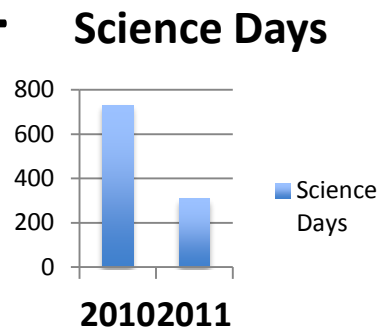
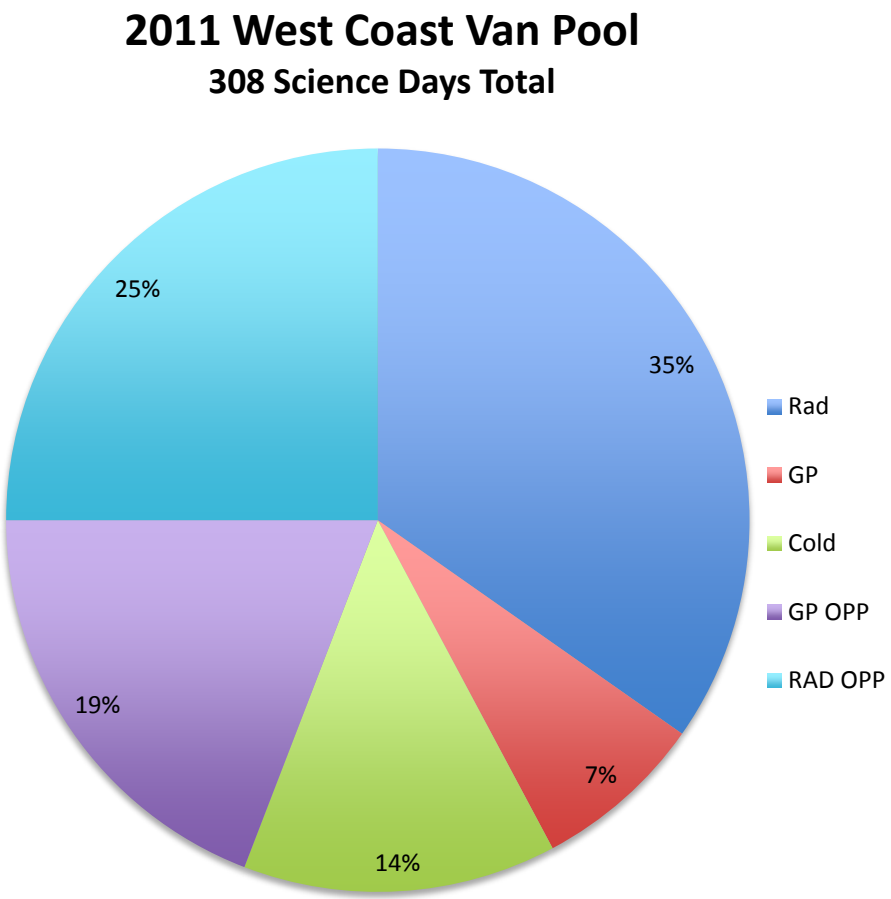
West Coast Van Pool 2011

- 308 Science days
- 198 Transit days
- Liquid Scintillation Counter LSC: Beckman Coulter no longer manufactures
- Newly acquired 20k# capacity forklift
- Unauthorized welding





West Coast Van Pool 2012

- 6 Vans for 288 Days on 4 ships.
- Personnel Van(s)
- 2 Vans from UW

Oceanus and her sister ship *Wecoma* at the WHOI dock in 1975.

R/V *Oceanus*

The why's and wherefores of
OSU's Ship-Swap

Overview

- Purpose: Why we did this?
- Background: Where we are and how we got here
- Mandate: NSF's direction
- Findings
- The transit
- Outcomes and results (so far)
- Plan for this year
- Wecoma fate

Purpose and Intent

- To ensure that OSU has a research vessel that is the least expensive to operate, meets scientific objectives, and remains viable for the longest period of time.

"Past performance is not an indicator of future success."

-Peter Drucker

Background

- Spring 2011: Fleet Improvement Committee sends letters to WHOI, URI, OSU.
- NSF announces decision to retire *Oceanus* at end of 2011.
- 2010 Shipyard: ABS unofficially signaled that it may not renew *Wecoma's* loadline in 2014 without significant work to reverse wastage issues throughout the hull, stacks, and plenum.

