

# MCC 7500 CONSOLE SYSTEM

## SAMANTHA TWO



The design, technical, and cost information furnished with this proposal is proprietary information of Motorola Solutions, Inc. (Motorola). Such information is submitted with the restriction that it is to be used only for the evaluation of the proposal, and is not to be disclosed publicly or in any manner to anyone other than those required to evaluate the proposal, without the express written permission of Motorola Solutions, Inc.

MOTOROLA, MOTO, MOTOROLA SOLUTIONS, and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. SYMBOL is a trademark owned by Symbol Technologies, Inc., which is a wholly owned subsidiary of Motorola Solutions, Inc. All other trademarks are the property of their respective owners. © 2013 Motorola Solutions, Inc. All rights reserved.



# TABLE OF CONTENTS

## Cover Letter

## Section 1

Statement of Work .....	1-1
1.1 Motorola Responsibilities .....	1-1
1.2 Orange County Responsibilities .....	1-2

## Section 2

System Description .....	2-1
2.1 MCC 7500 Dispatch Console .....	2-1
2.1.1 MCC 7500 Overview .....	2-1
2.1.2 MCC 7500 System Benefits and Features .....	2-1
2.2 MCC 7500 Architecture .....	2-2
2.2.1 MCC 7500 Dispatch Console Position .....	2-2
Personal Computer (PC) .....	2-3
Voice Processing Module (VPM) .....	2-4
Desktop Microphone .....	2-4
Headset Jack .....	2-4
Desktop Speaker .....	2-5
Footswitch .....	2-5
Software-based Dual Instant Recall Recorder .....	2-5
2.2.1.1 Elite Dispatch Graphical User Interface .....	2-6
2.2.1.2 Elite Admin Application .....	2-16
2.2.2 Logging Recorder Subsystem (Not included) .....	2-17
2.2.3 Auxiliary Inputs and Outputs (Not included) .....	2-18
2.2.4 Conventional K Core .....	2-18
2.2.4.1 GCP 8000 Conventional Site Controller .....	2-18
2.2.4.2 GGM 8000 Site Gateway .....	2-18
2.2.4.3 GGM 8000-based Conventional Channel Gateway .....	2-19
2.2.4.4 LAN Switch .....	2-19
2.2.4.5 Configuration Manager .....	2-19
2.2.4.6 System Expansion .....	2-19
2.3 Summary .....	2-20

## Section 3

Diagrams .....	3-1
----------------	-----

## Section 4

Preliminary Acceptance Test Plan .....	4-1
--	-----

## Section 5

Service/Warranty .....	5-1
5.1 Overview .....	5-1
5.2 OnSite Infrastructure Response/Dispatch Service .....	5-1
5.3 Technical Support Service .....	5-2
5.4 Infrastructure Repair and/or Infrastructure Repair with Advanced Replacement .....	5-2

5.5	Network Preventative Maintenance .....	5-3
<b>Section 6</b>		
	Equipment List.....	6-1
6.1	Main Offering Equipment List.....	6-1
<b>Section 7</b>		
	Pricing.....	7-1
7.1	MCC 7500 Consoles, K Core, and Services Pricing .....	7-1
7.2	Payment Schedule .....	7-1
<b>Section 8</b>		
	Contractual Documentation.....	8-1
<b>Section 9</b>		
	Our Commitment .....	9-1





Motorola Solutions, Inc  
6450 Sequence Drive  
San Diego, CA 92121

Tel. + 1 847 576 5000  
Fax + 1 847 538 6020

October 18<sup>th</sup>, 2013

Mr. Shawn Vadpey  
Orange County  
840 N Eckhoff St Ste 104  
Orange, CA 92868

Subject: MCC7500 Console System

Dear Mr. Vadpey,

Motorola Solutions, Inc. ("Motorola") is pleased to have the opportunity to provide Orange County ("The County") with quality communications equipment and services. The Motorola project team has taken great care to propose a solution that will meet your needs and provide unsurpassed value.

