

Good Morning,

Please acknowledge receipt of this Request for Quote (RFQ). Please indicate via email if you decline to provide a quote.

NIST reserves the right to use their own UPS shipping account code. Please do not include shipping charges on your quote.

The National Institute of Standards and Technology (NIST) has a requirement for several windows/viewports.

Attached is the Statement of Work (SOW) for solicitation # NB688000-16-00359. Please submit a quote for the Windows/Viewports that meets the requirement(s).

This RFQ is conducted under the authority of FAR 13 Simplified Acquisitions with NAICS code 333517, having a Small Business Size Standard of 500 employees. This is a total small business set aside.

All communications and documents must include the solicitation # NB688000-16-00359. Please email your quote to me at [marc.zurasky@nist.gov](mailto:marc.zurasky@nist.gov).

This solicitation shall close on Wednesday, November 04, 2015 at 05:00 pm Mountain. Your quote must meet all of the requirements of FAR 52.212-1, as well as include the following information:

- Information sufficient to demonstrate you can meet or exceed the requirements in the SOW
- Firm fixed price quote for the Windows / Viewports
- Payment Terms: Net 30.
- The requested delivery is 12 weeks after receipt of the order (ARO). FOB Destination for delivery (unless stated above) to NIST: 325 Broadway. Boulder, CO 80305. Delivery point of contact will be provided upon award.
- Company DUNS No. In order to be eligible for this award, the offeror must be registered with the System for Award Management at [www.sam.gov](http://www.sam.gov)., and have completed the Representations and Certifications therein.

The provision at FAR 52.212-1, Instructions to Offerors—Commercial, applies to this acquisition. Offeror shall clearly demonstrate their ability to meet the technical requirements and deliverable schedule as outlined in this solicitation. Quote shall include shipping cost. NIST reserves the right to ship under NIST provided account.

#### **BASIS OF AWARD:**

Award shall be made to the Lowest Price Technically Acceptable (LPTA) quote, based on technical acceptability and price. This will be a firm fixed price purchase order.

#### **TECHNICAL CAPABILITY:**

Evaluation of Technical Capability will be based on the information provided in the quotation. Documentation submitted in the quotation shall be evaluated to determine that the proposed equipment

meets or exceeds the Governments minimum required specifications. Failure to clearly and unambiguously demonstrate this will result in an “unacceptable“ technical rating.

#### PRICE:

Price shall be evaluated for reasonableness.

FAR 52.212-2, Evaluation - Commercial Items, applies to this acquisition. The Government will award a fixed price contract based on the following factors: Technical capability (capability of the item offered to meet the agency need), and price. Technical capability will be evaluated by how well the proposed products meet the Government requirements as stated in Paragraph (vi). The Government reserves the right to make an award to other than the lowest-priced offeror if the superior technical submission or the submission indicating a reduced performance risk, warrants paying a premium.

FAR 52.212-3, Offeror Representations and Certifications -- Commercial Items. The offeror must have completed the Online Representations and Certifications Application (ORCA), which must be uploaded to the System for Award Management (SAM) at [www.sam.gov](http://www.sam.gov).

FAR 52.212-4, Contract Terms and Conditions -- Commercial Items, applies to this acquisition.

FAR 52.212-5, Contract Terms and Conditions Required To Implement Statutes or Executive Orders -- Commercial Items applies to this acquisition. Additional FAR 52.212-5 clauses cited in the clause applicable to this acquisition are:

52.219-6, Notice of Total Small Business Aside

52.219-13, Notice of Set-Aside of Orders

52.219-28, Post Award Small Business Program Representation

52.222-3, Convict Labor

52.222-19, Child Labor – Cooperation with Authorities and Remedies

52.222-21, Prohibition of Segregated Facilities

52.222-26, Equal Opportunity

52.222-50, Combating Trafficking in Persons

52.223-18, Contractor Policy to Ban Text Messaging While Driving

52.225-1, Buy American Act-Supplies

52.225-13, Restrictions on Certain Foreign Purchases

52.232-33, Payment by Electronic Funds Transfer

FAR 52.252-1, Solicitation Provisions Incorporated by Reference:

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es): at <http://acquisition.gov/comp/far/index.html> and [http://www.osec.doc.gov/oam/acquistion\\_management/policy/default.htm](http://www.osec.doc.gov/oam/acquistion_management/policy/default.htm)

FAR 52.225-18 – Place of Manufacture.