Background (2)

- OSU ShipOps was NOT looking for a “new old ship” to operate
- OSU was skeptical that Oceanus was in significantly better material condition

The Mandate

- To formulate a proposal to NSF that presents the preferred alternative in consideration of:
  - Best option for the “community”
  - Best platform for science
  - Lowest cost to the Agency and the Taxpayers (over a 5-10 year time horizon)

The Team

- Demian Bailey: Marine Superintendent
- Daryl Swensen: Martech Superintendent
- Don Hilliard: Port Engineer
- Jeff Crews: Captain
- Fred Jones: Jack of all Trades

Evaluative Areas

- Survivability: Hull, superstructure, and major component condition.
  - Component failure could lead to de-activation
- Material Condition: State of the vessel
- Science Ability: Equipment, resources, and capabilities to best meet the University and science community requirements.
- Habitability: The state of the living spaces and overall condition of the house.

PART 1
Material Condition

	General Condition		Material Obsolescence		Technical Obsolescence		Years Remaining w/o SLE		Years Remaining w/SLE		SLE Cost Estimate	
Stability	2.0	2.3	2.0	2.3	2.0	3.0						$0
Hull & Superstructure	2.7	2.8	2.8	2.8							$255,000	$200,000
Major Machinery	2.7	3.0	2.7	3.3	2.7	3.7					$460,000	$500,000
Auxiliary Machinery	3.0	3.1	3.4	3.4							$320,000	$370,000
Electrical and Control	2.6	2.8	2.7	3.1	2.5	3.0					$400,000	$450,000
Deck Equipment	3.0	**2.0**	3.0	**1.7**			5	5	5-10	5-10	$160,000	$0
Science Support Facilities	2.8	2.9	3.3	3.3	2.8	3.0					$110,000	$500,000
Science Load Handling	2.3	2.8	3.0	3.0	2.8	3.0					$250,000	$0
Accommodations	3.4	**3.3**	3.8	4.0							$45,000	$550,000
Overall	**2.8**	**2.8**	**3.0**	**3.0**	**2.5**	**3.2**					**$2,000,000**	**$2,570,000**

	General Condition		Material Obsolescence		Technical Obsolescence		Years Remaining w/o SLE		Years Remaining w/SLE		SLE Cost Estimate	SLE Cost Estimate
Stability	Very Good	Very Good	Very Good	Very Good	Very Good	**Good**						$0
Hull & Superstructure	Good	Good	Good	Good							$255,000	$200,000
Major Machinery	Good	Good	Good	Good	Good	**Fair**					$460,000	$500,000
Auxiliary Machinery	Good	Good	Good	Good							$320,000	$370,000
Electrical and Control	Good	Good	Good	Good	Good	Good					$400,000	$450,000
Deck Equipment	Good	**Very Good**	Good	**Very Good**			5	5	5-10	5-10	$160,000	$0
Science Support Facilities	Good	Good	Good	Good	Good	Good					$110,000	$500,000
Science Load Handling	Very Good	**Good**	Good	Good	Good	Good					$250,000	$0
Accommodations	Good	Good	Fair	Fair							$45,000	$550,000
Overall	**Good**	**Good**	**Good**	**Good**	**Very Good**	**Good**					**$2,000,000**	**$2,570,000**

OSU

Green Text = OSU Superior rating

Red Text = OSU Inferior rating


1 30
Sperry Marine
RUDDER
← LEFT RIGHT →


BAND-AID
ZINC OXIDE
THROAT LOZENGE
BENADRYL
BAND-AIDS
TAPE
POST-OP SPONGES
STERILE PADS
GAUZE
GAUZE SPONGES
SHELF 1


FIRE
STATION
#4
SECURITY NOTICE
MARSEC LEVEL 1


GRAINGER

PART 2:
Science-Ability


SWL 140000 LBS
COAST GUARD


AT SEA
THIS W.T. DOOR
CLOSED
WHEN NOT IN USE


FIRST AID

PART 3:
Habitability

PART 4:
Survivability

Comparative Methods

- Crawled troubled spaces on both vessels:
  - UT Soundings
  - Relative wastage areas roughly measured
- Evaluated NSF inspections results (WE, OC)
- Evaluated self analysis results (WE, OC)
- Developed weighted comparison matrix

