

**Engineering Change Request Form**

<b>Change Request No.:</b> 1300-00289	<b>Date:</b> 9/19/2012	<b>WBS:</b>
<b>Control Account Name:</b> None	<b>Configuration Manager:</b> Chapman, Ed	<b>Control Account Manager:</b>
<b>SECTION TO BE COMPLETED BY PERSON REQUESTING CHANGE:</b>		
<b>Requestor:</b> Ed Chapman	<b>Telephone Number:</b> (202) 787-1662	
<b>Request Name (Include document number and revision level):</b> WET Labs ECO Triplet-w (FLOR Instrument) Waiver		
<b>Description of Change (Include all related systems):</b> A Waiver is requested to use the WET Labs ECO Triplet-w (FLOR Instrument) as a common OOI instrument.  OOI selected the instrument through a competitive Request For Proposal (RFP) process. This instrument was chosen in accordance with Source Selection Plan utilizing a highly skilled Source Selection Evaluation Board meeting the competitive procurement obligations of OOI. However, it does not meet the following requirements: L2-SR-RQ-3541 Optical backscatter coefficients shall be measured over a range of 0.001 bb( $\lambda$ ) m-1 to 0.2 bb( $\lambda$ ) m-1. L4-CG-IP-RQ-393 Optical backscatter instruments shall have a range of 0.001 bb( $\lambda$ ) m-1 to 0.2 bb( $\lambda$ ) m-1. L4-RSN-IP-RQ-360 The SSM Instrument for Optical Backscatter shall measure with a range of 0.001 bb( $\lambda$ )/m to 0.2 bb ( $\lambda$ )/m. L2 SR RQ-3791 Fluorometric chlorophyll-a concentration for open ocean regions shall be measured over a range of 0.01 to 10 $\mu$ g L-1. L4 CG IP RQ 555 Chlorophyll-a fluorescence instruments for open ocean regions shall have a range of 0.01 to 10 $\mu$ g L-1. L4-RSN-IP-RQ-366 The SSM Instrument for Chlorophyll-a fluorescence shall measure over a range of 0.01 to 10 $\mu$ g/L in open ocean regions. L2-SR-RQ-3557 Fluorometric CDOM concentration shall be measured over a range of 0.09 - 500 ppb relative to a quinine sulfate standard. L4-CG-IP-RQ-219 CDOM fluorescence instruments shall have a range of 0.09 - 500 ppb relative to a quinine sulfate standard. L4-RSN-IP-RQ-372 The SSM Instrument for CDOM fluorescence shall measure over a range of 0.09 to 500 ppb relative to a quinine sulfate standard. L4-CG-IP-RQ-442 Instruments shall be capable of operating in water temperatures from minus 2 to plus 35 degrees C. L4-RSN-IP-RQ-92 Command execution shall be acknowledged.  The attachment lists the requirement numbers, the requirement text, the associated Instrument Specification statement, and the vendor's RFP response to the requirement.		
<b>Reason for Change:</b> While the selected instrument does not meet the requirements noted above, it provides the best value to OOI at this time.  This ECR is a Waiver Request submitted in accordance with the Procedure for Obtaining Waivers which resides in the Systems Engineering Process Library in Alfresco. A waiver is a specific written authorization to accept a product which departs from specified requirements, but nevertheless is considered suitable for use "as is" or after modification by an approved method. A waiver states that a requirement does not need to be satisfied in order to pass a test of the related product. Waivers are associated with particular products and do not modify the requirement(s) in question. The procurement Source Selection and Evaluation Boards (SSEB) are authorized to procure products which deviate from the approved requirements in order to achieve the best value for the program. This scope of this ECR is whether the item is acceptable and the Waiver should be granted; it does not include the SSEB process.		
<b>Benefit to OOI:</b> This waiver allows the procurement and fielding of a best value instrument that has been procured through a competitive process.		
<i>Requestor Assessment of Impact to Control Account:</i>		
<b>Scope:</b> no change		
<b>Schedule:</b>		

no change

**Cost:**

no change

**SECTION TO BE COMPLETED BY IO/SL CCB CHAIRPERSON:**

*Assessment of Impact to IO Project:*

**Master Schedule:**

no change

**Project Cost:**

no change

**Deliverables:**

no change

**Potential Impact to Science and Design / As-built Capability:** no change. This is the exemplar instrument.

**Percent Impact on WBS elements(s) selected:** 0%

**Percent Impact on OOI:** 0%

**Contingency \$0**

**Contingency Schedule (weeks):** 0

**Signature of System CCB Chairperson:**

Ed Chapman (echapman@oceanleadership.org)

**Date:**

10/9/2012 2:00:00 PM

**Board Determination:**

Approved

***CERTIFICATION OF TECHNICAL DATA PACKAGE AND CONTROL SYSTEM UPDATE***

**Signature of Configuration Manager:**

Ed Chapman (echapman@oceanleadership.org)

