

# REPORT ON THE FEDERAL OCEANOGRAPHIC FACILITIES COMMITTEE MEETING

Meeting took place on 28 May 2003  
at the Brookings Institution  
Washington, DC  
1400 to 1615

## Some Attendees

### FOFC

NSF - Dr. Margaret Leinen (Chair)  
EPA - Dr. Kennard Potts  
MMS - Dr. Ronald Lai  
ONR - Dr. Frank Herr  
NOAA - RADM Evelyn Fields  
ON - RADM Thomas J. Wilson  
USCG - Dr. Jonathan Berkson

### Others

NOAA - Elizabeth White  
Navy - Richard Hayes  
CORE - Bill Forns  
NSF - Polly Smith  
NSF - Dolly Dieter  
NSF - Mike Reeve  
Oceans.US - Larry Atkinson  
NOAA - Captain Samuel DeBow

### FOFC Members Not Present

USACE - Dr. Bill Birkemeier  
DARPA - Dr. Thomas Green  
DS - Ms. Margaret Hayes  
NASA - Dr. William Emery  
DE - Ms. Anna Palmisano



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## Agenda Included

FOFC Working Group Update  
by Chair Elizabeth White (NOAA)

1. Aircraft Brochure
2. Implementation Options for Fleet Renewal
3. Integrated Fleet plan vs. Non-Integrated Fleet Plan
4. Round-table Comments



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# Acquisition/Implementation

METHODS OF ACQUISITION	EXAMPLES	PROS	CONS	IMPLEMENTATION
<p><b>NEW CONSTRUCTION:</b> FEDERAL GOVT</p> <p>Individual Agency</p> <p>Multi-Agency</p> <p>STATE GOVT</p>	<p>NSF – Oceanus &amp; Cape Class Navy/NOAA – AGOR Class NOAA - FSVs</p> <p>[None existing]</p> <p>California – R/V New Horizon</p>	<ul style="list-style-type: none"> <li>- Clear ownership</li> <li>- Control over design and acquisition process</li> <li>- Single design can be used by multiple users to build multiple vessels</li> <li>- Use of existing design (less cost)</li> <li>- Cost spread over multi-agencies</li> <li>- Agencies maintain control of design</li> <li>- Use of design for more than one vessel</li> <li>- Clear ownership</li> <li>- Agencies do not need to identify funds</li> </ul>	<ul style="list-style-type: none"> <li>- Requires Congressional Appropriation of funds or increase in agency budget</li> <li>- Full cost of design and time associated</li> <li>- Unprecedented</li> <li>- Ownership unclear</li> <li>- Differing agency policies and procurement</li> <li>- States could depreciate construction cost of the vessel, increasing long term costs to agencies</li> <li>- Unlikely State will be able to fund vessels &gt;40m</li> </ul>	<ul style="list-style-type: none"> <li>- Federal Agency funds through Congressional Appropriation               <ul style="list-style-type: none"> <li>- mid-size infrastructure (NSF)</li> <li>- MREFC (NSF)</li> <li>- RFP - Open competition</li> </ul> </li> <li>- One Agency takes lead role</li> <li>- Agencies send funds to lead agency</li> <li>- RFP - Open competition</li> <li>- State funded</li> </ul>

