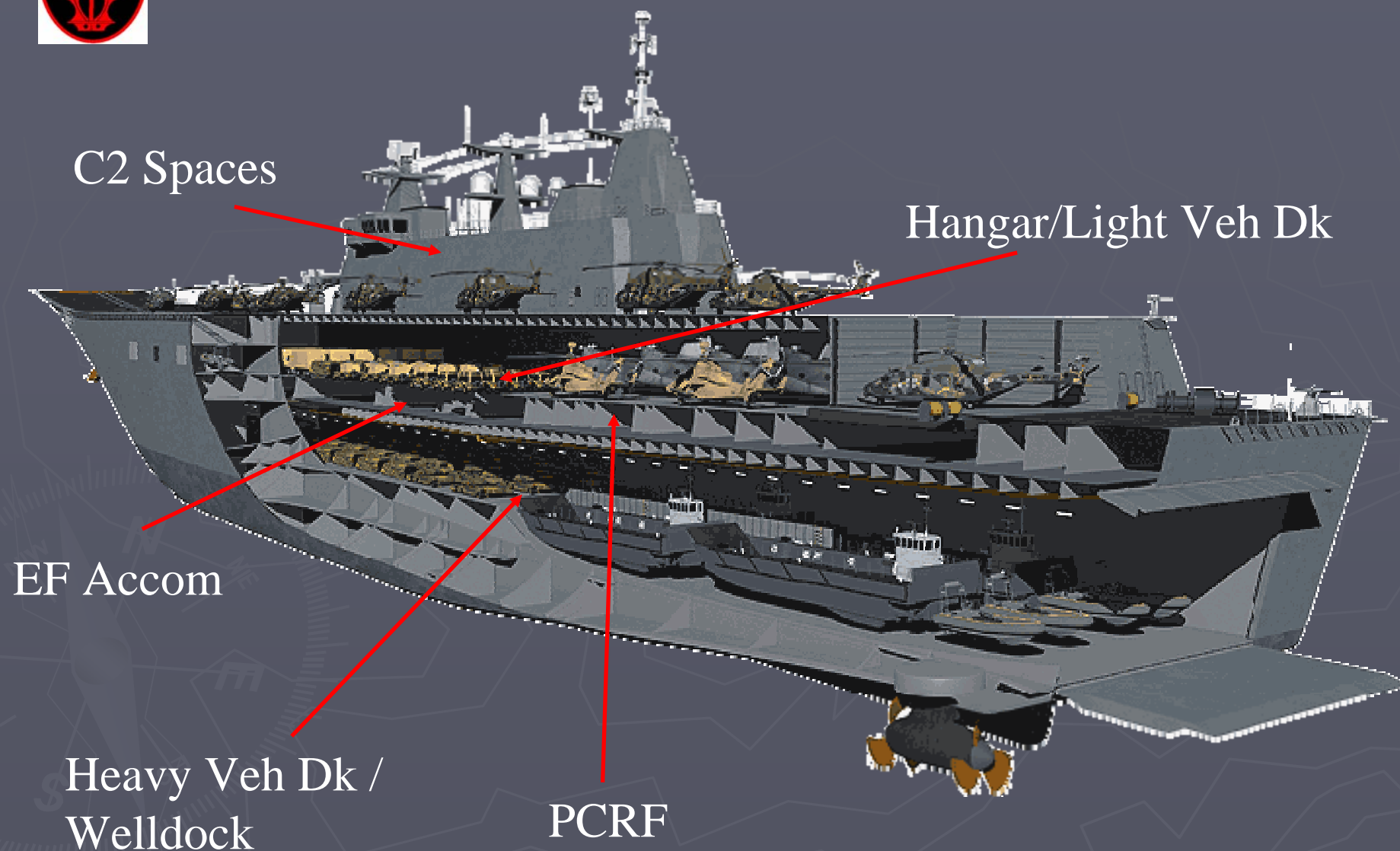
► Four per LHD





# CANBERRA CLASS Amphibious Assault Ships (LHD)

JP 2048 Ph4A/B



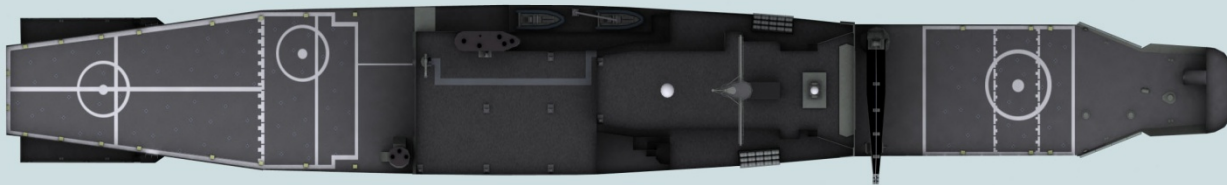
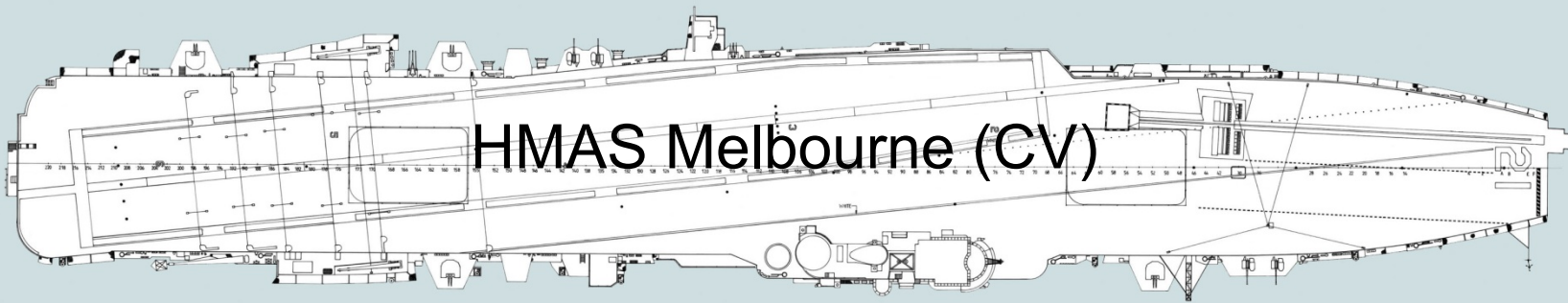
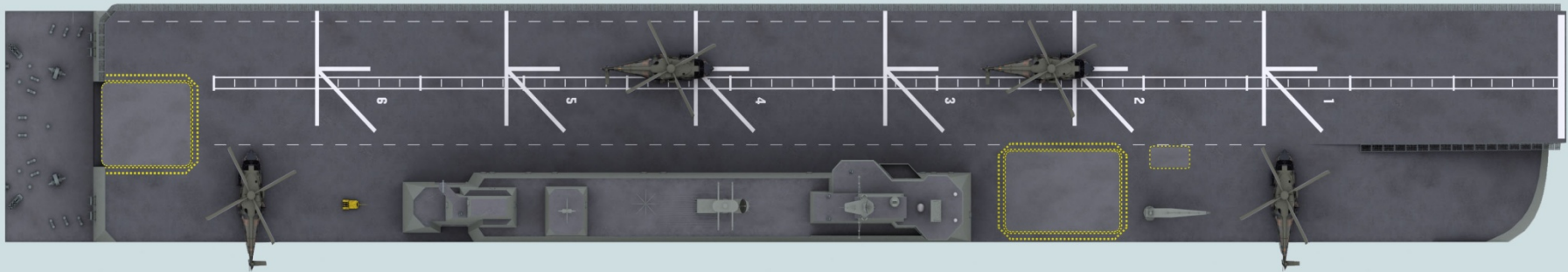
•Each LHD will embark 1000 troops and 8-10 helos





