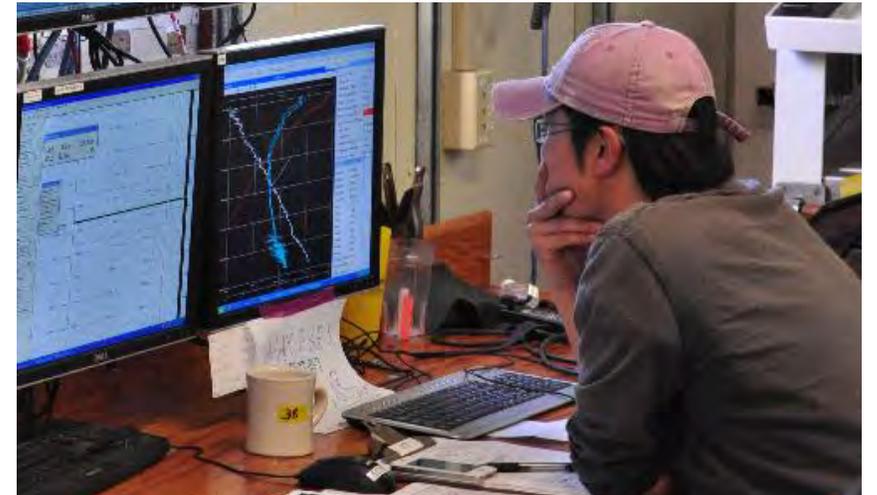
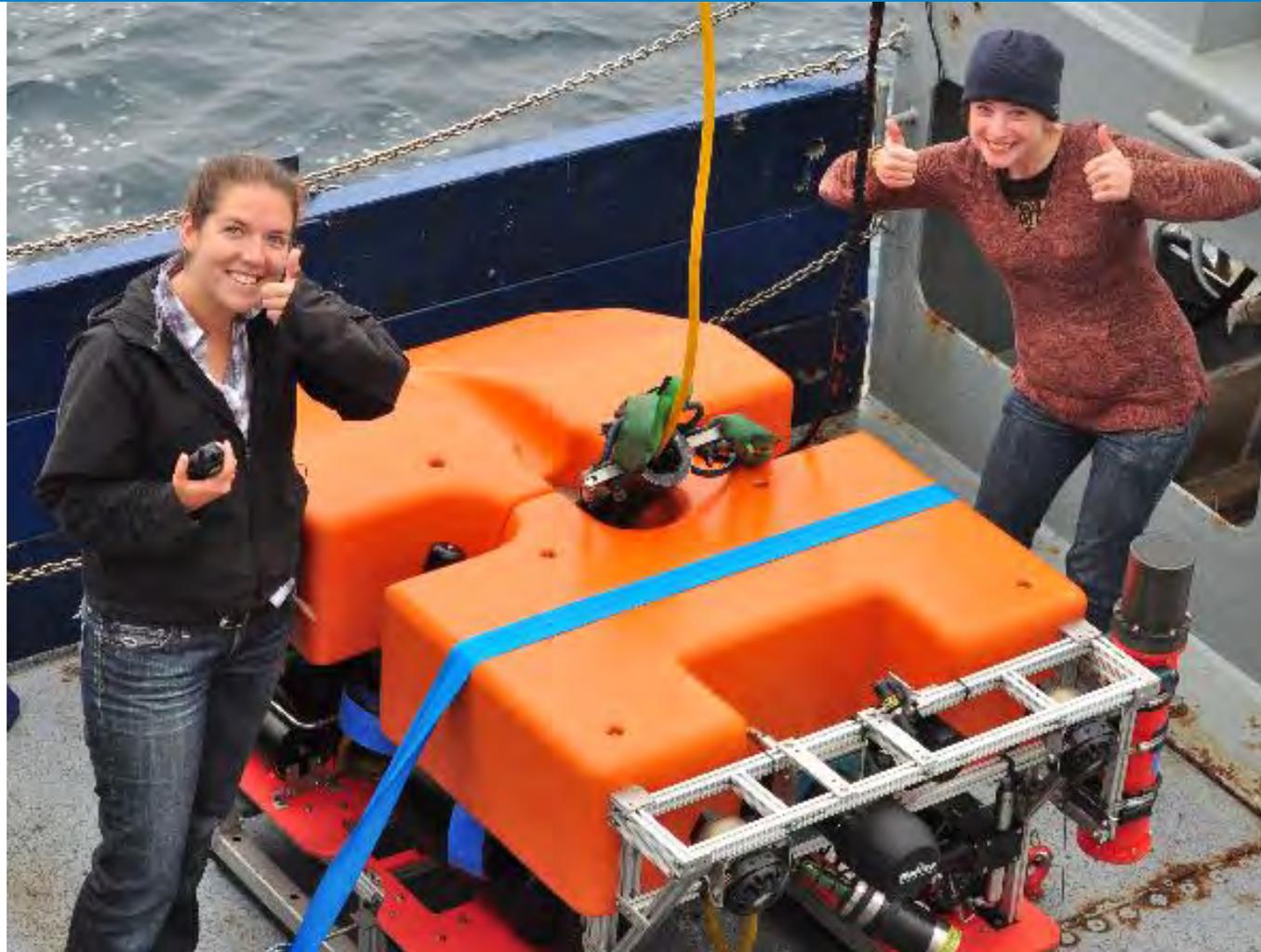