**Date:**

11/8/2012 5:24:33 PM

**Systems and**

**Documentation Updated:**

Confirmed Complete

**Attach supporting technical documentation and or additional comments as needed.**

**Change Request No.:** 1300-00289**Request Name:** WET Labs ECO Triplet-w (FLOR Instrument) Waiver**ECR Comments**

#	Reviewer	Date Added	General Comment	Requestor Response	CCB Decision	Lien
1	David Neiman	10/1/2012	Recommend passage. This aligns with several similar waivers for the FLOR Coastal glider. Suggest a permanent change to L2-SR-RQ-3557, L4-CG-IP-RQ-219, L4-RSN-IP-RQ-372 (0.09ppb lower/500ppb upper limit) on CDOM to match instrument unless scientific justification for limits can be supplied (requirement limits were originally set to match single-instrument CDOM specification), and same for backscatter and Chl-a response range.	Accept		
2	Michael Zernick	10/4/2012	No further comments.			
3	Sheri White	10/4/2012	Would be good to have a statement (or comment) from one of the Project Scientists or member of the Source Selection Team clarifying the extent of impact to the science, if any. Recommend approval.			
4	Al Plueddemann	10/8/2012	Recommend approval. I don't have the domain expertise to speak to the science impact.,			

**Change Request No.:** 1300-00289**Request Name:** WET Labs ECO Triplet-w (FLOR Instrument) Waiver**ECR Vote (Highest Level Board: System)**

Title	Member Name	Delegate Name	Vote	Comment
Project Manager	Matthew Arrott		Approve	
O&M Manager	Shahpour Ashaari		Approve	
Associate Program Director	Susan Banahan	Kathy Carr	Approve	
Project Manager	Pete Barletto		Approve	
Field Operations Coordinator	Liz Caporelli		Approve	
Chief Systems Engineer	Ed Chapman	Kathy Carr	Approve	
Former teammate	Alan Chave	Tim McPhail	Approve	
OOI Program Director/PI	Tim Cowles		Approve	
Project Manager	Mike Crowley		Approve	
Program Director/PI	John Delaney		Approve	
Senior Project Manager, Advisor	Anthony Ferlaino		Approve	
Principal Investigator	Scott Glenn		Approve	
COTR - Associate Project Manager RSN	Paul Hagstrom		Approve	
Project Scientist	Deb Kelley		Approve	
Business Operations Manager	Ben Korin		Approve	
Program Manager and Chief Engineer	Paul Matthias		Approve	
COTR - Associate Project Manager EPE	Andrea McCurdy		Approve	
Senior Systems Engineer	Chuck McGuire		Approve	
Associate Director	Michael Mulvihill		Approve	
Principal Investigator for CI	John Orcutt		Approve	
Project Scientist	Al Plueddemann		Approve	
COTR - Associate Project Manager CI	Bill Pritchett		Approve	
CGSN and EA COTR	Greg Settle		Approve	
Observatory Director	Julie Thomas		Approve	
Co-Principal Investigator	John Trowbridge		Approve	
Deputy Principal Investigator	Frank Vernon	John Orcutt	Approve	

Program Director/PI	Bob Weller		Approve	
Lead System Engineer	Sheri White	Kurt Stiffel	Approve	
System Engineer	Joe Wieclawek		Approve	
Quality & Safety Manager	Michael Zernick		Approve	

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**ECR Liens/Action Items**

Lien	Due Date	Complete	Completion Date
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Action Item	Due Date	Complete	Cancel	Completion Date
Mark the Verification Status for the L2 requirements as "Waived" in DOORS.	11/20/2012	Yes	No	11/2/2012
Mark the Verification Status for the L4 requirements as "Waived" in DOORS.	11/20/2012	Yes	No	11/2/2012
Update "Approved Waiver-CM" attribute for affected L2 requirement (s) in DOORS with the ECR number of the approved Waiver.	11/20/2012	Yes	No	11/2/2012
Update "Approved Waiver-CM" attribute for affected L4 requirement (s) in DOORS with the ECR number of the approved Waiver.	11/20/2012	Yes	No	11/2/2012
Update the Verification Details for the L2 requirement(s) with a description of the affected product and an indication of the circumstances under which the requirement has been waived.	11/20/2012	Yes	No	11/2/2012
Update the Verification Details for the L4 requirement(s) with a description of the affected product and an indication of the circumstances under which the requirement has been waived.	11/20/2012	Yes	No	11/2/2012
Baseline L2 Science Requirements module	11/16/2012	Yes	No	11/8/2012
Baseline L4 CG Instrument Package module	11/16/2012	Yes	No	11/8/2012
Baseline L4 RSN Instrument Package module	11/16/2012	Yes	No	11/8/2012
Export updated L2 Science Requirements spreadsheet and post in Alfresco	11/16/2012	Yes	No	11/8/2012
Export updated L4 CG Instrument Package spreadsheet and post in Alfresco	11/16/2012	Yes	No	11/8/2012
Export updated L4 RSN Instrument Package spreadsheet and post in Alfresco	11/16/2012	Yes	No	11/8/2012

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**ECR Meeting Results and Notes**

<b>Board Level</b>	<b>Meeting Date</b>	<b>Meeting Name</b>	<b>Meeting Result</b>	<b>Meeting Notes</b>
System	10/9/2012	2012-10-09 System Level CCB	Approved	