Commonwealth of Virginia
Virginia Information Technologies Agency

DATA SATELLITE EQUIPMENT, ANTENNAS, ACCESSORY ITEMS AND SERVICES

Mandatory Use Contract for COV Agencies & Institutions

Date:	September 14, 2005
Contract #:	VA-030909-SKYC
Authorized User:	State Agencies, Institutions, and other Public Bodies as defined in the VPPA
Contractor:	Skycasters 3500 Virginia Beach Boulevard Suite 600 Virginia Beach, VA 23452
FIN:	34-1953658
Contact Person:	Anne L. Salmon 800-853-0434, Ext. 7101 Fax: 419-818-1978 Email: salmon@skycasters.com
FOB:	Destination (Orders over $100)
Delivery:	60 Days ARO
Term:	September 9, 2005 – September 8, 2006
Payment:	Net 30 days

For Additional Information, Please Contact:

Virginia Information Technologies Agency
Supply Chain Management Division

Joe Parr, CPPO, VCO
Phone: 804-371-5991
E-Mail: joe.parr@vita.virginia.gov
Fax: 804-371-5969

NOTES: Individual Commonwealth of Virginia employees are not authorized to purchase equipment or services for their personal use from this Contract.

For updates, please visit our Website at http://www.vita.virginia.gov/procurement/contracts.cfm

VIRGINIA INFORMATION TECHNOLOGIES AGENCY (VITA): Prior review and approval by VITA for purchases in excess of $100,000.00 is required for State Agencies and Institutions only.

CONTRACT # VA-030909-SKYC

CONTRACT CHANGE LOG

Change No.	Description of Change	Effective Date
1	Mod 1 extends contract term	9/9/05

Appendix A

Lot 1
Invitation to Bid
Broadband Satellite Hardware and Service

Item 2
Fixed Satellite System
The System should consist of a fixed mount and antenna, receiver and transmitter modems and an Network Access Point (NAP) or gateway. Typical Broadband speeds up linking 30 – 90 Kbps and down linking 400 – 900 Kbps. System to be similar to Direct Wav Model IG-1500 High Speed Internet System or approved equal.

State Model:___DW4020.74_____

Model:_____DW4020.74_____ $____1,349.10_____/each

Installation $_____325.00_ _____

Annual On-Site Maintenance $_____300.00_____/each

Item 3
Broadband Internet Satellite Service
This service must provide broadband internet satellite service to the Commonwealth. Service should be based on both dynamically assigned IP addresses and/or static IP addresses. The service should be set up to allow one (1) to 13 or greater users. Service should be universally available throughout the United States. The service must provide for satellite latency, must ensure encryption and allow the data stream to be used efficiently in a Virtual Private Network (VPN). The service should be a flat rate with unlimited time, no per minute rates.

Satellite Service Plus2 Level DW4020 11-25 users (No VPN)
Additional Upload Speed Package

Satellite Flat rate service per month	$___190.00_____
Dynamical IP Address	$____0_____
Static IP Address -5	$____45.00_____
Any Setup Fees	$___ 0 _____
Total	$ 235.00_____

MODIFICATION #1
TO
CONTRACT NUMBER VA-030909-SKYC
BETWEEN THE
COMMONWEALTH OF VIRGINIA
AND
SKYCASTERS, LLC

This MODIFICATION #1 is an agreement between the Commonwealth of Virginia, hereinafter referred to as "State" or "Commonwealth" or "VITA" (Virginia Information Technologies Agency) and Skycasters, LLC, hereinafter referred to as "Contractor" relating to the modification of the above Contract. This Modification #1 is hereby incorporated into and made an integral part of Contract VA-030909-SKYC, as modified.

Both of the above referenced parties agree to the following:

Reference: Contract VA-030909-SKYC, Page C-11 of C-21, Paragraph 32 entitled "Term"

The term of Contract VA-030909-SKYC shall be extended from September 9, 2005 through September 8, 2006.

The foregoing is the complete and final expression of the parties' agreement to modify Contract VA-030909-SKYC and cannot be modified, except by a writing signed by duly authorized representatives of both parties.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

PERSONS SIGNING THIS CONTRACT ARE AUTHORIZED REPRESENTATIVES OF EACH PARTY TO THIS CONTRACT AND ACKNOWLEDGE THAT EACH PARTY AGREES TO BE BOUND BY THE TERMS AND CONDITIONS OF THE CONTRACT.

SKYCASTERS, LLC

BY: Vickie Massemelli

NAME: Vickie Massemelli

TITLE: General Manager

DATE: 9/13/05

COMMONWEALTH OF VIRGINIA

BY: Joe A Parr

NAME: Joe A. Parr

TITLE: Tech Contracts Manager

DATE: 9/13/05

COMMONWEALTH OF VIRGINIA — Virginia Information Technologies Agency

SOLICITATION, OFFER AND AWARD DATA PROCESSING / TELECOMMICATIONS			VENDOR #	FIN: 34-1953658 EPV2400.2	
1. Contract No:	2. IFB No:	3. Date Issued:	Date Due:	4. APR	5. Approval No:
VA-030909-SKYC	2003-035	Jul 30, 2003	Aug 21, 2003	229	A-42

For Information Call: David Butler (804) 371-5521

6. ISSUING OFFICE:	7. SHIP TO:
Virginia Information Technologies Agency Office of Acquisition Services 110 S. 7th Street, Lobby Floor Richmmond, Va. 23219-9300 ATTN: Bid Section	VITA ATTN: Stuart Thacker 110 South 7th Street 1st Floor Richmond, VA 23219-3931

SOLICITATION

8. Sealed bid(s) for furnishing the Products and Services set forth in the schedule, will be returned to the Issuing Office identified in block 6 above. Please provide an original and 0 copies. If hand carried, deliver to the ASD receptionist located on the Lobby Floor of the address listed in Block 6. Bids must be received prior to 2:00 p.m. local time Aug 21, 2003.

CAUTION - LATE OFFERS: See Paragraph 3 of the Solicitation Instructions

This is an advertised solicitation which consists of (1) the schedule of Products and Services, pages 2 thru 8; (2) the solicitation instructions pages S-1 thru S-3; (3) The Contract Terms and Conditions page C-1 thru C- 8; and (4) other provisions, representations, certifications or specifications as are attached or incorporated herein by reference.

Offers will be publicly opened at: 2:10 p.m. local time Aug 21, 2003, in the ASD Conference Room, 110 South 7th Street, Lobby Floor.

All offers are subject to the terms and conditions set forth in the above referenced sections of this solicitation.

Douglas L. Wilson, Acting Director
Office of Acquisition Services

Douglas L. Wilson
Signature

OFFER

In compliance with the terms and conditions set forth in the solicitation, the undersigned agrees, if this offer is accepted within 90 calendar days from the date of receipt of offers, to furnish any or all items awarded at the prices offered in the schedule, delivered to the address in block 7, within the time specified in the schedule.

9. CONTRACTOR:	10: BILL TO:
Company Name: Skyconsters Address: 3500 Virginia Beach Blvd Suite 600 City, State: Virginia Beach VA 23452 Signature: Anne L. Salman Name (Typed): ANNE L. SALMAN Title: Account Executive Phone: 757 306-4910 x 7101	VITA Attn: Accounts Payable 110 South 7th Street 3rd Floor Richmond, VA 23219-3931

AWARD

11. Accepted as to Item Numbers:	12. Amount:	13. Award Date:
Lot 1, Item 2, & Item 3 @ $235 EA	Per Order	9/9/03

14. Name of Contracting Officer:	15. COMMONWEALTH OF VIRGINIA	PAGES:
Jeff Davis Contracts Manager	By:	1 of 8

FORM 62 Rev. 12/15/2000

DIT-62A	SCHEDULE	IFB NO.	Page:
01/15/91		03-035	2 of 8

NAME OF CONTRACTOR	REQUIRED DELIVERY DATE: (RDD) 60 DAYS ARO	INITIALS

ITEM NO	DESCRIPTION	QTY	UNIT	UNIT PRICE	EXTEND PRICE
	The Virginia Information Technologies Agency (VITA) desires to establish a statewide firm fixed price term contract with one or more manufacturers to provide, on as needed basis, data satellite equipment antennas, accessory items and service necessary to extend or enhance requested items to "Authorized Users" of the Commonwealth of Virginia. Authorized users are defined as: State Agencies, Institutions and other public bodies including political subdivisions as defined in the Code of Virginia, Section 8.01-385 (3)iii. For the purposes of this solicitation this includes all Virginia counties, cities, towns, boroughs and local school divisions under the authority of the Virginia school boards constituted under Title 22.1 of the Code of Virginia and will be hereinafter referred to as "authorized users". (See Appendix A for the 2 lots of equipment required). NOTES: 1. All prices submitted shall inclute VITA's Industrial Fund Adjustments (IFA). 2. Installation will be required on both mobile and fixed satellite equipment. All items requiring installation will be marked with an asterisk on each individual specification and bid sheet in Appendix A.				

NAME OF CONTRACTOR	REQUIRED DELIVERY DATE: (RDD) 60 DAYS ARO	INITIALS

1. The Virginia Information Technologies Agency (VITA) desires to establish a statewide firm fixed price term contract with one or more manufacturers/ dealers to provide, on an as needed basis, data satellite equipment, accessories, antennas and service for the Commonwealth of Virginia (COV) authorized users. Use of the contract will be mandatory for COV state agencies and institutions and optional for localities and other public bodies.

2. This service must provide broadband Internet satellite service across the United States. Service should be based on either dynamically assigned IP addresses and allow one (1) to thirteen (13) or greater users. The service must provide for satellite latency, ensure encryption and allow the data stream to be used efficiently in a Virtual Private Network (VPN). The service should be ordered and billed directly to using agencies at a fixed flat monthly rate without usage charges. Equipment must be made available via eVA using credit cards for payment.

3. The Commonwealth reserves the right to authorize exceptions for the use of the mandatory contract on a case by case basis and to conduct separate procurements whenever it is deemed to be in the best interest of the COV.

4. SPECIFICATIONS:

   a. Equipment, antennas and accessories: This IFB includes mobile and fixed data satellite equipment.

      Bids will be accepted from Manufacturers or authorized resellers. Purchases from the resulting contract(s) of this IFB will be for initial start up and complete replacement of existing equipment or any additions/ replacements to same during the contract period and for complete replacement of existing equipment.

   b. All products furnished shall be new and in current production. New satellite products released during the term of this contract shall be offered at the same price awarded for that brand.

   c. When requested by the ordering entity on the purchase order, equipment purchased shall be installed by the contractor at the installation price bid not later than 60 days after request as mutually agreed upon by the vendor and authorized user. Product demonstrations, when requested, shall be provided at no additional cost.

5. An award, if made, will be made to a maximum of the three (3) lowest responsive and responsible bidders and evaluated on the first year total cost including equipment, installation, set-up and technical support for all items listed for each individual lot.

6. In order to be considered for selection, Bidders may bid on one or more lots, but must submit product literature for each brand offered.

NAME OF CONTRACTOR	REQUIRED DELIVERY DATE:	INITIALS
	(RDD) 60 DAYS ARO	

7. This is to be a Virginia Information Technologies Agency (VITA) contract. The term of the contract will be for a period of two (2) years and the Commonwealth reserves the right to renew the contract for three (3) additional twelve (12) month periods at its sole discretion. The Commonwealth will notify the contractor at least thirty (30) days prior to expiration of the current term of its intent to renew the contract for additional periods.

8. Delays in award, beyond the anticipated starting date, may result in a change in the contract period indicated in the solicitation. If this situation occurs, the Commonwealth reserves the right to award a contract covering a period equal to or less than the initial term indicated in this solicitation.

9. The Commonwealth reserves the right to request any bidder to submit information missing from its bid, to clarify its bid, and to submit additional information which the Commonwealth deems necessary to evaluate the bidders offer.

10. Bidders shall clearly and specifically identify the product(s) being offered and enclose the complete and detailed descriptive literature, catalog cuts and specifications with the bid to enable the Commonwealth to determine if the product(s) offered meets the requirements of the solicitation. FAILURE TO DO SO MAY CAUSE THE BID TO BE CONSIDERED NON-RESPONSIVE.

11. The Bidder shall provide with each piece of equipment an operations and maintenance manual with wiring diagrams, parts list, and a copy of all warranties.

12. Contractor will provide on-site warranty/maintenance for a period of one year or the manufacturer's warranty length, whichever is greater. Warranty shall begin on date of acceptance by the user. For items that must be repaired on-site, the vendor guarantees that the user will not be out of service for more than twenty-four (24) hours. Contractor shall provide on-site warranty response within four (4) hours after notification by an authorized user that a failure has occurred. The Contractor may replace, repair or loan the end-user similar equipment to meet this requirement. Contractor shall provide on-site warranty during the Principal Period of Maintenance (PPM), 8:00 a.m. to 5:00 p.m., Monday through Friday, State holidays excluded.

13. Bidders shall provide in their response to this solicitation, contact information (names, mailing addresses, telephone numbers, e-mail addresses) of support staff for orders, technical questions/information, inventory availability, etc..

14. The contractor shall provide necessary preventive maintenance, required testing and inspection, calibration and/or other work necessary to maintain the equipment in operational condition during the warranty period.

NAME OF CONTRACTOR	REQUIRED DELIVERY DATE:	INITIALS
	(RDD) 60 DAYS ARO	

15. Contractor and/or service facilities shall grant permission for a representative of the Commonwealth to inspect their facilities at any time during normal business hours both prior to and after award.

16. Delivery of all requested contract items shall be made within 60 calendar days after receipt of a valid purchase order referencing any contract awarded as a result of this solicitation/contract. Contractor shall carry an adequate stock of equipment to insure such delivery for the duration of the contract.

17. Except when otherwise specified herein, all items shall be F.O.B. delivered at any point within the Commonwealth of Virginia as directed by the ordering authorized user.

18. If bidding on an item that includes service and installation, each Bidder shall indicate their service providers and local Virginia representative(s). These service providers must provide warranty backup and daily routine maintenance. Service providers must be capable of "system" maintenance as well as hardware maintenance.

    Service providers must be backed by the manufacturer with a complete line of parts. All parts for the equipment furnished must be available for a period of at least five (5) years from the date of contract termination. All parts used in the repair of satellite equipment furnished under this contract must be the exact replacement part specified and supplied by the manufacturer. Any exception necessary because of part unavailability or other unusual situation must have prior approval of the VITA communications engineer in the case of COV state agencies and institutions or the purchaser in the case of other authorized users.

    Each Bidder must demonstrate, when requested, to the Commonwealth of Virginia that their service personnel are being consistently trained in the function and maintenance of all new products as well as standard products by providing updates of personnel certification on these products.

19. The successful Bidder shall provide each ordering agency an instruction/ maintenance manual for each type of equipment including accessories provided. Manuals for equipment purchased by political subdivisions shall be sent directly to the address furnished by them.

