

Middle Tennessee State University

Bid Information

Bid Owner Dr. Will Pritchett Executive
Director of Procurement Services
Email wpritch@mtsu.edu
Phone +1 (615) 898-2516
Fax +1 (615) 898-5597

Bid Number 17814357 Re-advertisement #1
Title Flight Simulation Training Device
(FSTD)
Bid Type ITB (Sealed)
Issue Date 11/10/2010
Close Date 12/15/2010 3:00:00 PM

Contact Information

Address Middle Tennessee State University
1500 Greenland Drive, P O Box 18
Murfreesboro, TN 37132

Contact Dr. Will Pritchett Director of
Procurement & Auxil

Department
Building
Floor/Room
Telephone +1 (615) 898-2516
Fax +1 (615) 898-5597
Email wpritch@mtsu.edu

Ship to Information

Address Airport
1940 Memorial Blvd
Murfreesboro, TN 37132

Contact Wayne Dornan
Department Aerospace
Building
Floor/Room
Telephone 1 (615) 898-2788
Fax
Email wdornan@mtsu.edu

Supplier Information

Company Name _____
Contact Name _____
Address _____

Telephone _____
Fax _____
Email _____

Signature _____

Supplier Notes

Date ____ / ____ / ____

Bid Notes

Re-advertisement #1 for Bid Flight Simulation Training Device (FSTD) designed and constructed in such a manner as to accurately reproduce the flight deck of an actual CRJ-200 regional jet aircraft.

Bid Activities

Bid Messages

Bid Attachments

The following attachments are associated with this opportunity and will need to be retrieved separately

Line	Filename	Description
Header	Standard Bid Terms and Conditions.pdf	MTSU Procurement Services Standard Bid Terms and Conditions.
Header	Ethnicity Report.doc	Save to your computer and complete, then attach to your bid before completing. NOTE: If you have an ethnicity report on file in MTSU Procurement it is not necessary to complete this form again.
Header	Protest Bond.doc	Protest Bond Form. Protest Procedures may be reviewed at http://procurement.mtsu.edu/policies.htm "click-on" MTSU Purchasing Policies.
Header	VENDOR CHECKLIST.doc	*This checklist does not represent either a complete list of, or replacement for, the mandatory requirements listed in the ITB. **This checklist is ONLY A TOOL meant to assist in the prevention of disqualification. ***Notations on Proposals that material submitted be kept confidential will not be honored. All bid documents and contracts will become public record.

Header	MTSU Proforma Contract New sept 3 2010.doc	Middle Tennessee State University intends to issue a purchase order which will be the contract for purchase of commodity and/or service. Whenever it becomes necessary to utilize a contract the vendor shall use the attached pro forma version and No changes.
1	CRJ200Specifications.doc	FSTD Bid Specifications & Requirements for pricing a turn-key Flight Simulation Training Device. These specifications are not exhaustive and vendors should not assume but shall bring to the Buyer's attention possible omissions.

Bid Attributes

Please review the following and respond where necessary

#	Name	Note	Response
1	MTSU Standard Terms and Conditions	I have read and understand Middle Tennessee State University's Standard Terms and Conditions.	_____ (Required)
2	Payment Term Discount	A prompt payment discount will be considered in the award process (Ex. 1% Net 30). Payment terms for less than thirty-(30) days will not be considered or accepted by the University. Proposer is not required to submit a payment discount but payment terms less than thirty-(30) days may cause your proposal be considered non-compliant.	_____ (Optional)
3	Other TBR and UTK Institutions	I certify that if selected as the successful proposer, this proposal may be applied to the entire TBR and UT Systems. This does not mean that other TBR or UT institutions are required to purchase under this ITB.	_____ (Optional)
4	Corporations	Corporations must be duly authorized to do business and be in good standing under The Laws Of The State Of Tennessee.	(No Response Required)
5	Contract Term Period	The term of this contract purchase will be for the successful installation, successful demonstration and successful benchmark testing of the FSTD Simulator. All Manufacturer's warranty periods will begin after the FSTD Simulator has been approved and accepted by the University, the Contractor's Final Invoice Date or University Payment date will be used as the Warranty start date whichever is later. A Contract may not exceed a total of sixty-(60) months, per TCA Statute limiting term contracts to sixty-(60) months.	_____ (Required)
6	Contract Period-Firm Discount Period	If Vendor agrees to offer 'firm' pricing to Tennessee Board of Regents member Institutions and/or University of Tennessee Institutions then all Vendor discounts and pricing shall be firm for the agreed upon contract firm price period should the Institutions desire to utilize this contract.	_____ (Optional)
7	Tennessee Contractor's License (If Applicable)	Be advised if this bid requires that your firm to be licensed by the Tennessee Board of Contractors any Bid Proposal that equals or exceed \$25,000.00, will be required to be licensed by The State Of Tennessee Board Of General Contractors and pursuant to TCA 62-6-119. Include a copy of the License, License Number, Date of Expiration, and the part of the classification applying to the bid. Failure to comply will result in rejection of your bid.	_____ (Optional)

