



**JUSTIFICATION FOR SOLE SOURCE / BRAND
NAME SOLE SOURCE (Simplified Acquisitions < \$150K)**

PLEASE CHECK ALL APPLICABLE BOXES AND FILL IN ALL APPLICABLE BLOCKS BELOW. A NARRATIVE MUST BE ADDED TO ALL APPLICABLE SECTIONS. CHECKING A BOX IS NOT SUFFICIENT.

Document Number:	N3032114RC005UU	
The material and/or service listed on this form is (<i>please mark one</i>):	<input checked="" type="checkbox"/> Sole Source	<input type="checkbox"/> Brand Name Sole Source

Restricted to the following source or manufacturer:

- Manufacturer: **University of Rhode Island (URI)**
- Manufacturer POC and Phone Number:
- Manufacturer Address: **Graduate School of Oceanography, Narragansett, IR 02882**
- Dealer POC and Phone Number (if applicable): **Not applicable**
- Dealer Address (if applicable):

Description of the item(s) or service(s) required and the estimated cost(s):

Item#	MFG Name	MFG Part#	Description	Qty	U/I	Unit Price	Ext Price
0001	University of Rhode Island (URI)	Geophysical Fluid Dynamics Lab - Navy (GFDN)	Incorporate improvements that have been successfully incorporated into the operational GFDL model running at the National Centers for Environmental Prediction (NCEP) into the USN equivalent GFDN model, including increased spatial resolution, improved physics, and coupling to the new Princeton Ocean Model. 1. Perform testing based on tropical cyclone cases provided by JTWC for each of JTWC's cyclone basins 2. Evaluate model performance compared to current operational GFDN model and JTWC statistical intensity models 3. Port the upgraded model to Fleet Numerical Meteorology and Oceanography Center BETA computer system	1	EA		

			<p>4. Conduct BETA testing based on tropical cyclone cases provided by JTWC for each of JTWC's cyclone basins and provide evaluation report of model track and intensity forecast results</p> <p>5. Provide telephonic support and work closely with FNMOC to implement the upgraded model into the operational models production cycle</p> <p>6. Investigate deficiencies noted by JTWC or FNMOCB and deliver corrective action (e.g. bug fixes) as required. Provide telephonic consultation with FNMOC programmers to assist with implementation of corrective actions.</p>				
			Total Estimated Cost				

*** If additional items are required, please provide on a separate spreadsheet

Required Delivery Date (RDD) or Period of Performance (POP): **31 July 2015 or sooner**

Specific characteristics of the material or service that limit the availability to a sole source/brand product (unique features, function of the item, etc.). Describe in detail why only this source/brand can furnish the requirements to the exclusion of other sources/brands. **GFDN is a proprietary adapted version of the National Hurricane Center's GFDL model. Maintenance and upgrades to the GFDL model are performed by the same sole source contractor we seek to perform the GFDN upgrades, namely the University of Rhode Island (URI). URI has partnered with NOAA and DoN for over 10 years to develop, maintain, and improve these models and are the only agencies that have the necessary and unique level of knowledge and familiarity with both GFDL and GFDN and are the only organization capable of completing the required work within the timeline required and within the available funding amount.**

The requested material or service represents the minimum requirements of the Government. **The Joint Typhoon Warning Center (JTWC) directly supports United States Pacific Command, United States Pacific Fleet and United States Pacific Air Forces with timely, accurate tropical cyclone warnings to mitigate the destruction caused by tropical cyclones across the USPACOM area of responsibility. To that end, JTWC has identified a requirement to correct deficiencies in the US Navy's GFDN weather forecast model. The GFDN model is the only hurricane model that meets the Navy's needs and meets the minimum requirements to aid JTWC to reduce the overall tropical cyclone track and intensity forecast errors. The model is currently only supported by the intended sole source contractor and the use of another contractor would require excessive time and money to be trained on the complex model code, resulting in project schedule delays and cost overruns.**

The material or service must be compatible in all aspects (form, fit and function) with existing systems presently installed/performing. Describe the equipment/function you have now and how the new item/service must coordinate,
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connect or interface with the existing system. ~~The upgraded model must be implemented into the Fleet Numerical Meteorology and Oceanography Center (FNMOC) high performance computing environment. This complex computing environment requires specialized knowledge to ensure successful integration of new computer code. Currently only URI possesses this knowledge.~~

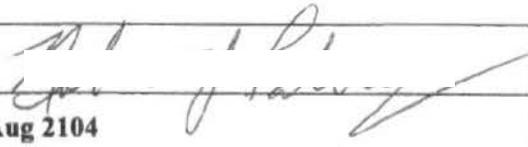
A patent, copyright or proprietary data limits competition: **GFDN is a proprietary adapted version of the National Hurricane Center's GFDL model.**

The items are "direct replacement" parts/components for existing equipment. Provide the information about the Next Higher Assembly (NHA)/equipment which the replacement parts are going into (e.g. description, model, part number, Original Equipment Manufacturer (OEM), etc.). **The upgraded model will directly replace the current model running on the Fleet Numerical Meteorology and Oceanography Center (FNMOC) high performance computer system.**

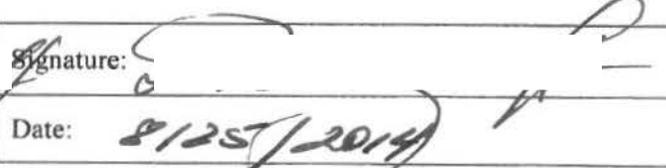
Other information to support sole source/brand name sole source procurement. The rationale must then justify "either" substantial duplication of cost to the Government that is not recovered through competition or unacceptable delays in fulfilling the mission of the agency.

TECHNICAL OR REQUIREMENTS CERTIFICATION

I CERTIFY THAT THE STATEMENTS CHECKED, AND INFORMATION PROVIDED ABOVE, ARE COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THE PROCESSING OF THIS SOLE SOURCE/BRAND NAME SOLE SOURCE JUSTIFICATION PRECLUDES THE USE OF FULL AND OPEN COMPETITION.

Printed Name:	Signature: 
Title: Director	Date: 18 Aug 2104

CONTRACTING OFFICER CONCURRENCE

Printed Name: <i>A</i>	Signature: 
Title: <i>Contracting Officer</i>	Date: <i>8/25/2014</i>

 NAVSUP FLC San Diego
 Competition Advocate