20. BID SAMPLES: Upon request from VITA/OAS, the bidder(s) shall submit bid samples for each product within ten (10) calendar days. FAILURE ON THE PART OF THE BIDDER TO PROVIDE SUCH SAMPLES WITHIN THE SPECIFIED TIMEFRAME OR TO COMPLY WITH THESE INSTRUCTIONS MAY BE CAUSE TO CONSIDER THE BID AS NONRESPONSIVE.

Paragraph #20 Continued:

Bid samples shall be an exact and true representative sample of the actual material offered. Each bid sample shall be properly tagged or labeled with the name of the bidder and manufacturer, the bid opening date, the requisition or inquiry number and the specific commodity or item number. Bid samples shall be provided at no additional costs to the Commonwealth. Bid samples will be handled and disposed of in accordance with paragraph 5.6 of the Vendors Manual.

Submit bid samples to: Acquisition Services Directorate
Virginia Information Technologies Agency
110 South 7th Street, East Lobby
Richmond, Virginia 23219

21. Any bid in response to this solicitation shall be valid for 90 days. At the end of the 90 days the bid may be withdrawn at the written request of the Bidder. If the bid is not withdrawn at that time it remains in effect until an award is made or the solicitation is cancelled.

22. The purchasing agency reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty, upon 60 day written notice to the Contractor. Any contract cancellation notice shall not relieve the Contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of cancellation. Cancellation of Purchase Orders shall be made in accordance with paragraph 7.15 of the Vendors Manual.

23. By signing this solicitation, the offeror accepts VITA's Industrial Fund Adjustment (IFA) provisions, to include the Contractor's Report of Sale, as stated in the attached Terms and Conditions.

24. By signing this solicitation, the offeror agrees that the invoice price to the Commonwealth for any contract item shall be the best price available which includes the IFA to any authorized user located in the Commonwealth of Virginia for the duration of the contract. In the event that, during the term of the contract the offeror has delivered the products or services proposed at a lower cost, the Commonwealth will be entitled to the lump sum difference in pricing for all products or services purchased from the date of the infraction.

25. Price adjustments may be permitted only for changes in the Contractor's cost of materials. No price increases will be authorized for 365 calendar days after the effective date of each contract. Price escalation may be permitted only at the end of this period and each 180 days thereafter and only where verified to the satisfaction of the Contracts Manager, VITA. However, "across the board price decreases are subject to implementation at any time and shall be immediately conveyed to the Commonwealth.

NAME OF CONTRACTOR	REQUIRED DELIVERY DATE:	INITIALS
	(RDD) 60 DAYS ARO	

26. ORDERS: Applicable departments, institutions, agencies and other authorized users of the Commonwealth MAY order by one of the following methods:

    a. Issuing Agency Purchase Orders.

    b. Verbal order (for orders valued under $2,000): Local control number must be provided by the authorized user's ordering official which must also appear on the invoice.

    c. Charge card: An ordering and payment process under contract with American Express (AMEX). Each order must not exceed $5,000 - payment will be made to contractor by AMEX within three business days. Equipment must be made available via eVA using credit cards for payment.

    d. A delivery order issued by th Office of Acquisition Services, VITA.

27. SPECIAL OR EDUCATIONAL DISCOUNTS:

    a. During the contract period, if the Contractor offers promotional discounts as a general practice or offers educational discounts to schools and institutions of higher education for items under this contract, with the result that those prices are lower than the prices available under this contract, then the promotional discounts shall be made available to schools and institutions of higher education eligible to place orders against this contract.

    b. The effective date for price changes/discounts will be the date that the lower prices/discounts are made available to the Contractor's customers generally or to schools and institutions of higher education as applicable.

    c. If the Contractor does not sell to purchasers eligible to place orders against this state contract at the lower prices/discounts required by sub-paragraph a. above, it shall owe a rebate to each affected purchaser which is equal to the amount of the overcharge. Said rebate shall be made within 30 days after the purchaser requests the rebate whichever comes first.

28. Minimum orders will be $100.00 for F.O.B. delivery to ordering agencies within the Commonwealth of Virginia. For orders of less than $100.00, the Contractor will be permitted to add actual transportation cost (pre-paid) to the invoice for payment, or the agency may purchase such order off contract from other sources. Partial shipments of less than the minimum order value which are made at the option of the Contractor shall be made F.O.B. Destination with no transportation charges added. If at the agency's request shipments are below the minimum order value, the Contractor may add actual transportation cost to invoice for payment.

29. The bid price shall be for complete installation ready for the Commonwealth's use, and shall include all applicable freight and installation charges and the IFA. Extra charges will NOT be allowed.

NAME OF CONTRACTOR	REQUIRED DELIVERY DATE:	INITIALS
	(RDD) 60 DAYS ARO	

30. By responding, the Bidder agrees that the products and services are to be provided solely under the Contractual terms and conditions attached to this solicitation and the provisions as delineated in this solicitation document. Any terms and conditions, clarifications and/or additions thereof contained in the bid will not apply to any transaction under the contract and may render the vendor's bid non-responsive.

31. Any questions concerning this solicitation must b submitted, in writing, to the attention of Dave Butler at the address listed in Block #6, page 1 of this solicitation no later than August 14, 2003. Please mark the outside of your envelope "QUESTIONS CONCERNING IFB #2003-035". Written questions may be submitted via e-mail to dave.butler@vita.virginia.gov, or via facsimile to (804) 371-5969. No response will be furnished to telephone calls.

32. The Office of Acquisition Services, VITA, maintains a web site with a URL of www.oas.virginia.gov This web site provides information about OAS and acquisitions conducted by OAS for Information Technology related items. Vendors are invited to check this site regularly.

33. Results of this solicitation will not be given out by telephone. Vendors wishing a copy of the bid results must include a self-addressed, stamped envelope along with their bid. The envelope should be marked with the words "BID RESULTS" and the "IFB #2003-035". Awards will also be posted to the OAS web site www.oas.virginia.gov

34. Bidder's attention is directed to Section 2.b, page S-1, of the Solicitation Instructions concerning the requirement for Federal Identification Numbers (FIN) to be placed on page 1 of the Invitation for Bids. Please place this number in the space provided on page 1. PLEASE NOTE THAT FAILURE TO PROVIDE THIS NUMBER MAY RESULT IN OUR INABILITY TO VERIFY YOUR REGISTARTION AND YOUR BID BEING RULED NON-RESPONSIVE.

35. All vendors are reminded to sign and return Attachment "A" to IFB 2003-035, Certification Regarding Lobbying.

36. Offerors must be registered with the Electronic Virginia procurement solution (eVA) prior to award. Bidders who are not registered with eVA will not be eligible for award. To register, visit: http://www.eva.state.va.us

Appendix A

Lot 1
Invitation to Bid
Broadband Satellite Hardware and Service

ITEM 1
Mobile Satellite System
The System should consist of a mobile mount and antenna, receiver and transmitter modems, an antenna control unit and a gateway. System should be capable of automatically pointing to the required satellite. Should have GPS location, heading and altitude. System should be capable of manual operation. Typical Broadband speeds up linking 30 – 90 Kbps and down linking 400 – 900 Kbps. System to be similar to DataStorm Mobile High Speed Internet System or approved equal.

Quantity 1 Each

State Model: Mobile DW4020

Model: Mobile DW4020 $ 4495.50 /each

Installation $ 600.00

Annual On-Site Maintenance $ 300.00

TOTAL $ 5395.50

ITEM 2
Fixed Satellite System
The System should consist of a fixed mount and antenna, receiver and transmitter modems and an Network Access Point (NAP) or gateway. Typical Broadband speeds up linking 30 – 90 Kbps and down linking 400 – 900 Kbps. System to be similar to Direct Wav Model IG-1500 High Speed Internet System or approved equal.

Quantity 1 Each

State Model: DW4020.74

Model: DW4020.74 $ 1349.10 /each

Installation $ 325.00

Annual On-Site Maintenance $ 300.00

TOTAL $ 1974.10

ITEM 3

Broadband Internet Satellite Service

This service must provide broadband internet satellite service to the Commonwealth. Service should be based on both dynamically assigned IP addresses and/or static IP addresses. The service should be set up to allow one (1) to 13 or greater users. Service should be universally available throughout the United States. The service must provide for satellite latency, must ensure encryption and allow the data stream to be used efficiently in a Virtual Private Network (VPN). The service should be a flat rate with unlimited time, no per minute rates.

Satellite Service BASIC LEVEL DW4020 with SVPN 1-10 USERS.

Satellite Flat rate service per month	$ 109.00
Dynamical IP Address	$ ∅
Static IP Address	$ 10.00
~~**Any Setup Fees**~~ VPN monthly	$ 27.00
TOTAL	$ 146.00

Award Total

Lot 1A
Item 1 (Mobile System) and Item 3 (Service) $_____

Lot 1B
Item 2 (Fixed System) and Item 3 (Service) $_____

ITEM 3
Broadband Internet Satellite Service
This service must provide broadband internet satellite service to the Commonwealth. Service should be based on both dynamically assigned IP addresses and/or static IP addresses. The service should be set up to allow one (1) to 13 or greater users. Service should be universally available throughout the United States. The service must provide for satellite latency, must ensure encryption and allow the data stream to be used efficiently in a Virtual Private Network (VPN). The service should be a flat rate with unlimited time, no per minute rates.

Satellite Service Plus Level DW4020 with SVPN 11-25 users.

Satellite Flat rate service per month	$ 190.00
Dynamical IP Address	$ ∅
Static IP Address -5	$ 45.00
~~**Any Setup Fees**~~ SVPN monthly	$ 49.50
TOTAL	$ 284.50

Award Total

Lot 1A
Item 1 (Mobile System) and Item 3 (Service) $_____

Lot 1B
Item 2 (Fixed System) and Item 3 (Service) $_____

ITEM 3
Broadband Internet Satellite Service
This service must provide broadband internet satellite service to the Commonwealth. Service should be based on both dynamically assigned IP addresses and/or static IP addresses. The service should be set up to allow one (1) to 13 or greater users. Service should be universally available throughout the United States. The service must provide for satellite latency, must ensure encryption and allow the data stream to be used efficiently in a Virtual Private Network (VPN). The service should be a flat rate with unlimited time, no per minute rates.

Satellite Service Plus 2 Level DW4020 11-25 users. (No VPN)
Additional Upload Speed Package

Satellite Flat rate service per month	$ 190.80
Dynamical IP Address	$ X
Static IP Address - 5	$ 45.00
Any Setup Fees	$ X
TOTAL	$ 235.00

Award Total

Lot 1A
Item 1 (Mobile System) and Item 3 (Service) $_____

Lot 1B
Item 2 (Fixed System) and Item 3 (Service) $_____

Lot 2
Invitation to Bid
EMnet Satellite Hardware and Service

Item 1
Mobile Satellite System
The System should consist of a mobile mount and antenna, receiver and transmitter modems, an antenna control unit and a gateway. System should be capable of automatically pointing to the required satellite. Should have GPS location, heading and altitude. System should be capable of manual operation. Typical Broadband speeds up linking 30 – 90 Kbps and down linking 400 – 900 Kbps. System to be similar to DataStorm Mobile High Speed Internet System or approved equal.

Quantity 1 Each

State Model: Mobile DW4000 & SNS

Model: Mobile DW4000&SNS $5031.00 /each

Installation $ 600.00

Annual On-Site Maintenance $ 300.00

TOTAL $5931.00

Item 2

Fixed Satellite System (Radio Station Package) SEE ATTACHMENT FOR .74 METER dish.

The radio station consists of a 1 meter satellite receive antenna, LNB, cable, receiver, and computer on which the EMnet software is installed and running. Remote stations require either a direct connection to the Internet or a telephone dial-up connection via an Internet Service Provider.The fixed satellite system consist of a oval satellite antenna, matching integrated outdoor electronics and the indoor units. The indoor equipment consists of one or two USB satellite adapters:

- **ITU (Indoor Transmit Unit).**
- **IRU (Indoor Receive Unit).**

Indoor equipment package includes the ITU, IRU, power supply, USB cable, and ITU-IRU interconnection cable. The IRU is a DVB compliant satellite adapter that can be used alone, in the one-way configuration, or together with the ITU for two-way operation.
The ITU is designed to be an add-on capability to a standard receive-only IRU. When the ITU is installed and configured, the user will have the ability to select the satellite instead of the modem as the outbound route. When this option is selected and the ITU is available, the system is essentially "always on". The ITU should connect to the IRU through the ITU-IRU interconnection cable, so that only one USB port is required to operate the indoor equipment.

The satellite antenna is equipped with the following:

- **A single LNB to receive data from the satellite.**
- **A radio unit to transmit data to the satellite.**

As an option to the system it can be equipped with an additional dual- LNB to receive
DIRECTV using the same antenna. The outdoor equipment should be is connected by two RG-6 coaxial cables to the indoor equipment.
System to be similar to Direct Wav Model DW4000 System or approved equal.

Quantity 1 each

State Model: DW4000.98 2way with mount

Model: DW4000.98 $1368.10 /each

Installation $325.00

Annual On-Site Maintenance $300.00

TOTAL $1993.10

Item 3

Fixed Satellite System (Receiver Package)

The receive only hardware package includes a 1.0 meter satellite dish, up to 300 feet of antenna cable, LNB, non-penetrating roof mount, and LAN compatible satellite receiver. The indoor equipment consists of one or two USB satellite adapters:

- **IRU (Indoor Receive Unit).**

Indoor equipment package includes the IRU, power supply, USB cable, and IRU interconnection cable. The IRU is a DVB compliant satellite adapter that can be used alone, in the one-way configuration. The IRU cable is configured to use one USB port.
The satellite antenna is equipped with the following:

- **A single LNB to receive data from the satellite.**

The outdoor equipment should be is connected by one RG-6 coaxial cables to the indoor equipment.
System to be similar to Direct Wav Model DW4000 System or approved equal.

Quantity 1 Each

State Model: N/A

Model: _____ $_____ /each

Installation $_____

Annual On-Site Maintenance $_____

TOTAL $_____

Item 4
EMnet Satellite Service

EM*net* is a satellite based warning and messaging system designed specifically to meet the needs of the Emergency Management community. EM*net* uses components of the TCP/IP environment as well as satellite technology to deliver the message. Built in redundancies and such capabilities as Forward Error Correction and Missed Packet Collection make EM*net* a superior messaging system. This service should provide up to 500 MB of download capability daily. The service should be a flat rate with unlimited time, no per minute rates.

