

# AWARD/CONTRACT

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)

RATING

PAGE

OF PGS

1

1

2. CONTRACT (Proc. Inst. Ident.) NO.

**DTEAAC-07-C-00001**

3. EFFECTIVE DATE

**March 1, 2007**

4. REQUISITION/PURCHASE REQUEST/PROJECT NO.

**AC-07-01514**

5. ISSUED BY

CODE

FAA, Center Acquisition Contracting Team (AMQ-310)  
6500 South MacArthur Boulevard  
P.O. Box 25082  
Oklahoma City, OK 73125-4929

6. ADMINISTERED BY (if other than Item 5) CODE

FAA, Center Acquisition Contract Mgmt. Team (AMQ-340)  
6500 South MacArthur Boulevard  
P.O. Box 25082  
Oklahoma City, OK 73125-4929

7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, State and ZIP Code)

**ZEDASOFT INC  
PO BOX 185006  
FT WORTH TX 76181**

8. DELIVERY

FOB ORIGIN  OTHER (See below)

9. DISCOUNT FOR PROMPT PAYMENT

Net 30

10. SUBMIT INVOICES

(4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN:

ITEM

BLOCK 12.

CODE

FACILITY CODE

11. SHIP TO/MARK FOR

CODE

DOT, FAA, AAM-500  
Human Res Research Div, RM 270 CAMI  
P.O. Box 25082 Oklahoma City, OK 731250082

Mark for: **Barry Runnels**

12. PAYMENT WILL BE MADE BY: CODE

FAA, Financial Operations Division (AMZ-100)  
P.O. Box 25710  
Oklahoma City, OK 73125-4913 (405) 954-4304

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:

10 U.S.C. 2304(c) ( )  41 U.S.C. 253(c)

14. ACCOUNTING AND APPROPRIATION DATA

To be shown on delivery order(s) issued hereunder.

15A. ITEM NO.

15B. SUPPLIES/SERVICES

15C. QUANTITY

15D. UNIT

15E. UNIT PRICE

15F. AMOUNT

Accepted as to Item 0001, Part I, Section B, per contractor's letter/offer dated 9/7/06 and/or filed herein. Schedule for Performance based payments acceptable as agreed by both parties.

(estimated)

15G. TOTAL AMOUNT OF CONTRACT

**\$389,628.60**

## 16. TABLE OF CONTENTS

(X)	SEC	DESCRIPTION	PAGE(S)	(X)	SEC	DESCRIPTION	PAGE(S)
<b>PART I - THE SCHEDULE</b>				<b>PART II - CONTRACT CLAUSES</b>			
X	A	SOLICITATION/CONTRACT FORM	1	X	I	CONTRACT CLAUSES	22-31
X	B	SUPPLIES OR SERVICES AND PRICES/COST	2	<b>PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.</b>			
X	C	DESCRIPTION/SPECS/WORK STATEMENT	3-15	X	J	LIST OF ATTACHMENTS	31
X	D	PACKAGING AND MARKING	15	<b>PART IV - REPRESENTATIONS AND INSTRUCTIONS</b>			
X	E	INSPECTION AND ACCEPTANCE	15-16	X	K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	INCORPORATED
X	F	DELIVERIES OR PERFORMANCE	16	BY REF-			
X	G	CONTRACT ADMINISTRATION DATA	16-17	X	L	INSTRS., CONDS., AND NOTICES TO OFFERORS	ERENCE
X	H	SPECIAL CONTRACT REQUIREMENTS	17-22	X	M	EVALUATION FACTORS FOR AWARD	

CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17.  CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return \_\_\_\_\_ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for his consideration stated herein. The rights and obligations of the parties to his contract shall be subject to and governed by the following documents: a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)

18.  AWARD (Contractor is not required to sign this doc.) Your offer on Solicitation Number **DTEAAC-06-R-02470**, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

19A. NAME AND TITLE OF SIGNER (Type or print)

20A. NAME OF CONTRACTING OFFICER  
**Michele D. Mustin**

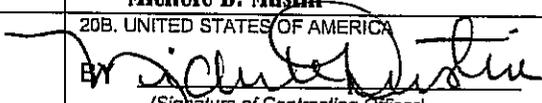
19B. NAME OF CONTRACTOR

19C. DATE SIGNED

20B. UNITED STATES OF AMERICA

20C. DATE SIGNED

BY \_\_\_\_\_  
(Signature of person authorized to sign)

BY   
(Signature of Contracting Officer)

**March 1, 2007**

<b>SOLICITATION, OFFER AND AWARD</b>		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350) >		RATING	PAGE 1
2. CONTRACT NO. <b>DTFAAC-07-C-00001</b>	3. SOLICITATION NO. <b>DTFAAC-06-R-02470</b>	4. TYPE OF SOLICITATION <input checked="" type="checkbox"/> NEGOTIATED (RFO)	5. DATE ISSUED <b>8/07/06</b>	6. REQUISITION/PURCHASE NO. (FAA Internal Use Only)	
7. ISSUED BY FAA, AMT Contracting Team (AMQ-310) 6500 South MacArthur Boulevard P.O. Box 25082 Oklahoma City, OK 73125-4929		8. ADDRESS OFFER TO (If other than Item 7) FAA, Bid & Proposal Officer (AMQ-77) Room 308, Multi-Purpose Building 6500 South MacArthur Boulevard P.O. Box 25082 Oklahoma City, OK 73125-4933			

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

**FIRM-FIXED PRICE SOLICITATION AGARS LIFECYCLE EXTENSION PROJECT**

9. Sealed offers in original and no copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in Room 308, Multi-Purpose Building until 3:00 P.M. local time 9/07/06.  
(Hour) (Date)

CAUTION - LATE Submissions, Modifications, and Withdrawals: See Section L, AMS Clause 3.2.2.3-14. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL: >	A. NAME	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS)
-----------------------------	---------	---

**11. TABLE OF CONTENTS**

(✓)	SEC	DESCRIPTION	PAGE(S)	(✓)	SEC	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES			
✓	A	SOLICITATION/CONTRACT FORM	1	✓	I	CONTRACT CLAUSES	22-31
✓	B	SUPPLIES OR SERVICES AND PRICES/COSTS	2	PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.			
✓	C	DESCRIPTION/SPECS./WORK STATEMENT	3-15	✓	J	LIST OF ATTACHMENTS	31
✓	D	PACKAGING AND MARKING	15	PART IV - REPRESENTATIONS AND INSTRUCTIONS			
✓	E	INSPECTION AND ACCEPTANCE	15-16	✓	K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	Incorporate
✓	F	DELIVERIES OR PERFORMANCE	16	✓	L	INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS	by
✓	G	CONTRACT ADMINISTRATION DATA	16-17	✓	M	EVALUATION FACTORS FOR AWARD	Ref.
✓	H	SPECIAL CONTRACT REQUIREMENTS	17-22				

**OFFER (Must be fully completed by offeror)**

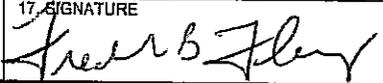
NOTE: Item 12 does not apply if the solicitation includes the Minimum Bid Acceptance Period provision.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within \_\_\_\_\_ calendar days (**90 calendar days unless a different period is inserted by the offeror**) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, AMS Clause 3.3.1-6) >	10 CALENDAR DAYS	20 CALENDAR DAYS	30 CALENDAR DAYS	CALENDAR DAYS
	%	%	%	%

14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR ZEDASOFT, INC. 2310 GRAVEL DRIVE FORT WORTH TX 76118	CODE	FACILITY	15. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)  FRED FLEURY, VICE PRESIDENT
--	------	----------	---

15B. TELEPHONE NO. (Include area code) 817/616-1000 (X229)	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE. <input type="checkbox"/>	17. SIGNATURE 	18. OFFER DATE 9/7/06
---	--	---	--------------------------

**AWARD (To be completed by Government)**

19. ACCEPTED AS TO ITEMS NUMBERED 0001	20. AMOUNT \$389,628.60	21. ACCOUNTING AND APPROPRIATION
---	----------------------------	----------------------------------

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION <input type="checkbox"/> 10 U.S.C. 2304(c)( ) <input type="checkbox"/> 41 U.S.C. 253(c)( )	23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 COPIES UNLESS OTHERWISE SPECIFIED) >	ITEM
--	---	------

24. ADMINISTERED BY (If other than Item 7) FAA, AMT Contract Management Team (AMQ-340) 6500 South MacArthur Boulevard P.O. Box 25082 Oklahoma City, OK 73125-4929	CODE	25. PAYMENT WILL BE MADE BY FAA, Financial Operations Division (AMZ-100) 6500 South MacArthur Boulevard P.O. Box 25082 Oklahoma City, OK 73125-4304	CODE
---	------	---	------

26. NAME OF CONTRACTING OFFICER (Type or print) MICHELE MUSTIN RICHARD L. CONYAC	27. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	28. AWARD DATE
--	--	----------------

IMPORTANT -- Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

**PART I – SECTION B  
SUPPLIES OR SERVICES AND PRICES/COSTS**

**B.1(a)** The contractor shall furnish all personnel and when required, space, materials, equipment and supplies to provide support for the AGARS Lifecycle Extension Project in accordance with the terms, conditions and provisions set forth herein and in the attached Statement of Work (SOW). The contractor shall be paid for services performed in accordance with the following price schedule:

**NOTES 1. CLIN 1.0 is firm-fixed price.**

<b>CLIN</b>	<b>DESCRIPTION</b>	<b>Amount</b>
1.0	AGARS Lifecycle Extension Project IAW the Statement of Work (SOW). Contractor shall provide all labor, materials, components, equipment, overhead, travel and incidentals to provide support IAW the SOW.	\$ <u>389,628.60</u>

## PART I - SECTION C - DESCRIPTION/SPECS/WORK STATEMENT

C.1 This Statement of Work (SOW) defines the requirements for services and equipment for the replacement of obsolete Silicon Graphics Inc. (SGI) computers, displays, and IrixGL based software utilized by the Civil Aerospace Medical Institute's (CAMI) Advanced General Aviation Research Simulator (AGARS) with high performance, Personal Computer (PC) based systems running the Linux operating system and OpenGL based software.

