

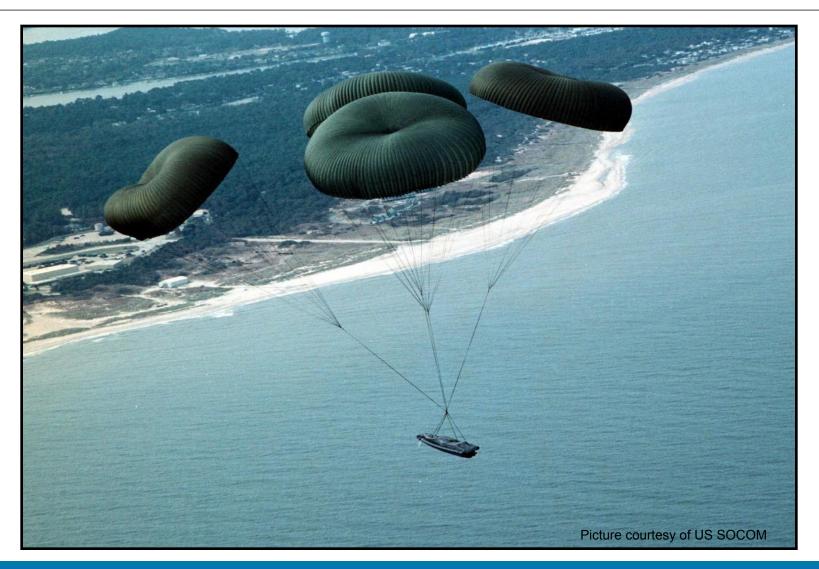
Airborne Systems



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Rigid Inflatable Boat Aerial Delivery







MARITIME CRAFT AERIAL DELIVERY SYSTEM (MCADS)



System History



- Certified for use from UK C130K aircraft
 1990
- Certified for use from C130 aircraft 1999
- Certified for use from C17 aircraft 2003
- Certified for use from latest C130J aircraft 2011

 US SOCOM has completed over 250 drops of the system to date without any major incidents or boat loss.

System Use

Airborne Systems

The system is mainly used by Navy/
maritime Special Forces units for
maritime counter terrorism and antipiracy operations. An increase in these
activities over the last 10 years has seen
a number of new countries requiring this
airdrop capability.

The system can also be used for Search and Rescue operations to get a RIB, rescue personnel and life rafts to survivors. The survivors can then be looked after until a rescue ship arrives.

The airdrop system can be adapted to meet user operational requirements.







Maritime Craft Aerial Delivery System (MCADS)



➤ Platform Universal Rigid Inflatable Boat Aerial Delivery

(PURIBAD)

6.5m to 8.5m RIB's

➤ Platform Rigid Inflatable Boat Aerial Delivery 21 (PRIBAD 21)

9m to 12m RIB's

MCADS PURIBAD



- >6.5m to 8.5m Boat
- ➤2.74m wide platform compatible with C130, C17 and A400M
- ➤ Parachute Extracted
- ➤ Boat released as load exits the aircraft
- ➤ 2, 3 or 4 main parachutes dependent on load mass
- ➤ Boat ready for use minutes after landing
- ➤Platform recovery parachutes and floatation for training drops
- ➤ Drop height as personnel parachutists

