INVITATION TO BID	LSU	BID DUE DATE AND TIME
BOARD OF SUPERVISORS OF LOUISIANA STATE UNIVERSITY AND AGRICULTURAL & MECHANICAL COLLEGE		**10/12/2005 11:00 am CT**

SOLICITATION **B6AET0054**

VENDOR #

VENDOR NAME AND ADDRESS

RETURN BID TO

Louisiana State University
Purchasing Office
213 Thomas Boyd Hall
Baton Rouge, LA 70803

BUYER Ashley E. Terrio, CPPB
BUYER PHONE 225-578-2097

ISSUE DATE 9/21/2005

TITLE: CONTROLLER, MULTI-CHANNEL DIGITAL

To Be Completed By Bidder

1. _____ "No Bid" (sign and return this page only).
2. _____ My Company does not wish to receive future solicitations for this commodity code.
3. Specify your Delivery: To be made within _____ days after receipt of order.
4. Specify your Payment Terms: _____.
   Prompt payment cash discounts for less than 30 days and less than 1% will be accepted, but will not be considered in determining awards. On indefinite quantity term contracts, cash discounts will be accepted and taken, but will not be considered in determining awards.
5. Specify your Bid Reference Number: _____.
   (This number will appear on any resulting order or contract.)

General Instructions to Bidders

1. Sealed bids for furnishing the items and/or services specified are hereby solicited, and will be received by the issuing LSU Campus/Department at the "Return Bid To" address stated above, until the specified due date and time.
2. Bids must be signed by a person authorized to bind the vendor. In accordance with Louisiana R.S. 39:1594, the person signing the bid must be: (1) a current corporate officer, partnership member, or other individual specifically authorized to submit a bid as evidenced in the appropriate records filed with the Louisiana Secretary of State; or (2) an individual authorized to bind the vendor as evidenced by a corporate resolution, certificate or affidavit; or (3) other documents indicating authority which are acceptable to the public entity.
3. Read the entire solicitation, including all terms, conditions and specifications.
4. All bid information and prices must be typed or written in ink. Any corrections, erasures or other forms of alteration to unit prices are to be initialed by the bidder.
5. Bid prices shall include all delivery charges paid by the vendor, F.O.B. LSU Destination, unless otherwise provided in the solicitation. Any invoiced delivery charges not quoted and itemized on the LSU purchase order are subject to rejection and non-payment.
6. Payment is to be made within 30 days after receipt of properly executed invoice, or delivery and acceptance, whichever is later. Delinquent payment penalties are governed by L.R.S. 39:1695.
7. By signing this solicitation, the bidder certifies compliance with all general instructions to bidders, terms, conditions and specifications; and further certifies that this bid is made without collusion or fraud.

BIDDER (Name of Firm)	MAILING ADDRESS
AUTHORIZED SIGNATURE	CITY, STATE ZIP
PRINTED NAME	PHONE #
TITLE	FAX #
E-MAIL	FEDERAL TAX ID #

These standard terms and conditions shall apply to all LSU solicitations, unless otherwise specifically amended and provided for in the special terms and conditions, specifications, or other solicitation documents. In the event of conflict between the General Instructions to Bidders or Standard Terms & Conditions and the Special Terms & Conditions, the Special Terms & Conditions shall govern.

Bids submitted are subject to provisions of the laws of the State of Louisiana, including but not limited to: the Louisiana Procurement Code (R.S. 39:1551-1736); Purchasing Rules and Regulations (Title 34 of the Louisiana Administrative Code); Executive Orders; and the terms, conditions, and specifications stated in this solicitation.