To best meet the functional and operational specifications of this solicitation, Motorola's solution includes a combination of hardware, software, and services. Specifically, this solution provides:

- One (1) non redundant K1 Core Site with 24 conventional station capability, no recording or aux I/O capacity.
- Four (4) position single site MCC7500 dispatch console system with touch screen monitors, dual headset Jacks, desk microphone, footswitch and IRR at each position.
- Option for two (2) additional dispatch positions.
- Installation services of a single site system with six (6) MCD5000 desk sets with six (6) backup consolettes. Desk sets and consolettes are not included and are to be provided separately.

This proposal consists of this cover letter and the Communications System Agreement (CSA), together with its Exhibits. This proposal shall remain valid until November 29, 2013. The County may accept the proposal by delivering to Motorola the signed CSA. Alternatively, Motorola would be pleased to address any concerns the County may have regarding the proposal. Any questions can be directed to your Motorola Account Executive, Kim Caplan, Senior Account Manager, at 858-442-3979.

We thank you for the opportunity to furnish OC with "best in class" solutions and we hope to strengthen our relationship by implementing this project. Our goal is to provide you with the best products and services available in the communications industry.

Sincerely,

Motorola Solutions, Inc.

  
Mark Schmidl  
MSSS Vice President

This page intentionally left blank.

# STATEMENT OF WORK

Motorola Solutions, Inc. (Motorola) is proposing to Orange County the installation and configuration of the following equipment at the specified locations.

Site Name	Major Equipment
Samantha Two	<ul style="list-style-type: none"> <li>- One (1) Non-Redundant Conventional K1 Core</li> <li>- Four (4) MCC 7500 Dispatch Positions</li> <li>- One (1) Configuration Manager Workstation</li> <li>- One (1) Rack mounted Slide out Monitor</li> <li>- Two (2) High-Density Enhanced Channel Gateways</li> </ul>

The document delineates the general responsibilities between Motorola and Orange County as agreed to by contract.

## 1.1 MOTOROLA RESPONSIBILITIES

Motorola's general responsibilities include the following:

- Name a Motorola Project Manager.
- Prepare project schedule in conjunction with Orange County.
- Provide Orange County with the appropriate system interconnect specifications.
- Schedule the implementation in agreement with Orange County.
- Coordinate the activities of all Motorola subcontractors under this contract.
- Administer safe work procedures for installation.
- Will not provide a storage location for the Motorola-provided equipment.
- Inventory all equipment received at Orange County-provided storage location.
- Remove existing console, desk set and radio equipment including radio network cabling.
- Relocate existing equipment to a location designated by Orange County.
- Will not dispose of existing equipment.
- Stage, assemble and prepare system for installation.
- Install a dedicated Local Area Network (LAN) with Motorola-provided cabling at the dispatch center to connect the proposed console positions.
- Install system equipment as specified by the Equipment List, System Description, and system drawings, in a space provided by Orange County.
- Install the Configuration manager tower workstation in the core rack with the 1RU rack mount KVM/slide out monitor.
- Install four (4) dispatch positions in designated operator pods. The monitor is to be mounted to existing moveable arms.

- Install twelve (12) APX7500 consolettes in the backroom (provided and programmed by Orange County). Connect RF feeds to Orange County-supplied control station combiner using existing RF jumpers.
- Install six (6) Motorola MCD 5000 desksets with six (6) additional APX 7500 consolettes (provided and programmed by Orange County).
- Configure Orange County-provided MCD 5000 desksets.
- Configure the dispatch system to pre-arranged system configuration.
- Install network peripherals.
- Connect Orange County-supplied, previously-identified circuits into the console, to a demarcation point located within 25 feet of the console interface.
- Connect the appropriate equipment to Orange County's supplied ground system in accordance with Motorola's R56 Site Installation standards.
- Prepare cut-over plan in conjunction with respective project managers.
- Cut-over from old to new system as pre-arranged.
- Will NOT include end-user training for the new system.
- Perform Acceptance Test Plan as pre-arranged.
- Complete acceptance test certificate with Orange County and begin warranty.
- Pay for travel, lodging, meals, and all incidental expenses for Orange County personnel and representatives to witness the Factory Acceptance testing at CCSi (if Orange County desires to come to CCSi).
- Perform a R56 Audit of the console site. A copy of the audit results will be provided to Orange County. It will be the responsibility of Orange County to correct any deficiencies highlighted by the R56 Audit report if they wish to comply with the R56 guidelines as recommended by Motorola. Motorola can be contracted to engineer and/or implement any necessary corrections discovered during this site evaluation.