ROV Trident

A 2,000 meter portable Remotely-Operated Vehicle



Report to UNOLS Fleet Improvement Committee
Bruce Appelgate, November 2017



ROV Trident

General Specifications

Depth: 2,000 meters

Payload: 74.5 kilograms

Crew: 2 to 3 persons per 12-hour shift

Power Requirements:

Control Van: 480v/3ph/60Hz/60A

Winch: 480v/3ph/60Hz/60A

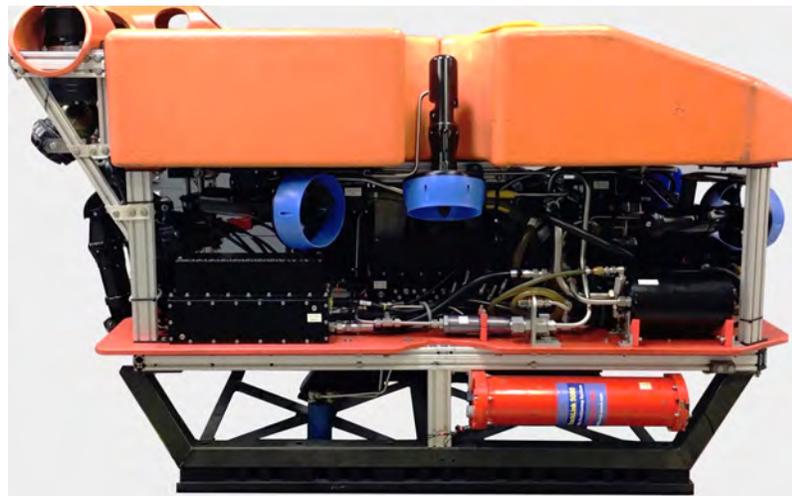
Deck Space:

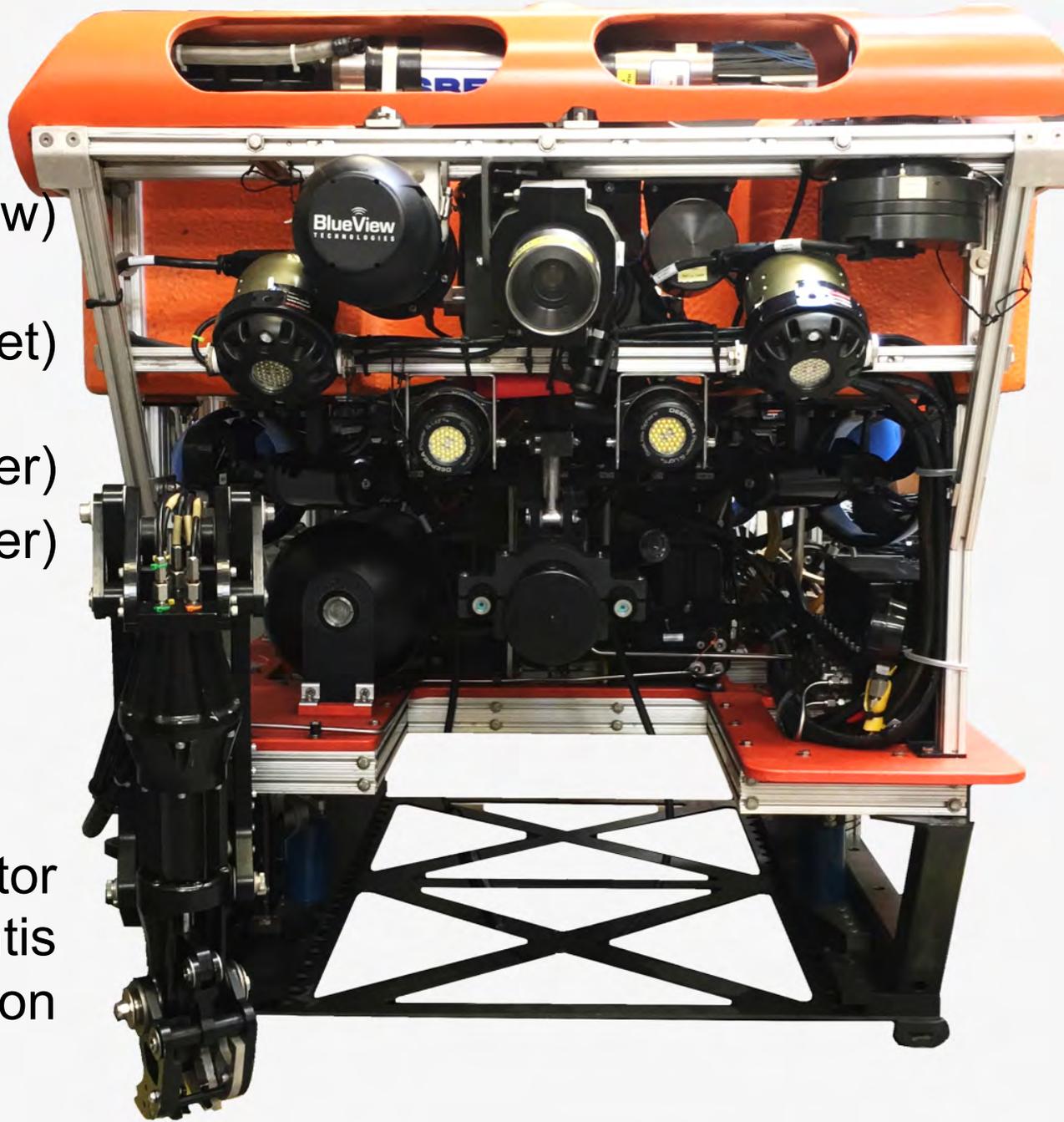
Control Van 9000 lbs 8' x 20'

Winch 3000 lbs 6' x 8'

ROV 895 lbs 60" x 39" x 48"

Navigation: USBL (portable pole mount)





Sonar (BlueView)

Camera (basket)

Lights (upper)

Lights (lower)