### 1.0 Introduction

This statement of work is issued under contract [name and number]. Section 1, "Introduction", provides a brief background for the project under which this SOW has been issued, the scope of the effort, and specific objectives to be achieved. Section 2, References, provides a list of the most significant reference items relevant to the project. Section 3, "Requirements", is the heart of the SOW, defining precise requirements in terms of tasks to be performed and deliverables to be produced. Section 4, "Progress and Compliance", lays out the reporting requirements for the project. Section 5, "Delivery, Evaluation, and Acceptance", provides specific instructions for transmittal of deliverables to the government. Section 6, "Notes", contains miscellaneous secondary information that may amplify material in the previous sections or does not logically fit into those categories. Attachments, if any, follow the last section.

### 1.1 Background

The Civil Aerospace Medical Institute's Advanced General Aviation Research Simulator, composed mainly of technology released in 1993, was designed to support human factors research tasks associated with traditional General Aviation (GA) display instrumentation and controls as well as the glass cockpit GA aircraft of the future. When CAMI accepted the simulator in 1995, the SGI computers responsible for operation of the displays, controls, and out the window visual scene were state of the art. Computers based upon PC architecture are now capable of out-performing the existing system and producing higher-resolution graphics at a greatly reduced maintenance cost. The performance of the existing system, the costs of maintenance and modifications of the display, and problems encountered when attempting to integrate contemporary avionics into the simulator are all factors in the decision to update the simulator. When upgraded it is anticipated that maintenance costs will be reduced by at least seventy percent and that AGARS will continue to support human factors research requirements for at least the next seven years.

The AGARS can depict various head-down display instruments in various combinations, but the most easily reconfigured synthetic-vision display is external to the simulator computer systems and does not communicate back to the host computer. As such, there is no "integrated" navigation-and-control system allowing the pilot to enter course/route information and have it affect depictions on the Primary Flight Display (PFD). This is also true for the MFD currently used to depict NEXRAD images and graphical Meteorological Aerodrome Reports (METARs). These two systems operate by using a copy of the visual database, which exists on the out-the-window (OTW) computer system. The MFD is not targeted for modification with this SOW; however, its capabilities must not be eliminated or reduced by the replacement of the primary simulation systems. The scenario-editing and data-collection aspects of the system, however, continue to be unique capabilities not available in commercial-off-the-shelf systems and are a requirement in the converted PC based version of the system.

The cockpit display system is part of a larger system of computers connected by Ethernet. The master simulation computer, a SGI Onyx InfiniteReality, sends data to two SGI Indigo II computers, the latter of which actually drives the cockpit displays in the simulator. The Onyx performs real-time computations, memory mapping of variables, and OTW visual generation. The Onyx has four graphics pipelines; however,

only three pipes are utilized due to performance limitations. Each of the OTW displays operates at a resolution of 960-by-680 for a combined resolution of 960-by-2040. The communication is largely a one-way path, with one exception - an application that transmits to the Onyx a few error-measurement variables (cross-track error and vertical error from a highway-in-the-sky display) for collection with other flight parameters. The cockpit instrumentation group consists of four physical displays (three head-down instrument-display CRTs in the cockpit and one Kaiser LCD HUD) with each SGI Indigo II computer driving two physical displays (labeled as HDR, HDC, HDL, and HUD in Figure 1). The panel-mounted displays are generated on three 1280-by-1024-pixel resolution CRT display units, which are mounted behind aluminum masks containing cutouts for simulation of discrete instruments and upon which are mounted controls related to the various displays (knobs and switches). Figure 1 illustrates the panel configured as a Piper Malibu. The cluster of instrumentation on the pilot's side (left) of the panel (9 round-dial instruments) is on the HDL (head-down left) display, the next three columns of instruments immediately to the left of the radio stack are on the HDC (head-down center) display, and the copilot's instrumentation (6 round-dial instruments in two rows) are on the HDR (head-down right) display.



Figure 1: AGARS panel in Piper Malibu configuration showing displays HDL, HDC, and HDR.

In addition to these displays, there are remote monitors at the Experimenter/Operator Station (EOS) that allow the experimenter to visually monitor the instrumentation presented on the three cockpit head-down displays, as well as to visually monitor the forward-looking out-the-window (OTW) view and a video-camera view of the cockpit (see Figure 2). The remote monitors to be addressed in this SOW will be only those depicting cockpit instrumentation and remote presentations of data from the OTW. The replacement of the remote monitor for the video camera is not a requirement. In addition, replacement of the OTW projection displays is not a requirement.



Figure 2: Experimenter/operator station (EOS) remote monitors.

The AGARS system consists of 261,000 lines of 'C' code with an estimated 7,900 lines of code for updating the visuals - OTW and heads down displays. The code base utilizes Silicon Graphics Performer libraries as well as IRIX GL libraries. The system is a state based event driven loop simulation developed around the proprietary Mission Simulator System (MSS). An overview of AGARS is illustrated in figure 3.

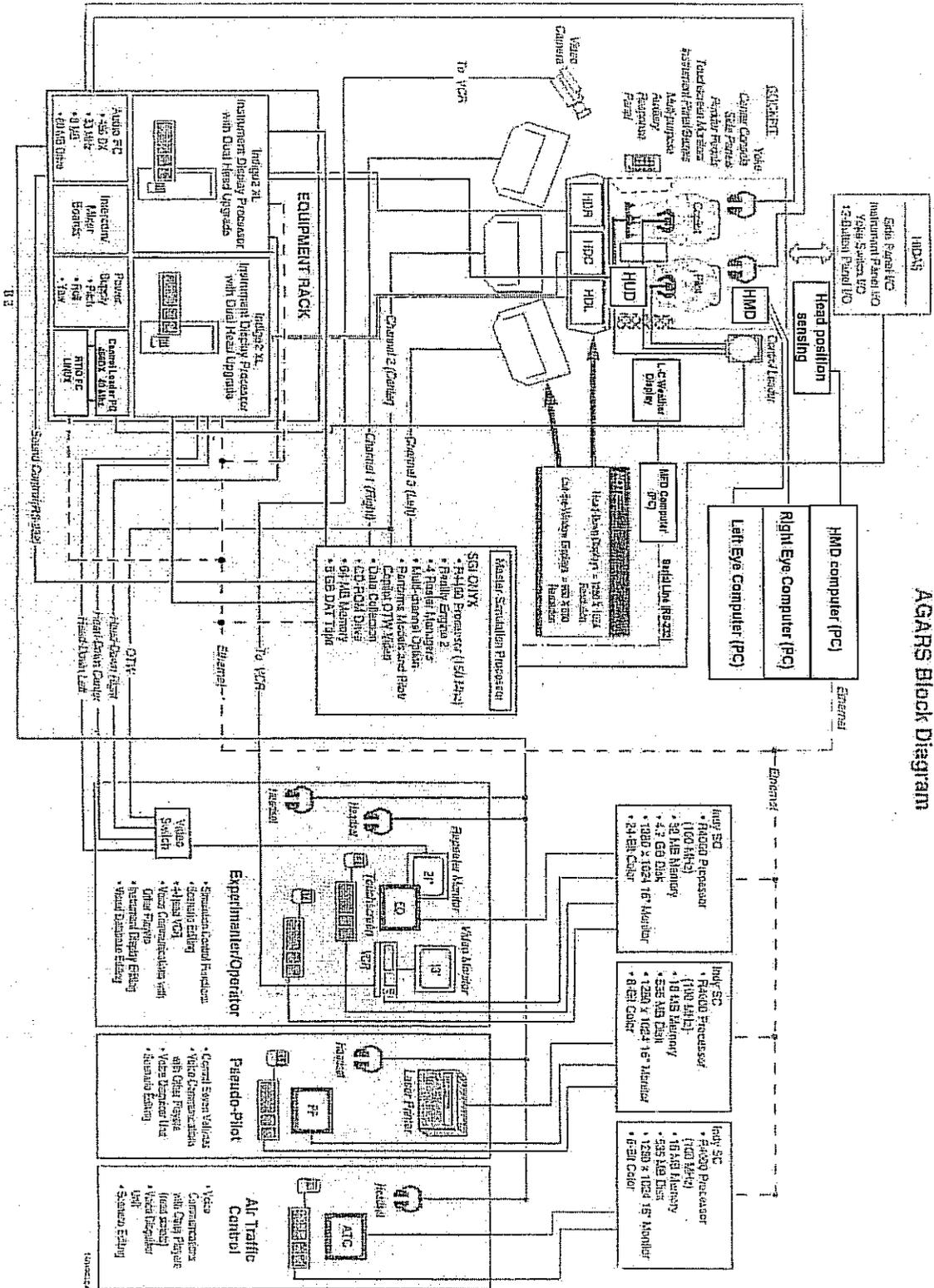


Figure 3: Overview of AGARS hardware components

## 1.2 AGARS Conversion

The goal of this SOW is to move the CAMI Advanced General Aviation Research Simulator (AGARS) to newer hardware that is more responsive running on the Linux operating system. This effort will simplify the AGARS computing hardware, lower operational costs, provide a more flexible architecture, and implement standard open source technologies, better positioning the system for future migrations and lowering cost of ownership.

