

SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS				1. Requisition Number NWWE0000-4-00051		PAGE 1 OF 104	
<i>Offeror to Complete Blocks 12, 17, 23, 24, & 30</i>				5. Solicitation Number DG133W-04-RP-0030		6. Solicitation Issue Date Jun 2, 2004	
2. Contract No.		3. Award/Effective Date		4. Order Number			
7. For Solicitation Information Call:		a. Name Jenista M. Featherstone jenista.m.featherstone@noaa.gov		b. Telephone Number (No collect calls) 301-713-0828 x184		8. Offer Due Date/Local Time Jul 2, 2004 / 12:00 PM	
9. Issued By DOC/NOAA/NWS Acquisition Management Div. 1305 East West Highway Suite 7604 Silver Spring, MD 20910		Code AMD00235		10. This Acquisition is <input checked="" type="checkbox"/> Unrestricted <input type="checkbox"/> Set-Aside % for <input type="checkbox"/> Small Business <input type="checkbox"/> HubZone Small Business <input type="checkbox"/> 8(A) NAICS: 334519 Size Standard: _____		11. Delivery for FOB Destination Unless Block is Marked. <input checked="" type="checkbox"/> See Schedule	
				13a. This contract is a rated order under DPAS (15 CFR 700)		12. Discount Terms	
				13b. Rating			
				14. Method of Solicitation <input type="checkbox"/> RFQ <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP			
15. Deliver To OFFICE OF SCIENCE AND TECHNOLOGY W/OST 1325 EAST-WEST HWY., SSMC-2 RM 12202 SILVER SPRING, MD 20910				Code WE000012			
17a. Contractor/Offeror Telephone No. _____ TIN: _____				16. Administered By Code _____			
17b. Check if Remittance is Different and Put Such Address in Offer. <input type="checkbox"/>				18a. Payment Will Be Made By Code _____			
17c. Check if Remittance is Different and Put Such Address in Offer. <input type="checkbox"/>				18b. Submit Invoices to Address Shown in Block 18a Unless Box Below is Checked. <input type="checkbox"/> See Addendum.			
19. ITEM NO.		20. SCHEDULE OF SUPPLIES/SERVICES		21. QUANTITY		22. UNIT	
		The Contractor shall provide real-time cloud to ground lightning data, with an option for integrated				23. UNIT PRICE	
						24. AMOUNT	
25. Accounting and Appropriation Data						26. Total Award Amount (For Govt. Use Only)	
27a. Solicitation incorporates by reference FAR 52.212-1, 52.212-4, FAR 52.212-3 and 52.212-5 are attached. Addenda <input checked="" type="checkbox"/> are <input type="checkbox"/> are not attached							
27b. Contract/Purchase Order incorporates by reference FAR 52.212-4, 52.212-5 is attached. Addenda <input type="checkbox"/> are <input type="checkbox"/> are not attached							
<input checked="" type="checkbox"/> 28. Contractor is required to sign this document and return <u>2</u> copies to Issuing Office. Contractor agrees to furnish and deliver all items set forth or otherwise identified above and on any additional sheets subject to the terms and conditions specified herein.				29. Award of Contract: Reference _____ Offer Dated _____. Your offer on Solicitation (Block 5), including any additions or changes which are set forth herein, is accepted as to items:			
30a. Signature of Offeror/Contractor				31a. United States of America (Signature of Contracting Officer)			
30b. Name and Title of Signer (Type or Print)			30c. Date Signed		31b. Name of Contracting Officer (Type or Print)		31c. Date Signed
32a. Quantity in Column 21 Has Been <input type="checkbox"/> Received <input type="checkbox"/> Inspected <input type="checkbox"/> Accepted, and Conforms to the Contract, Except as Noted: _____							
32b. Signature of Authorized Government Representative				32c. Date		32d. Printed Name and Title of Authorized Government Representative	
32e. Mailing Address of Authorized Government Representative						32f. Telephone Number of Authorized Government Representative	
						32g. E-mail of Authorized Government Representative	
33. Ship Number		34. Voucher Number		35. Amount Verified Correct For		36. Payment <input type="checkbox"/> Complete <input type="checkbox"/> Partial <input type="checkbox"/> Final	
<input type="checkbox"/> Partial <input type="checkbox"/> Final						37. Check Number	
38. S/R Account Number		39. S/R Voucher Number		40. Paid By			
41a. I certify this account is correct and proper for payment				41c. Date		42a. Received By (Print)	
41b. Signature and Title of Certifying Officer						42b. Received At (Location)	
						42c. Date Rec'd (YY/MM/DD)	
						42d. Total Containers	

SCHEDULE Continued

Item No.	Supplies/Services	Quantity	Unit	Unit Price	Amount
0001	lightning (cloud-to-cloud, between cloud, in-cloud, and cloud to air). This is an Indefinite Delivery-Indefinite Quantity Contract with Firm Fixed Priced Delivery Orders in accordance with the attached Statement of Work. Lightning Data for Fiscal Year 05				
	BASE YEAR - October 1, 2004 through September 30, 2005				
0001A	Base requirement - Cloud-to-Ground Lightning data for Zone 1.	12	MO		
0001B	Option - Zones 2 through 26.	12	MO		
0001C	Option - Total Lightning Data	12	MO		
0001D	Option - Hardware	12	MO		
0001E	Option - Software	12	MO		
0001F	Option - Archived data and communications	12	MO		
0001G	Option - Cloud-to-cloud Lightning Data	12	MO		
1001	Lightning Data for Fiscal Year 06.				
	OPTION YEAR I - October 1, 2005 through September 30, 2006.				
1001A	Option Year I Requirement - Cloud-to-Ground Lightning data for Zone 1.	0	MO		
1001B	Option - Zones 2 through 26.	12	MO		
	Option Year I				
1001C	Option - Total Lightning Data	12	MO		
	Option Year I				
1001D	Option - Hardware	12	MO		
	Option Year I				
1001E	Option - Software	12	MO		
	Option Year I				
1001F	Option - Archived data and communications	12	MO		
	Option Year I				
1001G	Option - Cloud-to-cloud Lightning Data	12	MO		
	Option Year I				
2001	Lightning Data for Fiscal Year 07.				
	OPTION YEAR II - October 1, 2006 through September 30, 2007.				
2001A	Option Year II Requirement - Cloud-to-Ground Lightning data for Zone 1.	12	MO		
2001B	Option - Zones 2 through 26.	12	MO		
	Option Year II				
2001C	Option - Total Lightning Data	12	MO		
	Option Year II				
2001D	Option - Hardware	12	MO		
	Option Year II				
2001E	Option - Software	12	MO		
	Option Year II				
2001F	Option - Archived data and communications	12	MO		
	Option Year II				
2001G	Option - Cloud-to-cloud Lightning Data	12	MO		
	Option Year II				
3001	Lightning Data for Fiscal Year 08.				
	OPTION YEAR III - October 1, 2007 through September 30, 2008.				
3001A	Option Year III Requirement - Cloud-to-Ground Lightning data for Zone 1.	12	MO		
3001B	Option - Zones 2 through 26.	12	MO		
	Option Year III				

SCHEDULE Continued

Item No.	Supplies/Services	Quantity	Unit	Unit Price	Amount
3001C	Option - Total Lightning Data	12	MO		
3001D	Option Year III Option - Hardware	12	MO		
3001E	Option Year III Option - Software	12	MO		
3001F	Option Year III Option - Archived data and communications	12	MO		
3001G	Option Year III Option - Cloud-to-cloud Lightning Data	12	MO		
4001	Option Year III Lightning Data for Fiscal Year 09.				
4001A	OPTION YEAR IV - October 1, 2008 through September 30, 2009. Option Year IV Requirement - Cloud-to-Ground Lightning data for Zone 1.	12	MO		
4001B	Option - Zones 2 through 26.	12	MO		
4001C	Option Year IV Option - Total Lightning Data	12	MO		
4001D	Option Year IV Option - Hardware	12	MO		
4001E	Option Year IV Option - Software	12	MO		
4001F	Option Year IV Option - Archived data and communications	12	MO		
4001G	Option Year IV Option - Cloud-to-cloud Lightning Data	12	MO		
	Option Year IV				

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B.1 52.212-4 CONTRACT TERMS AND CONDITIONS--COMMERCIAL ITEMS (Oct 2003)

(a) "Inspection/Acceptance." The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. The Government must exercise its post-acceptance rights--

- (1) Within a reasonable time after the defect was discovered or should have been discovered; and
- (2) Before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) "Assignment." The Contractor or its assignee may assign its rights to receive payment due as a result of performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727). However, when a third party makes payment (e.g., use of the Governmentwide commercial purchase card), the Contractor may not assign its rights to receive payment under this contract.

(c) "Changes." Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) "Disputes." This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) "Definitions." The clause at FAR 52.202-1, Definitions, is incorporated herein by reference.

(f) "Excusable delays." The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) "Invoice."

- (1) The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized) to the address designated in the contract to receive invoices. An invoice must include--

- (i) Name and address of the Contractor;
- (ii) Invoice date and number;
- (iii) Contract number, contract line item number and, if applicable, the order number;
- (iv) Description, quantity, unit of measure, unit price and extended price of the items delivered;
- (v) Shipping number and date of shipment, including the bill of lading number and weight of shipment if shipped on Government bill of lading;
- (vi) Terms of any discount for prompt payment offered;
- (vii) Name and address of official to whom payment is to be sent;
- (viii) Name, title, and phone number of person to notify in

SECTION B

- event of defective invoice; and
- (ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
 - (x) Electronic funds transfer (EFT) banking information.
 - (A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.
 - (B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision, contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer-- Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.
 - (C) EFT banking information is not required if the Government waived the requirement to pay by EFT.
- (2) Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) prompt payment regulations at 5 CFR part 1315.
- (h) "Patent indemnity." The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.
- (i) "Payment.--"
- (1) "Items accepted." Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract.
 - (2) "Prompt payment." The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and prompt payment regulations at 5 CFR part 1315.
 - (3) "Electronic Funds Transfer (EFT)." If the Government makes payment by EFT, see 52.212-5(b) for the appropriate EFT clause.
 - (4) "Discount." In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer is made.
 - (5) "Overpayments." If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.
- (j) "Risk of loss." Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:
- (1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or
 - (2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.
- (k) "Taxes." The contract price includes all applicable Federal, State, and local taxes and duties.
- (l) "Termination for the Government's convenience." The

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Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) "Termination for cause." The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) "Title." Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

(o) "Warranty." The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(p) "Limitation of liability." Except as otherwise provided by an express warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

(q) "Other compliances." The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) "Compliance with laws unique to Government contracts." The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. 327, et seq., Contract Work Hours and Safety Standards Act; 41 U.S.C. 51-58, Anti-Kickback Act of 1986; 41 U.S.C. 265 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. 423 relating to procurement integrity.

(s) "Order of precedence." Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order:

- (1) The schedule of supplies/services.
- (2) The Assignments, Disputes, Payments, Invoice, Other Compliances, and Compliance with Laws Unique to Government Contracts paragraphs of this clause.
- (3) The clause at 52.212-5.
- (4) Addenda to this solicitation or contract, including any license agreements for computer software.
- (5) Solicitation provisions if this is a solicitation.
- (6) Other paragraphs of this clause.
- (7) The Standard Form 1449.
- (8) Other documents, exhibits, and attachments.
- (9) The specification.

(t) Central Contractor Registration (CCR).

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- (1) Unless exempted by an addendum to this contract, the Contractor is responsible during performance and through final payment of any contract for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.
- (2)
 - (i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in FAR Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to
 - (A) change the name in the CCR database;
 - (B) comply with the requirements of Subpart 42.12; and
 - (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer.The Contractor must provide with the notification sufficient documentation to support the legally changed name.
 - (ii) If the Contractor fails to comply with the requirements of paragraph (t)(2)(i) of this clause, or fails to perform the agreement at paragraph (t)(2)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.
- (3) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.
- (4) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the internet at <http://www.ccr.gov> or by calling 1-888-227-2423 or 269-961-5757.

(End of clause)

SECTION B

B.2 1352.216-70 CONTRACT TYPE (MARCH 2000)

This is a FIRM FIXED PRICE type contract for SUPPLIES . It consists of a base period from 10/01/04 to 09/30/05 and four (4) one-year options.

B.3 1352.216-72 MINIMUM AND MAXIMUM CONTRACT AMOUNTS (MARCH 2000)

During the period specified in the ORDERING clause (FAR 52.216-18), the Government shall place orders totaling a minimum of \$27,500. The amount of all orders shall not exceed \$5 Million.

B.4 SCOPE OF CONTRACT

The contractor shall furnish, as required, lightning data, data format documentation and other contractor support services required for the installation and support of all items supplied under the contract. The contractor shall furnish, at the option of the Government, hardware, special purpose display software, archive services and format licenses as required. Such items shall be supplied in conformance with the terms and conditions of this contract.

SECTION C
DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 LIGHTNING DATA PROGRAM ACQUISITION STATEMENT OF WORK

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LIST OF ACRONYMS

ADAS AWOS/ASOS Data Acquisition System
AFS Alaska Fire Service
ALDARS ... Automated Lightning Detection and Reporting System
ARTCC Air Route Traffic Control Center
ASOS Automated Surface Observing System
AWOS Automated Weather Observing System

BIA Bureau of Indian Affairs
BLM Bureau of Land Management

CL Cloud Lightning
CG Cloud to Ground Lightning
COTR Contracting Officers Technical Representative

DOA Department of Agriculture
DOC Department of Commerce
DOD Department of Defense
DOI Department of Interior
DOT Department of Transportation

ETMS Enhanced Traffic Management System

FAA Federal Aviation Administration
FWS Fish and Wildlife Service

IL Integrated Lightning
ITWS Integrated Terminal Weather System

km Kilometers

NASA National Aeronautics and Space Administration
NCDC National Climatic Data Center
NESDIS ... National Environmental Satellite, Data and Information
 Service
NIFC National Interagency Fire Center
NOAA National Oceanic and Atmospheric Administration
NPS National Park Service
NWS National Weather Service
NWSSTG ... National Weather Service Telecommunication Gateway

SOW Statement of Work

TRACON ... Terminal Radar Control Facility

US United States
USFS United States Forest Service

SECTION C
DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

VNTSC Volpe National Transportation Systems Center

SECTION C
DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

1. INTRODUCTION

The Federal Government continues to use lightning data in its present operations and to explore new ways of using lightning data in concert with complementary data from other sources.

1.1 BACKGROUND

Several Federal Government agencies have purchased lightning data from a contractor since 1991. The National Oceanic and Atmospheric Administration (NOAA) within the Department of Commerce (DOC) has administered previous contracts for itself and on behalf of the other agencies. The Federal Government will continue to purchase lightning data and NOAA will continue to administer this contract. As in the past, several other government agencies receive lightning data under this contract. The use of the data by NOAA and the other agencies is described in Section 1.5.1. The number of organizations receiving lightning data could increase or decrease under this contract. Additional organizations could include Federal Government agencies not having received data in the past as well as non-Federal agencies or contractors who provide mission support to Government agencies.

1.2. SCOPE

This Statement of Work (SOW) describes the Government's base requirement and optional services for the continued acquisition of lightning data and the methodology for its delivery to Government agencies. Also described are the uses of lightning data received by the Government, Government plans for archiving data, and the re-dissemination of data by the Government.

1.3 GOVERNMENT/PARTICIPATING AGENCY DATA RIGHTS

The data provided under this contract may be used in any manner by the NWS or other participating agencies covered under this contract, including incorporation within any other information product or system of NWS/participating agencies, and redistribution in whole or part without attribution as incorporated into other NWS/participating agencies derivative products as long as such derivative products do not have sufficient information to readily retrieve the original content of the data provided by this contract. Unless required by law, NWS/participating Government agencies will not redistribute data provided from the contractor, or derivative products from which this originally transmitted data can be readily recovered, without express written permission of the contractor. The Government/NWS reserves the right to archive this data as transmitted and/or received by the Government/NWS from the contractor. If the contractor does archive the transmitted lightning data as received by the Government/NWS, the Government/NWS does not intend to archive this data. Further information on data rights and archiving is contained in Sections 6 and 7.7.2.

1.4. TYPES OF LIGHTNING

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This SOW addresses two types of lightning; cloud to ground lightning (CG) and Cloud lightning (CL). These lightning types are defined below. These definitions will apply throughout this SOW.

1. CG lightning is lightning originating in a cloud and striking the ground or some natural or man-made feature on the ground. CG lightning in this SOW refers to either a flash or stroke. A stroke is a leader and the return stroke and subsequent strokes. A flash is the combination of one or more strokes.
2. CL is lightning not striking the ground. It includes in-cloud, cloud to cloud, and cloud to air Lightning. CL lightning in this SOW refers to the mapping of the lightning channel.

This SOW also uses the term integrated lightning (IL), which includes both types of lightning (CG and CL).

1.5. TYPES OF LIGHTNING DATA

This SOW addresses five types of lightning data; Levels I, II, III, IV, and V. Table 1-1 defines these lightning data types. These definitions will apply throughout this SOW.

