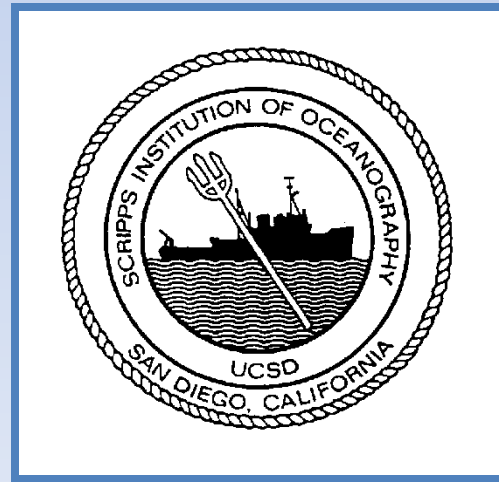


RVOC Annual Meeting April 2015

NSF West Coast Winch Pool
operated by
Scripps Institution of Oceanography



Winch Pool Mission

- Shared-use facility procures, maintains, upgrades, and provides a variety of science-requested portable oceanographic winches for broad range of research vessels
- Support scientific needs of users and comply with strict safety standards (CFRs & RVSS Appendix A & B)
- Skilled technical staff for maintenance, repair, fabrication, engineering services, and answers

Pool Assets (NSF-owned)

- 1 Dynacon traction winch (DTW)
- 1 Dynacon CTD traction winch
- 1 Lebus traction capstan mooring winch
- 4* TSE mooring spoolers
- 3 sets fiber optic slip rings

SIO Assets

- 2 Light-duty winches (SeaMac, Poseidon)
- Line spoolers & tensioners (1960's vintage)
- Cranes & forklifts

* 1 TSE Mooring Spooler is SIO-owned, but operated as pooled asset

Pool Assets (cont.)



DTW Components

R/V MARIA S MERIAN in March and April of 2014.

Leased to Fugro Pelagos to search for MH370 in August 2014, returning NLT August 2015.

DTW generally returns to our facility between deployments for overhaul and service.

Pool Assets (cont.)



Dynacon CTD

Acquired fm UHMC in 2010

Formerly on long-term
deployment to R/V
MARCUS LANGSETH

Returned to SIO late 2013

Awaiting refurbishment and
the addition of a flagging
block

Looking for a new, long-
term home

Pool Assets (cont.)



4 TSE Mooring Spoolers

2 of 3 functional spoolers heavily subscribed in 2014.

2015 will be similar.

A 4th spooler will be online ~June 2015.

Note: These are not oceanographic winches.

Pool Asset Utilization in 2014

- **Dynacon CTD Winch:** 0
- **Dynacon Traction Winch:** 2 deployments, 36 days usage on R/V MERIAN, 122 days usage on Fugro's DISCOVERY (a 65% increase from 2013. Only 2% less than 2012).
- **TSE Mooring Spoolers:** deployments aboard six vessels (R/Vs MELVILLE, REVELLE, SPROUL, OCEANUS, NEW HORIZON, HEALY). Funded days decreased by 50% between 2013-2014. A 54% decrease since 2012.

Spooler	Days	Deployments
NSF1	51	9
NSF4	35	5
SIO	47	2
TOTAL →	133	16

Projected Utilization in 2015

(Numbers certain to increase as the year progresses.)

- **Dynacon CTD Winch:** 0
- **Dynacon Traction Winch:** 1 deployment, 154 days of usage onboard Fugro's DISCOVERY.
- **TSE Mooring Spoolers:** world-wide deployments aboard six vessels.

Spooler	Days	Deployments	Ship
NSF1	30	5	OCEANUS
NSF4	41	4	NEW HORIZON, SPROUL, SIKULIAQ
NSF5 (new)	0	0	-
SIO	66	3	REVELLE
TOTAL TO DATE →	137	12	

SIO Assets

Line Spooling & Tensioning



Note: all of this equipment is 1960's vintage; no capability for precise level winding or tensioning.



WP Elements

- Management and Quality Control
 - Pool Manager (part time, 20 %)
 - Winch/Wire Engineer (full time)
- Travel
 - WP tech attends vessels for mob/de-mob of Dynacon deep sea traction winch
 - Occasional travel supporting other winches

WP Elements

- Normal Equipment Maintenance & Support
 - Covered by the day rate for each winch
 - Includes tech wages, materials and supplies, cable spooling on pool assets (when spooling is done at SIO Marine Facility)
- Specialized Services
 - Engineering: design, analysis, MCD development, etc.
 - Base funding amount requested annually; big ticket items called-out separately

WP Elements

- Logistics (Shipping and Crane Service)
 - Expenses estimated annually and funds requested
- Specialized Maintenance, Upgrades & Repair
 - Major overhaul/repair items not part of routine maintenance; called-out separately in proposals
 - Winch mods for RVSS Appendix B compliance, or improved functionality
 - Improvements to TSE spoolers
- Capital Equipment Purchases
 - Generally big ticket items; called-out separately in proposals

