



## Invitation to Bid

Air Traffic Control Equipment Upgrade

**Issued By:  
St. Johns County Airport Authority  
4796 US 1 N  
Saint Augustine, Florida 32095**

**Due Date/Time for Receipt of Quotes:  
Wednesday, May 31<sup>st</sup>, 2023 @ 12:00pm**



# TABLE OF CONTENTS

- **NOTICE TO BIDDERS**
- **BID QUANTITIES**
  - See Contract Drawing Sheet GI003 for Detailed Bid Quantities
- **PROPOSAL**
  - **ATTACHMENTS TO PROPOSAL**
    - Certification for Receipt of Addenda
    - Contractor's Certification of Eligibility
    - Buy America Certification
    - Statement of Surety's Intent
    - Disadvantaged Business Enterprise Requirements
- **SAMPLE AGREEMENT**
- **REGULATIONS**
- **DBE FORMS**
- **SPECIFICATIONS**
  - **TECHNICAL SPECIFICATIONS**
    - 275000 – Air Traffic Control (ATC) Equipment

## NOTICE TO BIDDERS

### TIMETABLE

**Date of Distribution:**

**Last Date of Inquiries:**

**Bids Due:**

For information concerning this bid, please contact Cindy Hollingsworth, Office Manager, phone number (904) 209-0090 or email CKH@SGJ-airport.com. Please specify the bid which you are inquiring.

The Contract Documents (consisting of Notice to Bidders, Bid Quantities, the Proposal, the Regulations, the Sample Agreement, DBE Requirements, Federal Wage Rates, and the Specifications) and the Contract Drawings may be obtained by visiting the Airport's website.

Sealed bids, one (1) original and one (1) electronic copy on a USB Drive, for the construction of the Air Traffic Control Equipment Upgrades will be received at the St. Johns County Airport Authority, 4796 US 1 N, St. Augustine, FL, 32095 until 12:00pm, local time, May 24th, 2023, and there at said office, at said time,.

Each bid must be accompanied by a certified check or bid bond, in the amount of **five percent (5%)** of the total maximum proposal price (combination of base bid and bid schedules) for the contract in the form and subject to the conditions provided in the Preparation of Proposal.

Bids submitted by telephone, email, or fax shall not be accepted. Faxed or emailed bids shall be rejected as non-responsive regardless of when it is received.

It is the sole responsibility of the bidder to ensure that their bid reaches All bids, proposals or quotations, unless otherwise specified, must be delivered to the following address not later than the time and date specified in the solicitation.

**St. Johns County Airport Authority  
4796 US 1 N  
St. Augustine, FL 32095**

Bidders are cautioned that they are responsible for delivery to the specific location cited above. Therefore, if your bid, proposal, or quotation is delivered by an express mail carrier or by any other means, it is your responsibility to ensure delivery to the above address. This office will not be responsible for deliveries made to any place other than the specified address.

**The Airport shall not be responsible for delays caused by any occurrence. The bid time must be and shall be scrupulously observed. Under no circumstances shall bids delivered after the time specified be considered. Such bids will be returned to the vendor unopened. The decision to refuse to consider a bid or proposal that was received beyond the date/time in the solicitation shall be the bases for a protest pursuant to the St. Johns County Airport Authority Purchasing Policy.**

Bidders shall not be allowed to modify their bids after the opening time and date. Bid files may be examined during normal working hours, thirty (30) days after bid opening or upon recommendation for award, whichever occurs first. Bidders desiring to view these documents are urged to schedule an appointment.

- A DBE Goal for this contract is set at **five and eighteen tenths of a percent (5.18%)** of the dollar value of the prime contract to small business concerns owned and controlled by socially and economically disadvantaged individuals (DBE). All DBE firms used to meet this goal must be certified by the Florida UCP. Certification as a DBE by the Florida UCP is separate and distinct from other certification programs. The only source that should be used for verification of current eligibility of a DBE firm is the Florida UCP website at <https://fdotxwp02.dot.state.fl.us/EqualOpportunityOfficeBusinessDirectory/> Physical certification letters and/or expiration dates should not be requested from DBE firms.