# RN LPD Steel Beach, Well Dock













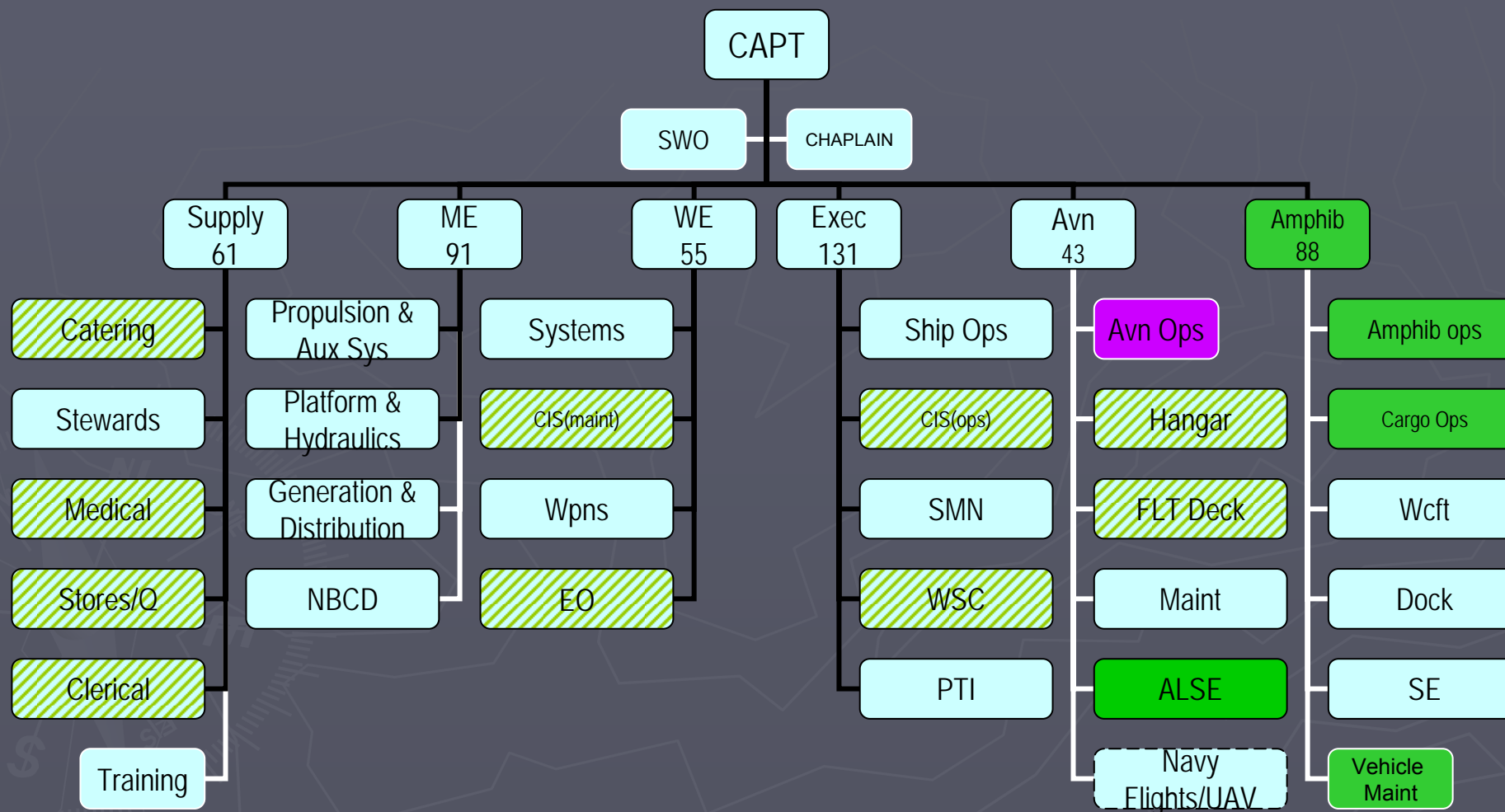


# DRAFT SCHEME OF COMPLEMENT

- ▶ Still “Indicative Draft” until BAES TNA returned and analysed
- ▶ Presently around 430 (which includes 73 pers whose AFS comes from elsewhere: Navy flight of 19, Amphib Beach Team and 6 crews for four landing craft of 46)
  - Navy: ~ 330 (+ 37)
  - Army: 56
  - RAAF: 2 (Air Traffic Controller)
- ▶ A true Joint Crew.

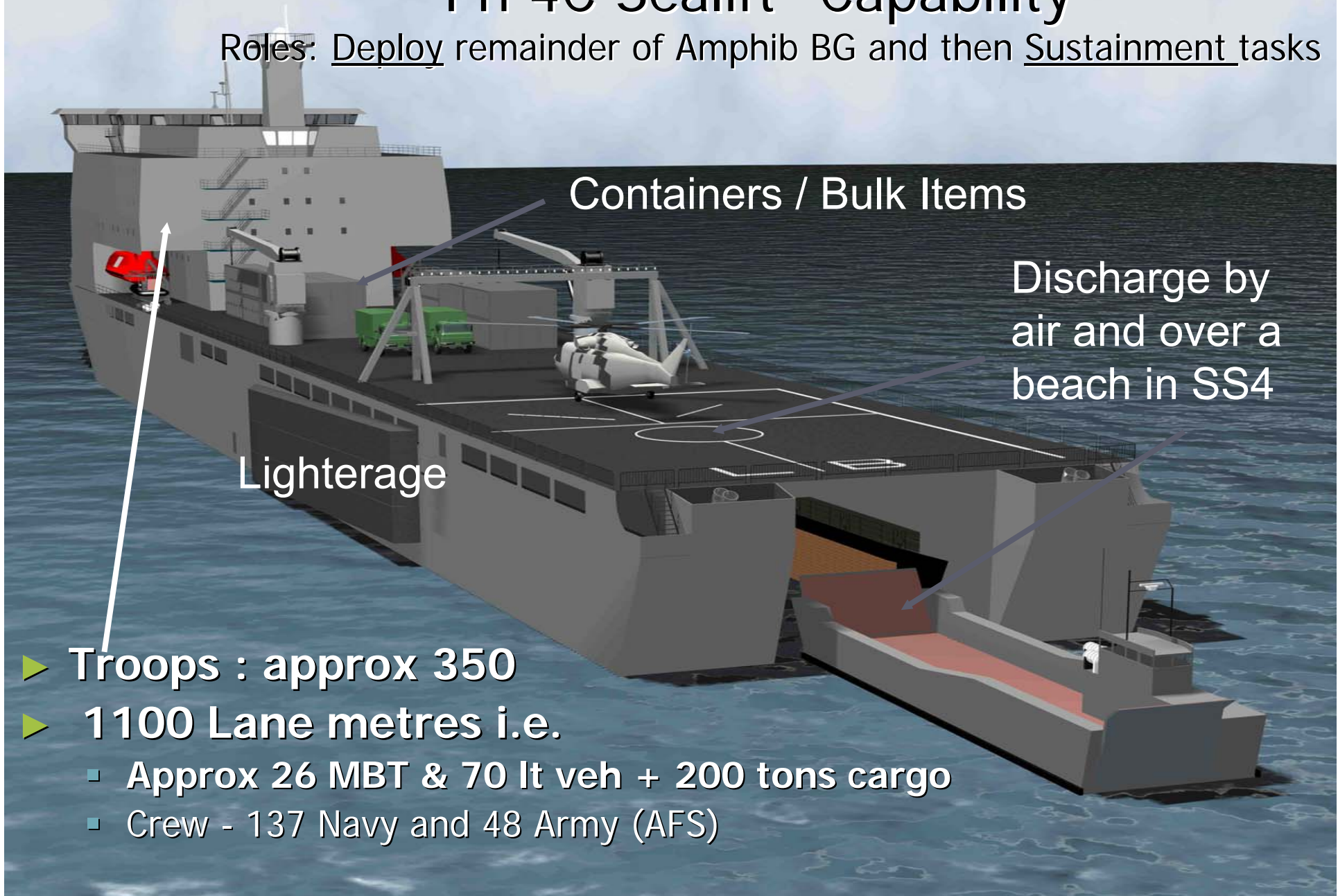


# DEPARTMENTAL STRUCTURE



# Ph 4C Sealift "Capability"

Roles: Deploy remainder of Amphib BG and then Sustainment tasks



- ▶ Troops : approx 350
- ▶ 1100 Lane metres i.e.
  - Approx 26 MBT & 70 lt veh + 200 tons cargo
  - Crew - 137 Navy and 48 Army (AFS)