Typical Applications include:

- **Attack Warning**
- **Earthquake Warning**
- **Hazmat coordination**
- **Weather warning**
- **Radiological warning**
- **Bioterrorism alerts**

Satellite Service Quantity 1 each

Satellite Flat rate service per month $ N/A

Dynamical IP Address $_____

Static IP Address $_____

Any Setup Fees $_____

TOTAL $_____

Options
Software Quantity 1 each
EAS Originate Software $_____

Maintenance Quantity 1 each
Dell 4 year $_____

Computer, EMNet Quantity 1 each $_____
Pentium III at 500 MHz or more
128 Megs RAM
2 Ghz Hard Drive
Floppy Disk Drive
CD-Rom Drive

Windows XP
USB port

Award Total $_____

Lot 2A
Item 1 (Mobile System), and Item 4 (Service) $_____

Lot 2B
Item 2 (Fixed System) and Item 4 (Service) $_____

Lot 2C
Item 3 (Fixed System) and Item 4 (Service) $_____

NOTE: **Quantities of one (1) each are for the initial solicitation, however, the Commonwealth reserves the right to procure additional quantities at the prices quoted for the duration of the initial contract and any subsequent renewals.**

Attachment Lot 2 Item 2

The satellite antenna is equipped with the following:

- **A single LNB to receive data from the satellite.**
- **A radio unit to transmit data to the satellite.**

As an option to the system it can be equipped with an additional dual- LNB to receive
DIRECTV using the same antenna. The outdoor equipment should be is connected by two RG-6 coaxial cables to the indoor equipment.
System to be similar to Direct Wav Model DW4000 System or approved equal.

Quantity 1 each

State Model: DW4000.74 2 way with mount

Model: DW4000.74 $ 809.10 /each

Installation $ 325.00

Annual On-Site Maintenance $ 300.00

TOTAL $ 1434.10

Item 3

Fixed Satellite System (Receiver Package)

The receive only hardware package includes a 1.0 meter satellite dish, up to 300 feet of antenna cable, LNB, non-penetrating roof mount, and LAN compatible satellite receiver. The indoor equipment consists of one or two USB satellite adapters:

- **IRU (Indoor Receive Unit).**

Indoor equipment package includes the IRU, power supply, USB cable, and IRU interconnection cable. The IRU is a DVB compliant satellite adapter that can be used alone, in the one-way configuration. The IRU cable is configured to use one USB port.
The satellite antenna is equipped with the following:

- **A single LNB to receive data from the satellite.**

The outdoor equipment should be is connected by one RG-6 coaxial cables to the indoor equipment.
System to be similar to Direct Wav Model DW4000 System or approved equal.

Quantity 1 Each

State Model: _____

Model: _____ $ _____ /each

Installation $ _____

Attachment Lot 2

~~ITEM 3~~

Broadband Internet Satellite Service

This service must provide broadband internet satellite service to the Commonwealth. Service should be based on both dynamically assigned IP addresses and/or static IP addresses. The service should be set up to allow one (1) to 13 or greater users. Service should be universally available throughout the United States. The service must provide for satellite latency, must ensure encryption and allow the data stream to be used efficiently in a Virtual Private Network (VPN). The service should be a flat rate with unlimited time, no per minute rates.

Satellite Service Basic DW4000

Satellite Flat rate service per month	$ 98.10
Dynamical IP Address	$ 8
Static IP Address - 1	$ 10.00
Any Setup Fees	$
TOTAL	$ 108.10

Award Total

Lot 1A
Item 1 (Mobile System) and Item 3 (Service) $_____

Lot 1B
Item 2 (Fixed System) and Item 3 (Service) $_____

Attachment Lot 2

~~ITEM 3~~

Broadband Internet Satellite Service

This service must provide broadband internet satellite service to the Commonwealth. Service should be based on both dynamically assigned IP addresses and/or static IP addresses. The service should be set up to allow one (1) to 13 or greater users. Service should be universally available throughout the United States. The service must provide for satellite latency, must ensure encryption and allow the data stream to be used efficiently in a Virtual Private Network (VPN). The service should be a flat rate with unlimited time, no per minute rates.

Satellite Service Plus Level DW4000

Satellite Flat rate service per month	$ 215.10
Dynamical IP Address	$ 0
Static IP Address - 1	$ 10.00
Any Setup Fees	$
TOTAL	$ 225.10

Award Total

Lot 1A
Item 1 (Mobile System) and Item 3 (Service) $_____

Lot 1B
Item 2 (Fixed System) and Item 3 (Service) $_____

Attachment Lot 2

~~ITEM 3~~

Broadband Internet Satellite Service

This service must provide broadband internet satellite service to the Commonwealth. Service should be based on both dynamically assigned IP addresses and/or static IP addresses. The service should be set up to allow one (1) to 13 or greater users. Service should be universally available throughout the United States. The service must provide for satellite latency, must ensure encryption and allow the data stream to be used efficiently in a Virtual Private Network (VPN). The service should be a flat rate with unlimited time, no per minute rates.

Satellite Service Basic Level DW4000 with SVPN

Satellite Flat rate service per month	$ 98.10
Dynamical IP Address	$ 8
Static IP Address	$ 10.00
~~**Any Setup Fees**~~ VPN monthly	$ 27.00
TOTAL	$ 135.10

Award Total

Lot 1A
Item 1 (Mobile System) and Item 3 (Service) $_____

Lot 1B
Item 2 (Fixed System) and Item 3 (Service) $_____

Attachment Lot 2

~~ITEM 3~~

Broadband Internet Satellite Service

This service must provide broadband internet satellite service to the Commonwealth. Service should be based on both dynamically assigned IP addresses and/or static IP addresses. The service should be set up to allow one (1) to 13 or greater users. Service should be universally available throughout the United States. The service must provide for satellite latency, must ensure encryption and allow the data stream to be used efficiently in a Virtual Private Network (VPN). The service should be a flat rate with unlimited time, no per minute rates.

Satellite Service Plus Level DW4000 with SVPN

Satellite Flat rate service per month	$ 215.10
Dynamical IP Address	$ X
Static IP Address	$ 10.00
~~**Any Setup Fees**~~ VPN monthly	$ 40.50
TOTAL	$ 265.60

Award Total

Lot 1A
Item 1 (Mobile System) and Item 3 (Service) $_____

Lot 1B
Item 2 (Fixed System) and Item 3 (Service) $_____

Appendix A attachment

Skycasters' SuperVPN

There are two ways to connect a remote location by VPN. One way is to run your VPN over the entire satellite internet connection from your corporate HQ to your remote location, with a noticeable loss of performance as the encrypted VPN data packets traverse the space segment. Even at speeds approaching the speed of light, the connection through the satellite will add 500 - 700 milliseconds of latency. Through the use of special software at the Hughes NOC in Maryland, this latency is "hidden" in the network, and as a result web browsing, FTP, email, etc. are not affected by this latency. Unfortunately, encrypted VPN packets cannot be spoofed, and the latency cannot be hidden. The result of this is that you can expect VPN performance to be slower that every other use of your satellite broadband connection.

The other way to create a VPN over satellite is called Super VPN. This simply involves reversing the equipment from a typical configuration. Instead of installing equipment at the remote location, you will install a Cisco router at your corp. HQ. This will create a secure tunnel between your VPN router at corp. HQ to our VPN concentrator and satellite gateway at the Hughes NOC in Germantown Maryland. From the Hughes NOC to the remote location, our private encrypted network will transport your data. This will give your VPN true broadband performance, and will even support multiple users at the remote location without the expected loss of VPN performance.

We can support either solution; it just depends on how much you will use the connection for VPN, and how important its performance is to the total picture. Please take a look at our VPN solutions by visiting **http://www.skycasters.com/vpn.htm** for a complete explanation of our services. The SVPN Whitepaper has been attached for review.

State Model: SVPN
Model: SVPN

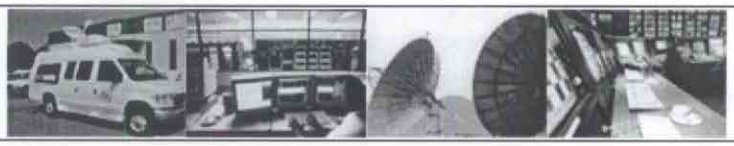
One-time Installation using your Cisco Equipment for Multiple Locations $1000.00

OR

One-time Installation with Pre-configured PIX 501 supplied by Skycasters $1495.00

As the State adds sites, the individual locations will be added to the SVPN at no additional charge.

Skycasters



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Satellite Internet Sales: 1-800-853-0434 or sales@skycasters.com

VEHICLE MOUNTED FIXED MOBILE

FCC Rules on Mobile & portable Units

USA Today Tech Review

Photo Gallery of Installed Units

Portable/Transportable Solution

As seen in USA TODAY Tech Reviews

Portable Internet service. Available wherever you need it.

If you need broadband Internet service anywhere you or your employees work or travel, even to the most remote locations of the desert, wilderness or mountains, Skycasters new 2-Way Satellite system will deliver. It can be mounted on a truck, trailer, RV or other vehicle and be operated from anywhere in North America (and some other places too).

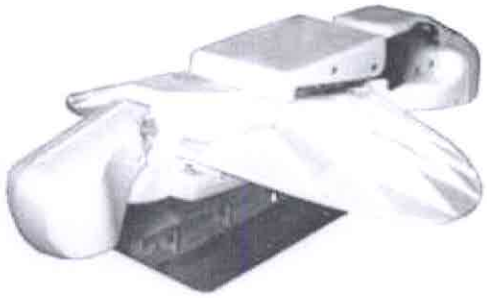
The Skycasters 2 -Way Satellite system requires no cell phones or phone lines. If you can see the Southern Sky, you can have broadband Internet service. This cost-effective system allows mobile or temporary workers, local and state governments along with construction, oil and gas exploration, forestry, emergency managment or other organizations to achieve broadband internet service wherever and whenever they need it. Just park the vehicle or trailer and use the system to automatically lock on to the satellite, then go to work - live on the internet.

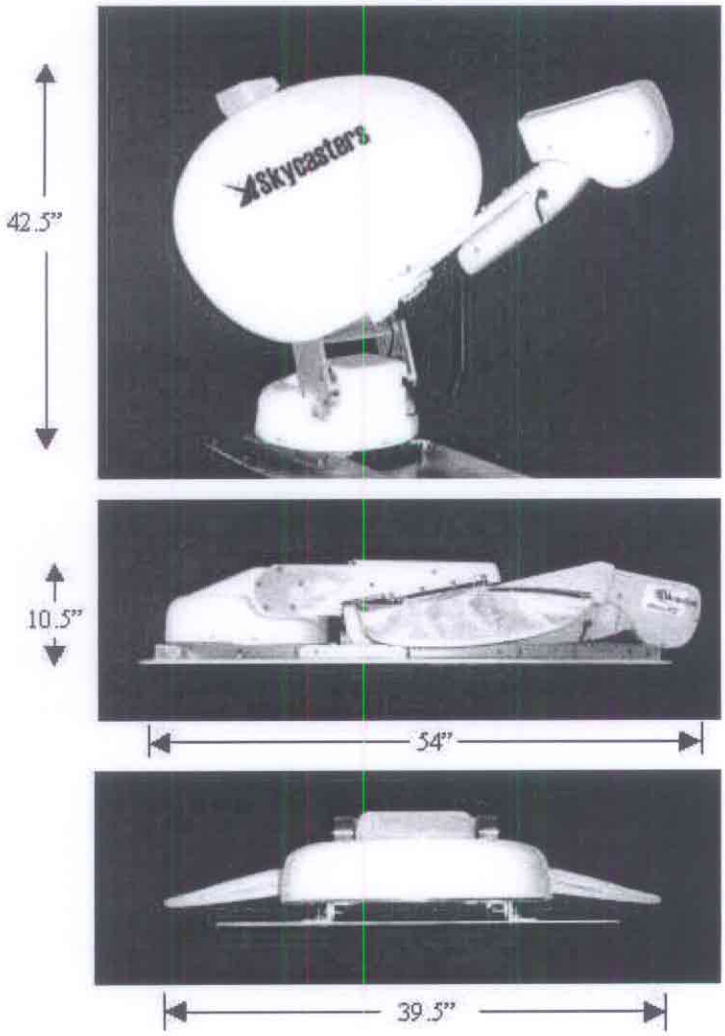
The Skycasters portable solution is not FCC approved for use while the vehicle is in motion. It can however be operated within minutes after the vehicle is stopped and fully stabilized. Some special training is required of the operator. Certain restrictions of use apply, Skycasters Vehicle mounted and Portable/Transportable systems must be used in accordance with FCC and HNS guidelines for "Temporary-Fixed DIRECWAY Two-Way Satellite Earth Stations".

STANDARD FEATURES

- **Broadband 2-way Internet Anywhere!**
- **Satellite controls from laptop/desktop**
- **Automatic Search and Lock**
- **Manual override to locate ANY satellite****
- **Can withstand wind speeds of 40 mph**
- **Safety Stow features**

The dish automatically folds down to a height of 10.5 inches





Product Specifications

Satellite Dish:

- **Mounting Plate Dimensions:**
- **48" long, 21 3/4" wide**
- **Dish Stowed Dimensions:**
- **54" long, 39.5" wide, 10.5" height!**
- **Dish Face Diameter - 39.5"**
- **Weight - 105 lbs.**

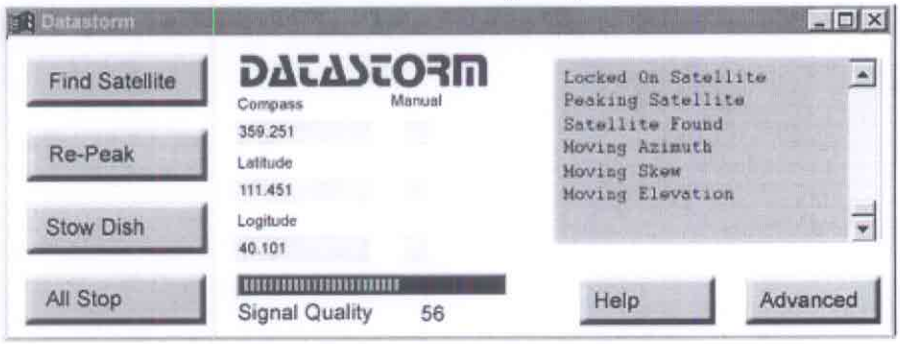
Satellite Controller
(Inside Vehicle)

- **Dimensions 1"h x 11"w x 9"d**

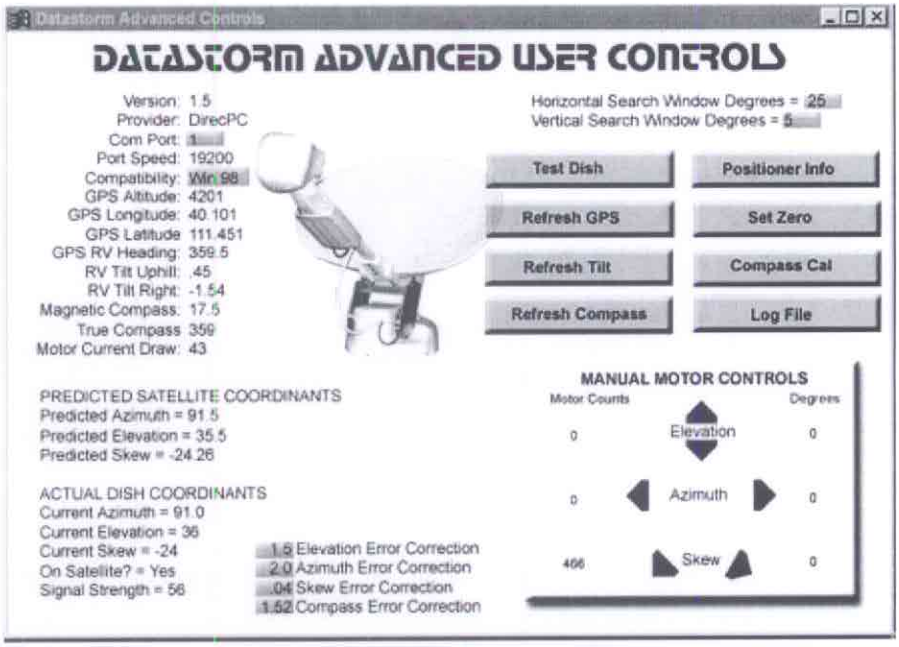
Operating Parameters:

- **-20 degrees F to 120 degrees F**
- **Power - 12 Volt DC**

Datastorm Automatic Deployment Software



Standard User Interface



Advanced User Interface

(seen when the ADVANCED button is clicked on the standard interface)

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DW4020 SATELLITE INTERNET SERVICE

DIRECWAY DW4020 Broadband Satellite Internet System

Internet via satellite is made simple with the **DW4020**, a stand-alone broadband satellite internet access appliance that requires no software to be loaded on any user machines and provides a standard ethernet interface. The DW4020 satellite internet access system will support a network hub or switch and/or connect directly to PC, MAC, UNIX or other computers or IP enabled devices. All upload and download traffic is carried over the satellite internet connection.