# Acquisition/Implementation

METHODS OF ACQUISITION	EXAMPLES	PROS	CONS	IMPLEMENTATION
<b>INSTITUTION</b> <b>Direct Purchase</b>	SKIO – R/V Savannah	<ul style="list-style-type: none"> <li>- Clear ownership</li> <li>- Agencies do not need to identify funds</li> <li>- Acquisition may be faster than through agency acquisition</li> </ul>	<ul style="list-style-type: none"> <li>- Agencies have no control over design process and timeline</li> <li>- Most Institutions do not have the funds for outright direct purchase</li> <li>- Institutions could depreciate vessel construction cost, increasing long term costs to agencies</li> <li>- Can not force compliance with ABS/USCG regulations for vessels under 300GT</li> </ul>	<ul style="list-style-type: none"> <li>- Institution identifies funds, initiates design process, begins construction</li> </ul>
<b>Issue Bond</b>	UMIAMI – R/V Smith	<ul style="list-style-type: none"> <li>- Agencies do not need to identify funds</li> </ul>	<ul style="list-style-type: none"> <li>- Institutions could depreciate vessel construction cost and bond interest, increasing long term costs to agencies</li> </ul>	<ul style="list-style-type: none"> <li>- Institution issues bond, initiates design process, begins construction</li> </ul>
<b>Donations</b> (funds towards a vessel)	ODU – R/V Slowey	<ul style="list-style-type: none"> <li>- Agencies do not need to identify funds</li> <li>- Acquisition may be faster than through agency acquisition</li> </ul>	<ul style="list-style-type: none"> <li>- Unlikely that donation will cover full cost of a vessel, especially larger vessels</li> <li>- Institutions could depreciate cost of the vessel, increasing longterm costs to agencies</li> <li>- Donation promises may not be fulfilled</li> <li>- During harder economic times, donations are less likely</li> </ul>	<ul style="list-style-type: none"> <li>- Institution fundraising</li> <li>- Donor initiated</li> <li>- Institution initiates design process, begins construction</li> </ul>

# Acquisition/Implementation

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<p><b>CONVERSION OF EXISTING:</b></p> <p>FEDERAL VESSELS</p>	<ul style="list-style-type: none"> <li>- NOAA acquired Navy T-AGOS, T-AGs and YTT vessels</li> <li>- NSF acquired USCG vessel and converted it to R/V Barnes</li> </ul>	<ul style="list-style-type: none"> <li>- Clear ownership</li> <li>- No acquisition cost</li> <li>- Clear acquisition process</li> </ul>	<ul style="list-style-type: none"> <li>- Typically older vessel</li> <li>- Typically vessel not optimally designed for oceanographic research</li> <li>- Costly to convert for general oceanography</li> <li>- Vessel may not be optimal for conducting research even after conversion</li> <li>- Conversion may happen over several years</li> </ul>	<ul style="list-style-type: none"> <li>- Federal acquisition (transfer) process</li> </ul>
<p>COMMERCIAL VESSELS</p>	<ul style="list-style-type: none"> <li>- UMN acquired R/V Blue Heron, former fishing vessel</li> <li>- UCSD acquired R/V Sproul and BBSR acquired Weatherbird II, both former oil field supply vessels</li> <li>- LDEO acquired R/V Ewing, former oil industry vessel</li> </ul>	<ul style="list-style-type: none"> <li>- Clear ownership</li> <li>- Less expensive to acquire than a new vessel</li> <li>- Due to lower cost, greater potential of being within the purchasing realm of Institution or State</li> </ul>	<ul style="list-style-type: none"> <li>- If institution purchased, vessel conversion costs could be depreciated, increasing longterm costs to agencies</li> </ul>	<ul style="list-style-type: none"> <li>- Institution, State or Agency direct purchase</li> <li>- Institution or State issue Bond</li> </ul>
<p>PRIVATE VESSEL OR YACHT</p>	<ul style="list-style-type: none"> <li>- STRI acquired R/V Urraca, former yacht</li> </ul>	<ul style="list-style-type: none"> <li>- Clear ownership</li> <li>- Often donated at no cost to institution</li> </ul>	<ul style="list-style-type: none"> <li>- Vessels typically &lt;40m, therefore not part of Plan</li> </ul>	<ul style="list-style-type: none"> <li>- Institution, State or Agency direct purchase</li> <li>- Institution or State issue Bond</li> </ul>

