

NASA CONTRACT

1. DPAS 2. PPC 3. Init. Ofc. 4. Page 1 of 27

5. Contract No. **NAS1 - 00113** 6. Effective Date **MAY 1 2000** 7. Procurement Request No. **E.2063** 8. Vendor Code

9. Issued By Code 10. Contractor Name and Address
 Building 1195B, Room 125
 National Aeronautics and Space Administration
 Langley Research Center
 9A Langley Boulevard
 Hampton, VA 23681-2199
Knowledge Sharing Systems, Inc.
1300 Sunset Lane, Suite 3230
Culpeper, VA 22701
 Name and Telephone No. of Contractor's Administrator:
Kevin Barquinero 540-825-1409

11. Administered By Code 12. Payment Will Be Made By Code
 National Aeronautics and Space Administration
 Langley Research Center
 Hampton, VA 23681-2199
 LaRC Administrator: **126/Bessie R. Nicholson**
(757) 864 - 2450
 Financial Management Division, M/S 175
 NASA Langley Research Center
 Hampton, VA 23681-2199

13. Submit Invoices To Code 14. Accounting and Appropriations Data
The address shown in Block 12 and in accordance with
Paragraph [Insert Number] of this contract.
E.2063; \$300,000 (Complete)
JO: R23244

15A. Contract Type **Cost-Reimbursement Services** 15B. Incremental Funding []

TABLE OF CONTENTS

SECTION DESCRIPTION	PAGE	SECTION DESCRIPTION	PAGE
Contract Cover Page	1	Statement of Work/Specifications	15
Full Text Clauses	2		
Clauses Incorporated by Reference	10		
Reporting	12		

AUTHORITY FOR OTHER THAN FULL AND OPEN COMPETITION:
 10.USC 2304(c) () 41.USC 253(c) () **Acknowledgment of Amendments #s**

17. Items Awarded Under This Contract:
**NASA TECHNOLOGY TRACKING SYSTEM (NASA TECHTRACS) OPERATION,
 MAINTENANCE AND MODIFICATION**

EXECUTED BY ALL PARTIES

18A. Discount Terms **None** 18B. Total Amount of Contract **\$1,735,991.85**
 19. Name and Title (Type or Print) **KEVIN BARQUINERO, PRESIDENT** 20. Name of Contracting Officer **DAVID H. JONES**
 21. Signature (of person authorized to sign) *Kevin Barquinero* **April 18, 2000** 22. Signature *David H. Jones* **4-26-00**
 Contractor Date United States of America Date

LaRC P-320 (June 1994)

FILE COPY

FULL-TEXT CLAUSES

1. SUPPLIES AND/OR SERVICES TO BE FURNISHED (LaRC 52.211-90) (MAY 1999)

The Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to perform the requirements delineated in the Description/ Specifications/Work Statement in Paragraph 23.

2. ESTIMATED COST AND MAXIMUM INCENTIVE FEE

The total estimated cost of this contract is \$ 1,607,399.86, exclusive of the maximum incentive fee of \$ 128,591.99. The total estimated cost and maximum incentive fee is \$ 1,735,991.85.

3. CONTRACT FUNDING (NFS 1852.232-81) (JUN 1990)

(a) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is \$ 277,778. This allotment is for and covers the following estimated period of performance: May 1, 2000 through August 31, 2000.

(b) An additional amount of \$ 22,222 is obligated under this contract for payment of fee.

4. PERIOD OF PERFORMANCE (LaRC 52.211-91) (AUG 1997)

The period of performance of this contract shall be 24 months from the effective date of this contract. 5/1/2000 - 5/1/2002

5. PLACE OF DELIVERY (LaRC 52.211-92) (OCT 1992)

Delivery shall be f.o.b. destination:

NASA Langley Research Center
4 South Marvin Street (Building 1206)
Hampton, VA 23681-2199

6. PLACE OF PERFORMANCE (LaRC 52.211-98) (OCT 1992)

The places of performance shall be the Contractor's facility and other sites as designated by the Contracting Officer.

7. FINAL INSPECTION AND ACCEPTANCE (LaRC 52.246-94) (OCT 1992)

Final inspection and acceptance of all items specified for delivery under this contract shall be accomplished by the Contracting Officer or his duly authorized representative at destination.

8. NOTICE OF DELAY

If, because of technical difficulties, the Contractor becomes unable to complete the contract work at the time specified, notwithstanding the exercise of good faith and diligent efforts in performing of the work called for under this contract, the Contractor shall give the Contracting Officer written notice of the anticipated delay and the reasons for it. The notice and reasons shall be delivered promptly after the condition creating the anticipated delay becomes known to the Contractor but in no event less than 45 days before the completion date specified in this contract, unless otherwise directed by the Contracting Officer. When notice is given, the Contracting Officer may extend the time specified in the Schedule for such period as is deemed advisable.

9. SUBMISSION OF VOUCHERS FOR PAYMENT (NFS 1852.216-87) (MAR 1998)

(a) The designated billing office for cost vouchers for purposes of the Prompt Payment clause of this contract is identified below. Public vouchers for payment of costs shall include a reference to the number of this contract.

(b)(1) If the Contractor is authorized to submit interim cost vouchers directly to the NASA paying office, the original voucher should be submitted to:

Attn: Financial Management Division, MS 175
NASA Langley Research Center
Hampton, VA 23681-2199

(2) For any period that the Defense Contract Audit Agency has authorized the Contractor to submit interim cost vouchers directly to the Government paying office, interim vouchers are not required to be sent to the Auditor, and are considered to be provisionally approved for payment, subject to final audit.

(3) Copies of vouchers should be submitted as directed by the Contracting Officer.

(c) If the Contractor is not authorized to submit interim cost vouchers directly to the paying office as described in paragraph (b), the Contractor shall prepare and submit vouchers as follows:

(1) One original Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment to:

Attn: Financial Management Division, MS 175
NASA Langley Research Center
Hampton, VA 23681-2199

(2) Five copies of SF 1034, SF 1035A, or equivalent Contractor's attachment to the following offices by insertion in the memorandum block of their names and addresses:

- (i) Copy 1 NASA Contracting Officer;
- (ii) Copy 2 Auditor;
- (iii) Copy 3 Contractor;
- (iv) Copy 4 Contract administration office; and
- (v) Copy 5 Project management office.

(3) The Contracting Officer may designate other recipients as required.

(d) Public vouchers of payment of fee shall be: prepared similarly to the procedures in Paragraphs (b) or (c) of this clause, which ever is applicable, and forwarded to:

Attn: Financial Management Division, MS 175
NASA Langley Research Center
Hampton, VA 23681-2199

This is the designated billing office for fee vouchers for purposes of the Prompt Payment clause of this contract. Interim fee vouchers in the amount of 50% of the maximum monthly fee may be submitted on a monthly basis. Final incentive fee vouchers are to be submitted at the conclusion of each 6-month evaluation period.

(e) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.

10. INCENTIVE FEE

This contract is a cost reimbursement incentive fee arrangement. The Contractor's ability to meet the Quality Metrics defined in the Incentive Fee Matrix will be the basis for computing the incentive fee. Delays that are caused by NASA or are beyond the Contractors control (e.g., power outages, world wide web outages, etc.) will be considered in the calculation of incentive fee.