LEVEL	DESCRIPTION
I	Streaming data as received from the contractor, unaltered in anyway. Example -- 1. Streaming data received from the contractor
II	Contractor generated products containing lightning data. Examples - 1. Time-lapse loop of detected lightning 2. Lightning data overlaid on a radar image
III	Government generated products repackaging lightning data. The data is unchanged in content but is formatted differently than the Level I data. No data other than lightning data is included in the product but the entire Level I data stream need not be included in a Level III product. Examples - 1. Current NOAAPORT one-minute product 2. Time-lapse loop of detected lightning

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IV	<p>Government generated value-added products which integrate lightning data along with other types of data to generate a new product. The new product identifies detected lightning or areas of lightning.</p> <p>Examples - 1. Lightning data overlaid on a satellite Image 2. Map outlining areas of detected lightning along with wild land fire potential.</p>
V	<p>Government generated products using lightning data as an input but not displaying the contractor transmitted/provided lightning data.</p> <p>Examples - 1. Map of detected thunderstorms that does not display lightning data 2. Map of forecast thunderstorm probability that uses lightning data as an input 3. Government generated products that are overlaid radar and satellite images</p>

TABLE 1-1
LIGHTNING DATA TYPES

1.6. LIGHTNING DATA USERS

This section addresses data use by the agencies covered by this SOW. Current users and possible additional future users are also discussed. Section 1.6.1. addresses Federal Government users and Section 1.6.2. users outside the Federal Government.

1.6.1. FEDERAL GOVERNMENT USERS

Several Federal Government users currently receive lightning data and may continue to receive data in the future. Sections 1.6.1.1. through 1.6.1.6 address these users. Section 1.6.1.7. addresses possible additional future Federal Government users. These sections also address some of the uses of the data by the Federal Government agencies. Other users not yet identified are also possible.

1.6.1.1. DEPARTMENT OF COMMERCE/NOAA

NOAA lightning data users include the National Weather Service (NWS), National Environmental Satellite, Data and Information Service (NESDIS) and the NOAA research organizations.

NOAA ingests lightning data into its AWIPS to support its operational mission of issuing accurate and timely meteorological and hydrological warnings, watches, forecasts and other products. NOAA also uses

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lightning data for research purposes to improve meteorological and hydrological forecasts and warnings. Lightning data acquired under this SOW will be integrated with other data sets to produce new products and applications.

NOAA may also archive lightning data. See Sections 6 and 7.7.2 for details on this archiving.

1.6.1.2. DEPARTMENT OF DEFENSE

Department of Defense (DOD) lightning data users include the Army, Navy, Air Force, and Marine Corps. Lightning is an important factor in safe air and land operation.

The DOD uses lightning data to support aircraft operations including pre-flight planning and pilot briefing, flight line maintenance, aircraft fueling, aircraft arming safety, and in-flight safety. Lightning data is also used to provide for safe munitions handling and storage, protect communications, protect troops, and protect assets during testing. Lightning data is one factor considered when issuing warnings to military bases. These warnings are for the protection of personnel and facilities.

1.6.1.3. DEPARTMENT OF TRANSPORTATION

The Department of Transportation's (DOT) Federal Aviation Administration (FAA) uses lightning data.

Lightning data is entered into the Enhanced Traffic Management System (ETMS) at the Volpe National Transportation Systems Center (VNTSC). The FAA Regions, Air Route Traffic Control Centers (ARTCC), selected Air Traffic Control Towers, Terminal Radar Control Facilities (TRACON), and Air Traffic Control Systems Command Center (ATCSCC) receive lightning data through the ETMS.

Lightning data is an input into the AWOS/ASOS Data Acquisition System (ADAS). The ADAS then enters the data into the Automated Lightning Detection and Reporting System (ALDARS). The ALDARS provides thunderstorm information to the Automated Weather Observing System (AWOS) and Automated Surface Observing System (ASOS). The ADAS also enters lightning data into the Integrated Terminal Weather System (ITWS) which is used to create terminal weather products for use of air traffic managers.

The FAA uses lightning data to increase aviation safety both en-route and in the terminal areas, to aid in the efficient movement of aircraft and to determine if thunderstorms are occurring at the AWOS/ASOS observation sites.

1.6.1.4. DEPARTMENT OF INTERIOR

Several Department of Interior (DOI) agencies receive and use

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lightning data. These agencies include the Bureau of Land Management (BLM), National Park Service (NPS), Fish and Wildlife Service (FWS), and Bureau of Indian Affairs (BIA). The BLM is the lead agency for the DOI. Lightning data for Zone 1 (see section 4.1.1 and Appendix B for a description of Zone 1) is received at the National Interagency Fire Center (NIFC) located in Boise, Idaho. From there it is disseminated to the other DOI agencies and the United States Forest Service (USFS).

The BLM may also receive data at the Alaska Fire Service (AFS) in Fairbanks, Alaska. Data will be disseminated from the AFS site in Fairbanks to field sites in Alaska.

The DOI agencies use lightning data to aid in locating potential wildland fires, to aid in suppressing those fires, and to support research into wildland fires and wildland fire suppression.

The DOI plans to disseminate lightning data to state and local government wildland fire suppression agencies.

1.6.1.5. DEPARTMENT OF AGRICULTURE

The USFS, a Department of Agriculture (DOA) agency, is a part of the wildland fire community and receives lightning data from the NIFC. The USFS uses lightning data in the same manner as the DOI wildland fire agencies.

1.6.1.6. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

The National Aeronautics and Space Administration (NASA) uses lightning data to support its operations and for research purposes.

NASA uses lightning data to support its ground operations such as the testing of spacecraft and propellants and to support space craft launch and recovery operations. Lightning data is used to support space shuttle operations; including launch, reentry, landing, and transport.

NASA also conducts research involving lightning data from space, sub-orbital platforms and at the earth surface.

1.6.1.7. OTHER FEDERAL GOVERNMENT USERS

Other Federal Government agencies not specifically mentioned in this SOW and not currently receiving lightning data may be interested in receiving data sometime during the period of performance of this SOW. The contractor will make service available to these agencies using the agency delivery format.

1.6.2. NON-FEDERAL GOVERNMENT USERS

1.6.2.1. STATE AND LOCAL GOVERNMENT USERS

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Several state and local government users cooperate with the Federal Government agencies receiving lightning data. These agencies may receive Level I, II, III, IV, or V lightning data under this SOW. The data may be received from the sponsoring Government agency or directly from the contractor. The Federal Government will identify to the contractor all state and local government agencies requiring lightning under this SOW.

1.6.2.2. NON-GOVERNMENT USERS

There are also non-government organizations cooperating with Federal Government agencies receiving lightning data. These include cooperating organizations and support contractors. Cooperating organizations are organizations with a cooperative working relationship with one or more Government agencies. Support contractors are organizations that have contracts with one or more of the sponsoring agencies to perform a task(s) for the Government. The tasks may involve operational use of lightning data or research. Cooperating organizations and contracting entities may receive Level I, II, III, IV, or V lightning data under this SOW. The data may be received from the sponsoring Government agency or directly from the contractor. The Government will identify to the contractor all cooperating organizations and contracting entities receiving lightning data.

Third party contractors may receive lightning data under this SOW. Third party contractors are contractors that receive lightning data and retransmit it to Federal Government agencies covered by this SOW. A third party contractor may also generate Level III, IV or V lightning data and transmit them to Federal Government agencies. Third party contractors are not lightning data users. They act only as communication companies or companies that generate Level III, IV or V lightning data for Federal Government agencies.

Example - A company receives Level I lightning data from the contractor. The company then generates Level III data and transmits them to a Federal Government agency.

1.6.3. UNAUTHORIZED USERS

There are two types of users not authorized to receive lightning data under this SOW:

1. Organizations not having a working relationship with a Federal Government user.
2. Organizations, including government agencies, using the data for any commercial purpose.

1.7 DOCUMENT ORGANIZATION

This SOW is divided into seven sections.

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- Section 1 -- Introduction ... Background information, definition of lightning types, information on users
- Section 2 -- Services Rendered ... Required services and options to be provided by the contractor
- Section 3 -- Technical Requirements ... Lightning data technical requirements
- Section 4 -- Geographic Coverage Requirements ... Geographic coverage zones and area coverage options
- Section 5 -- Level II, III IV, and V Lightning Data ... Description of Government and contractor-generated Level II, III, IV, and V lightning data
- Section 6 -- Archived Data ... Description of the Government's and contractor's archive for lightning data.
- Section 7 -- Data Delivery ... Data delivery methods, receiver and user sites, receiver site equipment, data format, availability and reliability, and redistribution rights
- Section 8 -- Technical Proposal Approach ... Description of the Government's technical proposal approach, evaluation criteria and proposal format.

In addition there are six appendices and one Addendum

- Appendix A - Terms of Reference
- Appendix B - Geographic Coverage Maps
- Appendix C - Service Rendered by the Lightning Data Contractor
- Appendix D - Receiver and user Sites

2. SERVICES RENDERED

The contractor shall offer lightning data to meet the Government's basic requirement. Optional services will also be offered as specified herein. The contractor shall have a network in place to meet the basic requirement or have legal access to data from another organization's network. The contractor will not need to have a network in place to meet any optional services which the government does not request. However, if an optional service is requested, the contractor must be able to meet the requirement within a period of one

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year from the date it receives the request.

2.1. BASE REQUIREMENT

The contractor shall deliver CG Level I lightning data for Zone 1 (See Section 4.1.1 and Appendix B for a description of this geographic zone). This is considered the base requirement which the contractor must meet to be compliant with this SOW. The Government will procure the base requirement from the contractor, although not all agencies may choose to receive this base service.

2.2. OPTIONS BEYOND THE BASE REQUIREMENT

The contractor shall provide several optional services beyond the base requirement. These options are based on the type of lightning data (CG, CL, and IL), Levels of data (I or II), and the geographic areas covered. The contractor shall provide the specified type of lightning data for each optional geographic area.

There are also several options for contractor supplied archived data, interfacing capabilities, and communications described in this SOW.

Some Government agencies may require the services indicated with one or more options while other agencies may not. Each Government agency will decide if it needs the service indicated in each option. The contractor shall be able to supply the service in individual options to individual agencies. Appendix C outlines these options.

3. TECHNICAL REQUIREMENTS

The contractor shall supply lightning data meeting the technical requirements described in all subsections below.

3.1. LIGHTNING DETECTION NETWORK

The contractor shall have legal access to lightning data capable of meeting the requirements in this SOW. The contractor shall have legal access to lightning data 24 hours a day 7 days a week. Lightning data from geographic Zones 1, 2 and 3 shall be made available to the Government in one minute or less. Data from the other geographic zones shall be available in 5 minutes or less. Note - data delivered via internet need not meet this timeliness requirement if the delay is due to internet delays.

The contractor shall provide the network required to meet the base requirement and options as specified herein. The network may be owned, operated, and maintained by the contractor or owned by another organizations. If the contractor supplies data from another organization's network, the contractor must have legal rights to the data.

The contractor shall have a 24 hour point of contact available for operational service, troubleshooting, and questions. The contractor

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shall provide the appropriate access information to the Government for this 24 hour a day information operation.

3.1.1. GEOGRAPHIC COVERAGE OF CONTRACTOR'S NETWORK

At a minimum the network shall provide coverage for Zone 1. The contractor shall also maintain a lightning detection network covering any other geographic zones for which the Government has requirements. These zones are described in Section 4.1 and Appendix B.

3.2. LIGHTNING DATA REQUIREMENTS

The contractor shall supply lightning data in real-time that meets all requirements outlined in Tables 3-1 through 3-8. Refer to all subsections of 4.1 for a discussion of the geographic zones.

PARAMETER	REQUIREMENT
Location Accuracy	1 km for 99% of the area within the zone; the location of a CG flash is the location where it strikes the ground
Timing Accuracy	Accuracy of the reported time of flashes shall be 0.001 seconds or better
Detection Efficiency	90% or higher over the 48 contiguous states; 60% or higher over adjacent marine and land areas
Probability of False Detection	No more than 1% of all reported lightning flashes shall be due to non-lightning causes
Probability of False Flash Type Identification	No more than 1% of all reported CG flashes shall be due to other types of lightning
Polarity	Polarity (positive or negative) shall be reported for all flashes
Estimated Peak Current	Peak current in amperes shall be reported for all flashes
Strokes per Flash	Number of strokes per flash shall be reported for all flashes

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Data Delivery Time	Total time from the time the flash occurs to the time that flash is reported shall be one minute or less for 99% of all flashes, except data delivered via internet need not meet this requirement if the delay is due to internet delays.
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TABLE 3-1
LIGHTNING DATA TECHNICAL REQUIREMENTS
GEOGRAPHIC ZONE 1
CLOUD TO GROUND LIGHTNING (CG)

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PARAMETER	REQUIREMENT
Location Accuracy	5 km or better for 99% of the area within the zones; the location of a CG flash is the location where it strikes the ground
Timing Accuracy	Accuracy of the reported time of flashes shall be 0.001 seconds or better
Detection Efficiency	80% or higher
Probability of False Detection	No more than 1% of all reported lightning flashes shall be due to non-lightning causes
Probability of False Flash Type Identification	No more than 1% of all reported CG flashes shall be due to other types of lightning
Polarity	Polarity (positive or negative) shall be reported for all flashes
Estimated Peak Current	Peak current in amperes shall be reported for all flashes
Strokes per Flash	Number of strokes per flash shall be reported for all flashes
Data Delivery Time	Total time from the time the flash occurs to the time that flash is reported shall be one minute or less for 99% of all flashes, except data delivered via internet need not meet this requirement if the delay is due to internet delays

TABLE 3-2
LIGHTNING DATA TECHNICAL REQUIREMENTS
GEOGRAPHIC ZONES 2 AND 3
CLOUD TO GROUND LIGHTNING (CG)

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PARAMETER	REQUIREMENT
Location Accuracy	5 km or better for 99% of the area within the zones; the location of a CG flash is the location where it strikes the ground
Timing Accuracy	Accuracy of the reported time of flashes shall be 0.001 seconds or better
Detection Efficiency	60% or higher
Probability of False Detection	No more than 1% of all reported lightning flashes shall be due to non-lightning causes
Probability of False Flash Type Identification	No more than 1% of all reported CG flashes shall be due to other types of lightning
Polarity	Polarity (positive or negative) shall be reported for all flashes
Estimated Peak Current	Peak current in amperes shall be reported for all flashes
Strokes per Flash	Number of strokes per flash shall be reported for all flashes
Data Delivery Time	Total time from the time the flash occurs to the time that flash is reported shall be 5 minutes or less for 99% of all flashes, except data delivered via internet need not meet this requirement if the delay is due to internet delays

TABLE 3-3
LIGHTNING DATA TECHNICAL REQUIREMENTS
GEOGRAPHIC ZONES 4 THROUGH 15
CLOUD TO GROUND LIGHTNING (CG)

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PARAMETER	REQUIREMENT
Location Accuracy	Contractor shall propose a location accuracy to the Government
Timing Accuracy	Accuracy of the reported time of flashes shall be 0.001 seconds or better
Detection Efficiency	20% or higher
Probability of False Detection	No more than 1% of all reported lightning flashes shall be due to non-lightning causes
Probability of False Flash Type Identification	No more than 1% of all reported CG flashes shall be due to other types of lightning
Polarity	NA
Estimated Peak Current	Peak current in amperes shall be reported for all flashes
Strokes per Flash	Number of strokes per flash shall be reported for all flashes
Data Delivery Time	Total time from the time the flash occurs to the time that flash is reported shall be 5 minutes or less for 99% of all flashes, except data delivered via internet need not meet this requirement if the delay is due to internet delays

TABLE 3-4
LIGHTNING DATA TECHNICAL REQUIREMENTS
GEOGRAPHIC ZONES 16 THROUGH 26
CLOUD TO GROUND LIGHTNING (CG)

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PARAMETER	REQUIREMENT
Location Accuracy	Contractor shall propose a location accuracy to the Government
Timing Accuracy	Accuracy of the reported time of flashes shall be 0.001 seconds or better
Detection Efficiency	Contractor shall offer options for detection efficiencies of 5%, 10%, 20%, 50% and 90% or higher
Probability of False Detection	No more than 1% of all reported lightning flashes shall be due to non-lightning causes
Probability of False Flash Type Identification	No more than 1% of all reported CL flashes shall be due to CG lightning or noise
Polarity	NA
Estimated Peak Current	NA
Strokes per Flash	NA
Data Delivery Time	Total time from the time the flash occurs to the time that flash is reported shall be one minute or less for 99% of all flashes, except data delivered via internet need not meet this requirement if the delay is due to internet delays

TABLE 3-5
LIGHTNING DATA TECHNICAL REQUIREMENTS
GEOGRAPHIC ZONE 1
CLOUD LIGHTNING (CL)

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PARAMETER	REQUIREMENT
Location Accuracy	Contractor shall propose a location accuracy to the Government
Timing Accuracy	Accuracy of the reported time of flashes shall be 0.001 seconds or better
Detection Efficiency	Contractor shall offer options for detection efficiencies of 5%, 10%, 20%, and 60% or higher
Probability of False Detection	No more than 1% of all reported lightning flashes shall be due to non-lightning causes
Probability of False Flash Type Identification	No more than 1% of all reported CL flashes shall be due to CG lightning or noise
Polarity	NA
Estimated Peak Current	NA
Strokes per Flash	NA
Data Delivery Time	Total time from the time the flash occurs to the time that flash is reported shall be one minute or less for 99% of all flashes, except data delivered via internet need not meet this requirement if the delay is due to internet delays