## 1.2 ORANGE COUNTY RESPONSIBILITIES

Orange County will assume responsibility for the installation and performance of all other equipment and work necessary for completion of this project that is not provided by Motorola. Orange County general responsibilities include the following:

- Provide all buildings, equipment shelters, and towers required for system installation.
- Ensure communications sites meet space, grounding, power, and connectivity requirements for the installation of all equipment.
- Obtain all licensing, site access, or permitting required for project implementation.
- Obtain the frequencies necessary to support the system design. Provide approved FCC licensing as required.
- Make any necessary site improvements to meet R56 standards.
- Provide a dedicated delivery point, such as a warehouse, for receipt, inventory and storage of equipment prior to delivery to the site(s).





- Provide secure storage for the Motorola-provided equipment. Motorola coordinates the receipt of the equipment with Orange County's designated contact, and inventory all equipment.
- Coordinate the activities of all Orange County vendors or other contractors.
- Remove, relocate or dispose of obsolete communications equipment as required.
- Provide Motorola MCD 5000 desksets with accessories to be installed in Samantha Two.
- Provide and configure eighteen (18) Motorola APX 7500 consolettes with associated RF as required by the system. In particular:
  - Provide and install all RF equipment required by the consolettes (antenna, lines, control station combiner, etc.).
  - Provide ground point within 6 cable feet of the control station.
  - Provide necessary space for installation of the local control station. (This also requires a flat surface for placement.)
  - Supply a dedicated 115 VAC grounded electrical outlet rated at 15 A to power the control station and remote control device. Provide an outlet within 6 feet of the unit.
  - Supply a ground point of 5 ohms or less located in the immediate vicinity (within 6 feet) of the finalized location of the antenna and control station.
  - Program and keyload stations prior to delivery for installation.

Motorola has made several assumptions in preparing this proposal, which are noted below. Should any of these assumptions be incorrect, Motorola reserves the right to amend the proposal which could result in a change in project scope, schedule, and/or cost. Motorola will need to verify all assumptions or seek alternate solutions in the case of invalid assumptions.

- All work is to be performed during normal work hours, Monday through Friday 8:00 a.m. to 5:00 p.m.
- All existing sites or equipment locations will have sufficient space available for the system described as required/specified by R56.
- All existing sites or equipment locations will have adequate electrical power in the proper phase and voltage and site grounding to support the requirements of the system described.
- Any site/location upgrades or modifications are the responsibility of Orange County.
- Any tower stress analysis or tower upgrade requirements are the responsibility of Orange County (if applicable).
- Approved local, State or Federal permits as may be required for the installation and operation of the proposed equipment are the responsibility of Orange County.
- Any required system interconnections not specifically outlined here will be provided by Orange County. These may include dedicated phone circuits, microwave links or other types of connectivity.
- A coverage guarantee has not been included in this proposal. No RF is being provided.
- Motorola is not responsible for interference caused or received by the Motorola-provided equipment except for interference that is directly caused by the Motorola-provided transmitter(s) to the Motorola-provided receiver(s). Should Orange County's system experience interference, Motorola can be contracted to investigate the source and recommend solutions to mitigate the issue.
- No box level or performance spec testing will be conducted.