Our newest offering, the 4020 supports up to 10, 25 or 50 connected computers. The 4020 has 2 basic configuration options.

HUGHES

The Skycasters Direcway DW4020 broadband satellite internet access system includes a built-in 4 port standard 10/100 ethernet switch that works with any type of computer, router or other TCP/IP ethernet device. The Direcway DW 4020 satellite internet access system with private IP addressing supports DHCP and up to 10 connected users. It can provide up to 254 IP addresses. The built-in 4 port switch/hub can be used to connect up to 4 PCs to the broadband satellite internet connection. For sharing the satellite internet access with additional PCs, a hub or switch can be connected to one of the ethernet ports, allowing the Hughes satellite internet access to be shared by many computers.

With Option 1 the 4020 provides a NAT router with private IP addresses.

The Direcway DW4020 can also be configured by the satellite internet provider to provide either one or five usable static/routable public IP addresses, however; there is no NAT or DHCP provided with the public IP address options. In this configuration a small router can be added to share the satellite internet connection with additional users. Please discuss configuration options and limitations with your Skycasters Satellite Internet Sales Engineer.

With Option 2 the 4020 can have 1 or 5 public-static IP

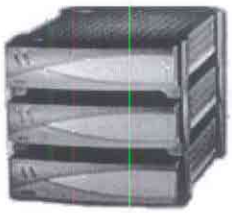
The Direcway DW4020 broadband satellite internet

addresses.

access system is also compatible with Wi-Fi (802.11a/b) wireless or standard routers. With the DW 4020 satellite internet service there is no software to load, nothing to manage, no moving disks, no cooling fans access system is also compatible with Skycasters satellite VPN services. Just plug in your computers and enjoy high-speed satellite internet access!

Skycasters Sales Engineers assist with selecting the proper configuration.

In addition to its 4 port ethernet hub, the **DW4020** incorporates the same **Indoor Receive and Transmit Units (IRU & ITU)** as the **DW4000:**



Dimensions
5" high x 6" wide x 8" deep

2 different service levels to chose from

4 port Ethernet Switch
Indoor Transmit Unit (ITU)
Indoor Receive Unit (IRU)

The DW4020 satellite internet access system is installed with the same **Outdoor Equipment** as **the DW4000**:

Installations are generally performed within 10 days of the order.

- **Dish Antenna**
- **Transmitter**
- **LNB**
- **Mounting Hardware**

Dish Antenna

The standard dish antenna is .74 meters.

The dimensions are 24" X 31". The dish connects to a 36" metal arm that is 2" in diameter. The pedestal has an adjustable mounting bracket at its base, and may be used for either a wall or penetrating roof mount.

FREE 24 x 7 technical support is included in all service plans.

Transmitter

The transmitter is a powerful unit mounted on the feed arm. Care should be taken not to allow animals or people to be in front of the dish at any time, as it is a powerful microwave transmitter. The transmitter receives its signal and power from the Indoor Transmit Unit (ITU).

LNB

(Low Noise Blocker receives the incoming signals and forwards them to the Indoor Receiver Unit (IRU)

Mounting Hardware

The mounting hardware options are addressed in our

installations section.

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DW4000 SATELLITE INTERNET SERVICE

SNS - Satellite Network Server

DIRECWAY DW4000 Series System with SNS

The Skycasters 4000-SNS broadband satellite internet access hardware delivers high speed satellite internet service at a surprisingly affordable price, while allowing satellite internet service to be shared by up to 50 or more computer workstations. Combining Skycasters Direcway Certified SNS (Satellite Network Server) with the Direcway DW4000 produces a highly reliable broadband satellite internet access solution with a long list of features and capabilities.

HUGHES

Our Best-Selling Solution, the 4000-SNS supports up to 10, 25 or 50 connected computers.

The 4000-SNS satellite internet access system communicates with the satellites in a "two-way" manner; that is, it receives (download) data and the transmits (upload) data signals through the satellite. And with the Skycasters 4000-SNS, your satellite internet services are always-on.

The Skycasters SNS (Satellite Network Server) is DIRECWAY CERTIFIED for compatability with the Direcway satellite internet system.

Standard ethernet interface supports any type of computer or network including Linux, Mac, etc.

The 4000-SNS is typically installed with the following **indoor equipment:**

- **Satellite Network Server (SNS)**
- **Indoor Transmitter Unit**
- **Indoor Receiver Unit**

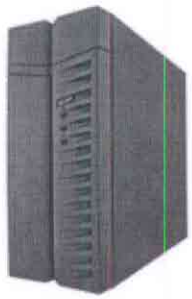
The SNS (Satellite Network Server)

The heart of the Skycasters satellite internet service is the Skycasters SNS. The SNS provides the **gateway**, **router**, **firewall** and **remote administration** functionality critical to a high-reliability multi-user deployment of satellite internet service. The Skycasters SNS is DIRECWAY CERTIFIED for

compatibility.

FREE 24 x 7 technical support is included in all service plans.

The SNS also includes special software that improves the stability and reliability of the satellite internet connection, and provides a standard ethernet interface. The SNS also eliminates the need to have a telephone line available at the time of installation, or at any other time.



Dimensions
13" high x 5" wide x 13.5" deep

Satellite Network Server

No satellite software to load on your computers.

The SNS is a proprietary Intel-based hardware device designed and engineered specifically to support the Skycasters and Hughes Network Systems Direcway broadband satellite internet connections. Click Here for complete information on the SNS.
Click Here for complete information on the SNS

2 different service levels to chose from.

Indoor Receiver and Transmit Units (IRU & ITU)
The IRU and the ITU are integral parts of the Skycasters/ Hughes satellite internet access system. Connected to the SNS, these two components weigh less than two pounds.

Nationwide installations are performed within 10 days of order.

Dimensions
6" high x 3" wide x 8" deep

Indoor Receiver Unit (IRU)
Indoor Transmit Unit (ITU)

Skycasters Sales Engineers assist with selecting the proper configuration.

The DW4000 is typically installed with the following **Outdoor Equipment:**

- **Dish Antenna**
- **Outdoor Transmit Unit**
- **LNB**
- **Mounting Hardware**

Dish Antenna

The standard dish antenna is .74 meters.

The dimensions are 24" X 31". The dish connects to a 36" metal arm that is 2" in diameter. The pedestal has an adjustable mounting bracket at its base, and may be used for either a wall or penetrating roof mount.

Outdoor Transmitter Unit

The satellite internet transmitter is a powerful unit mounted on the feed arm. Care should be taken not to allow animals or people to be in front of the dish at any time, as it is a powerful microwave transmitter. The transmitter receives its signal and power from the Indoor Transmit Unit (ITU).

The LNB

(Low Noise Blocker receives the incoming signals and forwards them to the Indoor Receiver Unit (IRU)

The Mounting Hardware

The mounting hardware options are addressed in our **installations section.**

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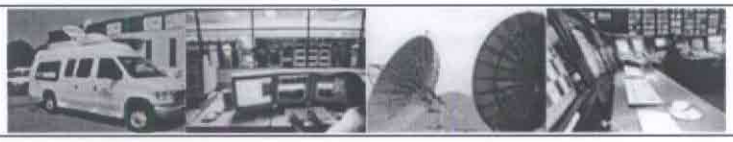

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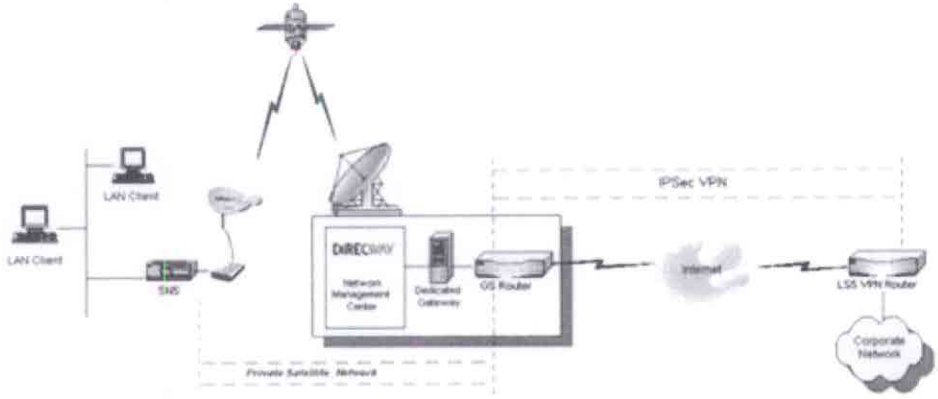
SUPER VPN

SuperVPN White Paper

Skycasters ***SuperVPN*** is the fastest, most cost-effective satellite VPN available from any provider. This is not the same satellite VPN service offered by other satellite internet providers, including the various providers of the Direcway Business Edition satellite internet service. ***SuperVPN*** is a unique Skycasters offering that combines Skycasters facilities and satellite VPN technology with the Direcway satellite internet system, eliminating the traditional performance problems associated with VPN-over-satellite. ***SuperVPN*** can be cost effective with as little as a single remote location. There is no minimum or maximum number of sites a customer may or must deploy.

Skycasters and other Direcway providers support most popular "regular" clinet-server VPNs (Cisco, Nortel, CheckPoint etc). Satellite VPN services over the Direcway Business Edition service, however this application does not produce a robust user experience. If you have tried the Direcway satellite system then you know that its email, web-browsing and FTP performance is very satisfactory. If you have tried using a VPN over the Direcway or other satellite services, you also know that performance suffers badly when a VPN is activated. VPN service over satellite without ***SuperVPN*** is typically a <33 kbps single user application at its best. Skycasters ***SuperVPN*** satellite VPN service eliminates this problem.



To enable the ***SuperVPN*** satellite VPN service, a Skycasters provided IPSec compliant VPN termination device will be installed at your headquarters location. All data traffic between your headquarters and your remote satellite locations will be transported exclusively across secure connections. Traffic is carried across the internet using IPSec 3DES VPN to our satellite uplink center, and

from the uplink center traffic is carried across a secure, private satellite network to your remote site. Data traffic across the private satellite space-link is protected by hardware-based (ASIC) encryption, DES encryption and Conditional Access using session-key technology. Each remote location requires our standard installation of the satellite internet dish & SNS satellite router (or DW4020).

Due to the Asymmetric nature of satellite internet, certain applications do not perform very well over satellite, regardless of whether used in a VPN, ***SuperVPN*** or in the clear. SuperVPN is not a not a cure-all for satellite-related performance issues, it simply is a way to use VPN without the traditional severe VPN-induced degradation. It does not increase whatever level or speed of service that would be available for a particular protocol/application above the level found if the application/protocol were to be used "in the clear".

The basic ***SuperVPN*** satellite VPN service will support from 1 up to 50 remote sites. Customers have the option of split-tunneling non-secure public internet traffic directly to the internet backbone from the remote site, or having all traffic tunneled to the headquarters location for routing to the internet. ***SuperVPN*** satellite VPN is not a transparent-LAN application, although limited host-to-remote connectivity may be established with customized solutions.

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VPN OVER SATELLITE WHITE PAPER

Faster secure network connections using satellite Internet access.

Summary

This paper explains in relatively non-technical terms why VPN performance over satellite is sluggish when compared to the use of other applications across a space platform. It also presents a unique and powerful solution to these performance deficiencies.

Introduction

Virtual Private Networks consist of two or more computers or networks of computers that communicate securely with each other across an unsecured or public network such as the Internet. VPNs are established by using compatible encryption and decryption hardware or software at each end of the connection.

For various reasons, there is a constantly growing requirement from the business and government sectors to provide secure broadband data connections to their remote locations, including employee residences.

Secure access at useful speed is not available with traditional dialup access and faster solutions are in ever increasing demand. While DSL and Cable Internet are clearly the most cost effective solutions, DSL and cable do not reach approximately one-third of the remote locations that seek broadband service.

Two-way satellite Internet service is fast and reliable. It works very well for browsing, email, and most other Internet applications. In fact, reliability exceeds 99.8 %. The increasing need for broadband services combined with very affordable solutions is driving demand for satellite services across North America. *However, until today VPN has typically had a much lower performance (>70% degradation) than traditional web browsing or email over the same satellite link due to factors discussed herein.*

Background

In order to perform properly in conjunction with traditional terrestrial networks (Internet, intranet), satellite data networks must employ special techniques to deal with the increased latency caused by the

46,000 mile space segment of the connection. The increased latency is induced by the extra milliseconds required for data to travel the extra distance. While not related directly to speed , latency can cause a severe speed performance problem over satellite links if not handled properly.

TCP/IP is the "language" of the Internet. It works by sending packets of data, and then waiting for acknowledgments of receipt. These acknowledgments signal the sender to transmit more packets. If an acknowledgement does not arrive in a timely manner, TCP assumes the packet was lost or discarded due to network congestion and the packet is resent. TCP then slows the speed at which packets are being sent in order to avoid retransmission.

TCP works by starting a TCP/IP session slowly. Speed builds as the networks capacity to carry traffic is verified by the rate of the acknowledgments. This effect is known as slow-start. Since TCP was designed for terrestrial networks that have less latency than a satellite network, the longer satellite latency (720ms range) causes TCP to expect an acknowledgment before the round trip to the remote site can be completed. TCP interprets the additional satellite link latency as network congestion. If uncorrected, this effect causes all additional packets to be sent at the slow-start rate.