A. Maximum Incentive Fee: The maximum amount of incentive fee that will be available for the base contract. (The amount will be divided into four equal parts for the four six months incentive fee evaluation paid.

B. Incentive Fee Evaluation: At the end of every six (6) month period, the Contractor's performance will be evaluated against the requirements in the Incentive Fee Matrix:

NASA TechTracs Incentive Fee Matrix

Section Weights	Tasks/% of Maximum Incentive Fee	100%	75%	50%	0%
35%	**1.0 1.1 Maintain Systems	100% up	99%	98%	Less than 98%
	1.2 Backups	All as scheduled	97% of logging & all others as scheduled	95% of logging or back-up test is done by July or code back-ups are 2 weeks late	Less than 95% logging or back-up test is done after July or late code back-up is past two weeks late.
	1.3 Maintain Help/Support Desk	99% available	97%	95%	Less than 95%
	1.4 Maintain NTTS Internet Web Site	100% up	97%	95%	Less than 95%
	1.5 Maintain NTTS Intranet (Support) Web Site	100% up	97%	95%	Less than 95%
	1.6 Maintain Wide Area Network (WAN) Connectivity	WAN flushed daily	WAN flushed weekly	WAN flushed bi-weekly	WAN flushed less often than biweekly
	1.7 Perform Financial Accounting System (FACS) Updates	All as scheduled	Week delay	2 weeks delay	more than 2 weeks delay
	1.8 Perform Congressional Information Updates	All as scheduled	Week delay	2 weeks delay	more than 2 weeks delay
	1.9 Archive of NTTS Data	All as scheduled	Week delay	2 weeks delay	more than 2 weeks delay
	1.10 End of Year Processing	All as scheduled	Week delay	2 weeks delay	more than 2 weeks delay
	2.0 Develop / Implement Modifications and New Features/				
20%	**2.0 2. Detail Requirements Analysis	One week ahead of schedule	All as scheduled	1 week delay	more than 1 week delay
	6. NASA Testing	100% up	97%	95%	Less than 95%
20%	7. Documentation	All as scheduled	Week delay	2 weeks delay	more than 2 weeks delay
	3.0 3.0 Deploy Software Releases - 3 times a year	All as scheduled	Week delay	2 weeks delay	more than 2 weeks delay
5%	4.0 4.0 Reporting Quarterly	All as scheduled	Week delay	2 weeks delay	more than 2 weeks delay
20%	5.0 5.0 Cost	Actual Cost < 0.98 X Est. Cost	0.98 X Est. Cost < Actual Cost < 1.02 X Est. Cost	1.02 x Est. Cost < Actual Cost < 1.05 x Est. Cost.	Actual Cost > 1.05 x Est. Cost

* Weight = percentage of Maximum Available Fee

** For Section 1 and 2, all criteria for a particular fee level (50%, 75% or 100%) must be met to earn that level of fee.

11. INCENTIVE FEE INVOICES

All fee vouchers shall be submitted in accordance with Paragraph 9, SUBMISSION OF VOUCHERS FOR PAYMENT. The CO will review and approve each fee voucher using input from the CO's Technical Representative (COTR) and data from the monthly Financial Management Report (533) to ensure that all calculations are accurate and in accordance with Paragraph 10, Incentive Fee. If errors or inaccuracies are revealed from the COTR's review, the Contractor will be contacted for verification purposes. The CO will ultimately determine the final incentive fee.

12. LIMITATION OF FUTURE CONTRACTING (NASA 1852.209-71) (DEC 1988)

(a) The Contracting Officer has determined that this acquisition may give rise to a potential organizational conflict of interest. Accordingly, the attention of all prospective offerors is invited to FAR Subpart 9.5--Organizational Conflicts of Interest.

(b) The nature of this conflict is that the Contractor may, in the course of contract performance, require access to proprietary, business confidential and/or financial data of other companies.

(c) The restrictions upon future contracting are as follows:

(1) If the Contractor, under the terms of this contract, or through the performance of tasks pursuant to this contract, is required to develop specifications or statements of work that are to be incorporated into a solicitation, the Contractor shall be ineligible to perform the work described in that solicitation as a prime or first-tier subcontractor under an ensuing NASA contract. This restriction shall remain in effect for a reasonable time, as agreed to by the Contracting Officer and the Contractor, sufficient to avoid unfair competitive advantage or potential bias (this time shall in no case be less than the duration of the initial production contract). NASA shall not unilaterally require the Contractor to prepare such specifications or statements of work under this contract.

(2) To the extent that the work under this contract requires access to proprietary, business confidential, or financial data of other companies, and as long as such data remains proprietary or confidential, the Contractor shall protect these data from unauthorized use and disclosure and agrees not to use them to compete with those other companies.

13. CONTRACT CLOSEOUT (LaRC 52.242-90) (MAY 1999)

(a) Reassignment—After receipt, inspection, and acceptance by the Government of all required articles and/or services, and resolution of any pending issues raised during the Period of Performance, this contract will be reassigned to the NASA Langley Research Center Contracting Officer for Contract Closeout, James W. Cresawn. All transactions subsequent to the physical completion of the contract should, therefore, be addressed to the said Contracting Officer at NASA Langley Research Center, Mail Stop 127, who may be reached by telephone at (757) 864-2500.

(b) "Quick Closeout"—Paragraph (f) of the Allowable Cost and Payment clause of this contract addresses the "Quick Closeout Procedure" delineated by Subpart 42.7 of the Federal Acquisition Regulation (FAR). It should be understood that the said procedure applies to the settlement of indirect costs for a specific contract in advance of the determination of final indirect cost rates when the amount of unsettled indirect cost to be allocated to the contract is relatively insignificant. Therefore, the "Quick Closeout" procedure does not preclude the provisions of paragraph (d) of the Allowable Cost and Payment clause nor does it constitute a waiver of final audit of the Contractor's Completion Voucher.

(c) Completion Voucher Submittal—Notwithstanding the provisions of the Allowable Cost and Payment clause, as soon as practicable after settlement of the Contractor's indirect cost rates applicable to performance of the contract, the Contractor shall submit a Completion Voucher as required by the aforesaid clause. The Completion Voucher shall be supported by a cumulative claim and reconciliation statement and executed NASA Forms 778, Contractor's Release, and 780, Contractor's Assignment of Refunds, Rebates, Credits, and Other Amounts. Unless directed otherwise by the Contracting Officer for Contract Closeout, the Contractor shall forward the said Completion Voucher directly to the cognizant Government Agency to which audit functions under the contract have been delegated.

14. RIGHTS TO PROPOSAL DATA (TECHNICAL) (FAR 52.227-23) (JUN 1987)

Except for data contained on pages N/A, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data - General" clause contained in this contract) in and to the technical data contained in the proposal dated 3-1-00, upon which this contract is based.

15. INCORPORATION OF THE REPRESENTATIONS AND CERTIFICATIONS BY REFERENCE (LaRC 52.215-107)(MAR 1989)

Pursuant to FAR 15.406-1(b), the Representations and Certifications dated 3-1-00 are hereby incorporated herein by reference.

16. SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES

(a) The Contractor shall comply with the security requirements outlined in NASA Policy Directive (NPD) 2810.1, "Security of Information Technology," and NASA Procedures and Guidelines (NPG) 2810.1, "Security of Information Technology". These policies apply to all IT systems and networks under NASA's purview operated by or on behalf of the Federal Government, regardless of location.

(b) (1) The Contractor shall ensure compliance by its employees with Federal directives and guidelines that deal with IT Security including, but not limited to, OMB Circular A-130, "Management of Federal Information Resources", OMB Circular A-130 Appendix III, "Security of Federal Automated Information Resources", and the Computer Security Act of 1987 (40 U.S.C. 1441 et seq.).

(2) All Federally owned information is considered sensitive to some degree and must be appropriately protected by the Contractor as specified in applicable IT Security Plans. Types of sensitive information that may be found on NASA systems that the Contractor shall have access to include, but are not limited to--

- (i) Privacy Act information (5 U.S.C. 552a et seq.);
- (ii) Resources protected by the International Traffic in Arms Regulation (22 C.F.R Parts 120-130); and
- (iii) National security information.

(3) The Contractor shall ensure that all systems connected to a NASA network or operated by the Contractor for NASA conform with NASA and Center security policies and procedures.

(c) In addition to complying with any functional and technical security requirements set forth in the schedule and the clauses of this contract, the Contractor shall initiate personnel screening checks for each contractor employee requiring unescorted or unsupervised physical or electronic access to restricted or limited areas, or privileged access to NASA systems, programs, and data.

(1) The Contractor shall ensure that all such employees have at least a National Agency Check investigation. The Contractor shall submit a personnel security questionnaire (NASA Form 531, Name Check Request for National Agency Check (NAC) investigation, and Standard Form 85P, Questionnaire for Public Trust Positions, (for specified sensitive positions), and a Fingerprint Card (FD-258 with NASA overprint in Origin Block) to the Center Chief of Security for each Contractor employee who requires screening. The required forms may be obtained from Center Chief of Security. In the event that the NAC is not satisfactory, access shall not be granted. At the option of the Government, background screenings may not be required for employees with recent or current Federal Government investigative clearances.

(2) The Contractor shall have an employee checkout process that ensures--

- (i) Return of badges, keys, electronic access devices and NASA equipment;
- (ii) Notification to NASA within three working days for normal terminations and by the close of business for terminations for cause to disable any user accounts or network accesses that may have been granted to the employee; and

(iii) That the terminated employee has no continuing access to systems under the operation of the Contractor for NASA. Any access must be disabled the day the employee separates from the Contractor.

(3) Granting a non-permanent resident alien (foreign national) access to NASA IT resources requires special authorization. The Contractor shall obtain authorization from the Center Chief of Security prior to granting a non-permanent resident alien access to NASA IT systems and networks.

(d) The Contractor shall ensure that its employees with access to NASA information resources receive annual IT security awareness and training in NASA IT Security policies, procedures, computer ethics, and best practices.

(1) The Contractor shall employ an effective method for communicating to all its employees and assessing that they understand any ITS policies and guidance provided by the Center Information Technology Security Manager (CITSM) and/or Center CIO (CCIO) as part of the new employee briefing process. The Contractor shall ensure that all employees represent that they have read and understand any new ITS policy and guidance provided by the CITSM and CCIO over the duration of the contract.

(2) The Contractor shall ensure that its employees performing duties as system and network administrators in addition to performing routine maintenance possess specific IT security skills. These skills include the following:

- (i) Utilizing software security tools.
- (ii) Analyzing logging and audit data.
- (iii) Responding and reporting to computer or network incidents.
- (iv) Preserving electronic evidence.
- (v) Recovering to a safe state of operation.

(3) The Contractor shall provide training to employees to whom they plan to assign system administrator roles. That training shall provide the employees with a full level of proficiency to meet all NASA system administrators' functional requirements. The contractor shall have methods or processes to document that employees have mastered the training material, or have the required knowledge and skills. This applies to all system administrator requirements.

(e) The Contractor shall promptly report to the Center IT Security Manager any suspected computer or network security incidents occurring on any system operated by the Contractor for NASA or connected to a NASA network. If it is validated that there is an incident, the Contractor shall provide access to the affected system(s) and system records to NASA and any NASA designated third party so that a detailed investigation can be conducted.

(f) The Contractor shall develop procedures and implementation plans that ensure that IT resources leaving the control of an assigned user (such as being reassigned, repaired, replaced, or excessed) has all NASA data and sensitive application software removed by a NASA-approved technique. NASA-owned applications acquired via a "site license" or "server license" shall be removed prior to the resources leaving NASA's use. Damaged IT storage media for which data recovery is not possible shall be degaussed or destroyed. If the assigned task is to be assumed by another duly authorized person, at the Government's option, the IT resources may remain intact for assignment and use of the new user.

(g) The Contractor shall afford NASA access to the Contractor's and subcontractor's facilities, installations, operations, documentation, databases and personnel to the extent required to carry out a program of IT inspection and audit to safeguard against threats and hazards to the integrity, availability and confidentiality of NASA data.

(h) The Contractor shall document all vulnerability testing and risk assessments conducted in accordance with NPG 2810.1 and any other current IT security requirements.

(1) The results of these tests shall be provided to the Center IT Security Manager. Any contractor system(s) connected to a NASA network or operated by the contractor for NASA may be subject to vulnerability assessment or penetration testing as part of the Center's IT security compliance assessment and the Contractor shall be required to assist in the completion of these activities.

(2) A decision to accept any residual risk shall be the responsibility of NASA. The Contractor shall notify the NASA system owner and the NASA data owner within 5 working days if new or unanticipated threats or hazards are discovered by the Contractor, made known to the Contractor, or if existing safeguards fail to function effectively. The Contractor shall make appropriate risk reduction recommendations to the NASA system owner and/or the NASA data owner and document the risk or modifications in the IT Security Plan.

(i) The Contractor shall develop a procedure to accomplish the recording and tracking of IT System Security Plans, IT system penetration and vulnerability tests for all NASA systems under its control or for systems out sourced to them to be managed on behalf of NASA. The Contractor must report the results of these actions directly to the Center IT Security Manager.

(j) When directed by the contracting officer, the contractor shall submit for NASA approval a post-award security implementation plan outlining how the contractor intends to meet the requirements of NPG 2810. The plan shall subsequently be incorporated into the contract as a compliance document after Government approval. The plan shall demonstrate thorough understanding of NPG 2810 and shall include as a minimum, the security measures and program safeguards to ensure that IT resources acquired and used by contractor and subcontractor personnel--

(1) Are protected from unauthorized access, alteration, disclosure, or misuse of information processed, stored, or transmitted;

(2) Can maintain the continuity of automated information support for NASA missions, programs, and functions;

(3) Incorporate management, general, and application controls sufficient to provide cost-effective assurance of the systems' integrity and accuracy;

(4) Have appropriate technical, personnel, administrative, environmental, and access safeguards; and

(5) Document and follow a virus protection program for all IT resources under its control.