- This quote does not include considerations for any site specific installation requirements, including but not limited to:
  - HVAC.
  - Floor Loading.
  - Power sourcing/loading.
  - Breaker panel availability.
  - Surge suppression.
- All power/HVAC will be provided by Orange County:
  - Equipment power is to be 120V AC.
  - The demarcation point will be the circuit distribution devices in the equipment racks.
  - Orange County will provide NEC and R56 compliant TVSS power panel protection and grounding connection points for all rack-mounted equipment.
  - Orange County will provide a connection to the grounding system at each operator position.
- Motorola is not providing any console workspace furniture or enclosures. Orange County will be responsible for providing furniture and any custom equipment to accommodate the console operator terminal(s) and to suit individual dispatcher preferences.
- This proposal/design does not make any claims with regards to equivalent functionality between the existing console dispatch equipment/design and the MCC 7500 dispatch equipment.
- Motorola assumes that all existing conventional resources utilize keying methods that are compatible with the provided CCGWs. The CCGW does not support DC-controlled or SB9600.
- Motorola assumes that Orange County will not use third-party encoders that will be interfaced to the CCGWs.
- AUX I/O functionality has not been included in this proposal.
- Motorola has not made any provisions in its design for connection of third-party systems to its dispatch hardware, this includes but is not limited to:
  - Computer Aided Dispatch (CAD).
  - Telephone Interconnect.
  - IP Logging recorder.
  - API.
- No provision has been made for a Netclock or another GPS time reference at the console site.
- Any required system interconnections not specifically outlined here will be provided by Orange County. These may include dedicated phone circuits, microwave links or other types of connectivity.
- A coverage guarantee has not been included in this proposal. No RF is being provided.
- Console encryption has not been included in this proposal as it was identified as not being required during the pre-sale design. It can be added upon request in a proposal and quotation revision if needed.
- A logging recorder solution has not been included in this proposal. Motorola training services for the end user will be handled separately from this proposal.
- Motorola is not providing any training services in this proposal.



- Lifecycle services have not been included in this proposal.
- Either Party may request changes within the general scope of this Agreement. If a requested change causes an increase or decrease in the cost or time required to perform this Agreement, the Parties will agree to an equitable adjustment of the Contract Price, Performance Schedule, or both, and will reflect the adjustment in a change order. Neither Party is obligated to perform requested changes unless both Parties execute a written change order.

This page intentionally left blank.



# SYSTEM DESCRIPTION

The Motorola Solutions, Inc. (Motorola) proposed dispatch solution for Orange County is our MCC 7500 Dispatch Console with four (4) positions and a standalone P25 Conventional Non Redundant K1 Core. This solution will be installed in place of the existing Gold Elite console in the Samantha 2 Mobile Command Center.

This solution will offer IP-based seamless connectivity between Orange County's dispatch operators and field personnel. The MCC 7500 Dispatch Console will provide Orange County with a scalable, flexible system architecture, sophisticated network management and security, and an easy migration to future capabilities.

Two additional operator positions are proposed as an option.

A description of the console features and benefits, system architecture, and hardware components follow.

Motorola has taken great care to propose an offering that will provide Orange County with a radio solution that meets their needs.

## 2.1 MCC 7500 DISPATCH CONSOLE

### 2.1.1 MCC 7500 Overview

The Motorola MCC 7500 Dispatch Console is Motorola's mission critical IP high-tier radio dispatch console system. The MCC 7500 dispatch Console features an intuitive, easy-to-use Graphical User Interface (GUI) that runs under a Microsoft Windows® operating system, utilizing the industry standard PC platform. MCC 7500's highly recognizable icons are designed to reduce user training time, and allow dispatchers to manage information more productively.

### 2.1.2 MCC 7500 System Benefits and Features

The MCC 7500 is designed to help reduce the total cost of owning an IP-based, feature-rich dispatch system without compromising quality and reliability. Specific benefits of the MCC 7500 include the following:

- The intuitive, easy to use Graphical User Interface (GUI) *enhances dispatchers' efficiency and accuracy.*
- Robust API *allows CAD systems to have complete access to console status and features* for further improvements in efficiency and accuracy. (Not included)
- *Software-based upgrades* facilitate system and feature expansion.
- Installation is simplified and site costs are reduced because *console positions function without backroom electronics.*
- Console *configuration is performed at centralized Network Management clients, and changes are automatically distributed,* which saves valuable technician and administrator time.
- Offers *robust service logs that contain real-time information* to facilitate maintenance activities.
- *Conventional audio can be transported over the IP network,* which eliminates the need for channel banks or a separate circuit-switched network.

