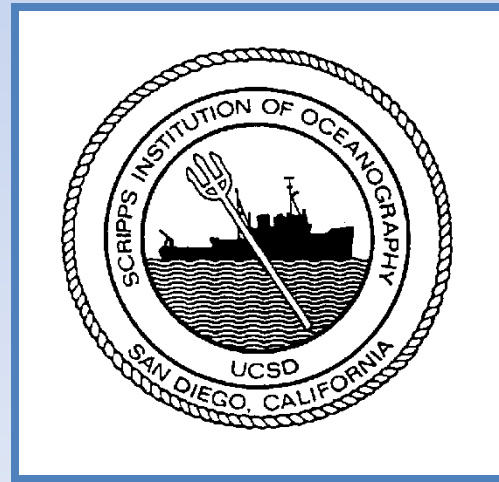


# RVOC Annual Meeting

April 2012

NSF West Coast Winch Pool  
Scripps Institution of Oceanography



# Mission

- Shared-use facility procures, maintains, upgrades and makes available a variety of portable oceanographic winches
- Support scientific needs of users and comply with strict safety standards
- Maintenance skilled technical
- Strive for continuous improvement.

# WCWP History

- SIO Dynacon traction winch shared-use asset since 2001
- WCWP officially started in 2009
- Additional assets acquired 2009 - 2011
- WCWP originally 1-year proposal and funding cycle
- In 2012 moved into a 5-year cycle

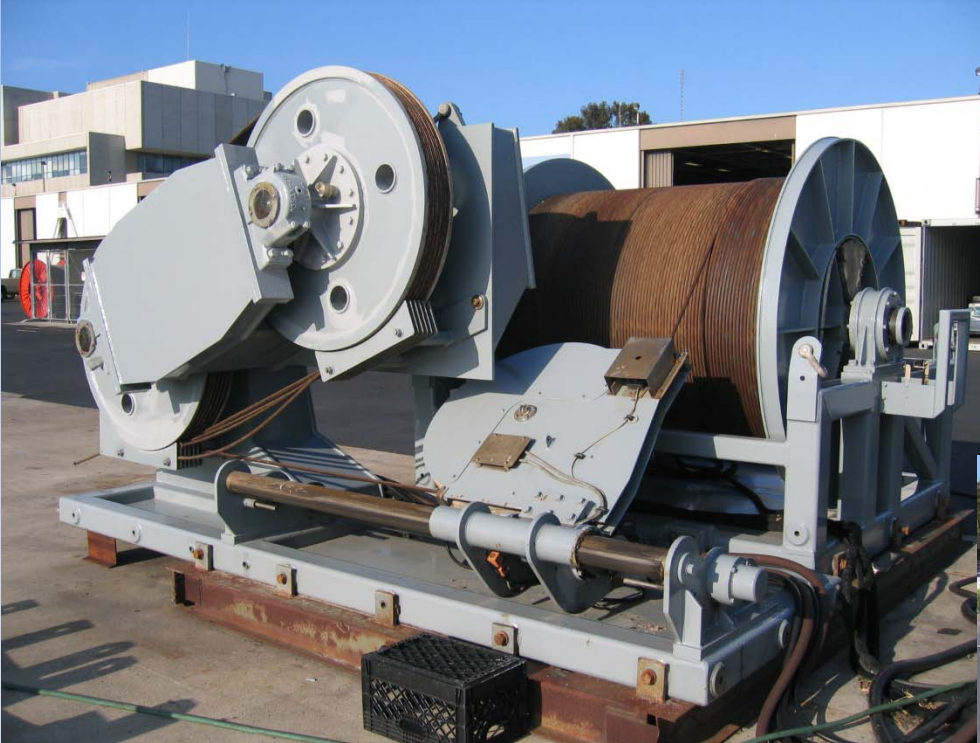
# Pool Assets

- 1 Dynacon Deep Sea Traction Winch
- 1 Dynacon CTD Winch
- 3 TSE Mooring Winches
- 3 sets F/O Slip rings