TABLE 3-6
LIGHTNING DATA TECHNICAL REQUIREMENTS
GEOGRAPHIC ZONES 2 AND 3
CLOUD LIGHTNING (CL)

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PARAMETER	REQUIREMENT
Location Accuracy	Contractor shall propose a location accuracy to the Government
Timing Accuracy	Accuracy of the reported time of flashes shall be 0.001 seconds or better
Detection Efficiency	Contractor shall offer options for detection efficiencies of 5%, 10%, 20%, and 60% or higher
Probability of False Detection	No more than 1% of all reported lightning flashes shall be due to non-lightning causes
Probability of False Flash Type Identification	No more than 1% of all reported CL flashes shall be due to CG lightning or noise
Polarity	NA
Estimated Peak Current	NA
Strokes per Flash	NA
Data Delivery Time	Total time from the time the flash occurs to the time that flash is reported shall be 5 minutes or less for 99% of all flashes, except data delivered via internet need not meet this requirement if the delay is due to internet delays

TABLE 3-7
LIGHTNING DATA TECHNICAL REQUIREMENTS
GEOGRAPHIC ZONES 4 THROUGH 15
CLOUD LIGHTNING (CL)

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PARAMETER	REQUIREMENT
Location Accuracy	Contractor shall propose a location accuracy to the Government
Timing Accuracy	Accuracy of the reported time of flashes shall be 0.001 seconds or better
Detection Efficiency	Contractor shall offer options for detection efficiencies of 5%, 10%, 20% or higher
Probability of False Detection	No more than 1% of all reported lightning flashes shall be due to non-lightning causes
Probability of False Flash Type Identification	No more than 1% of all reported CL flashes shall be due to CG lightning or noise
Polarity	NA
Estimated Peak Current	NA
Strokes per Flash	NA
Data Delivery Time	Total time from the time the flash occurs to the time that flash is reported shall be 5 minutes or less for 99% of all flashes, except data delivered via internet need not meet this requirement if the delay is due to internet delays

TABLE 3-8
LIGHTNING DATA TECHNICAL REQUIREMENTS
GEOGRAPHIC ZONES 16 THROUGH 26
CLOUD LIGHTNING (CL)

3.3. STATUS INFORMATION

With any lightning detection system, sensor or communication failures can result in a degradation of the data or a complete loss of data over specific areas or even over the entire network. The contractor shall furnish system status information to distinguish areas of no lightning activity from areas of degraded performance or lost data. This information shall be transmitted in a notice to each receiver site identified in Addendum D. The notice shall identify areas where the specified performance requirements cannot be expected.

The contractor's system shall detect all network changes or outages which adversely affect the performance of the system. The expected

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impact of these changes shall be reported within two minutes from the time of the outage and repeated at least every ten minutes. These changes may be expected or unexpected. They may result from sensor, communications, or processor failures, or from planned maintenance. Other causes of outages include solar storms and the effect of solar eclipses on satellite communications. Expected outages shall be reported to the Government at least two weeks in advance except outages due to the effect of a solar eclipse on satellite communications shall be reported one month in advance and expected outages due to solar storms reported one day in advance. Systems degradation information shall include estimates of the resulting changes in detection capability and location accuracy. Any expected outages due to the effect of solar eclipse on satellite communications used to transmit lightning data shall also be reported. The outage message shall be repeated at least once a day until the outage is over.

See Section 7.6. for more information on outages.

4. GEOGRAPHIC COVERAGE REQUIREMENTS

The contractor shall offer coverage based on geographic zones. Twenty six zones have been defined covering all geographic areas of the earth. Section 4.1 identifies these zones and Appendix B contains a detailed description and maps of the zones.

The contractor shall also offer coverage of Zones 1,2, and 3 based on areas of several sizes and based on individual states. Section 4.2 describes these areas.

4.1. GEOGRAPHIC ZONES

The following sections describe the terrestrial and marine zones and the area coverage of each zone.

4.1.1. TERRESTRIAL ZONES

The contractor shall at a minimum offer CG data from Zone 1 (the base requirement). Zones 2-15 are optional zones. IL data for Zone 1 is also an option. The contractor will not need to have data from Zones 2-15 unless the Government requires data from these optional areas.

Coverage for the terrestrial zones include coverage up to 250 km offshore and over adjacent land areas; except for Zones 1 and 2. Zone 1 will include coverage up to 500 km offshore and over adjacent land areas; and Zone 2 will include data from the Canadian network sufficient to provide coverage up to 200 nmi into Canada.

The terrestrial zones are defined in Table 4-1 and Appendix B contain maps and a detailed descriptions of these zones.

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ZONE	AREA
Zone 1	Forty Eight Contiguous States, District of Columbia, Puerto Rico and the Virgin Islands
Zone 2	Alaska
Zone 3	Hawaii
Zone 4	Canada
Zone 5	Mexico
Zone 6	Central and South America
Zone 7	Europe
Zone 8	Northern Asia
Zone 9	Southern Asia
Zone 10	Middle East
Zone 11	Africa
Zone 12	East Indies and the Philippines
Zone 13	Australia and New Zealand
Zone 14	Greenland and Iceland
Zone 15	Antarctica

TABLE 4-1
TERRESTRIAL ZONES

4.1.2. MARINE ZONES

All 11 marine zones are optional zones. The contractor shall propose how it plans to meet the requirements for these zones as defined in Section L. The marine zones are defined in Table 4-2 and Appendix B contains maps and detailed descriptions of these zones.

ZONE	AREA
Zone 16	Gulf of Mexico, Caribbean Sea and West Indies
Zone 17	North Atlantic Ocean
Zone 18	South Atlantic Ocean
Zone 19	Mediterranean and Black Seas
Zone 20	Northeast Pacific Ocean
Zone 21	Northwest Pacific Ocean
Zone 22	Southeast Pacific Ocean
Zone 23	Southwest Pacific Ocean
Zone 24	Indian Ocean
Zone 25	Arctic Ocean
Zone 26	Southern Ocean

TABLE 4-2
MARINE ZONES

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4.2. AREAL COVERAGE OPTIONS FOR ZONES 1, 2, AND 3

The contractor shall offer lightning data coverage for sectors of several different sizes within Zones 1, 2 and 3. The locations of the sectors will be defined by the Government agencies and centered on user sites. The Government will define the user sites. The Government may select any number of these sectors for any part of Zones 1, 2 or 3. The contractor may offer these sectors defined either as squares or circles. Table 4-3 defines these sectors.

SECTOR	SQUARE SIZE	CIRCLE SIZE
Very Small Sector	50 x 50 km	71 km diameter
Small Sector	100 x 100 km	142 km diameter
Medium Sector	500 x 500 km	708 km diameter
Large Sector	1,000 x 1,000 km	1,415 km diameter

TABLE 4-3
AREAL COVERAGE OPTIONS FOR ZONES 1, 2, AND 3

5. LEVEL II, III, IV AND V LIGHTNING DATA

Level I lightning data can be used to generate Level II, III, IV and V data. Descriptions of Government and contractor-generated Level II, III, IV, and V data follows.

5.1. GOVERNMENT-GENERATED LEVEL III, IV AND V LIGHTNING DATA

The Government may generate Government-developed Level III, IV and V data based wholly or partially on the contractor's lightning data. The content of these data will be determined by the Government. These data will be used operationally and a source of data for research purposes.

5.2. Contractor-GENERATED LEVEL II LIGHTNING DATA

The contractor may make available to the Government Level II lightning data. These data shall be offered as options that the Government may or may not elect to procure. Contractor-supplied Level II data shall be used only by the participating agencies and cooperating organizations and will not be redistributed beyond the participating agencies and cooperating organizations.

6. ARCHIVED DATA

Archived lightning data is any lightning data more than 24 hours old. Archived data may be in hardcopy or electronic form.

6.1. LEVEL I AND II DATA

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The contractor may archive Level I and II data in the form it is transmitted to the Government and in a quality controlled form. If the contractor elects not to archive Level I data in the transmitted form, the Government reserves the right to archive the data. If the contractor does archive Level I data in the as transmitted form the Government will not archive the same data. The Government will not archive Level II data.

6.2. LEVEL III, IV AND V DATA

The Government reserves the right to archive Level III, IV, and V data.

6.3. CONTRACTOR'S ARCHIVE

The contractor shall state the length of time lightning data is retained in its archive. This information shall be included by the contractor in Tab I of the proposal as defined by Section L. If the contractor plans to dispose of any data from its archive, the contractor shall offer the data to the Government before disposing of it.

The contractor shall make archived data available on CDs for each geographic zone on a monthly basis. Government agencies will not distribute these CD beyond the agency procuring them except that CDs may be distributed to organizations with cooperative arrangements.

6.4. GOVERNMENT ARCHIVE

The Government may archive data in individual agency archives, at the user and receiver sites, or in the permanent national archive at NOAA's National Climatic Data Center (NCDC).

7. DATA/PRODUCT DELIVERY

The contractor shall deliver lightning data to the Government as a continuous data stream. User sites in some agencies will receive the data directly from the contractor. Other agencies will receive the lightning data at a central location and redistribute it to the authorized users.

7.1. KEEP ALIVE MESSAGE

During periods with no observed lightning activity the contractor shall transmit a "keep alive" message indicating that no lightning is occurring throughout the zone. This message is necessary to inform the users that the lack of reported lightning is not due to a failure in the lightning detection network or communications.

7.2. DELIVERY METHODS

Several ways to receive lightning data are described in Sections 7.2.1. through 7.2.3. Government agencies may select the method that best meets its needs.

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7.2.1. NOAAPORT

NOAA will receive Level I lightning data from the contractor at the NWS Telecommunication Gateway (NWSTG). From there either CG or IL Level III, IV, or V data will be produced and disseminated in near real-time via the NOAAPORT Satellite Broadcast. Level I data may also be disseminated through NOAAPORT. The NOAAPORT broadcast is intended to meet NOAA's operational needs, but other users authorized under this SOW may also receive lightning products and data through NOAAPORT.

Lightning data transmitted through NOAAPORT will be encrypted so that unauthorized users may not use them.

7.2.2. DATA STREAMING

The contractor shall deliver lightning data from Zones 1, 2 and 3 to the Government agencies in a continuous data stream. Data from the other zones (Zones 4-26) shall be delivered in 5 minutes or less. In some agencies this data will be received at receiver sites and redistributed to the user sites. In other agencies the data will be received directly from the contractor at the user sites. See the subsections under 7.3 for definitions of receiver and users sites.

Lightning data distributed in a data stream will be transmitted through a secure link to prevent its use by unauthorized users.

7.2.3. INTERNET ACCESS

The contractor shall provide an alternate delivery system for Level I Data using the internet. This delivery system may be used as a redundant delivery method that could be used if the primary delivery system fails.

The contractor will also provide a display ready internet product displaying lightning data. This product will be developed to meet Government needs for a product that can be used by cooperating organizations that need limited access to lightning data. The internet product will offer lightning data coverage on a state by state basis for Zone 1. Coverage will not include any adjacent land or marine areas, except that bodies of water within the states and bodies of water between states will be included. Coverage over the US portions of the Great Lakes, Lake St. Clair, and the Lake of the Woods will also be included with the bordering states.

Internet access will be an option that the Government agencies may choose to procure.

7.3. RECEIVER SITES AND USERS SITES

The sections 7.3.1 through 7.3.4. describe receiver and user sites and the relationship between the two.

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7.3.1. RECEIVER SITES

A receiver site is a location receiving lightning data either as streaming data directly from the contractor or through a third-party contractor. Sites receiving data through the internet are not considered receiver sites unless the site also receives streaming data directly from the vendor or through a third party contractor. In general, a receiver site is the first entry point into an agency. Government-generated Level III, IV, and V data may be produced at receiver sites for dissemination to user sites.

7.3.2. USER SITES

User sites are locations, not necessarily located with receiver sites, using lightning data. User sites are the operational units using the lightning data, not individual work stations. Example - A NWS Weather Forecast Office is a user site but each individual forecaster's work position would not be. The use may be for operational purposes, research or testing. The total number of user sites will be identified in the completed lightning data delivery orders.

7.3.3. INTERNET USER SITES

Internet users sites are locations using lightning data that was received from the contractor through the internet. Internet user sites are the operational units using the lightning data, not individual work stations. The data may be used for operational purposes, research or testing. Internet user sites will be identified in individual lightning data delivery orders.

7.3.4. RELATIONSHIP BETWEEN RECEIVER AND USER SITES

Receiver sites disseminate lightning data to user sites. A receiver site may also use the data itself. In this case the location is both a receiver site and user site. Appendix D outlines the relationship between the receiver and users sites in a graphical format.

Internet user sites receive lightning data directly from the contractor but are not considered to also be receiver sites unless the sites also receives data as described in section 7.3.1.

7.4. RECEIVER SITE EQUIPMENT

The following sections describe the requirements for receiver site equipment and communications

7.4.1. GOVERNMENT-FURNISHED EQUIPMENT

The Government reserves the right to develop and interface Government-furnished equipment with the contractor's lightning data stream.

7.4.1.1. GOVERNMENT RECEIVER AND DISPLAY EQUIPMENT

Government agencies may use Government-owned and operated receiver and display equipment at their receiver and users sites. If a Government agency uses contractor-furnished communications with Government-

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supplied receiver and display equipment, the contractor shall interface the data stream directly into the Government's equipment and validate its proper operation.

7.4.1.2. GOVERNMENT COMMUNICATIONS LINKS

Government agencies may use Government supplied communications links to transmit data from the contractor's facility to the receiver sites. These links will connect the contractor's facility with the Government receiver site. The contractor shall input the lightning data stream directly into the Government's communication link. The contractor shall supply the Government with the technical requirements of a link capable of handling the contractor's data stream and any assistance needed to successfully implement the connection.

7.4.1.3. GOVERNMENT SOFTWARE

Government agencies reserve the right to use Government-supplied software at their receiver and users sites. The contractor shall provide the Government documentation describing data processing algorithms necessary to decode and unpack the contractor's data stream and to display the data. This will allow the Government to process and display the data using Government supplied software.

7.4.2. Contractor-FURNISHED EQUIPMENT

The following sections describe the requirement for contractor-supplied display and receiver equipment and communications.

7.4.2.1. Contractor-SUPPLIED RECEIVER AND DISPLAY EQUIPMENT

The contractor shall offer as an option receiver and display equipment. This equipment shall be capable of receiving the data stream and displaying it. At a minimum the display equipment shall be capable of:

1. Plotting lightning strikes as they are received.
2. Color coding the strikes so that the time of occurrence of the strike can be identified.
3. Use symbols and/or colors to denote the polarity of the strikes.
4. Use symbols and/or colors to indicate the type of lightning (CG or CL).
5. Displaying background maps with accuracies preserving the data stream. These maps will include at a minimum state and county boundaries, major roads, major bodies of water, and major cities.
6. Zooming any area selected by Government personnel.

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7. Producing hard copies of all data and graphics selected by Government personnel.
8. Plotting and updating loops of lightning strike locations as they are received. Loops shall include at least 6 hours of data.

The contractor shall provide detailed documentation describing clearly the installation and operation of the receiver and display equipment. In addition the contractor shall provide necessary training to Government onsite staff in the use of the receiver and display equipment.

7.4.2.2. Contractor-SUPPLIED COMMUNICATIONS LINKS

The contractor shall offer, as an option, a communications link between its facility and the Government receiver sites. This link shall be capable of transmitting the contractor's lightning data stream to the receiver sites within the time specified in Table 3-1 through 3-8. At receiver sites not using contractor supplied equipment the communications link shall be capable of ingesting the contractor's data stream directly into the Government's equipment.

7.4.2.3. Contractor SOFTWARE

The contractor shall offer, as an option software capable of displaying the lightning data stream as specified in Section 7.4.2.1. The Government may use Government supplied equipment meeting the system requirements defined by the contractor to run the contractor supplied software.

The contractor shall provide, at no cost to the Government, telephone technical support for the contractor-supplied software for a period of one year from that date of the software's acceptance by the Government. Technical support shall be 24 hours a day seven days a week. Support includes trouble shooting problems and all software upgrades made to correct identified problems.

7.5. DATA FORMAT

The following sections describe the types of formats authorized under this SOW.

7.5.1. Contractor-SUPPLIED DATA STREAM

The contractor shall provide the Government a detailed description of the format used with the contractor's streaming data. The description will be detailed enough to allow the Government to ingest and decode the data into any Government system, application, or numerical model.

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7.5.2. NOAAPORT ONE MINUTE PRODUCT

The formats of NOAA's 1-minute CG product will be provided upon request.

7.5.3. INTERNET FORMAT

The contractor shall provide a detailed description of the data format used with the contractor's internet dissemination. The description will be detailed enough to allow the Government to ingest and decode the data into any Government system, application, or numerical model.

