INTRODUCTION

‘DESIGN A LIFE BOAT CAPABLE OF RESCUING UP TO 1,000 PEOPLE FROM THE SEA AT ONCE...MUST BE DEPLOYABLE, QUICKLY, FROM A DIVERSE RANGE OF VESSELS AND/OR PLANES’

WHERE & WHY?

EXISTING SOLUTIONS?

SUSTAINABILITY?

ALTERNATIVES?

EX UNDIS
FROM THE WAVES (OF THE SEA)
DESIGN AND RESEARCH

STABILITY

ENVIRONMENTAL CHARACTERISTICS:
- Low wind speed
- Average air temperature 22.3°C
- Average water temperature 19.9°C

EX UNDIS
FROM THE WAVES (OF THE SEA)
DESIGN AND RESEARCH

STRUCTURE

MATERIALS

DESIGN FEATURES
- Folding / Collapsible
- Solid Hull / Keel
- Large Inflatable Volume (Buoyancy)
- Shape (Stability)
- Assisted Righting

BASED ON PROVEN DESIGN

SIMPLE TO MANUFACTURE

MODULAR DESIGN
- Provides capacity
- Improves stability

EX UNDIS
FROM THE WAVES (OF THE SEA)
DESIGN AND RESEARCH
COST – BUILD, MAINTENANCE AND DISPOSAL

EX UNDIS
FROM THE WAVES (OF THE SEA)
DESIGN AND RESEARCH

CONCEPT DESIGN

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LAUNCH AND RECOVERY

- Suited to multiple deployment techniques
- Impact resistant design for aerial deployment
- Compact & space optimised for stowage
- Designed for multiple re-use (return to shore/survey/stowage/redistribution)
EMBARKATION

- Self rescue
- Rear beach
- Swarm system to initially cover large rescue/search area and then co-locate

Ref: https://www.yankodesign.com/2014/08/28/saved-by-the-net/
FUTURE DEVELOPMENT

SCALABLE DESIGN

SOLUTION INTEGRATION
- Storage
- Deployment Locations
- Communications

PROPULSION / ANCHORING

PLATFORM SYSTEMS

INFLATION / UNFOLDING MECHANISM

DEPLOYMENT
- UAV
- Forward Platform (Barge)

RETRIEVAL METHODS
- Auto-vacuum deflation
- Lifting points for aerial extraction

EX UNDIS
FROM THE WAVES (OF THE SEA)
QUESTIONS?

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FROM THE WAVES (OF THE SEA)