Deployment of MEBO from Pourquoi pas? R/V

Feasibility conducted in 2008 for GUINECO cruise

➢ Different aspects:
  • On-board installation
  • Launch and recovery
  • Mechanical interfaces
  • Electrical interfaces
  • Software interfaces
Mebo system

- **Vehicle**
  - Dim: 2.3 * 2.6 * 6.6m
  - Weight in air: 10t
  - Weight in water: 7.5t
  - Depth: 2000 m

- **Winch**: 20’ – 28t

- **LARS**

- **Containers**: 6 * 20’
Handling procedure

- **Launching procedure**
  - LARS used to drive MEBO from horizontal to vertical position
  - When A frame slightly out-boarded, deep sea cable handles MEBO, disengages it from LARS
  - A frame is still slightly over-boarded and cable is paid out – floats are fitted

- **In conclusion**: A frame is not used from in-board position to vertical position
Deployment: Is the A frame able to deploy MEBO?

- **In air:**
  - Mébo weight in air: 10t
  - Deep sea pulley: 1t
  - On line: 11t + dynamic load

- **In water:**
  - Mébo + cable: 14t
  - Pulley: 1t
  - On line: 15t + dynamic

- **Cable winch outlet angle:** [15°, 45°]

A frame not fully out-boarded when MEBO in operation
MEBO on N/O Pourquoi pas?

- **Initial A frame SWL**
  - 8t SWL pulley fixing point for launch and recovery (in air)
  - 15t on line when vehicle in water (dynamic included)
  - Max load allowed when A frame fully out-boarded

- **MéBO requirement**
  - 11t SWL but A frame not loaded from in-board to vertical position
  - 15t on line when vehicle in water + dynamic loads
  - 17t (static) to unroot the Mébo
  - A frame not fully out-boarded when MEBO in operation
Study ordered to Kley France:

- Confirmation of the ability to deploy Mebo with the Pourquoi pas? A frame
  - 12t in air (1t more in case😊) + dynamic load
  - 15t in water (+ dynamic load)
  - 17t when pull up (static load)

- Certification by

[Logo of Bureau Veritas]
Morality:

This could have failed!, so anticipate when you are building a new ship or vehicle