Manipulator
DOER SeaMantis
five-function

Camera (aft)
SeaBird CTD
Navigation transponder

Color Camera (Pegasus)
Compass & thermometer

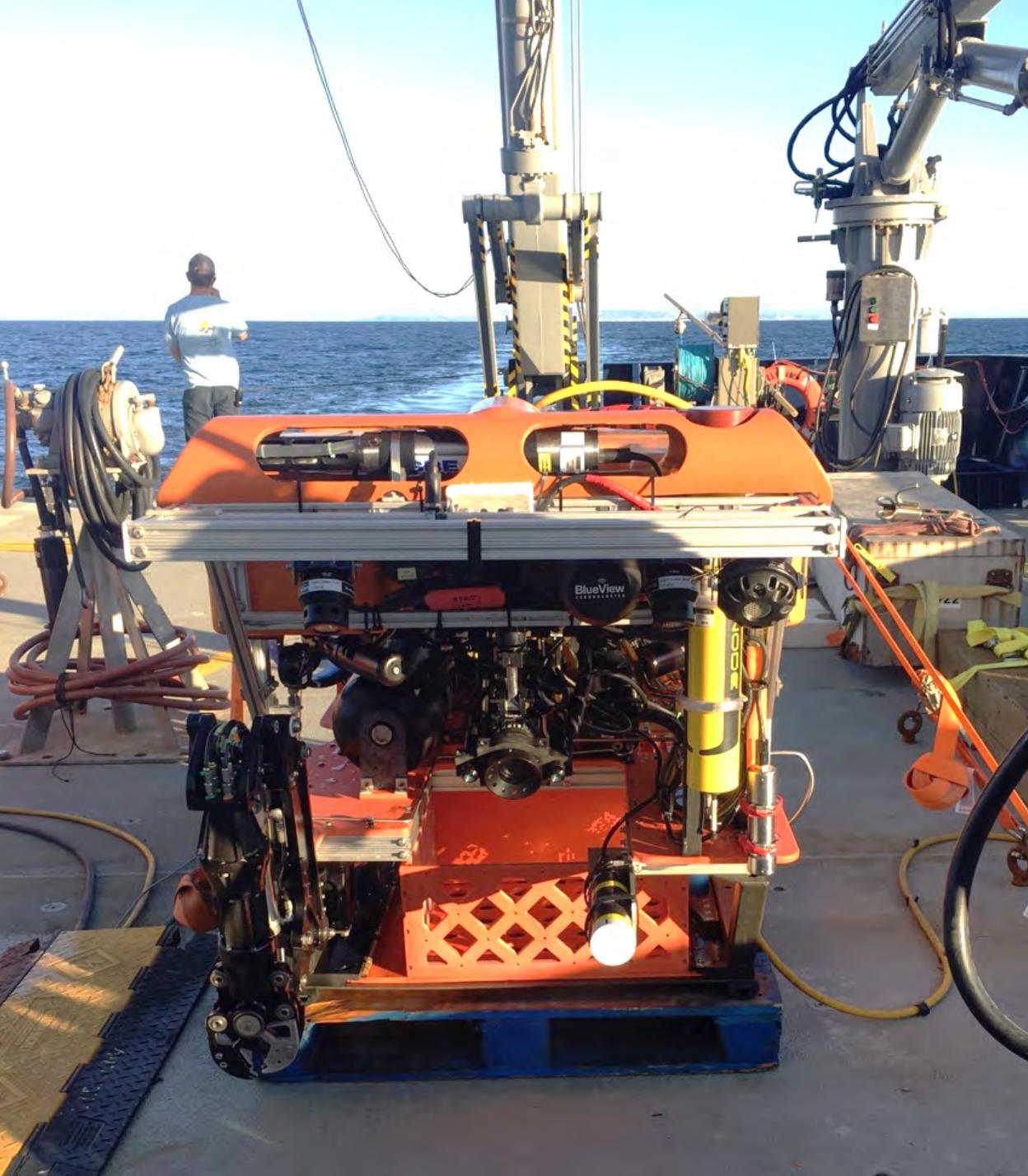
HD Camera (SIDUS)

Altimeter (Valeport)

Lasers (15 cm)

Retractable sample basket





2017 Activities

- Hardware and software integration of Greensea Inc. *Balefire* topside control system in January 2017
- Commissioned control system on *R/V Sally Ride*, February 18-25, 2017

Improvements, Changes, Modifications

- Additional tuning of control software
- Integration of Impact Subsea ISD400 AHRS (motion sensor)
- Reconfiguration of control van to fit operational features of Greensea system
- Replacement of control van networking components
- Preparations for 2018 cruise



ROV *Trident*

A 2,000 meter capable portable Remotely-Operated Vehicle

Available for use worldwide now.

Costs charged by usage day rate plus shipping.

How to use *Trident*

Contact the ROV group at Scripps:

rov-trident@ucsd.edu

Contact the SIO Tech Services Manager (Lee Ellett)

lellet@ucsd.edu



UC San Diego