1. **Bid Delivery and Receipt**
   To be considered, sealed bids must be received and time-stamped at the "Return Bid To" address no later than the due date and time specified herein. Sealed bids cannot be accepted by telegraph, fax, or e-mail. Price alterations and addenda to bids may be submitted by telegraph or fax, and will be considered provided bidder's sealed bid, price alterations and addenda have been received in the purchasing office prior to bid opening time. Late bids cannot be accepted per L.A.C. 34.I.517, and shall be returned unopened.
2. **Bid Forms**
   Bids are to be submitted on and in accordance with the LSU solicitation forms provided, and must be signed by an authorized agent of the vendor. Bids submitted on other forms or in other price formats may be considered informal and may be rejected in part or in its entirety. Bids submitted in pencil and/or bids containing no original signature indicating the bidder's intent to be bound will not be accepted.
3. **Interpretation of Solicitation/Bidder Inquiries**
   If bidder is in doubt as to the meaning of any part or requirement of this solicitation, bidder may submit a written request for interpretation to the Buyer-of-Record at the address and/or fax number shown above. Written inquiries must be received in the LSU Purchasing Office no later than five (5) calendar days prior to the opening of bids, and shall be clearly cross-referenced to the relevant solicitation/specification in question.
   No decisions or actions shall be executed by any bidder as a result of oral discussions with any LSU employee or consultant. Any interpretation of the documents will be made by formal addendum only, issued by the LSU Purchasing Office, and mailed or delivered to all bidders known to have received the solicitation. LSU shall not be responsible for any other interpretations or assumptions made by bidder.
4. **Bid Opening**
   Bidders may attend the public bid opening of sealed bids and proposals. No information or opinions concerning the ultimate contract award will be given at bid opening or during the evaluation process. Written bid tabulations will not be furnished. Bids may be examined within 72 hours after bid opening. Information pertaining to completed files may be secured by visiting the LSU Purchasing Office during normal working hours.
5. **Special Accommodations**
   Any "qualified individual with a disability" as defined by the Americans with Disabilities Act, who has submitted a bid and desires to attend the public bid opening, must notify the LSU Purchasing Office in writing not later than seven days prior to the bid opening date of their need for special accommodations. If the request cannot be reasonably provided, the individual will be informed prior to the bid opening.
6. **Standards of Quality**
   Any product or service bid shall conform to all applicable federal, state and local laws and regulations, and the specifications contained in the solicitation. Any manufacturer's name, trade name, brand name, or catalog number used in the specification is for the purpose of describing the standard of quality, performance, and characteristics desired; and is not intended to limit or restrict competition. Bidder must specify the brand and model number of the product offered in his bid. Bids not specifying brand and model number shall be considered as offering the exact product specified in the solicitation.
7. **New Products/Warranty/Patents**
   All products bid for purchase must be new, never previously used, of the manufacturer's current model and/or packaging, and of best quality as measured by acceptable trade standards. No remanufactured, demonstrator, used or irregular products will be considered for purchase unless otherwise specified.
   The manufacturer's standard published warranty and provisions shall apply, unless more stringent warranties are otherwise required by LSU and specified in the solicitation. In such cases, the bidder and/or manufacturer shall honor the specified warranty requirements, and bid prices shall include any premium costs of such coverage.
   Bidder guarantees that the products proposed and furnished will not infringe upon any valid patent or trademark; and shall, at its own expense, defend any and all actions or suits charging such infringement, and shall save LSU harmless.
8. **Descriptive Information**
   Bidders proposing an equivalent brand or model are to submit with the bid descriptive information (such as literature, technical data, illustrations, etc) sufficient for LSU to evaluate quality, suitability, and compliance with the specifications. Failure to

submit descriptive information may cause bid to be rejected. Any changes made by bidder to a manufacturer's published specifications shall be verifiable by the manufacturer. If items bid do not fully comply with specifications, bidder must state in what respect items deviate. Bidder's failure to note exceptions in its bid will not relieve the bidder from supplying the actual products requested.

9. Bids/Prices/F.O.B. Point

- The bid price for each item is to be quoted on a "net" basis and F.O.B. LSU Destination, i.e. title passing upon receipt and inclusive of all delivery charges, any item discounts, etc.
- Bids other than F.O.B. LSU Destination may be rejected.
- Bids indicating estimated freight charges may be rejected.
- Bids requiring deposits, payment in advance, or C.O.D. terms may be rejected.
- Bidders who do not quote "net" item prices and who separately quote an overall "lump sum" freight cost or discount for all items shall be considered as submitting an "all-or-none" bid for evaluation and award purposes; and risk rejection if award is made on an item basis.
- Prices shall be firm for acceptance for a minimum of 30 days, unless otherwise specified. Bids conditioned with shorter acceptance periods may be rejected.
- Prices are to be quoted in the unit/packaging specified (e.g. each, 12/box, etc), or may be rejected.
- In the event of extension errors, the unit price bid shall prevail.