8 Notice of Vendor Point of Contact/Intent to Respond

A Single Point of Contact must be provided to Buyer's email address listed above by the date and times of required Event Activities listed. All communication between potential bidders and the Institution will be conducted by the buyer electronically via email to the vendors who have provided a single point of contact.

(No Response Required)

The Institutions responses to vendor questions will be incorporated by attachment into the ITB and will be considered addendums. The names of the vendors submitting the questions will not be disclosed in the responses emailed.

Proposers shall respond to this ITB as well as any exhibits, attachments or amendments thereto.

CONTRACTORS must furnish specifications that permit quality determination. Each prospective CONTRACTOR must furnish all information required by the ITB to be considered, including the submission of brochures or technical material pertaining to the proposed services. Specifications based on brand names are not intended to exclude similar products of comparable quality, unless otherwise stated.

Each proposal must contain the full name and business address of the Proposer. Unsigned Proposals will be rejected. The person signing the proposal must furnish his/her title and, if requested, must show proof of his/her authority to bind his/her company in contract. Purchase orders/contracts will be issued to the name appearing on the proposal.

Proposals should be prepared simply and economically, providing a straightforward, clear and concise description of the CONTRACTOR'S capabilities to satisfy the requirements of the Bid. Emphasis should be placed on the completeness and clarity of content.

For better clarity and understanding of CONTRACTOR specifications, each section of the CONTRACTOR proposal should be prepared and formatted to correspond with the appropriate Bid section.

9 Licenses, Permits, and Certificates

All Proposers must have all Licenses, Permits, and Certificates required by Federal and State Laws for the performance of this Contract. Procurement Services reserves the right to require Vendors to provide evidence of possession of all Licenses, Permits, and Certificates. Failure to provide these documents upon request will cause your bid to be considered as non-responsive and the vendor will be removed from receiving future bid notifications.

_____ (Required)

10	Insurance Requirement	The CONTRACTOR must provide and maintain public liability insurance written on a standard approved Comprehensive General Liability Policy Form naming both the CONTRACTOR and INSTITUTION as joint assures with lines of liability of One Million Dollars (\$1,000,000) for personal injury and One Hundred Thousand Dollars (\$100,000) for property damage. The policy shall also be endorsed with the Personal Injury Endorsement and Accident Defined Endorsement. The CONTRACTOR shall furnish INSTITUTION with a certificate showing such insurance is in affect and that the protection afforded under the policy will not be canceled or reduced until at least ten (10) days prior notice is sent to INSTITUTION by the insurance company or agent, such notice being sent by registered mail to: MTSU, Attn: Procurement Services, P.O. Box 18, Murfreesboro, TN 37132. The CONTRACTOR will specify the additional umbrella liability, which it will provide.	(No Response Required)
11	References and Contact Information	Provide and attach to bid proposal Five (5) References for contracts completed or current, of comparable size and complexity (vendor will provide all contact information).	_____ (Required)
12	Provide Reference for Higher Education Installation	Vendor shall provide a minimum of three (3) complete 'turn-key' installations of their proposed FSTD CRJ-200 Simulator including software that is currently in operation at Institutions of Higher Education (vendor will provide all contact information). AND if required Vendor agrees to make the necessary arrangements for a 'site-visit' for the MTSU bid evaluation team (all travel costs for the evaluation team's site visit will be paid for by the Institution). During the 'site-visit' the Vendor will demonstrate all of the Institutions FSTD bid requirements and system capabilities. If required site visit should be within two-weeks of bid closing date.	_____ (Required)
13	Requirements for Award	AWARD CRITERIA: An award shall be made to the lowest responsive and responsible bidder considering the following: a. All or None Award b. Provided Five (5) References for contracts of comparable size and complexity (vendor will provide all contact information) c. Vendor shall provide a minimum of three (3) complete installations of their proposed FSTD CRJ-200 Simulator including software that is currently in operation at an Institutions of Higher Education (vendor will provide all contact information) AND if required Vendor agrees to make the necessary arrangements for a site visit to a Institution for the bid evaluation team (all travel costs for the evaluation team's site visit will be paid by the Institution). At the site visit the Vendor will demonstrate the Institutions bid requirements and system capabilities d. Vendor agrees to Sign Institutions Pro Forma Contract Document if necessary e. Vendor completes all bid documents as required and are submitted with their bid proposal. f. Vendor has provided complete pricing and warranty information. g. Vendor has included in their bid a complete 'Project' Timeline with all projected target dates for delivery, installation, and benchmark testing of FSTD Simulator. h. Level-5 qualification.	(No Response Required)
14	Number of Years in Business	Company must have been in business providing FSTD Simulators for a minimum of ten (10) years. Indicate in the space provided years in business.	_____ (Required)