7.5.4. DATA ENCRYPTION

The contractor shall provide the means of encryption used to ensure that unauthorized users cannot access the lightning data.

7.5.5. HEARTBEAT

The contractor shall add "heartbeat" packets to the data stream whenever 60 seconds have elapsed without receipt of a data packet.

7.6. AVAILABILITY AND RELIABILITY

The contractor's lightning detection network shall operate and transmit data to the Government agencies 24 hours a day, seven days a week. Availability is defined as data being received by the receiver sites within the time defined in Table 3-1 through 3-8. Any failure, regardless of the length of time, of either the detection network or of the contractor's communication system resulting in a loss of availability is defined as a system outage.

Systems outages at any receiving site shall not occur for more than 72 cumulative hours over a 12 month period. Of this time no more than 24 hours shall occur during any 30-day period.

The contractor shall grant credits to the Government against the monthly recurring charges whenever:

1. The system outages exceed a total of 72 hours over any 12 month period.

Or
2. The system outages exceed 24 hours over the previous 30 day period.

Periods of system outage shall be figured to the nearest hour increment. Credits shall be calculated on a prorated basis using a 30 day month and applied to the monthly billing period. The following equation will be used to calculate credits:

Credit (per Site per Month) =	$\frac{(\text{Unit Cost})(\text{Hours of Outage})}{(720)}$
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The contractor shall designate a 24 hour-a-day, seven days-a-week point of contact for system problems. The contractor shall initiate corrective action within six hours of receiving a report of a problem.

The Contractor shall provide stable network operation, communications, and data display for the entire life of the contract. If the contractor independently makes any modification to its system affecting the lightning data received by the Government, the contractor shall provide, cost-free to the Government, any hardware or software necessary to insure continuous receipt of data by the government.

The contractor shall monitor the operation of its system 24 hours a day, seven days a week and notify the user agencies and the Contracting Officers Technical Representative (COTR) of any system outages or significant changes. System outages include maintenance (scheduled or unscheduled) or any change implementation requiring the detection network or communications to be out of service. Planned outages shall be announced at least two weeks in advance. Unplanned outages shall be announced as soon as possible after the contractor becomes aware of the outage. This information is necessary to inform Government users of apparent changes in lightning activity due to changes in the performance of the contractor's lightning detection network or communications.

7.7. REDISTRIBUTION RIGHTS

The following sections describe the rights of the Government to redistribute lightning data.

7.7.1. REDISTRIBUTION OF REAL-TIME DATA

1. Level I, II, III, and IV Data - Government may redistribute Level I, II, III, and IV Data to any participating agencies and to any organization with which a participating agency has a cooperative or working arrangement. Organizations that may receive data include other Government agencies (federal, state, and local), contractors, and other cooperating organizations. Data may be distributed to organizations in foreign countries with which cooperative arrangements have been established. Data may be included in scientific papers or journal articles. Internet redistribution is allowed to participating agencies through secure internet connections that deny access to unauthorized organizations or individuals.
2. Level V Data - Government may freely distribute the Level V Data to any user.

7.7.2. REDISTRIBUTION OF ARCHIVED DATA

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1. Level I Data - If level I data is archived at NCDC (see Section 6.1) it may be disseminated to the participating agencies and to any other organization that request the products through a participating agency.

Participating agencies may disseminate archived Level I data to the agencies included in the contract and to cooperating organizations.

Internet redistribution is allowed to participating agencies through secure internet connections that deny access to unauthorized organizations or individuals.

2. Level II Data - NCDC will not archive or disseminate Level II data.

Participating agencies may disseminate archived Level II data to the agencies included in the contract and to cooperating organizations.

Internet redistribution is allowed to participating agencies through secure internet connections that deny access to unauthorized organizations or individuals.

3. Level III and IV Data - NCDC may redistribute archived Level III and IV data to participating agencies and to any other organization that request the products through a participating agency.

Participating agencies may disseminate archived Level III and IV Data to the agencies included in the contract and to cooperating organizations.

Internet redistribution is allowed to participating agencies through secure internet connections that deny access to unauthorized organizations or individuals.

4. Level V Data - NCDC and participating agencies may freely distribute the archived Level V Data to any user.

8.0 Technical Proposal Approach

The proposal must be prepared in two parts: a technical proposal and a business proposal. Each of the parts shall be separate and complete in itself so that evaluation of one may be accomplished independently from evaluation of the other. The technical proposal must not contain reference to cost; however, resource information (such as data concerning labor hours and categories, materials, subcontracts, etc.)

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must be contained in the technical proposal so that the contractor's understanding of the specifications may be evaluated. It must disclose the contractor's technical approach in sufficient detail to provide a clear and concise presentation that includes, but is not limited to, the requirement of the technical proposal instructions. Technical proposal instructions are contained Section L.5 (b)

8.1 Technical Evaluation Criteria - The Government will evaluate proposals in accordance with the evaluation criteria set forth in Section M of this RFP. The contractor must submit an explanation of its proposed technical approach in conjunction with the tasks to be performed in achieving the project objectives. The technical approach should be in as much detail as the contractor considers necessary to fully explain the proposed technical approach or method. The technical proposal should reflect a clear understanding of the nature of the work being undertaken.

8.2 Technical Proposal Format - Technical proposals submitted in response to this RFP must be prepared and tabbed in the format described below. Several tabs described below require a response to the specifications as stated in this SOW. Such a response shall be a paragraph by paragraph explanation of how the contractor intends to comply with the specification. Each response must be keyed to the respective paragraph in Section C.
The Tab sections are listed as follows:

- Tab (A) General Description
- Tab (B) Contractor Qualifications
- Tab (C) Lightning Data System
- Tab (D) Data Parameters and Quality
- Tab (E) System Performance and Status
- Tab (F) Area of Coverage
- Tab (G) Site Hardware and Display Function
- Tab (H) Maintenance
- Tab (I) Archive Data
- Tab (J) Past Performance

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APPENDIX A - TERMS OF REFERENCE

Archived Data ... Any lightning data or products generated from that data older than 24 hours. Archived data may be in hardcopy or electronic form.

Cloud Lightning (CL) ... Lightning not striking the ground. It includes in-cloud, cloud to cloud, and cloud to air Lightning.

Cloud to Air Lightning ... Lightning that originates in a cloud and travels through the air but does not enter another cloud or strike the ground.

Cloud to Cloud Lightning ... Lightning that originates in a cloud and travels to another cloud.

Cloud to Ground Lightning (CG) ... Lightning that originates in a cloud and strikes the ground or some natural or man-made feature on the ground.

Contracting Entity ... An organization that has a contract with one or more of the sponsoring agencies to perform a task for the Government. The task may involve operational use of lightning data or research.

CONUS ... The 48 contiguous states and District of Columbia.

Cooperating Organization ... An organization that has a working relationship with one or more of the participating agencies. Cooperating organizations can be government agencies (federal, state, or local) or non-governmental organizations.

Government ... Unless otherwise noted, the term "Government" in this SOW refers to the Federal Government.

Heartbeat ... Heartbeat is a message sent from the contract to the users indicating that the lightning detection system and communications are operating normally. Heartbeat messages contain no lightning data. They are transmitted even if the lightning detection network detects no lightning.

In-Cloud Lightning ... A lightning stroke that is confined to the cloud where it originated.

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Internet User Site ... Internet user sites are locations that receive lightning data from the contractor through the internet. User sites are the operational units using the lightning data, not individual work stations.

Integrated Lightning (IL) ... Lightning that includes cloud to ground, in-cloud, cloud to cloud, and cloud to air lightning.

Level I Lightning Data ... Streaming data as received from the vendor, unaltered in anyway.

Level II Lightning Data ... Contractor generated products containing lightning data.

Level III Lightning Data ... Government generated products repackaging lightning data. The data is unchanged in content but is formatted differently than the Level I data. No data other than lightning data is included in the product but the entire Level I data stream need not be included in a level III product.

Level IV Lightning Data ... Government value-added products which integrate lightning data along with other types of data to generate a new product. The new product identifies detected lightning or areas of lightning.

Level V Lightning Data ... Government generated products using lightning data as an input but not displaying the contractor transmitted/provided lightning data.

Lightning Stroke ... A lightning stroke is a leader and the return stroke.

Lightning Flash ... A lightning flash is the combination of two or more strokes.

Contractor ... The company that will supply lightning data to the Federal Government under this SOW.

Participating Agency ... A Federal Government agency that is covered by the lightning data contract. Participating agencies are identified in the contract.

Receiver Site ... A location that receives lightning data or products containing lightning data either directly from the vendor or through a third party contractor.

Sponsoring Agency ... A Federal Government agency covered by this SOW that procures lightning data from the contractor.

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Third Party Contractor ... A contractor receiving lightning data from the contractor and re-transmitting it to the Federal Government agency covered by this SOW. The third party contractor does not use the lightning data itself but acts as a communications company.

A third party contractor may also generate lightning products for the Government agency, which would be classified as Level III, IV, or V lightning data.

User Site ... User sites are locations, not necessarily located with receiver sites, using lightning data. User sites are the operational units using the lightning data, not individual work stations.

United States ... The 50 states, District of Columbia, Puerto Rico, and the Virgin Islands,.

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APPENDIX B - GEOGRAPHIC COVERAGE MAPS

The vendor shall provide lightning data from up to 26 geographic zones. Zone 1 is the basic requirement. The vendor shall offer lightning data from this zone. The other zones are options. The vendor is required to offer data from an optional zone only if an agency requests data from the zone. The vendor shall offer data for portions of Zone 1 as well as for the entire zone. A description of these zones follows. A series of maps showing these zones begins on page B-15.

ZONE 1 - FORTY EIGHT CONTIGUOUS STATES AND PUERTO RICO		
<u>AREAS COVERED - COVERAGE EXTENDS 500 KM OFFSHORE/OVER ADJACENT LAND AREAS</u>		
<ul style="list-style-type: none"> - United States (48 Contiguous States) - Puerto Rico - District of Columbia, - U.S. Virgin Islands 		
Agencies may choose to receive data from the entire zone or from sectors within the zone. The sectors are described below.		
SECTOR	SECTOR SIZE (SECTOR MAY BE DEFINED EITHER BY A SQUARE OR CIRCLE)	
	SQUARE SIZE	CIRCLE SIZE
Very Small Sector	50 x 50 km	71 km Diameter
Small Sector	100 x 100 km	142 km Diameter
Medium Sector	500 x 500 km	708 km Diameter
Large Sector	1,000 x 1,000 km	1,415 km Diameter

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Individual State	Areas Defined by State Boundaries; One Area for Each State

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ZONE 2 - ALASKA		
<u>AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE AND 200 NMI OVER ADJACENT AREAS OF CANADA</u>		
- Alaska		
Agencies may choose to receive data from the entire zone or from smaller areas within the zone. The smaller areas are described below.		
	AREA SIZE (AREA MAY BE DEFINED EITHER BY A SQUARE OR CIRCLE)	
	SQUARE SIZE	CIRCLE SIZE
Very Small Sector	50 x 50 km	71 km Diameter
Small Sector	100 x 100 km	142 km Diameter
Medium Sector	500 x 500 km	708 km Diameter
Large Sector	1,000 x 1,000 km	1,415 km Diameter
ZONE 3- HAWAII		
<u>AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE</u>		
- Hawaii		
Agencies may choose to receive data from the entire zone or from smaller areas within the zone. The smaller areas are described below.		
	AREA SIZE (AREA MAY BE DEFINED EITHER BY A SQUARE OR CIRCLE)	
	SQUARE SIZE	CIRCLE SIZE

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Very Small Sector	50 x 50 km	71 km Diameter
Small Sector	100 x 100 km	142 km Diameter
Medium Sector	500 x 500 km	708 km Diameter
Large Sector	1,000 x 1,000 km	1,415 km Diameter

ZONE 4 - CANADA

AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS

- Canada
- Hudson Bay
- Gulf of St. Lawrence
- Ungava Bay

ZONE 5 - MEXICO

AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS

- Mexico
- Sea of Cortez (Gulf of California)

ZONE 6 - CENTRAL AND SOUTH AMERICA

AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS

ZONE 7 - EUROPE

AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS

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- Albania
- Andorra
- Austria
- Belarus
- Belgium
- Bosnia - Herzegovina
- Bulgaria
- Croatia
- Czech Republic
- Denmark (Excluding Faeroe Islands and Greenland)
- Estonia
- Finland
- France (Including Corsica)
- Germany
- Gibraltar
- Greece (Including Greek Isles)
- Hungary
- Ireland
- Italy (Including Sardinia, Sicily, and Aeolian Islands)
- Latvia
- Liechtenstein
- Lithuania
- Luxembourg
- Macedonia (Republic of)
- Moldova
- Monaco
- Netherlands
- Norway (Excluding Jan Mayen and Svaldbard Islands)
- Poland
- Portugal (Excluding Azores and Madeira Islands)
- Romania
- San Marino
- Serbia and Montenegro (Including Kosovo)
- Slovakia
- Slovenia
- Spain (Including Balearic Islands; Excluding Canary Islands)
- Sweden
- Switzerland
- Ukraine
- United Kingdom
- Vatican City
- Baltic Sea
- North Sea

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ZONE 8 - NORTHERN ASIA
<u>AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS</u>
<ul style="list-style-type: none">- Armenia- Azerbaijan- Georgia- Japan (Excluding Bonin, Ryukyu, and Volcano Islands)- Kazakhstan- Kyrgyzstan- Mongolia- North Korea- Russia- South Korea- Tajikistan- Turkmenistan- Uzbekistan
ZONE 9 - SOUTHERN ASIA
<u>AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS</u>

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- Afghanistan
- Bangladesh
- Bhutan
- Cambodia
- China (Including Hong Kong and Macau)
- India (Excluding Andaman and Nicobar Islands)
- Laos
- Myanmar (Burma)
- Nepal
- Pakistan
- Sri Lanka
- Taiwan
- Thailand
- Vietnam

ZONE 10 - MIDDLE EAST

AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS

- Bahrain
- Iran
- Iraq
- Israel
- Jordan
- Kuwait
- Lebanon
- Oman
- Palestinian Territory (Gaza Strip and West Bank)
- Qatar
- Saudi Arabia
- Syria
- Turkey
- United Arab Emirates
- Yemen

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ZONE 11 - AFRICA

AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS

- Algeria
- Angola
- Benin
- Botswana
- Burkina Faso
- Burundi
- Cameroon
- Central African Republic
- Chad
- Congo (Democratic Republic of)(Formerly Zaire)
- Congo (Republic of)
- Cote d' Ivoire
- Djibouti
- Egypt
- Equatorial Guinea
- Eritrea
- Ethiopia
- Gabon
- Gambia
- Ghana
- Guinea
- Guinea-Bissau
- Kenya
- Lesotho
- Liberia
- Libya
- Madagascar
- Malawi
- Mali
- Mauritania

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- Morocco
- Mozambique
- Namibia
- Niger
- Nigeria
- Rwanda
- Sao Tome and Principe
- Senegal
- Sierra Leone
- Somalia
- Sudan
- Swaziland
- Tanzania
- Togo
- Tunisia
- Uganda
- Western Sahara
- Zambia
- Zimbabwe

ZONE 12 - EAST INDIES AND THE PHILIPPINES

AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS

- Brunei
- East Timor
- Indonesia
- Malaysia
- Papua New Guinea
- Philippines
- Singapore
- Solomon Islands

ZONE 13 - AUSTRALIA AND NEW ZEALAND

AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS

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- Australia - New Zealand
ZONE 14 - GREENLAND AND ICELAND
<u>AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS</u>
- Greenland - Iceland
ZONE 15 - ANTARCTICA
<u>AREAS COVERED - COVERAGE EXTENDS 250 KM OFFSHORE/OVER ADJACENT LAND AREAS</u>
- Antarctica (Including all Islands South of 60S)
ZONE 16 - GULF OF MEXICO, CARIBBEAN SEA AND WEST INDIES
<u>AREAS COVERED - MARINE AREAS</u>
- Caribbean Sea - Gulf of Mexico
- Coverage includes all islands within the zone except Puerto Rico and the Virgin islands
ZONE 17 - NORTH ATLANTIC OCEAN
<u>AREAS COVERED - MARINE AREAS</u>
- Atlantic Ocean (Equator to 60N) - Baltic Sea - North Sea - Gulf of St. Lawrence - Ungava Bay
- Coverage includes all islands within the zone except Newfoundland and islands in the Gulf of St. Lawrence
ZONE 18 - SOUTH ATLANTIC OCEAN

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<u>AREAS COVERED - MARINE AREAS</u>
- Atlantic Ocean (Equator to 60S)
- Coverage includes all islands within the zone
ZONE 19 - MEDITERRANEAN AND BLACK SEAS
<u>AREAS COVERED - MARINE AREAS</u>
- Black Sea
- Mediterranean Sea
- Adriatic
- Aegean
- Sea of Azov
- Ionian Sea
- Sea of Marmara
- Tyrrhenian Sea
- Coverage includes all islands within the zone
ZONE 20 - NORTHEAST PACIFIC OCEAN
<u>AREAS COVERED - MARINE AREAS</u>
- Pacific Ocean (Equator to 60N, East of 180 Degrees)
- Gulf of Alaska
- Bering Sea (Southeast Portion)
- Sea of Cortez (Gulf of California)
- Coverage includes all islands within the zone except the Hawaiian Islands