There are four broad objectives with this life cycle extension:

- 1) replace the SGI ONYX, SGI Indigo 2s, and SGI Indy workstations with up-to-date PCI-E based Linux PCs
- 2) migrate proprietary IRIX based AGARS application software from the IRIX operating system to Linux
- 3) integrate the GLStudio graphics package for the creation and manipulation of instrumentation displays
- 4) incorporate a revision control system with the new code base

(Note: most of the functions performed by the INDIGO 2's will be performed by the new hardware; but the computers will be retained to drive the Heads-Up Display).

## 1.3 Scope

The costs throughout the total life cycle are more affected by characteristics of the software product and the development process than by mission-oriented functions performed by the software system. Problems during development often remain hidden from the program managers until late in the development life cycle, resulting in last minute tradeoffs between software system capabilities and cost schedule. Early awareness of programmatic issues and risks is critical to effective program management. The increasing complexity of current systems coupled with an increasing scarcity of resources escalates the urgency for effective solutions to design management. The requirements of individual software programs are driven by a myriad of factors, to include mission, functional, and performance issues; hardware and software technical characteristics; and programmatic risks, priorities, and budgetary constraints. To achieve optimal developmental control of these factors, a five-phase implementation plan has been identified and presented in this SOW. The duration of all five phases will be constrained to approximately thirty-one (31) weeks. Phase I, design and requirements phase, will last approximately 4 weeks. Phase II, hardware acquisition phase, will last approximately 4 weeks. Phase III, software conversion, will last approximately 22 weeks and will run concurrently with Phase II. Phase IV, GLStudio integration, will last approximately 4 weeks. Phase V, delivery and acceptance, will last 1 week and will provide final testing, orientation, documentation and acceptance of the system.

## 1.4 Objectives

All aspects of software design and analysis activities specified by the SOW shall be completed within the time allotted.

## 2.0 References

All applicable documents referenced in this SOW are listed below. Where appropriate, a brief annotation has been provided to indicate the relevance of the document. Specific requirements, if any, with regard to the use of these documents in performing the SOW are contained in Section 3, Requirements.

### **3.0 Requirements**

#### **3.1 Task and Deliverables**

The tasks to be performed under this contract are described below in several categories. The contractor must be cognizant of all these task dimensions in order to perform them completely, correctly, and meet the Government's expectations. The expected tasks and resulting deliverables are as follows.

##### **3.1.1 Phase I: Design and Requirements**

Phase I will last approximately 4 weeks. This phase is for requirements and design. This phase is provided for agreement on the specifics of architecture, interfaces and requirements. It is expected that the contractor's Technical Description of the proposed AGARS replacement hardware and software will be expanded into a more detailed AGARS Upgrade Design Document during this phase. The design document will provide the specifics for the implementation of the project. Additionally the contractor shall submit a detailed project plan, which shall provide a list of 'who does what when'.

##### **3.1.2 Phase II: Hardware Acquisition**

Phase II will last approximately 4 weeks and will run concurrently with phase III. The contractor will obtain the specific hardware identified during the first phase.

##### **3.1.3 Phase III: Software Conversion**

Phase III will last approximately 22 weeks. During this phase all necessary AGARS software except the Designer's Workbench software shall be ported to the replacement platform. The integration of a replacement product for Designer's Workbench is reserved for the next phase. However, if the contractor and government agree during Phase I to combine this phase with the next, then the contractor may integrate the replacement for Designer's Workbench at this time and will be allotted the additional 4 weeks anticipated for the next phase.

##### **3.1.4 Phase IV: Integration of Instrumentation Editing Software**

Phase IV will last approximately 4 weeks. This phase is for the integration of a replacement product for Designer's Workbench.

##### **3.1.5 Phase V: Final Delivery and Acceptance**

Phase V will last approximately 1 week. During this phase the contractor will deliver the final product and the government will conduct acceptance testing.

#### **3.2 Deliverables**

The following deliverables shall be provided upon completion of each phase of development:

##### **3.2.1.0 Phase I Design and Requirements (Due 4 Weeks after Receipt of Order)**

This phase will produce the following deliverable items:

###### **3.2.1.1 Upgrade Design Document**

The Upgrade Design Document will include architecture, design, messaging interface, and data file syntax descriptions for the resulting upgraded system. The document shall also include the following:

- 1) Assumptions and Dependencies:
  - Describe any assumptions or dependencies regarding such items as changes in end-user characteristics
  - Provide a list of possible and/or probable changes in functionality from the original system
- 2) Description of any global limitations which may impact the project. Items such as:
  - Interoperability requirements
  - Availability of resources
  - Memory or other capacity limitations
  - Network communications
  - Requirements described within this statement of work
- 3) Description of development methodology to be used for software design. Include a brief explanation as to why the methodology was selected.
- 4) Architectural Strategies – describe any strategies that pertain to the upgrade of the system, such as:
  - Use of a particular software product such as a development language, tool, or library
  - Reuse of existing software modules versus replacement
- 5) Selection of particular hardware components

### **3.2.1.2 Detailed Project Plan**

The Detailed Project Plan shall provide guidance for who is responsible for what deliverables and exactly when.

### **3.2.2.0 Phase II Hardware Acquisition (8 Weeks after Receipt of Order)**

This phase will procure replacement hardware for the AGARS. The following are deliverable items:

#### **3.2.2.1 Procure replacements for EOS, ATC, Pseudo Pilot, and remote displays**

Procure replacements for the SGI displays at the EOS with PC-drivable displays. In addition, replacements shall be obtained for the EOS, ATC, and Pseudo Pilot displays. Requirements for these displays are as follows:

- 1) Displays must be capable of being PC driven.
- 2) Displays must be full color flat panels.
- 3) Displays must fit in the space at the EOS presently occupied by the remote displays (shelf above EOS table).
- 4) Displays must present/repeat all head-down displays depicted in the AGARS cockpit.
- 5) All displays must be viewable full time and simultaneously. Switching a single display between different inputs is NOT acceptable (present functionality of remote displays must be preserved).
- 6) Display resolution must match or exceed that of the displays being repeated.
- 7) Displays must be viewable through 160 degrees (plus or minus 80 degrees from the display viewing centerline).
- 8) Off-axis brightness must be no less than 75% of that on the viewing centerline.
- 9) Displays should not lose more than 20% of their initial brightness over their expected useable life
- 10) Displays must be adjustable for a down angle of at least 15 degrees.

- 11) Displays must be adjustable left and right at least 30 degrees for viewing from the EOS or the station immediately to the left of the EOS (ATC).
- 12) Displays must have
  1. Individual brightness and contrast (contrast) controls
  2. Front-mounted power switches

### 3.2.2.2 Procure head-down cockpit display replacements

Procure replacements for the three head-down cockpit displays compatible with PC graphics hardware output. The displays shall have the following characteristics:

- 1) Drivable, without additional interfaces, by the PC compatible hardware
- 2) COTS display units
- 3) Full color support
- 4) Display shall be viewable from plus and minus 85 degrees from the centerline orthogonal to the display surface. The intent is to allow cross-cockpit viewing
- 5) Maximum brightness reduction allowable at maximum off-axis viewing angle shall be no more than 20 percent.
- 6) Must be compatible with existing panel overlay hardware, i.e., must be capable of depicting all current Piper Malibu instrumentation in its present locations and must not mechanically interfere with panel overlays.

The HUD is not included in this task as that display unit is specifically configured, at the hardware level, to be driven by output from SGI computers. Thus, the Indigo II computers are to be retained and one will be used in the computer network to continue to support the HUD (with the second machine being held in reserve as a spare).

### 3.2.2.3 Procure PC based systems to replace SGI computer systems

Procure replacement systems for the ONYX desk-side, Indy desktops, and Indigo II workstations. Replacement systems must meet the following requirements:

- a) Hardware based on 32 bit or 64 bit PC architecture
- b) All hardware shall be maintainable by the CAMI simulation/computer staff using COTS hardware components. Only commercially available hardware shall be used.
- c) The replacement system for the EOS station must have a NTSC video output in order to provide a clock signal for combining with a camera view of the cockpit.
- d) Graphics cards must have a bandwidth of at least 28.8 GB per second and be capable of drawing a minimum of 750 million vertices per second.
- e) Graphics cards must provide the following:
  - 1) hardware accelerated rendering for OpenGL Shading language
  - 2) hardware acceleration for OpenGL polygon functions
  - 3) hardware support for full scene anti-aliasing
- e) Computer systems must not have been available on the market for longer than 12 months. Older/slower systems are NOT acceptable!

