



Where Technology, Creativity and Quality Service Meet

Executive Summary

Kraus Associates, Inc. d/b/a AK Associates is a full 9-1-1 service provider. Our company provides its customers with various services including: installation, maintenance, project management and other professional services. At AK Associates 9-1-1 is our focus. We take pride in creating customized solutions to fit the unique needs of our customers. While our solutions are state of the art, our customer service is of the highest quality.

AK Associates already has a long standing contract with LFUCG and currently maintains the current 911 system. Under this contract, AK Associates is willing to pick up the tier 1 maintenance/support of the proposed Exacom recording system at no additional cost.

AK Associates has a great presence in the State of Kentucky and has the expertise in all facets of 9-1-1, maintaining everything from CPE to logging recorders. Our local technicians ensure that our customers receive prompt and quality service. AK Associates is proposing an Exacom Hindsight-G2 Geo-Redundant P-25-NG911 logging recorder. We have performed numerous installations of Exacom systems all over the United States. AK Associates' expertise, experience, and desire to provide the highest quality service, will provide LFUCG with not only a top notch solution, but the best ongoing support moving forward.



Lexington-Fayette Urban County Government Request For Proposal

Lexington-Fayette Urban County Government Logging Recorder for Police and Fire

General System Overview

Lexington-Fayette County Urban Government (LFUCG) is looking to replace the recorder used currently by the Divisions of Police & Fire.

Response: Understood

As this new system will be a shared LFUCG resource, interoperability with other agencies identified in these requirements must also be supported by the Cassidian¹ COR P25 radio system.

Response: Understood

Any requirements or specifications in this RFP that refer to or describe proprietary equipment, processes and/or technologies are incidental and not intentional.

Response: Understood

All project components and equipment shall be designed and installed to appropriate seismic standards.

Response: Understood

The successful vendor will be expected to install, train dispatch employees, perform periodic software upgrades, remote performance monitoring, and long-term maintenance support for the System. The requirements of this RFP presume a complete turnkey Digital Voice Logging Recorder reflective of current industry standards.

Response: Understood

WebEx Demonstration

Each proposer will be requested to provide demonstration of their product via a web conference service such as Webex. The Vendor will provide the link to the web conference. The allotted time for each Proposer will be one (1) hour. The product demonstration can take up to 45 minutes. The remainder of the time will be allocated for follow up questions from the LFUCG selection committee and end users.

Response: Understood

Cassidian COR^{P25} System

LFUCG currently operates a 4-site, 9 channel, 800 MHz P25 Phase 1 trunked system and accesses and supports a Multicast, 4-channel, single site, 800 MHz P25 Phase 1 for the Blue Grass Airport (BGA). The FCC Call Sign for the P25 system is WQRM468.

Response: Understood

The P25 system communicates with fireground and university networks operating on 800 MHz EDACS trunked system.

Response: Understood

The main switch for the COR^{P25} is located at one of the simulcast sites (WLEX, 1065 RUSSELL CAVE ROAD, Lexington, KY). The backup switch is located at the Police headquarters (150 E Main Street, Lexington, KY 40507).

Response: Understood

LFUCG is also considering adding the Airport Site into the simulcast system resulting into a single 13 channel wide-area simulcast system. For the purpose of simultaneous recording of the radio system, the vendor shall incorporate the worst case scenario.

Response: Understood

Hindsight-G2 supports Airbus certified IP level integration with the Airbus-Vesta P25 Trunked Radio System, for Phase-1 (IMBE) and Phase-2 (+AMBE+2), and both AES/DES Encryption with support for KFD, KMF and OTAR.

¹ Cassidian Communications changed its name to Airbus DS Communications.

LFUCGE-911 Centers

The Lexington Fayette Urban County Government Division of Enhanced 911 operates two E-911 centers, one for the Lexington Police Department (150 E Main Street, Lexington, KY 40507) and the other for the Lexington Fire Department (219 E. Third St., Lexington, KY 40508). All 911 calls are routed first to a calltaker at the Division of Police PSAP who then determines if the matter should be handled by the police, the fire department, or both working together. If the call is a police matter, the calltaker passes the information to a police dispatcher who sends the appropriate units. If the call is a fire, hazardous materials call, rescue or medical emergency, the calltaker passes the call to the fire department dispatch center where the call is handled. Units are dispatched as per pre-established protocols and if necessary the dispatcher will provide medical assistance to the caller until the response units arrive.