In all current-generation satellite data networks IP acceleration (IP spoofing) compensates for the space-link transit time. Spoofing is accomplished by special equipment at the carrier's main satellite hub site. This equipment masquerades itself so as to appear as if it were the remote location, while acting as a relay or forwarder for data packets going to and from the remote satellite location. When the spoofing equipment receives Internet traffic destined for a remote satellite location, it acknowledges receipt of the packet so more data packets will follow immediately. In this manner, the latency is "hidden" because the acknowledgments are returned rapidly. As a result, TCP moves out of slow-start mode quickly and builds to the highest possible speed.

The acceleration equipment watches for real acknowledgements coming back from the remote site and suppresses them. If the acknowledgement is not received from the remote site, the system automatically re-sends the packet from its buffer. Thus, satellite-connected sites communicate seamlessly with servers on the terrestrial Internet.

In a VPN-over-satellite session, the packets are encrypted and, therefore, can only be acknowledged by the VPN client software at the remote site – not by the spoofing equipment. Spoofing is bypassed. Consequently, acknowledgments are delayed and the slow-start data rate remains in place during the entire session. This results in substantial performance degradation. VPN over satellite may be approximately as fast dial-up, but is not the robust multi-user broadband experienced when web browsing or using email over the same satellite link.

The *SuperVPN* Solution

The new satellite-powered VPN service recently announced by Skycasters (in conjunction with Hughes Global Services) is called ***SuperVPN***. This solution is not truly a VPN, but a hybrid VPN and PN (Private Network). It does not have the VPN-over-satellite performance limitations of it's competitors because Skycasters securely connects its private satellite network directly to it's customers headquarters network, eliminating the need to use a VPN across the space segment.

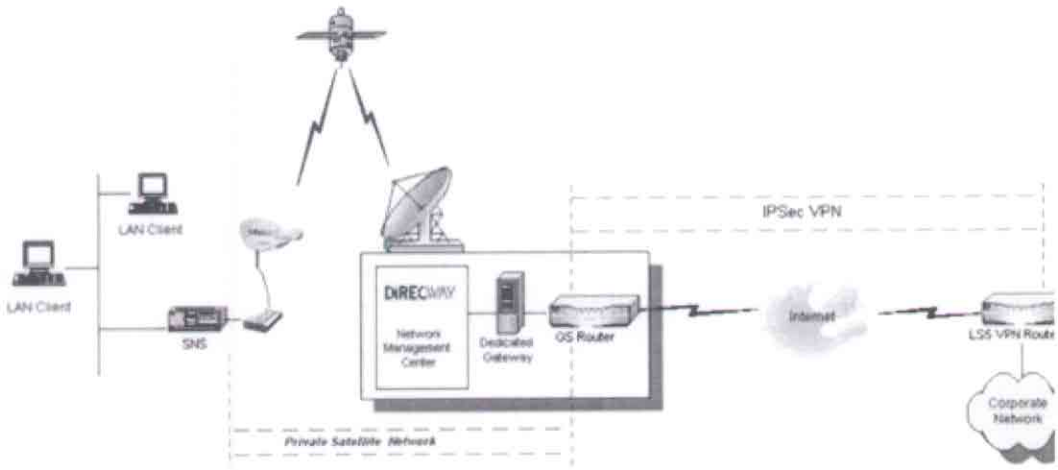
In the Skycasters ***SuperVPN*** secure network model, all data is doubly secured across the space link by both ASIC-based DES in addition to session-key encryption between the remote hardware (satellite modem) and the Skycasters routers and equipment collocated at the Hughes Network Systems satellite uplink center. This segment of the connection is therefore secure with or without added VPN technology.

Skycasters routes the secure traffic between its private satellite network and it's customers' headquarters network across a variety of customer-selected options including point-to-point T-1, Frame Relay PVC or VPN across the Internet. Since the Internet method is by far the least costly, it is the most popular. If the internet method is chosen then it is important to note that in the ***SuperVPN*** network configuration the VPN need only exist across the public Internet and not across the private satellite network. This completely avoids the performance problems of VPN-over-satellite because there is no VPN used across the satellite link.

As an option, split-tunneling at the Skycasters VPN router can allow non-secure traffic to directly access the Internet backbone at the Skycasters router, eliminating the need to unnecessarily backhaul this traffic to the headquarters router. Like all Skycasters applications, ***SuperVPN*** is designed to perform on the client side of a client-server connection. It should be noted that this service is not a transparent-LAN solution, although certain customizations may be employed to achieve nominal host-to-client connectivity.

The *SuperVPN* Network

The Skycasters ***SuperVPN*** high-performance secure solution allows the customer to establish dedicated leased-line or point-to-point VPN across the Internet to connect their headquarters network with Skycasters private satellite gateway at the Hughes facility in Germantown, MD. In the illustration below, an IPSec VPN secures the traffic while it passes over the public Internet to and from the customer's headquarters location and the Skycasters satellite gateway equipment. The traffic between the satellite uplink center and the remote satellite sites traverses the already-secure private satellite network.



SuperVPN VPN Segment

Since the Skycasters DIRECWAY-powered satellite network is itself a private network, the point-to-point VPN connection only has to be made across the Internet (the public portion of the data path).

The point-to-point VPN configuration connects dedicated Skycasters routers and equipment at the Hughes uplink center to a Skycasters provided router located at the customer's headquarters network. A permanent VPN session is established across the Internet between the Skycasters private network and the customers network, and all designated data traffic is sent through the established connection. In the ***SuperVPN*** scenario, the remote site computers do not require a VPN client to be installed. Also, since the encrypted private data is not tunneled end-to-end, it allows much greater speeds to be achieved by taking advantage of the performance-enhancing IP spoofing technologies. As mentioned previously, these performance enhancing characteristics are disabled when using VPN service across the space-segment, so confining the VPN to only the portion of the transmission where it is needed dramatically increases performance.

SuperVPN Space Segment

Skycasters Direcway Conditional Access utilizes encryption technology to protect the various services against unauthorized access on the satellite downlink. Conditional access provides privacy by protecting multimedia streams and digital file transmissions to a site (email, file transfers, etc) and preventing transmissions from being intercepted by any site except those designated by Skycasters.

The Direcway NOC (Network Operations Center) individually encrypts each multimedia stream or package with a unique session key. Access to a stream or package is controlled by the NOC's only making its session key available in usable form to individually authorized Direcway receivers. The NOC passes to a Direcway remote unit its session keys in a scrambled format only usable by that specific receiver. Each remote includes a tamper–resistant hardware crypto–facility (secure ASIC) in

which unique key material has been stored during the manufacturing process. The crypto–facility is only capable of decrypting with session key material created by the NOC especially for the crypto–facility. As such, the receiver is only capable of decrypting the appropriate satellite services, and no other receiver can decrypt the service unless intentionally enabled by the NOC as part of a broadcast or multicast application.

The NOC utilizes the Digital Encryption Standard (DES) with 56-bit key length as the bulk encryption algorithm over DVB (Digital Video Broadcast). Triple–DES with 112-bit key length is used within the key–distribution algorithms. There is no encryption algorithm required for the upstream data going to the NOC/VPN router at the satellite uplink center because the upstream channels (inroutes) are inherently secure based on their method of operation. Inroutes use a Time Division Multiple Access (TDMA) method of access and transmission, which means that multiple Direcway transmitters are all using the same inroute or set of inroutes for transmission. Transmissions occur in almost random bursts on the inroutes and the TDMA time-slot assignments of the transmissions are controlled via the receive/downlink channel, so compromise of outroute security would be necessary in order to compromise inroute security.

SuperVPN Network Security – Terrestrial Segment (Internet)

All traffic across the Internet between the Skycasters VPN routers at the satellite uplink center and the customer's headquarters location is secured by IPSec. Using the latest IPSec VPN technology, Skycasters is one of the first networks (satellite or terrestrial) to fully implement 3DES-CBC data encryption. Skycasters currently uses SHA-1, developed by the US National Security Agency for messaging security, and uses 3DES-CBC (Triple Digital Encryption Standard) for data encryption.

The result is that customers will connect to the Skycasters *SuperVPN* private satellite network with the security level of a dedicated private network, while using the Internet at a fraction of the leased line cost. Skycasters main VPN routers are collocated in the Direcway NOC facility and mediate all access between the Skycasters private satellite network and the Internet, leased lines and other satellite networks. These routers, in a fully redundant configuration, are capable of providing wire-speed Internet VPN to > 40,000 simultaneous VPN sessions at speeds of up to 40 Gbps.

Limitations of VPN over Satellite

Most regular internet applications like email and web browsing perform very well over satellite, delivering high speed service similar to DSL or Cable. There are some known issues with certain applications which are expanded upon below.

The Direcway service is asymmetrical, meaning that 80% of the bandwidth is allocated towards download traffic and 20% is allocated for uploads. For this reason, Direcway does not support applications that require a high-speed upload such as web hosting at the remote site

or 2-way video conferencing. Applications that are affected by high latency may have problems. Satellite latency in the range of 720ms - 1500 ms can be expected. These latency affected applications include interactive gaming, VoIP, and non-TCP/IP applications. Even though the satellite latency can be hidden from TCP/IP, applications themselves can be affected by latency.

Shared folders or drive mapping via NetBIOS will not perform properly over any satellite connection. Shared folders can be used by creating a directory using an application such as Microsoft Internet Information Server (free, and included in Windows 2000 and NT), Apache or other web front-end. SQL server applications need to be set up the same way for the same reasons. Any application that is compatible with a HTML front-end will perform better over satellite when set up in this fashion. Generally, any application that requires client software loaded at the remote site can have problems with latency unless adjustments are made at both the client and server end. These types of applications need to be evaluated individually by checking with the manufacturer to determine the effects of latency on the particular application.

Conclusion

Skycasters innovative and unique satellite VPN solution solves the VPN-over-satellite performance problems while maintaining the highest levels of security. The solution provides unprecedented cost effectiveness for networks with as few as one remote satellite site. Skycasters VPN over satellite runs more than twice as fast as comparable satellite VPN services. Hardware-based encryption including ASIC session-key and DES insure that the space segment is fully secure. IPSec VPN across the Internet keeps the terrestrial segment fully secure.

The Skycasters ***SuperVPN*** solution is priced comparably to regular satellite Internet service, but provides a much higher level of performance and security. Skycasters is currently the only provider capable of offering this service.

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SOLICITATION INSTRUCTIONS
REV. 03/01/02

1. EXPLANATION TO VENDORS

Any explanation desired by a vendor regarding this solicitation/invitation for bid must be requested in writing and with sufficient time allowed for a reply to reach the vendor before the submission of their bids. PRIOR TO SUBMISSION OF A BID, VENDORS ARE REQUIRED TO READ THESE INSTRUCTIONS, REVIEW THE SCHEDULE, READ ALL TERMS AND CONDITIONS AND CHECK THE ACQUISITION SERVICE DIVISION'S (ASD'S) WEB PAGE AT (HTTP://ASD.STATE.VA.US) FOR ANY AMENDMENTS OR CHANGES. THIS SOLICITATION IS SUBJECT TO THE PROVISIONS OF THE COMMONWEALTH OF VIRGINIA VENDOR'S MANUAL WHICH WAS REVISED IN DECEMBER 1998 AND ANY REVISIONS THERETO, WHICH ARE HEREBY INCORPORATED INTO THIS CONTRACT IN THEIR ENTIRETY. A copy of the manual is available for review at the purchasing office, and can be obtained by calling the Division of Purchases and Supply (804) 786-3842, or by accessing the Department of General Services (DGS), Division of Purchases and Supply (DPS) Internet Home Page (www.dgs.state.va.us/dps). Any interpretation required by the State will be in the form of an amendment to the solicitation; SEE PARAGRAPH 11 BELOW. Oral explanations or instructions given before the award of the contract will not be binding. In any conflict arising between this solicitation and the Vendors' Manual, this solicitation shall prevail.

2. PREPARATION OF SOLICITATION

A. Bids shall be submitted on the forms furnished, and must bear an original signature by an individual authorized to bind the company submitting the bid. If erasures or other changes appear on the form, each erasure or change must be initialed by the person signing the bid. Telegraphic or facsimile bids will not be considered. Vendors may not submit multiple bids in a single envelope.

B. Vendors are required to enter their Federal Identification Number [FIN] in the upper right hand corner on Page 1, DIT Form 62. This number must correspond with the FIN number shown on Page 1 of the DIT Vendor Application For Registration Form submitted by a principal or officer of the firm submitting the bid. Failure to enter a number in the space provided or to provide a correct FIN number may delay award or result in DIT determining that the vendor is not registered to conduct business with DIT. It is the vendor's responsibility to provide the correct FIN number and to keep DIT updated as to any changes in vendor's status.

C. The bid form may provide for submission of a price or prices for one or more items. All prices shall be entered in the schedule; DIT Form 62A or 62B. Where the bid form explicitly requires that the vendor bid on all items (e.g., an all or none requirement), failure to do so will disqualify the bid. When submission of a price on all items is not required, vendor should insert the words "no bid" in the space provided for any item on which no price is submitted.

D. Additional bids may be submitted, when in the vendor's judgment they can provide more than one solution which meets the required specifications of the procurement. Additional bids shall be submitted on either a duplicate copy of the bid document or on plain paper and shall be clearly identified with the words "ADDITIONAL BID" written or printed on the face of each additional bid. Additional bids shall not be considered unless detailed specifications or descriptions sufficient to establish quality, utility and merit accompany the bid.

VENDORS SUBMITTING ADDITIONAL BIDS ARE REMINDED THAT THE TERMS AND CONDITIONS WHICH APPLY TO THE ORIGINAL BID SHALL ALSO APPLY TO THE ADDITIONAL BID AND ANY MODIFICATION TO TERMS AND CONDITIONS OF A SOLICITATION OR THE ADDITION OF RESTRICTIVE PROVISIONS BY A BIDDER SHALL BE CAUSE FOR REJECTION OF THE BID.

E. Modification of bids already submitted will be considered if received at the office designated in the invitation for bids before the time set for opening of bids.

3. SUBMISSION OF BIDS

TO BE CONSIDERED, THE BID MUST BE RECEIVED AT THE ADDRESS GIVEN IN BLOCK #6 OF THE SOLICITATION ON OR BEFORE THE DATE AND HOUR DESIGNATED. Vendors must pay particular attention to ensure that the bid is properly addressed. The State is not responsible if the bid is not properly addressed. The State is not responsible if the bid does not reach the destination specified by the date and time identified in block #8 page 1 of the Bid. Sealed bids received after the date and hour identified in block #8 are automatically disqualified, and will not be considered. All bids must be sealed, marked and addressed, to the address shown in block #6 of the Solicitation, and marked on the outside of the vendor's envelope as in the example below. Failure to do so may result in a premature opening of, or a failure to open, the bid.

