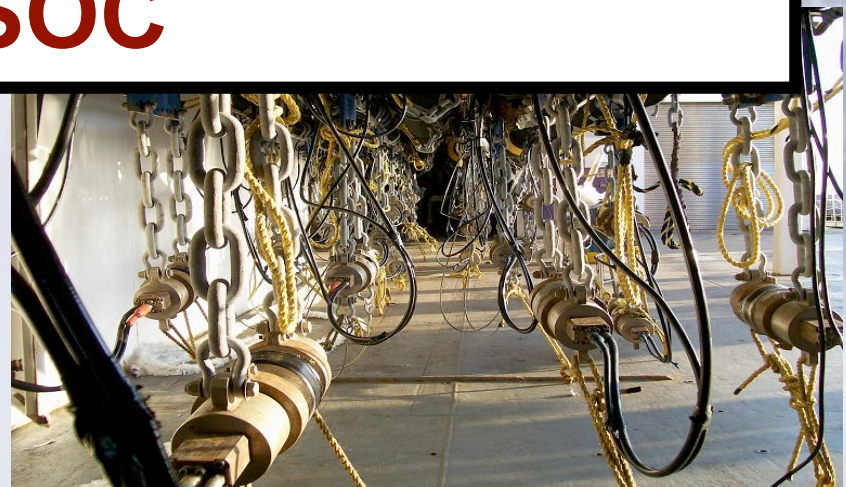




**Shipboard Scientific Support Equipment  
Oceanographic Instrumentation  
Technical Services  
MLSOC**



# New Procurements for *Langseth*

<u>Equipment</u>	<u>Cost</u>
X-Band RADAR	\$34,400
Stern Capstans	\$44,250
Magnetometer Winch	\$10,529
Installation cost for Fleet Broadband	\$5,000
Propulsion Pitch Control Up-grade	\$350,000
Steering Control Up-grade	\$158,800
Engine Control Up-grade	\$213,159
Compressor Reliability and Air Management	\$96,020
Shaft Seal Upgrade	\$90,000
Oceanographic Winch Systems Evaluation	\$74,802
Bow Thruster Up-grade/Exchange	\$151,300
Used Streamer Purchase	\$135,000
Near Field Sound Source Hydrophones	\$11,200
Sound Source Umbilicals x 6	\$427,592
MCS Digital Air Management Manifolds	\$129,500
MCS Streamer Level Device Upgrade	\$232,645
Vane Tow Wire	\$110,617
	<b>\$2,274,814</b>



# Panel Comments

- “The proposal requests a significant amount of funding to purchase equipment and instrumentation. Given that the RV Marcus Langseth is a national facility, it is strongly suggested that the proponents at Lamont Doherty Earth Observatory consult with the vessel's oversight committee and come up with a multi-year plan that prioritizes the instrumentation/equipment needs of the scientific community for the vessel. Planning, input and support from the community is critical to justify this and future requests and needs to be included in future proposals.”
- “At the very least, it should have been evaluated by the MLSOC before submittal.”
- “In summary, this proposal should have been reviewed by the Langseth oversight committee.”
- “The proponents need to involve the oversight committee to ensure that important science needs justify the requests.”

# *Langseth* as a General Purpose Oceanographic Vessel

- “not one nickel to make Langseth a multipurpose vessel!”
- “The Langseth is not a general purpose vessel and never will be. She is a highly specialized MG&G asset and to use her otherwise would be a waste.”
- “To use this vessel as a general oceanographic ship would be a waste of resources.”
- “Lots of funding is being poured into the LANGSETH but the program seems to be lacking any sort of order.”
- “The proposed upgrades to the Langseth are both extensive and costly. If NSF is committed to supporting this vessel, these upgrades are necessary. Bringing the capabilities up to UNOLS standards for a multipurpose oceanographic vessel are important, as the trend now is for the Langseth to support multidisciplinary programs in addition to MCS operations. The proposed upgrades will allow the vessel more capabilities, as well as increase safety during MCS operations.”

**LANGSETH COSTS**

<b>R/V LANGSETH</b>	<b>2009</b>	<b>2010 (proposed)</b>	<b>% Delta</b>								
<b>Ship day rate</b>	\$31,000	\$40,522	31%								
<b>2009 Tech day rate</b>											
Basic Services	\$2,700	\$3,500	30%								
Source Only	\$10,000	\$12,000	20%								
2D	\$16,000	\$16,750	5%								
3D	\$34,320	\$34,320	0%								
<b>2009 Total day rate</b>	includes ship day rate plus Tech basic service rate plus specialized service rate										
Basic Services	\$33,700	\$44,022	31%								
Source Only	\$49,656	\$62,322	26%								
2D	\$55,656	\$67,072	21%								
3D	\$73,976	\$84,642	14%								
<b>Marine Mammal Mitigation</b>											
day rate (artificial)	\$5,956	\$6,300	6%								
<b>Examples:</b>	<b>Days</b>	<b>Ship</b>	<b>Tech</b>	<b>Mammal</b>	<b>Total</b>	<b>Comments</b>					
Mutter 2008 3D cruise	57	\$1,767,000	\$2,110,140	\$339,492	\$4,216,632	includes 15 days shakedown, 42 day cruise, no transit					
Holbrook 2009 2D cruise	59	\$1,829,000	\$1,103,300	\$351,404	\$3,283,704	includes 2 cruises (27 and 24 days) and transit (8)					
McGuire 2009 Source Only cruise	19	\$589,000	\$241,300	\$113,164	\$943,464	19 day cruise, no transit					
<b>Bangs 2010 3D cruise</b>	<b>34</b>	<b>\$1,377,748</b>	<b>\$1,285,880</b>	<b>\$214,200</b>	<b>\$2,877,862</b>	<b>34 day cruise, no transit</b>					
<b>Estimated Transit 2010</b> (assumes basic services only)	53	\$2,147,666	\$185,500	0	<b>\$2,333,166</b>						
<b>Comparison with EWING</b>	<b>Ewing' 05</b>	<b>Langseth '09</b>	<b>Langseth '10</b>	<b>% delta</b>							
Ship day rate	\$18,500	\$31,000	\$40,522	119%							
Tech day rate											
Basic Services	\$3,400	\$2,700	\$3,500	3%							
Source Only	\$5,500	\$10,000	\$12,000	118%							
2D MCS	\$13,000	\$16,000	\$16,750	29%							
Marine Mammal Mitigation	\$5,255	\$5,956	\$6,300	20%							
<b>2D Seismic Comparison</b>	<b>Days</b>	<b>Ship</b>	<b>Tech</b>	<b>Mammal</b>	<b>Total</b>	<b>Delta</b>	<b>% increase</b>				
Holbrook '08 on Ewing in '05	59	\$1,091,500	\$967,600	\$310,045	\$2,369,145						
Holbrook '08 on Langseth in '08	59	\$1,829,000	\$1,103,300	\$351,404	\$3,283,704	\$1,195,222	50%				
Holbrook '08 on Langseth in '09	59	\$2,597,298	\$1,194,750	\$371,700	\$4,163,748	\$880,044	27%				