-2	highly favorable to WE
-1	favorable to WE
0	very similar
1	Favorable to OC
2	Highly favorable to OC

Weight factor	
1	considerable
4	important
10	critical

Conclusions: Three Alternatives

Alternative	Pros	Cons
Status Quo	• Least short term disruption and effort • Known Issues • Retain known science capacity	• Estimated high maintenance costs • NSF possibly unsympathetic to maintenance needs
Operate WE w/ URI Partnership to capitalize OC	• Most parts to be maintained by URI • $$ from OC scrap process • Increased parts pool increases survivability	• Not favorable to WHOI • Estimated high maintenance cost
Operate OC and capitalize WE	• Higher state of material condition, survivability, habitability • NSF possibly sympathetic to maintenance needs • Repurpose ARRA $$ • $$ from WE scrap process • Increased parts pool increases survivability	• Loss of Wecoma • Time consuming conversion • Change in science capability

The Numbers…

* Unplanned dry docking to fix current leak issue. Full cost accounting

Near-term items (2013/earlier)		WECOMA	OCEANUS
Shell & web repairs, ER fwd P/S		$0.00	$175,000.00
Shell & web repairs, ER aft P/S		$175,000.00	$100,000.00
Shell repairs, BT room *		$300,000.00	$35,000.00
Shell repairs, CPP room		$0.00	$15,000.00
Shell & web repairs, shaft alley		$250,000.00	$0.00
Corrosion repairs, winch room		$0.00	$15,000.00
MSD addition/upgrade		$60,000.00	$75,000.00
CPP overhaul		$115,000.00	$100,000.00
OWS upgrade		$0.00	$10,000.00
Air handler & ducting replacement		$40,000.00	$15,000.00
Switchboard modernization		$60,000.00	$0.00
Steel pipe repair/replacement		$50,000.00	$15,000.00
	Subtotal	$1,050,000.00	$555,000.00
Long-term items			
Funnel, stack & vent plenum repairs		$600,000.00	$100,000.00
Mast repairs		$100,000.00	$0.00
	Subtotal	$700,000.00	$100,000.00
Other			
A-Frame		$350,000.00	$0.00
Conversion		$0.00	$350,000.00
Transit from WHOI		$0.00	$163,000.00
MetMast		($30,000.00)	$0.00
Transas		$10,000.00	$10000,00
App-A Compliance		$20,000.00	$0.00
	Subtotal	$380,000.00	$523,000.00
	Total:	**$2,130,000.00**	**$1,178,000.00**

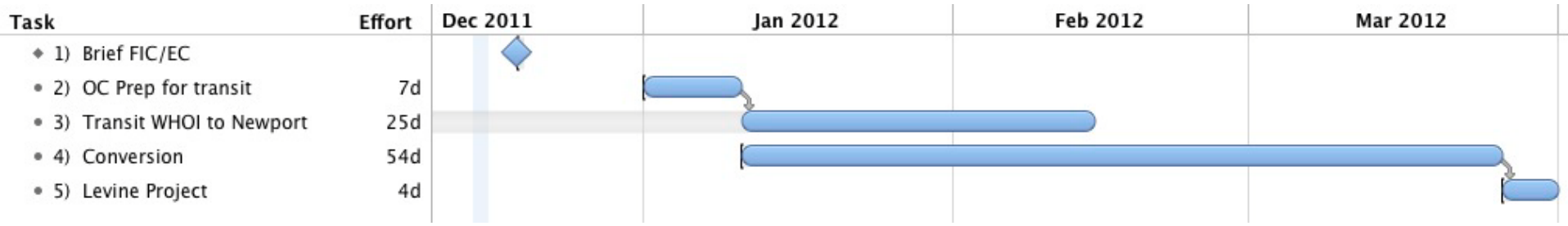
Timeline

- Considerations:
  - Cooperative agreements between operators and NSF expire in February, 2012
  - Inactive vessels cost money to reactivate
  - Decisions needed ASAP regarding 2011-2012 winter repairs and upgrades (A-Frame, Leak, Turbo, etc)
- Handshake agreement with WHOI to provide decision by middle of January if at all possible
  - Decision will dictate subsequent actions and timelines