Response: Understood

The information on the two dispatch centers is summarized in the table below:

Description	Police E-911 Center	Fire Dispatch center
Is this location a Primary PSAP or Secondary PSAP	Primary	Secondary
Radio Positions	10	7
911 Workstations	17	7
T1 Digital Trunk Lines	39	19
Ring-Down Lines	2	2
Admin Phone Sets	27	7

LFUCG Police E911 Center radio consoles are provided by Avtec. Fire and the Airport Dispatch Center

(Which is not going to be part of this logging recorder RFP, but is on the same radio system) are in process of upgrading to Avtec consoles. For the purposes of this RFP, the Proposer can assume that the new logging recorder(s) will be interfaced to the Avtec consoles. *Response: Understood*

The radio consoles also have access and control to a number of conventional resources that require recording:

- A VHF Tornado Siren (One VHF channel using 17 sites)
- EDACS System (5)
- 800 MHz Mutual Aid Channels (6)
- Other bands Fixed stations

Response: Understood

LFUCG Future Plans for the E-911 Centers

The current plan is to consolidate the Police and Fire into one center. The new location is at 115 Cisco Rd, Lexington, KY and the current schedule calls for 14 months finish from the interior demolition which is already completed. Phase 1 of the project is for the administrative offices and an Emergency Operation Center (EOC) and Phase 2 will be for the consolidated E-911 center. Phase 2 has not yet been funded.

Response: Understood

The vendor's work for the any modification or relocation of the logging recorder to support the transition to the new consolidated center will be an optional service. The RFP is requesting a preliminary quote for the work and outline of a preliminary cutover plans and issues that may be involved. The new 911 Center at 115 Cisco Road will replace the Fire PSAP. The Police PSAP will be designated as the back-up 911 center.

Response: Understood

The new center will also be monitoring a number of cameras and the vendor describe the capability of the provided logging recorder for video recording and any additional modifications and cost that may be needed to upgrade the logging recorder.

Response: Understood, Comply

The Hindsight-G2 Recording System supports Audio, Video and Data recording in one system. A price quotation for video recording will be submitted pending availability of detailed requirements/specifications; number of cameras, type of cameras (IP-H264 etc...), video storage requirements, and access requirements, etc...

Design Concepts

The system must be developed in concert with the following:

- System capacity and modular expandability requirements
- Robust system reliability to help maintain system operation during a wide range of adverse conditions which may include but not be limited to tornadoes, industrial accidents, terrorist events, and day-to-day operations
- Maintainability
- Long term useful lifetime
- Short and long-term cost effectiveness, and
- Compliance with FCC rules and regulatory actions that impact a system of this nature.

LFUCG is seeking a full-turnkey solution from qualified firms having substantial experience in the deployment of logging recorder systems.

- Turnkey means that the system is designed, supplied, installed and ready to operate.

Response: Understood, Comply

At a minimum, the Proposer must provide three references. At least one of these references must be from a end user where they have interfaced with a P25. At least one of the systems installed in the United States or Canada. System cost is a significant concern to LFUCG. After reviewing RFPs, LFUCG may elect to take on certain aspects of the project on its own to reduce costs. A final decision about LFUCG taking on some aspects of the project on its own will not be made until an analysis of the RFPs and proposed costs has been completed.

*Response: Understood, Comply
Please see attached references sheet*

The contractor shall provide a new computer-based, networked digital logging recorder system with a full geo-redundant backup to be installed at the Police and Fire dispatch locations. The new logging recorder system shall provide the ability to log all radio and telephone traffic in real-time. Both trunking and conventional radio traffic shall be logged by the new recorder. All dispatch console select audio and backup control stations shall also be logged by the new recorder. All call-taker 911 and administrative

telephone traffic shall be logged by the new recorder. The new recorder shall be capable of recording video images from cameras which input is displayed at the dispatch locations. The proposed logging recorder system shall be equipped to archive radio, video and telephony audio traffic to various storage media: internal, redundant hard drive(s), CD-R/W, and/or DVD-R/W devices. The proposed logging recorder system shall store the real-time audio in a variable bit rate, industry-standard, digital format (i.e., WAV, AAC, MP3, AIFF, WMP, etc.) that can easily be transferred over an Ethernet-based computer network for easy playback.

Response: Understood, Comply

Logging Recorder Capacity

The dispatch console subsystem shall provide logging recorder audio outputs for monitoring and logging dispatcher/radio traffic on a conventional radio channel basis, trunked user group basis, and individual call basis and on an individual operator position basis. All recorder audio modes shall consist of transmit and receive audio for a particular radio channel/user group regardless of selected channel status of operator console. Dispatch console position audio shall consist of the operator's transmit audio and selected receive audio. The recorded audio outputs shall be free of any control and functional tone signals.

Response: Understood, Comply

A minimum recording capacity of any combination of 300 simultaneous sources of audio (i.e., dispatch console, trunking resources, individual calls, conventional resources, 911 telephone, administrative telephone, ringdowns, etc.) shall be provided. RAID Level 5 (or greater) hard drive storage methodology shall be utilized to provide fault-tolerant audio/data storage. The logging recorder system shall be sized to provide online and immediately accessible storage of at least 15,000 channel-hours before external storage/archival required. This storage threshold must be expandable to higher storage capacities and the supplier shall define storage options and upgrade strategies to enable greater future capacity.