From: Name of Vendor
Street or Box Number
City, State, Zip Code
Due Date Time
IFB No.

4. SPECIFICATIONS AND USE OF BRAND NAMES

Unless otherwise provided in the solicitation, the name of a certain brand, make or manufacturer does not restrict bids to the specific brand, make or manufacturer named. Any item which the State at its sole discretion determines to be the equal of that specified as defined in the Schedule, will be accepted. The award will be made to the lowest responsive and responsible bidder or offeror offering the functional equivalent to the brand name described in the specification. Thus, equivalent products of other manufacturers will be considered only if proof of equivalency is contained in or accompanies the bid.

5. LATE BIDS, MODIFICATIONS OF BIDS OR WITHDRAWALS OF BIDS

A. Any bids received at the office designated in block #6 of the Solicitation after the exact time specified for receipt will not be considered for award. (See Paragraph 4.10 of the Vendor's Manual for further discussion.)

B. A bid may be amended and/or withdrawn by a vendor if the office issuing the bid receives the request in writing before the date and hour set forth in the bid form. The request must be signed by a person authorized to represent the person or firm that submitted the bid. Submission of a subsequent bid shall normally constitute the withdrawal of any prior bid submitted by the same bidder or offeror on the same IFB.

6. PUBLIC OPENING OF BIDS

Bids will be publicly opened at the time and date specified on page 1 of the Solicitation document. The content of these solicitations will be made public in accordance with Paragraphs 1.9 and 2.4 of the Vendor's Manual. Bids will not normally be evaluated at the bid opening meeting. All bids will be opened at the location shown on page 1 of the solicitation.

7. SOLICITATION TERMS AND CONDITIONS

The terms and conditions contained in this solicitation are considered mandatory and are the only terms and conditions governing transactions under any contract awarded as a result of this solicitation.

If the vendor includes additional terms and conditions on pre-printed marketing sheets, pre-printed catalogues, or other pre-printed materials, then it is understood that those terms and conditions are of no consequence to any resulting contract.

Any other modification, addition, clarification, or change to the mandatory terms and conditions by the vendor shall cause the bid to be rejected.

8. AWARD OF CONTRACT

Bids shall be evaluated and the responsive and responsible bidder offering the lowest price will be awarded the Contract. The State reserves the right to reject any and all bids in whole or in part and to waive any informality in the bids.

9. AWARD NOTICES

Upon the completion of evaluation, the State will either post a NOTICE OF AWARD (NOA) or a NOTICE OF INTENT TO AWARD (NOITA). If a NOITA is used, the notice will be publicly posted ten days prior to the actual award date of the contract. All award notices will be posted on ASD's Web Page (HTTP://ASD.STATE.VA.US) and posted in ASD's lobby in written format.

A NOTICE OF INTENT TO AWARD OR A NOTICE OF AWARD will be mailed to any bidder submitting a self-addressed, stamped envelope with their bid.

NOTICES OF INTENT TO AWARD OR NOTICES OF AWARD will be posted in accordance with paragraph 6.3 of the Vendor's Manual.

TELEPHONIC REQUESTS FOR BID RESULTS WILL NOT BE HONORED.

10. FAILURE TO DELIVER

Failure to comply with the terms and conditions of the IFB or to deliver equipment, software or services identified in the solicitation at the price quoted may result in cancellation or rescission of the award/contract by the Commonwealth and may subject the Contractor to removal from DIT's Vendor Registration file and ruled ineligible to participate in DIT's (and other agencies and institutions information technology) procurements for a period of 12 months.

11. AMENDMENT OF SOLICITATION

Any amendment or change to this solicitation will be issued in writing and will identify the changes to be made in the bid. All amendments will be posted to the ASD's Web page at (http://asd.state.va.us) and posted in ASD's lobby in written format.

If the bid opening date is extended the new date and time will be clearly shown on the face of the amendment.

Bidders will be required to sign and return a copy of the amendment with their bid to indicate that they have received the document and are aware of the changes made.

12. ANTI-COLLUSION CERTIFICATION

By Bidder's signature on the face of this bid, Bidder certifies that this bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a bid for the same equipment, software, or services, and is in all respects fair and without collusion or fraud. Vendor understands collusive bidding is a violation of the Virginia Governmental Frauds Act and Federal Law and can result in fines, prison sentences, and civil damage awards. Bidder agrees to abide by all conditions of this bid and certifies that he or she is authorized to sign this bid for the bidder' firm.

13. DEMONSTRATIONS

The State reserves the right to require the Bidder to demonstrate to the satisfaction of the State, that the products offered will perform in a completely acceptable manner and to meet or exceed the specifications referenced in the solicitation. The demonstration site and time is subject to agreement between the State and Bidder. A Bidder refusing to demonstrate his products bid after determination that he is the apparent low responsive and responsible bidder may be removed from DIT's vendor registration file and ruled ineligible to participate in DIT's (and other agencies and institutions information technology) procurements for a period of 12 months.

14. PROTESTS OF AWARDS

All protests of awards shall be conducted in accordance with Chapter 9 of the Vendors Manual.

15. VENDOR REGISTRATION

AN AWARD WILL NOT BE MADE TO ANY BIDDER NOT REGISTERED WITH THE DEPARTMENT OF INFORMATION TECHNOLOGY (DIT). A completed registration form must be on file or received by DIT (Acquisition Services Division) not later than the award date. Call (804) 371-5900 to request a registration form.

16. CONTRACT

Any contract which is awarded as a result of this solicitation, offer and award shall be between DIT and the Contractor. No other agency, institution or public body may negotiate in any way with the vendor concerning the items identified in the schedule or any terms and conditions of the contract. All problems associated with the resulting contract shall be brought to the attention of the Contracts Manger, DIT.

Specifications - Any comments or questions concerning the specifications, terms and conditions or any note contained in this solicitation shall be submitted, in writing to the issuing office (See Block #6 DIT Form #62) at least ten (10) days prior to the closing date.

17. TRADE SECRETS OR PROPRIETARY INFORMATION

Trade secrets or proprietary information submitted by a bidder in connection with a procurement transaction shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the bidder must invoke the protections of *Code of Virginia*, Section 2.2-4342, prior to or upon submission of the data or other materials, and must identify the data or other materials to be protected and state the reason why protection is necessary. **The proprietary or trade secret material submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, or paragraphs that constitute trade secret or proprietary information. The classification of an entire bid document, line item prices and/or total bid prices as proprietary or trade secrets is not acceptable and will result in rejection of the bid.**

CONTRACTUAL TERMS AND CONDITIONS
INVITATION FOR BID (IFB) #2003-035

1. SCOPE OF CONTRACT

The following paragraphs contain the Contractual terms and conditions by which the Commonwealth of Virginia, hereinafter referred to as "Commonwealth" or "State" or "VITA" (Virginia Information Technologies Agency), will establish a Master Agreement for data satellite equipment, accessories, antennas and Services from the Contractor identified in block #9, page 1 of the Solicitation, hereinafter referred to as "the Contractor." This Master Agreement may be used by Authorized Users which are defined as State Agencies, Institutions and other public bodies including political subdivisions as defined in the Code of Virginia, Section 8.01-385 (3) iii, and others as defined herein.

2. APPLICABLE LAWS AND COURTS

This solicitation and any resulting Contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The Contractor shall comply with all applicable federal, state and local laws, rules and regulations.

3. ANTI-DISCRIMINATION

By submitting their bids, bidders certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and §2.2-4311 of the Virginia Public Procurement Act. If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the Contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that Contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (Code of Virginia, § 2.2-4343.1E).

In every Contract over $10,000 the provisions in a. and b. below apply:

a. During the performance of this Contract, the Contractor agrees as follows:

1) The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to

employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

2) The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer.

3) Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for meeting these requirements.

b. The Contractor will include the provisions of 1. above in every subcontract or purchase order over $10,000, so that the provisions will be binding upon each subcontractor or vendor.

4. ETHICS IN PUBLIC CONTRACTING

By submitting their bids, bidders certify that their bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other bidder, supplier, manufacturer or subcontractor in connection with their bid, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

5. IMMIGRATION REFORM AND CONTROL ACT OF 1986

By submitting their bids, bidders certify that they do not and will not during the performance of this Contract employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986.

6. DEBARMENT STATUS

By submitting their bids, bidders certify that they are not currently debarred by the Commonwealth of Virginia from submitting bids on Contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.

7. ANTITRUST

By entering into a Contract, the Contractor conveys, sells, assigns, and transfers to the Commonwealth of Virginia all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Commonwealth of Virginia under said Contract.

8. MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS FOR IFBs AND RFPs

Failure to submit a bid on the official state form provided for that purpose shall be a cause for rejection of the bid. Modification of or additions to any portion of the Invitation for Bids may be cause for rejection of the bid; however, the Commonwealth reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a bid as nonresponsive. As a precondition to its acceptance, the Commonwealth may, in its sole discretion, request that the bidder withdraw or modify nonresponsive portions of a bid which do not affect quality, quantity, price, or delivery. No modification of or addition to the provisions of the Contract shall be effective unless reduced to writing and signed by the parties.

9. PAYMENT

a. To Prime Contractor:

1) Invoices for items ordered, delivered and accepted shall be submitted by the Contractor directly to the payment address shown on the purchase order/Contract. All invoices shall show the state Contract number and/or purchase order number; social security number (for individual Contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).

2) Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.

3) All goods or services provided under this Contract or purchase order, that are to be paid for with public funds, shall be billed by the Contractor at the Contract price, regardless of which public agency is being billed.

4) The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.

5) **Unreasonable Charges**. Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, Contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges that appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the Commonwealth shall promptly notify the Contractor, in writing, as to those charges which it considers unreasonable and the basis for the determination. A Contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification. The provisions of this section do not relieve an agency of its prompt payment obligations with respect to those charges that are not in dispute (Code of Virginia, § 2.2-4363).

b. To Subcontractors:

1) A Contractor awarded a Contract under this solicitation is hereby obligated:

(a) To pay the subcontractor(s) within seven (7) days of the Contractor's receipt of payment from the Commonwealth for the proportionate share of the payment received for work performed by the subcontractor(s) under the Contract; or

(b) To notify the agency and the subcontractor(s), in writing, of the Contractor's intention to withhold payment and the reason.

2) The Contractor is obligated to pay the subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the Contract) on all amounts owed by the Contractor that remain unpaid seven (7) days following receipt of payment from the Commonwealth, except for amounts withheld as stated in (2) above. The date of mailing of any payment by U. S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier Contractor performing under the primary Contract. A Contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the Commonwealth.

10. QUALIFICATIONS OF BIDDERS

The Commonwealth may make such reasonable investigations as deemed proper and necessary to determine the ability of the bidder to perform the services/furnish the goods and the bidder shall furnish to the Commonwealth all such information and data for this purpose as may be requested. The Commonwealth reserves the right to inspect bidder's physical facilities prior to award to satisfy questions regarding the bidder's capabilities. The Commonwealth further reserves the right to reject any bid/proposal if the evidence submitted by, or investigations of, such bidder fails to satisfy the Commonwealth that such bidder is properly qualified to carry out the obligations of the Contract and to provide the services and/or furnish the goods contemplated therein.

11. ASSIGNMENT OF CONTRACT

A Contract shall not be assignable by the Contractor in whole or in part without the written consent of the Commonwealth.

12. MODIFICATIONS

This contract maybe modified in accordance with §2.2-4309 of the Code of Virginia. Such modifications may only be made by the representatives authorized to do so. No modifications to this contract shall be effective unless it is in writing and signed by the duly authorized representative of both parties. No term or provision hereof shall be deemed waived and no breach excused unless such waiver or consent to breach is in writing. For purposes of the contract, the only authorized representative for the

Commonwealth shall be the individual identified in block #14 of this solicitation or his duly designated alternate, and for the Contractor the person identified in block #9 of the solicitation or his/her duly designated alternate.

13. TAXES

Sales to the Commonwealth of Virginia are normally exempt from State sales tax. State sales and use tax certificates of exemption, Form ST-12, will be issued upon request, and can be obtained online at http://www.tax.state.va.us/. Deliveries against this Contract shall usually be free of Federal excise and transportation taxes. The Commonwealth's excise tax exemption registration number is 54-73-0076K.

14. USE OF BRAND NAMES

Unless otherwise provided in this solicitation, the name of a certain brand, make or manufacturer does not restrict bidders to the specific brand, make or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article that the public body, in its sole discretion, determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The bidder is responsible to clearly specify and identify the product being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the Commonwealth to determine if the product offered meets the requirements of the solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding only the information furnished with the bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a bid nonresponsive. Unless the bidder clearly indicates in its bid that the product offered is an equal product, such bid will be considered to offer the brand name product referenced in the solicitation.

15. TRANSPORTATION AND PACKAGING

By submitting their bids, all bidders certify and warrant that the price offered for FOB destination includes only the actual freight rate costs at the lowest and best rate and is based upon the actual weight of the goods to be shipped. Except as otherwise specified herein, standard commercial packaging, packing and shipping containers shall be used. All shipping containers shall be legibly marked or labeled on the outside with purchase order number, commodity description, and quantity.

16. INSURANCE

By signing and submitting a bid or proposal under this solicitation, the bidder or offeror certifies that if awarded the Contract, it will have the following insurance coverages at the time the Contract is awarded. For construction Contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with §§ 2.2-4332 and 65.2-800 et seq. of the Code of Virginia. The bidder or offeror further certifies that the Contractor and any subcontractors will maintain these insurance coverages during the entire term of the Contract and that all insurance coverages will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

INSURANCE COVERAGES AND LIMITS REQUIRED:

a. Worker's Compensation - Statutory requirements and benefits.

b. Employers Liability - $100,000.

c. Commercial General Liability - $500,000 combined single limit. Commercial General Liability is to include Premises/Operations Liability, Products and Completed Operations Coverage, and Independent Contractor's Liability or Owner's and Contractor's Protective Liability. The Commonwealth of Virginia must be named as an additional insured when requiring a Contractor to obtain Commercial General Liability coverage.

17. ANNOUNCEMENT OF AWARD

Upon the award or the announcement of the decision to award a contract over $30,000, as a result of this solicitation, the purchasing agency will publicly post such notice on the DGS/DPS eVA web site (www.eva.state.va.us) for a minimum of 10 days.

18. DRUG-FREE WORKPLACE

During the performance of this Contract, the Contractor agrees to (i) provide a drug-free workplace for the Contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over $10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific Contract awarded to a Contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the Contract.

19. NONDISCRIMINATION OF CONTRACTORS

A bidder, offeror, or Contractor shall not be discriminated against in the solicitation or award of this Contract because of race, religion, color, sex, national origin, age, or disability or against faith-based organizations. If the award of this Contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this Contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.