### 3.2.3.0 Phase III Software Conversion (Due 26 weeks after Receipt of Order)

This phase involves porting all existing AGARS code from IRIX to Linux. The current code is divided into two basic development trees – one for the ONYX and one for the 32-bit SGI platforms. Once completed and

installed on the replacement hardware the new system shall have all of the capabilities of the current AGARS system. The replacement operating system shall have the following characteristics:

- 1) The operating system shall be Linux
- 2) The Linux kernel must be revision 2.6.11.x or greater
- 3) If the computer system on which the operating system is installed is a multi-processor system or dual core system then the Linux operating system installed shall be a SMP version

The following items must be provided in conjunction with all installed operating system(s):

- 1) A list of all kernel customizations as well as documentation describing the purpose of the modifications
- 2) All DVDs or CDs containing the Linux distribution as well as all necessary installation media
- 3) A brief document describing the configuration of each system, to include system name, IP address, net mask, and kernel version
- 4) A recovery CD
- 5) A boot floppy or CD

The ported software shall have the following characteristics:

- 1) OTW software must utilize Performer and OpenGL
- 2) Display generation/update rates (data-update rates, not screen-refresh rates) must be at least 30Hz to guarantee the appearance of continuous motion
- 3) The contractor shall add a feature to the OTW which will display the frame rate on one of the OTW displays. This tool shall be software selectable at experiment startup and shall be used to confirm a frame rate of at least 30 Hz
- 4) Highway-in-the-sky display code presently functioning on one of the Indigo II machines shall be ported to function on the new head-down display computer(s)
- 5) All developed code shall be commented sufficiently enough so that the intent and organization of the code shall be immediately apparent to a reader familiar with code development
- 6) The necessary sources, utilities, batch files, and other associated items required for rebuilding the system "from scratch" shall be provided, as well as a means of conducting an automated rebuild of the necessary executable files
- 7) The new code base shall exist within the framework of a revision management system such as CVS or subversion to permit easy tracking of future modifications
- 8) No software development tools shall be used which require other than initial licensing (no recurring annual licensing without which the tools would become disabled). The government must approve use of tools and libraries, which are not Opensource. Initial exceptions are Performer libraries and the GLStudio development package (which the government will provide).
- 9) In order to provide compatibility with the older Indigo II systems, MSS shall be ported to Linux and remain the core of the simulator.

### **3.2.3.1 Initial Demonstration Delivery of Ported Software**

At the end of Phase III, the contractor shall provide a demonstration of progress by replacing the ONYX system with the replacement main simulation system(s). The replacement system(s) shall drive the OTW projection displays and communicate with the Indigo II computer systems. The contractor may elect to replace the EOS station as well as any additional systems required for the demonstration. This demonstration will permit the government to observe the interoperability of the new system with the older Indigo II systems and guarantee that the HUD display will still be functional after completion of the upgrade.

### 3.2.4.0 Phase IV Integration of Designer's Workbench Replacement (Due 30 Weeks after Receipt of Order)

This task will provide a capability for experimenters and support personnel to create graphical displays for the head-down displays in the AGARS cockpit. Instrumentation is presently generated using Designer's Workbench as the graphics editor and driver, and the intent of modifying this functional module is to replace this graphics tool with another means of generating the cockpit graphics. The contractor shall be provided a software tool, GLStudio, to permit easy creation and editing of graphics. The contractor may choose to procure a different COTS tool, but justification shall be provided in the Upgrade Design Document to be delivered at the end of Phase I and the government must agree to the use of the different package. Utilizing this tool, the contractor may either re-create instrumentation from scratch or convert existing DWB instrumentation files.

The software tool selected by the contractor shall have the following properties once integrated with the rest of the system:

- 1) Graphics created with the software tool can be executed under Linux and linked to variables broadcast via UDP from the main simulation computer
- 2) Graphical presentations on the head-down cockpit displays (sets of instrumentation) are selectable and assignable, as they are now, from the menus used on the EOS and in the EOS scenario editor
- 3) Any developed display format or constellation of instrumentation shall be displayable, upon selection, on any of the cockpit displays having the capability to do so (within the limits of the native resolution and displayable colors of the specific display)
- 4) Graphics can be created/edited and installed on the AGARS by individuals with minimal training required (familiarization training must be arranged for or provided by the contractor in a form to be agreed upon by the contractor and the Government)
- 5) The generated instrumentation graphics update rates (data-update rates, not screen-refresh rates) must be at least 30Hz to guarantee the appearance of continuous motion in cockpit displays.

### 3.2.5.0 Phase V Final Delivery and Acceptance (Due 31 Weeks after Receipt of Order)

The deliverables will be the following:

All remaining hardware and software necessary to replace the existing AGARS with Linux PCs installed and configured

- 1) Backup media containing a copy of all source code necessary to re-install the system onto blank hard drives
- 2) Recovery documentation – any additional instructions necessary for final configuration and recovery of software products from the backup media
- 3) Documentation on the use of the replacement systems configuration management system
- 4) Final report concerning the status of all delivered products, including:
  - a) A description of all hardware supplied. This list should include a brief description of the hardware, model numbers, and serial numbers. Serial numbers are not necessary for items that are components of computer systems, but the description of those systems should mention upgraded features such as graphics cards, tape drives, RAID arrays, memory upgrades, etc.
  - b) A list of all source files that were modified during the conversion process. The list must contain both file names as well as their directory location.

- c) A list of all new source files. The list must contain both the file names, the directory location, and a brief description of the function of the files.

The government shall test the system as specified in section 5.3. An electronic copy of all documentation in Microsoft Word 2000 or Microsoft Word 2003, as well as one hard copy is required.

### **3.3 Schedules/Milestones**

The Contractor shall submit all reports in Microsoft Word 2000 or Microsoft Word 2003. Timelines specified under **3.1 Tasks and Deliverables** are an estimate for the initial submission and may be lengthened with government approval following Phase I and the delivery of the detailed Upgrade Design Document.

### **3.4 Configuration Management**

The Contractor shall establish, institute and maintain configuration management for all software. The contractor will also be responsible for maintaining daily backups of all software during development and prior to delivery. The final delivered product will include configuration management software.

### **3.5 Year 2000 compliance**

All design elements must comply with Year 2000 Government standards. All software must continue to work properly regardless of the date.

### **3.6 System Security**

Security is paramount when working with confidential systems. The contractor will be responsible for the actions of their respective employees. The contractor will also be responsible for obtaining/maintaining investigations prior to employment by FAA and for obtaining applicable clearances as directed. It is anticipated that a majority of the work will be conducted at the contractor's site. The Government reserves the right to direct that the contractor reassign Contractor employees whose continued use under a Task Order issued under this contract is deemed contrary to the best interests of the Government. The Contracting Officer will give notice of such reassignment in writing.

### **4.0 Progress and Compliance**

The Government requires the following from the Contractor in order to monitor progress and ensure compliance:

- 1) Weekly Status Reports
- 2) Bimonthly meetings (Teleconference twice a month )
- 3) End of Phase Status Reports (On-site briefings upon completion of each phase)

When not on-site, the Contractor development team is also encouraged to maintain frequent contact by phone with FAA members of the project team.

### **5.0 Delivery, Evaluation, and Acceptance**

#### **5.1 Contractor Quality Control**

The Contractor is responsible for ensuring quality control of all software and hardware products it delivers. The system must meet or exceed all evaluation criteria prior to acceptance.

## 5.2 Delivery

The Contractor shall provide all deliverables as specified by the Requirements section of the SOW. An electronic copy of all documentation as well as one hard copy is required. All software developed under this contract shall become the property of the government, and both executable and source-code versions shall be provided.

## 5.3 FAA Evaluation and Final Acceptance

The *acceptance test* will include the following activities, satisfaction of which will be required for the acceptance of the final delivery:

For all software-related and computer-installation-related tasks:

- 1) Verification that the CAMI AGARS system functioning is not negatively affected by the modifications
- 2) Verification that error indices generated in the HITS code (vertical and lateral error) can still be accessed for data collection purposes
- 3) Exercising the system through a wide range of conditions to verify proper functioning within the range of expected operation
- 4) Verification that all indications (airspeed, altitude, etc.) generated for the displays are functional and present accurate data without compromising the update rate of the cockpit instrumentation (i.e., that called for update rates are achieved).
- 5) Verification that all functions previously supported by head-down displays have been implemented and work as expected
- 6) Verification that required hardware documentation has been provided
- 7) Verification that all necessary and appropriate software licenses have been obtained and that requirements for limitations on the type and frequency of licenses required have been met
- 8) Verification that both executable and source-code files and archival copies of same have been provided for all software developed under the contract
- 9) Verification that graphics editing tools function as required, are easy to use by the CAMI staff, and provide all necessary functions to create, modify, and maintain all cockpit instrumentation graphics
- 10) Verification that all software can be installed and/or rebuilt by CAMI staff after it has been completely removed from each delivered system (i.e. a clean build)

For display-installation tasks:

- 1) Verification that display units meet all requirements for integration into the AGARS as spelled out in each of the requirements section of this SOW
- 2) Verification that imagery appears in the proper locations and is updated appropriately
- 3) Verification that there is no significant transport delay in the display systems
- 4) Verification of update rate as sufficient to produce the satisfactory appearance of continuous motion (30 Hz) by utilizing the frame rate tool provided by the contractor
- 5) Verification that required software documentation has been provided

All software and/or hardware defects shall be documented and the contractor shall be notified in writing. The contractor shall be given a reasonable amount of time, as determined by the government technical

representatives, to correct the problems. At no point during the delivery or testing of the replacement system shall destructive tests be performed on the current AGARS systems.

#### 5.4 Training

The contractor is responsible for providing basic documentation on the use of the operating system as well as a brief demonstration of simulation capabilities at the end of Phase III and Phase V. The documentation shall cover the backup and recovery procedures as well as any additional procedures, which are new or are different from those currently in use on the AGARS system. Extensive training on the use of the current AGARS system is not part of the requirements.