All bidders are requested to submit a list of all DBE firms that provide them quotes with the following information:

- a) Name of firm
- b) Address and telephone number of firm
- c) DBE status/category (if any)
- d) Age of firm
- e) Approximate annual gross receipts of business
- f) Type of work
- g) Dollar amount of work quoted

END NOTICE TO BIDDERS

**PROPOSAL  
FOR AIR TRAFFIC CONTROL EQUIPMENT UPGRADES  
AT  
NORTHEAST FLORIDA REGIONAL AIRPORT  
ST. AUGUSTINE, FLORIDA**

**TO: St. Johns County Airport Authority  
4796 US 1 N  
St. Augustine, FL 32095**

The undersigned, as bidder, hereby declares that he/she has examined the site of the work and informed himself/herself fully in regard to all conditions pertaining to the place where the work is to be done; that he/she has examined and read the Contract Documents and Contract Drawings for the work and all addenda relative thereto furnished prior to the opening of bids; that he/she has satisfied himself/herself relative to the work to be performed.

The bidder understands that the advertisement/notice to bidders, located in the front of these Contract Drawings, contains the location and a description of the proposed construction, as well as indicates the place, date, and time of the proposal/bid opening; information about pre-bid conference, as scheduled, is contained in the advertisement/notice to bidders; a listing of estimated bid quantities is located in the front of these Contract Documents; the time in which the work must be completed shall be in accordance with the subsections titled FAILURE TO COMPLETE ON TIME of Section 80. If the bidder considers that the time to complete the work is inadequate, they should not submit a bid.

The bidder understands the quantities for bid items listed on the proposal sheets are estimated quantities only for the purpose of comparing bids; any difference between these estimated quantities and actual quantities required for construction shall not be taken as a basis for claims by the Contractor for extra compensation; compensation will be based upon the unit prices and actual construction quantities.

The bidder understands that the description under each item, being briefly stated, implies, although it does not mention, all incidentals and that the prices stated are intended to cover all such work, materials and incidentals as constitute bidder's obligations as described in the specifications and any details not specifically mentioned, but evidently included in the Contract shall be compensated for in the item which most logically includes it.

The bidder understands that the proposal guaranty shall be in the form of a bid bond in the amount of **5%** of this bid in accordance with the subsection titled BID GUARANTEE of Section 20; the proposal guaranty shall become the property of the Owner in the event the Contract and bond(s) are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Owner caused thereby.

The bidder agrees that upon receipt of written notice of the acceptance of this proposal, the bidder will execute the Contract attached within 15 days and deliver a Surety Bond or Bonds as required by the subsection titled REQUIREMENTS OF CONTRACT BONDS of Section 30. The bidder further agrees to commence construction with an adequate work force, plant and equipment on the date stated in the written notice to proceed and will progress therewith to its completion within the time stated, and in accordance with this Contract and Specification.

The bidder states that this proposal is based upon prevailing wages in St. Johns County and in no case are wages considered less than those predetermined by the State and Federal Departments of Labor, schedules of which are contained in the Contract Documents.

The bidder proposed and agrees, if this Proposal is accepted, to contract in the form of contract specified with the St. Johns County Airport Authority (Owner), to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary to complete the construction of the Air Traffic Control Equipment Upgrades project in full and complete accordance with the shown, noted, described and reasonably intended requirements of the Contract Documents and Contract Drawings, to the full and entire satisfaction of the above said Owner, with a definite understanding that no money will be allowed for extra work except as set forth in the attached Contract Documents, for the unit prices listed for each item.

It is understood that the Owner reserves the right to reject any or all proposals or any part thereof or item therein, and to waive any defects or irregularities in proposals. It is further understood that competency and responsibility of bidders will receive consideration before the award of contract.

BIDDER, IF AN INDIVIDUAL:

BY: \_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Signature)

COMPANY NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

EMAIL: \_\_\_\_\_

DATE: \_\_\_\_\_

**BIDDER, IF A PARTNERSHIP (GIVE NAMES AND ADDRESSES OF EACH PARTNER):**

**BY:** \_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Signature)

**COMPANY NAME:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

\_\_\_\_\_

**PHONE NUMBER:** \_\_\_\_\_

**EMAIL:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**PARTNER'S  
NAME:** \_\_\_\_\_

**BUSINESS  
ADDRESS:** \_\_\_\_\_

\_\_\_\_\_

**PARTNER'S  
NAME:** \_\_\_\_\_

**BUSINESS  
ADDRESS:** \_\_\_\_\_

\_\_\_\_\_

**PARTNER'S  
NAME:** \_\_\_\_\_

**BUSINESS  
ADDRESS:** \_\_\_\_\_

\_\_\_\_\_

**PARTNER'S  
NAME:** \_\_\_\_\_

**BUSINESS  
ADDRESS:** \_\_\_\_\_

\_\_\_\_\_

**BIDDER, IF A CORPORATION:**

**BY:** \_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Signature)

**CORPORATION  
NAME:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

(SEAL)

