

11 October 2024

Mr. François Cazenave
Monterey Bay Aquarium Research Institute
7700 Sandholdt Road
Moss Landing, California 95039

RE: WHOI Proposal No. 665, “WHOI Continuing Support of MBARI’s Niobicon AUV Docking Project”

Dear Mr. Cazenave:

The enclosed firm fixed price proposal is in response to your request for support of Monterey Bay Aquarium Research Institute’s Niobicon AUV docking project. If you approve this proposal, please complete and return the following two items:

1. the enclosed Payment Authorization Information (PAI) form (including signature), and
2. your Purchase Order, or please complete the credit card information section on the enclosed PAI form (including signature). All payments will be in U.S. dollars

Submit these two forms to WHOI to the attention of Ms. Jennifer Lech, Grant & Contract Services Pre-Award Manager, via e-mail at awards@whoi.edu. Please reference WHOI Proposal No. 665.

Please be aware that this proposal expires on 31 October 2024. If we have not received an award by this date, you will need to request an updated quote. The offer presented in this proposal is subject to WHOI Terms and Conditions of Sale, which are available at https://external.whoi.edu/gcs_tc/WHOI_Sale_TsAndCs.pdf.

If you have any questions of a technical nature, please contact me at 508-289-3377 or dpeters@whoi.edu. For any administrative questions, please contact Ms. Jennifer Lech at 508/289-3180 or awards@whoi.edu.

Sincerely,



Donald B. Peters, Principal Engineer
Applied Ocean Physics & Engineering Department

Jennifer Lech, Pre-Award Manager
Grant & Contract Services

Enclosures: WHOI Proposal No. 665
WHOI PAI form

DBP:ggs

WHOI Continuing Support of MBARI's Niobicon AUV Docking Project

Donald Peters & Kristopher Newhall, WHOI

ABSTRACT

This proposal includes labor and materials for Woods Hole Oceanographic Institution's (WHOI) support of the Monterey Bay Aquarium Research Institute's (MBARI) Niobicon autonomous underwater vehicle (AUV) docking project. The MBARI project includes a mooring that utilizes components previously provided by WHOI, including a mooring stretch hose, an electromechanical (EM) cable, and an EM chain. MBARI is requesting spare components in support of follow-on deployments.

MBARI requests that WHOI: (1) specify, supply components for, and integrate one 15-meter mooring stretch hose (hose build to be contracted directly by MBARI), (2) provide four termination pieces for their integration with EM cables, (3) specify, supply components for, build, and integrate one 3-meter EM chain. Completed components will be shipped to MBARI for performance of their project.

SCOPE OF WORK

The mooring stretch hose is an existing WHOI design in use on numerous moorings. WHOI will provide termination pieces, conductor cables, and connectors required for the hose fabrication. Hose fabrication to existing WHOI specification by Kadant Unaflex will be contracted directly by MBARI. WHOI will complete final integration of the stretch hose assembly. The EM cable and EM chain are existing WHOI designs in use on numerous moorings. WHOI will build, integrate, and deliver one EM chain of the existing design, and provide terminations for MBARI to integrate into their EM cables.

WHOI will: (1) provide components for and integrate one 15-meter stretch hose (MBARI will purchase the stretch hose directly from the vendor); (2) provide four EM cable termination pieces and one 3-meter EM chain assembly, and (3) ship one stretch hose, EM cable terminations, and one EM chain assembly to MBARI.

In addition to the stretch hose, MBARI will also provide wooden crates for shipping.



WHOI Continuing Support of MBARI's Niobicon AUV Docking Project

DONALD B PETERS (Non-Govt. Other)

Oct 1, 2024 to Feb 28, 2025

Budget

	Approximate Labor Months		
	10/01/24	02/28/25	Total
A. Senior Personnel			
1. D. PETERS, Prin Engr	0.03		0.03
2. K. NEWHALL, SR PROJ MGR	0.09		0.09
B. Other Personnel			
2. Other Professionals			
J. PIETRO, Sr Engr Asst II	0.26		0.26
C. Total Direct Labor & Benefits	\$6,406		\$6,406
G. Other Direct Costs (see detail)			
1. Materials and Supplies	15,680		15,680
6. Other	1,450		1,450
Total Other Direct Costs	17,130		17,130
H. Total Direct Costs	\$23,536		\$23,536
I. Indirect Costs			
3. Facility & Administrative	15,098		15,098
Total Indirect Costs	15,098		15,098
J. Total Direct & Indirect Costs	\$38,634		\$38,634
K. Fee at 15.0000%	5,795		5,795
L. Amount of this Request	\$44,429		\$44,429



WHOI Continuing Support of Niobicon AUV Docking Project

DONALD B PETERS (Non-Govt. Other)

Oct 1, 2024 to Feb 28, 2025

Budget

Other Direct Costs - Detail

	10/01/24	02/28/25	Total
G. Other Direct Costs			
1. Materials and Supplies			
a. Supplies			
1. Stretch Hose (50 ft', 8-conductor,			
a. Terminations	4,590		4,590
b. Bulkheads	500		500
c. Hose endcap	900		900
d. Oct-8 conductors (per ft)	1,500		1,500
e. Stretch hose (MBARI)	0		0
f. Wooden crate (MBARI)	0		0
g. Dummies	50		50
2. EM Chain (DMON-style, 2 m,			
a. Terminations	1,750		1,750
b. Chain hardware kit	1,100		1,100
c. Pigtails, locking sleeves, dummies	690		690
d. Urethane material	450		450
e. Coil cord	450		450
3. EM Cable (60 m, 6-conductor): 2 ea.			
a. Terminations	3,700		3,700
Total Materials and Supplies	15,680		15,680
6. Other			
a. Shipping & Postage			
1. Ropak transit costs (w/ material	1,450		1,450
Total Other	1,450		1,450
Total Other Direct Costs	17,130		17,130