20. eVA BUSINESS-TO-GOVERNMENT VENDOR REGISTRATION

The eVA Internet electronic procurement solution, web site portal www.eva.state.va.us, streamlines and automates government purchasing activities in the Commonwealth. The portal is the gateway for vendors to conduct business with state agencies and public bodies.

All vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution either through the eVA Basic Vendor Registration Service or eVA Premium Vendor Registration Service, and complete the Ariba Commerce Services Network registration.

Vendors are strongly encouraged to register prior to submitting a bid or offer. Failure to register will result in the bid being found non-responsive and rejected. All vendors must register in both the eVA and the Ariba Commerce Services Network Vendor Registration Systems.

a. eVA Basic Vendor Registration Service: $25 Annual Fee plus a Transaction Fee of 1% per order received. The maximum transaction fee is $500 per order. eVA Basic Vendor Registration Service includes electronic order receipt, vendor catalog posting, on-line registration, and electronic bidding, as they become available.
B-6a

b. eVA Premium Vendor Registration Service: $200 Annual Fee plus a Transaction Fee of 1% per order received. The maximum transaction fee is $500 per order. eVA Premium Vendor Registration Service includes all benefits of the eVA Basic Vendor Registration Service plus automatic email or fax notification of solicitations and amendments, and ability to research historical procurement data, as they become available.

c. Ariba Commerce Services Network Registration. The Ariba Commerce Services Network (ACSN) registration is required and provides the tool used to transmit information electronically between state agencies and vendors. There is no additional fee for this service.

eVA BUSINESS-TO-GOVERNMENT CONTRACTS

The eVA Internet electronic procurement solution, web site portal www.eva.state.va.us, streamlines and automates government purchasing activities in the Commonwealth. The portal is the gateway for vendors to conduct business with state agencies and public bodies.

Failure to comply with the requirements in a. and b. below will be just cause for the Commonwealth to reject your bid/offer or terminate this contract for default.

Vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution and agree to comply with the following:

a. Submit a fully executed American Management Systems, Inc., (AMS) Trading Partner Agreement, a copy of which can be accessed and downloaded from www.eva.state.va.us. AMS is the Commonwealth's service provider to implement and host the eVA e-procurement solution.

b. Provide an electronic catalog (price list) for items awarded under a term contract. The format of this electronic catalog shall conform to the eVA Catalog Interchange Format (CIF) Specification that can be accessed and downloaded from www.eva.state.va.us.

21. BREACH

The Contractor shall be deemed in breach of this Agreement if the Contractor (a) fails to make any Product or Service ready for acceptance testing by the specified delivery date; (b) repeatedly fails to respond to requests for maintenance or other required service within the time limits set forth in this Agreement; (c) fails to comply with any other term of this Agreement and fails to cure such noncompliance within ten days (or such greater period as is acceptable to the Commonwealth) following Contractor's receipt of a Show Cause Notice identifying such noncompliance; or (d) fails to provide a written response to the Commonwealth's Show Cause Notice within ten days after receiving same.

The Contractor shall not be in breach of this Agreement if its default was due to causes beyond the reasonable control of, and occurred without any fault or negligence on the part of, both the Contractor and its subcontractors. Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of the Commonwealth in either its sovereign or Contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather.

In the event of breach, in addition to any other remedies provided by law, the Commonwealth may cancel its obligations with respect to any or all unaccepted Products or Services. All costs for deinstallation and return of Products shall be borne by the Contractor. In no event shall any failure by the Commonwealth to exercise any remedy available to it be construed as a waiver of or consent to any breach.

22. CONTRACTOR COMMITMENTS, WARRANTIES AND REPRESENTATIONS

Any commitment made by the Contractor within the scope of this Contract shall be binding upon Contractor. For the purposes of this Contract, a commitment by the Contractor includes:

a. Prices and options committed to remain in force over a specified period(s) of time;

b. Any written warranty or representation made by the Contractor in this solicitation as to hardware or software performance, or other physical design or functional characteristics of that which is offered.

23. INSTALLATION DATES (or SERVICE COMMENCEMENT DATES)

a. The Contractor shall deliver/install the requested equipment, software, or services ready for use, by the installation date (day, month, year) identified in the Order, but not later than 60 days ARO.

b. Any amendment by the State to this Contract or any part thereof, may require the establishment of a new mutually agreed to required delivery date. The State may delay the installation date by notifying the Contractor at least ten (10) days before the required installation date.

c. If the equipment, software or services is not delivered/installed within the time specified in the Order, the State reserves the right to cancel the award of this Contract and/or terminate this Contract for default without further obligation, and award the solicitation to the next responsive and responsible bidder. Contractors are cautioned that failure to deliver/install the proposed equipment as stated in response to a solicitation document may result in removal from VITA's Vendor Registration File as per Section 7.20 of the Division of Purchases and Supply's Vendor's Manual dated December 1998.

d. Neither the Contractor nor the State shall be responsible for delays resulting from acts beyond the control of each party. These include, but are not limited to, acts of God, riots, acts of war, fire, earthquakes, epidemics, or disasters.

24. RISK OF LOSS OR DAMAGE

The Contractor shall have the risk of loss or damage to all equipment until clear and unrestricted title to such equipment is transferred to the Commonwealth.

25. EQUIPMENT CONDITION

All equipment to be supplied by Contractor shall be new equipment.

26. PATENT/COPYRIGHT PROTECTION

Contractor, at its own expense, shall defend any suit brought against the Commonwealth for the infringement of patents, copyrights or trade secrets enforceable in the United States if the claim of infringement is alleged to relate to or arise from the Contractor's or Commonwealth's use of any equipment, software, materials or information prepared, developed or delivered in connection with performance of this Agreement. In such suit, Contractor shall indemnify the Commonwealth, its agents, officers and employees for any loss, liability or expense incurred as a result of such suit.

The purchasing agency shall notify the Contractor of such suit within a reasonable time after learning of it and shall give the Contractor the full right and opportunity to conduct the defense of the suit, subject however to the requirements of Section 2.2-510 and Section 2.2-514 of the Code of Virginia or any successor statute. If principles of governmental or public law are involved, the Commonwealth may, at its option and expense, participate in the defense of the suit.

The Contractor shall not be required to indemnify the Commonwealth for liability arising solely out of the Commonwealth's own specifications or design or solely from the combination of equipment or software furnished hereunder with any equipment or software not supplied by the Contractor.

If, any Product or Service becomes, or in the Contractor's opinion, is likely to become, the subject of a claim of infringement, Contractor may, at its option, provide noninfringing substitutes that are satisfactory to the Commonwealth, or at Contractor's option and expense, may obtain the right for the Commonwealth to continue the use of such Product or Service.

If the use of such equipment or software by the Commonwealth is prevented by permanent injunction or by Contractor's failure to procure the right for the Commonwealth to continue using the software, the Contractor agrees to take back the infringing equipment, software, materials or information and refund the total amount the Commonwealth has paid Contractor under this Agreement, less one half (1/2%) percent of the total paid for each month of use by the Commonwealth. This obligation is in addition to the obligations cited in the first four subparagraphs above.

27. NON-APPROPRIATION

All funds for payment of equipment, software or services ordered under this Contract are subject to the availability of legislative appropriation for this purpose. In the event of non-appropriation of funds by the Legislature for the items under this Contract, the Commonwealth will terminate this Contract for those goods or services for which funds have not been appropriated. Written notice will be provided to the Contractor as soon as possible after legislative action is completed.

If any purchases are to be supported by federal funding, and such funding is not made available, the Commonwealth may terminate this Contract for goods or services dependent on such federal funds without further obligation.

28. HEADINGS NOT CONTROLLING

Headings used in this Contract are for reference purposes only and shall not be considered to be a substantive part of this Contract.

29. ENTIRE AGREEMENT

This Contract, the solicitation, bid response, solicitation instructions and all equipment and software specifically listed in the Schedule, and the notes in the Schedule constitute the entire agreement between the parties with respect to the subject matter of this Contract. All prior agreements, representations, statements, negotiations and undertakings are hereby superseded with respect to equipment and/or software acquired by the State under the terms and conditions of this Contract.

No other written documents regardless of form or content shall be executed by any agency or institution for equipment acquired under this Contract unless signed by the Contracts Manager, VITA, or his alternate as designated by the Director, VITA.

30. TITLE

Clear and unrestricted title to all equipment purchased under this Agreement shall pass to the Commonwealth upon payment of the purchase price.

31. PRICE PROTECTION/ADJUSTMENTS

The State will not pay any additional costs above those costs provided for in the Schedule identified herein. In no event may the amount of any Contract, without adequate consideration, be increased for any purpose.

32. TERM

The initial Term of this Contract shall be from the date of award and continue for two years. The Commonwealth at its sole discretion may extend the Contract for three additional one year periods. The Commonwealth shall issue a writing identifying any renewal period at least thirty days prior to the renewal period.

33. INVENTIONS AND COPYRIGHTS

The Contractor is prohibited from copyrighting any papers, reports, forms or other materials, and from obtaining any patent on any invention or other discovery resulting solely from its performance under the terms and conditions of this Contract.

34. CONTRACTUAL RECORDS

All Contractual books, records and other documents related to matters under this Contract shall be made available by Contractor to the State and its designated agents for a period of five (5) years after final payment for purposes of audit and examination.

Contractual records are hereby further defined as this Contract and all delivery/purchase orders, invoices or correspondence directly relating to this agreement.

35. LIMITATION OF LIABILITY

To the maximum extent permitted by applicable law, the Contractor's liability under this Contract for loss or damages to government property caused by use of any defective or deficient supplies, products, equipment and/or services delivered under this Contract shall not exceed the greater of $120,000.00 or twice the amount of money paid to the Contractor under this Contract during the twelve month period preceding the event or circumstance giving rise to such liability. The Contractor will not be liable under this Contract for any indirect, incidental, special or consequential damages, or damages from loss of profits, revenue, data or use of the supplies, equipment and/or services delivered under this Contract. The above limitation of liability is per incident. The limitation and exclusion of damages in the foregoing sentences will not apply, however, to liability arising from: (a) personal injury or death; (b) defect or deficiency caused by willful misconduct or negligence on the part of the Contractor; or (c) circumstances where the Contract expressly provides a right to damages, indemnification or reimbursement.

36. SITE PREPARATION

a. Equipment environmental specifications, if required, for the equipment to be delivered under this Contract shall be furnished in writing by the Contractor upon award. These specifications shall be in such detail to ensure that the equipment to be installed shall operate efficiently from the point of view of environment.

b. The State shall prepare the site at its own expense and in accordance with the equipment environmental specifications provided by the Contractor.

37. ACCEPTANCE, TESTING AND COMPLIANCE WITH SPECIFICATIONS

All materials, equipment, software and services are subject to inspection and testing by the State, and any that does not meet or exceed the specifications or other requirements of the Contract may be rejected. The State shall be given thirty (30) days from the completion of installation by the Contractor (or thirty (30) days after delivery if customer installed) to test, evaluate and accept the materials, equipment, software and services delivered or furnished under this Contract (provided that the using agency, in its sole discretion, may accept the same prior to expiration to the thirty (30) day period). If the Contractors materials, equipment, software or services fail to meet the Contract specifications or other requirements, including the specifications of the brand name (see paragraph 4 of the Solicitation Instructions), or those required by the Contractor's own technical documentation, then the same may be rejected and returned to the vendor. Such rejection will terminate this Contract and exempt the State from all costs incurred by the Contractor.

Acceptance shall be effective for the purpose of determining title to that which is delivered and for making payment, however, acceptance by the State following testing and evaluation during the thirty (30) day period shall not be conclusive that the materials, equipment, software or services conform in all respects to the Contract specifications and other requirements. In the event that nonconformance therewith is discovered by the State after acceptance, whether due to a latent defect or otherwise, the Contractor shall take whatever action is necessary to conform the materials, equipment, software or services to the Contract specifications and other requirements, including but not limited to modification or replacement of the same. The Contractor's failure to do so shall constitute breach of Contract for which the State may exercise the remedies provided in the section herein entitled "Termination and Cancellation," in addition to and not in lieu of any other remedies available under Virginia law.

38. FIELD MODIFICATIONS AND/OR ENGINEERING CHANGES

Contractor sponsored modifications and/or engineering changes shall be made with the consent of the State at no additional charge for a period of one (1) year from the date of installation. The State reserves the right at all times to schedule these Contractor sponsored modifications and/or changes to minimize the impact on the daily operations of the State.

39. SUPPLIES

Authorized charges do not include operational supplies (e.g. paper, tape, etc.) unless such supplies are specifically identified in the Schedule. All supplies used by the State shall conform to the Contractor's published specifications provided to State at time of equipment installation. The State reserves the right to acquire such supplies from any Contractor of its choice.

40. GUARANTEE (WARRANTY)

Contractor will provide on-site warranty services (labor, parts and travel) for a period of not less than twelve (12) months or such greater period as may be provided in the Schedule, beginning on the date of acceptance, at no cost to the State for all equipment. Contractor shall act as sole point-of-contact for all units repaired under warranty. All warranty services shall be provided during the Principal Period of Maintenance, which is hereby defined as 8 a.m. to 5 p.m. Monday through Friday, State holidays excluded. The Contractor shall respond to all requests for warranty service within four (4) hours after notification that a failure has occurred.

Prior to the expiration of the guarantee period, whenever equipment is shipped for mechanical repair or replacement purposes, the Contractor will bear all costs associated with returning the equipment to the Contractor's repair facility. When repair of the equipment is completed, the Contractor shall bear all costs associated with returning the equipment to the State's original point of shipment. Cost of shipping includes but is not limited to, costs of packing, transportation, rigging, drayage and insurance for damage or loss. Contractor shall repair the equipment or provide an interim replacement product, within 72 hours of notification that a malfunction exists. Any interim product(s) will be provided at no additional cost to State, until the original product is returned, in good working condition.

All parts used under this agreement must be new parts or refurbished parts certifiable as new. Parts that have been replaced shall become the property of the Contractor.

41. TERMINATION AND CANCELLATION

The Commonwealth shall have the unilateral right to terminate this Contract for Default, in the event that any one or more of the following events of default occur or continue during the term of this agreement, (a) the vendor shall fail to deliver the equipment or services required by this Contract or (b) the vendor shall repeatedly fail to respond to requests for maintenance or other services within the time limits set forth in the Contract or (c) the vendor shall breach any of the other terms set forth within this agreement or (d) the vendor shall fail to cure any breach after receiving a "Show Cause Notice" identifying the failure, and providing the vendor ten (10) days to cure the failure/nonperformance. If the vendor fails to answer the cure notice, or does not correct the deficiencies noted, the State may immediately terminate the agreement for Default.

In such event, the Commonwealth will only be liable for cost incurred to the date of termination. All costs of de-installation and return of the equipment will be the vendor's expense.

The Commonwealth's failure to exercise its right to terminate for default under this provision shall not be construed as a waiver of its right to terminate, rescind or revoke this Contract in the event of any subsequent breach of any provisions of this agreement.