FAR 52.232-15, Progress Payments Not Included.

CAR 1352.233-70, Agency Protests  
CAR 1352.233-71, GAO and Court of Federal Claims Protests

FAR 52.252-2, Clauses Incorporated by Reference:

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://acquisition.gov/comp/far/index.html> and

[http://www.osec.doc.gov/oam/acquisition\\_management/policy/default.htm](http://www.osec.doc.gov/oam/acquisition_management/policy/default.htm)

FAR 52.232-40, Providing Accelerated Payments to Small Business Subcontractors. .

FAR 52.247-34, FOB Destination

CAR 1352.201-70, Contracting Officer's Authority

CAR 1352.209-73, Compliance with the Laws

CAR 1352.209-74, Organizational Conflict of Interest

CAR 1352.246-70, Place of Acceptance (APR 2010)

(a) The Contracting Officer or the duly authorized representative will accept supplies and services to be provided under this contract.

(b) The place of acceptance will be:

NIST

Shipping and Receiving

325 Broadway

Boulder, CO 80305

NIST LOCAL-04 BILLING INSTRUCTIONS

(a) NIST prefers electronic Invoice/Voucher submissions and they should be emailed to [INVOICE@NIST.GOV](mailto:INVOICE@NIST.GOV).

(b) Each Invoice or Voucher submitted shall include the following: (1) Contract Number. (2) Contractor Name and Address. (3) Date of Invoice. (4) Invoice Number. (5) Amount of Invoice and Cumulative Amount Invoiced to-date. (6) Contract Line Item Number (CLIN). (7) Description, Quantity, Unit of Measure, Unit Price, and Extended Price of Supplies/Services Delivered. (8) Prompt Payment Discount Terms, if Offered. (9) Any other information or documentation required by the contract.

(c) In the event electronic submissions are not used, The Contractor shall submit an original invoice or voucher in accordance with the payment provisions of this contract to:

NIST

Accounts Payable Office

100 Bureau Drive, Mail Stop 1621

Gaithersburg, MD 20899-1621

NIST LOCAL - 39, NIST LOCAL-39 MARKING/PACKING INSTRUCTIONS

(1) If the total contract/order includes multiple quantities of the same or like item(s), segregated as separate CLIN/Item numbers, deliverables shall be packed accordingly. Each individual Package / container in the shipment shall include deliverables on a per-CLIN or Item basis.

(2) For each shipment made under this contract/order, the Contractor shall furnish itemized packing list(s), enumerating the specific contents of each shipping container and what specific individual

Components constitute a full and complete "unit" for each bid item. The packing list shall include the brief description of each item found in the Schedule. If more than one container is Required for each unit, each container should be marked accordingly, e.g., "Box 1 of 2," "Box 2 of 2," and the boxes, where feasible, should be taped or shrink-wrapped together as an Issuable unit.

(3)The contract number AND CONTRACT LINE ITEM NUMBER (CLIN) OR ORDER ITEM NUMBER shall be placed on the exterior of all containers.

If you have any questions please do not hesitate to contact me at [marc.zurasky@nist.gov](mailto:marc.zurasky@nist.gov).

Thank you.

## Statement of Work

### PURPOSE

The Time and Frequency Division (div. 688) of the National Institute of Standards and Technology (NIST), are seeking several windows/viewports to provide laser light access to the Ultra-High Vacuum (UHV) region of the cold atom clock.

