



SCRIPPS INSTITUTION OF
OCEANOGRAPHY

UC San Diego

ROV Trident

12/14/2014

Drew Cole

Resident Technician

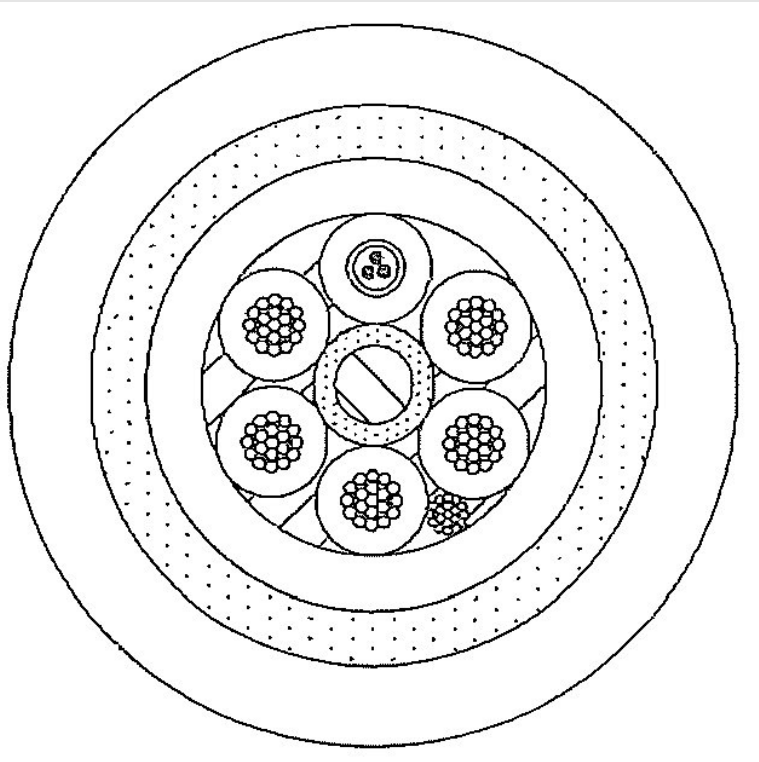
ROV Engineering and Operations

ROV Upgrades

- Depth rating to 2000m
- HD Camera Sidus 1920 x 1080HD
- Hydraulic sample tray
- Red Lasers 5mW output
- Hydraulic intercooler



New Tether



- Designed by Falmat
- 3 single mode fibers
- 5 18AWG copper power wires
- 20AWG drain wire
- 2500m
- .590 OD
- Weight in sea water
37lbs per 300m
- Ruggedized jacket
- Water blocked
- Kevlar strength member
- Breaking strength 9,000lbs
- Working load 1,500lbs

Winch Upgrades



- 2.5" added to the flanges to increase drum capacity
- Fabrication of multi angle level wind
- Hardware replacement
- New Paint
- Emergency stop button
- RF control system

Increase Spare Inventory



- Hydraulic valves
- Propellers
- Thruster seals
- Thruster motors
- Compensator
- O-rings
- Fiber jumpers
- Assorted electrical components

Current Activities

- Tank test
- Ocean engineering dive
- Clump weight redesign
- Hydraulic deck cart
- Sample collection systems
- Design of elevator system





Thank You

2013/08/19
18:58:26