Response: Understood, Comply and exceed

Hindsight-G2 Geo-Diverse Redundant P25/NG911 supports up to 360 channels per recorder and comes standard with 420,000 channel-hours of on-board Raid-5 storage, plus geo-diverse NAS for archival storage

Logging Recorder Network Redundancy and Backup

The new logging recorder shall be equipped with built in redundancy so that no piece of information recorded is lost due to a hardware or software failure, proposers must describe in detail how the redundancy is accomplished. In addition, the system will be equipped with a backup Master Control site, this site shall be a mirror of the primary Master control site including the centralized logging recorder. All information recorded at the primary location shall be recorded at the secondary location simultaneously. The Proposer must explain in detail how this will be accomplished.

The information logged at the primary and backup facilities shall be accessible from any of the management terminals at the different LFUCG PSAPs.

Response: Understood, Comply

Hindsight-G2 being proposed with full redundancy per location with no single point of failure, and geo-diverse storage redundancy via bilateral NAS at each location; PD NAS located at FD, and vice-versa FD NAS located at PD

Logging Recorder Network

The new logging recorder system shall be of a client/server architecture that facilitates the access, playback, and transfer of digital audio files across a TCP/IP-over-Ethernet computer network. All of the new lookup/playback workstations shall be networked. LFUCG strongly encourages a design in which the logging recorder subsystem applications co-exist and reside on the same client workstations as the Network Management Subsystem (NMS) (when applicable) workstations to minimize the total number of client workstations. The logging recorder subsystem shall also be designed to facilitate a number of intranet client workstations to access the archived audio through a properly provisioned firewall or security appliance.

Response: Understood, Comply

The LFUCG requires seven (3) fully-functional logging recorder client lookup/playback workstation(s) and/or software. The three (3) will be provided at the (location(s)) and located at the 911 Director's discretion. At minimum, the fixed logging recorder client playback workstations shall be equipped with 21" flat-screen LCD monitor.

Response: Understood, Comply via 3-Workstations e/w "TimeGate" Client software and additional "TimeGate Client licenses for intranet access as required.

The client workstation requires the comprehensive ability to lookup, playback, and write to transferable media. The LFUCG also requires the ability for up to (10) additional simultaneous LFUCG -intranet users (existing LFUCG computers) to have remote access/lookup/playback functionality through a secure logging recorder gateway. The vendor will provide access at each dispatcher/calltaker location at both PSAP's as well for instant recall functionality. The vendor shall clearly delineate the time period that dispatcher/calltaker locations can instantly replay recent transmissions/calls.

Response: Understood, Comply via "TimeGate-IR" client licenses for Calltakers and Dispatchers

All spare equipment shall be uniquely noted and itemized by line item unit independent of the primary system/pricing matrices. The submitter shall propose optional incremental expansion of recorder audio outputs and simultaneous recording capacity in the design proposal. The supplier will provide a detailed explanation of the incremental expansion proposed. The cost of the incremental expansion shall be for a turnkey installation. The supplier shall be responsible for fully testing and configuring all spare equipment for any of the proposed subsystems.

Response: Understood, Comply

The new logging recorder will be a component of the existing Cassidian COR P25 radio network. The logging recorder shall be fully integrated with the existing Solarwinds SNMP Manager web-based application.

Response: Understood, Comply

Logging Recorder Features and Performance Requirements

The following list represents the minimum functionality, performance, and quality requirements that shall be included in the logging recorder system. The list is not necessarily totally inclusive of all requirements since the supplier may offer additional functionality in its standard logging recorder offering. The following section briefly defines the required functionality, performance, and quality of the specific requirements in this list: *Response: Understood, Comply*

- High quality, reliability, and availability to meet 24/7/365 continuous duty public safety dispatch standards (e.g. redundant power supplies, redundant processors, etc.)
- Meets or exceeds all FCC, EIA/TIA, IEEE, NFPA and APCO standards
- Conform to local PSTN requirements as necessary
- State-of-the-art design with distributed processing and multi-tasking capability
- Redundant and fault-tolerant configuration/network server(s) with mirrored databases
- Capability for any combination of client workstations to access the logging recorder simultaneously for real-time monitoring or historical playback
- Access workstations capable of running Microsoft Windows-based operating system and archiving to CD-R/W or DVD-R/W
- Multiple search and playback techniques: console position, subscriber/console unit ID and/or alias, emergency call, talkgroup, multigroup/announcement group, individual call, telephone interconnect call, encrypted call (as required), time/date, call length, channel resource, site resource, ANI/ALI data, annotations, etc.
- Capability to package a group of independent, specific calls into a consolidated call sequence for documenting/describing a situation or event
- Capability to activate data compression to maximize data storage
- Redundant internal/mirrored hard drives or suitable automatic backup scheme to prevent loss of data
- System notification to user and network administrator that storage threshold close to being exceeded to prompt permanent archiving
- FIFO overwrite when storage threshold exceeded
- VOX-activation and/or ability to set audio level threshold for recorder activation to tailor recording style per channel/track
- Redundant 120 VAC/60 Hz power supplies for all common and core equipment
- Synchronized to master system clock
- Capable of logging any combination of system talkgroups and conventional resources per the ultimate system fleetmap
- Capability to annotate specific calls and/or call sequences using free text
- Capability to lookup call annotations for specific calls and/or call sequences
- Capability to add audible time/date stamping using a pre-recorded voice watermark
- User-friendly, field-reconfigurable independent GUI interface(s) for each lookup/playback position
- Password-protectable lookup/playback positions with comprehensive event log to note specific authorized user time/date usage
- Full interoperability between IP-based, digital trunked and conventional subsystems.
- **Vendor to describe capability to encrypt all or certain calls, such as medical calls, particularly when data is at rest.**

