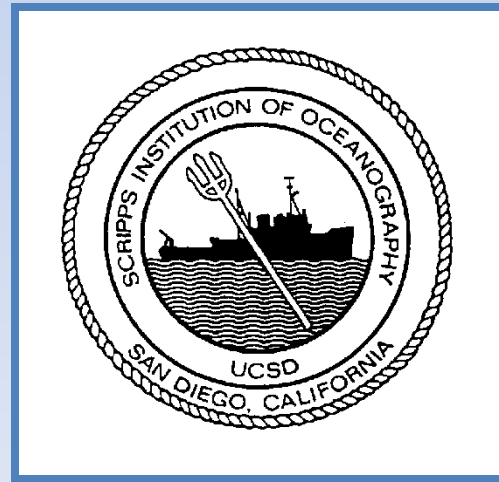


RVOC Annual Meeting April 2016

NSF West Coast Winch Pool
operated by
Scripps Institution of Oceanography



Winch Pool Mission

- To provide an inventory of oceanographic winches (etc.) for shared use.
- To keep the inventory in good repair, in compliance with applicable standards (CFR, RVSS).
- To modify the composition of the inventory to reflect the needs of end-users.
- To provide technical support: maintenance, repairs, design, engineering, fabrication, Q&A.

Personnel

- Management and Quality Control
 - Pool Manager: Capt. Eric Buck (part time, 20 %)
 - Winch/Wire Engineer: A. Davis, PE (full time)
- Mechanical
 - WP Technician: Lorenzo McCoy (as required)
 - Attends vessels for mob/de-mob of Dynacon deep sea traction winch
 - Occasional travel supporting other winches

Funding



- Logistics (Shipping and Crane Service)
 - Expenses estimated annually and funds requested
- Specialized Services
 - Engineering design, analysis, MCD development, etc.; generally included in our annual proposal
- Specialized Maintenance, Upgrades & Repair
 - Major overhaul/repair items not part of routine maintenance; called-out separately in proposals
- Capital Equipment Purchases
 - Generally big ticket items; called-out separately in proposals

Funding



- 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)

Winch Pool Inventory (NSF-owned)

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

Winch Pool Inventory



Dynacon Traction Winch

Leased to Fugro Pelagos to search for MH370 in August 2014, returning NLT Sept. 2016.

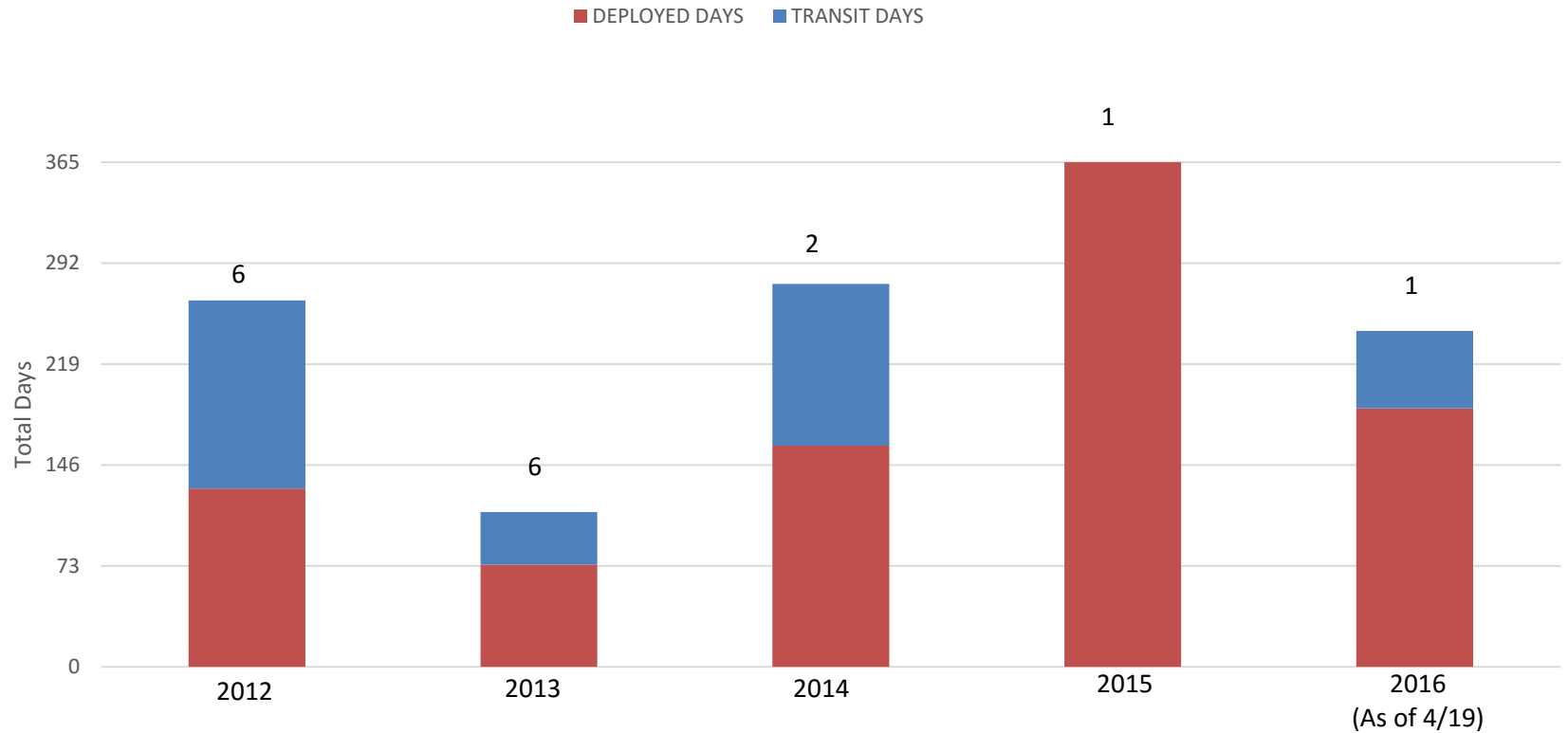
DTW generally returns to our facility between deployments for overhaul and service.