## 2.2 MCC 7500 ARCHITECTURE

Motorola's MCC 7500 Console Subsystem consists of the following components:

- MCC 500 Dispatch Console Positions
- Logging Recorder Subsystem (Not included)
- Conventional Non-Redundant K1 core
- Conventional Channel Gateways

Various combinations of these components are connected together and to the rest of the ASTRO<sup>®</sup> 25 system via console site routers and switches on an IP network.

The following section of the system description contains descriptions of the above components.

### 2.2.1 MCC 7500 Dispatch Console Position

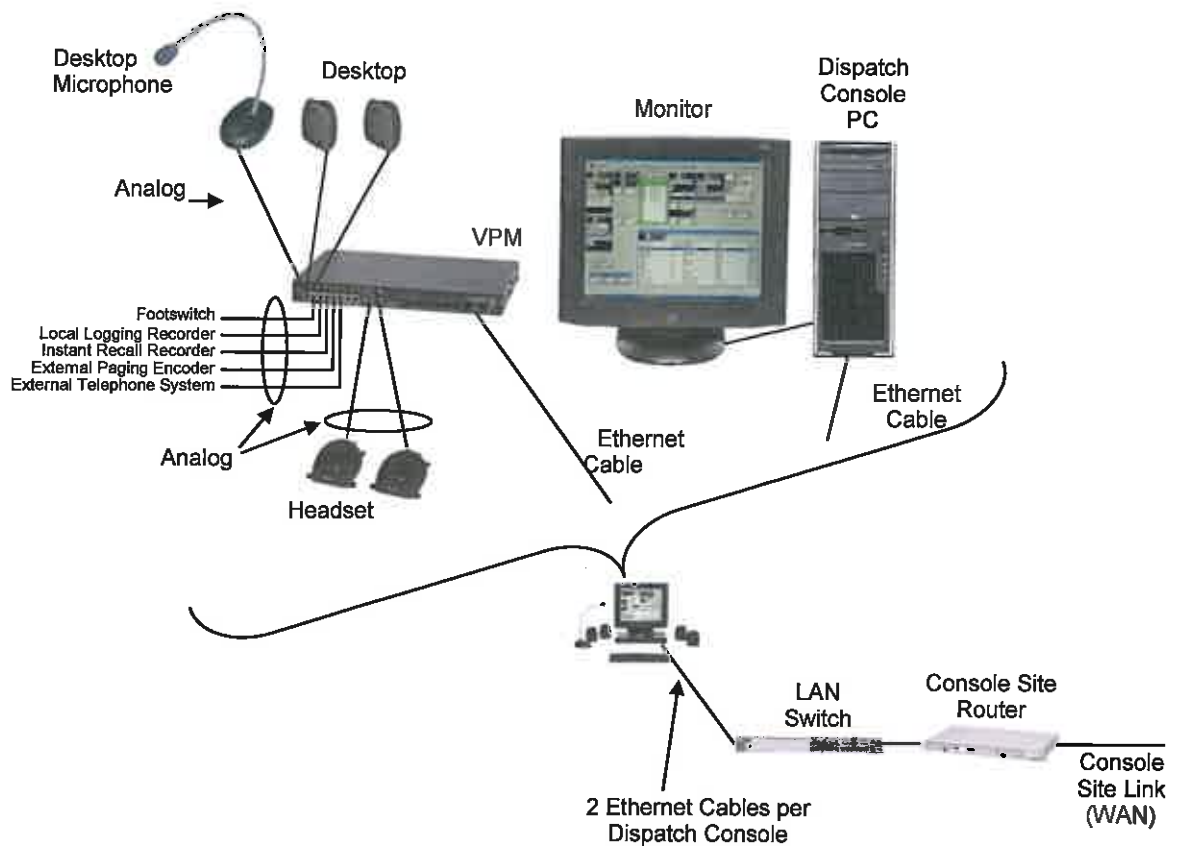
The proposed Motorola Solutions hardware includes the following equipment at each of the MCC 7500 dispatch positions:

- One (1) Motorola-Certified Personal Computer with keyboard and mouse
- One (1) 19" Touch Screen monitor
- One (1) Voice Processor Module (VPM)
- One (1) Desktop Gooseneck Microphone
- Two (2) Headset Jacks
- Two (2) Desktop Speakers
- One (1) Dual Pedal Footswitch
- Two (2) Headsets Headset Bases with PTT Switch
- One (2) Noise Cancelling Single Muff Headset Top
- One (1) Dual Instant Recall Recorder

This section of the system description contains descriptions of the above components.