### DELIVERABLES:

- Eight (8), 1.3-1.4” diameter viewports mounted on standard 2.75” Conflat (CF) style flanges with very low magnetic susceptibility.
- Five (5), 0.6-0.65” diameter viewports mounted on 1.33” CF style flanges with very low magnetic susceptibility.
- Six (6) 1.3-1.4” diameter viewports mounted on 2.75” CF style flanges with low magnetic susceptibility.

### TECHNICAL SPECIFICATIONS:

1. The windows must be mounted on standard dimension CF flanges in a “zero length” configuration. That is, the entire assembly shall be no thicker than that of the mounting flange.
2. The 2.75” CF flanges shall additionally have three (3) 10-32 tapped holes as illustrated in Fig. 1. (p. 2 of 2).
3. The body of the CF flanges shall be made of grade 5 Titanium for the “very low susceptibility” windows, while the “low susceptibility” window flanges shall be made from 316L stainless steel.
4. Any material used to join the windows to the flange body must have comparable magnetic susceptibility to the body material.
5. The window material must be amorphous (i.e., glass) not crystalline (e.g., crystal quartz or sapphire).
6. All of the 2.75” windows shall have a broad band antireflection coating suitable for use at both 780 nm and 852 nm.
7. The 1.33” windows shall be uncoated.
8. All windows shall be helium leak tested to  $<2 \times 10^{-10}$  Atm cc/sec or better.
9. Windows and flanges shall be cleaned for UHV service prior to shipping and packaged appropriately prior to shipping.

### TECHNICAL CONSIDERATIONS

Except for the extremely low magnetic susceptibilities provided by the use of titanium, the size and design of these windows is standard. NIST has specified grade 5 titanium, also known as 6Al-4V titanium, because it is considerably harder than grade 2 titanium.

The 10-32 mounting holes are nonstandard and in the past have been added to windowed flanges by NIST as needed. It is far easier to add these holes during the manufacturing cycle.

Crystalline windows, (e.g., quartz or sapphire), can exhibit stress induced birefringence which is highly undesirable for our application.

### **DELIVERABLE SCHEDULE**

The contractor shall deliver no later than 12 weeks after receipt of order.

### **INSPECTION AND ACCEPTANCE**

Upon receipt the windows will be individually inspected for damage to the sealing surfaces and inspected for any obvious defects or damages to the window. The windows will also be tested to verify low magnetic susceptibility. Once the vacuum system is fully assembled, the windows will be leak checked with helium.

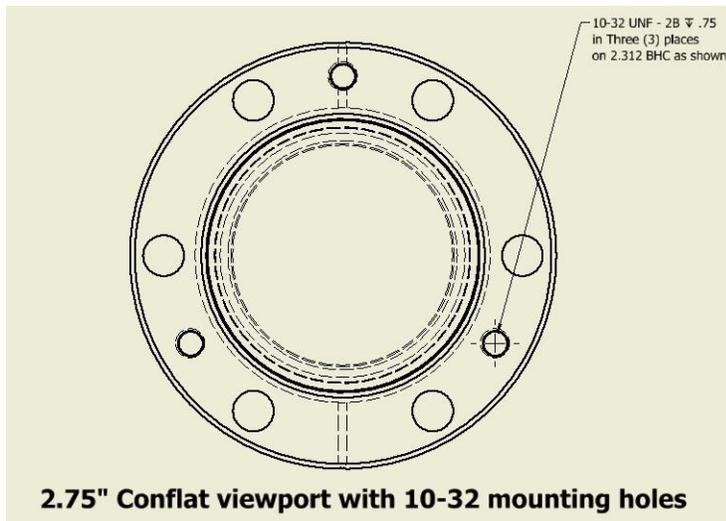


Figure 1. Shows a 2.75" CF window with three tapped holes located on the same Bolt Hole diameter as the flange bolt holes.