MCADS PURIBAD





6.5m BAE Systems RIB

7.53m Zodiac RIB



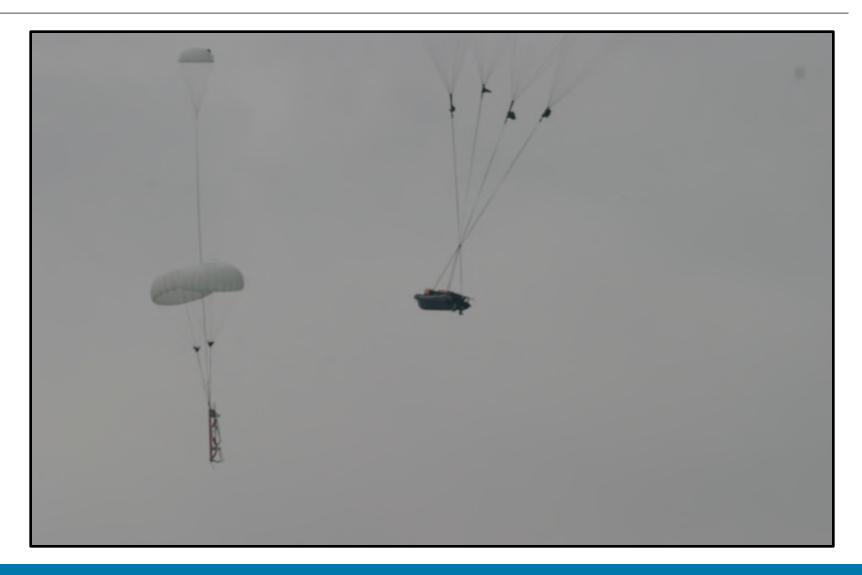
Load Extracted





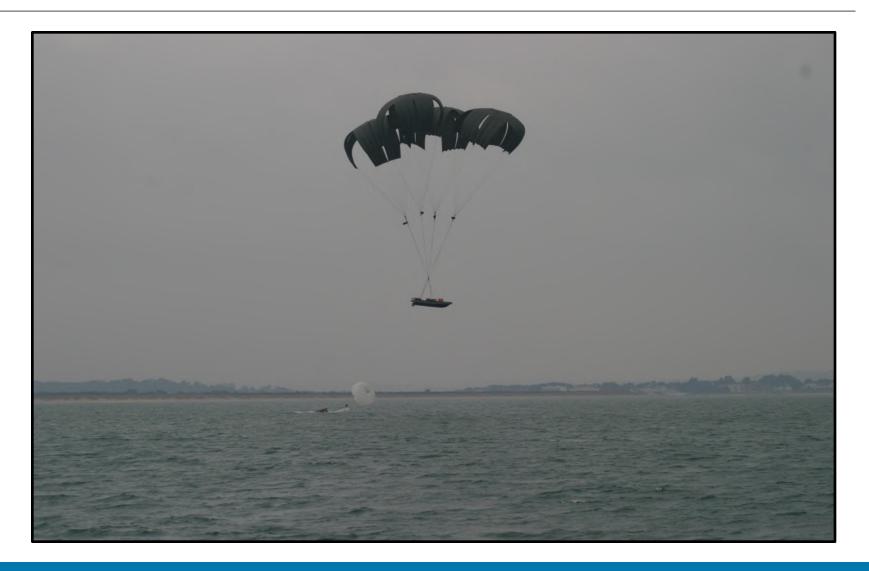
RIB and **Platform Descend**





Final Descent





MCADS PURIBAD Airdrop





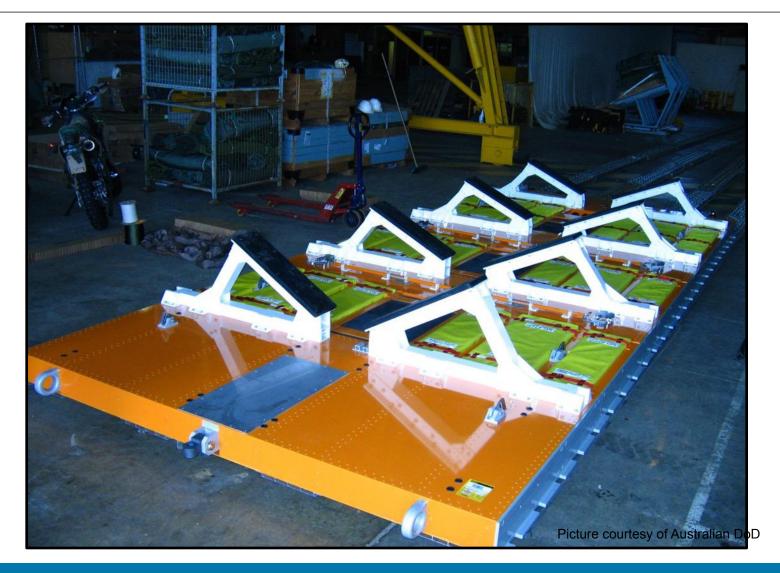
MCADS PRIBAD 21



- >9m to 12m Boats
- > Platform
 - > 2.76m (108") wide
 - > 6.46m (21ft) long
- ➤ Parachute Extracted, 22ft or 28ft Ringslot
- ≥3 or 4 Main G11 Parachutes dependant on the boat mass
- ➤ Platform descends beneath G12 recovery parachute
- ➤ Drop Height Freefall 1000m AMSL
- ➤ Drop Height Static Line 300m AMSL