Figure 2-1 shows the hardware architecture of the Motorola MCC 7500 Dispatch Console. Further details on the various dispatch equipment are provided below.





**Figure 2-1: Motorola MCC 7500 IP Dispatch Console Hardware Architecture (with VPM).**

The four (4) dispatch positions will be loaded with software certified with the ASTRO 25 System Release. Figure 2-2 shows a typical operator position.



**Figure 2-2: MCC 7500 Typical Operator Position.**

## Personal Computer (PC)

The VPM-based dispatch console uses an off-the-shelf personal computer running the Microsoft Windows operating system. The PCs used in ASTRO 25 systems have a minitower form factor and come with a keyboard and mouse. A variety of monitors are supported, including both touch and non-touch operation.

The proposed system includes a certified workstation with a 19" Touch Screen Monitor per position.



## Voice Processing Module (VPM)

The VPM connects to the console site LAN switch and communicates with the dispatch console PC via Ethernet. The VPM performs the digital-to-analog and analog-to-digital conversions for all analog audio flowing into or out of the dispatch console. The VPM provides all the audio processing services for the VPM-based dispatch console. The VPM is capable of providing encryption/decryption services (Encryption capability is not included in this proposal). The voice card within the VPM provides the vocoding and audio processing services for the dispatch console. It is capable of supporting IMBE vocoder algorithms for ASTRO 25 operation, as well as supporting audio level adjustments, summing, and filtering, and can support multiple simultaneous streams of audio.

The VPM is designed so it can be mounted in furniture, placed on top of a writing surface, or mounted in an EIA 19 inch rack. It is also capable of supporting monitors weighing up to 80 pounds (36 kg) standing on top of it. The VPM uses an external power supply (similar to the power supplies used with laptop computers) which must be connected to an AC power source.

The VPM provides the connections for the following items:

- One desktop microphone
- Two headset jacks
- Eight desktop speakers (four speakers max supported in 7.8 and earlier releases, eight speakers max supports in 7.9 and later releases)
- One logging recorder port
- One radio instant recall recorder
- One telephone instant recall recorder (supported in a future release)
- One external telephone set
- One external paging encoder (for analog resources only)
- One footswitch
- One generic transmit audio input

The VPM uses an external power supply (similar to the power supplies used with laptop computers) which must be connected to an AC power source.

## Desktop Microphone

The MCC 7500 Dispatch Console is capable of supporting a single Desktop Gooseneck Microphone. The Desktop Gooseneck Microphone contains a microphone cartridge on a flexible shaft and two buttons in its base. One button controls the General Transmit feature and the other controls the Monitor feature.

The proposed system includes a desktop gooseneck microphone per dispatch position.

## Headset Jack

A dispatch console is capable of supporting up to two headset jacks. A headset jack allows a dispatcher to use a headset while operating the dispatch console. The headset jack contains two volume controls; one for adjusting the level of received radio audio and one for adjusting the level of received telephone audio.

The headset jack allows customers to use headsets which both decrease the ambient noise in a control room and reduce the effect of any ambient noise on console transmissions. This improves the quality of the audio being transmitted from the control room and allows the dispatchers to hear received audio more clearly.





The proposed system includes two (2) headset jacks per dispatch position.

## Desktop Speaker

A dispatch console is capable of supporting up to Desktop Speakers through which audio is presented to a dispatcher. Each speaker on a dispatch console contains unique audio; that is an audio source cannot appear in multiple speakers at a single dispatch console.

The speaker is a self-contained unit which may be placed on a desktop, mounted in a rack/furniture, mounted on a wall or mounted on a computer monitor. It contains an amplifier which provides 2 Watts of power maximum. Power for the speaker is obtained from the VPM via its interconnect cable. A mounting bracket is included with the speaker.

The speaker provides the user with a continuous volume control knob. This serves as a master volume control for all the audio which appears in the speaker. When the user adjusts this volume control, all the audio in the speaker is increased or decreased by the same amount.