10. Taxes

Vendor is responsible for including all applicable taxes in the bid price. LSU is exempt from all Louisiana state and local sales and use taxes. By accepting an award, resident and non-resident firms acknowledge their responsibility for the payment of all taxes duly accessed by the State of Louisiana and its political subdivisions for which they are liable, including but not limited to: franchise taxes, privilege taxes, sales taxes, use taxes, ad valorem taxes, etc.

11. Terms and Conditions

This solicitation contains all terms and conditions with respect to the purchase of the goods and/or services specified herein. Submittal of any contrary terms and conditions may cause your bid to be rejected. By signing and submitting a bid, vendor agrees that contrary terms and conditions which may be included in its bid are nullified; and agrees that this contract shall be construed in accordance with this solicitation and governed by the laws of the State of Louisiana.

12. Vendor Forms/LSU Signature Authority

The terms and conditions of the LSU solicitation and purchase order/contract shall solely govern the purchase agreement, and shall not be amended by any vendor contract, form, etc.

The University's chief procurement officer, or authorized designee, is delegated sole authority to execute/sign any vendor contracts, forms, etc, on behalf of LSU. Departments are expressly prohibited from signing any vendor forms.

Any such vendor contracts/forms bearing unauthorized signatures shall be null and void, shall have no legal force, and shall not be recognized by LSU in any dispute arising therefrom. Vendors who present any such forms to department users for signature without regard to this strict LSU policy may face contract cancellation, suspension, and/or debarment.

13. Awards

Award will be made to the lowest responsible and responsive bidder. LSU reserves the right: (1) to award items separately, grouped, or on an all-or-none basis, as deemed in its best interest; (2) to reject any or all bids and/or items; and (3) to waive any informalities.

All solicitation specifications, terms and conditions shall be made part of any subsequent award as if fully reproduced and included therein, unless specifically amended in the formal contract.

14. Acceptance of Bid

Only the issuance of an official LSU purchase order/contract, a Notification of Award letter, or a Notification of Intent to Award letter shall constitute the University's acceptance of a bid. LSU shall not be responsible in any way to a vendor for goods delivered or services rendered without an official purchase order/contract.

15. Applicable Law

All contracts shall be construed in accordance with and governed by the laws of the State of Louisiana.

16. Awarded Products/Unauthorized Substitutions

Only those awarded brands and numbers stated in the LSU contract are approved for delivery, acceptance, and payment purposes. Any substitutions require prior approval of the LSU Purchasing Office. Unauthorized product substitutions are subject to rejection at time of delivery, post-return at vendor's expense, and non-payment.

17. Testing/Rejected Goods

Vendor warrants that the products furnished will be in full conformity with the specification, drawing or sample, and agrees that this warranty shall survive delivery, acceptance, and use. Any defect in any product may cause its rejection. LSU reserves the right to test products for conformance to specifications both prior to and after any award. Vendor shall bear the cost of testing

if product is found to be non-compliant. All rejected goods will be held at vendor's risk and expense, and subject to vendor's prompt disposition. Unless otherwise arranged, rejected goods will be returned to the vendor freight collect.

18. Delivery

Vendor is responsible for making timely delivery in accordance with its quoted delivery terms. Vendor shall promptly notify the LSU Department and/or Purchasing Office of any unforeseen delays beyond its control. In such cases, LSU reserves the right to cancel the order and to make alternative arrangements to meet its needs.

19. Default of Vendor

Failure to deliver within the time specified in the bid/award will constitute a default and may be cause for contract cancellation. Where the University has determined the vendor to be in default, LSU reserves the right to purchase any or all goods or services covered by the contract on the open market and to surcharge the vendor with costs in excess of the contract price. Until such assessed surcharges have been paid, no subsequent bids from the defaulting vendor will be considered for award.