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ZONE 21 - NORTHWEST PACIFIC OCEAN
<u>AREAS COVERED - MARINE AREAS</u>
<ul style="list-style-type: none">- Pacific Ocean (Equator to 60N, West of 180 Degrees)- Bering Sea (Southwest Portion)- East China Sea- Sea of Japan- Sea of Okhotsk- Philippine Sea- South China Sea- Gulf of Thailand- Yellow Sea
- Coverage includes all islands within the zone except Sakhalin, Japan, Taiwan, Hainan, the Philippines and East Indies
ZONE 22 - SOUTHEAST PACIFIC OCEAN
<u>AREAS COVERED - MARINE AREAS</u>
<ul style="list-style-type: none">- Pacific Ocean (Equator to 60S, East of 180 Degrees)
- Coverage includes all islands within the zone
ZONE 23 - SOUTHWEST PACIFIC OCEAN
<u>AREAS COVERED - MARINE AREAS</u>
<ul style="list-style-type: none">- Pacific Ocean (Equator to 60S, West of 180 Degrees)- Coral Sea- Tasman Sea
- Coverage includes all islands within the zone except New Zealand, Tasmania, and East Indies
ZONE 24 - INDIAN OCEAN
<u>AREAS COVERED - MARINE AREAS</u>

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<ul style="list-style-type: none">- Indian Ocean (North of 60S)- Arabian Sea- Bay of Bengal- Gulf of Oman- Persian Gulf- Red Sea- Timor Sea
<p>- Coverage includes all islands within the zone except Sri Lanka and Madagascar</p>
ZONE 25 - ARCTIC OCEAN
<u>AREAS COVERED - MARINE AREAS</u>
<ul style="list-style-type: none">- Arctic Ocean (Marine Areas North of 60N)- Baffin Bay- Beaufort Sea- Berents Sea- Bering Sea (North of 60N)- Davis Strait- Labrador Sea- Norwegian Sea
<p>- Coverage includes all islands within the zone except Greenland, Iceland, and Canadian and Russian Islands in the Arctic Ocean</p>
ZONE 26 - SOUTHERN OCEAN
<u>AREAS COVERED - MARINE AREAS</u>
<ul style="list-style-type: none">- Southern Ocean (Marine Areas South of 60S)- Amundsen Sea- Bellingshausen Sea- Ross Sea (Including Ross Ice Shelf)- Waddell Sea (Including Ronne Ice Shelf)
<p>- Coverage includes all islands within the zone</p>

SECTION C
DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

APPENDIX C - SERVICES RENDERED BY THE LIGHTNING DATA CONTRACTOR

<u>BASE REQUIREMENTS</u>
THE Offeror SHALL MEET ALL OF THE BASE REQUIREMENTS
Lightning Data
<ul style="list-style-type: none"> - Geographic Zone 1 - Lightning Type CG - Detection Efficiency 90% (60% Off Shore) - Area Sizes Entire Zone <ul style="list-style-type: none"> . Very Small Areas . Small Areas . Medium Areas . Large Areas . Individual States
Access to data from the offeror's archive (Section 6.3)
Notification of Government agencies of periods of systems outages or degraded operation (Section 3.3)
<u>OPTIONAL SERVICES</u>
THE Offeror MUST PROVIDE THE OPTIONAL SERVICES ONLY IF A GOVERNMENT AGENCY REQUIRES THE SERVICE
Lightning Data
<ul style="list-style-type: none"> - Geographic Zone 1 - Lightning Type CL - Detection Efficiencies ... 5%, 10%, 20%, 50%, 90% - Area Size Entire Zones
Lightning Data
<ul style="list-style-type: none"> - Geographic Zones 2-3 - Lightning Type CG - Detection Efficiency 80% - Area Size Entire Zones
Lightning Data
<ul style="list-style-type: none"> - Geographic Zones 2-3 - Lightning Type CL - Detection Efficiencies ... 5%, 10%, 20%, 60% - Area Size Entire Zones
Lightning Data
<ul style="list-style-type: none"> - Geographic Zones 4-15 - Lightning Type CG - Detection Efficiency 60% - Area Size Entire Zones
Lightning Data

SECTION C
DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

<ul style="list-style-type: none"> - Geographic Zones 4-15 - Lightning Type CL - Detection Efficiencies ... 5%, 10%, 20%, 60% - Area Size Entire Zones
Lightning Data
<ul style="list-style-type: none"> - Geographic Zones 16-26 - Lightning Type CG - Detection Efficiency 20% - Area Size Entire Zones
Lightning Data
<ul style="list-style-type: none"> - Geographic Zones 16-26 - Lightning Type CL - Detection Efficiency 5%, 10%, 20% - Area Size Entire Zones
Internet data delivery (Section 7.2.3)
Communication Link between contractor and Government receiver sites (Section 7.4.2.2.)
<u>OPTIONAL SERVICES</u>
THE Offeror MUST PROVIDE THE OPTIONAL SERVICES ONLY IF A GOVERNMENT AGENCY REQUIRES THE SERVICE
Offeror generated lightning products and applications (Section 5.2)
Access to data and products from the offeror's archive (Section 6.3)
Display equipment (Section 7.4.2.1.)
Receiver equipment (Section 7.4.2.1.)
On-site training on the operation offeror's receiver and display equipment (Section 7.4.2.1.)
Display Software (Section 7.4.2.3.)
Technical Support (Section 7.4.2.3.)

SECTION C
DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

<u>APPENDIX D- RECEIVER AND USER SITES</u>			
	Lightning Data Contractor		
Lightning Data (Level I, II, and/or III Data)			
V	V		
Agency Sites Receiving Lightning Data from the Contractor but Not Using Data	Third Party Contractor Receiving Lightning Data from the Contractor		
Receiver Sites	Lightning Data (Level I, II, and/or III Data)		
Lightning Data (Level I, II, and/or III Data)			
	V		
	Agency Sites Receiving Lightning Data from Contractors but Not Using Data		
	Receiver Sites		
	Lightning Data (Level I, II, and/or III Data)		
V	V	V	V
Agency Sites Using Lightning Data Received from Receiver Sites	Agency Sites Using Lightning Data Received from Receiver Sites	Agency Sites Using Lightning Data Received from Contractors	Agency Sites Using Lightning Data Received Directly from Contractor
User Sites	User Sites	Combined Receiver and User Sites	Combined Receiver and User Sites

SECTION E
INSPECTION AND ACCEPTANCE

E.1 1352.246-70 INSPECTION AND ACCEPTANCE (MARCH 2000)

The Contracting Officer or the duly authorized representative will perform inspection and acceptance of supplies and services to be provided under this contract.

Inspection and acceptance will be performed at:

U.S. Department of Commerce/NOAA/NWS

1325 East West Highway

W/OPS22, SSMC2, Room 4358

Silver Spring, MD 20910

Michael Carelli - 301-713-2093 x115

SECTION F
DELIVERIES OR PERFORMANCE

F.1 1352.215-70 PERIOD OF PERFORMANCE (MARCH 2000)

a. The period of performance of this contract is from 10/01/04 through 09/30/05 . If an option is exercised, the period of performance shall be extended through the end of that option period.

b. The option periods that may be exercised are as follows:

Period	Start Date	End Date
Option I	10/01/05	09/30/06
Option II	10/01/06	09/30/07
Option III	10/01/07	09/30/08
Option IV	10/01/08	09/30/09

F.2 REQUIRED TIME OF DELIVERY

The Government will provide a delivery schedule which will be cited for each individual delivery order.

F.3 PLACE OF DELIVERY

The articles furnished hereunder shall be delivered, all transportation charges paid by the Contractor as follows:

TO BE CITED ON INDIVIDUAL DELIVERY ORDERS.

SECTION G
CONTRACT ADMINISTRATION DATA

G.1 1352.201-70 CONTRACTING OFFICER'S AUTHORITY (MARCH 2000)

The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract and notwithstanding any provisions contained elsewhere in this contract, the said authority remains solely in the Contracting Officer. In the event the Contractor makes any changes at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract terms and conditions, including price.

G.2 1352.201-71 CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) (MARCH 2000)

a. **(Will be incorporated upon award)** is hereby designated as the Contracting Officer's Technical Representative (COTR). The COTR may be changed at any time by the Government without prior notice to the Contractor by a unilateral modification to the Contract. The COTR is located at:

U.S. Department of Commerce/NOAA/NWS
1325 East West Highway, SSMC2
Silver Spring, MD 20910

b. The responsibilities and limitations of the COTR are as follows:

- (1) The COTR is responsible for the technical aspects of the project and serves as technical liaison with the Contractor. The COTR is also responsible for the final inspection and acceptance of all reports, and such other responsibilities as may be specified in the contract.
- (2) The COTR is not authorized to make any commitments or otherwise obligate the Government or authorize any changes which affect the Contract price, terms or conditions. Any Contractor request for changes shall be referred to the Contracting Officer directly or through the COTR. No such changes shall be made without the expressed prior authorization of the Contracting Officer. The COTR may designate assistant COTR(s) to act for the COTR by naming such assistant(s) in writing and transmitting a copy of such designation through the Contracting Officer to the Contractor.

G.3 1352.216-76 PLACEMENT OF ORDERS (MARCH 2000)

The Contractor shall provide data under this Contract only as directed in Delivery Orders. In accordance with FAR 16.505, each order will include:

- (i) Date of order.
- (ii) Contract number and order number.
- (iii) Item number and description, quantity, and unit price or estimated cost or fee.
- (iv) Delivery or performance date.
- (v) Place or delivery or performance (including consignee).
- (vi) Packaging, packing, and shipping instructions, if any.
- (vii) Accounting and appropriation data.
- (viii) Method of payment and payment office, if not specified in the contract.
- (ix) Any other pertinent information.

In accordance with FAR 52.216-18, ORDERING, the following individuals (or activities) are authorized to place orders against this contract:

Any duly appointed NOAA/Acquisition and Grants Office Contracting Officer actin within the scope of their authority.

SECTION H
SPECIAL CONTRACT REQUIREMENTS

H.1 1352.208-70 PRINTING (MARCH 2000)

Unless otherwise specified in this contract, the Contractor shall not engage in, or subcontract for, any printing (as that term is defined in Title I of the Government Printing and Binding Regulations in effect on the effective date of this contract) in connection with performing under this contract. Provided, however, that performing a requirement under this contract involving the duplicating of less than 5,000 units of only one page, or less than 25,000 units in the aggregate of multiple pages, such pages are not exceeding a maximum image size of 10 and 3/4 inches by 14 and 1/4 inches, will not be deemed printing.

H.2 1352.209-71 ORGANIZATIONAL CONFLICT OF INTEREST (MARCH 2000)

(a) The Contractor warrants that, to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which would give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, or that the Contractor has disclosed all such relevant information.

(b) The Contractor agrees that if an actual or potential organizational conflict of interest is discovered after award, the Contractor will make a full disclosure in writing to the Contracting Officer. This disclosure shall include a description of actions which the Contractor has taken or proposes to take, after consultation with the Contracting Officer, to avoid, mitigate, or neutralize the actual or potential conflict.

(c) Remedies - The Contracting Officer may terminate this contract for convenience, in whole or in part, if it deems such termination necessary to avoid an organizational conflict of interest. If the Contractor was aware of a potential organizational conflict of interest prior to award or discovered an actual or potential conflict after award and did not disclose or misrepresented relevant information to the Contracting Officer, the Government may terminate the contract for default, debar the Contractor from Government contracting, or pursue such other remedies as may be permitted by law or this contract.

(d) The Contractor further agrees to insert provisions which shall conform substantially to the language of this clause, including this paragraph (d), in any subcontract or consultant agreement hereunder.

H.3 1352.209-73 COMPLIANCE WITH THE LAWS (MARCH 2000)

The Contractor shall comply with all applicable laws and rules and regulations having the force of law which deal with or relate to performance hereunder or the employment by the Contractor of the employees.

H.4 52.227-14 RIGHTS IN DATA--GENERAL (JUN 1987)

(a) Definitions. "Computer software," as used in this clause, means computer programs, computer data bases, and documentation thereof.

"Data," as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

"Form, fit, and function data," as used in this clause, means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, as well as data identifying source, size, configuration, mating, and attachment characteristics, functional characteristics, and performance requirements; except that for computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software.

SECTION H
SPECIAL CONTRACT REQUIREMENTS

"Limited rights," as used in this clause, means the rights of the Government in limited rights data as set forth in the Limited Rights Notice of subparagraph (g)(2) if included in this clause.

"Limited rights data," as used in this clause, means data (other than computer software) that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications thereof.

"Restricted computer software," as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software, including minor modifications of such computer software.

"Restricted rights," as used in this clause, means the rights of the Government in restricted computer software, as set forth in a Restricted Rights Notice of subparagraph (g)(3) if included in this clause, or as otherwise may be provided in a collateral agreement incorporated in and made part of this contract, including minor modifications of such computer software.

"Technical data," as used in this clause, means data (other than computer software) which are of a scientific or technical nature.

"Unlimited rights," as used in this clause, means the right of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) Allocation of rights. (1) Except as provided in paragraph (c) of this clause regarding copyright, the Government shall have unlimited rights in--

- (i) Data first produced in the performance of this contract;
- (ii) Form, fit, and function data delivered under this contract;
- (iii) Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this contract; and
- (iv) All other data delivered under this contract unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) of this clause.

(2) The Contractor shall have the right to--

- (i) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, unless provided otherwise in paragraph (d) of this clause;
- (ii) Protect from unauthorized disclosure and use those data which are limited rights data or restricted computer software to the extent provided in paragraph (g) of this clause;
- (iii) Substantiate use of, add or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) of this clause; and
- (iv) Establish claim to copyright subsisting in data first produced in the performance of this contract to the extent provided in subparagraph (c)(1) of this clause.

(c) Copyright. (1) Data first produced in the performance of this contract. Unless provided otherwise in paragraph (d) of this clause, the Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings or similar works. The prior, express written permission of the Contracting Officer is required to establish claim to copyright subsisting in all other data first produced in the performance of this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government, as well as when the data are

SECTION H
SPECIAL CONTRACT REQUIREMENTS

published or deposited for registration as a published work in the U.S. Copyright Office. For data other than computer software the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Contractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government.

(2) Data not first produced in the performance of this contract. The Contractor shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contains the copyright notice of 17 U.S.C. 401 or 402, unless the Contractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause; provided, however, that if such data are computer software the Government shall acquire a copyright license as set forth in subparagraph (g)(3) of this clause if included in this contract or as otherwise may be provided in a collateral agreement incorporated in or made part of this contract.

(3) Removal of copyright notices. The Government agrees not to remove any copyright notices placed on data pursuant to this paragraph (c), and to include such notices on all reproductions of the data.

(d) Release, publication and use of data. (1) The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided in this paragraph of this clause or expressly set forth in this contract.

(2) The Contractor agrees that to the extent it receives or is given access to data necessary for the performance of this contract which contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the Contracting Officer.

(e) Unauthorized marking of data. (1) Notwithstanding any other provisions of this contract concerning inspection or acceptance, if any data delivered under this contract are marked with the notices specified in subparagraph (g)(2) or (g)(3) of this clause and use of such is not authorized by this clause, or if such data bears any other restrictive or limiting markings not authorized by this contract, the Contracting Officer may at any time either return the data to the Contractor, or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer shall make written inquiry to the Contractor affording the Contractor 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Contractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii) If the Contractor provides written justification to substantiate the propriety of the markings within the period set in subdivision (e)(1)(i) of this clause, the Contracting Officer shall consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Contractor shall be

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so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer shall furnish the Contractor a written determination, which determination shall become the final agency decision regarding the appropriateness of the markings unless the Contractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government shall continue to abide by the markings under this subdivision (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination becoming final (in which instance the Government shall thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in subparagraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(3) This paragraph (e) does not apply if this contract is for a major system or for support of a major system by a civilian agency other than NASA and the U.S. Coast Guard agency subject to the provisions of Title III of the Federal Property and Administrative Services Act of 1949.

(4) Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Contractor is not precluded by this paragraph (e) from bringing a claim under the Contract Disputes Act, including pursuant to the Disputes clause of this contract, as applicable, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this contract.

(f) Omitted or incorrect markings. (1) Data delivered to the Government without either the limited rights or restricted rights notice as authorized by paragraph (g) of this clause, or the copyright notice required by paragraph (c) of this clause, shall be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use, or reproduction of such data. However, to the extent the data has not been disclosed without restriction outside the Government, the Contractor may request, within 6 months (or a longer time approved by the Contracting Officer for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Contractor's expense, and the Contracting Officer may agree to do so if the Contractor--

- (i) Identifies the data to which the omitted notice is to be applied;
 - (ii) Demonstrates that the omission of the notice was inadvertent;
 - (iii) Establishes that the use of the proposed notice is authorized;
- and
- (iv) Acknowledges that the Government has no liability with respect to the disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.

(2) The Contracting Officer may also (i) permit correction at the Contractor's expense of incorrect notices if the Contractor identifies the data on which correction of the notice is to be made, and demonstrates that the correct notice is authorized, or (ii) correct any incorrect notices.