(Remote operating station w/LCI-90 not shown)



Pool Asset Utilization

Utilization, Dynacon Traction Winch



Winch Pool Inventory



(Remote operating station, HPU not shown)

Dynacon CTD Winch

Acquired from UHMC in 2010

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

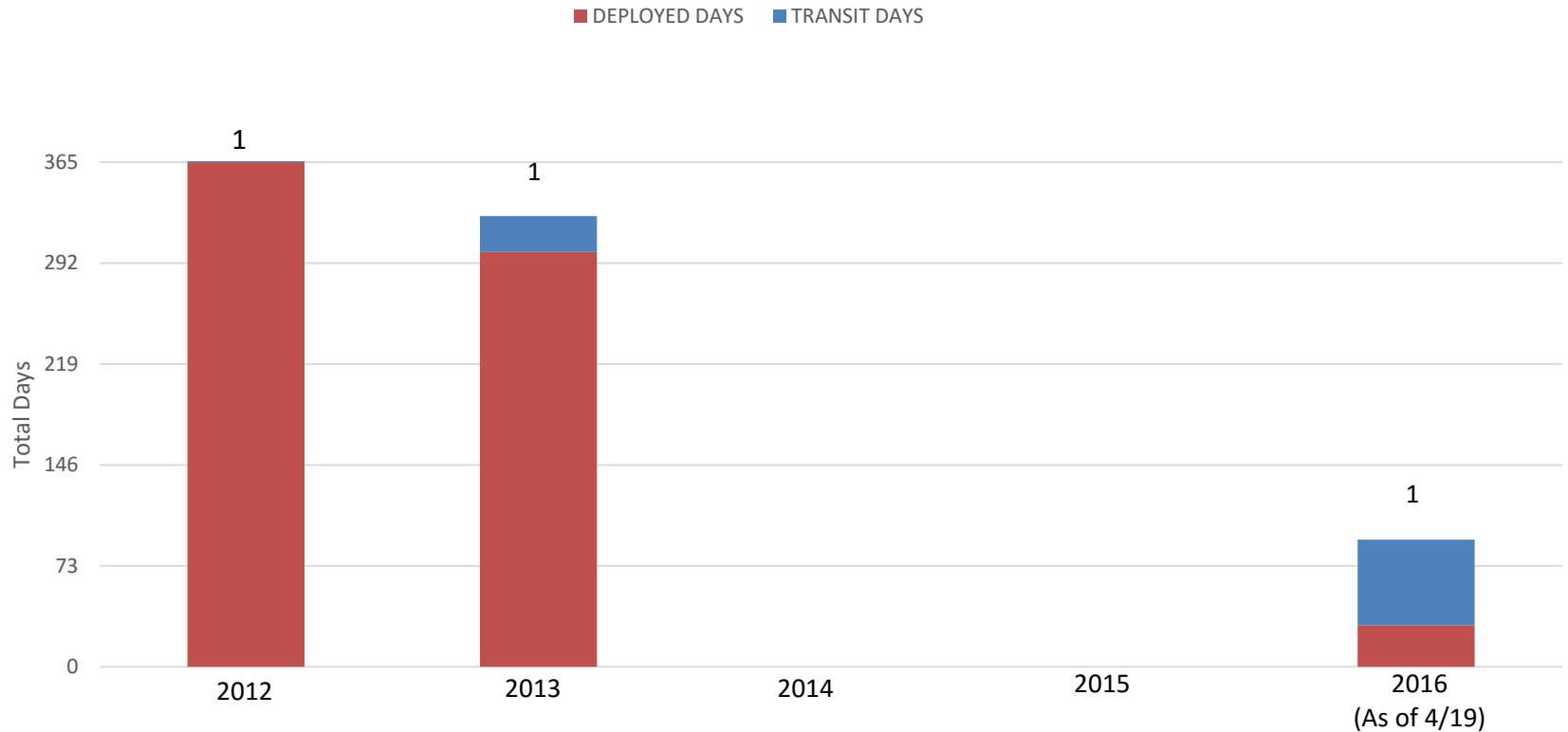
Returned to SIO late 2013

2014-2015: awaited