MCADS PRIBAD 21





USMI 11m NSW RIB





Picture courtesy of US SOCOM

Goldfish 11.5m RIB Rigged





11m RIB Loading in C130H





Load Extraction





Picture courtesy of Australian DoD

RIB and **Platform Descend**





RIB Splashdown





Goldfish 11.5m RIB Airdrop





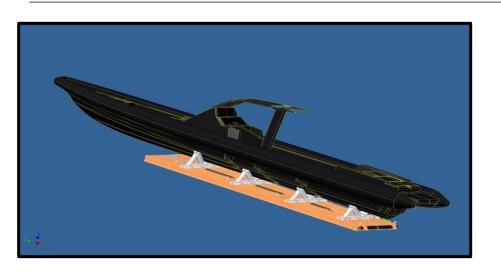
RIB Requirements

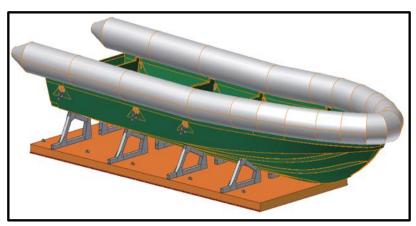


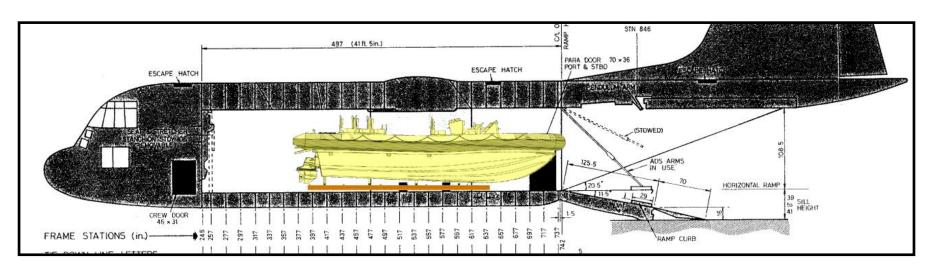
- Maximum Height to fit into C130 aircraft
 - RIB on airdrop platform maximum 100" (2.56m)
- Maximum Width of Rigid Hull with Tubes Deflated
 - 108" (2.74m)
- Maximum Length
 - 40ft (12m)

RIB, Platform, Aircraft Interface







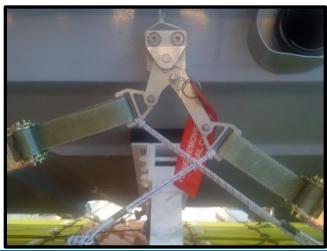


Boat Restraint Fittings









Boat Suspension









Main Parachute Release



Two parachute disconnect systems to provide redundancy



Water activated parachute release

Atlas PR-A2 Mechanical parachute release



Boat Airdrop Cover





Parachute Tray Assembly

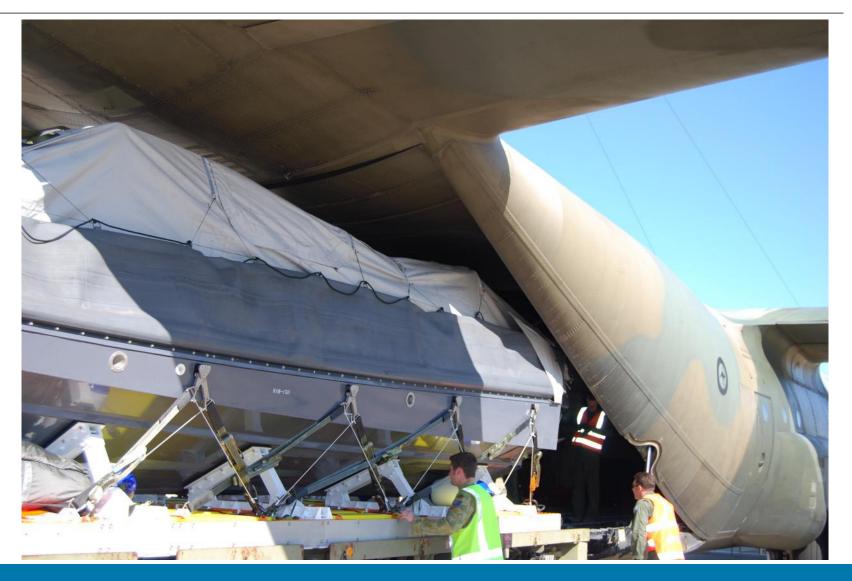






Automatic Inflation System





Flight Trials



- Trials Instruction
- Safety Assessment
- Ground Assessment
- Flight Test Programme
- Final Trials Report

Training



- Platform Maintenance and user repairs
- Platform Pre and Post drop inspection
- Load Rigging
- Parachute Packing and repair
- Aircraft Loading
- In-flight procedures
- Equipment recovery

Manuals and Procedures



- Platform Maintenance and Repair
- Load Rigging
- In-flight procedures and checklists
- Equipment post drop procedures

2 x USMI 11m RIB's from C17





Video courtesy of US SOCOM

Any Questions