- 15 Cancellation Notice for Cause The University may cancel any Contract for cause effective immediately upon written notice of intent to cancel. This Purchase Order is subject to the allotment of state and/or federal funds, and may be null and void unless funds have been appropriated and are available for the purchase of the service or item, which forms the basis of the Contract. (No Response Required)
- 16 Cancellation - Termination for Convenience Cancellation - Termination for Convenience: the Institution _____ (Required)
 may terminate this contract without cause. Said termination shall not be deemed a breach of contract by the Institution. The Institution shall give the vendor/contractor at least ninety (90) days written notice before the effective cancellation date.

 The vendor/contractor shall be entitled to receive compensation for goods shipped or services satisfactorily completed as of the cancellation date, but in no event shall the Institution be liable to the vendor/contractor for compensation for any goods or services which have not been rendered.

 Upon such termination, the vendor/contractor shall have no right to any actual general, special, incidental, consequential, or any other claims whatsoever of any description or amount.
- 17 Termination for Non-Performance Default (No Response Required)
 The INSTITUTION may terminate the Agreement for non-performance, as determined by the INSTITUTION for causes including, but not limited to:

 Failure to provide satisfactory quality of service, including, failure to maintain adequate personnel, whether arising from labor disputes, or otherwise.

 Any substantial change in ownership or proprietorship of the CONTRACTOR, which in the opinion of the INSTITUTION is not in University's best interest, or failure to comply with the terms of the Agreement.

 Failure to keep or perform, within the time period set forth herein, or violation of, any of the covenants, conditions, provisions or agreements contained in the Agreement.

 A voluntary petition in bankruptcy is filed by CONTRACTOR or an involuntary petition is filed to place CONTRACTOR in bankruptcy and the matter is not dismissed within ninety (90) days of the filing.

 Making a general assignment for the benefit of its creditors, or taking the benefit of any insolvency act, or if a permanent receiver or trustee in bankruptcy shall be appointed for the CONTRACTOR

 The INSTITUTION will provide to CONTRACTOR ten (10) calendar days written notice of default. Unless arrangements are made to correct the non-performance issues to the INSTITUTION'S satisfaction within ten (10) calendar days, the INSTITUTION may terminate the Agreement by giving ninety (90) days notice, by registered or certified mail, of its intent to cancel the Agreement.

- 18 Tax Exempt Institution MTSU is tax exempt and therefore does not pay sales tax. (No Response Required)
Vendors making improvements or additions to, or performing repair work on real property for Institution are liable for any applicable sales or use tax on tangible personal property used in connection with the contract or furnished to vendors by the state for use under the contract. A copy of the Tax Exempt Certificate will be provided to the successful bidder.
- 19 Bid Proposal Validity All Bid proposals shall state that the offer contained _____ (Required)
therein is valid for a minimum of one hundred eighty (180) days from the date of opening. This assures that proposers' offers are valid for a period of time sufficient for thorough consideration. Proposals that do not so state will be considered valid for one hundred eighty (180) days
- 20 Freight on Board (FOB) All Bids shall be FOB destination. The Term FOB _____ (Required)
destination shall mean Delivered as specified on the purchase order with all charges for Transportation and Unloading prepaid by the Vendor/Contractor. All Prices should include freight and shipping charges. Failure to include these charges shall cause forfeiture of all rights to collect freight.
FSTD to be delivered to:
Airport
Attn: Wayne Dornan
Building/Room
Contact Phone +1 (615) 898-2788
1940 Memorial Blvd
Murfreesboro, TN 37129
- 21 Assignment and Subcontracting Proposer must identify any intended subcontracts, _____ (Optional)
indicating the scope of work to be subcontracted and the name(s) of potential sub-Bank(s). All subcontracts are subject to approval by University. Despite the existence of subcontracts, the Proposer who is awarded the contract pursuant to this bid will remain responsible for all work performed or duties owing under the contract.
- 22 Independent Price Determination No Proposal shall be considered for award if the price in _____ (Required)
the proposal was not quoted independently and without collusion, consultation, communication or agreement relating to any pricing matter with any other Proposer or with any of Proposers competitors.
Proposers may not submit more than one proposal, nor submit multiple proposals in different forms; including, but not limited to, submitting a proposal as a Prime Proposer and as a Subcontractor to another prime Proposer. It is acceptable for an entity to be a subcontractor for more than ONE Proposer.
NOTE: If price-fixing, pricing collusion, multiple proposal submission, or any other behavior prohibited by the terms contained herein are detected at any time during the course of the contract, the contract shall be deemed null and void.
- 23 Prohibited Transactions No employee of any TBR INSTITUTION or technology _____ (No Response Required)
center responsible for initiating or approving requisitions shall accept or receive, directly or indirectly, from any firm, person or corporation to which any contract may be awarded, by rebate, gift, or otherwise, any money or anything of value whatsoever, or any promise, obligation or contract for future awards or compensation. Whenever any contract is awarded contrary to this prohibition, the contract shall be void.