refurbishment, flagging block

Leased by UH for use on KOK
Sept.-Oct. 2016

Pool Asset Utilization

Utilization, Dynacon CTD Winch



Winch Pool Inventory

NEW!

Dynacon Spooling Winch

Formerly MBARI "MOOS" winch.

MBARI removed from service,
offered for purchase only.

Recently acquired from MBARI.

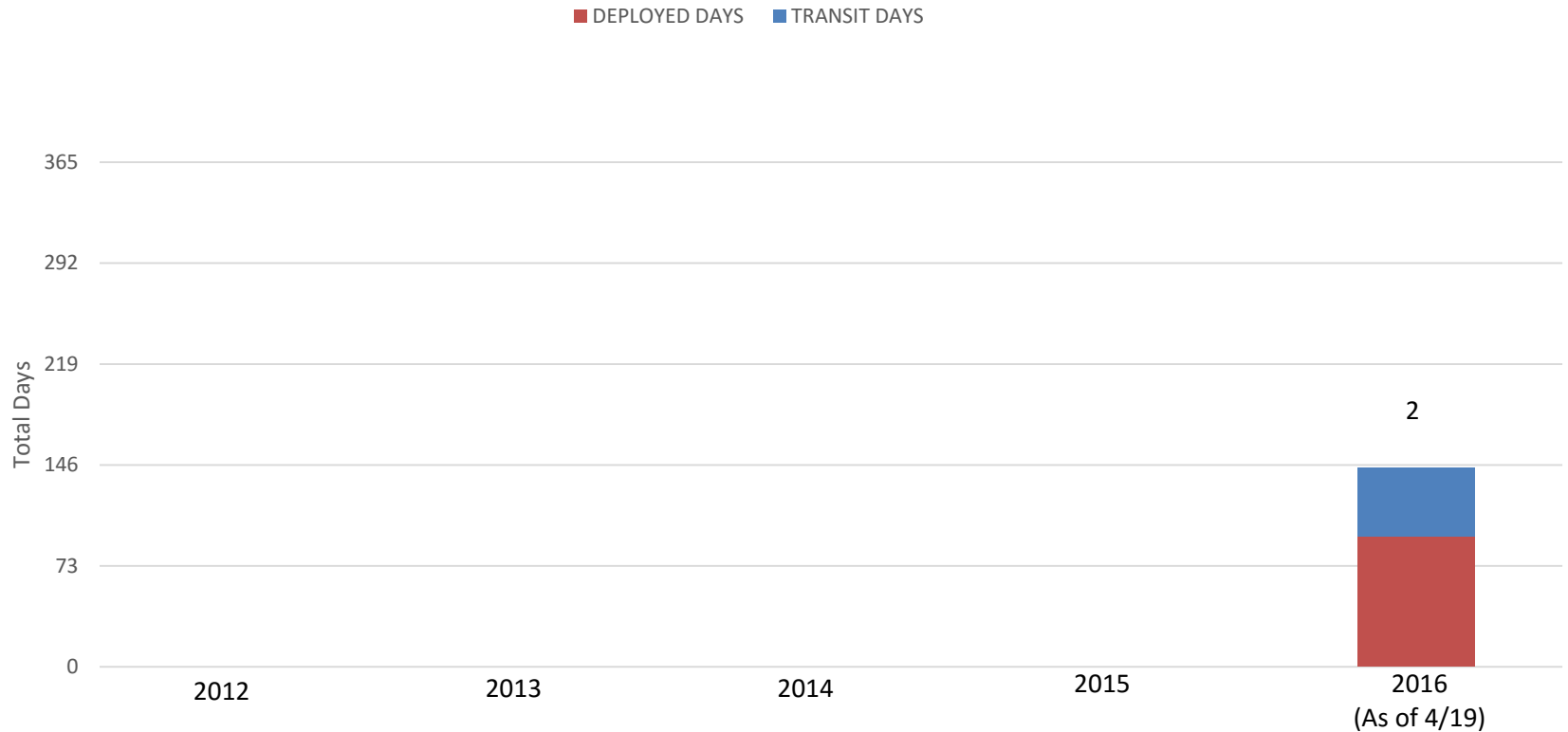
Subscribed for 86 days in 2016.