**STATE OF  
CORPORATION  
CHARTER:** \_\_\_\_\_

**PHONE NUMBER:** \_\_\_\_\_

**EMAIL:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**PRESIDENT'S  
NAME:** \_\_\_\_\_

**BUSINESS  
ADDRESS:** \_\_\_\_\_

\_\_\_\_\_

**SECRETARY'S  
NAME:** \_\_\_\_\_

**TREASURER'S  
NAME:** \_\_\_\_\_

**BUSINESS  
ADDRESS:** \_\_\_\_\_

**BUSINESS  
ADDRESS:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## **ATTACHMENTS TO PROPOSAL**

BIDDER and his/her surety, where appropriate, have completed and executed the attached documents, which are identified below.

Certification for Receipt of Addenda

Contractor's Certification of Eligibility

Buy American Certification

Statement of Surety's Intent

Disadvantaged Business Enterprise Requirements

Safety Plan Compliance Certification

**CERTIFICATION FOR RECEIPT OF ADDENDA**

Receipt of the following Addenda is acknowledged:

ADDENDUM NO.:	_____	DATED:	_____
ADDENDUM NO.:	_____	DATED:	_____
ADDENDUM NO.:	_____	DATED:	_____
ADDENDUM NO.:	_____	DATED:	_____
ADDENDUM NO.:	_____	DATED:	_____

FIRM OR CORPORATION MAKING BID: \_\_\_\_\_

SIGNATURE OF AUTHORIZED PERSON: \_\_\_\_\_

PRINTED NAME OF AUTHORIZED PERSON: \_\_\_\_\_

FIRM OR CORPORATION ADDRESS: \_\_\_\_\_

DATED: \_\_\_\_\_

**(This form must be completed and submitted with the Proposal)**

**CONTRACTOR'S CERTIFICATION OF ELIGIBILITY**

The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

The bidder/offeror further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

That the information above is true and complete to the best of my knowledge.

---

Printed Name and Title

---

Signature

---

Date

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

The full names and residences of all persons interested in this proposal as principals are as follows:

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**(This form must be completed and submitted with the Proposal)**

## **BUY AMERICAN CERTIFICATION**

The Contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list. A bidder or offeror must complete and submit the Buy American certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

### **Certificate of Buy American Compliance – Total Facility**

#### **CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR TOTAL FACILITY**

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark (✓) or the letter “X”.

- Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:
- a) Only installing steel and manufactured products produced in the United States; or
  - b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
  - c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- To faithfully comply with providing U.S. domestic products.
- To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

- The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
- a) To submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
  - b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
  - c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
  - d) To furnish U.S. domestic product for any waiver request that the FAA rejects.
  - e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

**Required Documentation**

**Type 3 Waiver** – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the “facility”. The required documentation for a Type 3 waiver is:

- a) Listing of all manufactured products that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- c) Percentage of non-domestic component and subcomponent cost as compared to total “facility” component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

**Type 4 Waiver** – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

**False Statements:** Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

\_\_\_\_\_

Date

\_\_\_\_\_

Signature

\_\_\_\_\_

Company Name

\_\_\_\_\_

Title

**Certificate of Buy American Compliance –  
Manufactured Product**

**CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR MANUFACTURED PRODUCTS**

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (✓) or the letter “X”.

- Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:
- a) Only installing steel and manufactured products produced in the United States;
  - b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
  - c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
2. To faithfully comply with providing U.S. domestic product.
3. To furnish U.S. domestic product for any waiver request that the FAA rejects
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

- The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
  2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
  3. To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
  4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

**Required Documentation**

**Type 3 Waiver** – The cost of the item components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the “item”. The required documentation for a Type 3 waiver is:

- a) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.

- c) Percentage of non-domestic component and subcomponent cost as compared to total “item” component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

**Type 4 Waiver** – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

**False Statements:** Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Title

**STATEMENT OF SURETY'S INTENT**

TO: \_\_\_\_\_

We have reviewed the bid of \_\_\_\_\_  
(Contractor)

of \_\_\_\_\_  
(Address)

for the \_\_\_\_\_

project for which bids will be received on: \_\_\_\_\_  
(Bid Opening Date)

and wish to advise that should this Bid of the Contractor be accepted and the Contract awarded, it is our present intention to become surety on the performance bond and labor and material bond required by the Contract.