Response: Understood, Comply to all

Logging Recorder Interfaces

The proposed logging recorder system shall provide the necessary radio and telephone interfaces to concatenate comprehensive call processing data (both radio and telephone) with the specific audio calls. Time synchronization of the logging recorder system with the master system clock and the telephone system is required so that all call sequences can reliably and accurately be reconstructed. The logging recorder system shall be equipped to receive real-time call processing data from the radio communications system and the 911 telephone system for advanced call lookup/playback functionality based on lookup criteria such as: talkgroup, channel, time, date, call length, radio/console unit ID, radio/console alias, specific call type, assigned network resources, annotations, ANI/ALI information, etc.

Response: Understood, Comply

Logging recorder audio demarcations from the radio and telephone networks shall be made at the PSAP equipment rooms via wall-mounted or rack-mounted punchblocks. The supplier shall provide all necessary logging recorder cabling and connectors to/from the demarcation punchblocks. The supplier shall provide all necessary radio communications system cabling and connectors to/from the demarcation punchblocks. LFUCG will provide all necessary telephone cabling to/from the demarcation punchblocks. The supplier shall provide all surge suppression, grounding leads, and connectors/lugs of sufficient gauge to properly bond all logging recorder equipment to the single point grounding system.

Response: Understood, Comply

Logging Recorder Management/User Partitioning

The logging recorder subsystem shall support multiple levels of access that are protected in a manner allowing users to control, monitor and use software applications that have been partitioned and provisioned for specific use by the end-user. The supplier shall provide a detailed description of this capability by defining the levels of partitioning and security, total number of end-users, the total number of simultaneous users with independent views, and the method used to achieve this requirement.

Response: Understood, Comply

End-users shall be located at different locations such as dispatch centers, offices, maintenance facilities, and other remote sites. Therefore, this user partitioning feature must be provided to remote locations in order to allow restricted access to the overall radio network. User functionality and passwords must be configurable through a network administrator/superuser (root level) login. Superuser (root level) login and password must be re-configurable in the event of a network security breach. The logging recorder subsystem shall provide the administrative functionality to disable in real-time specific client workstation(s) and user login(s) as necessary in the event of malicious or unwanted activity.

Response: Understood, Comply

Time Synchronization

The proposed logging recorder subsystem shall be time synchronized using a common timing reference scheme for the entire network (i.e., GPS, NTP, WWVB, etc.). All call transactions and network alarm events shall be time/date stamped with the master system clock for accurate logging recorder call archiving. Any logging recorder internal status/error logging capability shall be synchronized to the same master system clock for accurate diagnostic and troubleshooting and correlation to NMS alarm data information. In the event of master clock failure, the logging recorder subsystem shall provide a free-running clock which is originally disciplined from the master system clocking reference. The supplier shall define the time synchronization methodology for the proposed logging recorder subsystem.

Response: Understood, Comply

Equipment Housing

The logging recorder common equipment, for both sites, shall be permanently housed in an EIA/TIA standard 19"-wide steel relay rack or 19"-wide stationary steel cabinet at the Fire PSAP and Police PSAPS. All logging recorder equipment shall provide a grounding lug or connection that facilitates a single point grounding methodology within each PSAP. The logging recorder equipment shall provide front and rear access for cabling and service purposes. Power, audio, and data cabling interfaces to/from the logging recorder shall be supported from above using either overhead/aerial cable tray or from underneath via computer flooring.

Response: Understood, Comply, Server Cabinets include in proposal for each location

AK Associates installation team has a long and very successful history of installing server based equipment in a controlled environment.

Logging Recorder Outputs

Proposer shall provide a fully operational and functional recording capability as part of this contract.

The Avtec Dispatch Consoles shall be provided with logging recorder audio outputs for monitoring and logging telecommunications officer/radio traffic on a conventional radio channel basis, trunked user group basis, and private call basis and on an operator position basis. All recorder audio modes shall consist of transmit and receive audio for a particular radio channel/user group regardless of selected channel status of operator console. Operator position audio shall consist of the operator's transmit audio and selected receive audio. The recorded audio outputs shall be free of any control and function tone signals. A minimum of 600 trunked talkgroup audio outputs, 60 conventional channel audio outputs, and 100 phone line interface audio outputs shall be provided.