(Remote operating station, HPU not shown)

Pool Asset Utilization

Utilization, Dynacon Spooling Winch



Winch Pool Inventory

NEW!



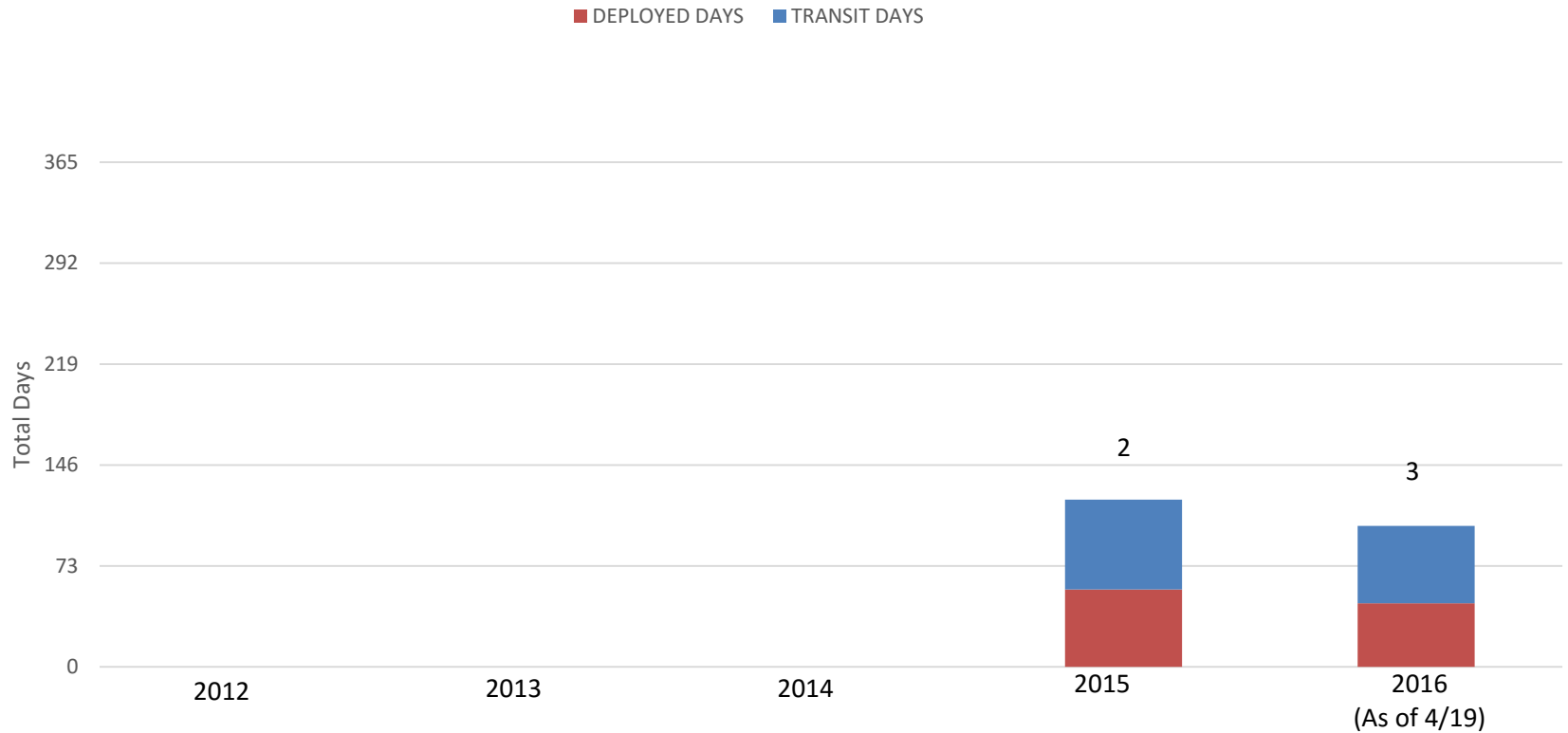
Lebus Mooring Capstan

Deployed 58 days, in transit 54 days since it was received from
Lebus in July 2015.