20. Vendor Invoices

Invoices shall reference the LSU purchase/release order number, vendor's packing list/delivery ticket number, shipping/delivery date, etc. Invoices are to be itemized and billed in accordance with the order, show the amount of any prompt payment discount, and submitted on the vendor's own invoice form. Invoices submitted by the vendor's supplier are not acceptable.

21. Delinquent Payment Penalties

Delinquent payment penalties are mandated and governed by Louisiana R.S. 39:1695. Vendor penalties to the contrary shall be null and void, shall have no legal force, and shall not be recognized by LSU in any dispute arising therefrom.

22. Assignment of Contract/Contract Proceeds

Vendor shall not assign, sublet or transfer its contractual responsibilities, or payment proceeds thereof, to another party without the prior written consent and approval of the LSU Purchasing Office. Unauthorized assignments of contract or assignments of contract proceeds shall be null and void, shall have no legal force, and shall not be recognized by LSU in any dispute arising therefrom.

23. Contract Cancellation

LSU has the right to cancel any contract for cause, in accordance with purchasing rules and regulations, including but not limited to: (1) failure to deliver within the time specified in the contract; (2) failure of the product or service to meet specifications, conform to sample quality or to be delivered in good condition; (3) misrepresentation by the vendor; (4) fraud, collusion, conspiracy or other unlawful means of obtaining any contract with the University; (5) conflict of contract provisions with constitutional or statutory provisions of state or federal law; (6) any other breach of contract.

LSU has the right to cancel any contract for convenience at any time by giving thirty (30) days written notice to the vendor. In such cases, the vendor shall be entitled to payment for compliant deliverables in progress.

24. Prohibited Contractual Arrangements

Per Louisiana R.S. 42:1113.A, no public servant, or member of such a public servant's immediate family, or legal entity in which he has a controlling interest shall bid on or enter into any contract, subcontract, or other transaction that is under the supervision or jurisdiction of the agency of such public servant. See statute for complete law, exclusions, and provisions.

25. Equal Employment Opportunity Compliance

By submitting and signing this bid, vendor agrees to abide by the requirements of the following as applicable: Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972; federal Executive Order 11246; federal Rehabilitation Act of 1973, as amended; the Vietnam Era Veteran's Readjustment Assistance Act of 1974; Title IX of the Education Amendments of 1972; the Age Act of 1975; the Americans with Disabilities Act of 1990. Vendor agrees not to discriminate in its employment practices, and will render services under any contract entered into as a result of this solicitation without regard to race, color, religion, sex, age, national origin, veteran status, political affiliation, handicap, disability, or other non-merit factor. Any act of discrimination committed by vendor, or failure to comply with these statutory obligations when applicable, shall be grounds for termination of any contract entered into as a result of this solicitation.

26. Mutual Indemnification

Each party hereto agrees to indemnify, defend, and hold the other, its officers, directors, agents and employees harmless from and against any and all losses, liabilities, and claims, including reasonable attorney's fees arising out of or resulting from the willful act, fault, omission, or negligence of the indemnifying party or of its employees, contractors, or agents in performing its obligations under this agreement, provided however, that neither party hereto shall be liable to the other for any consequential damages arising out of its willful act, fault, omission, or negligence.

27. Certification of No Suspension or Debarment

By signing and submitting this bid, bidder certifies that its company, any subcontractors, or principals thereof, are not suspended or debarred under federal or state laws or regulations. A list of parties who have been suspended or debarred by federal agencies is maintained by the General Services Administration and can be viewed on the internet at www.epls.gov.

BOARD OF SUPERVISORS
LOUISIANA STATE UNIVERSITY AND
AGRICULTURAL & MECHANICAL COLLEGE
Purchasing Office, 213 Thomas Boyd Hall
Baton Rouge, LA 70803-3001

INSURANCE REQUIREMENTS

WORKMEN'S COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE: The Contractor shall, before commencing any work to be conducted under this contract, procure Workmen's Compensation and Employer's Liability insurance with a limit of liability as required by the Labor Code of the State of Louisiana with an insurance company authorized to write such policies of insurance in the State of Louisiana. It shall be the further responsibility of the Contractor to require that all subcontractors have in full force and effect, a policy of Workmen's Compensation and Employer's Liability insurance before proceeding with any of the work required under this contract. The Employer's Liability limit shall be $1,000,000 when work is over water and involves maritime exposure.