Any arrangement for the bonds required by the Contractor is a matter between the Contractor and ourselves and we assure no liability to you or third parties if for any reason we do not execute the requisite bonds.

We are duly authorized to do business in the State of Florida.

ATTEST: \_\_\_\_\_

\_\_\_\_\_  
Surety's Authorized Signature(s)

(Corporate Seal, if any. If no seal, write "No Seal" across this place and sign)

**ATTACH PROPOSAL GUARANTEE**

**ATTACH POWER OF ATTORNEY**

**(This form must be complete and submitted with the Proposal.  
Copies of this form may be filled out and attached to this page.)**



**DISADVANTAGED BUSINESS ENTERPRISE (DBE) STATEMENT**

The requirements of 49 CFR Part 26, Regulations of the U.S. Department of Transportation, apply to this contract. It is the policy of the Sponsor to practice nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. All firms qualifying under this solicitation are encouraged to submit proposals. Award of this contract will be conditioned upon satisfying the DBE requirements of this contract. These requirements apply to all bidders, including those who qualify as a DBE. A DBE contract goal of **5.18 percent** has been established for this contract. The bidder shall make good faith efforts, as defined in Appendix A, 49 CFR Part 26, to meet the contract goal for DBE participation in the performance of this contract. Excerpts from 49 CFR Part 26 are included in the "Regulations" section of the Contract Documents.

Within **3 business days** after the opening of bids and before the award of the contract, all bidders wishing to remain in competition for award of this contract shall submit The Contractor's DBE Plan to the Owner. The Contractor's DBE Plan Form and DBE Letter of Intent Form are located in the "DBE Requirements" section of the Contract Documents.

**CERTIFICATION OF BIDDER:** The undersigned bidder will satisfy the DBE requirements of these specifications in the following manner (please check the appropriate space):

\_\_\_\_\_ The bidder is committed to meeting or exceeding the DBE utilization goal stated above on this contract.

\_\_\_\_\_ The bidder, if unable to meet the DBE utilization goal stated above, is committed to a minimum of \_\_\_\_ % DBE utilization on this contract, and will submit documentation demonstrating good faith efforts.

**SMALL BUSINESS PARTICIPATION:**

This contract does not have a Small Business Element (SBE) set-aside.

Name of Bidder's Firm: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Bidder's Status: DBE: \_\_\_\_\_ Non-DBE: \_\_\_\_\_ Age of Firm: \_\_\_\_\_

Annual Gross Receipts of Firm: \_\_\_\_\_

IRS Number: \_\_\_\_\_

\_\_\_\_\_  
Signature and Title

## SECTION 275000 – AIR TRAFFIC CONTROL (ATC) EQUIPMENT

### 1. General

The criterion set forth in this section presents the materials and labor required to satisfy the requirements for upgrading and/or replacing ATC communication equipment in the Airport Traffic Control Tower (ATCT) at the St. Johns County Airport Authority (NFRA). This project is bid and will be contracted as a Design/Build Project. The Prime Contractor shall be a Communications Equipment Installer registered and insured to conduct business in the State of Florida. The Prime Contractor is encouraged to verify all existing conditions by making an independent site evaluation during the bid period.

### 2. Codes, Standards and Related Sections

All equipment installations and incidentals shall be provided in accordance with the current local and national codes and standards, as applicable. Qualified personnel shall perform the installations and shall also be in attendance for all punch list and final inspections. All equipment is based on the guidelines set forth as follows:

- a. FAA Contract Tower Minimum Equipment and Facilities List FAA JO 7210.78 Appendix A dated July 25, 2018 including current updates by the Federal Contract Tower Program Office, Washington, DC.
- b. FAA Memorandum, date Sep 03, 2015, From: Bettie Loudenslager (AJW-1440), Subject: Updated Approval of Stand Alone and Backup Weather Equipment for Federal Contract Towers

Other Sections of these specifications that apply to this section are:

011400	Work Coordination
017329	Cutting and Patching

### 3. Qualifications

The Contractor must provide a minimum of two (2) installer technicians on-site for this project, both having prior experience with electronics installations in similar control towers. These technicians must have demonstrated the ability to install, configure and integrate all equipment needed to meet FAA minimum standards, as provided in FAA JO 7210.78, Effective date 07/25/2018, Appendix A and FAA Memorandum date Sep 03, 2015 From: Bettie Loudenslager (AJW-1440), Subject: Updated Approval of Stand Alone and Backup Weather Equipment for Federal Contract Towers. The ATCT Subconsultant shall demonstrate its familiarity in the design, construction and equipping of an ATCT. The Prime Contractor shall provide, with its bid, prequalification documentation for itself and its ATCT Subconsultant as described in the Bidder's Statement of Qualifications attached to the end of this section.