(k) The Contractor shall incorporate this clause in all subcontracts where the requirements identified in this clause are applicable to the performance of the subcontract.

17. ADVANCE APPROVAL FOR RELEASE OF TECHNICAL INFORMATION (AUG 1998)

The contractor shall not release technical information based on or containing data first produced in the performance of this contract and describing the work performed under this contract unless prior written approval is given by NASA. The contractor shall submit technical information regarding the contract effort, such as journal articles, meeting papers, and technical documents to the contracting Officer's Technical Representative (COTR) for review and concurrence with approval by the Center Export Administrator or designee prior to publication, presentation or release to others. The Contractor may proceed upon receipt of written concurrence by the COTR, unless directed otherwise in the COTR concurrence letter.

18. OPTION TO EXTEND THE TERM OF THE CONTRACT (FAR 52.217-9) (MAR 1989)

(a) The Government may extend the term of this contract by unilateral written notice to the Contractor within the current contract period of performance; provided, that the Government shall give the Contractor a preliminary notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option provision.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 5 years.

19. OPTIONS

Priced Options/Extended Term

Pursuant to the clause entitled "Option to Extend the Term of the Contract (MAR 1989)," the Contractor hereby grants to the Government options to extend the term of the contract for 3 additional periods of 12 months each. Such options are to be exercisable by issuance of a unilateral modification. Upon exercise of such option(s) by the Government, the following items will be increased by the amount specified below for each option period.

<u>Item</u>	<u>First Option Period</u>	<u>Second Option Period</u>	<u>Third Option Period</u>
Period of Performance	12 months	12 months	12 months
Estimated Cost	\$828,577.66	\$847,875.38	\$868,219.45
Maximum Incentive Fee	\$ 66,286.21	\$ 67,830.03	\$ 69,457.56

NOTE: The maximum incentive fee will be divided into two equal amounts for the two 6-month incentive fee evaluation periods within each option period.

20. YEAR 2000 COMPLIANCE (MAY 1998)

(a) Definition: "Year 2000 compliant", as used in this clause, means that the information technology (hardware, software and firmware, including embedded systems or any other electro-mechanical or processor-based systems used in accordance with its associated documentation) accurately processes date and date-related data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap year calculations, to the extent that other information technology, used in combination with the information technology being acquired, properly exchanges date and date-related data with it.

(b) Any information technology provided, operated and/or maintained under this contract is required to be Year 2000 compliant. To ensure this result, the Contractor shall provide documentation describing how the IT items or services demonstrate Year 2000 compliance, consisting of:

Documentation and testing for Year 2000 compliance shall be based on complexity and the risk associated with the IT item. The Contractor shall use the documents "NASA Year 2000 Agency Test and Certification Guidelines and Requirements," dated July 2, 199 (available at <http://cio.larc.nasa.gov/y2k/>) and "NASA LaRC Y2K Compliance Verification Form" (Attachment D hereto) for each IT item/system provided or maintained under this contract.

(c) The Contractor warrants that any IT items or services provided under this contract that involve the processing of date and date-related data are Year 2000 compliant. If the contract requires that specific listed products must perform as a system in accordance with the foregoing warranty, then that warranty shall apply to those listed products as a system.

(d) The remedies available under this warranty shall include repair or replacement, at no additional cost to the Government, of any provided items or services whose non-compliance is discovered and made known to the Contractor in writing within 90 days after acceptance. In addition, all other the terms and limitations of the Contractor's standard commercial warranty or warranties shall be available to the Government for the IT items or services acquired under this contract. Nothing in this warranty shall be construed to limit any rights or remedies the Government may otherwise have under this contract with respect to defects other than Year 2000 performance.

21. CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)

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

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

A. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

52.202-1	Definitions (Oct 1995)
52.203-3	Gratuities (Apr 1984)
52.203-5	Covenant Against Contingent Fees (Apr 1984)
52.203-6	Restrictions on Subcontractor Sales to the Government (Jul 1995)
52.203-7	Anti-Kickback Procedures (Jul 1995)
52.203-8	Cancellation, Rescission and Recovery of Funds for Illegal or Improper Activity (Jan 1997)
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (Jan 1997)
52.203-12	Limitation on Payments to Influence Certain Federal Transactions (Jun 1997)

52.204-4 Printing/Copying Double-Sided or Recycled Paper (Jun 1996)

52.209-6 Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (Jul 1995)

52.211-15 Defense Priority and Allocation Requirements (Sep 1990)

52.215-2 Audit and Records--Negotiation (Jun 1999)

52.215-11 Price Reduction for Defective Cost or Pricing Data--Modifications (Oct 1997)

52.215-13 Subcontractor Cost or Pricing Data--Modifications (Oct 1997)

52.215-14 Integrity of Unit Prices (Oct 1997)

52.215-15 Pension Adjustments and Asset Reversions (Dec 1998)

52.215-17 Waiver of Facilities Capital Cost of Money (Oct 1997)

52.215-18 Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other Than Pensions (Oct 1997)

52.215-19 Notification of Ownership Changes (Oct 1997)

52.215-20 Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data (Oct 1997)

52.215-21 Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data--Modifications (Oct 1997) – Alternate IV (Oct 1997)

52.216-7 Allowable Cost and Payment (Apr 1998)

52.217-8 Option to Extend Services (Nov 1999)

52.219-6 Notice of Total Small Business Set-Aside (Jul 1996)

52.219-8 Utilization of Small Business Concerns (Jun 1999)

52.219-14 Limitations on Subcontracting (Dec 1996)

52.222-1 Notice to the Government of Labor Disputes (Feb 1997)

52.222-2 Payment for Overtime Premiums (Jul 1990) (\$0)

52.222-3 Convict Labor (Aug 1996)

52.222-21 Prohibition of Segregated Facilities (Feb 1999)

52.222-26 Equal Opportunity (Feb 1999)

52.222-35 Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (Apr 1998)

52.222-36 Affirmative Action for Workers with Disabilities (Jun 1998)

52.222-37 Employment Reports on Disabled Veterans and Veterans of the Vietnam Era (Jan 1999)

52.222-41 Service Contract Act of 1965, as Amended (May 1989)

52.223-2 Clean Air and Water (Apr 1984)

52.223-6 Drug-free Workplace (Jan 1997)

52.223-14 Toxic Chemical Release Reporting (Oct 1995)

52.225-11 Restrictions on Certain Foreign Purchases (Aug 1998)

52.227-1 Authorization and Consent (Jul 1995)

52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement (Aug 1996)

52.227-11 Patent Rights--Retention by the Contractor (Short Form) (Jun 1997)--as modified by NASA FAR Supplement 1852.227-11

52.227-14 Rights In Data - General (Jun 1987) - as modified by NASA FAR Supplement 1852.227-14

52.227-16 Additional Data Requirements (Jun 1987)

52.232-9 Limitation on Withholding Payments (Apr 1984)

52.232-17 Interest (Jun 1996)

52.232-22 Limitation of Funds (Apr 1984)

52.232-23 Assignment of Claims (Jan 1986)

52.232-25 Prompt Payment (Jun 1997) [Insert 30th day in subparagraph (b)(2)]

52.232-34 Payment by Electronic Funds Transfer—Other Than Central Contractor Registration (May 1999) [Insert “no later than 15 days prior to submission of the first request for payment” in paragraph (b)(1).]