#### 6.0 Notes

##### 6.1 Use of Government Furnished Property

The Government will provide on-site access to all hardware and equipment necessary for completion of this Task Order. Off-site development may take place at the contractor's discretion but all Government owned hardware must remain at the Government work site unless the Contractor, the COTR, and Government Property Manager make other provisions.

### PART I - SECTION D - PACKAGING AND MARKING

#### D.1 PRESERVATION, PACKAGING, PACKING, AND MARKING (JAN 1997) CLA.2110

Preservation, packaging, and packing shall be in accordance with the industry's standard commercial practices to protect from contamination and damage. The outside of the shipping container shall be marked with the applicable contract number and delivery order number.

### PART I - SECTION E - INSPECTION AND ACCEPTANCE

#### E.1 INSPECTION AND ACCEPTANCE AT DESTINATION (JAN 1997) CLA.1908

(a) Final inspection and acceptance shall be at destination.

(b) Although source inspection by the Government is not anticipated under this contract, the provisions of this clause shall in no way be construed to limit the rights of the Government under the clause entitled:

##### 3.1-1 CLAUSES AND PROVISIONS INCORPORATED BY REFERENCE (December 2005)

This screening information request (SIR) or contract, as applicable, incorporates by reference one or more provisions or clauses listed below with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make the full text available, or offerors and contractors may obtain the full text via Internet at: <http://fast.faa.gov> (on this web page, select "toolsets", then "procurement toolbox").

##### 3.10.4-2 Inspection of Supplies--Fixed-Price (November 1997)

- 3.10.4-4 Inspection of Services--Both Fixed-Price & Cost Reimbursement (April 1996)  
 3.10.4-16 Responsibility for Supplies (April 1996)

**PART I - SECTION F - DELIVERIES OR PERFORMANCE**

- F.1 ACCELERATED DELIVERY (JAN 1997) CLA.1817**

Any Schedule for delivery or performance may be expedited at the contractor's option, if without additional expense to the Government.

- F.2 CONTRACT PERIOD (JAN 1997) CLA.1604**

The effective period of this contract is date of award through 217 days after award, or as proposed, whichever is less. The actual contract period will be determined at award.

- F.3 F.O.B. POINT (JAN 1997) CLA.2015r**

- (a) The contractor shall deliver each item F.O.B. Destination, to the following address:

FAA, Mike Monroney Aeronautical Center  
 Human Resources Research Division (AAM-510)  
 PO Box 25082  
 Oklahoma City OK 73125-0082

(b) Acceptance of all deliverable items shall be made, in writing, by the Contracting Officer's Technical Representative (COTR).

**NOTICE:** The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference:

- 3.10.1-9 STOP-WORK ORDER (OCTOBER 1996)  
 3.10.1-11 GOVERNMENT DELAY OF WORK (APRIL 1996)  
 3.11-34 F.O.B. DESTINATION (APRIL 1999)

**PART I - SECTION G - CONTRACT ADMINISTRATION DATA**

- G.1 ACCOUNTING AND APPROPRIATION DATA**

Accounting and appropriation data will be set forth at contract award.

- G.2 INVOICING PROCEDURES - GENERAL (JUL 1997) CLA.0135**

(a) In addition to the requirements set forth at AMS Clause 3.3.1-17, Prompt Payment, for the submission of a proper invoice, the contractor shall submit a separate invoice for (1) each month of performance of services, or (2) those items of supplies furnished, as follows:

- (1) The original to: FAA, Mike Monroney Aeronautical Center  
Financial Operations Division (AMZ-100)  
P.O. Box 25710  
Oklahoma City, OK 73125-4913
- (2) One copy to: FAA, Mike Monroney Aeronautical Center  
AMT Acquisition Division, AMQ-340  
P.O. Box 25082  
Oklahoma City, OK 73125
- (3) One copy to: FAA, Mike Monroney Aeronautical Center  
Human Resources Research Division (AAM-510)  
PO Box 25082  
Oklahoma City OK 73125-0082

(b) Each invoice shall highlight the following information:

- (1) Contract number.
- (2) Noun description of services and/or supplies, including applicable line item number(s) and quantity(s) that were provided.
- (3) Extended totals for invoiced quantities.

**NOTICE: The following provisions and/or contract clauses pertinent to this Section are hereby incorporated by reference in accordance with Clause 3.1-1, Section E.**

- 3.10.1-9 STOP-WORK ORDER (OCTOBER 1996)  
3.10.1-24 NOTICE OF DELAY (NOVEMBER 1997)  
3.10.6-7 EXCUSABLE DELAYS (OCTOBER 1996)

## PART I - SECTION H - SPECIAL CONTRACT REQUIREMENTS

### **H.1 NOTIFICATION OF CRIMINAL ACTIVITY BY CONTRACT EMPLOYEE (JUL 2001) CLA.0069**

Upon learning that contractor personnel with authorized access to FAA facilities/resources has been charged by a law enforcement agency for any criminal offense other than minor traffic offense, the contractor shall provide written notification within one workday to the Contracting Officer. The Contracting Officer (CO) shall then notify the FAA Servicing Security Element (SSE) AMC-700 at the Aeronautical Center in writing. A traffic offense will be considered minor when the maximum fine that could be imposed is \$300 or less. The contractor will be notified of the impact that the charge or results of the charge have on the contractor's affected personnel as soon as a determination is provided to the CO by the SSE.

### **H.2 REQUIREMENT FOR SCREENING OF CONTRACTOR PERSONNEL (JUL 2001) CLA.1262**

(a) **Contractor Screening of Personnel.** The operation of this contract is intended to promote the continued safe and secure operation of Federal Aviation Administration (FAA) facilities, systems and resources that comprise or support the National Aerospace System. Access to most FAA locations, systems and equipment is restricted and controlled by the responsible FAA Servicing Security Element. No rights of access to FAA facilities or resources are conferred to the contractor or contractor personnel by this contract.

The contractor is responsible for identifying and providing qualified and acceptable personnel in performance of the contract. To meet this requirement, the contractor shall perform routine personnel screening prior to personnel having access to any FAA facility, resources, or sensitive information.

(1) The contractor shall obtain a criminal history report of the prospective employee from the appropriate state authority, i.e., the state where the individual was last employed. If the criminal history report reveals an occurrence of activity listed in paragraphs 1 through 6 of the contract attachment entitled "Screening Standards-Contractor" within the preceding 9 years, the prospective employee shall not be allowed access to any FAA facility, resources, or sensitive information. Payment of any fees charged for such criminal history reports shall be the responsibility of the contractor. If the cost is included in the price of the contract, it shall be subject to the usual tests of allocability and reasonableness.

(2) The Government expects that the contractor will normally contact prospective employees' previous employer(s) for employment history, and apply the contractor's customary standards for employment suitability. If this employment history check reveals a documented occurrence of activity listed in paragraph 7 of the contract attachment entitled "Screening Standards - CONTRACTOR" within the preceding 9 years, the prospective employee shall not be allowed access to any FAA facility, resources, or sensitive information.

(3) When specific experience or educational requirements apply to personnel performing on the contract, the contractor shall verify prospective employees' claimed experience or educational qualifications.

**(b) Government Screening Standards for Contractor Personnel.**

(1) The Contractor shall inform prospective employees that the FAA will perform background investigations on contractor personnel prior to their gaining access to any Federal Aviation Administration (FAA) facility, resource or sensitive information/system in performance of the contract.

(2) Prior to placing any employee in a position having access to FAA facilities, resources or sensitive information, the contractor shall provide that employee a copy of the contract attachment entitled "Adjudicative Standards: Issues". (Appendix 6, FAA Order 1600.72). In addition, the contractor must advise the prospective employee of FAA's intent to employ such adjudicative standards in determining employee access as described above.

(3) Any personnel the contractor employs to work on FAA facilities and resources found to have a conviction history within nine (9) years prior to beginning performance under this contract shall be denied access to any FAA-controlled facility/resource. No access will be granted until the Government's background investigation is complete and a favorable determination made as a result of the adjudication process.

(c) Upon written request to the CO or his/her designated representative, the FAA may waive the screening requirements with respect to:

(1) a contractor employee that has had a FAA background investigation within the previous five years, with uninterrupted employment and performance on a FAA facility, and a record of acceptable behavior; or

(2) a contractor employee that has had a FAA background investigation within the previous 12 months, with interrupted employment and performance on a FAA facility, and a record of acceptable behavior.

(d) If in unusual circumstances the contractor finds it necessary to utilize a person that does not meet the requirements of paragraph (a), the FAA may at its sole discretion, grant a waiver to this clause. Contractor's request

for waiver shall be in writing to the contracting officer, providing information about mitigating circumstances to the negative screening results, and explain why the person should have access to FAA facilities, resources or sensitive information. The FAA will grant or deny the waiver request in writing within 15 days following receipt. The decision to grant or deny the waiver is solely the FAA's, and is not subject to appeal or to the "Disputes" clause of this contract. The contractor understands that access suitability determinations by the responsible Security Servicing Element, although conclusive under this contract, derive legal standing independent of the contract.

(e) If the contractor fails to perform the required screening, or disregards the results of the screening, and subject personnel are found to be unacceptable as a result of FAA background investigation(s), the

contractor shall be responsible for FAA's cost of subsequent FAA background investigation(s) of the replacement personnel. The cost of additional FAA background investigation(s) may be deducted from requests for payment under the contract.