COMMERCIAL GENERAL LIABILITY INSURANCE: Commercial General Liability Insurance with a combined single limit of $1,000,000 per occurrence for bodily injury and property damage. This insurance shall include the following coverage:

1. Premises - Operations;
2. Broad Form Contractual Liability;
3. Products and Completed Operations;
4. Use of Contractors and Subcontractors;
5. Personal Injury;
6. Broad Form Property Damage;
7. Explosion, Collapse and Underground (XCU) Coverage.

BUSINESS AUTOMOBILE LIABILITY INSURANCE: Business Automobile Liability Insurance with a combined single limit of $1,000,000 per occurrence for bodily injury and property damage, unless otherwise indicated. This insurance shall include for bodily injury and property damage the following coverages:

1. Owned automobiles;
2. Hired automobiles;
3. Non-owned automobiles.

If the vendor/contractor does not own an automobile and an automobile is utilized in the execution of the contract, then only hired and non-owned coverage is acceptable. If an automobile is not utilized for the execution of the contract, then automobile coverage is not required.

Board of Supervisors of Louisiana State University and Agricultural & Mechanical College shall be named as additional insured on all liability policies. A Thirty (30) day prior notice of cancellation must be given to the University for all required coverages. Insurance must be from a company with an A.M. Best's rating of no less than A-:VI who is authorized to do business in the State of Louisiana. The A.M. Best's rating requirement may be waived for Worker's Compensation only.

The successful contractor is to provide the owner with a certificate of insurance prior to commencement of work.

Rev. 02/12/03

ITEM	QTY	UNIT	DESCRIPTION	UNIT PRICE	EXTENSION
0001	1	EA	CONTROLLER, MULTI-CHANNEL DIGITAL, MTS FLEXTEST GT 493.10 WITH 244.22 ACTUATOR, OR EQUAL. ****** ADDITIONAL SPECIFICATIONS ATTACHED ****** QUOTING#_____MFD.BY_____	_____	_____

NOTE: A PREFERENCE, IF APPLICABLE, MAY BE ALLOWED FOR PRODUCTS PRODUCED, MANUFACTURED, ASSEMBLED, GROWN OR HARVESTED IN LOUISIANA. DO YOU CLAIM THIS PREFERENCE? YES _____ NO _____
NOTE: PREFERENCES SHALL NOT APPLY TO SERVICE CONTRACTS.
IS YOUR LOUISIANA BUSINESS WORKFORCE COMPOSED OF A MINIMUM OF FIFTY PERCENT LOUISIANA RESIDENTS? YES _____ NO _____
SPECIFY ITEM NUMBER AND LOCATION WITHIN LOUISIANA WHERE THE PRODUCT IS/WAS PRODUCED, MANUFACTURED, ASSEMBLED, GROWN OR HARVESTED: _____
NOTE: THIS PREFERENCE IS NOT APPLICABLE FOR SERVICES.

NOTE: LSU IS A MEMBER OF THE NATIONAL ASSOCIATION OF EDUCATIONAL BUYERS AND THE E & I COOPERATIVE PURCHASING SERVICE.

NOTE: IF AN AUTOMOBILE IS UTILIZED IN THE EXECUTION OF THE CONTRACT, INCLUDING DELIVERIES MADE WITH COMPANY OWNED, HIRED, AND/OR NON-OWNED VEHICLES, SUCCESSFULL BIDDER SHALL BE REQUIRED TO FURNISH A CERTIFICATE OF INSURANCE EVIDENCING COVERAGES PER ATTACHED INSURANCE REQUIREMENTS. THE BOARD OF SUPERVISORS OF LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COLLEGE SHALL BE NAMED AS AN ADDITIONAL INSURED ON ALL LIABILITY POLICIES.