BUDGET JUSTIFICATION

Woods Hole Oceanographic Institution (WHOI) is a non-profit [501(c)(3)] research and education organization subject to the cost principles of 2 CFR 200. Our cognizant oversight agency is the Office of Naval Research (ONR). WHOI Principal Investigators are responsible for conceiving, funding, and carrying out their research programs. Senior Personnel are expected to raise 12 months of support per calendar year for themselves and their staff by writing proposals and obtaining sponsored research grants and contracts from a variety of sources. Some teach voluntarily in WHOI's Joint Program, but support for this is limited. WHOI uses a standard escalation rate for salaries and other direct costs in outyear budget estimates. WHOI's fiscal year runs from Jan. 1 - Dec. 31 (with the calendar year).

Each Party shall retain full right, title and ownership to Intellectual Property developed solely by its employees and agents. In addition, WHOI shall own any improvements or Intellectual Property that arises from this Award that relates to the mooring (located from below the buoy to the anchor), and MBARI shall own any improvements or Intellectual Property that arises from this Award that relates to the docking system (located beyond the anchor). "Intellectual Property" means technical information, inventions, developments, discoveries, know-how, methods, techniques, formulae, algorithms, data, processes, and other proprietary ideas (whether or not patentable or copyrightable), patent applications, patents, copyrights, trademarks, mask works, trade secrets, and any other legally protectable information, including computer software.

This is a firm-fixed price proposal.

Personnel

A. Senior Personnel:

D. Peters, Principal Engineer and Principal Investigator (0.03 mo.), will review dynamic modeling of mooring performed by MBARI. **K. Newhall**, Senior Project Manager and co-Principal Investigator (0.09 mo.), will support the WHOI effort for component fabrication.

B. Other Personnel:

J. Pietro, Senior Engineering Assistant II (0.26 mo.), will integrate the 15-meter stretch hose, fabricate the EM chain, and prepare all components for shipping.

C. Fringe Benefits:

Employee benefits have been proposed using rates that are the total assignable to salaries of regular employees including paid absences, excluding Graduate Research Assistants, overtime salaries, and allotted paid leave benefits. In accordance with WHOI's 2024 fixed rate agreement with the ONR dated June 20, 2024, the fringe benefits rate applied to regular salaries is 34.08%.

G. Other Direct Costs:

1. Materials and Supplies: Funds are requested to purchase supplies including but not limited to the following items: terminations, bulkheads, endcaps, conductors, dummies, chain hardware kit, pigtails, locking sleeves, urethane material, and coil cord.

6. Other: Shipping & Postage costs are requested to ship one stretch hose, one EM chain assembly, and four EM cable terminations to MBARI.

I. Indirect Costs:

In accordance with WHOI's 2024 ONR fixed rate agreement dated June 20, 2024, Indirect Costs are proposed at a rate of 64.15% on a Modified Total Direct Cost basis (MTDC). Exclusions from the MTDC base include graduate student tuition, equipment/capital expenditures over \$5,000, the portion of each subaward over \$25,000, participant support costs, cruise leave/overtime costs, ship/submersible use, vessel charters, ship fuel, and maintenance and stabilization agreements for ship overhauls. Direct costs excluded from the MTDC base in this budget are indicated with an asterisk (*).

Total Indirect Costs requested: \$15,098

Period 1 (10/01/2024-02/28/2025): MTDC Base (\$23,536) x Rate (64.15%) = \$15,098

K. Fee:

WHOI requires fees to be included on all proposals for contracts and foreign awards and on proposals for subcontracts as authorized under existing government regulations. Fees are determined in a consistent manner. The fees are not net income. Fees represent a portion of total remuneration over allowable costs and offset risk. A fee of 15.00% has been assessed on this project's Total Direct and Indirect Costs.



WOODS HOLE OCEANOGRAPHIC INSTITUTION

PAYMENT AUTHORIZATION INFORMATION

Company/Organization Name: _____

Contact Name: _____

Contact Telephone: _____

Contact Email: _____

WHOI Tracking Number: _____

1) How will you pay for these services? (check one)

☐ Purchase Order (attach to this form) PO Number _____

☐ Credit Card (check one) ☐ MasterCard ☐ Visa ☐ American Express ☐ Discover

Credit Card Number: _____

Cardholder Name: _____

Credit Card Expiration Date: _____ Security Code: _____

Cardholder Signature: _____

☐ Payment Authorization Period: Start Date _____ End Date _____

2) Is the source of your funding from the U.S. Federal Government? ☐ Yes ☐ No

If yes, please provide the **required** following information:

Federal Government Agency: _____

Source of these funds: ☐ Grant (complete section 2a) ☐ Contract (complete section 2b)

2a) Federal Grant:

Prime Award Number _____

CFDA (Catalog of Federal Domestic Assistance) Number _____

2b) Federal Contract:

Prime Contract Number _____

3) Project Period of Performance: Start Date _____ End Date _____

4) What is the maximum amount WHOI may bill? (US Dollars) _____

5) What is the Accounts Payable Billing Address or email for credit card receipt?

Address: _____

City: _____ State: _____ Zip Code: _____

Email: _____

Signature of Authorized Representative: _____

Date: _____