Direction from NSF

- OSU's determination, ratified by a community decision
- Four step process
  - LOI due to NSF Monday, December 19th
    - If…we were to use *Oceanus* for Levine in March
  - Budget case and science impact memo to NSF
  - Revised ShipOps Budget Proposal
  - Disposal Proposal

Course of Action



- 12/20: Brief FIC/EC
- 12/26: LOI from OSU to NSF
- 1/18/12: Depart for WHOI
- 1/25/12: Depart WHOI (“convert” in route)
- 02/21/12: Arrive Newport

Departure from WHOI

http://www.youtube.com/watch?v=qRV1IG3rs1o

Transit to OSU

Arrival In Newport

Wednesday
February 22, 2012
48 Pages
75¢

NEWS TIMES

130 Years
Number 15
Newport
Oregon

Your information source for the Central Oregon Coast

SMALL CRAFT ADVISORY
Wednesday
Showers, mainly before 4 p.m., high near 52. W wind 20 to 25 knots. Wednesday night, a 30 percent chance of showers, low around 38. NW wind 25 to 30 knots with gusts to 35 knots.

Thursday-Friday
Thursday, partly ...ny, high near 50. ...N wind 10 to 15 ...s. Thursday night, ...stly cloudy, low ...r 39, SW wind 5 ...knots. Friday, a ...ercent chance of ... high near 52, ...wind 30 to 35 ... Friday night, a ...e of rain, low ...ear 40.

...1.15 = mph)

...SUNSET

	Sunset
...	5:51pm
...	5:52pm
...	5:53pm
...	5:54pm
...	5:55pm

...TIDES

...R/V Hatfield Marine Science Center Dock

	High Water	Low Water
...h 21	12:05am / 8.3ft	5:30am / 2.2ft
	11:44am / 8.9ft	6:02pm / -0.2ft
...h 22	12:38am / 8.5ft	6:21am / 1.8ft
	12:25pm / 8.2ft	6:43pm / 0.1ft

The R/V Oceanus is moored to the dock at Oregon State University's Hatfield Marine Science Center just behind her sister ship R/V Wecoma. She arrived about 12:30 p.m. Tuesday after a 6,084-mile journey from Massachusetts-based Woods Hole Oceanographic Institution. Oceanus will replace Wecoma as OSU's marine research vessel. (Photos by Terry Dillman)

R/V Oceanus arrives

Vessel completes journey from East Coast

By Terry Dillman
Of the News-Times

After almost a month at sea traversing 6,084 miles of water, the R/V Oceanus slid under the Yaquina Bay Bridge early Tuesday afternoon, all but obscured by low clouds and rain.

A fair number of hardy souls - primarily crew members' families and staff and dock workers for Oregon State University's Hatfield Marine Science Center (HMSC) - ventured out to greet the vessel, but it was almost an inauspicious end to a history-making journey launched Jan. 29 from Woods Hole Oceanographic Institution (WHOI). A band and several hundred folks provided a rousing sendoff amid cheers, horns and fireworks to a vessel that served the Massachusetts-based WHOI marine research facility since 1975.

While adverse weather led to a more subdued welcome, the arrival of the Oceanus marks a new chapter in marine research history at Hatfield.

OSU's signature research vessel for the past 36 years, the Wecoma, is sailing into retirement, time and tide having taken their toll on her. Oceanus will replace Wecoma in supporting Pacific Ocean, and while she differs in many ways, her arrival marked a homecoming of sorts. These are sister ships, part of triplets launched in 1975 that also includes the R/V Endeavor, currently based at the University of Rhode Island. The National Science Foundation (NSF) owns all three ships, which support research projects funded primarily by NSF and the U.S. Navy. They are also part of the University National Oceanographic Laboratory System fleet, a consortium of 60 academic research institutions that operate 16 vessels around the nation.

The three sisters are mid-sized research vessels designed for expeditions lasting two to four weeks.

Oceanus on Page A3

Jeff Crews, former skipper of the R/V Wecoma and newly assigned captain of R/V Oceanus, greets his wife, Tracy, and son, Nick, 5, at the Hatfield Marine Science Center dock Tuesday afternoon. Tracy is the Oregon Sea Grant marine education coordinator at Hatfield.