# Bay Class LSD(A)







# Ph 4C lighterage

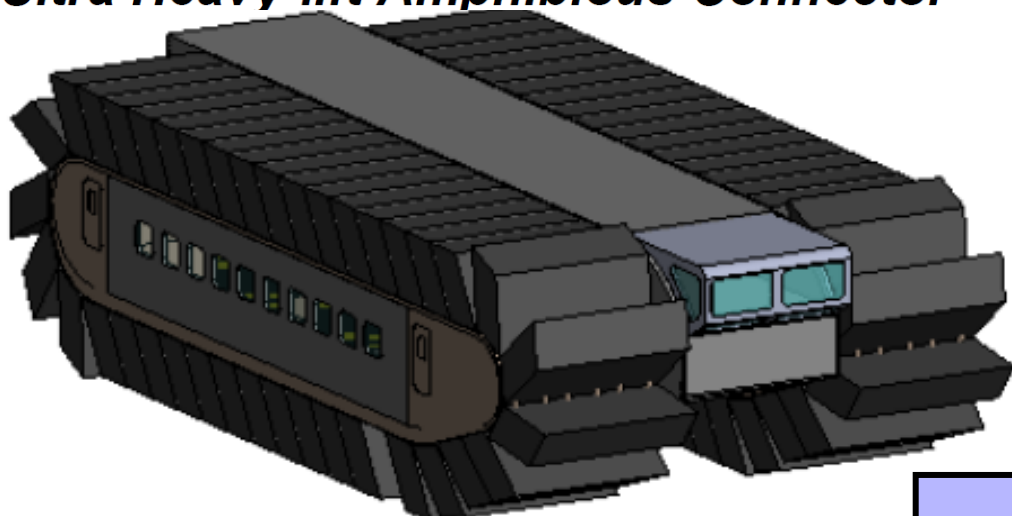
LOTS Enabler. < 9% of  
ports in region have Ro-Ro.





# Ph 5: 6 x LCH Replacement

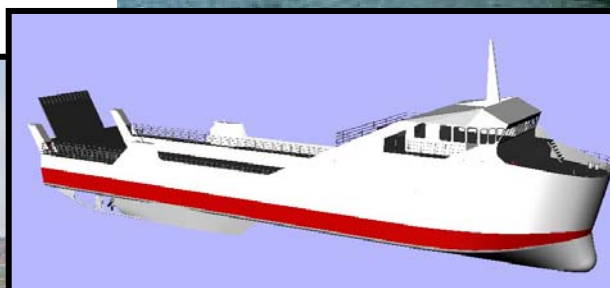
*Ultra Heavy-lift Amphibious Connector*



Stern Landing Vessel



47 Army AFS  
47 RAN AFS





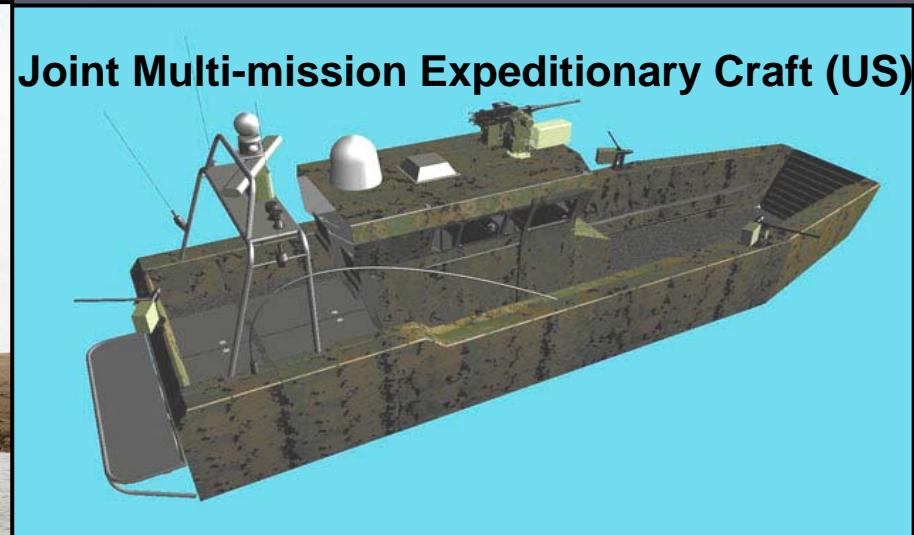


# Deployable Tactical Littoral Craft Manoeuvre ("Riverine Warfare")

**Small Unit Riverine Craft  
(USN, NECC)**



**Joint Multi-mission Expeditionary Craft (US)**



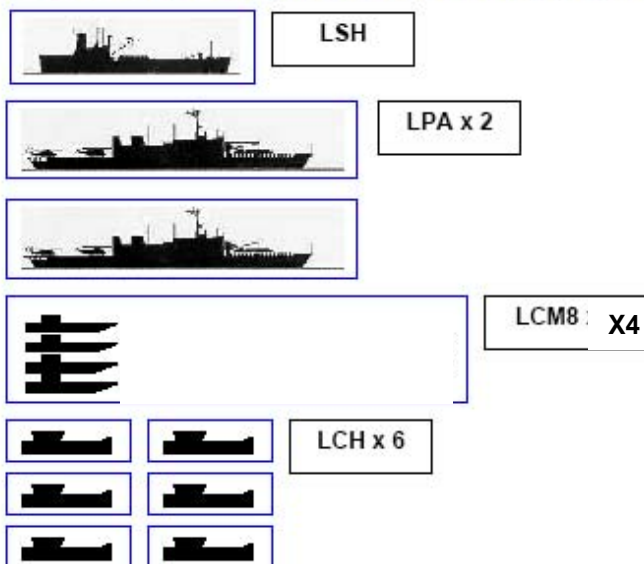
**Offshore Raiding Craft (RM)**





- Equivalent in scale to a USN/USMC ARG/MEU or UK Lead Cdo Gp embarked.

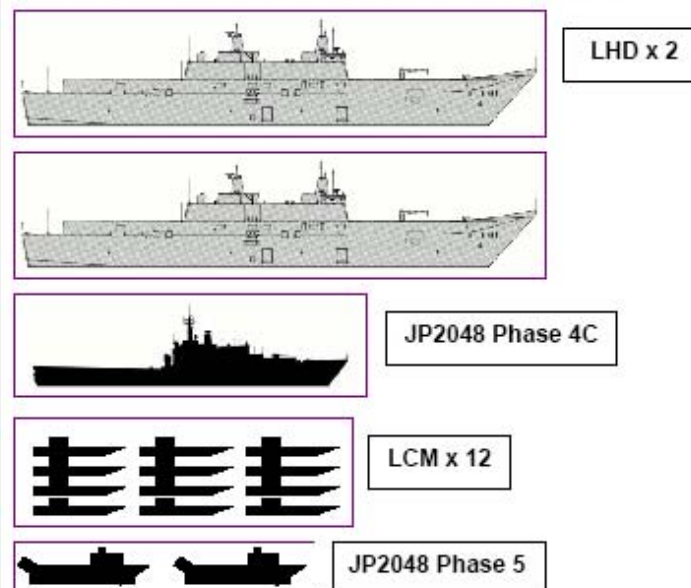
### CURRENT AMPHIBIOUS CAPABILITY



TONNAGE	
LPA x 2	= 16900 T
LSH x 1	= 5700 T
LCH x 6	= 3018 T
LCM 8 x 15	= 1500 T
<b>Total</b>	<b>= 27,118 T</b>
Embarked Force	= 1115
Lane Metres	= 788m
Comms Circuits	= 17
Helicopters	= 8
Hangared	
Hospital (level 3)	= Each LPA
has - 1 op theatre, limited ICU and x-ray	
Sea State Limitations Sea State 2	