24	Expansion of Services	At INSTITUTION'S sole discretion, it may request an expansion or reduction of the services provided by the CONTRACTOR herein, at which time the parties shall negotiate in good faith commensurate with the expansion or reduction.	_____ (Required)
25	Executed Contract or Purchase Order	Notwithstanding any provision contained herein or in any solicitation document, submission of a bid or a proposal shall not create rights, interests or claims of entitlement in any bidder or proposer, including the successful bidder or proposer. Notwithstanding any action or agreement to the contrary, no such right, interest, or claim shall exist unless and until a purchase order has been issued or a contract is fully executed by Institution and TBR officials.	(No Response Required)
26	Open Records Act	All proposals shall become public documents of the State of Tennessee, open for review by the public in accordance with the requirements of the Tennessee Open Records Act. If an ITB is re-advertised, all prior offers and/or proposals shall remain closed to inspection by the bidders and/or public until evaluation of the responses to the re-advertisement is complete.	_____ (Required)
27	Waiver of Minor Deviations	Institution may waive minor variances in a Vendor's proposal. Such a waiver does not change the specifications of the ITB.	(No Response Required)
28	State Contracts	Procurement Services reserves the right to utilize existing Institution Contracts, Tennessee Board of Regents authorized Contracts, University of Tennessee Contracts and State of Tennessee Contracts to fulfill part or all of any Contract when it is deemed to be in the best interests of the Institution.	(No Response Required)
29	Life Cycle Costs/Energy Efficiency Standards	<p>MTSU in determining life cycle costs, will use the acquisition cost of the product, the energy consumption and the projected energy cost of energy over the useful life of the product and the anticipated resale or salvage value of the product may be considered in the evaluation (T.C.A. §12-3-606).</p> <p>MTSU shall use energy efficiency standards prescribed by Energy Star for the purchase of energy-consuming products. The Energy Star website (http://www.energystar.gov/) provides a qualified list of products and commodities meeting Energy Star's minimal energy specifications, life cycle costing calculations, life cycle cost formula information and qualified products that meet Energy Star's rating for using less energy and helping to protect the environment (T.C.A. §12-3-604 & 12-3-605). Products and commodities listed on the Energy Star website's list of qualified products and commodities will be used as "acceptable brands and models" on bid documents.</p> <p>The minimal energy specifications for products and commodities listed on the Energy Star Qualified Products list (see link above) must be included by each vendor for items bid.</p>	_____ (Required)

Tennessee Public Chapter No. 878 of 2006, TCA 12-4-124, requires that Contactor attest in writing that Contractor will not knowingly utilize the services of illegal immigrants in the performance of this Contract and will not knowingly utilize the services of any subcontractor, if permitted under this Contract, who will utilize the services of illegal immigrants in the performance of this Contract. The attestation shall be made on the form, Attestation re Personnel Used in Contract Performance ("the Attestation"), which is attached and hereby incorporated by this reference.

_____ (Required)

If Contractor is discovered to have breached the Attestation, the Commissioner of Finance and Administration shall declare that the Contractor shall be prohibited from contracting or submitting a bid to any Tennessee Board of Regents institution or any other state entity for a period of one (1) year from the date of discovery of the breach. Contractor may appeal the one (1) year by utilizing an appeals process in the Rules of Finance and Administration, 0620.