# SIO Assets

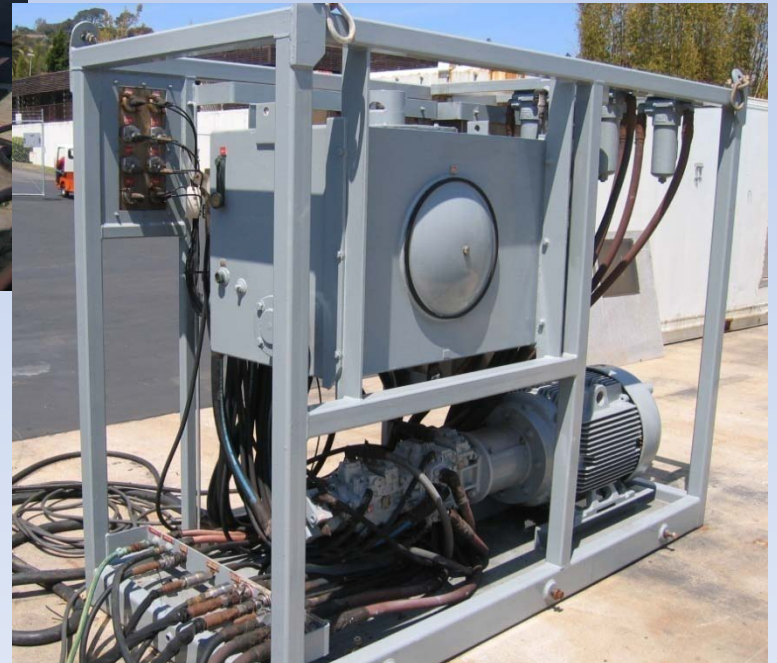
- Line spoolers and tensioners (1960's vintage)
- Cranes and forklifts

# Pool Assets



## DTW Components

This winch is very heavily subscribed in 2012. It generally returns to our facility between deployments for overhaul and service.



# Pool Assets



## Dynacon CTD

Acquired from UHMC in  
2010

On long-term  
deployment to R/V  
MARCUS LANGSETH



# Pool Assets



## 3 TSE Mooring Winches

Deployed as needed.

In recent years SIO transferred two winches, one each to UH and WHOI

# 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, requested)
- Travel
  - WP technician attends vessels for mob/de-mob of DTW
  - Occasional travel to support other winches

# WP Elements

- Normal Equipment Maintenance & Support
  - Covered by the day rate for each winch
  - Includes technician wages, materials and supplies, cable spooling on pool assets (when spooling is done at SIO)
- Specialized Services
  - Items not covered by normal support (engineering, consulting, MCD development, etc.)
  - A basic funding amount is 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
  - F/O slip ring overhaul
  - Marine-grade improvements to TSE winches
  - Winch display control panels (MTNW LCI-90i)
- Capital Equipment Purchases

# Current Challenges Facing the Pool

- RVSS Appendix A/B compliance
- 20% manager
- Lack of high end technical expert (winch/wire technology)
- Community expectations
- TSE “mooring” winches:
  - More accurate nomenclature would be “modified utility line puller.”
  - OK for deploy/recover long strings for moorings/buoys under low tension
  - Probably not OK to recover 5,000-lb anchors from ocean bottom.



# Current Utilization 100%

- TSE Mooring Winches: one each aboard MELVILLE, ROGER REVELLE and OCEANUS
- Dynacon CTD Winch: on long-term deployment to MARCUS LANGSETH
- Dynacon Traction Winch: aboard German RV MARIA S MERIAN

# DTW 2012 Scheduling

## Dynacon Deep-Sea Traction Winch with FO Cable

2012	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																				
JAN	RV TGT/Stern																					Apra, Guam			T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
FEB	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T																		
MAR																				T	T	T	T	T	T	T	T	T	T	T	T	T																			
APR	T	T	T	T	T	T	T	T	MOB Freeport, Bahamas (R/V MERIAN)										T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T																
MAY									De-mob @ St. John's							T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T																		
JUN	Major maintenance - change 3 hyd pumps																																																		
JUL		T	T	T	T	T	T	MOB Seattle (R/V TGT)																																											
AUG																																																			
SEP	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T																		
OCT	T	T	T	T	T	T	T	T	T	T	T	T	T	MOB Pta Delgada, Azores (R/V KNORR)																																					
NOV					De-mob Praia, Cape Verde								T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T																	
DEC	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T																		
JAN 2013	T	T	T	T	T	T	T	T	ETA San Diego (~60 days transit)																																										

### Notes

 Aboard Ship

 In Transit

 Mob/De-mob