(Remote operating station, wireless remote not shown)

Pool Asset Utilization

Utilization, Lebus Mooring Capstan



Winch Pool Inventory



3 TSE Mooring Spoolers

Our most highly requested asset.

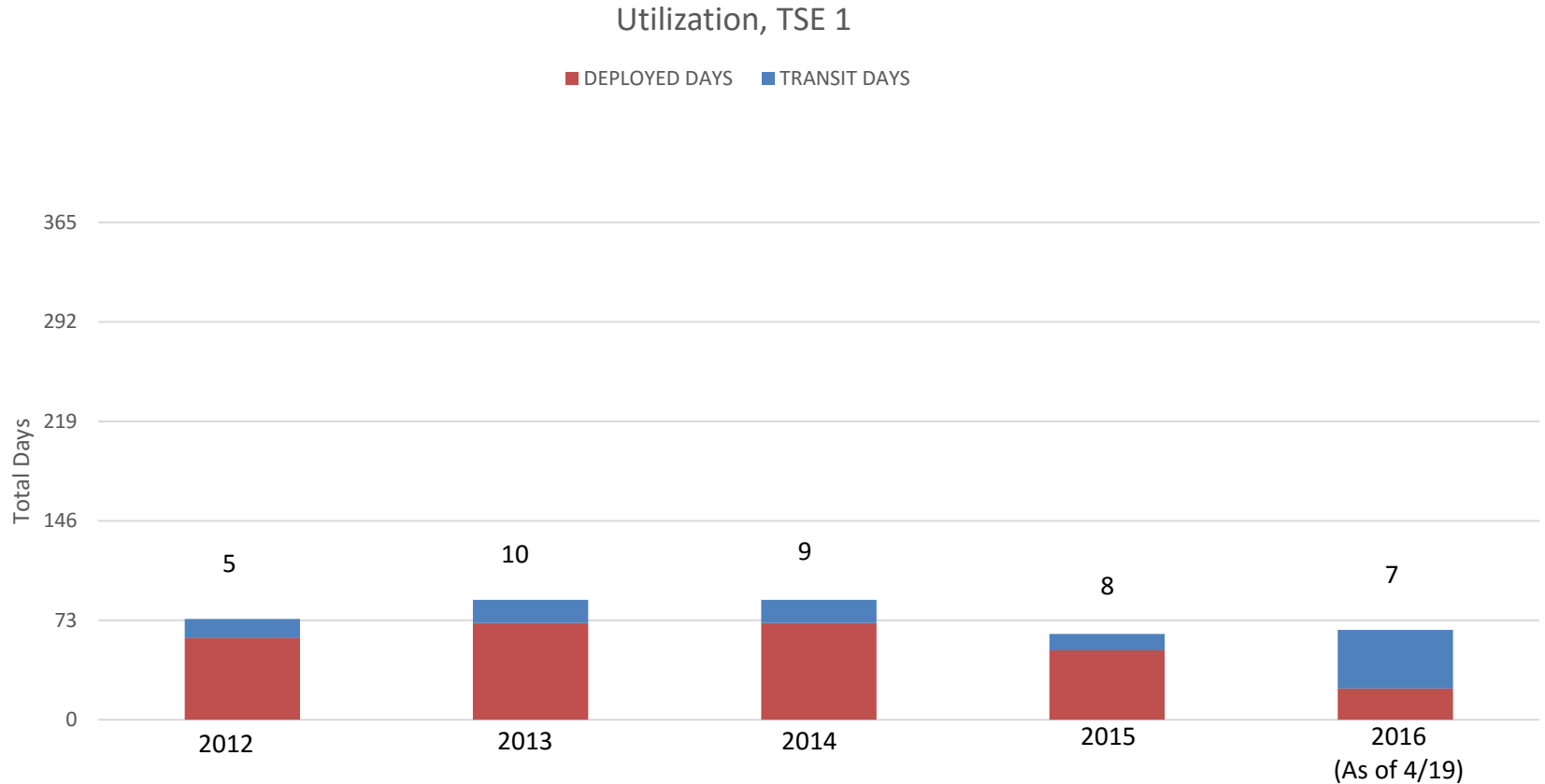
1 new spooler brought online fall 2015.