**TOTAL  
Manpower**  
625 Navy  
100 Army

### FUTURE AMPHIBIOUS CAPABILITY



TONNAGE	
LHD x 2	= 54000 T
Phase 4C x 1	= 16000
Phase 5 x 6	= 7800 T
LCM x 12	= 1500 T
<b>Total</b>	<b>= 79,300 T</b>
Embarked Force	= 2600
Lane Metres	= 2800m
Comms Circuits	= 58
Helicopters	= 16 Hangared
8-12 deck parked	
Hospital (level 3)	= Each LHD has - 2 op
theatres, 8 ICU and 20+ MDU beds, x-ray etc	
Operations up to and including Sea State 4	

**TOTAL  
Manpower**  
805 Navy  
207 Army  
6 RAAF





# The Australian Amphibious Concept and Army's requirement...



# DWP Force 2030

- ▶ Army is directed to undertake amphibious manoeuvre as part of maritime or littoral manoeuvre and;
- ▶ “Amphibious and sea-lift ships ... and other capabilities are required for strategic mobility for our forces and to provide us with the ability to project military power throughout our primary operational environment and, on occasions, beyond”





# Regional Environment: Riverine and Archipelagic

## ► Navigable Waterways:

- Indonesia: 21,579 km
- Vietnam: 17,702 km
- Burma: 12,800 km
- PNG: 11,000 km
- Malaysia: 7,200 km
- Laos: 4,600 km
- Thailand: 4,000 km
- Philippines: 3,219 km
- Cambodia: 2,400 km
- **Australia: 2,000 km**
- Fiji: 203 km
- **Total of 85,000km**

## ► Islands per archipelago:

- Indonesia: 17,508
- Philippines: 7,107
- Solomon Islands: ~1,000
- Papua New Guinea: ~600
- Fiji: 332
- **Total of 25,000 Islands**







# AUSTRALIA'S AMPHIBIOUS CONCEPT

## V3.0

- ▶ Australia's Amphibious Concept (AAC),
  - endorsed by the Joint Amphibious Council (DCN, DCA and DCJOPS) on 26 Feb 08, and again on 19 May 10.
  - establishes the ADF approach to contemporary and future expeditionary amphibious operations.
  
- ▶ The AAC:
  - reflects Australia's strategic environment and guidance; and developing ADF capabilities. Complement, and consistent with, Future Joint, Maritime, Land and Special Forces' Operational Concepts
  - Directly reflects emergent and extant US / UK / NATO Doctrine and practices.



# Australia's Amphibious Concept

## ► Missions

- Amphibious Operations – Demonstrations, Raids, Assault, Withdrawal

## ► Military Support Operations

- HA, NEO, Peace Operations, Defence Aid to Civil Community

## ► Sea Lift

- Administrative movement of personnel and equipment



# Australia's Amphibious Concept

## ► ADF Approach to Amphibious Operations

- Ship-to-Objective Manoeuvre (STOM)
- Distributed Manoeuvre (DM)
- Sea-Basing
- OVP of 10 days operations ashore





# *20<sup>th</sup> Century: Amphibious Assault*



- UTH Operations
- Seize beach head, build up combat power
- Separation of ATG and LF
- Strike inland to actual objective
- Limited Manoeuvre and Operational Pause



# *21<sup>st</sup> Century: Ship-To-Objective Manoeuvre*



- Focus on the objective
  - No beach head
  - Rapid tempo
- Integrated fire and maneuver of ATG and LF
  - Avoid/bypass enemy strong points
- OTH Operations
- Seabased/Networked:
  - Joint Fires
  - C2
  - Logistics

**2014 - Joint ACTION**



# Australia's Amphibious Concept

## ► Components of Capability

- **Amphibious Ready Group (ARG)** – Medium Weight Battle Group (BG) of 2056 personnel and associated stores. Two or more ships.
- BG comprised of infantry, armour, artillery, engineers equipment and other vehicles. It is supported by armed reconnaissance, heavy and medium lift helicopters.





# Landing Force Components of Capability

- ▶ ARG Capable of conducting coordinated air and surface STOM assaults, of up to 4 Coy CT, plus an OS Bty and BG HQ Tac from 30 nm OTH to an initial radius of action of 90nm, within a 6 hour cycle of darkness.

- LF CONEMP Jun 2009

\* Advance Force composition is threat and effect dependant. Data is ROM only



# Amphibious Ready Element

- ▶ ARE provides the short-notice amphibious capability as its primary role.
- ▶ Be prepared to conduct HA/NEO within 48 hours.
- ▶ ARE based on an infantry company with protected mobility, indirect offensive fire support, mobility and survivability attachments and ISTAR assets. May include medium lift helicopters, resuscitation element and superior Tac HQ.