The proposed system includes two (2) desktop speakers per dispatch position.

## Footswitch

The dispatch console is capable of supporting a single footswitch. The footswitch allows a dispatcher to access the General Transmit feature or Monitor feature without using his/her hands. This is useful in situations where the dispatch console user's hands are not free for activating those features. The footswitch can contain either one of two pedals. If a footswitch with one pedal is used, the pedal controls the General Transmit feature. If a footswitch with two pedals is used, one pedal controls the General Transmit feature and the other controls the Monitor feature.

The proposed system includes a two pedals footswitch per dispatch position.

## Software-based Dual Instant Recall Recorder

The Dual Instant Recall Recorder (IRR) software (CD format) allows users to record the audio from two different sources (e.g., radio and telephone) digitally on a personal computer (the software can also be configured to operate as a single channel IRR). The system uses an individual PC where the recording files are stored on the PC's hard drive. The Instant Recall Recorder keeps a database of all recordings, which allows for convenient "point and click" search and playback of any recordings. Once the software is installed on your PC, the functions are controlled through a Graphical User Interface (GUI) icon.

In addition, the Instant Retrieval Recorder has numerous special features; such as the ability to attach text documents to recordings, a security system, multiple playback (which allows the user to playback more than one recording at the same time), and real time audio monitor (which allows the user to listen to the last ten minutes of a recording in progress without being required to stop recording to be able to listen).

The Instant Retrieval window allows the user to immediately access the recordings. The Instant Retrieval window initially opens on the newest recordings, but allows access to any recordings on the system. The recording can also be saved to the .WAV file that the user specifies. This is useful if the user wants to save a specific recording to a CD or hard disk.

The proposed system includes IRR at each dispatch position with a set of PC speakers.

### 2.2.1.1 Elite Dispatch Graphical User Interface

The Motorola MCC 7500 dispatch console uses the Elite Dispatch graphical user interface (GUI) for displaying information to and accepting commands from the dispatch console user. The Elite Dispatch GUI is efficient, easy to use and intuitive, having been refined and proven through years of use in public safety dispatch centers around the world.

An example of the Elite Dispatch GUI is shown in Figure 2-3.

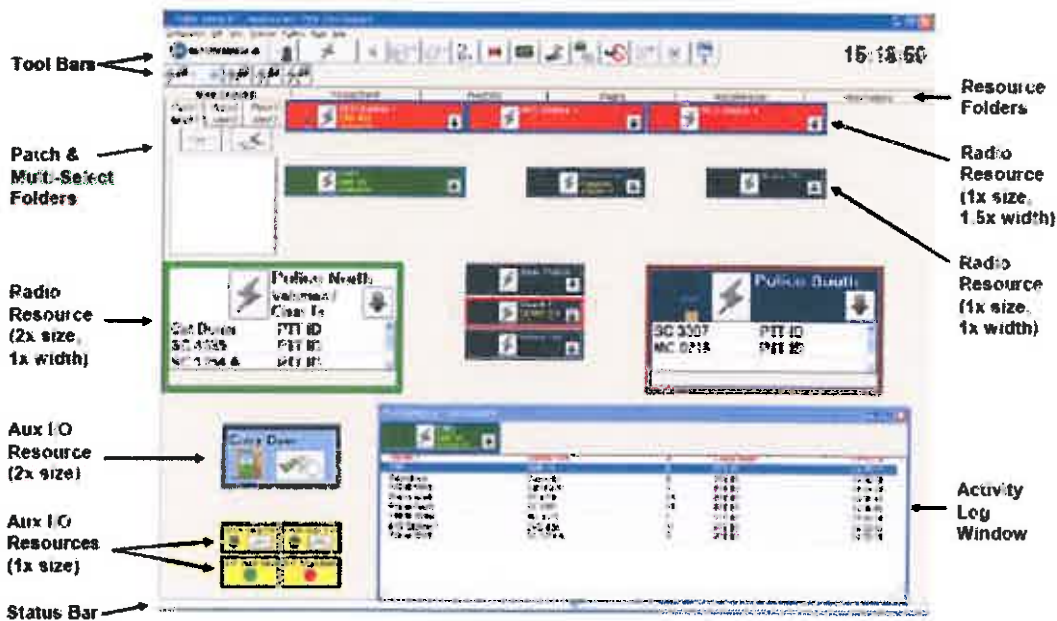


Figure 2-3: Elite Dispatch GUI.