(g) Protection of limited rights data and restricted computer software. (1) When data other than that listed in subdivisions (b)(1)(i), (ii), and (iii) of this clause are specified to be delivered under this contract and qualify as either limited rights data or restricted computer software, if the Contractor desires to continue protection of such data, the Contractor shall withhold such data and not furnish them to the Government under this contract. As a condition to this withholding, the Contractor shall identify the data being withheld and furnish form, fit, and function data in lieu thereof. Limited rights data that

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are formatted as a computer data base for delivery to the Government are to be treated as limited rights data and not restricted computer software.

(2) Reserved.

(3) Reserved.

(h) Subcontracting. The Contractor has the responsibility to obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this contract. If a subcontractor refuses to accept terms affording the Government such rights, the Contractor shall promptly bring such refusal to the attention of the Contracting Officer and not proceed with subcontract award without further authorization.

(i) Relationship to patents. Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

(End of clause)

H.5 52.227-19 COMMERCIAL COMPUTER SOFTWARE--RESTRICTED RIGHTS (JUN 1987)

(a) As used in this clause, "restricted computer software" means any computer program, computer data base, or documentation thereof, that has been developed at private expense and either is a trade secret, is commercial or financial and confidential or privileged, or is published and copyrighted.

(b) Notwithstanding any provisions to the contrary contained in any Contractor's standard commercial license or lease agreement pertaining to any restricted computer software delivered under this purchase order/ contract, and irrespective of whether any such agreement has been proposed prior to or after issuance of this purchase order/contract or of the fact that such agreement may be affixed to or accompany the restricted computer software upon delivery, vendor agrees that the Government shall have the rights that are set forth in paragraph (c) of this clause to use, duplicate or disclose any restricted computer software delivered under this purchase order/contract. The terms and provisions of this contract, including any commercial lease or license agreement, shall be subject to paragraph (c) of this clause and shall comply with Federal laws and the Federal Acquisition Regulation.

(c)(1) The restricted computer software delivered under this contract may not be used, reproduced or disclosed by the Government except as provided in subparagraph (c)(2) of this clause or as expressly stated otherwise in this contract.

(2) The restricted computer software may be--

(i) Used or copied for use in or with the computer or computers for which it was acquired, including use at any Government installation to which such computer or computers may be transferred;

(ii) Used or copied for use in or with backup computer if any computer for which it was acquired is inoperative;

(iii) Reproduced for safekeeping (archives) or backup purposes;

(iv) Modified, adapted, or combined with other computer software, provided that the modified, combined, or adapted portions of the derivative software incorporating any of the delivered, restricted computer software shall be subject to same restrictions set forth in this purchase order/contract;

(v) Disclosed to and reproduced for use by support service Contractors or their subcontractors, subject to the same restrictions set forth in this purchase order/contract; and

(vi) Used or copied for use in or transferred to a replacement computer.

(3) If the restricted computer software delivered under this purchase order/contract is published and copyrighted, it is licensed to the Government, without disclosure prohibitions, with the rights set forth in subparagraph (c)(2) of this clause unless expressly stated otherwise in this purchase order/contract.

(4) To the extent feasible the Contractor shall affix a Notice substantially as follows to any restricted computer software delivered

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under this purchase order/contract; or, if the vendor does not, the Government has the right to do so: "Notice--Notwithstanding any other lease or license agreement that may pertain to, or accompany the delivery of, this computer software, the rights of the Government regarding its use, reproduction and disclosure are as set forth in Government Contract (or Purchase Order) No. _____."

(d) If any restricted computer software is delivered under this contract with the copyright notice of 17 U.S.C. 401, it will be presumed to be published and copyrighted and licensed to the Government in accordance with subparagraph (c)(3) of this clause, unless a statement substantially as follows accompanies such copyright notice: "Unpublished--rights reserved under the copyright laws of the United States."

(End of clause)

H.6 1352.233-70 HARMLESS FROM LIABILITY (MARCH 2000)

The Contractor shall hold and save the Government, its officers, agents, and employees harmless from liability of any nature or kind, including costs and expenses to which they may be subject to or on account of any or all suits or damages of any character whatsoever resulting from injuries or damages sustained by any person or persons or property by virtue of performance of this contract, arising or resulting in whole or in part from the fault, negligence, wrongful act or wrongful omission of the contractor, or any subcontractor, their employees, and agents.

SECTION I
CONTRACT CLAUSES

I.1 52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (MAR 2004)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clause, which is incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items: 52.233-3, Protest after Award (AUG 1996) (31 U.S.C. 3553).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: [Contracting Officer check as appropriate.]

XX (1) 52.203-6, Restrictions on Subcontractor Sales to the Government (JUL 1995), with Alternate I (OCT 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).

_____ (2) 52.219-3, Notice of Total HUBZone Set-Aside (JAN 1999) (15 U.S.C. 657a).

_____ (3) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JAN 1999) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

_____ (4)(i) 52.219-5, Very Small Business Set-Aside (JUNE 2003) (Pub. L. 103-403, section 304, Small Business Reauthorization and Amendments Act of 1994).

_____ (ii) Alternate I (MAR 1999) of 52.219-5.

_____ (iii) Alternate II (JUNE 2003) of 52.219-5.

_____ (5)(i) 52.219-6, Notice of Total Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

_____ (ii) Alternate I (OCT 1995) of 52.219-6.

_____ (iii) Alternate II (MAR 2004) of 52.219-6.

_____ (6)(i) 52.219-7, Notice of Partial Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

_____ (ii) Alternate I (OCT 1995) of 52.219-7.

_____ (iii) Alternate II (MAR 2004) of 52.219-7.

XX (7) 52.219-8, Utilization of Small Business Concerns (OCT 2000) (15 U.S.C. 637 (d)(2) and (3)).

XX (8)(i) 52.219-9, Small Business Subcontracting Plan (JAN 2002) (15 U.S.C. 637(d)(4)).

_____ (ii) Alternate I (OCT 2001) of 52.219-9.

XX (iii) Alternate II (OCT 2001) of 52.219-9.

_____ (9) 52.219-14, Limitations on Subcontracting (DEC 1996) (15 U.S.C. 637(a)(14)).

_____ (10)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (JUNE 2003) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).

_____ (ii) Alternate I (JUNE 2003) of 52.219-23.

_____ (11) 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting (OCT 1999) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

_____ (12) 52.219-26, Small Disadvantaged Business Participation Program-Incentive Subcontracting (OCT 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

XX (13) 52.222-3, Convict Labor (JUNE 2003) (E.O. 11755).

_____ (14) 52.222-19, Child Labor-Cooperation with Authorities and Remedies (Jan 2004) (E.O. 13126).

XX (15) 52.222-21, Prohibition of Segregated Facilities (FEB 1999).

XX (16) 52.222-26, Equal Opportunity (APR 2002) (E.O. 11246).

XX (17) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212).

XX (18) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).

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XX (19) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212).

_____ (20)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA Designated Products (AUG 2000) (42 U.S.C. 6962(c)(3)(A)(ii)).

_____ (ii) Alternate I (AUG 2000) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)).

_____ (21) 52.225-1, Buy American Act-Supplies (JUNE 2003) (41 U.S.C. 10a-10d).

_____ (22)(i) 52.225-3, Buy American Act-Free Trade Agreements- Israeli Trade Act (Jan 2004) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, Pub. L. 108-77, 108-78).

_____ (ii) Alternate I (Jan 2004) of 52.225-3.

_____ (iii) Alternate II (Jan 2004) of 52.225-3.

XX (23) 52.225-5, Trade Agreements (Jan 2004) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301 note).

XX (24) 52.225-13, Restrictions on Certain Foreign Purchases (OCT 2003) (E.O.s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).

XX (25) 52.225-15, Sanctioned European Union Country End Products (FEB 2000) (E.O. 12849).

XX (26) 52.225-16, Sanctioned European Union Country Services (FEB 2000) (E.O. 12849).

_____ (27) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

_____ (28) 52.232-30, Installment Payments for Commercial Items (OCT 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

XX (29) 52.232-33, Payment by Electronic Funds Transfer-Central Contractor Registration (OCT 2003) (31 U.S.C. 3332).

_____ (30) 52.232-34, Payment by Electronic Funds Transfer-Other than Central Contractor Registration (MAY 1999) (31 U.S.C. 3332).

_____ (31) 52.232-36, Payment by Third Party (MAY 1999) (31 U.S.C. 3332).

_____ (32) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).

_____ (33)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (APR 2003) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631).

_____ (ii) Alternate I (APR 1984) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: [Contracting Officer check as appropriate.]

_____ (1) 52.222-41, Service Contract Act of 1965, as Amended (MAY 1989) (41 U.S.C. 351, et seq.).

_____ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

_____ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act-Price Adjustment (Multiple Year and Option Contracts) (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

_____ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act-Price Adjustment (February 2002) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

_____ (5) 52.222-47, SCA Minimum Wages and Fringe Benefits Applicable to Successor Contract Pursuant to PreDecemberessor Contractor Collective Bargaining Agreements (CBA) (MAY 1989) (41 U.S.C. 351, et seq.).

(d) Comptroller General Examination of Record. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records--Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all

SECTION I
CONTRACT CLAUSES

reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e)

(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in paragraphs (i) through (vi) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause--

(i) 52.219-8, Utilization of Small Business Concerns (October 2000) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$500,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (April 2002) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (December 2001) (38 U.S.C. 4212).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).

(v) 52.222-41, Service Contract Act of 1965, as Amended (May 1989), flow down required for all subcontracts subject to the Service Contract Act of 1965 (41 U.S.C. 351, et seq.).

(vi) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (April 2003) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor May include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

I.2 52.216-18 ORDERING (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from 10/01/04 through 09/30/05, unless contract period is extended by exercising annual option.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

(End of clause)

**SECTION I
CONTRACT CLAUSES**

I.3 52.216-22 INDEFINITE QUANTITY (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum." The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after 09/30/09.

(End of clause)

I.4 52.217-7 OPTION FOR INCREASED QUANTITY--SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within 30 days prior to exercise of option. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

I.5 52.217-9 - OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

As prescribed in 17.208(g), insert a clause substantially the same as the following:

(a) The Government may extend the term of this contract by written notice to the Contractor within 30 days provided, that the Government gives the Contractor a preliminary written notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Government to an extension.

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

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 09/30/09.

I.6 52.232-18 AVAILABILITY OF FUNDS (APR 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until the Contractor receives notice of such availability, to be confirmed in writing by the Contracting Officer.

SECTION I
CONTRACT CLAUSES

(End of clause)

I.7 52.232-19 AVAILABILITY OF FUNDS FOR THE NEXT FISCAL YEAR (APR 1984)

Funds are not presently available for performance under this contract beyond 09/30/05. The Government's obligation for performance of this contract beyond that date is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise for performance under this contract beyond 09/30/09 until funds are made available to the Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

SECTION J
LIST OF ATTACHMENTS

J.1 PAST PERFORMANCE

<p>CONTRACTOR PERFORMANCE REPORT</p> <p><input type="checkbox"/> Final <input type="checkbox"/> Interim - Period Report: From _____ To _____</p>		
<p>1. Contractor Name and Address: (Identify Division)</p>	<p>2. Contract Number: _____</p> <p>3. Contract Value (Base Plus Options): _____</p> <p>4. Contract Award Date: _____</p> <p>Contract Completion Date: _____</p>	
<p>5. Type of Contract: (Check all that apply) -- <input type="checkbox"/> FP <input type="checkbox"/> FPI <input type="checkbox"/> FP-EPA <input type="checkbox"/> Award Fee <input type="checkbox"/> CPMF-Completion <input type="checkbox"/> CPMF-Term <input type="checkbox"/> CPIF <input type="checkbox"/> CPAF <input type="checkbox"/> ID/IQ <input type="checkbox"/> BOA <input type="checkbox"/> Requirements <input type="checkbox"/> Labor Hour <input type="checkbox"/> T&M <input type="checkbox"/> SBSA 8(a) <input type="checkbox"/> SBIR <input type="checkbox"/> Sealed Bid <input type="checkbox"/> Negotiated <input type="checkbox"/> Competitive <input type="checkbox"/> Non-Competitive</p>		
<p>6. Description of Requirement:</p>		
<p>7. Ratings. Summarize contractor performance and circle in the column on the right the number which corresponds to the performance rating for each rating category. Please see page three for explanation of rating scale.</p>		
<p>Quality</p>	<p>Comments:</p>	<p>0 1 2 3 4 +</p>
<p>Cost Control</p>	<p>Comments:</p>	<p>0 1 2 3 4 +</p>
<p>Timeliness of Performance</p>	<p>Comments:</p>	<p>0 1 2 3 4 +</p>

**SECTION J
LIST OF ATTACHMENTS**

Business Relations	Comments:	0 1 2 3 4 +
Customer Satisfaction (End Users)	Comments:	0 1 2 3 4 +
Mean Score (Add the ratings above and divide by number of areas rated)		
8. Contracting Officer Name	Signature	
Phone/FAX/Internet Address	Date	

RATING GUIDELINES

Summarize contractor performance in each of the rating areas. Assign each area a rating of 0 (Unsatisfactory), 1 (Poor), 2 (Fair), 3 (Good), 4 (Excellent), or ++ (Plus). Use the following instructions as guidance in making these evaluations. Ensure that this assessment is consistent with any other Agency assessments made (i.e., for payment of fee purposes).

	Quality of Products/Service	Cost Control	Timeliness of Performance	Business Relations
	- Compliance with contract requirements	- Within budget (over/under target costs)	- Met interim milestones	- Effective management
	- Accuracy of reports	- Current, accurate, and complete billings	- Reliable	- Businesslike correspondence
	- Appropriateness of personnel	- Relationship of negotiated costs to actuals	- Responsive to technical direction	- Responsive to contract requirements
	- Technical excellence	- Cost efficiencies	- Completed in time including wrap-up and contract administration	- Prompt notification of problem
		- Charge orders issue	- No liquidated damages assessed	- Reasonable/cooperative
				- Flexible
				- Pro-active
				- Effective Contractor-recommended solutions
				- Effective small/small disadvantaged business subcontracting program
0. Unsatisfactory	Nonconformance are compromising the achievement of contract requirements despite use of Agency resources.	Cost issues are compromising performance of contract requirements.	Delays are compromising the achievement of contract requirements, despite use of Agency resources.	Response to inquires, technical/service/ administrative issues is not effective and responsive.

SECTION J
LIST OF ATTACHMENTS

1. Poor	Nonconformance require major Agency resources to ensure achievement of contract requirements.	Cost issues require major Agency resources to ensure achievement of contract requirements.	Delays require major Agency resources to ensure achievement of contract requirements.	Response to inquiries, technical/service/ administrative issues is marginally effective and responsive.
2. Fair	Nonconformance require minor Agency resources to ensure achievement of contract requirements.	Cost issues require minor Agency resources to ensure achievement of contract requirements.	Delays require minor Agency resources to ensure achievement of contract requirements.	Response to inquiries, technical/service/ administrative issues is somewhat effective and responsive.
3. Good	Nonconformance do not impact achievement of contract requirements.	Cost issues do not impact achievement of contract requirements.	Delays do not impact achievement of contract requirements.	Response to inquiries, technical/service/ administrative issues is usually effective and responsive.
4. Excellent	There are no quality problems	There are no, cost issues	There are no delays.	Response to inquires, technical/service/ administrative issues is effective and responsive.

++ PLUS: The contractor has demonstrated an exceptional performance level in any of the above four categories that justifies adding a point to the score. It is expected that this rating will be used in those rare circumstances when contractor performance clearly exceeds the performance levels described as "Excellent".

CONTRACTOR PERFORMANCE REPORT INSTRUCTIONS

Block 1: Contractor Name and Address. Identify the specific division being evaluated if there is more than one.

Block 2: Contract number of contract being evaluated.

Block 3: Contract value shall include base plus options. If funding was increased or decreased during the evaluation period, the value in this block should reflect the change.

Block 4: Contract award date and anticipated or anticipated contract completion date.

Block 5: Type of Contract: Check all that apply.

Block 6: Provide a brief description of the work being done under the contract and identify the key performance indicators. This description will allow agencies calling for reference checks to compare statement of work.

Block 7: Circle rating in far right column and provide brief narrative for each of the categories rated. Indicate the contract requirements that were exceeded or were not met by the contractor and by how much. Also, calculate the mean score of the ratings.

Block 8: The contracting officer's signature certifies concurrence with the initial and final ratings.

SECTION K
REPRESENTATIONS, CERTIFICATIONS AND
OTHER STATEMENTS OF OFFERORS

K.1 52.212-3 Offeror Representations and Certifications -- Commercial Items
(May 2004)

(a) Definitions. As used in this provision:

"Emerging small business" means a small business concern whose size is no greater than 50 percent of the numerical size standard for the NAICS code designated.

"Forced or indentured child labor" means all work or service—

(1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or

(2) Performed by any person under the age of 18 pursuant to a contract the enforcement of which can be accomplished by process or penalties.