Proposer shall propose optional incremental expansion of recorder audio outputs in their design proposal.

Response: Understood, Comply

Hindsight-G2 supports bilateral certified IP level integration with the Avtec-Scout RoIP Radio Dispatch System

Installation/Implementation

Proposer shall provide an implementation schedule to LFUCG to include full integration with the existing Cassidian COR P25, legacy radio, Plant/CML 9-1-1, and LFUCG administrative telephone systems. When the Division of Enhanced 911 moves to its new dispatch center at 115 Cisco Road, in approximately 14 months, the customer premise equipment will change from Plant/CML 9-1-1 Sentinel to Solacom Guardian. Vendors shall indicate if their product offering is compatible with Solacom and whether migration from Plant/CML to Solacom impacts cost.

Response: Understood, Comply

Hindsight-G2 supports bilateral certified IP level integration with the Solacom-Guardian NG911 System. The upgrade to add the Hindsight-G2/Solacom-Guardian Integration software is shown as an option in the pricing section of the response.

AK Associates will project manage the entire solution. Our team has installed and integrated the Exacom G2 recorder and the Solacom Guardian products. We have implemented the VoIP interface over SIP trunking, which is the mechanism used to accomplish the above requirement.

Logging Recorder Design Information and Documentation

The Proposer shall provide the following logging recorder subsystem design information and documentation details based upon LFUCG requirements and specifications:

- System Functional Block Diagrams
- Network Topology with Proposed Connectivity (LAN/WAN)
- Network Traffic Baseline/Utilization Baseline
- System License Matrix/Structure
- Equipment Layouts and Physical Dimensions
- Equipment Electrical and HVAC Requirements.

Response: Understood, Comply, and will provide final pending award and technical site survey, and development Statement of Work

Logging Recorder Optional Features

The Proposer shall provide a detailed list and explanation of optional features for the logging recorder subsystem that can be supplied for review and understanding.

Response: Understood, Comply, provided in proposal narrative

Detailed Cutover Plan

A detailed transition and cutover plan is required thirty days after the start of the contract.

Response: Understood, Comply, and will provide final pending award and technical site survey, and development Statement of Work

AK Associates will also provide a detailed cutover plan, weekly meetings will commence to track all milestones to ensure a successful implementation.

Proposer's Responsibilities:

- Proposer will present a cutover plan for the LFUCG's approval.
- Plan shall cover proposed cutover timeline.
- Plan shall include LFUCG's requirement for accessing their existing logging recorder for at least 90 days. Both existing and the proposed new logging recorder(s) will be operating in parallel during this window.
- Plan shall cover procedures, Dispatch center/workstation migration, and fall back plan.

Response: Understood, Comply, and will provide final pending award and technical site survey, and development Statement of Work

LFUCG Responsibilities:

- Attend cutover meeting and approve the cutover plan.

Response: Understood, Comply

Completion Criteria:

- Finalize the agreed cutover plan with LFUCG.

Response: Understood, Comply

Dispatch Console and Logging Recorder Operator's Instruction Tutorial

A customized logging recorder operator's instruction tutorial with associated embedded video demonstrations shall be clearly written and illustrated to instruct dispatch personnel in the proper use of all provisioned features available for the logging recorder and their consoles. LFUCG-specific drawings and/or photographs shall show the location of all operator controls and tools. This manual shall be provided in addition to all other installation and training manuals furnished.

Response: Understood, Comply

A quantity of two (2) logging recorder operator's instruction tutorials shall be furnished. These instruction books shall be provided in both original file format (e.g., MS-Word, PowerPoint, Visio, Macromedia, etc.) and in *.PDF (Portable Document Format) format to be readable with the Adobe Acrobat Reader software. Eight (8) DVD-ROM copies and eight (8) paper hard copies shall be supplied at least one month prior to individual dispatcher training. There shall be no copy restrictions or licensing requirements for information provided as a system reference or used for training purposes.

Response: Understood, Comply

Installation and Maintenance Manuals

The installation and maintenance manuals shall be clearly written and illustrated to instruct a radio technician skilled in the trade to unpack, assemble, and interconnect the various system components to prepare the system for operation. All base station site/console interconnect wiring, console and auxiliary function wiring shall be customized and included as part of this manual and its attachments.

Response: Understood, Comply

The maintenance manual shall be written and illustrated such that a radio technician skilled in the trade can service any portion of the system to the component level, if desired. The manual shall include the theory of design for each unit, a schematic diagram of each assembly, assembly drawings of each circuit board, detailed part numbers where applicable, the description of each component used and the name and part number of the original component manufacturer to facilitate locating parts locally. The manual and its attachments shall include complete system configuration data, programming data, and customized as-built drawings. Where applicable, such information also shall be supplied for any items furnished as part of the system but not manufactured by the Proposer. A quantity of three (3) installation/maintenance manuals shall be furnished in complete, bound paper format and three (3) in CD-ROM electronic format. These instruction books shall be available in a *.PDF (Portable Document Format) format to be read with the Adobe Acrobat Reader software. There shall be no restrictions or licensing requirements for information provided as reference or used for training purposes.

