University-National Oceanographic Laboratory System

~UNOLS ~

NSF Letter Regarding the Number of Regional Class Research Vessels

NSF Recommendations on the # of RCRVs and Community Response

- NSF Letter- dated March 11, 2014 to FIC Chair
- Task: " OCE is seeking UNOLS community concurrence to move forward with a preliminary request for Major Research Equipment and Facilities (MREFC) funding in FY 2017 to support construction of three RCRV's"
- UNOLS FIC Subcommittee formed- Dave Bradley/ PSU-chair, Joan Bernhard/WHOI, Greg Cutter/ODU, Sandy Shor/UH- Worked on written response from March to July 2014

FIC Subcommittee – Response Letter

"FIC Subcommittee agrees with NSF and UNOLS Council that building three RCRV is the appropriate number, and that this supports the best estimate of the affordable research requirements from NSF and other federal agencies for the next 10-20 years." " FIC absolutely agrees that getting three new, capable, technologically advanced research vessels into the fleet, one on each coast, is essential to support US ocean research.

Financial estimates given in five scenarios could not be duplicated with information we have and therefore we do not specifically endorse any particular plan to remove one ship from the fleet.

Replacement or layup of ships must be based on actual needs and distribution at time of decision and not on 2014 budget projections alone.

Committee sees a shift toward research on anthropogenic processes and impacts in the coastal region.

Community Feedback- UNOLS Office solicited broad community input during an open period from August to October 2014.

Received to date: Responses from 17 Researchers

UC Berkeley

"We have utilized RCRV's extensively for sensor development, it is far more efficient to test sensors, sensor equipped floats and gliders".

Undergraduate Marine Science students gaining experience on a UNOLS vessel has been a huge plus"

RCRV= Fine ship handling, relatively low freeboard for deployments & recovery of autonomous vehicles. Ease in launch and recovery of work boats.

RCRVs are in my shiptime requests and will be there for a very long time to come.

Community Feedback - continued

WHOI

FIC letter is a reasonable assessment and clearly supports the need for the 3 RCRVs. Also encourage FIC to reinforce the need for more NSF core and facilities funding.

OSU

There is a need for the RCRVs as cost-effective alternatives to OCRV or global ships.

Right size for servicing and ground truthing the OOI arrays and moorings.

I think there is a larger issue looming- the loss of global vessels. OCRVs are not replacements for Melville & Knorr

Suggest building two RCRVs- One to replace Oceanus, one to replace Endeavor, and consider a much smaller vessel for the Gulf of Mexico. And lets focus our attention on the global class.

Community Feedback - continued

LDEO

NSF has proposed getting rid of either the Kilo Moana or the Atlantic Explorer. The Atlantic Explorer is quite a competent vessel, but I have never understood why we support a ship in Bermuda. The Kilo Moana works well , biggest advantage is access to Western Pacific. If KM is laid up, it should be replaced with another large ship.

UCSD

I think your letter should have an analysis of the practicality of upgrading existing ships. It might indicate that money can be saved over the long term by avoiding some new construction.

FSU

I find the shrinking support for global class disturbing.

Community Feedback - continued

Univ. of Texas/Austin

I fully support the analysis that indicate 3 RCRVs need to be built. I have been going to sea for 34 years and sailed on every class of vessel. RCRV sized vessels are the most versatile, and nimble size while still permitting blue water operations, including blue water diving.
I agree that retro-fitting existing ships with advanced technologies for IT, efficiency, and cost savings is not a cost-effective solution. Technology is advancing so quickly that it must be integrated into the ship's design.
While the focus for use on these ships seems to be regional coastal work, I think this is an underrepresentation of what they will actually need to do.
It is absolutely essential that the Gulf of Mexico has its own regional vessel.
If only one RCRV is provided to serve the East Coast and the Gulf, there will be much conflict in scheduling.

Community Feedback - continued

Bigelow Lab for Ocean Sciences

My biggest comment is that I think there is a lack of support for global and ocean class vessels, and I think that these are of a much higher priority then regional class vessels.

OSU

I strongly believe that at least three RCRV's are needed- one for the Gulf of Mexico, one for the East Coast, (Endeavor replacement) and one for the West Coast, (Oceanus replacement). These vessels are needed to ensure affordable ships with modern science lab and deck handling capabilities for use in the coastal ocean and beyond.

UW

As an individual scientist, I strongly endorse the recommendation to build 3 RCRV's.
I think there will be significant demand for RCRV on all 3 coasts.
Given the importance of coastal science around the US, I suspect that any decisions on right sizing the fleet should be made starting with the baseline decision that there will be three RCRV's.

Community Feedback - continued

Bigelow Lab for Ocean Sciences

Agree with the assessment that a larger fraction of cruises are focused on process oriented research generally closer to a particular region and therefore maximizing the number of RCRV's is essential for the future science.

For process studies, if in fact those who are requesting global class vessels are filling all the science bunks then we should consider their value in that light.

Naval Post Graduate School

I fully support the FIC recommendation to replace NSF intermediate class research vessels with the smaller, more capable, less expensive RCRV's.

This begs the question of what will provide the academic community with smaller vessels which can provide access to the EEZ and meet the educational and research needs of students and faculty at coastal institutions. The new RCRV's are too big for many ports, shallow coastal waters and to expensive to maintain. What has caused the new ships to become so large? Mission Creep?

Community Feedback - continued

OSU

Building three RCRVs is the best case for NSF, UNOLS, and the oceanographic community in the most cost effective manner.

Capabilities of the RCRV's as currently designed will be in high demand.

The number and distribution of global class research vessels needs to be carefully considered. By 2022, the only globals on the East Coast will be Langseth and Atlantis, both highly specialized ships with narrow missions.

TAMU

I have read the final version of the FIC/UNOLS response to NSF letter regarding the number of new RCRV vessels and I support what is said in that letter.

Community Feedback - continued

WHOI

I have reviewed the NSF letter that recommends that three RCRVs be built and I think NSF came to the correct decision. I also agree with the FIC letter which stops short of endorsing NSF-OCE's recommendation to decrease the fleet from 17 to 16 vessels. However keeping the fleet reduction on the table is reasonable concession to make at this stage and UNOLS Council and FIC should keep their focus on securing commitments for these three new vessels.

It would be nice if the response letter left open the possibility that the trend from blue water to coastal oceanography is not a fate that the entire community is comfortable with from a scientific standpoint.

Community Feedback - continued

Smithsonian Tropical Research Institute

The UNOLS fleet does not contain any regional class ships with home ports south of Florida. Large ship can reach the Caribbean and Tropical Eastern Pacific at much higher costs and are inconvenient and expensive to operate in shallow waters typical of coral reefs. We propose the addition of a regional vessel operated out of Panama would greatly enhance the ability of US and international community to conduct research in tropical seas.