All spoolers are heavily subscribed.

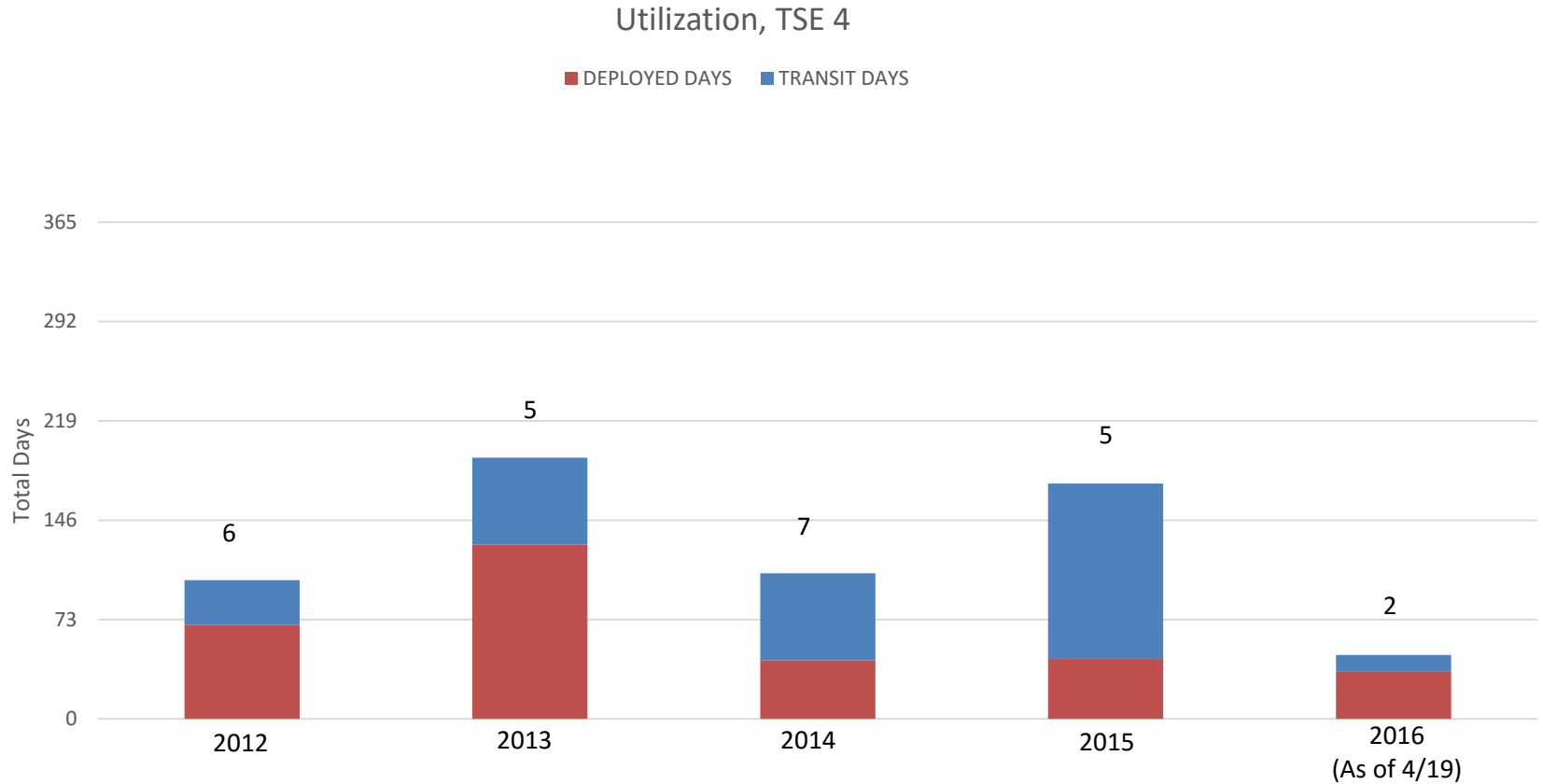
Note: These are not oceanographic winches.