# Acquisition/Implementation

METHODS OF ACQUISITION	EXAMPLES	PROS	CONS	IMPLEMENTATION
<p><b>LEASE*</b></p> <p>DIRECT OR SUBCONTRACT LEASE</p>	<p>NSF ODP – R/V JOIDES Resolution (via subcontract)</p> <p>NOAA AMLR Charter (Foreign Vessel)</p>	<ul style="list-style-type: none"> <li>- No direct ownership of the vessel</li> <li>- Allow for specialized missions, without long-term ties to vessel</li> <li>- If science priorities change, a more appropriate vessel can be obtained without ties to old vessel at end of lease</li> <li>- Reduces front end costs</li> </ul>	<ul style="list-style-type: none"> <li>- Overhead costs</li> <li>- Transfers cost to agency operating budgets</li> <li>- May not be a “state of the art” vessel to conduct oceanographic research</li> <li>- Need long term lease authority</li> <li>- Low availability (market dependent)</li> <li>- Difficult to cancel or modify lease agreement</li> <li>- Less economical to lease as vessel ages</li> <li>- Anti-buy America (Foreign Vessel)</li> <li>- Could have significant impact on UNOLS fleet scheduling priorities, it would be desirable to keep leased vessels busy for economy, taking priority over other vessels</li> </ul>	<ul style="list-style-type: none"> <li>- Agency Lease</li> <li>- Indirect Agency lease via contract to Lessor</li> <li>- Institution Lease</li> </ul>
<p>INDUSTRY BUILD AND AGENCY LEASE</p>	<p>NSF OPP- R/Vs Palmer and Gould (via Subcontract)</p>	<ul style="list-style-type: none"> <li>- Open design and construction process, but contractor has oversight</li> <li>- Low front end costs</li> <li>- Construction cost spread out over term of lease</li> <li>- Payments begin when ship is delivered for science cruises</li> </ul>	<ul style="list-style-type: none"> <li>- Difficult to cancel or modify lease agreement</li> <li>- Life cycle costs are higher than direct purchase</li> <li>- Could have significant impact on UNOLS fleet scheduling priorities, it would be desirable to keep leased vessels busy for economy, taking priority over other vessels</li> </ul>	<ul style="list-style-type: none"> <li>- Industry uses community derived SMRs to build vessel</li> <li>- Agency Lease</li> <li>- Institution Lease</li> </ul>
<p>LEASE TO PURCHASE</p>	<p>[None existing]</p>	<ul style="list-style-type: none"> <li>- Costs are spread out over time, lower in the short term and higher in the long term</li> </ul>	<ul style="list-style-type: none"> <li>- Present value of payments cannot be lower than outright purchase</li> <li>- Circular 104 allows no financing advantage</li> </ul>	<ul style="list-style-type: none"> <li>- Agency Lease/Purchase</li> <li>- Institution Lease/Purchase</li> </ul>

\* Lease – Technically Long-term Charter

# Acquisition/Implementation

METHODS OF ACQUISITION	EXAMPLES	PROS	CONS	IMPLEMENTATION
<b>CHARTER SPECIALIZED SHIPS</b>	NSF MGG - Drill Rig	<ul style="list-style-type: none"> <li>- Can accomplish specialized research without buying or converting a vessel</li> <li>- Charter length can be short-term</li> </ul>	<ul style="list-style-type: none"> <li>- Only viable for those services available on the open market</li> <li>- Chartered crew may not provide the same services scientists are accustomed to receive</li> </ul>	<ul style="list-style-type: none"> <li>- Agency charter</li> <li>- Institution grant</li> </ul>
<b>COMBINATIONS &amp; PARTNERSHIPS</b>	NOAA/URI	<ul style="list-style-type: none"> <li>- Vessel cost shared between partners</li> <li>-Theoretically vessel will be more fully utilized</li> </ul>	<ul style="list-style-type: none"> <li>- Ownership unclear</li> <li>-Competing need for vessel time during peak season</li> <li>- Crew – Federal or Institution?</li> </ul>	<ul style="list-style-type: none"> <li>- Federal acquisition (transfer) process</li> <li>- Institution construction/conversion OR</li> <li>- Combination effort</li> </ul>



## 2. Implementation Options for Fleet Renewal

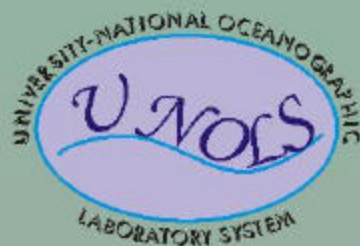
**Herr:** Questioned whether multi-agency funding of ship construction possible?