52.233-1 Disputes (Dec 1998) -- Alternate I (Dec 1991)

52.233-3 Protest After Award (Aug 1996) -- Alternate I (Jun 1985)

52.237-3 Continuity of Services (JAN 1991)

52.242-1 Notice of Intent to Disallow Costs (Apr 1984)

52.242-3 Penalties for an Unallowable Cost (Oct 1995)

52.242-4 Certification of Final Indirect Cost (Jan 1997)

- 52.242-13 Bankruptcy (Jul 1995)
- 52.242-15 Stop-Work Order (Aug 1989)--Alternate I (Apr 1984)
- 52.243-2 Changes--Cost-Reimbursement (Aug 1987) Alternate I (Apr 1984)
- 52.246-5 Inspection of Services - Cost-Reimbursement (Apr 1984)
- 52.249-6 Termination (Cost-Reimbursement) (Sep 1996)
- 52.249-14 Excusable Delays (Apr 1984)
- 52.252-6 Authorized Deviations in Clauses (Apr 1984)
- 52.253-1 Computer Generated Forms (Jan 1991)

B. NASA/FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

- 1852.208-81 Restrictions on Printing and Duplicating (Aug 1993)
- 1852.215-84 Ombudsman (Oct 1996)
LaRC: Belinda Adams, Direct inquiries to Sandra S. Ray, (757) 864-2428
- 1852.216-89 Assignment and Release Forms (Jul 1997)
- 1852.219-76 NASA 8 Percent Goal (Jul 1997)
- 1852.225.70 **1852.225-70 Export Licenses.**
- 1852.227-72 Designation of New Technology Representative and Patent Representative (Jul 1997)[Insert titles "New Technology Representative," "Patent Representative," Office Code "212" (both); address "NASA, Langley Research Center, Hampton, VA 23681-2199."]
- 1852.242-73 NASA Contractor Financial Management Reporting (Jul 1997)
- 1852.243-70 Engineering Change Proposals (Feb 1998)--Alternate II (Sep 1990) [Provide inserts for Paragraphs (c) and (d).]
- 1852.243-71 Shared Savings (Mar 1997)

22. REPORTING REQUIREMENTS

A. Financial Management Reports--The Contractor shall comply with the clause of this contract entitled "NASA Contractor Financial Management Reporting" by monthly submission of NASA Form 533M. The form shall be prepared and submitted in accordance with the instructions set forth on the reverse side of the form and NPG 9501.2C, NASA Contractor Financial Management Reporting as further definitized below.

1. Due not later than the 10th operating day following the close of the Contractor's accounting period being reported.
2. Columns 7.b. and d. shall be completed using the time-phased financial baseline plan.
3. Columns 8.a. and b. shall be completed using estimates (forecasts) for the succeeding two months.
4. Minimum reporting categories:
 - a. Direct Labor Hours
 - b. Direct Labor Dollars
 - c. Overhead(s)
 - d. Subcontract
 - e. Material
 - f. Other Direct Cost
 - g. G&A
 - h. Total Estimated Cost
 - i. Incentive Fee
 - j. Total Estimated Cost and Incentive Fee

5. Each 533M shall include a narrative explanation for variances exceeding 10% percent between planned hours and dollars and actual hours and dollars for each reporting category.

B. Quarterly Financial Management Report--The Contractor shall submit a quarterly financial report detailed by categories specified in A.4 above on NASA Form 533Q at times and in accordance with the instructions contained on the reverse side of the form. The initial 533Q shall be submitted within 10 days after award of the contract.

C. Financial Baseline Plan--A time-phased financial baseline plan, detailing by month how you plan to incur costs for the period, shall be submitted for the first 24-month interval of the total five year contract period. Financial baseline plans for each of the remaining 12-month intervals shall be submitted within 10 days of the anniversary of the effective date of this contract. This plan shall include the periods by the cost categories specified in Paragraph A.4 above. The total estimated cost and level of effort reflected in the baseline plans must equal the contract values for the total contract period.

D. Federal Contractor Veterans Employment Report--In compliance with FAR clause 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era, the Contractor shall submit the Federal Contractor Veterans Employment Reports (VETS-100) as required by this clause.

E. Status Reports - See Statement of Work, Section 5.0, Reporting

F. Commercialization Plan -- The Contractor shall develop and implement a proactive Technology Transfer & Commercialization (TT&C) activity consistent with NASA's Commercial Technology Policy as described in NASA documents *Agenda for Change* (July 1994 - <http://nctn.hq.nasa.gov/division/Agenda/Contents.html>); and *Implementing the Agenda for Change* (May 1996 - <http://nctn.hq.nasa.gov/division/Agenda/policy.pdf>). With respect to this contract TT&C is defined as the transfer and commercial (aerospace or non-aerospace) application/utilization of technological assets developed under or related to this contract; with the goal of achieving economic benefit or quality of life improvement. Technological assets are defined as innovations, technologies, facilities and expertise.

Results expected from the Contractor's TT&C activities included the following:

1. Within sixty days from the start of this contract, a TT&C plan describing the Contractor's technology commercialization program key elements; its organization structure including sub-contractors; its TT&C training activity; a milestone-based schedule; and how it addresses NASA Commercial Technology Policy. NASA document *Implementing the Agenda for Change* identified above provides additional guidance on TT&C plans.

2. Early and complete reporting of new technologies and innovation deemed as "reportable items" under this contract. The data provided in these reports shall be kept current throughout the contract's existence.

3. Commercial technology partnerships with either government parties; non-government parties; or both. Successful commercial technology partnerships are those which result in some measure of commercial activity/impact or quality of life improvement. NASA recognizes that not all commercial technology partnerships will yield successful commercialization. The NASA documents identified in above provide additional information on commercial technology partnerships.

4. Quarterly reports that provide metrics and additional information on the above results and the overall performance status of the Contractor's TT&C activity.

G. Reports Distribution

Unless otherwise specified elsewhere in this contract, reports and other documentation shall be submitted F.O.B. destination as specified below, addressed as follows:

National Aeronautics and Space Administration
Langley Research Center
Attn: _____, Mail Stop _____

Contract NAS1- TBD
Hampton, VA 23681-2199

The following letter codes designate the recipients of reports and other documentation which are required to be delivered prepaid to Langley Research Center by the Contractor:

A--Contract Specialist, Mail Stop 126

B--Contracting Officer Technical Representative, Mail Stop 211

C--New Technology Representative, Mail Stop 212

D--Cost Accounting, Mail Stop 135

E--Programs and Resources Division, Mail Stop 104

F--Patent Counsel, Mail Stop 212

The following are the distribution requirements for reports and other documentation required with the numeral following the letter code specifying the number of copies to be provided:

<u>DOCUMENT</u>	<u>LETTER CODE AND DISTRIBUTION</u>
Financial Management Report (NASA Forms 533M and 533Q)	A-1, B-1, D-1, E-1
Financial Baseline Plan	A-1, B-1
Patent Rights Report	A-1, B-2, C-1, F-1
Year 2000 Compliance Report	A-1, B-1
Commercialization Plan	A-1, B-2

23. STATEMENT WORK

I. Background

NASATechTracS (NTTS) is an agency-wide management tool which supports NASA's technology transfer & commercialization mission.