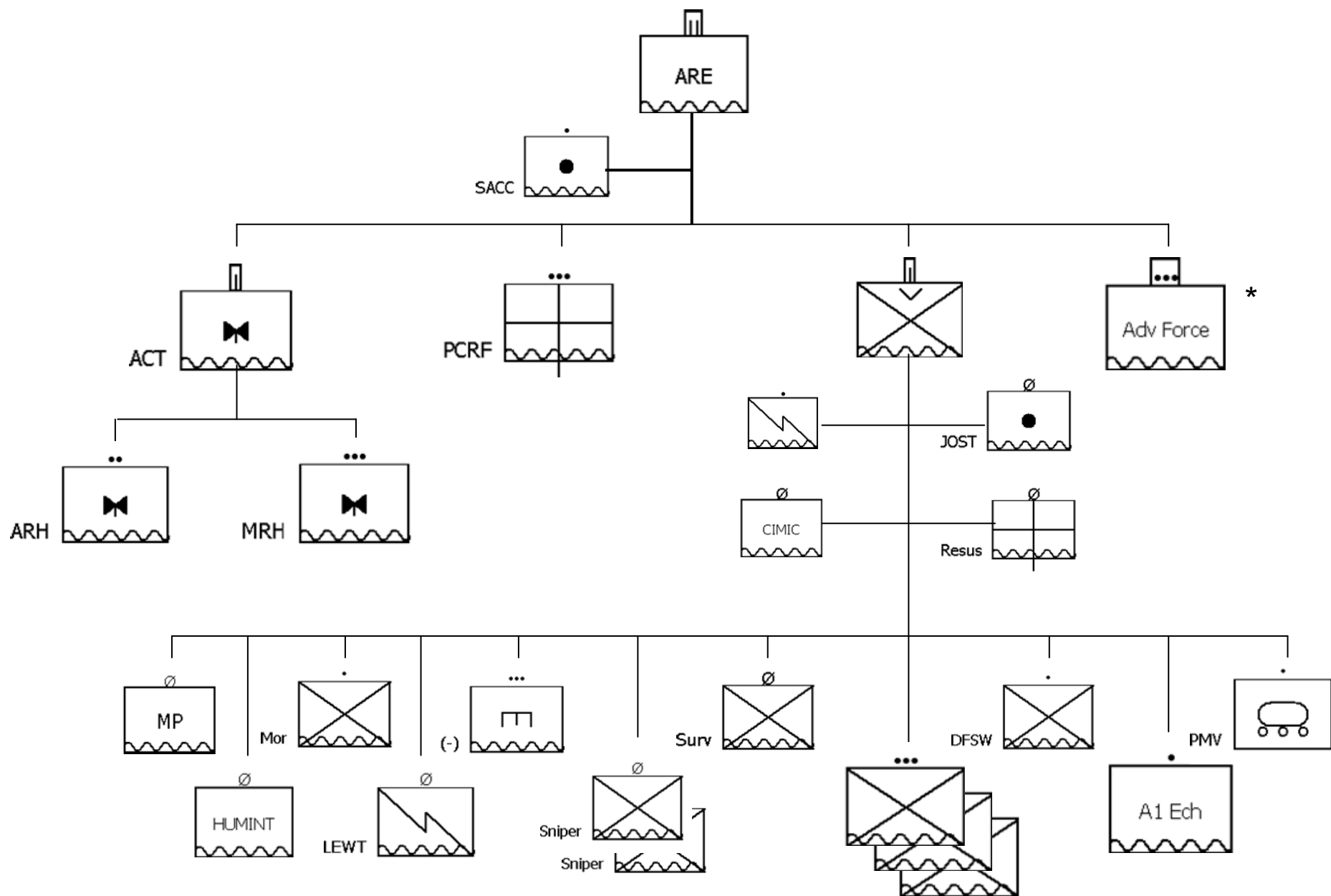




# Amphibious Ready Element

- ▶ ARE should be capable of conducting coordinated air and surface STOM type actions, of up to 4 PI/Tp elms, plus an OS Det and CT HQ Tac from 30 nm OTH to an initial radius of action of 90nm, within a 6 hour cycle of darkness.

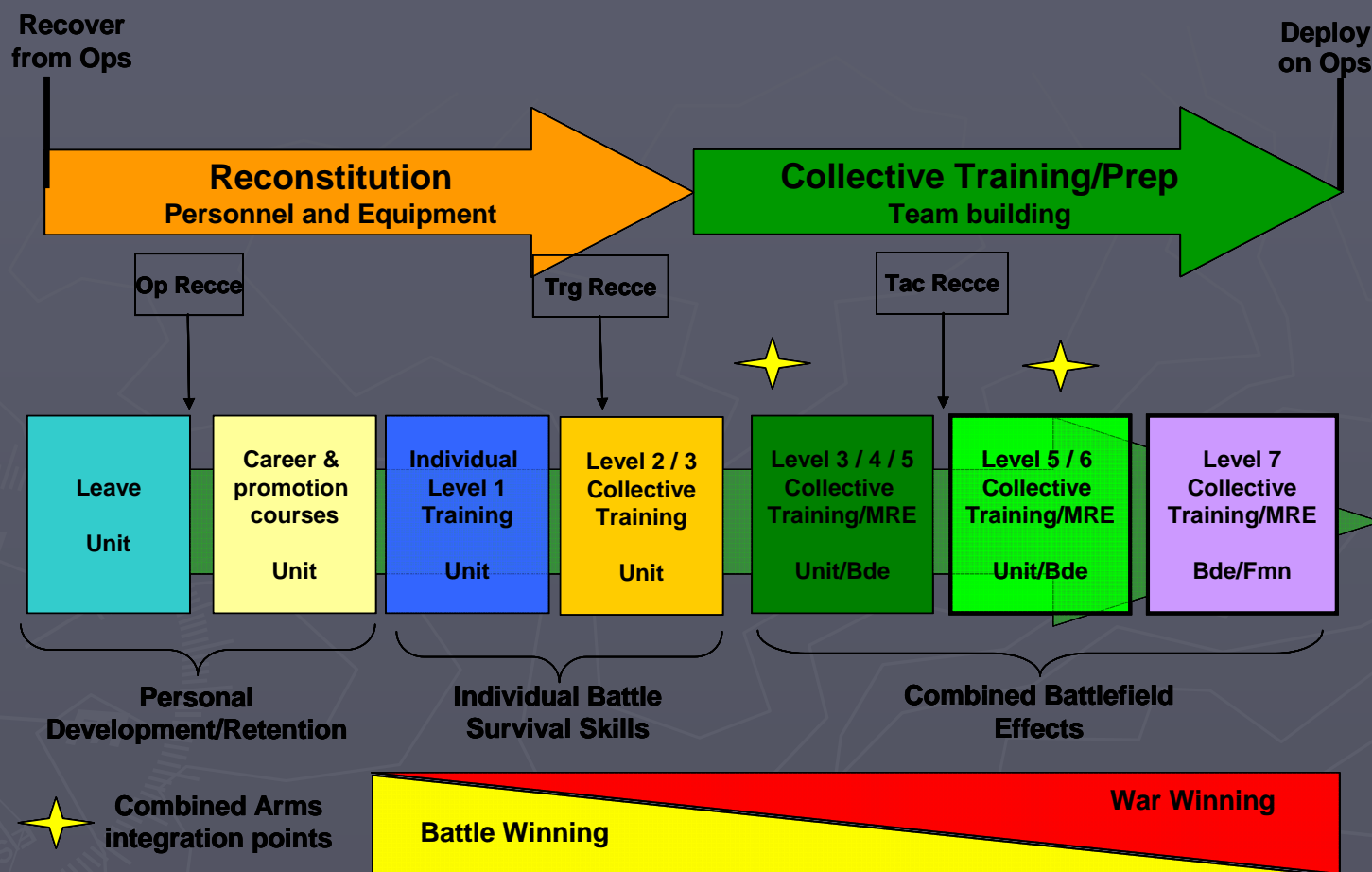
- LF CONEMP Jun 2009



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# Force Generation

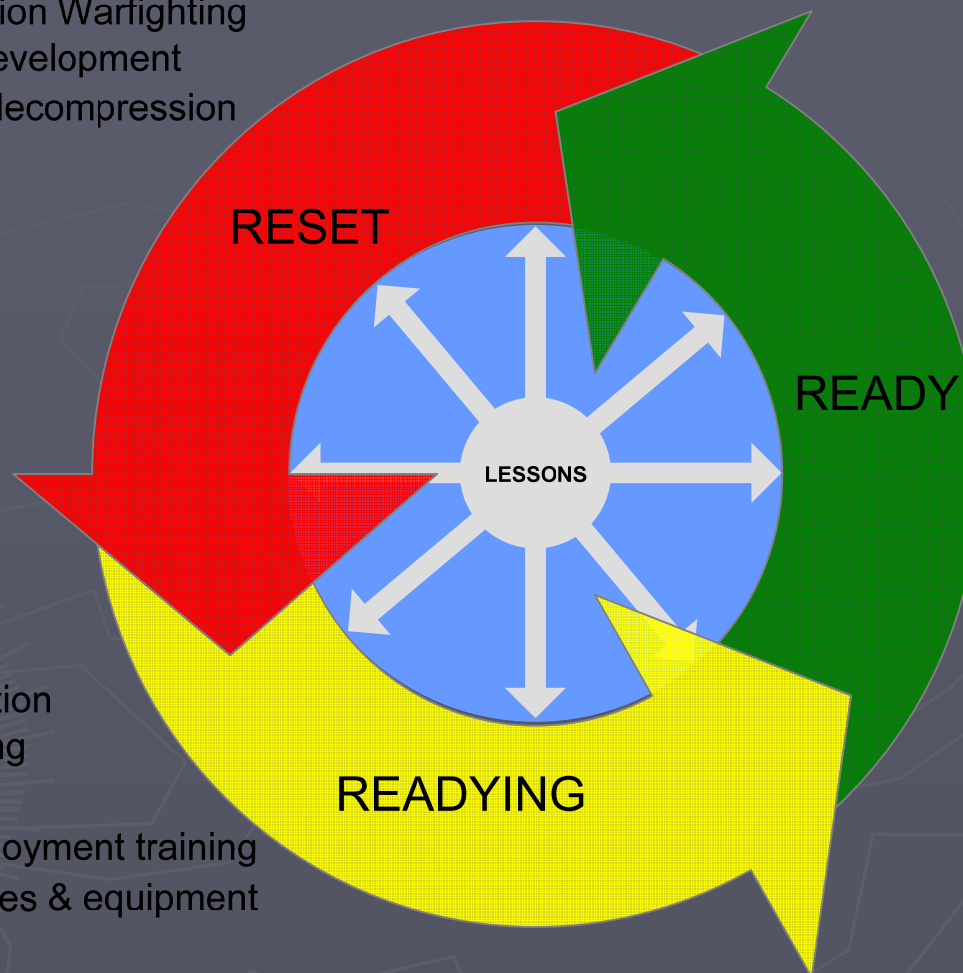






# Force Generation Cycle

- Individual Foundation Warfighting training & career development
- Post-deployment decompression
- Leave
- Reconstitution