Realistic Acquisition approaches by the Federal Government. Issue of leasing versus purchase - Costs more to lease over the long haul.

**Herr:** Prospect of having a fleet that is private would cause a problem. There is need to have a mixed fleet - there is public policy value in having a mixed fleet.

**Leinen:** From academic fleet perspective, most of the concern is with the ocean and global class vessels. Because this administration is interested in outsourcing, we need to consider it - we need good analyses that specify feasibility.

**Herr:** ONR needs to convince Gov to proceed in re-building the fleet and so we need answers to the question of leasing. This consideration could also determine science births and needs. Does science support the ships or the ships support the science



## 2. Implementation Options for Fleet Renewal (Continued)

**Wilson:** Questioned the feasibility of having the SCN account fund the academic fleet renewal. Times have changed, we need to realize this.

**Herr:** UNOLS Office needs to provide operations cost for this comparison.

**Leinen:** Big pressure will come from the private sector to do building and leasing with outsourcing the major issue. So we need to evaluate this. The working Group should figure out what it would take to do the evaluation of viability of leasing vs purchase.

**Consensus that working group should come back in a month with such an evaluation - via email to FOFC.**



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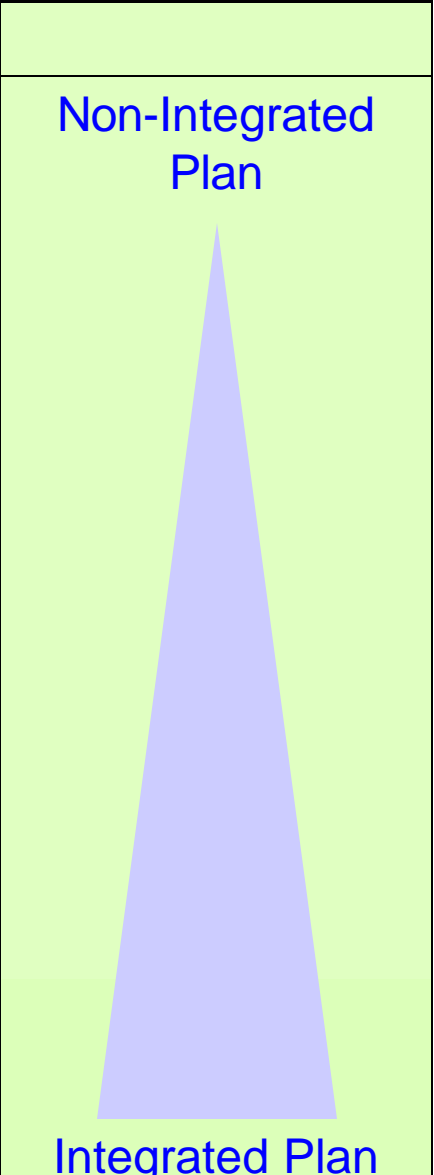
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# Integrated Fleet plan vs. Non-Integrated Fleet Plan