As a Center management tool, NTTS identifies NASA activities and assets with commercial potential and tracks their progress towards commercialization via commercial technology partnerships. NASA assets include technologies, programs, facilities and expertise. Specifically NTTS supports the following functional areas in the commercial technology process:

- New technology reporting
- Intellectual Property processing
- Marketing & Outreach
- Partnering
- Success Stories; and
- Metrics

As an agency-wide commercial technology management tool, NTTS supports a wide and diverse range of customers including

- Commercialization Offices;
- Intellectual Property Offices;
- the Invention Contributions Board;
- Program / Project Managers & COTR's;
- Agency Enterprise Managers;
- the Chief Engineer's Office;
- Public & Legislative Affairs Offices;
- NASA's Contractors and Grantees; and
- The U.S. Public.

NTTS is a distributed network of 4th Dimension relational databases and web servers that are located at each NASA field center, NASA Headquarters, the National Technology Transfer Center (NTTC), and NASA contractors. An integrated agency-wide server is located at LaRC, as well as a public server called the NASA Technology Access Server (NTAS) and a test/training server (NTTS Test). An agency-wide working group, NASA TechTracS Configuration Management Sub Team (NTTS CMT), is responsible for configuration control of NTTS

II. Scope

NASA requires a set of 5 activities be worked in order to assure an operational production system. This set of 5 activities defines the work breakdown structure of this project.

1. Operate and maintain NASA NTTS—including each Center's NTTS component, the agency-wide component, NTAS, contractor component, web and the security component;
2. Develop modifications and new features to NTTS;
3. Deploy software releases;
4. Train NTTS users and database administrators;
5. Report periodically on the technical and financial status of the system;

III. Minimum System Configuration and Operational Status

NASA shall maintain, at a minimum, all NTTS systems at the Minimum System Configuration set forth by the NTTS Sub Team. NASA shall have each system connected to the NASA network and all software components shall be operational.

IV. Contractor Tasks

The Contractor shall perform the following tasks.

1.0 NTTS Operations/Sustaining Engineering

1.1 **Maintain Systems**

- NTTS shall be operational from 8AM - 8 PM EST;
- The Contractor shall recover any component of the database within 1 working day of notification.

1.2 **Backups**

1.2.1 *Data Logging*

Data logging shall be maintained as documented in the technical documentation.

1.2.2 *Production Source Code*

Updated source code, without password protection, shall be placed on the following servers concurrently with every scheduled and interim release:

- LaRC: techtracs.larc.nasa.gov, at "LaRC TechTracS Server:TechTracS Server:TechTracS Source"
- KSC: 128.217.63.103 at "KSC TechTracS Server:TechTracS Server:TechTracS Source"

1.2.3 *Development Source Code*

Development NTTS source code shall be placed on the LaRC machine listed above (at "LaRC TechTracS Server:TechTracS Server:TechTracS Development") on a weekly basis.

1.2.4 *Test of Backup*

In May of each year, the Contractor shall test the backup of the production source code. Using the backup of source code and data (from any Center) restore to NTTS Test and notify the NASA TM for review.

1.3 **Maintain Help/Support Desk**

The Contractor shall provide Help Desk Support Monday through Friday from 8 AM to 8 PM EST including the following activities.

1.3.1 Answer electronic and telephonic requests for support Monday through Friday from 8 AM to 8 PM EST.

1.3.2 Issue confirmation via E-mail or telephone call to the requester of the receipt of a help request within 1 hour of the request.

1.3.3 Maintain a log of support requests containing the dates of help requests, requester's name, requester's center, description, and resolution description.

1.3.4 Notify the Technical Monitor if any request can not be resolved within 8 hours of the request. The Technical Monitor will provide guidance as to the disposition of the request.

1.3.5 Provide a copy of the logged support requests as part of the quarterly report or within five working days of NASA request.

1.4 Maintain NTTS Internet Web Site

The Contractor shall:

Monitor the following NTTS Internet Web Sites for and performance:

<http://technology.nasa.gov> (NTAS server)

webawntts.larc.nasa.gov (Agency-wide web server)

apply corrections and updates to the systems as requested by NASA.

1.5 Maintain NTTS Intranet (Support) Web Site

The Contractor shall maintain support of the NTTS support web site (See <http://nttssupport.larc.nasa.gov>) which contains:

- Contacts - Name and active E-mail listing of NASA and Contract points of contact that give support on NTTS.
- Documentation - All of NTTS documentation is listed here and active links for access to the documentation.
- Bug Reporting System: An online system that supports the submittal and reporting of bugs found in NTTS. Reports contain short title, description of bug, bug-reported date, bug reported by, and resolution description and date. Information can be queried on bug reported by, title contains, submittal date, and resolution date.
- Releases - Schedule of testing and release dates, steps to access the Test System, Release Notes and related documentation.
- Software - For both Macintosh and PC, current versions of 4D client.

1.6 Maintain Wide Area Network (WAN) Connectivity

1.6.1 monitor NTTS Wide Area Network communication systems for availability;

1.6.2 ensure all required center information is being transmitted to the Agency-Wide system, to the public server, and to the public server mirror;

1.6.3 document within 5 working days of date of issue any discovered operational issues via e-mail to the Technical Monitor with date of issue, description of issue, and proposed resolution of issue.

1.7 Perform Financial Accounting System (FACS) Updates

Within 5 working days of notification that the FACS data is ready for retrieval,

- retrieve data from identified machine
- process data downloaded from NASA FACS and transfer all files to each NASA Field Center's NTTS server;
- coordinate with Center database administrators (DBA) to shutdown the NTTS server at the Field Center, backup Field Center data files, load data using standalone NTTS, restore server functions;
- monitor WAN transmission.

1.8 Perform Congressional Information Updates

Quarterly Congressional Information shall be supplied by NASA and loaded into NTTS by the Contractor.

1.9 Archive of NTTS Data

1.9.1 Monthly

1.9.1.1 Create an archive of the NTAS data including a standalone interface.

1.9.1.2 Place the archive in a zipped compressed format on

oz.larc.nasa.gov/nttsarchive

1.9.2 Quarterly

1.9.2.1 Create an archive of the NTTS Agency-wide data and a standalone interface.

1.9.2.2 Place the archive in a zipped compress format on

oz.larc.nasa.gov/nttsarchive

1.10 End of Year Processing

During the month of October each year:

- Contact Center DBA's and coordinate shutdown of the NTTS server at each Field Center and at Agency-wide NTTS;
- Backup data files;
- Perform the following end-of-year procedures:
- execute routine, AWIDEWANENDYR, to add all current year obligation data to the prior year obligation data and reset current year obligation data to zero; and
- restore server functions.
- Notify NASA Technical Monitor by E-mail when complete
- Process shall be completed before 11/1 each year.

2.0 Develop / Implement Modifications and New Features

The Contractor shall provide the required hardware and software to perform Steps 1 through 5 and 7.