(f) The Contractor shall retain all reports and related documentation pertaining to (a)(1) through (3) for the duration of this contract, and shall make them available for review by the contracting officer, or his/her designated representative, within 10 days of written request.

(g) Neither the time required to perform the screening, nor the impact of any personnel action(s) required as a consequence of the screening shall be considered an "excusable delay" as described in the "Default" clause of this contract.

(h) Notwithstanding the diligent effort of the contractor to provide qualified and acceptable personnel for performance of the contract, the CO may by written notice deny access to FAA facilities, resources, or sensitive information to those personnel who have been deemed incompetent, careless, dangerous, unsuitable or otherwise objectionable, former federal employees in violation of a post-employment restriction, or those whose continued presence on Government property is contrary to the public interest or inconsistent with the interest of national security. The Contractor shall fill out, and cause each of its personnel on the contract to fill out for submission to the Government, such forms as may be necessary for security or other reasons relating to qualifications and suitability for contract work. Upon request of the CO, the Contractor's personnel shall be fingerprinted.

### **H.3 SAVE HARMLESS AND INDEMNITY AGREEMENT (JAN 1997) CLA.3211**

The contractor shall save and keep harmless and indemnify the Government against any and all liability, claims, and costs of whatsoever kind and nature of injury to or death of any person or persons and for loss or damage to any property (Government or otherwise) occurring in connection with or in any way incident to or arising out of the occupancy, use, service, operations, or performance of work in connection with this contract, resulting from the negligent acts, fault or omissions of the contractor, any subcontractor, or any employee, agent, or representative of the contractor or any subcontractor.

### **H.4 LIABILITY INSURANCE (JAN 1997) CLA.3212**

(a) Pursuant to AMS 3.4.1-10, Insurance--Work on a Government Installation, the insurance required of the contract during contract performance is:

(1) Workers' compensation and employer's liability as required by applicable Federal and Oklahoma State workers' compensation and occupational disease statutes. Employer's liability coverage shall be not less than \$100,000.

(2) General liability coverage written on the comprehensive form of policy providing limits of liability for bodily injury of not less than \$500,000 for each occurrence and property damage limits of liability of not less than \$100,000 for each accident.

(3) Automobile liability (applicable to vehicles used in connection with contract performance) written on the comprehensive form of policy providing coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$100,000 per occurrence for property damage.

(b) The policy shall name "The United States of America, acting by and through the Federal Aviation Administration" as an additional insured with respect to operations performed under this contract.

(c) The policy shall include the following provision: "It is a condition of this policy that the insurer shall furnish written notice to the Federal Aviation Administration (certificate holder) 30 days in advance of any reduction in or cancellation of this policy."

(d) Certificate holder address:

FAA, AMT Contract Management Division, AMQ-340  
P. O. Box 25082  
Oklahoma City, OK 73125

(e) At any time during contract performance and upon request of the Contracting Officer, the contractor shall provide a certified true copy of the liability policy and manually countersigned endorsements of any changes thereto.

**H.5 FAA FACILITY REGULATIONS (JUL 2001) CLA.3402**

Contractor personnel, including employees of subcontractors, suppliers, etc., working or visiting an FAA facility, shall abide by all appropriate traffic, parking, security, and airport regulations in effect at that facility.

**H.6 CONTRACT PERFORMANCE WITH FORMER GOVERNMENT EMPLOYEES (JAN 2000) CLA.4527**

(a) After contract award or the effective date this clause is incorporated into the contract by modification, the Contractor agrees not to allow any former Government employee, who separated from Government service with a Voluntary Separation Incentive Payment (VSIP), to perform work on this contract before receipt of non-objection by the Contracting Officer.

(b) The contractor shall notify the Contracting Officer in advance of any proposed work or change in work to be done under this contract by a former government "buyout" employee. Such written notification shall include:

- (1) employee's full name and date of separation from Government service,
- (2) name and location of former Government agency of employment, and
- (3) either evidence of any one of the following:
  - (i) repayment of the separation incentive or a court approved settlement, or
  - (ii) a waiver of repayment granted under authority of the statute(s) or
  - (iii) that five years have lapsed since separation from government service; or
- (4) proposed job title, work location and "a detailed statement of work to be performed by the former employee" under the contract

(c) The contracting officer's non-objection described in (a) above is at the sole discretion of the Government. In no event shall the Government's decision under (a) above with respect to any person, or the length of time to arrive at the decision, constitute grounds for adjustment of the contract price, or the contract performance or delivery requirements.

**H.7 RESERVED**

**H.8 AGREEMENT TO PARTICIPATE IN ALTERNATIVE DISPUTE RESOLUTION (APRIL 1998) CLA.4540**

(a) The Federal Aviation Administration encourages direct communications and negotiations between the contractor and the contracting officer in an attempt to resolve contract disputes. In those situations where the parties are not able to achieve resolution at the contracting officer level, the agency favors the use of alternative dispute resolution (ADR) techniques to resolve disputes.

(b) The parties hereby agree that, prior to referring a contract dispute to the Office of Disputes Resolution as described in contract clause 3.9.1-1 "Contract Disputes", the parties will discuss whether they are willing to utilize ADR techniques such as mediation or nonbinding evaluation of the dispute by a neutral party. Upon receipt of a contract dispute from the contractor, the contracting officer will explore with the

contractor whether the use of ADR techniques would be appropriate to resolve the dispute. Both parties must agree that the use of such techniques is appropriate, and agree to fairly share the associated expenses. If the parties do not mutually agree to utilize ADR to resolve the dispute, the dispute will be processed in accordance with the procedures set forth in clause 3.9.1-1.

## H.9 QUALIFICATIONS OF EMPLOYEES (DEC 2002)

CLA.4552

The Contracting Officer will provide notice to the Contractor when any contractor employee is found to be unsuitable or otherwise objectionable, or whose conduct appears contrary to the public interest, or inconsistent with the best interest of national security. The Contractor shall take appropriate action, including the removal of such employees from working on this FAA contract, at their own expense. The contractor agrees to insert terms that conform substantially to the language of this clause in all subcontracts under this contract.

## H.10 SECURITY – ESCORTED ACCESS ONLY (SEPTEMBER 2003)

CLA.4553

### (a) Definitions.

(1) *Access* – In general the term “access” is defined as the ability to physically enter or pass through an FAA area or a facility; or having the physical ability or authority to obtain FAA sensitive information, materials or resources. In relation to classified information, the ability, authority or opportunity to obtain knowledge of such information or materials.

(2) *Classified information* - means official information or material that requires protection in the interest of national security and is classified for such purpose by appropriate classification authority in accordance with the provisions of Executive Order 12958, Classified National Security Information, in accordance with the provisions of Executive Order 12968, Access to Classified Information.

(3) *Contractor employee as used for personnel security* – any person employed as or by a contractor, subcontractor or consultant in support of the FAA.

(4) *FAA Facility as it applies to personnel security* – any manned or unmanned building, structure, warehouse, appendage, storage area, utilities, and components, which, when related by function and location form an operating entity owned, operated, or controlled by the FAA.

(5) *Operating Office* - a FAA line of business, an office or service in FAA headquarters, or a FAA division level organization in a region or center.

(6) *Resources* – FAA resources includes a physical plant, information databases including hardware and software, as well as manual records pertaining to agency mission or personnel.

(7) *Sensitive Information* – any information which if subject to unauthorized access, modification, loss, or misuse could adversely affect the national interest, the conduct of Federal programs, or the privacy to which individuals are entitled under Section 552a of Title 5, United States Code (the Privacy Act), but which has not been specifically authorized under criteria established by an Executive Order or an Act of Congress to be kept secret in the interest of national defense or foreign policy. Sensitive data also includes proprietary data.

(b) It has been determined by the operating office, in conjunction with the Servicing Security Element (SSE), and in accordance with FAA Order 1600.72, that all positions under this contract are low risk (as designated on the FAA Form 1600-77) and seasonal, per diem, temporary, or intermittent and will not exceed 180 days in either a single assignment or a series of assignments and will be exempt from investigation. Therefore, all services or work performed under this contract that are performed at an FAA facility or that involve access to FAA sensitive information, restricted areas, or resources will be done only while under the escort of an authorized FAA employee or an appropriately cleared contractor employee.

(c) This determination does not preclude the SSE from investigating contractor employees under the normal investigative requirements, if it is determined that the contractor employee will require unescorted access to sensitive FAA information, resources and Automated Information Systems, and/or unescorted access to FAA facilities.

(d) If it is determined that the contractor's employees require an investigation, then this contract will be modified to include the applicable security and suitability clauses.

(e) It is the responsibility of the escort to keep the escort-required contractor employee or other person in plain view at all times and must be constantly aware of the contractor employee's or other person's actions. The contractor will not allow any contractor employee unescorted access to FAA facilities, restricted areas, sensitive information or resources.

(f) The contract employee shall not have access to classified information.

(g) For all foreign nationals requiring escorted access to an FAA facility under this contract, the contractor shall furnish the following information to AMC-700, Security and Investigations Division, one week in advance of their proposed escorted access: name, alias(es), SSN, date and place of birth, country(ies) of citizenship, alien registration number, date and place of entry into the US, contract name and contract number.

(h) The contract employee shall comply with all applicable DOT, FAA, and local security directives while performing work under this contract.