42. FAILURE TO DELIVER

In the event the Contractor fails for any reason to deliver in a timely manner or according to Contract terms the items set forth in the Schedule, the Commonwealth, at its own discretion, may give Contractor oral or written notice of such breach. Once notice by State is sent or given, State may immediately procure the items from another source. Once State has effected a purchase from an alternate source (in accordance with the Virginia Public Procurement Act) the parties agree that the State may charge-back Contractor, in which case Contractor agrees to reimburse State for any difference in cost between the original Contract price and the State's cost to cover from the alternate source. In no event shall State be held to pay Contractor any costs incurred by Contractor, including but not limited to ordering, marketing, manufacturing, or delivering the item(s) which are subject of the State's notice of breach. This remedy is in addition to and not in lieu of any other remedy the Commonwealth may have under this agreement and the laws of the Commonwealth of Virginia.

43. CONTRACTUAL DISPUTES

In accordance with Section 2.2-4363 of the Code of Virginia, Contractual claims, whether for money or other relief, shall be submitted in writing to the purchasing agency no later than sixty (60) days after final payment; however, written notice of the Contractor's intention to file such claim must be given to such agency at the time of the occurrence or beginning of the work upon which the claim is based. Pendency of claims shall not delay payment of amounts agreed due in the final payment. The purchasing agency shall render a final decision in writing within thirty (30) days after its receipt of the Contractor's written claim.

The Contractor may not invoke any available administrative procedure under Section 2.2-4365 of the Code of Virginia nor institute legal action prior to receipt of the purchasing agency's decision on the claim, unless that agency fails to render its decision within thirty (30) days. The decision of the purchasing agency shall be final and conclusive unless the Contractor, within six (6) months of the date of the final decision on the claim, invokes appropriate action under Section 2.2-4364, Code of Virginia or the administrative procedure authorized by Section 2.2-4365, Code of Virginia.

The Virginia Information Technologies Agency, its officers, agents and employees, including, without limitation, the Contracts Manager, are executing this Agreement and any Orders issued hereunder, solely in its or their statutory and regulatory capacities as agent for the Commonwealth agency purchasing and receiving the goods or services identified in Attachment "A" to this Agreement or on the subsequent Order in question and need not be joined as a party to any dispute that may arise thereunder.

In the event of any breach by the Commonwealth, Contractor's remedies shall be limited to claims for damages and Prompt Payment Act interest and, if available and warranted, equitable relief, all such claims to be processed pursuant to this Section. In no event shall Contractor's remedies include the right to terminate any license or support services hereunder.

44. TITLE (SOFTWARE/FIRMWARE)

For any Software / Firmware delivered under this Contract, the Contractor represents and warrants that it is the sole owner of the software/firmware product or, if not the owner, has received all proper authorizations from the owner to license the software/firmware product, and has the full right and power to grant the rights contained in this Contract. Contractor further warrants and represents that the software/firmware product is of original development, and that the package and its use will not violate or infringe upon any patent, copyright, trade secret or other property right of any other person.

45. TERM OF LICENSE

For any Software / Firmware delivered under this Contract, the licenses granted are purchased on a non-exclusive, irrevocable perpetual license basis and shall commence upon the acceptance of the software Product by the Commonwealth. Notwithstanding the foregoing, the Commonwealth may terminate the license at anytime. All licenses granted to the Commonwealth are for the use of the software Product at the Commonwealth's computing facilities at the sites identified in any executed Attachment or Order referencing this Agreement. This license is perpetual and in no event shall Contractor's remedies for any breach of this Agreement include the right to terminate any license or support services hereunder.

46. WARRANTY SOFTWARE

Contractor warrants the operation of any Software Product identified in this Agreement for a minimum of twelve (12) months (or such longer period as may be agreed to) after installation. Software Products that fail to operate in accordance with the Contractor's Proposal or published specifications will be returned, at Contractor's expense, for replacement. Contractor agrees to replace any non-conforming Software Product within five (5) calendar days after receipt of the returned Software Products. Warranty service shall include, but not necessarily be limited to, detection and correction or errors, updating of all Software Products to operate with all updated or revised versions of the operating systems for which the Software Product is licensed, and provision of enhancements to the Software Product as they are generally made available. Warranty charges shall include unlimited telephonic support and all travel, labor, and documentation necessary to maintain the Products in accordance with Contractor's published specifications.

In addition, the Contractor agrees to provide all patches, fixes, revisions, updates, upgrades and releases to both the software/firmware and applicable documentation, which may be released by the software developer, along with unlimited telephone support for the duration of the warranty period.

47. COMMONWEALTH'S RIGHTS TO COMPUTER SOFTWARE

Notwithstanding anything to the contrary in this Agreement, the Commonwealth shall have:

a. Unlimited use of the Software Products on the machines for which it is acquired and on any replacement equipment;

b. Use of such Software Products with a backup system if the system(s) for which it was acquired is for any reason, inoperative or during an emergency, or the performance of engineering changes in features or model;
c. The right to use such Software Products at any Commonwealth installation to which the machine(s) may be transferred by the Commonwealth;
d. The right to copy such software for safekeeping or backup purposes;
e. The right to modify such Software Product or combine it with other programs or material at the Commonwealth's risk; and
f. The Commonwealth shall have the right to reproduce any and all physical documentation supplied under the terms of this Agreement, provided, however, that such reproduction shall be for the sole use of the Commonwealth and shall be subject to the same restrictions or use and disclosure as are contained elsewhere in this Agreement.

Nothing contained herein shall be construed to restrict or limit the Commonwealth's rights to use any technical data which the Commonwealth may already possess or acquire under proper authorization from other sources.

48. CONFIDENTIALITY

Commonwealth agrees that when the Software Product is proprietary to Contractor and has been developed or acquired at Contractor's expense, that it shall hold and use the Software Product in the same manner as it would deal with its own confidential information. Commonwealth shall not knowingly divulge, nor knowingly permit any of its employees, agents, or representatives to divulge, any proprietary information with respect to the Software Product, the technology embodied therein, or any other documentation, models, descriptions, forms, instructions or other proprietary information relating thereto, except as specifically authorized by Contractor, in writing, or as may be required by the laws of the Commonwealth of Virginia.

Commonwealth shall take all reasonable steps necessary or appropriate to insure compliance with this Section by the Commonwealth's employees, agents and representatives, including copying reproducible legends and markings on all physical components of the Software Product.

The Commonwealth's obligation under this Section G.3 shall terminate three years after the Commonwealth ceases using the Software Product containing the proprietary information.

49. MAINTENANCE RESPONSIBILITIES

Upon expiration of the On-Site Warranty set forth in paragraph entitled Guarantee (Warranty) the Contractor shall provide as ongoing options for the Commonwealth to purchase, additional one (1) year periods of on-site maintenance (labor, parts and travel) at the prices identified in the Schedule, and shall keep the equipment and software in good operating condition. Maintenance services shall not include electrical work external to the vendor's equipment. It shall not include repair or damage resulting from accident; transportation by the State between State sites; negligence on the part of State personnel; or causes other than ordinary use in the production environment in which the equipment is installed. The

Contractor may also provide Return to Vendor Maintenance Services for periods after the On-Site Warranty Services, for the Commonwealth's purchases at the prices contained herein.

50. MAINTENANCE RESPONSE

The Contractor shall provide on-site maintenance service under the same terms as set forth in the paragraph above entitled "GUARANTEE (WARRANTY)" for equipment, with a four (4) hour on-site response time, during the Principal Period of Maintenance (PPM) which is hereby defined as 8 a.m. to 5 p.m. Monday through Friday excluding holidays.
The State may alter the PPM by requesting a change, in writing, thirty (30) days prior to the requested change in the PPM, subject to mutual agreement between the parties.

51. REMEDIAL MAINTENANCE

Remedial Maintenance shall be performed after notification that the equipment is inoperative. The Contractor shall provide the user with a designated point(s) of contact and make arrangements to enable its maintenance personnel to receive such notification.

52. REPAIR PARTS

All parts used under this agreement must be new parts or refurbished parts certifiable as new. Parts, which have been replaced, shall become the property of the Contractor.

53. MALFUNCTION REPORTS

The Contractor shall furnish a signed malfunction report to the user upon completion of each maintenance call. The report will list as a minimum all corrective action taken, parts used, and number of hours required to repair the equipment.

54. MAINTENANCE CONTINUITY

Contractor will provide the required maintenance/software support services as defined in this Contract for a period not to exceed three (3) years after the initial Term. Such services shall be provided in accordance with the Contractor's price, set forth in the schedule, for a period of twelve (12) months. Maintenance increases for additional periods shall be effective on the anniversary date for each succeeding year. All increases will be governed by the CPI-W index entitled "Other Services". The percentage increase shall not exceed the above index's most recent percentage available to the Commonwealth as published by the Bureau of Labor Statistic's, Philadelphia Office. If maintenance prices remain the same or decrease for succeeding years, the State shall be afforded the opportunity to renew the maintenance services at the lowest price available to any other customer.

55. MAINTENANCE RENEWAL

Maintenance under this agreement shall be renewed at the option of the State. The State shall issue a written notification to the Contractor for each twelve (12) month period that maintenance services are required after the initial three (3) year warranty/maintenance period.

56. COMPLIANCE WITH FEDERAL LOBBYING ACT

a. Contractor shall not, in connection with this Agreement, engage in any activity prohibited by 31 U.S.C.A. Section 1352 (entitled "Limitation on use of appropriated funds to influence certain Federal Contracting and financial transactions") or by the regulations issued from time to time thereunder (together, the "Lobbying Act"), and shall promptly perform all obligations mandated by the Lobbying Act in connection with this Agreement, including, without limitation, obtaining and delivering to the Commonwealth all necessary certifications and disclosures.

b. Contractor is hereby advised that a significant percentage of the funds used to pay Contractor's invoices under this Agreement may be federal funds. Under no circumstances shall any provision of this Agreement be construed as requiring or requesting the Contractor to influence or attempt to influence any person identified in 31 U.S.C.A. Section 1352 (a) (1) in any matter.

c. A representative of Contractor shall sign the certification attached as Attachment "A" and deliver such certification to the Commonwealth simultaneously with the execution and delivery of this Agreement. Contractor shall have the certification signed by a representative with knowledge of the facts and shall fulfill the promises of undertakings set forth in the certification.

57. CONTRACTOR'S REPORT OF SALES

The Contractor must report the quarterly dollar value, in U.S. dollars and rounded to the nearest whole dollar, of all sales under this Contract by calendar quarter; i.e., January through March, April though June, July through September, and October through December. The dollar value of a sale is the price paid by the user for products and services on a Contract order as recorded by the Contractor. The reported Contract sales value must include the Industrial Funding Adjustment, as delineated in paragraph entitled "Industrial Funding Adjustment". The Contractor shall provide this report in hard copy to the Controller, VITA, and a copy of the report to the Contracts Manager, VITA, both within 30 days after the end of each quarterly reporting period as defined herein. The report must show each individual item and quantities purchased and the purchaser. The report is required to be hard copy. VITA may at a later time, agree to an electronic version of the report, however, in lieu of any express agreement by both parties as to the electronic format, the Commonwealth will only accept a hardcopy version. The Contractor shall define "sale" prior to the first reporting period and then shall maintain that definition through out the term of this Agreement. Sale may be defined as; 1) when the Commonwealth pays the purchase price, or 2) when the Commonwealth accepts the Products or 3) other as defined by the Contractor.

58. INDUSTRIAL FUNDING ADJUSTMENT

The Contractor must pay VITA, an Industrial Funding Adjustment (IFA). The Contractor must remit the IFA within 30 days after the end of each quarterly reporting period as established in the clause entitled "Contractor's Report of Sales". The IFA equals two percent (2%) of the total quarterly sales reported. Contractor shall remit the IFA together with a copy of the Contractor's Report of Sales as delineated in the paragraph herein entitled "Contractor's Report of Sales". The IFA reimburses the Commonwealth and defrays the costs for IT procurement and the administration of the subsequent awards. The IFA amount due must be paid by check with identification of "Contract number", "report amounts", and "report period", on either the check stub or other remittance material. VITA may at its discretion, agree to an electronic funds transfer, in lieu of a check, however in the absence of an express written agreement from VITA that validates agreement, then the payment shall be made by check as described herein made payable to the Controller, VITA.

If the full amount of the IFA is not paid within 30 calendar days after the end of the applicable reporting period, it shall constitute a Contract debt to the Commonwealth of Virginia, and the State may exercise all rights and remedies available under law. Failure to submit sales reports, falsification of sales reports, and or failure to pay the IFA in a timely manner may result in termination or cancellation of this Contract. Willful failure or refusal to furnish the required reports, falsification of sales reports, or failure to make timely payment of the IFA constitutes sufficient cause for terminating this Contract for default.

It is the intent of the Commonwealth to capture 2% of all sales, including temporary reduced pricing, fire sales, one time sales, trade ins, promotional items that have been marked down and all sales to the Commonwealth under this Agreement.

59. NONVISUAL ACCESS TO TECHNOLOGY:

All information technology which, pursuant to this Agreement, is purchased or upgraded by or for the use of any State agency or institution or political subdivision of the Commonwealth (the "Technology") shall comply with the following nonvisual access standards from the date of purchase or upgrade until the expiration of this Agreement:

(i) Effective, interactive control and use of the Technology shall be readily achievable by nonvisual means;

(ii) The Technology equipped for nonvisual access shall be compatible with information technology used by other individuals with whom any blind or visually impaired user of the Technology interacts;

(iii) Nonvisual access technology shall be integrated into any networks used to share communications among employees, program participants or the public; and

(iv) The technology for nonvisual access shall have the capability of providing equivalent access by nonvisual means to telecommunications or other interconnected network services used by persons who are not blind or visually impaired.

Compliance with the foregoing nonvisual access standards shall not be required if the head of the using agency, institution or political subdivision determines that (i) the Technology is not available with nonvisual access because the essential elements of the Technology are visual and (ii) nonvisual equivalence is not available.

Installation of hardware, software, or peripheral devices used for nonvisual access is not required when the Technology is being used exclusively by individuals who are not blind or visually impaired, but applications programs and underlying operating systems (including the format of the data) used for the manipulation and presentation of information shall permit the installation and effective use of nonvisual access software and peripheral devices.

If requested, the Contractor must provide a detailed explanation of how compliance with the foregoing nonvisual access standards is achieved and a validation of concept demonstration.

The requirements of this Paragraph shall be construed to achieve full compliance with the Information Technology Access Act, 2.2-3500 through 2.2-3504 of the Code of Virginia.

ATTACHMENT "A"
TO
IFB 3002-035

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee or an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal Contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal Contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal Contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

c. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and Contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Signature: Anne L Salmon

Printed Name: ANNE L. SALMON

Organization: SKYCASTERS LLC

Date: 8/19/03