Step 1: Identification of User Requirements

The Contractor shall consult with NASA to design screens, queries, and reports. As part of this consultation the Contractor shall recommend system impact/improvement considerations. This information shall be delivered verbally or electronically to the CO.

Step 2: Detail Requirements Analysis

Documented User Requirements shall be submitted to the Contractor by E-mail and will at a minimum contain the information noted in Attachment A.

A review by the Contractor of user requirements and clarification of outstanding questions with NASA is required so that an estimate of hours to complete Steps 3 and 4 of this process can be attained. The resulting document of this step shall contain a detail analysis of the requirements and an estimation of hours to complete Steps 3 and 4. The analysis shall convey to NASA that the Contractor has a complete understanding of the requirements and how they pertain to NTTS. This estimate shall be submitted to the CO and work can not proceed on the item until the CO notifies the Contractor. Notification shall be given by E-mail. Time to complete this step is no more than 2 weeks from the time NASA submits the User Requirements. This estimate shall be used by NASA to determine the release version to contain the modification.

Step 3: Detail Design Analysis and Test Plan

Using the Detail Requirements Analysis produce a document containing the elements noted in Attachment B. This document shall be submitted to the CO, who will review this document and notify the Contractor of acceptance within 2 weeks of its delivery. This notification by E-mail shall permit the Contractor to proceed to step 4.

NASA Requires that a test plan be developed and address the items noted in Attachment C. The test plan shall be completed before stage 5 - System Testing begins.

Step 4: Construction

Using the Detail Design Document, the Contractor shall implement the requirements in the Contractor development environment.

Step 5: System Testing

The Contractor shall perform 1 week of integrated system testing in the Contractor development environment.

Step 6: NASA Testing

The Contractor shall deploy the beta version of the release to the NASA test system. The NASA test period is two weeks. During this period NASA shall submit bugs by the Bug Reporting System. The Contractor shall monitor the bug reports and modify the Contractor beta version. After one week of NASA testing, a second deployment of the beta version will be placed on the NASA test system. This updated beta version shall contain bug fixes performed by the Contractor during the first week of NASA testing. After NASA testing is complete the Contractor shall fix remaining bugs within one week. NASA reserves the right to request additional beta releases to the NASA test system.

Step 7: Documentation

The Contractor shall perform documentation of NTTS. Documentation of NTTS has four categories: Technical, DBA Guide, User Guide, and Module. All documentation shall be current with the current release of NTTS. Updates to the documentation shall be delivered within 10 working days from the end of release deployment. Each document shall conclude with a log of documentation changes noting the NTTS version and the sections that have been created, changed, or deleted.

3.0 Deploy Software Releases

NASA releases modifications to NTTS on a tri-annual basis: January, May, and September. NASA determines the release content. NASA reserves the right to change the release schedule in response to work requirements.

3.1 Scheduled Version Release

The Contractor shall contact Center DBA's to schedule time to deploy the new version of NTTS. Deployment shall be completed within one week of the completion of the NASA Testing stage.

3.2 Critical Correction Releases

NASA may determine that a system modification is critical and therefore will be applied outside a scheduled release. The Critical Correction Release will follow the 7-stage process applied to scheduled releases. Depending on the severity of the modification, NASA may reduce the requirements of stages 3, 6 and 7. Examples of corrections that would mandate a release of this nature are information is not being stored correctly by the system or the inoperability of a system function causes a NASA work stoppage.

3.3 Configuration Control

Release versions shall be numbered using the following format.
YYY.9.99
V - Alpha character representing the word version.
YY - the last two digits of the FY the release was deployed.

9 - the sequential number within a FY assigned to a release. Each FY starts with number 1.

99 - sequential numbers representing releases that occur between the scheduled releases. Each release starts with 00.

All references to NASA TechTracS versions by NASA or the Contractor shall follow this format.

3.4 Schedule Changes

The Contractor shall notify the NASA TM by E-mail of any schedule changes no later than 5 working days before the scheduled date.

3.5 3rd Party Software

Any 3rd party software used to support the functions of NTTS shall be of a version that is considered "market ready". Market Ready signifies that the software can be purchased by the Government and is supported through the Vendor's customer and technical support systems.

4.0 Training

4.1 Formal Classes

NASA requires course and materials development, system and classroom setup, and instruction for all level of NTTS users. Course topics shall be submitted to the Contractor using the format noted in Attachment A. The Contractor shall hold to steps 1 and 2 of the release stages in response to this work request. An archive of this information shall be maintained for the duration of the Contract. All status reports shall be posted on the web with the capability of up to 20 concurrent logins. Courses may be conducted at any NASA Field Centers or at the Contractor's Facility.

4.2 Telecon Instruction

NASA requires coordination, support, and training sessions via teleconference with NASA Field Centers as required. Centers are authorized to liaison directly with the Contractor to schedule training and define topics and formats; the Contractor is to provide training support (load specific Center datasets into the Test System, consult on technical details of the Patent module, etc.) or actually provide telecon training as required. This activity is limited to 200 hours for all Centers (not necessarily equally, depending on individual Center requirements) over the course of the fiscal year unless otherwise specified in writing by the Technical Monitor.

5.0 Reporting

5.1 Project Schedule Updates

NASA requires bi-weekly project schedule updates on work requests on the 1st and 3rd Tuesday of each month. Status reports shall contain information on the following areas.

An archive of this information shall be maintained for the duration of the Contract. All status reports shall be posted on the web with the capability of up to 20 concurrent logins.

1. **Description** - shall contain the NASA Work Request, NASA POC, Contractor POC, overall status rating of either No Issues, Minor Issues, or Outstanding Issues. A rating of No Issues indicates work is progressing as planned. A rating of Minor Issues indicates work is progressing as planned but the Contractor has some outstanding questions to NASA. A rating of Outstanding Issues indicates the work schedule will be delayed unless NASA and the Contractor can resolve the issues.

2. **Schedule** - shall contain a graphical representation of the Contractor's planned versus actual dates of completion for stages 3 - 5 of the release process; Detail Design, Construction, and Testing and Documentation. A total of all noted activities shall be included on the graph.

3. **Budget** - shall contain a graphical representation of the Contractor's planned versus actual hours for stages 3 - 5 of the release process; Detail Design, Construction, and Testing and Documentation. A total of all noted activities shall be included on the graph.

4. **Progress** - shall contain a graphical representation of the Contractor's percent complete on stages 3 - 5 of the release process; Detail Design, Construction, and Testing and Documentation. A total of all noted activities shall be included on the graph.
5. **Status** - shall contain a description of any issues and their resolution.
6. **Related Documents** - shall contain the Detail Requirements, Detail Design and the Test Plan as they are delivered.

5.2 Quarterly

For the period reports shall contain a status on major accomplishments, commercialization activities, planned versus actual costs broken down by the 1 digit WBS level (see Attachment D), technical status broken down by the 3 digit WBS level (see Attachment D) note accomplishments and issues/concerns, help desk log, and bug system log.

This report shall be delivered within 10 working days of end of the quarter.