	PROS	CONS
<p><b>Integrated Federal Oceanographic Research Vessel Plan</b></p>	<p>OMB and Congress may be more supportive if they see coordination among agencies toward a broader management approach to more effectively meet and sustain the ocean research vessel needs of the research community</p> <p>All agency science mission requirements would be assembled and modernization of the fleets could proceed with potential for multiple builds and economies of scale</p> <p>More focused interagency planning on vessel assets could result in better leveraged research program resources and scheduling efficiencies</p> <p>Potential for better multidisciplinary designs serving larger spectrum of requirements</p> <p>Potential that high priority vessels would be funded first rather than needs with most political clout</p> <p>Could help prevent over-capitalization</p> <p>An integrated plan could focus on similar program and ship capability needs across the agencies</p>	<p>Already developed Academic Fleet Plan may lose momentum</p> <p>Potential delays may create political “end runs” by institutions to mark budgets instead of having an orderly plan</p> <p>Some agencies may not want to participate in an integrated plan for fear:</p> <ul style="list-style-type: none"> <li>- it will slow progress for any one agency to move their own renewal plan forward until other agency plans are completed and compiled</li> <li>- their fleet and shiptime may fall into a prioritization list</li> <li>- their budget may be at greater risk to cuts when submitted as a combined effort</li> </ul> <p>Could result in ship acquisition decisions that are based on the political influence of each Agency at the time the integrated plan is developed/completed</p> <p>Broad integrated plan may lead to multipurpose ships that do not meet any agencies needs well or are unnecessarily expensive</p>

# Integrated, Semi-Integrated, or Non-integrated FOFC Plan?

Members						 <p>Non-Integrated Plan</p> <p>Integrated Plan</p>
Academic Fleet						
Academic Fleet	NOAA Fleet					
Academic Fleet	NOAA Fleet	Navy Survey vessels				
Academic Fleet	NOAA Fleet	Navy Survey vessels	USCG Polar vessels			
Academic Fleet	NOAA Fleet	Navy Survey vessels	USCG Polar vessels	EPA vessels		
Academic Fleet	NOAA Fleet	Navy Survey vessels	USCG Polar vessels	EPA vessels	Others: ACE, NASA, USGS, NPS, NFW, US Army	

If not all FOFC agencies want to participate in an integrated plan, how effective will a “semi-integrated” plan be?

### 3. Integrated Fleet plan vs. Non-Integrated Fleet Plan

**Leinen:** The administration and congress would love to see one grand “thing” for all non-military vessels - non-duplicative - well integrated and coordinated.

There was not a lot of feeling that this was doable or feasible, but because the admin and congress were optimistic, the working group was asked to evaluate this.

**Fields:** Really need to know what the different groups plans are before there can be integration

**Wilson:** What the Oceanographer of the Navy does with the fleet is very different from that of other groups and he could not see sharing vessels or missions. He did see Navy use of UNOLS ships, but not the reverse.

**Potts:** EPA would not have any problem with doing integration, but mission unique - applied not pure science - more monitoring.

**Lai:** Integration scares MMS - always results in cuts to MMS budget.



### 3. Integrated Fleet plan vs. Non-Integrated Fleet Plan (Continued)

**Berkson:** USCG Problem of what to integrate. Now taking place with polar ice breakers re the science upgrades now under discussion. Also USCG role in the Integrated Ocean Observing plan. There is a 5-fold increase in buoys and in the number of sensors that the USCG has been servicing. But Coast Guard may find it difficult to carry the increased work load. This level of integration is difficult.

**Leinen:** Hearing a consensus, with some concerns, to looking at a plan within the agencies that would describe the needs without defining an integrated program. **The working Group was charged to say what it would take to put together an integrated plan.**



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## 4. Round-table Comments

**Herr:** Admiral Cohen has included funds for an Ocean class vessel in the 2005 budget. Also ONR is undertaking a more detailed study of the Ocean class ship to be started in the fall - a limited design step to be done with NSF/UNOLS.

**Lienen:** ARRV proposal is in the construction account - will go to senior management for decision. Will be in a future budget beyond 05. All processes going smoothly for this vessel.

**Fields:** Security is a major issue for ships, especially non-CG or military. The Pinkerton report now complete. NOAA does not want to share report, but will discuss findings with others.

Re fleet issues - NOAA acquired TAGOS vessels and some refits are now complete (Nancy Foster). Two came on line - four taken off line. Building FRVs - two in works and third planned. Looking to refit another vessel.

May get another twin otter for Right Whale work.