Current Challenges Facing the Pool

- Attaining RVSS App A/B compliance for pooled assets and NSF-funded UNOLS operators
- Accomplishing engineering services
- Specifying and purchasing much needed assets (mooring spooler, portable spooling equipment, light-duty winches)
- Attaining compliance with upcoming wire maintenance standards

Current Projects

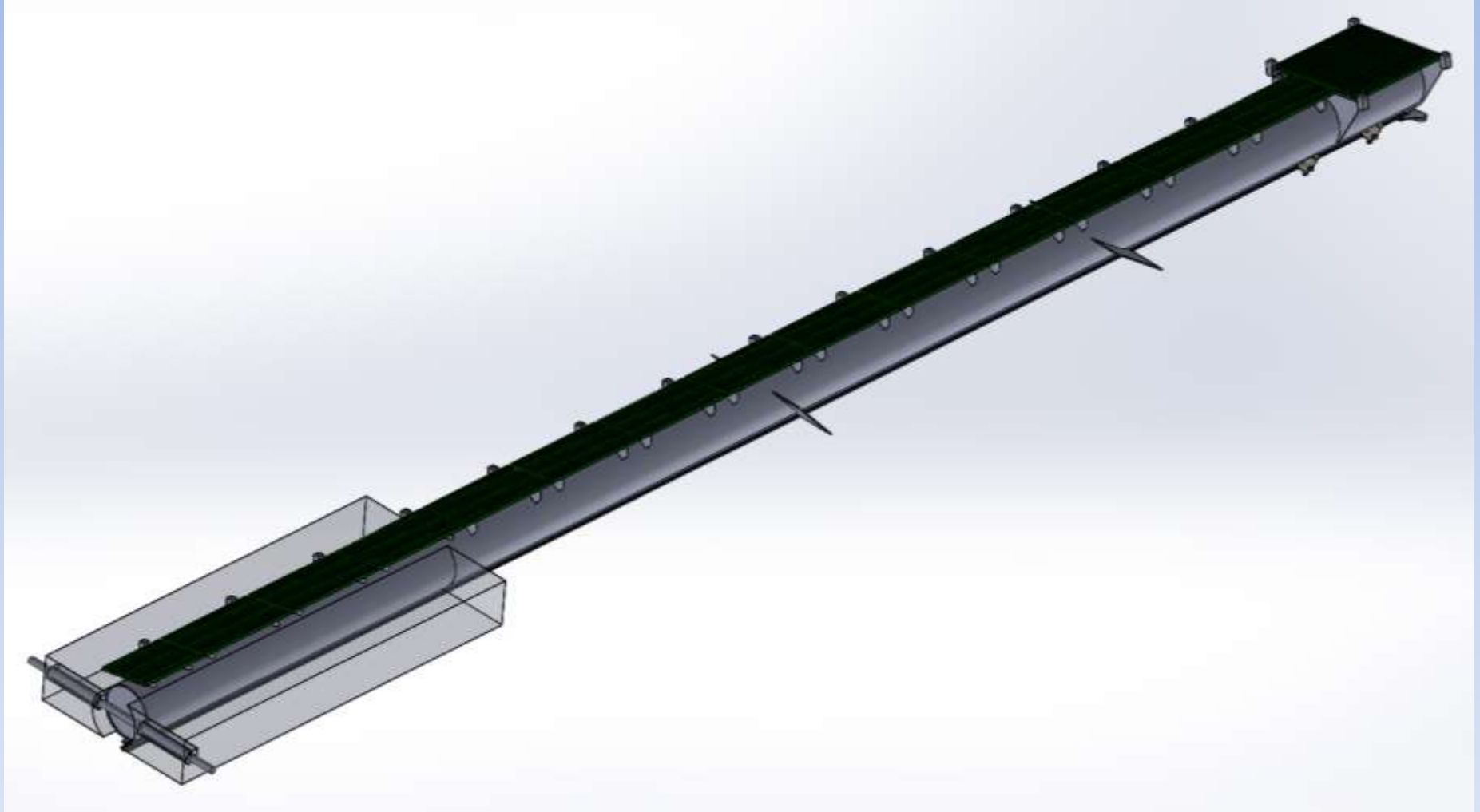
- RVSS Appendix B Revision
- R/P FLIP face boom
- Commissioning one Lebus double capstan winch
- Specification and purchase of tensioning spooler

Current Projects



R/P FLIP face boom

Current Projects



R/P FLIP face boom

Future Projects

- Dynacon CTD TW refurbishment
- Dynacon CTD flagging block design and fabrication
- R/V Atlantis, Thompson crane/crutch
- R/V Atlantis trawl winch
- R/V Atlantis guide sheaves