## PART II - SECTION I - CONTRACT CLAUSES

### 3.1.7-6 DISCLOSURE OF CERTAIN EMPLOYEE RELATIONSHIPS (OCTOBER 2005)

(a) The policy of the FAA is to avoid doing business with contractors, subcontractors, and consultants who have a conflict of interest or an appearance of a conflict of interest. The purpose of this policy is to maintain the highest level of integrity within its workforce and to ensure that the award of procurement contracts is based upon fairness and merit.

(b) The contractor must provide to the Contracting Officer the following information with its proposal and must provide an information update within 30 days of the award of a contract, any subcontract, or any consultant agreement, or within 30 days of the retention of a Subject Individual or former FAA employee subject to this clause:

(1) The names of all Subject Individuals who:

- (i) participated in preparation of proposals for award; or
- (ii) are planned to be used during performance; or
- (iii) are used during performance; and

(2) The names of all former FAA employees, retained by the contractor who were employed by FAA during the two year period immediately prior to the date of:

- (i) the award; or
- (ii) their retention by the contractor; and

(3) The date on which the initial expression of interest in a future financial arrangement was discussed with the contractor by any former FAA employee whose name is required to be provided by the contractor pursuant to subparagraph (2); and

(4) The location where any Subject Individual or former FAA employee whose name is required to be provided by the contractor pursuant to subparagraphs (1) and (2), are expected to be assigned.

(c) "Subject Individual" means a current FAA employee's father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, brother-in-law, sister-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, spouse of an in-law, or a member of his/her household.

(d) The contractor must incorporate this clause into all subcontracts or consultant agreements awarded under this contract and must further require that each such subcontractor or consultant incorporate this clause into all subcontracts or consultant agreements at any tier awarded under this contract unless the Contracting Officer determines otherwise.

(e) The information as it is submitted, must be certified as being true and correct. If there is no such information, the certification must so state.

(f) Remedies for nondisclosure: The following are possible remedies available to the FAA should a contractor misrepresent or refuse to disclose or misrepresent any information required by this clause:

- (1) Termination of the contract.
- (2) Exclusion from subsequent FAA contracts.
- (3) Other remedial action as may be permitted or provided by law or regulation or policy or by the terms of the contract.

### 3.5-13 RIGHTS IN DATA--GENERAL (OCTOBER 1996)

(a) Definitions.

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

(2) "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.

(3) "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.

(4) "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.

(5) "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.

(6) "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.

(7) "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.

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

(9) "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) Allocations 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 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 may 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 canceled or ignored. If the Contracting Officer determines that the markings are authorized, the Contractor shall be 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 may 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 may 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) Reserved.

(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 filing a claim under the "Contract 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, may 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;

(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 may withhold such data and not furnish them to the Government under this contract. As a condition to this withholding, the Contractor may identify the data being withheld and furnish form, fit, and function data in lieu thereof. Limited rights data that 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.

### 3.5-13/ALT2 RIGHTS IN DATA--GENERAL ALTERNATE II (OCTOBER 1996)

Insert the following in paragraph (g).

(g) (2) Notwithstanding subparagraph (g)(1) of this clause, the contract may identify and specify the delivery of limited rights data, or the Contracting Officer may require by written request the delivery of limited rights data that has been withheld or would otherwise be withholdable. If delivery of such data is so required, the Contractor may affix the following Limited Rights Notice to the data and the Government will thereafter treat the data, subject to the provisions of paragraphs (e) and (f) of this clause, in accordance with such Notice:

#### LIMITED RIGHTS NOTICE

(a) These data are submitted with limited rights under Government Contract No. \_\_\_\_\_ (and subcontract \_\_\_\_\_, if appropriate). These data may be reproduced and used by the Government with the express limitation that they will not, without written permission of the Contractor, be used for purposes of manufacture nor disclosed outside the Government; except that the Government may disclose these data outside the Government for the following purposes, if any, provided that the Government makes such disclosure subject to prohibition against further use and disclosure: \_\_\_\_\_  
[Agencies may list additional purposes or if none, so state]

(b) This Notice may be marked on any reproduction of these data, in whole or in part.

**3.5-13/ALT3 RIGHTS IN DATA--GENERAL ALTERNATE III (OCTOBER 1996)**

Insert the following in paragraph (g).

(g) (3) (i) Notwithstanding subparagraph (g)(1) of this clause, the contract may identify and specify the delivery of restricted computer software, or the Contracting Officer may require by written request the delivery of restricted computer software that has been withheld or would otherwise be withholdable. If delivery of such computer software is so required, the Contractor may affix the following Restricted Rights Notice to the computer software and the Government will thereafter treat the computer software, subject to paragraphs (e) and (f) of this clause, in accordance with the Notice:

**RESTRICTED RIGHTS NOTICE**

(a) This computer software is submitted with restricted rights under Government Contract No. \_\_\_\_\_ (and subcontract \_\_\_\_\_, if appropriate). It may not be used, reproduced, or disclosed by the Government except as provided in paragraph (b) of this Notice or as otherwise expressly stated in the contract.

(b) This computer software may be-

(1) 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;

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

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

(4) Modified, adapted, or combined with other computer software, provided that the modified, combined, or adapted portions of the derivative software incorporating restricted computer software are made subject to the same restricted rights;

(5) Disclosed to and reproduced for use by support service Contractors in accordance with subparagraphs (b) (1) through (4) of this clause, provided the Government makes such disclosure or reproduction subject to these restricted rights; and

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

(7) Other uses \_\_\_\_\_

(c) Notwithstanding the foregoing, if this computer software is published copyrighted computer software, it is licensed to the Government, without disclosure prohibitions, with the minimum rights set forth in paragraph (b) of this clause.

(d) Any other rights or limitations regarding the use, duplication, or disclosure of this computer software are to be expressly stated in, or incorporated in, the contract.

(e) This Notice shall be marked on any reproduction of this computer software, in whole or in part.

**3.5-15 ADDITIONAL DATA REQUIREMENTS (APRIL 1996)**

(a) In addition to the data (as defined in the "Rights in Data-General" clause, or other equivalent included in this contract) specified elsewhere in this contract to be delivered, the Contracting Officer may, at any time during contract performance or within a period of 3 years after acceptance of all items to be delivered under this contract, order any data first produced or specifically used in the performance of this contract.

(b) The "Rights in Data-General" clause or other equivalent included in this contract is applicable to all data ordered under this "Additional Data Requirements" clause. Nothing contained in this clause shall require the Contractor to deliver any data the withholding of which is authorized by the "Rights in Data-

General" or other equivalent clause of this contract, or data which are specifically identified in this contract as not subject to this clause.

(c) When data are to be delivered under this clause, the Contractor will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.

(d) The Contracting Officer may release the Contractor from the requirements of this clause for specifically identified data items at any time during the 3-year period set forth in paragraph (a) of this clause.

### 3.5-18 COMMERCIAL COMPUTER SOFTWARE--RESTRICTED RIGHTS (OCTOBER 1996)

(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 may 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 applicable Federal laws.

(c)

(1) The restricted computer software delivered under this contract shall 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 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 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."

### **3.10.1-22 CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (JULY 1996)**

(a) The Contracting Officer may designate other Government personnel (known as the Contracting Officer's Technical Representative) to act as his or her authorized representative for contract administration functions which do not involve changes to the scope, price, schedule, or terms and conditions of the contract. The designation will be in writing, signed by the Contracting Officer, and will set forth the authorities and limitations of the representative(s) under the contract. Such designation will not contain authority to sign contractual documents, order contract changes, modify contract terms, or create any commitment or liability on the part of the Government different from that set forth in the contract.

(b) The Contractor shall immediately contact the Contracting Officer if there is any question regarding the authority of an individual to act on behalf of the Contracting Officer under this contract.

### **3.10.4-21 REQUIREMENTS FOR SOFTWARE MEASURES (AUGUST 1997)**

(a) Software Measurements Plan

(1) Draft.

(i) Content. The Contractor shall provide a draft software measurements plan for collecting and reporting software measurement data. The plan shall include the following:

- (A) a measurement definition;
- (B) the measurement approach ;
- (C) how data will be collected;
- (D) measurement methodologies;
- (E) how the data will be utilized in the Contractor's internal management of the program;
- (F) issues to be addressed;
- (G) the measures to be utilized;
- (H) an estimation methodology;
- (I) the method used to measure actual data;
- (J) the data reporting format and associated mechanism
- (K) a description of any tools utilized;
- (L) points of contact and responsibilities;
- (M) organizational communications and interfaces.

(ii) Approval. The Contractor shall submit the plan to the Contracting Officer for review and approval within **28** days after date of award. The Contracting Officer will notify the Contractor of the approval or rejection of the plan within **10** days after receipt.

(iii) Substitute Measures. In the event that an FAA-specified measure is unavailable, the Contractor shall request a substitution in its plan. The request shall identify the substitute software measure with a data definition, rationale for the change, a description of how this measure addresses the identified issue, and a description of how this measure will be used internally. The proposed substitute software measure shall be readily available from the Contractor's software development process.

(2) Modifying the Approved Plan. After the draft software measurements plan is approved by the Contracting Officer, the Contractor shall not modify the approved plan without the prior review and approval of the Contracting Officer. The Contractor shall notify the Contracting Officer immediately of a proposed change to the software measurement parameters defined in the approved plan and provide an updated plan in writing to the Contracting Officer within 30 days of the change. The updated plan shall document the proposed changes, such as those related to definitions, estimation methodologies, or actual measurement approaches. The updated plan requires approval by the Contracting Officer.