Children's Trust to seek tax levy in November

By April Bamburg
Of the News-Times

After three years of work and planning, the Children's Trust of Lincoln County is starting to make their presence known, giving presentations on their plans to focus on three areas to address issues of early childhood education, child development outside of school and child abuse prevention and intervention.

The steering committee includes 10 individuals from around the county with varied involvement in children's projects and community organizations, including retired teachers and a former district attorney.

The Lincoln County Board of Commissioners has agreed to put a tax levy on the November ballot if organizers can, as a show of good faith, gather the required number of signatures. If successful, the levy would fund the organization with a tax of $.35 per thousand in assessed property value.

Commissioner Bill Hall will serve as the county commissioners' liaison with the trust. He cautions that inclusion on this November's ballot is not a done deal and that the commissioners haven't taken formal action to place the Children's Trust levy before voters.

Children's Trust on Page A7

Beach box mystery explained

By Terry Dillman
Of the News-Times

2012 and Beyond

- 164 funded days this year (up from 112)
- Live and learn
- Substantial Shipyard period next winter
- 2013: looks full!
- 2014-???:

On the other hand….

- Ship doesn’t ride quite as well
- Stability challenges
- Reduced science capability
- Berthing van vs. 18 science berths

On the Plus side…

- “All publicity is positive”
- All proposals have been fully funded
- New high-tech fleet management system
- New customer base possibilities
- We have a real chance at keeping a vessel in operations until a replacement is obtained.

What's the Fate of Wecoma?

- Title to be transferred to OSU for disposal
- NSF has given some direction
- Resale Value: ~$400k
- Parts Value: ~$2.4M
- Trade Scrap value for parts removal

Equipment	Illegal to sail	Est. Value	Possible Use
Transas ECS	N	$20,000	1
GMDSS Suite	N	$15,000	2,3,4
AIS	N	$5,000	2,3,4
GP-90D GPS Rcvr	N	$2,000	1,2,3,4
Echo Sounder	Y	$2,000	1
Radars	Y-1 at least	$15,000	2,3,4
VHF Radios other than GMDSS	Y - 1 at least	$1,000	1,2,3,4
NAVTEX	N	$500	1,2,3,4
ICOM HF/MF Rdo	N?	$2,500	2,3,4
Necode	N	$1,200	1,2,3,4
Simrad Auto Pilot	Y	$5,000	2,3,4
Winch Inst.	N		
Sat Comms other than GMDDS C unit	N		
Uninteruptable DC power supplies	Y	$5,000	1,2,3,4,5
WEFAX	N	$500	2,3,4
Handheld radios	N	$2,000	1,2,3,4,5
Intercom system	N	$1,000	?
General Announcing System	N	$1,000	?
VoIP Phone System	N	$1,000	1?
SARTS	N	$1,000	1,2,3,4
EPIRBs	Y?	$1,000	2,3,4
Misc. stuff	N	$2,000	1,2,3,4
Charts & Pubs	N	$4,000	1
Clock	N	$1,000	1,4
Sperry Gyrocompasses/Repeaters	N?	$100,000	1,2
Magnetic Compass	Y	$25,000	1,2,3
Big searchlight	N	$5,000	1,2,3,4
Portable Dewatering Pumps	N	$3,000	1,2,3,4
Winches	N	$500,000	1,2,3,4
Crane	N	$250,000	2,3,4
Rescue Boat	N	$15,000	2,3,4,5
Rescue Boat Davit	N	$10,000	1,2,3,4
Anchor cable	Y	$5,000	1,2
Anchors	Y	$20,000	2,5
Anchor Windlass	Y	$20,000	1,2
Portable Capstan	N	$20,000	2
CPP Blades	Y	$300,000	1,2
CPP Hub	Y	$300,000	1,2
Tailshaft	Y	$200,000	1,2
Generator components	Y	$150,000	2
Main Engine Components	Y	$100,000	1,2
Bow Thruster Components	Y	$100,000	1,2
Emergency Generator	N?	$30,000	5,6
Galley Equipment	N	$10,000	1,2,3,4,5,6
Fire & GS Pumps	Y	$8,000	1,2,3,4
Oily Water Separator	N	$30,000	1
Smithy Combo Lathe/Mill/Drill	N	$10,000	1,2,3,4,5

Wecoma Retirement 23 Mar 12


WECOMA

Next Steps