Note this term has been added to the terms in the event Federal Stimulus Funds are used to purchase any of the items or services under this contract. This Agreement requires CONTRACTOR to provide products and/or services that are funded in whole or in part under the American Recovery and Reinvestment Act of 2009, Public Law 111-5, (Recovery Act). CONTRACTOR is responsible for ensuring that all applicable requirements, including but not limited to those set forth herein, of the Recovery Act are met and that CONTRACTOR provides information to the State as required. CONTRACTOR (and any subcontractor) shall comply with the following: a. Federal Grant Award Documents, as applicable. b. Executive Office of the President, Office of Management and Budget (OMB) Guidelines as posted at www.whitehouse.gov/omb/recovery_default, as well as OMB Circulars, including but not limited to A-102 and A-133 as posted at www.whitehouse.gov/omb/financial_offm_circulars. c. Office of Tennessee Recovery Act Management Directives (posted on the Internet at www.tnrecovery.gov). d. The Recovery Act, including but not limited to the following sections of that Act: (1) Section 1604 – Disallowable Use. No funds pursuant to this Agreement may be used for any casino or other gambling establishment, aquarium, zoo, golf course, or swimming pool. (2) Section 1512 – Reporting and Registration Requirements. CONTRACTOR must report on use of Recovery Act funds provided through this Agreement. Information from these reports will be made available to the public. (3) Section 1553 – Recovery Act Whistleblower Protections. An employee of any non-Federal employer receiving covered funds under the Recovery Act may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing, including a disclosure made in the ordinary course of an employee's duties, to the Accountability and Transparency Board, an inspector general, the Comptroller General, a member of Congress, a State or Federal regulatory or law enforcement agency, a person with supervisory authority over the employee (or other person working for the employer who has the authority to investigate, discover or terminate misconduct), a court or grand jury, the head of a Federal agency, or their representatives, information that the employee believes is evidence of one or more of the following related to the M T S U Procurement Services Purchase Order General Provisions Multi-Year Contract 3 implementation or use of covered funds: i. gross mismanagement, ii. gross waste, iii. substantial and specific danger to public health or safety, iv. abuse of authority, or v. violation of law, rule, or regulation (including those pertaining to the competition for or negotiation of an Agreement. Non-enforceability of Certain Provisions Waiving Rights and Remedies or Requiring Arbitration: Except as provided in a collective bargaining agreement, the rights and remedies provided to aggrieved employees by this section may not be waived by any agreement, policy, form, or condition of employment, including any pre-dispute arbitration agreement. No pre-dispute arbitration agreement shall be valid or enforceable if it requires arbitration of a dispute arising out of this section. Requirement to Post Notice of Rights and Remedies: CONTRACTOR and any subcontractor shall post notice of the rights and remedies as required under Section 1553. (Refer to Section 1553 of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5 located at www.recovery.gov, for specific requirements of this section and prescribed language for

the notices.) (4) Section 902 – Access Of Government Accountability Office. CONTRACTOR shall provide that the Comptroller General and his representatives are authorized: i. to examine any records of CONTRACTOR or any of its subcontractors, that directly pertain to, and involve transactions relating to, this Agreement or a subcontract; and ii. to interview any officer or employee of CONTRACTOR or any of its subcontractors regarding such transactions. (5) Section 1514 – Inspector General Reviews. Any inspector general of a federal department or executive agency has the authority to review, as appropriate, any concerns raised by the public about specific investments using such funds made available in the Recovery Act. In addition, the findings of such reviews, along with any audits conducted by any inspector general of funds made available in the Recovery Act, shall be posted on the inspector general's website and linked to the website established by Recovery Act Section 1526, except that portions of reports may be redacted to the extent the portions would disclose information that is protected from public disclosure under sections 552 and 552a of title 5, United States Code. (6) Section 1515 – Access of Offices of Inspector General to Certain Records and Employers. With respect to this Agreement, any representative of an appropriate inspector general appointed under section 3 or 8G of the Inspector General Act of 1978 (5 U.S.C. App.), is authorized: i. to examine any records, of CONTRACTOR or any of its subcontractors, that pertain to and involve transactions relating or pursuant to this Agreement; and ii. to interview any officer or employee of CONTRACTOR or any subcontractors regarding such transactions. e. CONTRACTOR agrees to comply with any modifications or additional requirements that may be imposed by law and future guidance and clarifications of Recovery Act requirements.