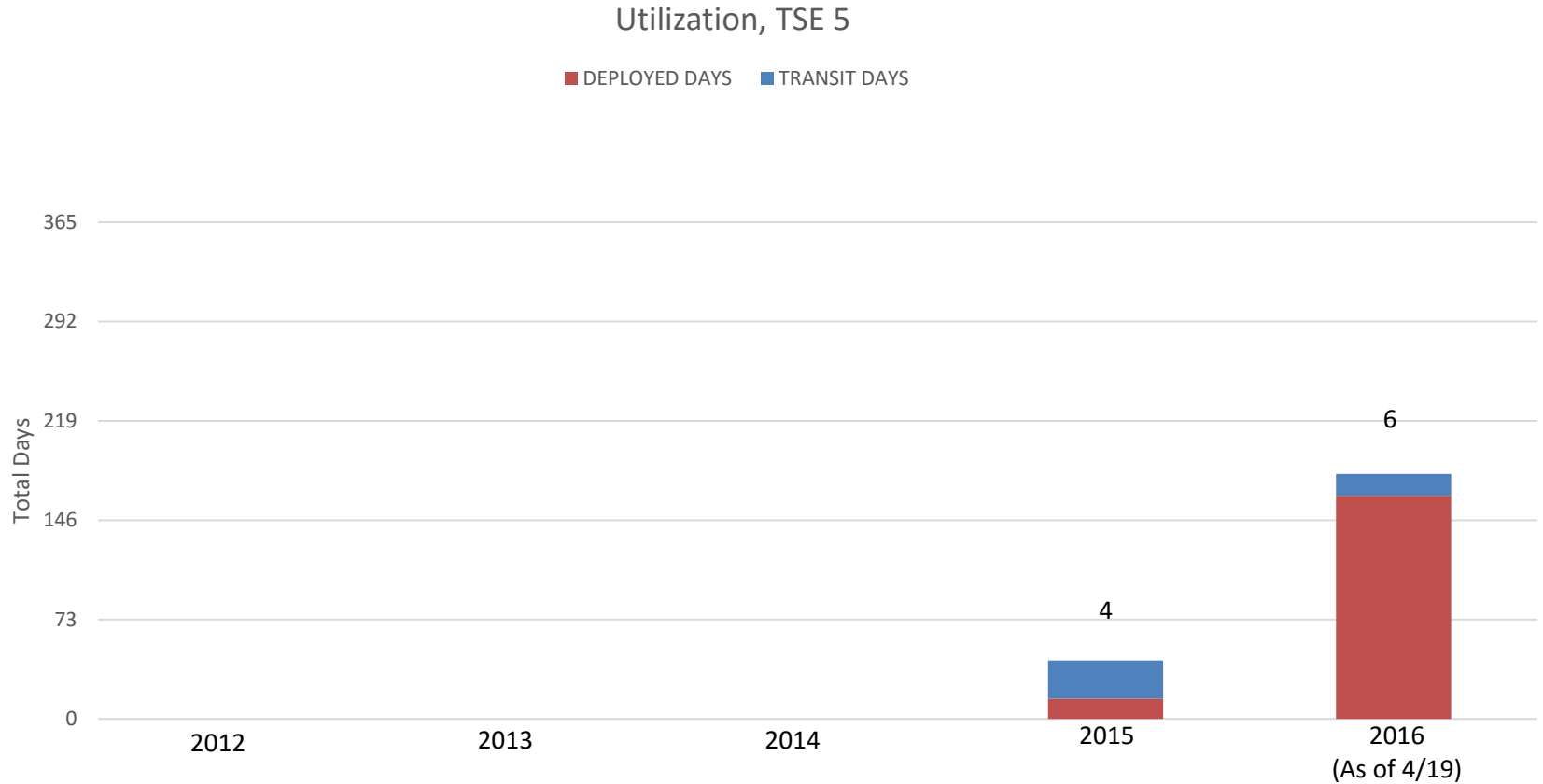
Pool Asset Utilization



Pool Asset Utilization



Pool Asset Utilization



SIO Inventory

- 1 TSE mooring spooler
- 2 Light-duty winches (SeaMac, Poseidon)
- 2 Line spoolers (1960's vintage)
- 3 Tensioners
- Cranes & forklifts
- HPU

SIO Inventory



SeaMac, Poseidon (light duty) Winches

Also highly requested.

Reliable, in good
repair, but long in the
tooth.

SIO Inventory

Line Spoolers & Tensioners



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



SIO Tensioning Spooler

by Markey Machinery



We've received funding from NSF under the SSSE program for a tensioning spooler suitable for oceanographic wire and cable. Markey Machinery of Seattle Washington won the competition to design and build it, the spooler should be completed and delivered in early autumn of this year.