Response: Understood, Comply

The logging recorder manufacturer (if other than the Proposer) shall maintain a complete set of original, customized LFUCG reference documentation for the system, to be supplied upon request as individual replacement sheets or complete replacement manuals. The manufacturer shall certify that this support will be available.

Response: Understood, Comply

Prior to system acceptance and subject to field review, the Proposer shall provide customized "As-Built" drawings for the logging recorder subsystem equipment supplied in response to this specification. Three (3) sets of documents with reproducible drawings shall be supplied. Three (3) CD-ROM copies shall be supplied with all as-built files provided in both original file format (e.g., MS-

Word, Excel, Visio, AutoCAD, etc.) and in *.PDF format (Portable Document Format). There shall be no restrictions or licensing requirements for information provided as reference or used for training.

Response: Understood, Comply

Operational, Technical and User Training

The Proposer shall fully describe all proposed and available training courses. This shall include, at a minimum, classroom style instruction, operational style classes, a detailed training plan, description of available training material, resume of potential course instructors and a customer reference list of trained personnel (to include: names, telephone numbers, company, and system description).

Response: Understood, Comply

The Proposer shall train LFUCG employees, LFUCG contractors, and LFUCG designees. The training shall include Logging recorder configuration and management. The Proposer shall permit videotaping of training sessions for use within the LFUCG for re-fresher training. All written and presentation training materials shall become property of LFUCG.

Response: Understood, Comply

Field Acceptance Testing

At the time that all equipment and subsystems are functioning as designed in the field, LFUCG shall inspect and witness the testing of the equipment as it is field-installed, cabled, tested, and burned-in per the agreed-upon field acceptance ATP. If the field ATP fails to meet LFUCG's expectations, another date for re-testing and customer witness shall be set to repeat the event solely at the Proposer's expense which includes all logistical costs to reproduce the field ATP. The LFUCG's team and system Proposer's representatives shall conduct these acceptance tests and inspections as defined.

Response: Understood, Comply

The results of the tests and the associated punch list of outstanding items to be completed or re-tested shall be signed by both parties and forwarded to the LFUCG for review and acceptance. The outstanding items shall be resolved within seven (7) business days and these items shall be re-tested at no additional expense to the LFUCG. If the outstanding items have an effect on other previously performed tests, then re-testing of those tests also shall be included. Final acceptance of each individual subsystem shall include, but not be limited to, the list of tests and inspections contained in the following sections.

Response: Understood, Comply

The acceptance testing for all systems shall consist of a series of tests, inspections, and verifications that demonstrate the functionality of the system provided and as specified in this document. The ATP shall cover all field testing procedures and those inspections that shall be made in order to show Proposer compliance to the solicitation specifications as well as define each and every required subsystem interface.

Response: Understood, Comply

All system equipment that comprises the proposed network shall be configured and installed in a manner conducive of testing hardware and software prior to beginning the field ATP. All optimization procedures shall be executed prior to conducting the field ATP and the final as-built documentation shall be complete and ready for LFUCG review.

Response: Understood, Comply

Warranty Maintenance and System Support

The Proposer guarantees that all equipment supplied pursuant to this solicitation will be new and of first quality throughout. The Proposer shall warrant that the System shall be free of Errors and

Bugs. The system warranty shall commence on the day that the LFUCG grants final system acceptance. The Vendor shall provide the Services specified in Maintenance.

Response: Understood, Comply

Kraus Associates, Inc. d/b/a AK Associates is LFUCG's current maintenance provider for its Airbus and Solacom 911 equipment. AK Associates' First Tier support (labor) for this recording project is included free of charge under the current 911 maintenance contract.

All items (material and labor) shall be warranted for a minimum of one (1) year after the date of final system acceptance, unless otherwise specified in the specification. This warranty shall include repair or advanced replacement of any defective equipment, system, subsystem, hardware and/or software which becomes defective through normal wear and usage or is deemed as such between the LFUCG and the Proposer.

Response: Understood, Comply

When parts under warranty are replaced, the LFUCG requires that the replacement part also be new and not factory-refurbished. The Proposer shall fully integrate and test all spare parts prior to final system acceptance. No replacement parts shall be integrated that provide less functionality or diminished capacity than the original equipment to be replaced. A new twelve-month warranty period should begin when a new part is installed as a replacement to a defective part under warranty. All warranty and maintenance issues shall be tracked by the Proposer and its service organization using an electronic database that the LFUCG can query at any time.