32 Performance Bond

The successful CONTRACTOR is required to furnish a performance bond equal to one-hundred (100) percent of the entire FSTD project including installation, Benchmark testing, and successful FAA Level 5 Certification. This amount to be forfeited if CONTRACTOR fails to complete any academic year or transition period. The performance bond requirement may be waived at the discretion of INSTITUTION administrators. Personal checks are not acceptable in place of performance bonds. However bank cashier's checks will be accepted. An irrevocable letter of credit or a certificate of deposit, which shall be held by Procurement Services, from a state or national bank or a state or federal savings and loan association having its principal office in Tennessee, may be accepted by Procurement Services in lieu of a performance bond, subject to approval of the terms and conditions of said irrevocable letter of credit or certificate of deposit. Such Bond shall be furnished to Procurement Services within ten (10) working days or sooner after request. The performance bond will insure performance over the entire term of the contract and where appropriate may be proportionally reduced over the term of the contract, at the discretion of the INSTITUTION.

(No Response Required)

- 33 Vendor Note for Bid Mailed or Hand-Delivered This section applies for hand-carried or mailed bids (No Response Required)
Vendors are encouraged to log-in and register as a supplier at MT \$ource -
([http://sciquest.ionwave.net/MT\\$ource](http://sciquest.ionwave.net/MT$ource)). Non-Electronic
Sealed Bids must be mailed or hand delivered and received by Procurement Services before the bid deadline.
Sealed Bid responses to this proposal must include
Correct Format:
One (1) Original Proposal with Original Signature;
Three (3) Copies of Original Proposal;
One (1) Electronic Copy of Original Proposal;
Original Signatures on Original Bid Proposals, NO copied or digital Signatures on Original Proposals .
Include the Bid Number on the outside of the envelope.
Also, failure to properly respond to the required fields [i.e. INITIALS/Signature, "Yes,I agree", or "Yes, I will comply"] will cause your bid to be considered non-compliant. MTSU Procurement Services along with the 'end-user' will be the 'final authority' for determining compliant bid specifications.
All bids shall include all educational and governmental discounts including Higher Education Discounts.
- 34 Digital Signature By entering your name in the field provided you are _____ (Required)
accepting the terms of this bid. You agree that your typed name will serve as your electronic digital signature. Failure to sign this Proposal will result in the disqualification of your entire ITB Proposal.

Line Items

#	Qty	UOM	Description	Response
1	1	EA	Bid for 'turn-key' Flight Simulation Training Device (FSTD) designed and constructed in such a manner as to accurately reproduce the flight deck of an actual CRJ-200 regional jet aircraft. Flight Simulation Training Device per attached specifications and bid requirements. Provide Complete Pricing breakdown and attach with bid. Vendor shall provide as an option maintenance and software support COSTS for THE proposed system for years 2-5 and attach to your bid proposal (HOWEVER DO NOT INCLUDE PRICING IN FSTD SIMULATOR COSTS). The Institution may use these prices IN THE FUTURE for providing support and will issue a new purchase order at that time.	\$_____

Manufacturer: Manufacturer #:

Item Notes: All attachments must be saved to your desktop computer completed and then attached to your completed bid response.

IMPORTANT: In order to respond to the bid there are required fields that you must agree too. Failure to agree with required fields will cause your bid to be considered as 'non-responsive'.

Ship To: Airport, 1940 Memorial Blvd, Murfreesboro, TN 37129 USA

Supplier Notes: _____

Item Attributes: Please review the following and respond where necessary

#	Name	Note	Response
1	Overall construction and design criteria:	The Flight Training Device (FTD) shall be designed and constructed in such a manner as to precisely replicate the flight deck of an actual CRJ200 regional jet aircraft. All systems and panels must be simulated. The FTD must be designed and manufactured to meet the requirements of FAA level 5.	_____ (Required)
2	Overall construction and design criteria:	The FTD flight deck should not have noticeable deviations from the actual CRJ200 flight deck. Position of controls, panels, displays, seats, interior furnishings, etc. must be accurate with respect to the actual CRJ200.	_____ (Required)
3	Overall construction and design criteria:	Graphical representations of panels or controls will not be excepted.	_____ (Required)
4	Overall construction and design criteria:	The device shall be capable of fitting through a standard door for assembly.	_____ (Required)
5	Instructor Operating Station:	A fully enclosed instructor station that will serve to isolate the instructor and flight deck environment from surroundings with sufficient room for the instructor and one observer is required. This instructor station must be capable of having pre-programmed flight scenarios and flight plans, including wind shear profiles. This system must be capable of integrating lesson plans, ATIS, ATC, and air traffic to provide a realistic environment for simulation. These lesson plans must be capable of being automatically set and failures can be preprogrammed, clearances can be automatically given, and read back can be monitored through voice recognition. In addition, a stand-alone debrief station that allows instructors to review a recording training session separate from the FTD is required.	_____ (Required)