Current Projects

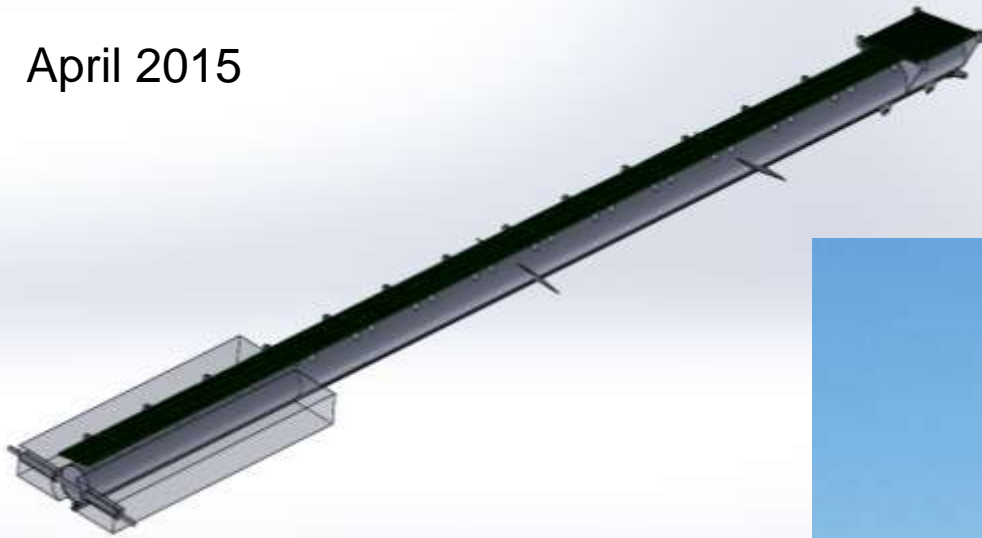


R/P FLIP face boom



Current Project

April 2015



April 2016



R/P FLIP face boom

Future Projects

- R/V Atlantis, Revelle, Sally Ride, Thompson(?): MCDs.
- West-coast winch pool: MCD component booklets.
- Appendix B training.

Current Challenges Facing the Pool

- Maintaining a high state of readiness on a greater amount of equipment, providing high quality of service to a greater number of customers, with the same staff.
- Attaining full RVSS App A/B compliance for pooled assets while accomplishing all other directives.
- Providing engineering services to a broader population.

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<https://scripps.ucsd.edu/ships/national-science-foundation-west-coast-winch-pool>