"Service-disabled veteran-owned small business concern"—

(1) Means a small business concern—

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

"Veteran-owned small business concern" means a small business concern—

(1) Not less than 51 percent of which is owned by one or more veterans(as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned business concern" means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

**SECTION K
REPRESENTATIONS, CERTIFICATIONS AND
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"Women-owned small business concern" means a small business concern

--

(1) That is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(b) Taxpayer identification number (TIN) (26 U.S.C. 6109, 31 U.S.C. 7701). (Not applicable if the offeror is required to provide this information to a central contractor registration database to be eligible for award.)

(1) All offerors must submit the information required in paragraphs (b)(3) through (b)(5) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the Internal Revenue Service (IRS).

(2) The TIN may be used by the government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.]

(3) Taxpayer Identification Number (TIN).

* TIN: _____.

* TIN has been applied for.

* TIN is not required because:

* Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

* Offeror is an agency or instrumentality of a foreign government;

* Offeror is an agency or instrumentality of the Federal Government;

(4) Type of organization.

* Sole proprietorship;

* Partnership;

* Corporate entity (not tax-exempt);

* Corporate entity (tax-exempt);

* Government entity (Federal, State, or local);

* Foreign government;

* International organization per 26 CFR 1.6049-4;

**SECTION K
REPRESENTATIONS, CERTIFICATIONS AND
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* Other _____.

(5) Common parent.

* Offeror is not owned or controlled by a common parent:

* Name and TIN of common parent:

Name _____

TIN _____

(c) Offerors must complete the following representations when the resulting contract is to be performed in the United States or its outlying areas. Check all that apply.

(1) Small business concern. The offeror represents as part of its offer that it * is, * is not a small business concern.

(2) Veteran-owned small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents as part of its offer that it * is, * is not a veteran-owned small business concern.

(3) Service-disabled veteran-owned small business concern. [Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(2) of this provision.] The offeror represents as part of its offer that it * is, * is not a service-disabled veteran-owned small business concern.

(4) Small disadvantaged business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents, for general statistical purposes, that it * is, * is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) Women-owned small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it * is, * is not a women-owned small business concern.

Note: Complete paragraphs (c)(6) and (c)(7) only if this solicitation is expected to exceed the simplified acquisition threshold.

(6) Women-owned business concern (other than small business concern). [Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.]. The offeror represents that it * is, a women-owned business concern.

(7) Tie bid priority for labor surplus area concerns. If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price:

**SECTION K
REPRESENTATIONS, CERTIFICATIONS AND
OTHER STATEMENTS OF OFFERORS**

(8) Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program. [Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.]

(i) [Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the four designated industry groups (DIGs).] The offeror represents as part of its offer that it * is, * is not an emerging small business.

(ii) [Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or four designated industry groups (DIGs).] Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (check the Employees column if size standard stated in the solicitation is expressed in terms of number of employees); or

(B) Offeror's average annual gross revenue for the last 3 fiscal years (check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts).

(Check one of the following):

Number of Employees	Average Annual Gross Revenues
50 or fewer	\$1 million or less
51-100	\$1,000,001-\$2 million
101-250	\$2,000,001-\$3.5 million
251-500	\$3,500,001-\$5 million
501-750	\$5,000,001-\$10 million
751-1,000	\$10,000,001-\$17 million
Over 1,000	Over \$17 million

(9) [Complete only if the solicitation contains the clause at FAR 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns, or FAR 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.]

(i) General. The offeror represents that either-

(A) It * is, * is not certified by the Small Business Administration as a small disadvantaged business concern and identified, on the date of this representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net), and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, the net worth of each individual upon

**SECTION K
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whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); or

(B) It *has, * has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(ii) Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns. The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(9)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. [The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture: _____.]

(10) HUBZone small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents, as part of its offer, that--

(i) It * is, * is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and

(ii) It * is, * not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (c)(10)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. [The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: _____.] Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(d) Representations required to implement provisions of Executive Order 11246 --

(1) Previous contracts and compliance. The offeror represents that -

(i) It * has, * has not, participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation; and

(ii) It * has, * has not, filed all required compliance reports.

(2) Affirmative Action Compliance. The offeror represents that --

(i) It * has developed and has on file, * has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR parts 60-1 and 60-2), or

(ii) It * has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

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(e) Certification Regarding Payments to Influence Federal Transactions (31 U.S.C. 1352). (Applies only if the contract is expected to exceed \$100,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no 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 on his or her behalf in connection with the award of any resultant contract.

(f) Buy American Act Certificate. (Applies only if the clause at Federal Acquisition Regulation (FAR) 52.225-1, Buy American Act - Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products. The terms "component," "domestic end product," "end product," "foreign end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act-Supplies."

(2) Foreign End Products:

LINE ITEM NO.

COUNTRY OF ORIGIN

[List as necessary]

(3) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(g)

(1) Buy American Act -- Free Trade Agreements -- Israeli Trade Act Certificate. (Applies only if the clause at FAR 52.225-3, Buy American Act -- Free Trade Agreements -- Israeli Trade Act, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (g)(1)(iii) of this provision, is a domestic end product and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The terms "component," "domestic end product," "end product," "foreign end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act."

(ii) The offeror certifies that the following supplies are FTA country end products or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act":

FTA Country or Israeli End Products:

LINE ITEM NO.

**SECTION K
REPRESENTATIONS, CERTIFICATIONS AND
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COUNTRY OF ORIGIN

[List as necessary]

(iii) The offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) or this provision) as defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act." The offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

Other Foreign End Products:

LINE ITEM NO.

COUNTRY OF ORIGIN

[List as necessary]

(iv) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(2) Buy American Act-Free Trade Agreements-Israeli Trade Act Certificate, Alternate I (Jan 2004). If Alternate I to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products as defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act":

Canadian End Products:

Line Item No.:

[List as necessary]

(3) Buy American Act-Free Trade Agreements-Israeli Trade Act Certificate, Alternate II (Jan 2004). If Alternate II to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products or Israeli end products as defined in the clause of this solicitation entitled ``Buy American Act--Free Trade Agreements--Israeli Trade Act'':

Canadian or Israeli End Products:

Line Item No.:

Country of Origin:

DG133W-04-RP-0030

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[List as necessary]

(4) Trade Agreements Certificate. (Applies only if the clause at FAR 52.225-5, Trade Agreements, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(4)(ii) of this provision, is a U.S.-made, designated country, Caribbean Basin country, or FTA country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(ii) The offeror shall list as other end products those end products that are not U.S.-made, designated country, Caribbean Basin country, or FTA country end products.

Other End Products

Line Item No.:

Country of Origin:

[List as necessary]

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25. For line items subject to the Trade Agreements Act, the Government will evaluate offers of U.S.-made, designated country, Caribbean Basin country, or FTA country end products without regard to the restrictions of the Buy American Act. The Government will consider for award only offers of U.S.-made, designated country, Caribbean Basin country, or FTA country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) Certification Regarding Debarment, Suspension or Ineligibility for Award (Executive Order 12549). (Applies only if the contract value is expected to exceed the simplified acquisition threshold.) The offeror certifies, to the best of its knowledge and belief, that the offeror and/or any of its principals--

(1) * Are, * are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency; and

(2) * Have, * have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(3) * Are, * are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses.

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(i) Certification Regarding Knowledge of Child Labor for Listed End Products (Executive Order 13126). [The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are included in the List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at 22.1503(b).]

(1) Listed End Product

Listed End Product

Listed Countries of Origin:

(2) Certification. [If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1) of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.]

[] (i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

[] (ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

(End of Provision)

Alternate I (Apr 2002). As prescribed in 12.301(b)(2), add the following paragraph (c)(11) to the basic provision:

(11) (Complete if the offeror has represented itself as disadvantaged in paragraph (c)(4) or (c)(9) of this provision.) [The offeror shall check the category in which its ownership falls]:

___ Black American.

___ Hispanic American.

___ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

___ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

___ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

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___ Individual/concern, other than one of the preceding.

Alternate II (Oct 2000). As prescribed in 12.301(b)(2), add the following paragraph (c)(9)(iii) to the basic provision:

(iii) Address. The offeror represents that its address ___is, ___ is not in a region for which a small disadvantaged business procurement mechanism is authorized and its address has not changed since its certification as a small disadvantaged business concern or submission of its application for certification. The list of authorized small disadvantaged business procurement mechanisms and regions is posted at <http://www.arnet.gov/References/sdbadjustments.htm>. The offeror shall use the list in effect on the date of this solicitation. "Address," as used in this provision, means the address of the offeror as listed on the Small Business Administration's register of small disadvantaged business concerns or the address on the completed application that the concern has submitted to the Small Business Administration or a Private Certifier in accordance with 13 CFR part 124, subpart B. For joint ventures, "address" refers to the address of the small disadvantaged business concern that is participating in the joint venture.

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L.1 52.212-1 INSTRUCTIONS TO OFFERORS--COMMERCIAL ITEMS (Jan. 2004)

(a) *North American Industry Classification System (NAICS) code and small business size standard.* The NAICS code and small business size standard for this acquisition appear in Block 10 of the solicitation cover sheet (SF 1449). However, the small business size standard for a concern which submits an offer in its own name, but which proposes to furnish an item which it did not itself manufacture, is 500 employees.

(b) *Submission of offers.* Submit signed and dated offers to the office specified in this solicitation at or before the exact time specified in this solicitation. Offers may be submitted on the SF 1449, letterhead stationery, or as otherwise specified in the solicitation. As a minimum, offers must show --

- (1) The solicitation number;
- (2) The time specified in the solicitation for receipt of offers;
- (3) The name, address, and telephone number of the offeror;
- (4) A technical description of the items being offered in sufficient detail to evaluate compliance with the requirements in the solicitation. This may include product literature, or other documents, if necessary;
- (5) Terms of any express warranty;
- (6) Price and any discount terms;
- (7) "Remit to" address, if different than mailing address;
- (8) A completed copy of the representations and certifications at FAR 52.212-3;
- (9) Acknowledgment of Solicitation Amendments;
- (10) Past performance information, when included as an evaluation factor, to include recent and relevant contracts for the same or similar items and other references (including contract numbers, points of contact with telephone numbers and other relevant information); and
- (11) If the offer is not submitted on the SF 1449, include a statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation. Offers that fail to furnish required representations or information, or reject the terms and conditions of the solicitation may be excluded from consideration.

(c) *Period for acceptance of offers.* The offeror agrees to hold the prices in its offer firm for 30 calendar days from the date specified for receipt of offers, unless another time period is specified in an addendum to the solicitation.

(d) *Product samples.* When required by the solicitation, product samples shall be submitted at or prior to the time specified for receipt of offers. Unless otherwise specified in this solicitation, these samples shall be submitted at no expense to the Government, and returned at the sender's request and expense, unless they are destroyed during preaward testing.

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(e) *Multiple offers.* Offerors are encouraged to submit multiple offers presenting alternative terms and conditions or commercial items for satisfying the requirements of this solicitation. Each offer submitted will be evaluated separately.

(f) *Late submissions, modifications, revisions, and withdrawals of offers.*

(1) Offerors are responsible for submitting offers, and any modifications, revisions, or withdrawals, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that offers or revisions are due.

(2)

(i) Any offer, modification, revision, or withdrawal of an offer received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and—

(A) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of offers; or

(B) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(C) If this solicitation is a request for proposals, it was the only proposal received.

(ii) However, a late modification of an otherwise successful offer, that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(3) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the offer wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(4) If an emergency or unanticipated event interrupts normal Government processes so that offers cannot be received at the Government office designated for receipt of offers by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation or other notice of an extension of the closing date, the time specified for receipt of offers will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(5) Offers may be withdrawn by written notice received at any time before the exact time set for receipt of offers. Oral offers in

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response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile offers, offers may be withdrawn via facsimile received at any time before the exact time set for receipt of offers, subject to the conditions specified in the solicitation concerning facsimile offers. An offer may be withdrawn in person by an offeror or its authorized representative if, before the exact time set for receipt of offers, the identity of the person requesting withdrawal is established and the person signs a receipt for the offer.

(g) *Contract award (not applicable to Invitation for Bids)*. The Government intends to evaluate offers and award a contract without discussions with offerors. Therefore, the offeror's initial offer should contain the offeror's best terms from a price and technical standpoint. However, the Government reserves the right to conduct discussions if later determined by the Contracting Officer to be necessary. The Government may reject any or all offers if such action is in the public interest; accept other than the lowest offer; and waive informalities and minor irregularities in offers received.

(h) *Multiple awards*. The Government may accept any item or group of items of an offer, unless the offeror qualifies the offer by specific limitations. Unless otherwise provided in the Schedule, offers may not be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit prices offered, unless the offeror specifies otherwise in the offer.

(i) *Availability of requirements documents cited in the solicitation*.

(1)(i) The GSA Index of Federal Specifications, Standards and Commercial Item Descriptions, FPMR Part 101-29, and copies of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained for a fee by submitting a request to--

GSA Federal Supply Service Specifications Section

Suite 8100
470 L'Enfant Plaza, SW
Washington, DC 20407
Telephone (202) 619-8925)

Facsimile (202 619-8978).

(ii) If the General Services Administration, Department of Agriculture, or Department of Veterans Affairs issued this solicitation, a single copy of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained free of charge by submitting a request to the addressee in paragraph (i)(1)(i) of this provision. Additional copies will be issued for a fee.

(2) The DoD Index of Specifications and Standards (DoDISS) and documents listed in it may be obtained from the--

Department of Defense Single Stock Point (DoDSSP)
Building 4, Section D

700 Robbins Avenue
Philadelphia, PA 19111-5094

Telephone (215) 697-2667/2179

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Facsimilie (215) 697-1462.

(i) Automatic distribution may be obtained on a subscription basis.

(ii) Order forms, pricing information, and customer support information may be obtained—

(A) By telephone at (215) 697_2667/2179; or

(B) Through the DoDSSP Internet site at
<http://dodssp.daps.mil>.

(3) Nongovernment (voluntary) standards must be obtained from the organization responsible for their preparation, publication or maintenance.

(j) *Data Universal Numbering System (DUNS) Number*. (Applies to offers exceeding \$25,000, and offers of \$25,000 or less if the solicitation requires the Contractor to be registered in the Central Contractor Registration (CCR) database. The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS or DUNS+4 number that identifies the offeror's name and address. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see FAR Subpart 32.11) for the same parent concern. If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. An offeror within the United States may contact Dun and Bradstreet by calling 1-866-705-5711 or via the Internet at <http://www.dnb.com>. An offeror located outside the United States must contact the local Dun and Bradstreet office for DUNS number.

(k) *Central Contractor Registration*. Unless exempted by an addendum to this solicitation, by submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance and through final payment of any contract resulting from this solicitation. If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror. Offerors may obtain information on registration and annual confirmation requirements via the Internet at <http://www.ccr.gov> or by calling 1-888-227-2423 or 269-961-5757.

(1) *Debriefing*. If a post-award debriefing is given to requesting offerors, the Government shall disclose the following information, if applicable:

(1) The agency's evaluation of the significant weak or deficient factors in the debriefed offeror's offer.

(2) The overall evaluated cost or price and technical rating of the successful and debriefed offeror and past performance information on the debriefed offeror.

(3) The overall ranking of all offerors, when any ranking was developed by the agency during source selection.

(4) A summary of rationale for award;

(5) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.

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(6) Reasonable responses to relevant questions posed by the debriefed offeror as to whether source-selection procedures set forth in the solicitation, applicable regulations, and other applicable authorities were followed by the agency.

(End of Provision)

L.2 1352.252-71 REGULATORY NOTICE (MARCH 2000)

Offerors are advised that certain provisions and clauses identified with a Commerce Acquisition Regulation (CAR) notation for identification purposes, have not yet been incorporated into the CAR. However, all of these items are binding for this acquisition and will eventually be contained in the CAR at Part 13 of Title 48 of the Code of Federal Regulations.

L.3 1352.215-73 INQUIRIES (MARCH 2000)

Offerors must submit all questions concerning this solicitation in writing to the Contracting Officer. They must be received no later than fifteen calendar days after the date of this solicitation. All responses to the questions will be made in writing and included in an amendment to the solicitation.

L.4 NOTICES TO OFFERORS

Proposals submitted in response to this solicitation will be in the quantities and format specified below:

- a. VOLUME I - Three originally executed copies of the SF33 and one copy of Section K fully executed.
- b. VOLUME II - Eight copies of the Technical/Contractor Qualifications Proposal.
- c. VOLUME III - Cost/Price Proposal - Two copies with the costs and prices and one copy without the prices.

L.5 PROPOSAL INSTRUCTIONS

(a) General Instructions

The following instructions established the acceptable minimum requirements for the format and content of proposals:

(1) Any resultant contract shall include the clauses applicable to the selected contractor's organization and type of contract awarded. Any additional clauses required by public law, executive order, or acquisition regulations in effect at the time of execution of the proposed contract will be included.

2) The proposal must be prepared in three parts as referenced in Section L.4 of this solicitation: Standard Form 1449 --Solicitation/Contract/Order for Commercial Items, in addition Section K fully executed, Technical/Contractor Qualifications proposal, and Cost/Price proposal. Each of the parts shall be separate and complete in itself so that evaluation of one may be accomplished independently from evaluation of the other. The technical proposal must not contain reference to cost; however, resource information (such as data concerning labor hours and categories, materials, subcontracts, etc.) must be contained in the technical proposal so that the contractor's understanding of the specifications may be evaluated. It must disclose the contractor's technical approach in sufficient detail to provide a clear and concise presentation that

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includes, but is not limited to, the requirement of the technical proposal instructions.

