

SINGLE SOURCE CERTIFICATION

Authority is requested to make the following purchase under the provision of USF System Regulation USF4.02010(IV)(A)(2)(b) as a non-competitive purchase available from only one source. By submitting this form, department acknowledges that existing [exemptions](#) will not apply to this purchase. Single source requests exceeding \$75,000 must be signed by a Procurement Director and posted publicly for (3) business days.

DATE: _____

ITEM(S): _____

PRICE: \$ _____ FUND #: _____

SUPPLIER ID: _____ REQUISITION#: _____

SUPPLIER NAME: _____

FEDERAL GRANT: ___Y___N

In your words, describe the equipment, commodity, or contractual service. Explain how these specifications are essential to the accomplishment of your work:

In your own words, describe the reason(s) the item is not subject to competition from other sources and how the stated specification(s) restrict the requisition to only one supplier. Description may include unique features/compatibility/specifications/availability/delivery time frame etc. (Note: Price is not a valid reason).

In your own words, describe the due diligence conducted to validate this supplier as Single Source. Description SHOULD list all other suppliers with item(s)/service(s) with similar functions, your efforts to identify other suppliers, and why these suppliers would not qualify to submit a competitive quote.

Approved By (Procurement) DATE

Authority: USF4.02010(IV)(A)(2)(b)

START _____ END _____

PUBLIC POSTING DATES

Last Modified: 05/10/2021

OFFICE OF THE UNIVERSITY CONTROLLER, PROCUREMENT SERVICES

University of South Florida | 4202 E Fowler Avenue, | Tampa, FL 33620-4301

813-974-2481 | usf.edu/

Sole Source Justification: Synthetic Aperture Radar

The radar system for our project has to meet a number of requirements. First, from a technical perspective, we have requirements for a highly integrated system that meets stringent conditions on data quality. Second, there are security implications since this project will be providing data and technology to the Army Corps of Engineers.

The basic technical requirement for our system is an L-Band synthetic aperture radar (SAR) imaging system, able to operate from a moving vehicle or a light aircraft or drone, and capable of interferometric measurements.

Required characteristics include:

- Tight integration with the INS system permitting time-domain back projection processing. This permits non-linear flight trajectories.
- Light weight for the entire system (< 8.5 kg including antennas, frame and INS). This enables flight on a number of smaller, less expensive commercial non-crewed aircraft.
- Usable as both a car-borne or airborne SAR.
- At least dual-polarization capability

Desired characteristics include:

- Full polarimetric (quad-pol) data
- Sufficient transmitter output power (user-selectable) to enable far-field imaging.
- Python programming of all system interfaces, with user access to the radar system data acquisition source code.
- Data processing system permitting full flexibility in the selection of the map projection
- Built in power meter and calibrated noise diode sources for radiometric calibration of the radar.
- Built-in GPS-disciplined quartz crystal oscillator, providing accurate time and radar frequency with low carrier phase noise.
- Sufficient on-board storage for several hours of radar raw data.

The Gamma L-Band radar combined with the Gamma Time Domain Back Projection processing system have demonstrated repeat-pass differential interferometry from both an automobile and from a compact helicopter UAV.

See this link for a list of downloadable publications and references demonstrating this capability:

<https://www.gamma-rs.ch/index.php/L-band-specific-Publications>

To our knowledge, the Gamma radar system is the only commercially available system that meets the above technical requirements.

Second, as this project is funded by the Army Corps of Engineers (ACE), our system also has to meet strict security requirements. In particular, we are not allowed to use systems manufactured in China. The Gamma system is designed and built by Gamma Remote Sensing, a Swiss-based company that meets our security requirement. Gamma has already supplied a similar system to Us DoD.

In summary, the Gamma system is the only solution for our project that meets both technical and security goals.

Lori Vanhelden

From: Timothy Dixon
Sent: Friday, January 27, 2023 4:58 PM
To: George Cotter III; Lori Vanhelden; Michael Hernandez
Subject: Re: Radar purchase

Good point, thanks. Yes, lets move forward.

Tim

From: George Cotter III <gcotter@usf.edu>
Date: Friday, January 27, 2023 at 4:02 PM
To: Timothy Dixon <thd@usf.edu>, Lori Vanhelden <lorivanhelde@usf.edu>, Michael Hernandez <mahernandez@usf.edu>
Subject: RE: Radar purchase

I don't think posting will get you any additional information. It is a passive posting so a potential competitor would have to purposefully go to our website to find a single source.

If you are satisfied with your review of the marketplace (I am), then I suggest moving forward with the purchase under policy exemption of purchase specified by granting agency.

Thanks,

George

From: Timothy Dixon <thd@usf.edu>
Sent: Friday, January 27, 2023 2:01 PM
To: George Cotter III <gcotter@usf.edu>; Lori Vanhelden <lorivanhelde@usf.edu>; Michael Hernandez <mahernandez@usf.edu>
Subject: Re: Radar purchase

Thanks for getting back to me so quickly. Yes, the make/model was specifically mentioned in the proposal (I've attached it, see pages 11 and 12).

I don't mind a public posting, always good to see what's out there, as long as we don't have to delay too long

Tim

From: George Cotter III <gcotter@usf.edu>
Date: Friday, January 27, 2023 at 1:05 PM
To: Timothy Dixon <thd@usf.edu>, Lori Vanhelden <lorivanhelde@usf.edu>, Michael Hernandez

<mahernandez@usf.edu>

Subject: RE: Radar purchase

Hi Tim – Thank you for reaching out in advance.

I support your single source. My follow-up is about whether we need to publicly post this.

Is this purchase specifically named in the grant from the US Army Corps of Engineers? We have an exemption to that point.

Glad to have a conversation if needed. A Teams meeting can always be scheduled against open times on my calendar.

Thanks,

George

George Cotter

Director Procurement Services

University of South Florida

4202 E. Fowler Ave. SVC 1073, Tampa, FL 33620

(813) 974-3340

gcotter@usf.edu

www.usf.edu



Due to Florida's broad open records law, email to or from university employees is public record, available to the public and the media upon request.

From: Timothy Dixon <thd@usf.edu>

Sent: Friday, January 27, 2023 11:02 AM

To: Lori Vanhelden <lorivanhelde@usf.edu>; George Cotter III <gcotter@usf.edu>; Michael Hernandez <mahernandez@usf.edu>

Subject: Radar purchase

Hello George and Michael: Lori VanHelden in the CAS business office has started the paperwork on a large purchase order for a scientific instrument, a synthetic aperture radar (SAR). The price will be approximately \$510,000. To my knowledge, there is only one potential supplier (sole source justification attached) but I understand that purchases of this magnitude require an open bid process. The project is funded by the US Army Corps of Engineers; the SAR instrument is used for mapping and terrain classification.

Would it be possible to have a short meeting (Teams) or phone call about this? There is some additional information that I would like to share with you regarding this purchase.

Thanks (in advance) for your help

Tim Dixon

Tim Dixon

Distinguished University Professor, School of Geosciences, USF

Mobile: 305 323 1820

Lab web site: <http://labs.cas.usf.edu/geodesy/>

Book web site: <https://www.amazon.com/author/timothydixon>

Scholar Commons: <https://works.bepress.com/timothydixon/>