Specifications for Multi-Channel Digital Controller

Digital servo test controller

1. General

1.1. Controller configuration with, 1 channel/1 station control, 1 valve driver, 2 digital universal conditioners with single range conditioning, and 6 analog input cards totaling 36 channels of analog input, 3 I/O carriers, expandable to 60 channels for future need.

1.2. Analog inputs shall receive +/-10V signal.

1.3. Max. update rate 6 KHz (estimated at 1 kHz with 36 channels analog input)

1.4. Signal conditioning 19 bit, 100 kHz data sample rate, 32 bit, double precision computation signal processing.

1.5. Program generation 32 bit, 0.001Hz to 600 Hz frequency range, sine, square, triangle, ramp, haversine-shaped load (Figure 1), pulse-shaped load (Figure 2), and any user-defined load waveform, >1000 years of ramp time.

1.6. PC will be provided by the University.

1.7. Controller shall include basic system software to allow set up, and run monotonic and cyclic test including sine, triangle, square, ramp, haversine-shaped load, and pulse-shaped load command signals. Shall include station manager. Shall provide the ability to capture and store data in standard formats.

1.8. Controller shall have operating temperature range of 5-40 degrees Celsius.

1.9. Controller shall be equipped with Portable Remote Station Control, including floor stand, hydraulic controls, move actuator, start/stop test, displays to include interlock; also function keys and station/e-stop button.

1.10. Controller shall have separate OFF/LOW/HIGH contacts for HSM (hydraulic service manifold) and for HPU (hydraulic power unit), to enable multiple controllers to share one HPU.

1.11. System cables shall include pc communications cable, HPU, HSM for 24V hi/low, E-stop,

1.12. Y-cable shall provide capability of controlling existing hydraulic power unit from multi-channel digital con controller and existing controller.

1.13. First-on/last-off for pump control.

1.14. Pump interface box with 24V control.

1.15. Environment 5C to 40C at 10% to 85% non-condensing relative humidity.

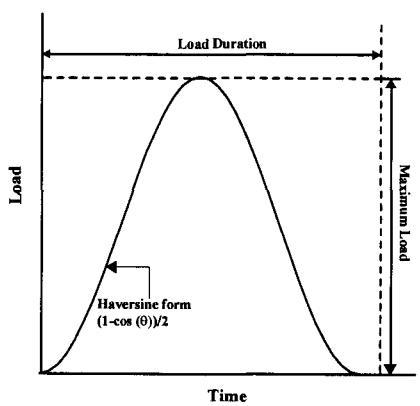

Figure 1

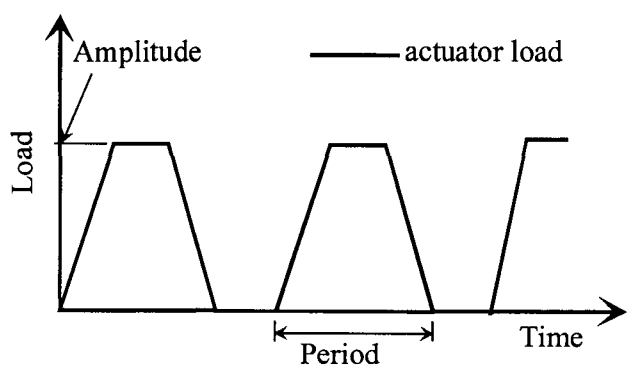

Figure 2

2. **Advanced Block/Cyclic Software**

   2.1. Shall be used in conjunction with proposed controller and installed on University supplied pc
   2.2. Windows based drag & drop menus.
   2.3. Shall allow for customization of test methods including tensile, compression, bend, cycle fatigue, block loading, low cycle fatigue, ramps & holds, multi-rate, profile loading.
   2.4. Selectable process to define test including command processes, data acquisition processes, event processes, external control processes.
   2.5. Multiple data acquisition methods including peak/valley, max/min, timed data, cyclic data, high speed timed data.
   2.6. Export data to spread sheet.