- Deploy on operations, or
- Remain on standby for contingency tasks

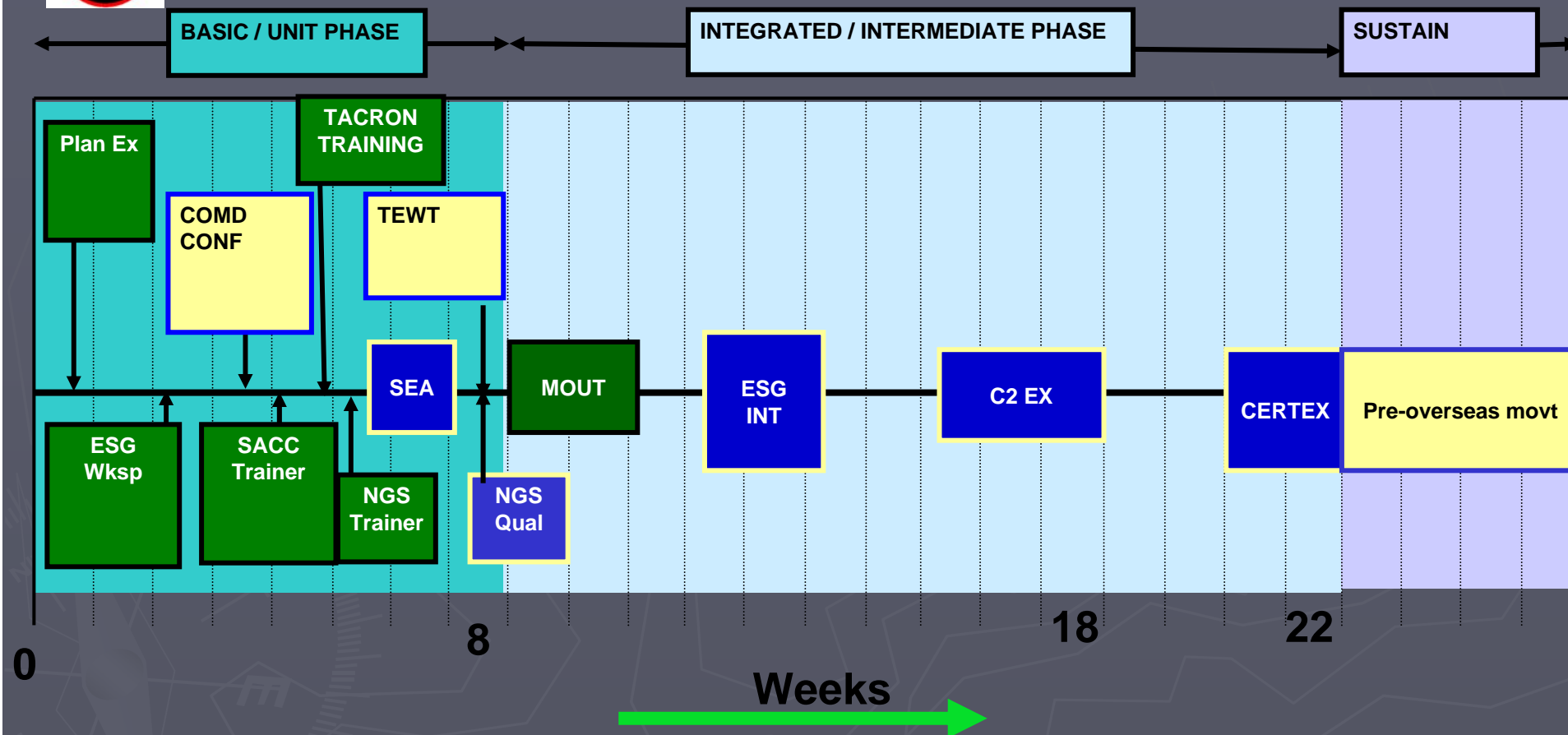
- Collective Foundation Warfighting training
- Exercise HAMEL
- Collective pre-deployment training
- Priority for resources & equipment



Platform Availability	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
LHD1: HMAS CANBERRA	Leave	Fleet	EMA	EMA							Port	Leave
LHD2: HMAS ADELAIDE	Leave	Fleet	Port							EMA	EMA	Leave

Source: JP2048 Proposed Maintenance Schedule for LHD, as at Apr 09

**Table 4 – Proposed LHD Maintenance Schedule**



Source: Expeditionary Warfare Training Group, Atlantic, Brief to JACIT Oct 08

**Table 2 – USMC MEU/ESG Training and Certification Schedule**





# OPTION ONE

- Placing one Battle Group as the amphibious specialist battalion, similar to an Airborne Battle Group, with group enablers, such as fires, comms and logistics assets in support. This option will allow a high level of capability to be achieved, comparable to US and UK standards, but introduces significant rotation issues on Army especially under the current operational constraints.



## OPTION TWO

- ▶ Similar to the USMC MEUs and the UK's 3 Cdo Bde (RM), an Australian Bde, grouped as a combined arms task force, may be best placed to be the Army's amphibious specialist, providing entry and allowing heavier, or follow-on, forces to penetrate subsequent to the amphibious operation. This would allow capability comparable to the US and UK certifications levels.



## OPTION THREE

- ▶ Rotate the Army's 10 battle groups through the role, which is similar to the French model where, until recently, annual changeovers occurred between battle groups. This would allow capability development to be broad but would not achieve US and UK comparable standards.





## ARG

*C2 Elem based on  
COMAUSATG (CATF)  
and CLF HQ (Bn/ Bde)*



LHD



LSD



x 6 LCH



x 12-24 MRH/MSH/ARH



x 8-10 LCM1E

LF: Battle Group 2200 Pers

*REA, MCM, SF (Not Embarked)*

## ARE



LHD

OR



LSD



x 3 – 4 MRH / 1 x MSH



X 2-4 LCM1E

LF: Combat Team 150-220 pers

*REA, MCM, SF (Not Embarked)*

Escorts / Strike Gp (task-organised against threat)