6	Fuselage enclosure:	An accurate CRJ200 fuselage constructed using industry accepted techniques sufficient to encapsulate the flight deck that is of sufficient strength and with attachment points to accept the interior appointments.	_____ (Required)
7	Fuselage enclosure:	Appropriate CRJ200 style flight deck interior appointments are required to enhance the fidelity of the simulation. Accurate representations of interior trim shall be installed so as no bare or exposed portion of the fuselage enclosure is visible.	_____ (Required)
8	Visual system	A front projected multi channel visuals system sufficient to provide both pilots front, left and right views of the simulated environment without noticeable distortions or projected image overlap is required. The projected visuals shall be of high quality and appear to be one continuous image. The projected image shall be of sufficient size as to fill the entire pilots out the window field of view from the normal seated position. An accurate and highly detailed worldwide airport and terrain database is required. In addition, the visual system should have an open architecture which would allow MTSU to later enhance the visual database.	_____ (Required)
9	Pilot Seats:	Adjustable CRJ200 style Pilot and Copilot seats with yoke cutaways, arm rests and head rests.	_____ (Required)
10	Flight Controls:	CRJ200 style thrust lever quadrant that incorporate accurate: a. FADEC detents, functionality and appropriate markings b. Fuel shut off gates and levers c. Friction adjustment control d. Thrust reverser levers with press to release triggers e. Pilot and Co-Pilot TOGA switches	_____ (Required)
11	Flight Controls:	CRJ200 style slat/flap lever that incorporate accurate: a. Position detents at 0,1,8,20,30 and 45 degrees b. Forward flap gate at the 8-degree setting c. Rearward gate at the 20-degree setting d. Flap lever guard with appropriate markings	_____ (Required)
12	Flight Controls:	CRJ200 style flight spoiler control lever that incorporates accurate: a. Detents at 0, ¼, ½, ¾ and max b. Appropriate markings	_____ (Required)
13	Flight Controls:	CRJ200 style captain and copilot yoke assembly that incorporate: a. Travel, self centering and control force appropriate to the CRJ200 b. Control wheels with AP disconnect, elevator trim and stab trim disconnect	_____ (Required)
14	Flight Controls:	CRJ200 style dual linked rudder pedals, independently adjustable fore and aft	_____ (Required)
15	Flight Controls:	CRJ200 style parking brake assembly	_____ (Required)
16	Flight Controls:	CRJ200 Stick shaker and Stick Pusher	_____ (Required)
17	Flight Controls	CRJ200 Manual or automatic deployable Air Driven Generator (ADG)	_____ (Required)

18	Simulation Capabilities:	CRJ200 style Flight Management System that incorporates: a. At least Pilot Control Display Unit b. Updatable North American navigation database available on a 28 day cycle	_____ (Required)
19	Flight Management System software capable of:	a. FMS Initialization and performance initialization	_____ (Required)
20	Flight Management System software capable of:	b. Flight planning with departures, arrivals and approaches and en-route modifications	_____ (Required)
21	Flight Management System software capable of:	c. Flight Planning (company routes)	_____ (Required)
22	Flight Management System software capable of:	d. Missed approach procedures	_____ (Required)
23	Flight Management System software capable of:	e. En-route holding	_____ (Required)
24	Flight Management System software capable of:	f. Radio Tuning	_____ (Required)
25	Flight Management System software capable of:	g. Configuring MFD display data	_____ (Required)
26	Flight Management System software capable of:	h. Vertical navigation (VNAV	_____ (Required)
27	Aircraft simulated in flight and ground operations under normal and abnormal conditions:	The aircraft systems must be simulated in sufficient detail to allow pilots to train on procedures during all phases of flight and ground operations under normal and abnormal conditions. Accurate CRJ200 systems functionality must allow for normal pilot interaction and EICAS display with the following systems: a. Electrical services b. Engine fire detection and monitoring c. Hydraulics d. Landing and external lights e. Fuel f. Bleed air g. Auxiliary Power Unit h. Engine start and ignition i. Cabin pressurization j. Environmental air conditioning k. Anti Ice l. Passenger signs and emergency lights m. Engine speed control n. Anti Skid and landing gear bay overheat protection o. Ground Lift Dumping and spoilers p. Stabilizer and mach trim q. Elevator, rudder and aileron trim r. AIR DATA and AHARS reversionary s. Cargo Fire monitoring and detection	_____ (Required)
28	Auto Flight Control System capable of:	The autopilot simulation shall be sufficient to allow for pilot use under all phases of flight and for procedures typical of an Advanced Jet Training course; this includes normal use for takeoff, climb, cruise, descent, go around, ILS approaches, VOR/LOC approaches, VOR tracking, holding, etc. All normal functions and appropriate failures will be modeled.	_____ (Required)