(b) Monthly Reports. The Contractor shall submit a monthly progress report on actual data collected during the previous calendar month related to the software development. The report shall address each data item at the specified collection level on each software measure specified in the plan and use the same measurement methodology specified in the plan. The Contractor shall not report data as actuals, until the criteria for counting actuals has been successfully met. The Contractor shall submit this report to the Contracting Officer on a monthly basis, within 30 days after the data is collected.

(c) Contractor Access. The Contracting Officer may require access at reasonable times to contractor personnel, contract software records and processes from time to time to gather or validate information related to the software that is not otherwise provided under the contract. The access could be for the purpose of interviewing contractor personnel, conducting audits of the software development processes and practices, and performing other examinations related to the software development or software measures. In these instances, the Contractor shall also provide explanations and rationale for changes, answer questions, and provide clarifications regarding the measurement process and associated data and information to the product team members engaged in administering the contract. The Contractor shall contact the Contracting Officer in the event of requested access that appears to be inappropriate or unreasonable.

**NOTICE: The following provisions and/or contract clauses pertinent to this Section are hereby incorporated by reference in accordance with Clause 3.1-1, Section E.**

- 3.1.7-2 ORGANIZATIONAL CONFLICTS OF INTEREST (AUGUST 1997)
- 3.1.8-1 CANCELLATION, RECISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (SEPTEMBER 2000)
- 3.1.8-2 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (SEPTEMBER 2000)
- 3.2.2.3-1 FALSE STATEMENTS IN OFFERS (JULY 2004)
- 3.2.2.3-33 ORDER OF PRECEDENCE (JULY 2004)
- 3.2.2.3-37 NOTIFICATION OF OWNERSHIP CHANGES (JULY 2004)
- 3.2.2.7-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (APRIL 1996)
- 3.2.5-1 OFFICIALS NOT TO BENEFIT (APRIL 1996)
- 3.2.5-3 GRATUITIES OR GIFTS (JANUARY 1999)
- 3.2.5-4 CONTINGENT FEES (OCTOBER 1996)
- 3.2.5-5 ANTI-KICKBACK PROCEDURES (APRIL 1996)
- 3.2.5-7 DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUNE 1999)

- 3.2.5-8 WHISTLEBLOWER PROTECTION FOR CONTRACTOR EMPLOYEES (APRIL 1996)
- 3.2.5-11 DRUG FREE WORKPLACE (APRIL 1996)
- 3.1.1-1 PAYMENTS (APRIL 1996)
- 3.3.1-6 DISCOUNTS FOR PROMPT PAYMENT (APRIL 1996)
- 3.3.1-8 EXTRAS (APRIL 1996)
- 3.3.1-9 INTEREST (APRIL 1996)
- 3.3.1-15 ASSIGNMENT OF CLAIMS (APRIL 1996)
- 3.3.1-17 PROMPT PAYMENT (JANUARY 2003)
- 3.3.1-32 PERFORMANCE BASED PAYMENTS (NOVEMBER 2000)
- 3.3.1-33 CENTRAL CONTRACTOR REGISTRATION (APRIL 2006)
- 3.3.1-34 PAYMENT BY ELECTRONIC FUNDS TRANSFER/CENTRAL CONTRACTOR REGISTRATION  
(OCTOBER 2005)
- 3.3.2-1 FAA COST PRINCIPLES(OCTOBER 1996)
- 3.4.1-11 INSURANCE--LIABILITY TO THIRD PERSONS (OCTOBER 1996)
- 3.4.2-6 TAXES--CONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO (OCTOBER  
1996)
- 3.4.2-8 FEDERAL, STATE, AND LOCAL TAXES - FIXED PRICE CONTRACT  
(APRIL 1996)
- 3.6.1-3 UTILIZATION OF SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL  
BUSINESS CONCERNS (SEPTEMBER 2001)
- 3.6.2-9 EQUAL OPPORTUNITY (AUGUST 1998)
- 3.6.2-12 AFFIRMATIVE ACTION FOR SPECIAL DISABLED AND VIETNAM ERA VETERANS (JANUARY  
1998)
- 3.6.2-13 AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS (APRIL 2000)
- 3.6.2-14 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS AND VETERANS OF  
VIETNAM ERA (JANUARY 1998)
- 3.6.3-2 CLEAN AIR AND WATER (APRIL 1996)
- 3.6.3-16 DRUG FREE WORKPLACE (JANUARY 2004)
- 3.8.2-10 PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION  
(APRIL 1996)
- 3.9.1-1 CONTRACT DISPUTES (NOVEMBER 2002)
- 3.9.1-2 PROTEST AFTER AWARD (AUGUST 1997)
- 3.10.1-7 BANKRUPTCY (APRIL 1996)
- 3.10.1-12 CHANGES -- FIXED PRICE (APRIL 1996)
- 3.10.1-12/Alt 5 CHANGES -- FIXED PRICE (ALT V) (APRIL 1996)
- 3.10.1-25 NOVIATION AND CHANGE-OF-NAME AGREEMENTS (JANUARY 2003)
- 3.10.6-1 TERMINATION FOR CONVENIENCE OF THE FAA (FIXED PRICE)  
(OCTOBER 1996)
- 3.10.6-4 DEFAULT (FIXED PRICE SUPPLY AND SERVICE) (OCTOBER 1996)
- 3.10.6-7 EXCUSABLE DELAYS (OCTOBER 1996)
- 3.13-5 SEAT BELT USE BY CONTRACTOR EMPLOYEES (JANUARY 1999)

### PART III - SECTION J - LIST OF ATTACHMENTS

<u>Attachments</u>	<u>Title</u>	<u>Date</u>	<u>No. of Pages</u>
(1)	Screening Standards-Contractor	N/A	1
(2)	Adjudicative Standards: Issues	N/A	1

**ATTACHMENT 1**  
**SCREENING STANDARDS-CONTRACTOR**  
**(JUL 2001)**

1. Record of conviction for illegal use or possession of intoxicants;
2. Record of conviction for illegal use, possession, or sale of controlled substances or marijuana;
3. Record of conviction of criminal behavior relating to immoral conduct, such as child molestation, rape, sexual assault, incest, bestiality, indecent exposure, lewd acts, etc.;
4. Record of conviction of criminal behavior relating to dishonesty, such as theft, larceny, burglary, robbery, forgery, extortion, counterfeiting, blackmail, fraud, conversion, sale, or possession of stolen property, embezzlement, etc.;
5. Record of conviction for criminally disruptive or violent behavior, such as assault, battery, kidnapping, abduction, murder, rape, arson, vandalism, voluntary manslaughter, child abuse, etc.;
6. Record of conviction for illegal use, possession, manufacture, or sale of firearms or explosives.
7. Violation of Hatch Act restrictions (5 U.S.C. Chapter 73), mutilation/destruction of public records, striking against the Government, desertion from the military, disregard for debts, engaging in riots or civil disorders, or a pattern of unemployability based upon misconduct or delinquency as reflected in employment history.

**ATTACHMENT 2**  
**\*ADJUDICATIVE STANDARDS: ISSUES**  
**(JUL 2001)**

Major issues or conduct which standing alone would be disqualifying under suitability, for any position is a conviction record within the past 9 years, particularly for issues 1, 2, 4, 5, 6, or 8. In addition, a pattern is defined as two or more convictions or a combination of two or more issues of any or all of the items listed below.

1. **Issues related to use or possession of intoxicants:**  
 Pattern of excessive use as reflected in (1) conviction record; (2) job performance; (3) employment history; (4) inability to function responsibly; (5) medical treatment; and (6) health.
2. **Issues related to illegal use/possession of controlled substances or marijuana:**  
 Pattern of excessive use as reflected in (1) conviction record; (2) job performance; (3) employment history; (4) inability to function responsibly; (5) medical treatment; (6) health; (7) manufacturing; (8) addiction; (9) importing/trafficking; and (10) cultivating for sale.
3. **Issues related to financial responsibility:**  
 Pattern of irresponsibility as reflected in (1) credit history; (2) disregard for debts; (3) abuse of fiduciary trust; and (4) continuing, major, valid liabilities.
4. **Issues related to immoral conduct:**  
 Pattern of misconduct as reflected in (1) conviction record; (2) medical treatment; (3) public knowledge; (4) child molestation; (5) sexual assault statutory rape; (6) incest; and (7) bestiality.
5. **Issues related to honesty:**  
 Pattern of dishonesty as reflected in (1) disregard for truth; (2) conviction records; (3) abuse of trust; (4) employment records; (5) blackmail; (6) counterfeiting; (7) extortion; (8) armed robbery; and (9) intentional false statement or deception or fraud in examination or appointment.
6. **Issues related to disruptive or violent behavior:**  
 Pattern of violence as reflected in (1) conviction record; (2) disregard for life or property; (3) civil actions; (4) employment record; (5) medical record; (6) aggravated assault; (7) assault with a deadly weapon; (8) assault with intent to commit rape; (9) kidnapping/abduction; (10) murder; (11) rape; (12) arson; (13) threat or assault upon a public official; (14) voluntary manslaughter; and (15) child abuse.
7. **Issues related to termination or forced resignation:**  
 Pattern of unemployability based on misconduct or delinquency as reflected in employment history.
8. **Issues related to firearms/weapons:**  
 Improper/illegal sale or transportation of firearm or explosive; manufacture of firearms or explosives.
9. **Miscellaneous issues:**  
 Hatch Act violation; (2) mutilation/destruction of public records; (3) engaging in riots or civil disorders; (4) striking against Government; and (5) desertion.