### 4. Equipment Submittals, Installation and Coordination

The Prime Contractor shall furnish, install, test, and verify all equipment, hardware, software, racks, cabling, conduit, connectors, labeling (identification), mounting devices and miscellaneous equipment required to provide a complete and usable installation. All ATC equipment shall be new unless otherwise indicated and shall be installed in the NFRA control tower or in the field, as required. The NFRA ATCT is equipped with an elevator to the floor below the control cab. ATC

Equipment shall be installed in the Control Cab, on the Roof, in the Equipment Room and at one location on the airfield.

All submittals shall be provided in pdf electronic format with at least two (2) full size hard copies (documentation and 24" X 36" drawings) to the Owner's Representative.

After a contract award, the Prime Contractor, together with its ATCT Subconsultant, shall prepare contract drawings (plans and diagrams) of its ATC equipment installation showing the proposed modifications to the existing control cab console, antennas and ancillary equipment on the roof, equipment room and the airfield, as required. Catalog cut sheets shall be provided for all ATC Equipment to be installed. Contract Drawings and Cut Sheets are due to be submitted within three (3) weeks after the Preconstruction Meeting at which a Notice-to-Proceed will be issued. These submittals will be reviewed by the Owner's Representative and Control Tower Personnel for written approval from the Owner to the Prime Contractor prior to any purchase and installation of materials and equipment.

- A. The submittal data package shall include manufacturers' product data and installation instructions for all materials, equipment and features as specified herein. Strike-out non-applicable items. Where there are options, clearly identify which options are proposed.
- B. Provide 2 copies (and a pdf file) of proposed equipment materials submittals and installation drawings.
- C. Prior to job completion, provide 1 copy of operation & maintenance instructions and training manuals in a 3-ring binder(s). Commercial off the shelf manuals shall be furnished for operation, installation, configuration, and maintenance of products.
- D. Submit As-built system red line marked up plans and diagrams showing equipment locations and wire paths.
- E. Submit Test Reports for ATC cabling and equipment installations.
- F. All equipment removed for replacement shall be delivered to the Owner and shall remain the property of the St. Johns County Airport Authority.

#### **(5) Scheduling the Installation**

The ATC Equipment shall be purchased, installed, tested, operational and accepted within 100 calendar days after the date of the written Notice-to-Proceed.

In general, work shall be conducted during the hours that the control tower is not in operation, that is, between the hours of 9:00pm and 7:00am. Any work proposed to be conducted during other hours shall be requested by the Prime Contractor and approved by the Owner in writing prior to any attempt. The new equipment shall be installed in the same locations (i.e., consoles, equipment room, roof) as the pieces that are being replaced unless otherwise directed in writing (e.g., meteorological cab display). If there is a reason not to, then the Prime Contractor shall provide a written statement and drawing, as required, to the Owner's Representative showing the proposed change for approval prior to installation. A Cutover Plan shall be submitted (see specific paragraph in this section). The Contractor shall check all equipment and electrical systems after each work session but prior to 6:30am and certify to the Owner that they are ready for operation.

The Prime Contractor shall supply the Owner and his Authorized Representative with an initial schedule and monthly updates. It is the Prime Contractor's responsibility to schedule and coordinate work with the Owner and others, as required. The Contractor shall report any difficulties or delays to the Owner or his Authorized Representative, immediately.

## **6. Voice Communications Switching System (VCSS)**

The Prime Contractor shall furnish and install all components necessary to replace the existing VCSS with a new Liberty Star 3 VCSS and three (3) Mintronix MP5000 Touchscreen Computer displays at Local, Local Assist and Ground Control Positions. The system shall be expandable to at least four (4) total positions in the future. The VCSS shall provide the ATC Tower Controller the capability to utilize the radio telecommunications equipment, and voice recording requirements, FAA dedicated circuits, intercom system between positions, position relief redundant capability between positions and software that is programmable either at the position or remotely.