29	EGPWS, Weather Radar, and TCAS:	The FTD must have a fully functional EGPWS, weather radar, and TCAS that can be program to generate different scenarios. The GPWS will provide aural and visual cues for all modes from 1 to 6, including windshear warnings during encounters with simulated microbursts during takeoff and landing. The radar will be able to have display on the MFDs and provide a means of basic storm identification and avoidance.	_____ (Required)
30	Aerodynamic Modeling:	An aerodynamic model must be provided that allows for training of all phases of flight using procedures and power settings appropriate to a CRJ200. Overall flying characteristics such as takeoff and landing distance, roll rate, climb performance etc. shall adequately match the flying characteristics of the real CRJ200.	_____ (Required)
31	Ice protection:	Ice detectors and annunciators will function as in a CRJ200. The instructor will be able to activate surface ice accumulation which will trigger the detectors. If ice is allowed to accumulate, aircraft performance will be simulated as seen in a CRJ200.	_____ (Required)
32	Networkability:	VPN (Virtual Private Network) providing "networkability" with the MTSU labs. Specifically, we need the capability to have the virtual position, flight progress, and speed of the Flight Training Device (FTD) displayed on the radar screens and ramp tower of the MTSU labs which are located in the Business and Aerospace Building on the main campus of MTSU. The radar and ramp tower screens (and the software to operate them) in the NASA FOCUS lab and the MTSU ATC lab are provided by Computer Sciences Corporation, a Nevada corporation having its corporate headquarters located at 3170 Fairview Park Drive, Falls Church, Virginia 22042 ("CSC"). The successful FTD bidder would have to work with CSC to provide this networkability. The systems must be compatible with the Windows XP platforms that operates the MTSU labs.	_____ (Required)
33	Networkability:	The networkability must be provided with the FTD at a remote location to the NASA FOCUS lab. The FTD will be physically located at the flight simulation lab at the Murfreesboro Municipal Airport (KMBT). Expansion of the project in the future will have the need to connect other FTDs and/or labs around the USA and potentially the world. Consequently the winning bidder must have sold FTDs to other colleges, universities and flight training companies. These other colleges, universities and companies would therefore become potential partners in the project.	_____ (Required)
34	Networkability:	Communications between the FTD and the MTSU labs. Specifically, we need the capability to allow pilots in the FTD to communicate both via text message and voice. This requirement is to provide a workable representation of ACARS and air traffic telecommunications used in flight dispatch and ATC.	_____ (Required)
35	FAA Certification Level:	The device shall be a "FAA Level 5 Certified Flight Training Device (FTD)	_____ (Required)

36	Required Warranty and Service Support	Vendor will provide comprehensive maintenance and software support for one year (12 months) from effective date at no charge to MTSU. The vendor must provide unlimited email and phone support on the software system operation with a response time of one business day. Support must be offered between the hours of 9:00 am and 5:00 pm central time, Monday through Friday, excluding MTSU holidays. Telephone assistance with developing or modifying software scenarios must be included in the software support. The vendor will provide a one-year (12 months) warranty on all hardware components at no additional cost.	_____ (Required)
37	Under the warranty coverage the vendor agrees to:	Fix any defects in the software free of charge, where defects are defined as functionality that does not meet the written system specifications contained in the user manual.	_____ (Required)
38	Description of On-Site Training Deliverables	The vendor must provide a comprehensive on-site training class designed to accommodate four to five MTSU instructors in a classroom. The training curriculum must be primarily a "hands-on" training exercise. The on-site training must cover technical (system configuration, trouble shooting, and maintenance processes) and operational (set-up, run, build, etc) curriculum.	_____ (Required)
39	Description of Documentation Deliverables:	The vendor must deliver accurate system user manuals, training documentation, and quick reference cards that reflect the system delivered to MTSU in electronic form (PDF or DOC files on disk). The vendor provided documents may be reproduced as necessary for classroom and/or training purposes as often as necessary	_____ (Required)