SH60B / FNACS



CAP / CAS



MPA



AEWC



DDG



FFH x 2



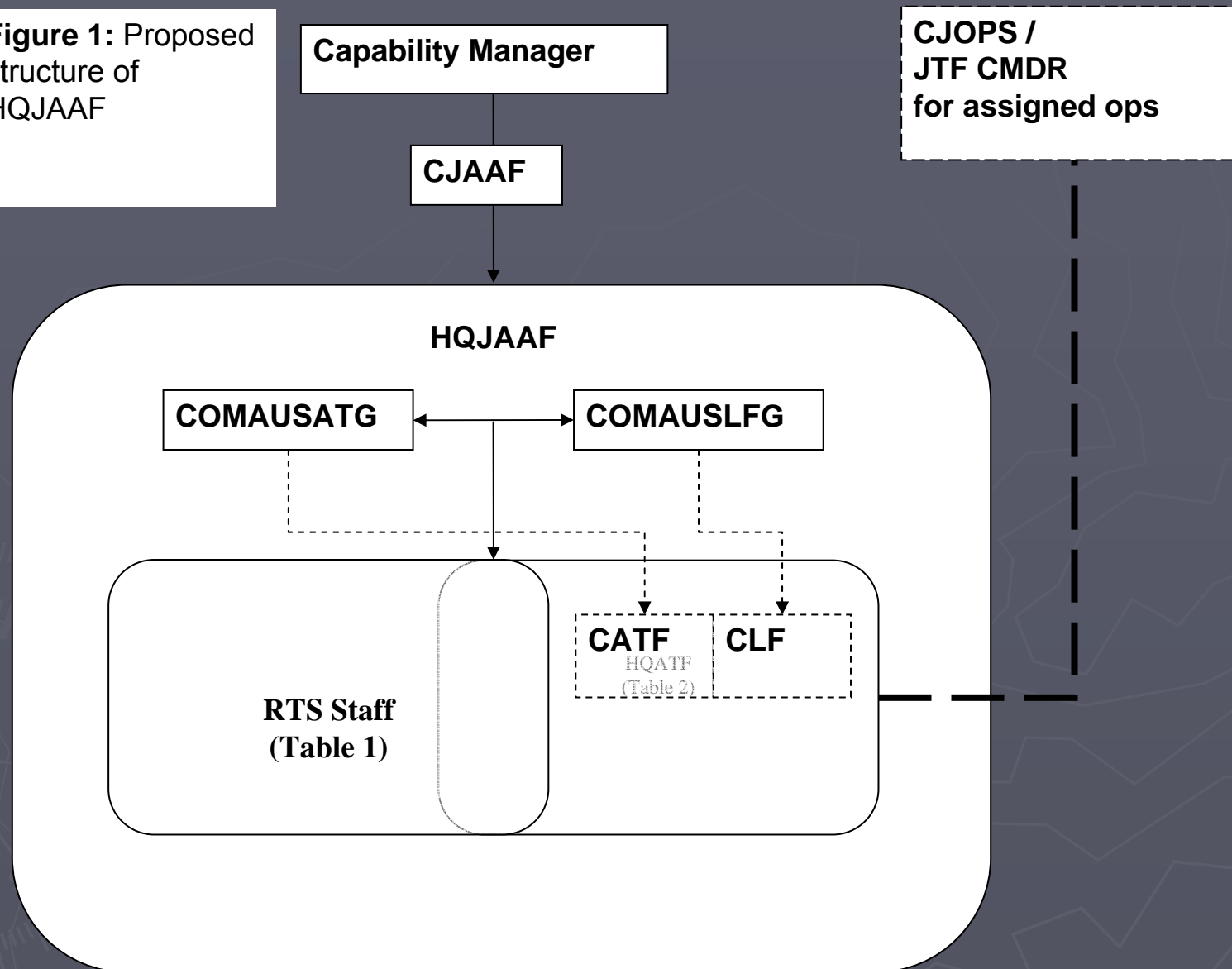
AOR



SSK



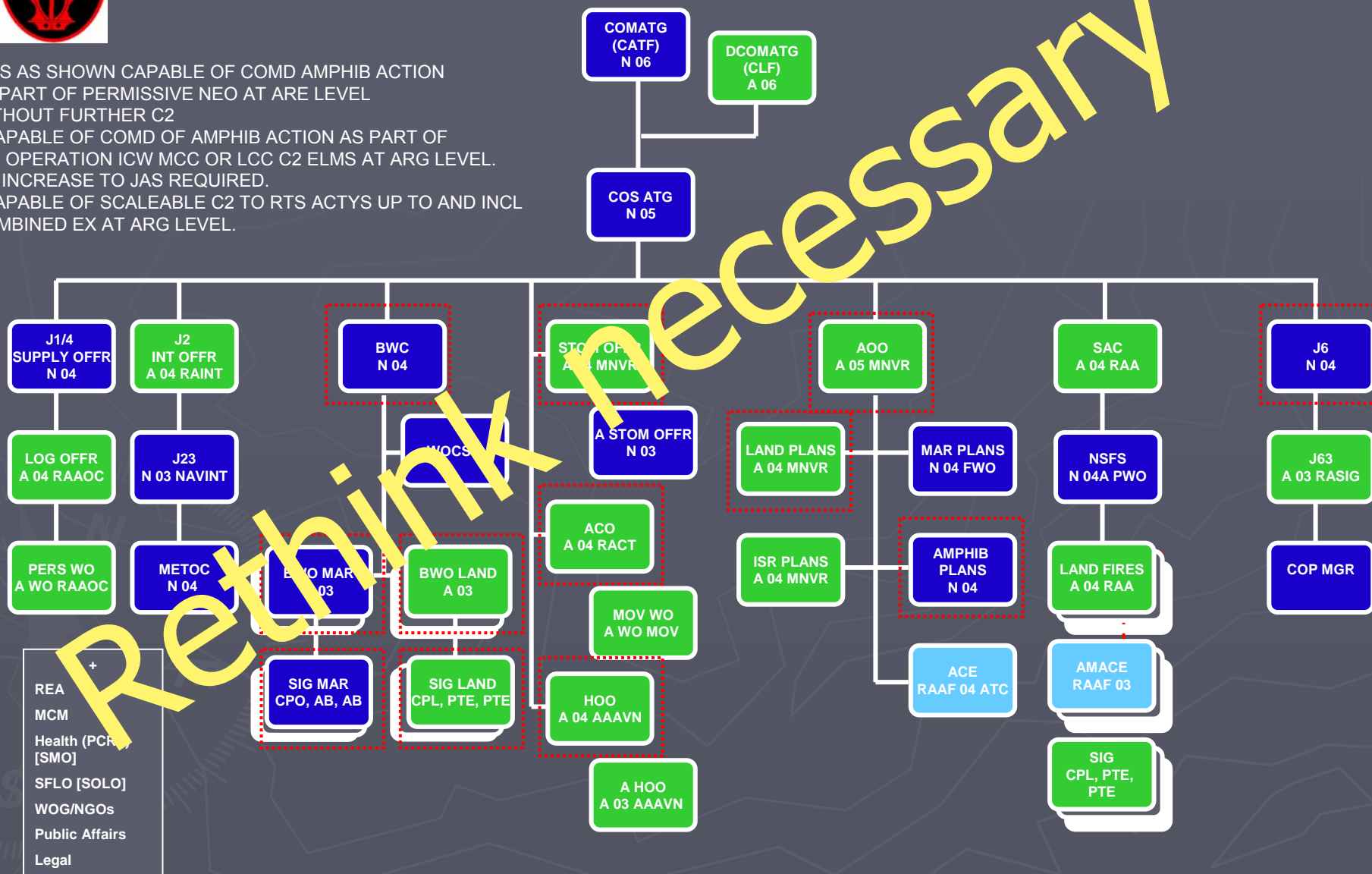
**Figure 1:** Proposed structure of HQJAAF