3. **Compensation Techniques**

   3.1. Controller, with or without computer supervision, shall provide Null Pacing compensation, which can ensure desired end-levels are reached on the first cycle without over-programming.
   3.2. Controller, with or without computer supervision, shall provide Peak Valley Control compensation, to ensure peaks and valleys are achieved for cyclic waveforms of any shape, in linear systems.
   3.3. Controller, when used with a computer, shall provide option for Adaptive Inverse Control compensation. AIC can work with, block-cycle, or random profiles, in linear systems, and which senses the frequency content of the drive, automatically generates an inverse filter, and adaptively filters the command to achieve the desired responses.
   3.4. Controller shall provide option for Arbitrary Level Control compensation that can work with block-cycle files or random profiles, to improve the tracking accuracy of spectrum profiles, and that works effectively with both linear and non-linear specimens.
   3.5. Controller shall provide option for Peak Valley Phase Control compensation that combines Peak Valley Control (to ensure peaks and valleys are achieved, including mean level) and Amplitude Phase Control (to correct for phasing) for cyclic waveforms.

4 **Maintenance, Enhancement, and Support**

   Maintenance, Enhancement, and Support shall include all software Updates (maintenance) and software Upgrades (enhancement) that become available after initial purchase. During the life of the contract, supplier can be contacted for live technical support. Enhancements shall include upgrades for previously purchased software options (e.g. improved editing and plotting for the Profile Editor option). Shall include new features included in the base system. Coverage shall include all applications and options delivered on the System Software Media.

5 **22kip Fatigue Hydraulic Fatigue Actuator**

   Double acting (hydraulic pressure on both sides of the equal area piston). Full stroke coaxially mounted Linear Variable Displacement Transducers (LVDT) displacement transducer. High quality, non-metallic bearings shall be included. Double amplitude displacement: 6 inches, (single amplitude: +/- 3 inches).

   5.1 Fatigue shall be certified to 10 million cycles at 150% of rated capacity (or 33kip).
   5.2 Actuator to load cell attachment kit; shall include high strength stud and spiral washers.

5.3 10 gpm (37 lpm), 4 port servovalve: Rated flow capacity: 10 gpm (37 lpm), Four port valve, Two stage, four way operation. Shall provide filter before servovalve.

5.4 Servovalve Manifold-Dual Split servovalve manifold assembly. Porting for one or two servovalves. 1 inch (-16 JIC) pressure and return fittings.

5.5 Servovalve Port Blocking Plate. Covers one servovalve port on dual manifold. Rated at 3000psi.

5.6 Cables for ground, LVDT, load cell, single servovalve.

5.7 22,000lb (100kN) axial capacity rated load transducer. Static capacity 150% of axial force rating, temperature effect on zero 0.001% of reading/F (0.002% of reading/C), useable temperature range -65F (-54C) to +200F (+93C), non-linearity 0.08% of full scale, hysteresis 0.05% of full scale, repeatability 0.03% of full scale, deflection at rated force capacity 0.002in (0.05mm), single bridge.

6 Hydraulic Service Manifold

6.1 Single station manifold

6.2 24V control, max flow 50gpm, with 1gal & 1qt accumulator

6.3 On/Off/Low pressure control.

6.4 3000psi operation

6.5 -16 pressure & return, -6 drain Pilot Pressure & Return hose fittings.

6.6 10 Micron Filtration.

6.7 Pilot Pressure.

6.8 Hydraulic hoses with JIC fittings, pressure -8, return -8, drain -6.

7 Service & Warranty

7.1 Transducers calibrated at factory, full range transducer calibration, and verified on-site during installation.

7.2 Installation and commissioning shall be performed by certified Field Service Engineer.

7.3 Installation shall include system start up and operator(s) training.

7.4 Supplier shall warrant equipment of its manufacture to be free of defects in materials and workmanship for a period of 12 months after shipment from its plant or 12 months from acceptance in the case of supplier installation. Supplier shall, at its option, repair or replace free of charge within the warranty period any components or assemblies supplied which prove to be defective in workmanship or materials.

7.5 Supplier Integrated Software: supplier shall provide telephone consultation and correct errors brought to its attention for the period of the warranty.