Response: Understood, Comply

Proposer support is defined as the ability of the Proposer to remedy to LFUCG satisfaction any hardware and/or software problem with any equipment and services provided as part of this offering. Proposer support shall take the form of a 24x7x365 technical support hotline, two-hour on-site response time, advanced board replacement, product engineering, field service technicians, and field engineering. Proposer support also requires the Proposer to be able to provide new and/or equivalent spare/replacement hardware and software equipment for the proposed offering for not less than four (4) years from the date of final system acceptance. Equivalent spare/replacement hardware and software provided during the entire support timeframe shall not necessitate any platform upgrade or subsystem reconfiguration.

Response: Understood, Comply

System Software and Hardware Warranty

The equipment supplied pursuant to this solicitation and any subsequent agreement is warranted by the Proposer to be free from defects in materials, workmanship and otherwise for one year from final acceptance of the proposed system unless otherwise provided in this solicitation and any subsequent agreement.

Response: Understood, Comply

The Proposer shall warrant that the system and each component of the system shall perform in strict accordance with the requirements of this solicitation and any subsequent agreement and shall be completely free of system defects, including latent defects for at least one year after the date of final system acceptance. Unless otherwise provided herein, all equipment shall be warranted for a period of one year after the date of final system acceptance. The warranty period for non-Proposer manufactured equipment is as specified by its manufacturer, but not less than one year after the date of final system acceptance. The Proposer maintains sole responsibility for settling and coordinating all warranty issues with OEM Proposers on behalf of LFUCG throughout the entire warranty and maintenance period.

Response: Understood, Comply

The proposed system release/platform being offered shall not be the last of its type or version with regard to future software and hardware compatibility. The next software release compatible with the system shall not require new hardware to support the existing functions of the system. In the event that parallel system software development has been undertaken by the Proposer, and the software release in LFUCG's system is abandoned (no further development or support) or obsoleted, the Proposer shall completely upgrade LFUCG's system to the surviving software release at no expense to LFUCG.

Response: Understood, Comply

At no additional cost to LFUCG, the Proposer shall provide and completely integrate all hardware, firmware, software releases or patches that are required to correct any latent functionality or software defect that may exist in the proposed system (including system failures resulting from software problems, functionality fixes, and software upgrades to LFUCG's system), for a four (4) year period from the date of final system acceptance. This responsibility is to include any upgrades to fixed network equipment, and system management systems. For the life of the contract and the contract maintenance period, the Proposer shall provide, at a minimum, the opportunity to refresh software for all system equipment on a semi-annual basis to take advantage of enhancements and defect resolutions.

Response: Understood, Comply

In the event a defect is found in another customer or field system that utilizes the same or similar release as LFUCG's system, the Proposer shall notify and advise LFUCG of the defect and when a new hardware, firmware, software release or patch will be available to correct the problem. At such time, LFUCG shall decide whether it will require an upgrade prior to observing the defect. Notification should occur regardless of whether LFUCG is currently affected by this defect. The Proposer shall be responsible for providing monthly product quality bulletins for all Proposer and OEM equipment and software contained in the proposed network in electronic fashion to LFUCG Project Manager and System Manager during the course of system implementation and the entirety of the warranty and contract maintenance phases.

Response: Understood, Comply

The software release in LFUCG's system at the time of final system acceptance shall be the latest version available at the time of shipment from the Proposer's development and manufacturing facility. The Proposer assumes responsibility for all equipment and services to implement the latest system equipment software versions prior to final system acceptance. Under all warranties provided, all parts shall be replaced free of charge including labor. The Proposer may replace equipment, software or components rather than repair them, at the Proposer's option.

Whenever defective work (and damage resulting from such a remedy) has been corrected, removed, or replaced under warranty, the warranty period with respect to such defective work shall be extended for an additional period of one (1) year after such correction or removal and replacement has been satisfactorily completed.

Response: Understood, Comply

Equipment Support

The Proposer shall warrant support in the form of replacement parts for all system hardware and software equipment for four (4) years from the last date of manufacture of the product. The Proposer shall use commercially-reasonable efforts to identify and to obtain replacement parts to meet or exceed LFUCG's specific maintainability requirements. The Proposer shall electronically issue all product cancellation notices to LFUCG Project Manager and System Manager throughout the entire system implementation and maintenance periods. The Proposer shall provide product cancellation notices within two weeks of the official announcement. These cancellation notices serve the basis for the four (4) year support guarantee. The Proposer is responsible throughout the project implementation and contract maintenance period for remedying and re-designing, at no cost to LFUCG, any system design affected by the cancellation of equipment or software which

reduces the four (4) year product support guarantee. Prior to final system acceptance, no equipment or software shall be included with the system offering that has been identified or announced for cancellation.

Response: Understood, Comply

Spare Parts Inventory

The cost for replacement parts shall be quoted as part of the Proposer's proposal. Parts pricing shall be in the form of a standard discount off of the OEM or Proposer's list price equivalent to those provided to dealers or Proposer-authorized service shops. This discount level shall be part of the attached pricing sheets. The Proposer also shall provide a comprehensive pricing matrix or book defining the OEM and Proposer list prices for all relevant hardware and software for the proposed system platform. This comprehensive pricing matrix shall serve as the definitive ordering guide for all future system equipment purchases. The parts pricing level shall remain intact for a period not less than four years following final system acceptance.