(3) Contractors may, at their discretion, submit alternate proposals or proposals which deviate from the requirement; provided, that an contractor also submit a proposal for performance of the work as specified in the statement of work. Any "alternate" proposal may be considered if overall performance would be improved or not compromised, and if it is in the best interest of the Government. Alternate proposals, or deviations from any requirement of this RFP, must be clearly identified.

(4) The Government will evaluate proposals in accordance with the evaluation criteria set forth in Section M of this RFP.

(b) Technical Proposal Instructions

(1) Proposals which merely offer to conduct a program in accordance with the requirements of the Government's specifications will not be eligible for award. The contractor must submit an explanation of its proposed technical approach in conjunction with the tasks to be performed in achieving the project objectives.

(2) The technical approach should be in as much detail as the contractor considers necessary to fully explain the proposed technical approach or method. The technical proposal should reflect a clear understanding of the nature of the work being undertaken.

(3) The technical proposal must include information on how the project is to be organized, staffed, and managed. Information should be provided which will demonstrate the contractor's understanding and management of important events or tasks. The contractor must explain how the management and coordination of consultant and/or subcontractor efforts will be accomplished.

(4) The technical proposal must include a list of names and proposed duties of the professional personnel, consultants, and key subcontractor employees assigned to the project. Their resumes should be included and should contain information on education, background, recent work experience, and specific scientific or technical accomplishments.

(5) Technical proposals submitted in response to this RFP must be prepared and tabbed in the format described below. Several tabs described below require a response to the specifications in Section C. Such a response shall be a paragraph by paragraph explanation of how the contractor intends to comply with the specification. Each response must be keyed to the respective paragraph in Section C. For paragraphs of the specification which describe a mandatory feature, the response may consist of a reference to the contractor's technical literature. Any technical literature used as a reference contains the required technical detail, it is not necessary to restate such detail in the proposal itself. All references must clearly identify the volume, page and line number of the referenced material. For paragraphs of the specification which describe a desirable feature, the response must also state whether the contractor is proposing the feature. other paragraphs in the specification require the contractor to furnish a discussion of a technical issue. Such discussions shall appear in the appropriate place in the proposal.

Elaborate brochures, binders and the like are neither required nor desired. Legibility, clarity, and completeness are important.

Tab (A) **General Description.** Provide a brief synopsis of the proposal. State broadly how the proposal meets the requirements and the intent of the specification. List all exceptions taken to the RFP requirements and include appropriate rationale for each. Where alternate proposals are made, discuss the

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controlling principles. Discuss any restrictions on use and distribution of the data which may be in discord with the requirements.

Tab (B) **Contractor Qualifications.** Present a clear and concise description of the contractor's Corporate resources. The purpose is to evaluate the contractor's qualifications including: 1) personnel, 2) lightning data collection, processing, and distribution capabilities, and 3) support services. The proposal shall also provide evidence that the Contractor will be able to continue to fulfill the requirements and to correct any existing deficiencies in data quality, coverage, and system performance.

Tab (C) **Lightning Data System.** Describe the system used to sense, process, quality control, and transmit the required lightning data parameters. The description of data coverage should include a map showing the coverage and the locations of present and planned sensors. Sensors which the contractor does not own and/or operate should be identified. Discuss how data quality and system performance is achieved especially in the case that a portion of the system is not owned and/or operated by the contractor. Describe any deficiencies including coverage, data quality, and system performance and how the contractor intends to rectify these deficiencies.

Tab (D) **Data Parameters and Quality.** Describe the offered near real time data and quality of that data including parameters, accuracy, strike type (cloud-to-ground and cloud-to-cloud) identification and detection efficiency. Describe problems and solutions which are relevant to using data from different detection systems or subsystems for example meshing data at boundaries and degradation of data quality as function of distance from sensor clusters and geographical boundaries. Verification of data quality should be based on field evaluations and tests. Location accuracy, strike identification, and probability of detection should be referenced to independent observations including accepted standards, trained weather observers, multiple optical cameras, radar, and short baseline lightning detection systems. Theoretical and model calculations which have been validated or are widely accepted by the industry may also be submitted. Broad variability of system performance should also be described if data characteristics are significantly different over the required area of coverage.

To enable the Government to plan for adequate data processing capabilities (ALDARS for example) the contractor shall describe their data transmission strategy, capacity and limitations, what extremes can be expected, and whether information can be lost under these and other circumstances.

Tab (E) **System Performance and Status.** Describe the specific system status information sent as part of the real-time data stream. Give evidence to support the effectiveness and completeness of: 1) data processing and quality control, 2) system monitoring, 3) reliability, availability, 4) fault isolation capabilities, and 5) fidelity of status messages describing local system performance in real time. Describe the mechanism for status reporting and dealing with system problems.

Tab (F) **Area of Coverage.** Describe in detail the area of coverage provided for in : 1) national lightning network, 2) Pacific Maritime areas (if offered), 3) Atlantic and Caribbean Maritime areas (if offered), 4) Alaska (if offered), Hawaii (if offered) and all optional zones (if offered) described in the SOW.

Tab (G) **Site Hardware and Display Function.** Provide the hardware specifications needed to transfer the lightning data to Government systems. Describe display hardware, software, and display capabilities. Include a description of the data stream, format, and interface. Discuss how the offered data may be protected from non-authorized users when a nonsecured method of

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transfer is used to communicate the data from a central site to users, as for example, AWIPS.

The contractor shall specify the hardware and general-purpose software required for the display software. To "specify" in this context means to provide the Government with the names and addresses of manufacturers and model numbers or comparable information which will uniquely identify the equipment, component, software package; but the requirement does not include providing detailed specifications such as engineering drawings, circuit schematics, or source code documentation. This shall include sufficient detail to permit the Government to acquire them from other commercial sources or from existing inventory.

Tab (H) **Maintenance**

Discuss maintenance of supplied hardware and software as required by Section C.4. Supply a maintenance schedule including response time. Include also a discussion of installation and training.

Tab (I) **Archive Data**. Describe an approach both by proposing to allow the Government to archive the data and by the contractor providing the data directly in response to requests. In the latter case include a description of the proposed media, response time, format, and other pertinent factors.

Tab (J) **Past Performance**.

In this section, the contractor shall describe its capabilities (and those of its subcontractors, if any, and provide its comparable past performance with a maximum of five (5) contracts of a **similar nature** and magnitude. The contractor shall discuss how its previous experience prepares it to undertake a contract of the scope envisioned in this solicitation. The contractor shall further describe those changes which it contemplates to develop the capability to perform the proposed contract. In addition to the narrative synopses of experience provide a chart, in tabular form, listing the following information:

Column 1 - Procurement activity and address
Column 2 - Procuring Contracting Officer's name and telephone no.
Column 3 - Contract No.
Column 4 - Type of contract
Column 5 - Award price
Column 6 - Final price
Column 7 - Period of Performance
Column 8 - User of the equipment/service (name & phone no.)
Column 9 - Brief description of the contract

L.6 COST/PRICE PROPOSAL INSTRUCTIONS

The cost proposal shall be physically separate from the Technical Proposal.

The offeror is required to provide, as part of its price proposal, a CLIN structure for Section B based upon the items (both base requirement and optional items) being proposed. The Contractor shall provide firm fixed prices for all items, both base requirement and optional items being offered. The offeror shall provide this CLIN structure (Price Schedule) and associated prices for the base contract period and all option periods. The CLIN structure and the associated prices will become the Price Schedule.

The Price Schedule must contain all the costs pertinent to the acquisition. All items offered must be listed in the Price Schedule, and must be proposed on a firm fixed price basis. If there is no price associated with an item, N/C (no

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charge) shall be inserted in the unit price column. Applicable commercial price lists and GSA Schedules shall also be included with the offer.

L.7 ALTERNATE PROPOSALS

Contractors may submit more than one proposal, each of which must satisfy the mandatory requirement of the solicitation, in order to be considered. As minimum, one of the proposals submitted must be complete. The alternate proposal(s) may be in an abbreviated form following the same section format, but providing only those sections which differ in any way from those contained in the original proposal. Each proposal will include cost tables indicating the complete range of pricing options. In the case of price/cost options for a given configuration, an alternate proposal will not be required. If alternate proposals are submitted, such alternatives will be clearly labeled and identified on the cover page of each separate document. The reason for each alternate and its comparative benefits shall be explained. Each proposal submitted will be evaluated on its own merits.

L.8 52.233-2 SERVICE OF PROTEST (AUG 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

U.S. Department of Commerce/NOAA/NWS
Acquisition Management Division, OFA63
ATTN: Contracting Officer, Station No. 7523
1325 East West Highway, SSMC2
Silver Spring, MD 20910

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(c) In this procurement, you may protest to the GSBCA because of the nature of the supplies or services being procured.

In addition to the above, protests shall also be served on the Contract Law Division of the Office of the Assistant General Counsel for Finance and Litigation located at:

U.S. Department of Commerce, Herbert C. Hoover Building, Room H5893, 14th Street,
N.W., Washington, DC 20230 ATTN: Mark Langstein
(End of provision)

L.9 NEGOTIATIONS (DOC)

To the extent deemed necessary by the Government, negotiations will be conducted with all offeror's who are eligible to receive a contract award resulting from this solicitation. However, offeror's are cautioned to submit proposals on the most favorable basis as to price, delivery, or time of completion and other factors as the Government may elect to make an award without further discussions or negotiations.

The Government reserves the right to award a contract based on the initial offer received without discussions with offeror's (negotiations). Therefore, offeror's are requested to submit proposals on the most favorable terms from a price and technical viewpoint.

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L.10 SMALL BUSINESS SUBCONTRACTING PLAN

1. In accordance with FAR 52.219-9, SMALL BUSINESS SUBCONTRACTING PLAN (included in Section I.1 by reference), offerors (large business concerns only) are required to submit a Small Business Subcontracting Plan. Reference L.11, SUBCONTRACTING SUPPORT IN ACCORDANCE WITH PUBLIC LAW 95-507, of this Section for applicable subcontracting goals. This Plan shall be included with the initial proposal and submitted to the following:

U.S. Department of Commerce/NAA/NWS
Acquisition Management Division
1305 East West Highway, SSMC3, OFA63, Sta. No. 7504
Silver Spring, Maryland 20910
ATTN: JENISTA M. FEATHERSTONE

2. Specific subcontracting plan requirements are listed at FAR 19.704. Plans which do not address all items listed therein are not acceptable.

L.11 SUBCONTRACTING SUPPORT IN ACCORDANCE WITH PUBLIC LAW 95-507

(a) Small and small disadvantaged businesses are encouraged to participate as prime contractors or as members of joint ventures with other small businesses. All interested contractors are reminded that the successful contractor will be expected to place subcontracts to the maximum practicable extent with small and disadvantaged firms in accordance with the provisions of Public Law 95-507 and Subpart 19.7 of the Federal Acquisition Regulation.

(b) The 2004 Department of Commerce Preference Program Goals are the following:

1. Subcontracts to small business firms ----- 40.0%
2. Subcontracts to minority-owned firms ----- 5.0%
3. Subcontracts to women-owned businesses ----- 5.0%
4. Subcontracts to HUBZone businesses ----- 3.0%
5. Subcontracts to Service Disabled Veteran owned businesses ---- 3%

L.12. 52.222-24 PREAWARD ON-SITE EQUAL OPPORTUNITY COMPLIANCE EVALUATION (FEB 1999)

If a contract in the amount of \$10 million or more will result from this solicitation, the prospective Contractor and its known first-tier subcontractors with anticipated subcontracts of \$10 million or more shall be subject to a preaward compliance evaluation by the Office of Federal Contract Compliance Program (OFCCP), unless, within the preceding 24 months, OFCCP has conducted an evaluation and found the prospective Contractor and subcontractors to be in compliance with Executive Order 11246.

(End of provision)

SECTION M
EVALUATION FACTORS FOR AWARD

M.1 52.212-2 EVALUATION--COMMERCIAL ITEMS (JAN 1999)

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers: Technical Merit, Past Performance, Technical Management, and Price.

(b) Options. The Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. The Government may determine that an offer is unacceptable if the option prices are significantly unbalanced. Evaluation of options shall not obligate the Government to exercise the option(s).

(c) A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

(End of Provision)

M.2 DEGREE OF RELATIVE IMPORTANCE ASSIGNED TO MAJOR EVALUATION FACTORS

A merit rating will be assigned for technical merit, technical management and past performance. The cost/price proposal will be evaluated for balance and realism. An offer is considered unbalanced if it proposes costs which are significantly understated for some items and significantly overstated for others. An unbalanced offer may be rejected.

The Government will evaluate offers for award purposes by evaluating the base requirement for Zone 1 and then separately consider the total price for each option or Zone that is proposed by offerors. Maximum quantities will be utilized in the evaluation of cost proposals. Evaluation of these options will not obligate the Government to exercise the options. Offers containing any charges for failure to exercise any option will be rejects.

The following represents the evaluation criteria in descending order of importance:

- Technical Merit
- Past Performance
- Program Management and Experience
- Price

The Government's primary concern for this procurement is the technical merit, offeror's past performance record, program management and experience, and price. Accordingly, the Government is willing to pay more if an increase in technical approach, technical management or offeror's past performance record so warrants. However, probable price may become more significant in the event competing merit ratings are closely grouped and offer comparable merit contributions to the Government.

SECTION M
EVALUATION FACTORS FOR AWARD

M.3 Technical Merit Factors

The following three (3) factors will be considered when evaluating technical merit. Factor A contain elements relating to data and format. Factor B contains elements relating to systems availability and reliability. Factor C contain elements relating to hardware and software. Factor A is slightly more important than Factor B. Factor B is significantly more important than Factor C. These Factors will apply to the optional capabilities of total lightning/in-cloud data and coverage of Zones 1 through 26.

Factor A - Data and Format.

The following sub elements will be evaluated. They are of equal importance.

1. Probability of Detections/Detection Efficiency.
2. Area of Coverage.
3. Data/Parameter Delivery Time.
4. Strike Location Accuracy.
5. Status Information.
6. Time Accuracy.
7. Strike Identification.
8. Format Description.
9. Data/Product Delivery.
10. Archiving.
11. Types of Lightning/Polarity.
12. Total Lightning/In-cloud Data (Optional Capabilities)

Factor B - Systems Availability and Reliability.

The following sub elements are listed in descending order of importance.

1. Data Availability - The lightning data and system availability as described in the performance specifications.
2. Quality and Performance - The Offeror's approach to insuring data quality and system performance, including monitoring throughout the total contract period.
3. 24 hour point of contact.

Factor C - Hardware and Software.

The following sub elements are listed in descending order of importance.

1. Communications Hardware.
2. Display of Software.
3. Warranty of Hardware and Software.

SECTION M
EVALUATION FACTORS FOR AWARD

M.3.1 PAST PERFORMANCE

This factor will be rated based on the information and opinions gained by contacting the references listed in the proposal, firms with which the offeror has a history of past performance, and possibly other customers known to the Government and others who may have useful and relevant information. The Government reserves the right not to contact all references provided and to contact other references even though not provided by the Offeror.

The following sub-factors will be considered (all sub-factors are of equal importance):

- Quality of products or service, compliance with contract requirements, accuracy of reports and technical excellence.
- Cost control, remaining within budget, current accurate and complete billing, relationship of negotiated costs to actual costs and being cost efficient.
- Timeliness of performance.
- Business relations, management, an effective subcontracting program, reasonable and effective offeror-recommended solutions.
- Satisfaction of customer end users with the offeror's service.

Assessment of the offeror's past performance will be one means of evaluating the credibility of the offeror's proposal, and relative capability to meet performance requirements.

Information will also be considered regarding any significant subcontractors.

Evaluation of past performance will include a determination of the Offeror's commitment to customer satisfaction and will include conclusions of informed judgment. The basis for the past performance rating will be documented.

During discussions offerors will be given an opportunity to address unfavorable reports of past performance, if the offeror has not had a previous opportunity to review the rating. Recent contracts will be examined to ensure that corrective measures have been implemented. Prompt corrective action in isolated instances may not outweigh overall negative trends.

If an offeror does not have a past performance history relating to this solicitation, the offeror will not be evaluated favorably or unfavorably on this factor.

M.3.2 Project Management and Experience

The qualifications and ability of the offeror to meet the requirements over the projected period of contract performance will be evaluated on the basis of:

1. The offeror's established project organization management process, experience, and demonstrated programmatic success. This should include the offeror's capability for supplying lightning data of high quality, reliability, and availability to other users.
2. The offeror's resources, key personnel, facilities, commitments, and other evidence to support their ability to correct any identified system deficiencies and to ensure present and future data quality and system performance.

SECTION M
EVALUATION FACTORS FOR AWARD

M.4 Multiple Contract Awards

Zone 1 will be awarded to one offeror. Multiple contract awards may be made for Zones 2 through 26.