ATTACHMENT A - WORK REQUEST TEMPLATE

System:

Title:

Requester:

Date of Request:

Hardware:

Operating System:

Priority:

Description:

Current

New Requirement

Security:

Existing Data:

Use of Existing System Functions :

Module Prototype:

Documentation:

Requested Release Date:

ATTACHMENT B - DETAIL DESIGN DOCUMENT REQUIREMENTS

TABLE OF CONTENTS

INTRODUCTION

DESIGN OVERVIEW

- REUSE STRATEGY.
- QUALITY ASSURANCE
- USER MANUAL
- DESIGN METHODOLOGY
- DESIGN STATUS
- DEVELOPMENT/OPERATIONS ENVIRONMENT

DETAILED DEVELOPMENT PLAN

- INTRODUCTION
- REQUIREMENTS DEFINITION
- DETAILED DESIGN
- DATA STRUCTURE REVISIONS
 - Data Conversion*
 - Data Control Panel Modifications*
 - List Screen Modifications*
 - Data Screen Modifications*
 - Reports and Letters*
- USER INTERFACE MOCK-UP
 - Current User Interface Screens*
 - New User Interface Screens*

DATA INTERFACES

- CURRENT TABLES/FIELDS
- TABLES/FIELDS AFFECTED
- WAN LISTS

APPENDIX A – MOD REVIEW NOTES

- ESTIMATE UPDATE
- OUTSTANDING ISSUES
- ISSUE TABLE

APPENDIX B – PROGRAMMING STANDARDS

- NAMING CONVENTIONS

APPENDIX C – INTERFACE STANDARDS DEFINITIONS

- NASA TECHTRACS STANDARDS
- STANDARDS ISSUES

INDEX

ATTACHMENT C - TEST PLAN REQUIREMENTS

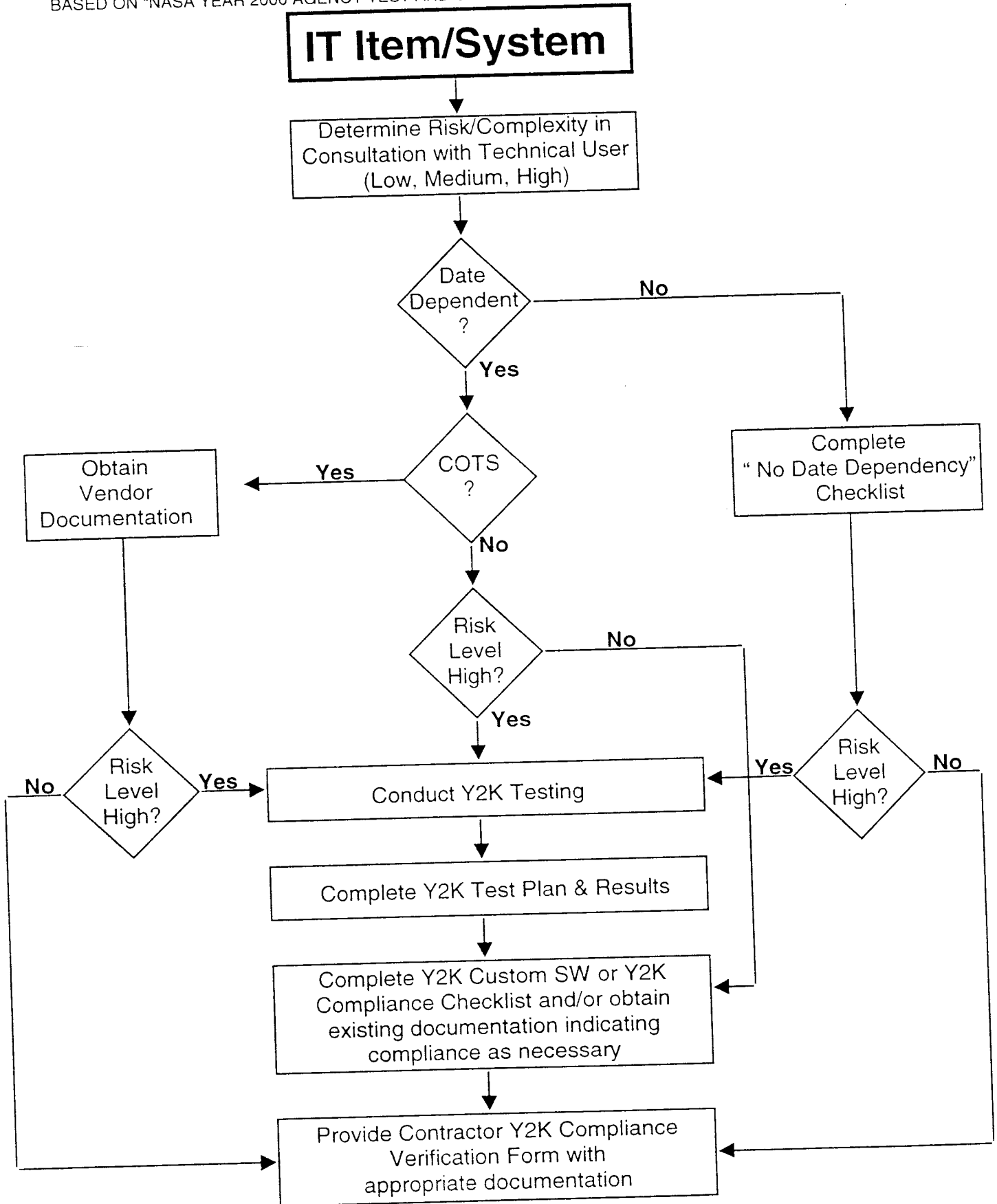
For all screens and reports the following is required.

1. Object Name
2. Test Procedure
3. Expected Result
4. Pass/Fail
5. Description of Failure

23. YEAR 2000 ATTACHMENT

NASA LaRC Y2K Guideline for Documentation and Testing

BASED ON "NASA YEAR 2000 AGENCY TEST AND CERTIFICATION GUIDELINES AND REQUIREMENTS"



Contractor Y2K Compliance Verification Form

NASA Langley Research Center

IT Item Name/System:

Risk /Complexity Level Low
(High, Medium, Low)

Brief Description:

NASA' Commercial Technology Management System

Facility/Lab (if applicable):

Organization:

Documentation (check if applicable) (Refer to the "NASA Year 2000 Agency Test and Certification and Requirements" and "NASA LaRC Y2K Guideline for Documentation and Testing Requirements" for guidance.)

- "No Date Dependency" Checklist
- Vendor Documentation for COTS Products (Software, Hardware, Firmware)
Specify: _____
- Y2K Test Plan
- Y2K Test Results
- Y2K Custom Software Compliance Checklist
- Y2K Compliance Checklist
- Other existing documentation indicating compliance, e.g. system documentation
Specify: _____

Comments:

KSS completed and submitted this Y2K Verification Form as the incumbent subcontractor in marc 1999. We will forward it upon request.

I certify the IT Item/System identified has been assessed for Y2K compliance using the NASA and Langley Research Center Year 2000 test and certification guidelines and requirements as guidanc and that the IT Item/System is compliant as reflected in the attachments.

Contractor Company Name: Knowledge Sharing Systems, Inc.

Contractor Official: Kevin Barquinero  April 18, 2000
Typed Name and Signature *Date*

Concurrence:

NASA COTR/Technical Monitor

Typed Name and Signature

Date