



**OCEAN INFINITY**



**3 vessels - each with 5 AUVs, 2 ROVs, 3 USVs**

Seabed Constructor



Island Pride



Normand Frontier



Autonomous Underwater Vehicle  
(AUV)



Remotely Operated Vehicle  
(ROV)



Unmanned Surface Vehicle  
(USV)





- **Heavy lift System (2X)**

- 45T at 6000m

- 250T at 3000m

- **Unmanned Surface Vehicles (USV)**

- 150hr endurance

- Multiple payload options



# 15 AUVs – 6000m depth

- HiSAS 1032, Kraken MINSAS 120
- Edgetech Side Scan Sonar
- EM2040 Multi-Beam Echosounder
- Edgetech Sub-bottom profiler
- Cathx Color Camera
- Conductivity/temperature/Depth (SAIV)
- Self Compensating OFG Magnetometer
- FLNTU Turbidity / Visibility Sensor

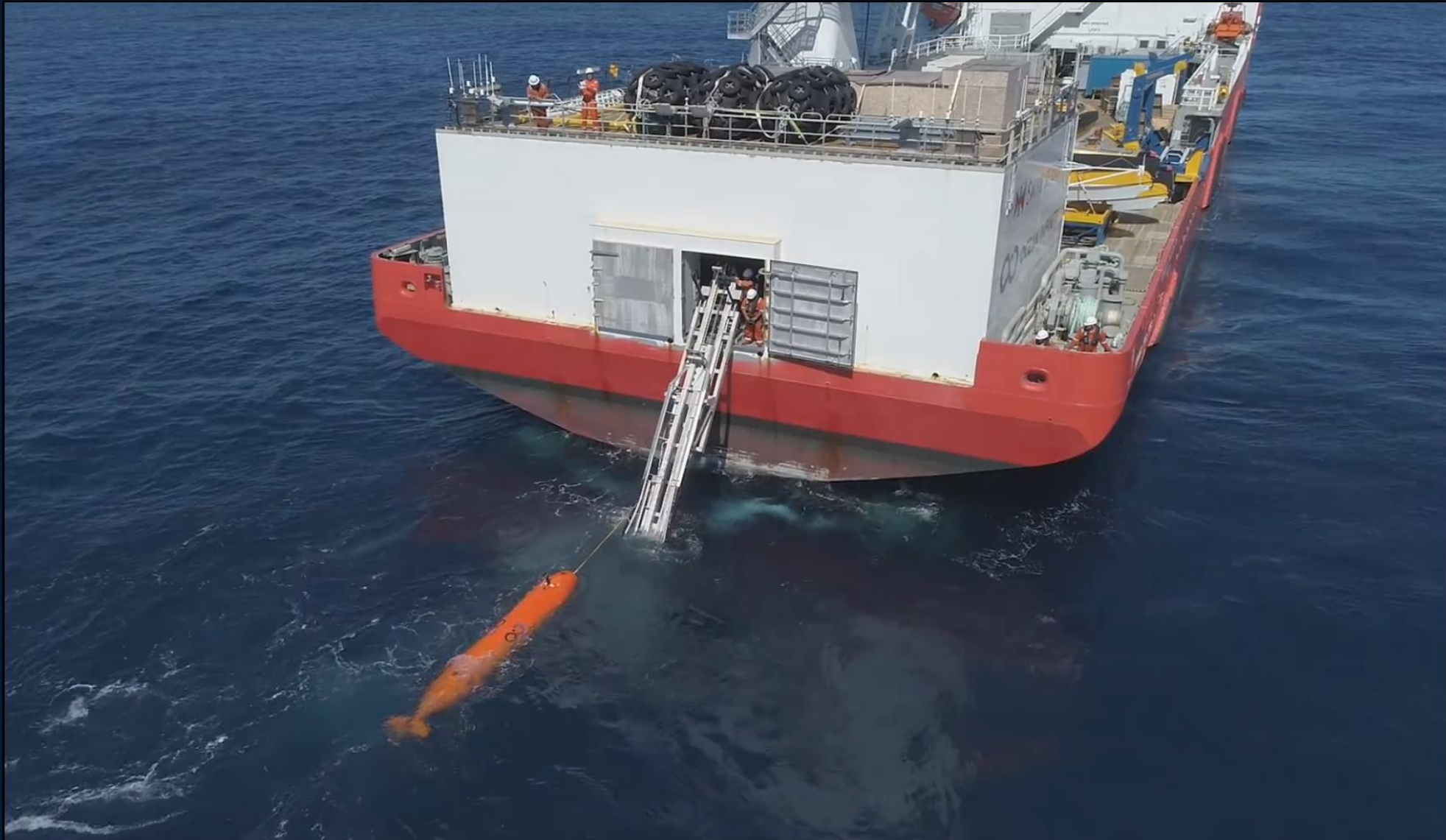
Length = 6.2m  
Diameter = 0.875m  
Weight = 1,850kg  
Speed = 2-6kts  
Mission duration = 60-100hr







# AUV Hangar – 8 AUVs





**STELLAR DAISY**



# Stellar Daisy

- Originally Sunrise III, very large crude carrier (VLCC) – single hull
- 2006-2008 converted to very large ore carrier (VLOC) as Stellar Daisy
- L = 322m, Beam = 58m, Depth = 29.5m





# Background information

- Sank on March 31, 2017 ~1423UTC
- South Atlantic 1800nm off the coast of Uruguay
- Carrying 260,003MT Iron Ore fines (~12.5mm) from Brazil to China
- 24 Crew, 16 Filipinos, 8 south Koreans
  - 2 Filipinos rescued in ~24hrs
- Uruguayan Navy ship found floating debris during 17-day search
- Search continued with six merchant ships – no other survivors found
- **Ocean Infinity contacted in late 2018 – search operations began in mid Feb.**





Stellar Daisy shipwreck found on first AUV Dive



## Marshall Island Administrator Report Findings

....determined that the likely direct cause of STELLAR DAISY foundering was a rapid list to port following a *catastrophic structural failure of the ship's hull that resulted in a loss of buoyancy and uncontrolled flooding*. The structural failure and flooding are thought to have begun in the No. 2 port water ballast tank (WBT) and then progressed rapidly to include structural failure and flooding in multiple WBTs, voids, and cargo holds. The structural damage was likely due to a *combination of factors, including the strength of the ship's structure being compromised over time due to material fatigue, corrosion, unidentified structural defects, multi-port loading, and the forces imposed on the hull as a result of the weather conditions STELLAR DAISY encountered between 29–31 March 2017*.

...also concluded that liquefaction of the cargo likely did not contribute to the sinking...





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Thank you