Each Position will have a 15' pedestal mounted touch screen monitor. The screen shall provide high contrast color, be adjustable to viewing angles and have brightness controls to be easily readable during day and night use. The screen shall be sun readable and have a non-glare surface.

All terminations cabling for the VCSS will be terminated in the equipment room to avoid interference in the cab area

## **7. Radio Antennas and Cable Management**

The Prime Contractor shall remove and replace three (3) VHF antennas (ground, local, and ATIS). They shall meet the requirements of Taco Antenna Products DPV or approved equal. Antennas shall be tested by the Prime Contractor and when found satisfactory in relation to all frequencies, shall be installed by the Contractor on the cab roof as required for the configuration of radios in the particular installation. As part of this element, the Contractor is expected to replace worn out mounting hardware, as needed. New mounting hardware shall be rated for outdoor use and provide acceptable resistance to the elements. This shall require the Prime Contractor to install or replace stainless steel or galvanized mounting brackets, such as Unistrut or All Storage Systems, suitable for the antenna mounts.

Antenna cables shall be removed and replaced from the new antennas to their respective radios in the Equipment Room. The same pathways as existing shall be used unless otherwise approved in writing. New antenna cable shall be Belden/Andrew RF, LMR-400 or equal.

VHF Frequency Range: **117.975 – 136.975**  
VSWR 2 to 1 or less: (Across the entire bandwidth)  
Wind Velocity/Loading: 100 MPH  
Lightning Protection: Direct Ground

## **8. Radio Filters**

The Prime Contractor shall furnish and install cavity type filters to each of the VHF/AM single channel transmitters, receivers and/or backup transceiver. Radio filters built-in each new receiver shall be provided to minimize channel interference. Cavity filters will only be required if the new installation creates any unique interference with respect to its components or the control tower's location. Prime Contractor must determine this prior to completion and acceptance. Telewave Band Filters, Sinclair Technologies Low Band Aviation or an approved equal shall be provided.

## **9. Standalone - Altimeter Setting Indicator (DASI)**

NFRA ATCT currently has a Digital Altimeter Setting Indicator (DASI) at the Local and Ground Control positions. The Prime Contractor shall furnish and install one (1) additional Digital Altimeter Setting Indicator (DASI) at the Local Assist position. An additional DASI Pressure Port may not be required provided the new DASI can share use of the Pressure Port currently used by the DASI's at the Local and Ground Control Positions.

Siting and installation criteria for the DASI sensor shall be in accordance with FAA Order JO 6560.20C dated 09/06/2017

Setra Model 370 is conditionally approved by FAA as stated in FAA Memorandum date Sep 03, 2015 From: Bettie Loudenslager (AJW-1440), Subject: Updated Approval of Stand Alone and Backup Weather Equipment for Federal Contract Towers.

## **10. Airport Terminal Information System (ATIS) and ATIS/AWOS Interface Unit (AAIU)**

The Contractor shall furnish and install a complete ATIS with voice integrated announcer and AAIU Switch. **NOTE: VAL Avionics VHF transmitter used for ATIS broadcast during the hours the ATCT is open specified in paragraph 7. VHF Radio Transmitters and Receivers.**

Interalia SBX2 ATIS and Wolen AAIU-W

## **11. Backup VHF Radio Communications**

The Prime Contractor shall furnish and install a tunable and portable VHF radio for emergency backup for air-ground communications by ATCT controller. The portable backup radio is in lieu of a fixed base backup radio in the ATCT Tower.

JOTRON TR-810MP Transceiver Man Portable, 118 MHz – 137MHz w/ internal battery backup or ICON A-280

## **12. Transparent ATC Tower Cab Window Shades**

The Prime Contractor shall furnish and install ATC window shades for all glazing in the tower cab. One shade roller shall be installed at each of eight (8) sides of the tower cab. That is, one shade shall span the entire window, across and over the center curtain wall mullion, from structural column to structural column.

The shade roller shall be placed in the position closest to the window leaving enough space for a second future roller. The shade material shall closely follow the same incline as the cab glass in the down position. A wooden nail board painted flat black shall be provided by the Prime Contractor for the full length of each shade pocket for the shades to be securely and evenly screwed into. Only installers experienced with control tower shade installation shall be allowed to furnish and install tower cab window shades.