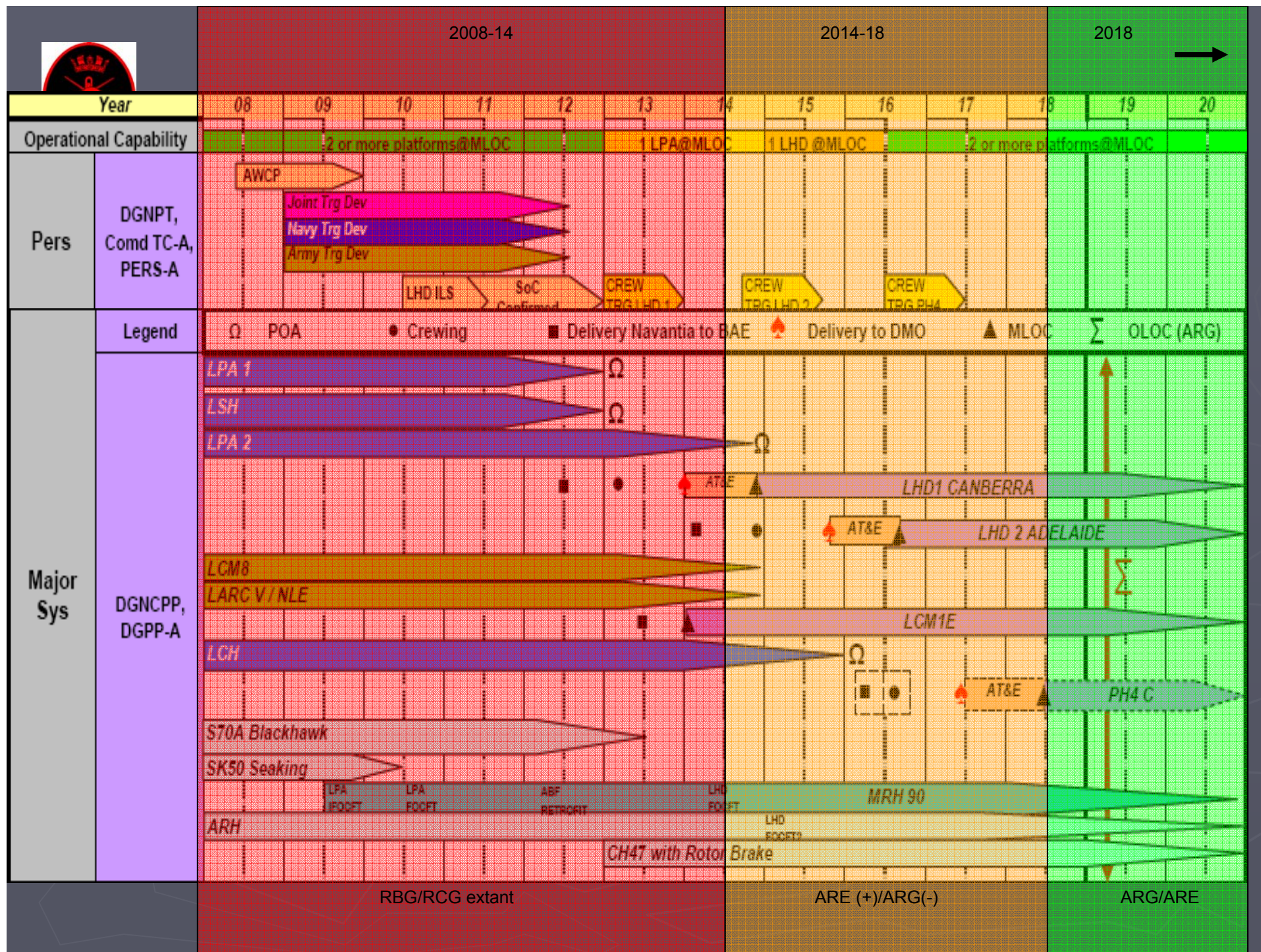


# JOINT AMPHIBIOUS STAFF

- JAS AS SHOWN CAPABLE OF COMD AMPHIB ACTION AS PART OF PERMISSIVE NEO AT ARE LEVEL WITHOUT FURTHER C2
- CAPABLE OF COMD OF AMPHIB ACTION AS PART OF JTF OPERATION ICW MCC OR LCC C2 ELMS AT ARG LEVEL. NO INCREASE TO JAS REQUIRED.
- CAPABLE OF SCALEABLE C2 TO RTS ACTYS UP TO AND INCL COMBINED EX AT ARG LEVEL.







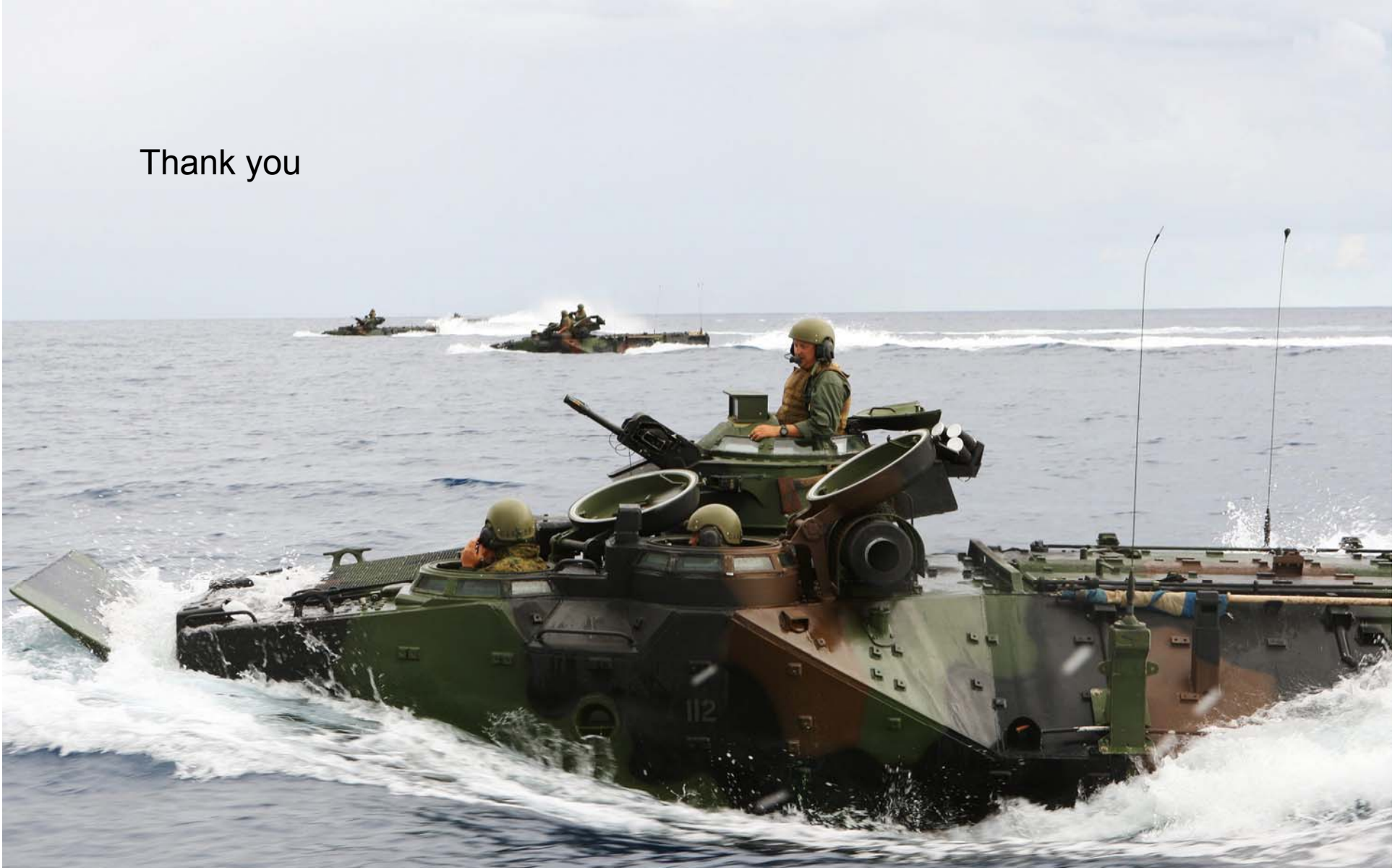


# Key Army Considerations

- ▶ Develop Army's amphibious culture, including an analysis of Army's role in amphibious manoeuvre and C2,
- ▶ Concept for Seabasing (which includes C2, Fires and Log),
- ▶ Small craft to protect LCM1E, low signature interaction with the local population, inserting patrols from the sea or conduct patrolling in the littoral,
- ▶ Training Needs Analysis for Landing Force, and
- ▶ Force generation continuum



Thank you







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