Response: Understood, Comply

The cost for replacement parts are included in the optional section of the pricing proposal. In addition, a replacement parts matrix is included in the pricing proposal section of the response.

Spare parts required for this system shall include sufficient parts, modules and components to restore the system to full redundancy during a system or subsystem failure. The Proposer shall fully integrate and test all spare parts prior to final system acceptance. When not specifically addressed in this specification, the Proposer shall recommend and price accordingly the spares necessary to maintain the required availability levels for the various subsystems.

Response: Understood, Comply

Warranty Maintenance Performance Levels

The Proposer shall provide all labor, parts, tools, and test equipment required for the maintenance of the system through the warranty period and any extensions thereof covered by a contracted maintenance agreement. The Proposer shall provide a recommended system management plan (personnel and location) to ensure operational efficiency, monitoring, and control. The Proposer also shall provide information regarding key personnel; training/specialization; number of personnel; equipment required for analysis and troubleshooting; optimization; and schedules for preventive maintenance.

Response: Understood, Comply

The Proposer shall propose a yearly maintenance program for 3 years and to commence after the conclusion of the system warranty period. This maintenance plan shall include parts and labor; 24/7/365 infrastructure support; 2-hour on site response for severity one issues; 4 hour response for severity two issues; depot-level board repair; analysis, and annual preventive maintenance.

Response: Understood, Comply

Proposals shall provide a complete description of the intended preventive maintenance methodology and shall specify the frequency of preventive maintenance required for all proposed equipment and systems. Preventive maintenance shall be performed according to a schedule that is mutually acceptable to LFUCG and the Proposer. The Proposer shall include in its proposal an example of an actual, completed preventive maintenance regimen representative of what will be provided with the proposed system and corresponding maintenance phases. The schedule shall be consistent with the operation requirements of LFUCG and shall be based upon the specific needs of the equipment being maintained.

Response: Understood, Comply

The Proposer shall include in its proposal a description of any remote administration and maintenance service arrangements that will be provided with the proposed system. The qualifications and individual resumes (noting years of experience, training, schooling/degree, customer references, etc.) of all proposed maintenance service provider staff shall be provided in the Proposer's proposal response. All service providers may be required to submit to routine background investigations conducted by LFUCG to ensure system integrity in concert with security policies and initiatives. In the pricing response, the Proposer shall quote the annual costs for comprehensive, turnkey system maintenance for all proposed equipment for a period of three (3)

years following final system acceptance noting all available discounts, incentives, and economies of scale. The Proposer also shall include a standard contractual service agreement and associated comprehensive, detailed statement of work with the maintenance quotation.

Response: Understood, Comply

If awarded to AK Associates, this equipment would be maintained under its existing contract with LFUCG for its 911 System (Airbus and Solacom).

Maintenance Documentation

The Proposer shall furnish to LFUCG a sufficient number of equipment and maintenance manuals and customized system drawings of commercial standard with sufficient information included therein so that an average technician or engineer with basic electronic knowledge and experience, but unfamiliar with the system, will be able to define its operations and perform corrective and preventive maintenance. The manuals shall note in detail any special circuitry, special wiring, special interfacing, special tools/instruments and custom or non-standard procedures required to operate, maintain, and install any of the equipment furnished under this solicitation and any resulting agreement. All documentation shall be specifically applicable and customized to the system, except documentation for standard issue equipment which may be standard issue documentation. The Proposer shall warrant that any inability of County or subcontracted technicians or engineers to perform corrective and preventive maintenance on the scheme caused in whole or in part by the Proposer's failure to provide accurate or sufficient information in provided manuals will cause the Proposer to be liable for damage if such failure results in damage to or interruption of the system.

Response: Understood, Comply

Maintenance Cost Savings

Vendor shall propose optional cost savings, where applicable, including inclusion of first level of maintenance by LFUCG's trained technical personnel. The Proposer shall fully describe the proposed option and resulting cost savings as applicable.

Response: Understood, Comply

Selection Criteria

1. Estimated Cost of Services. 15 points
2. Specialized experienced and technical competence of the person or firm (including a joint venture or association) with the type of service required. 20 points
3. Capacity of the person or firm to perform the work, including any specialized services, within the time limitations. 15 points
4. Character, integrity, reputation, judgment, experience and efficiency of the person or firm. 15 points
5. Past record and performance on contracts with the Urban County Government or other governmental agencies and private industry with respect to such factors as control of cost, quality of work and ability to meet schedules. 10 points
6. Familiarity with the details of the project. 20 points
7. Degree of local employment to be provided by the person or firm in the performance of the contract by the person or firm. 5 points

Response: Understood