ATC Tower Cab window shade materials and installation tolerances shall meet or exceed FAA E-2470b criteria. Window shades shall be adjustable and have a scratch resistant surface on drawn cord rollers. Draw cords for shades over the cab stairwell shall extend over the stairwell opening and provided with additional lock pulleys in order to access them without walking down the stairs. Installation of window shades shall be coordinated on site with the Airport Director and the Air Traffic Manager.

Solar Screen Co. Inc., Plastic-View ATC Inc. and Wolen LLC. are FAA approved vendors.

## **13. Battery Backup (UPS) for Temporary Emergency Power to Tower Communication Equipment**

The Prime Contractor shall provide battery backup to critical equipment in the tower cab and equipment room as follows. The equipment being backed up includes transmitters, receivers, voice switch, digital voice recorder and ATIS

## **14. Standalone – Backup Weather Mast (Required if FAA does not approve installation of Wind and Temperature/Dewpoint Sensors and Radiation Shield on the AWOS Mast)**

### **15. Signal Light Gun**

Model 901 design and construction are based on the United States Federal Aviation Administration FAA-2214-A Specification.

### **16. Installation Cutover**

“Cutover” from existing equipment to new equipment shall be carefully planned and coordinated in order to maintain safe and continuous operation of airport traffic control.

a. The Contractor shall make all required provisions to prevent impact to flight operations during control tower transfer from the existing equipment to the new replacements

b. The Contractor shall perform the cutover during the hours of tower closure 9:00pm - 7:00am unless otherwise approved in writing by the Owner, and remain on-site for the first day of operation to provide whatever assistance and/or troubleshooting is required. The backup meteorological indicators/sensors (wind, temperature, dewpoint) are an exception to this but still must be accomplished and coordinated in a reasonably short time.

c. The individual equipment replacements in the ATCT may be made over more than one night. Existing equipment shall stay on-line and operable if not replaced, tested and operable by the time the ATCT opens each morning until all new systems are in place, tested and ready for operation as the primary equipment.

d. The Installer shall provide an equipment Cutover Plan to the Owner for review and consideration by the FIN Controllers at least 21 days prior to the planned cutover date. No cutover activities shall commence until all Owner and Controller coordination has been finalized.

e. The Contractor shall coordinate all activities with the Owner and the Air Traffic Manager prior to and during the cutover. A pre-cutover meeting to be held at the ATCT shall be scheduled at least 48 hours before the scheduled activity.

#### The Cutover Plan shall address:

- Provide an equipment replacement plan that shall maintain control tower operational requirements.
- Confirm backup plans for critical equipment items necessary to maintain ATC operations.
- Confirm that all work will be done during tower off-hours and make written request for any required deviations.
- Develop a strategy and schedule that mitigates impact to ATC operations and coordinate this with all concerned parties.
- Verify operational capability after equipment replacement each morning prior to ATCT operation hours. Immediately identify and correct deficiencies, if any are encountered.

## 17. Training & Orientation

The Contractor shall schedule and provide a training session to the ATC controllers and the Owner's Maintenance Personnel at the completion of the installation. Completion of this session shall be documented by the Prime Contractor with the Owner, attendees, and specific equipment manufacturers, as required. A separate visit by the Prime Contractor's installer shall be made within the first 30 days after commissioning to provide an inspection and adjustments of the electronics performance, as required.

Sufficient written documentation shall be provided by the Prime Contractor in order for the Owner and Controllers to independently operate and maintain the equipment included in this specification. Documents shall include all owners' manuals, schematics, diagrams, as-built conditions and any other related materials.

## 18. Bid and Payment Items

**BASE BID – Furnish & Install Air Traffic Control (ATC) Equipment to Replace:**

### Voice Communications Switching System

AIR TRAFFIC CONTROL (ATC) EQUIPMENT:

Signal Light Gun Model #901 - FAA-2214-A Specification  
Radio Antennas and Cable Management  
Radio Filters  
Standalone – Altimeter Setting Indicator (DASI)  
Airport Terminal Information System and ATIS/AWOS Interface Unit (AAIU)  
Backup VHF Radio Communications  
Transparent ATC Tower Cab Window Shades  
Inverter and Batteries (UPS) for Tower Cab and Equipment Room

All in accordance with Specification Section 275000 complete including the services of the ATCT Subconsultant, all labor, testing, applicable taxes and incidentals to provide all equipment, hardware, software, programming, cable, conduit and connections as required to result in complete and operational equipment for a Lump Sum Price.