The Elite Dispatch GUI is based on Microsoft Windows GUI programming standards and contains many controls, displays and features which are familiar to anyone who has caused Windows-based applications. These features are described in greater detail in the following sections.

#### 2.2.1.1.1 Pull-Down Menus

The dispatcher is able to access features and functions through the pull-down menus. The Elite Dispatch GUI provides the following pull-down menus on a menu bar across the top of the dispatch window.

- **Configuration** – Provides access to the configuration files used by the Elite Dispatch GUI. Also allows the dispatch application to be exited.
- **Edit** – Allows various aspects of how audio, resources and features are presented to the user on the Elite Dispatch GUI to be edited. Changes made using this menu are not permanent and are lost when the dispatch application is exited. Also provides access to an on-screen keyboard for use when a hardware keyboard is not available.
- **View** – Allows the dispatcher to control whether or not the Activity Log, Auxiliary I/O and Inbound Event Display Windows are shown.
- **Features** – Provide access to various features of the dispatch console. Note that some of these features may also be available via buttons on the GUI if so configured. Also allows the System Status Window to be viewed, Tool Tips to be hidden and/or the Status Line to be cleared.



- **Folders** – Allows the dispatcher to switch between folders, add folders and delete folders. Changes made using this menu are not permanent and are lost when the dispatch application is exited.
- **Help** – Provides access to detailed online help for using the Elite Dispatch GUI and information about the Motorola MCC 7500 application software.

The user may customize which menus are displayed and what they contain via the Elite Admin application.

#### 2.2.1.1.2 Tool Bars

Up to two tool bars may be present across the top of the dispatch window and may be used to provide quick access to frequently used features. The following are examples of the items which may be placed in the tool bars:

- Clock
- General Transmit Button
- Monitor Button
- All Mute Button

There are many other items which may be placed in the tool bars. The Elite Admin application is used to define how many tool bars are displayed and what they contain.

#### 2.2.1.1.3 Status Bar

A status bar is provided across the bottom of the dispatch window for viewing the status of the dispatch console, as well as various error messages. The most current status or error message is displayed in the status bar until cleared by the dispatch console user. The dispatch console user may scroll through the last ten statuses and error messages to view them and may clear them by using the Features menu on the menu bar.

#### 2.2.1.1.4 Resource Folders

The Elite Dispatch GUI provides up to twenty resource folders for organizing the various resources (radio resources, auxiliary input/output resources, etc.) which are assigned to the dispatch console. These folders may be given descriptive names to simplify the organization of the resources.

The resources on a folder are displayed when the dispatch console user clicks on the folder tab. Resources on folders which are hidden behind the one being displayed continue to operate in a normal manner. Radio resource audio on a hidden folder appears in the appropriate speakers/headsets along with a visual call indication on the folder tab. If an emergency alarm or call is received on a radio resource which is located on a hidden folder, a visual emergency indication is displayed on the folder tab along with the normal emergency audible indication. If both emergencies and calls are being received on resources on a hidden folder, both icons will be displayed on the folder tab.

A resource may be placed on more than one folder at the same time. This allows OCSD to create folders for special situations without having to move resources back and forth between folders. A resource may be displayed in different ways (compressed or expanded) or in different widths or sizes on different folders.

The Elite Admin application is used to configure how many folders appear on the Elite Dispatch GUI and which resources appear on each folder. It is also used to put descriptive names on the folder tabs.

During dispatch operations the dispatch console user may, if so configured by the Elite Admin application, be able to add, remove or move resources on the folders. If this is done, these changes are not saved if the user logs out of or changes configuration files for the dispatch application.

## Radio Resources

Voice communication paths in the radio system are represented as radio resources – also referred to as tiles – on the Elite Dispatch GUI. These radio resources are used by the dispatch console user to communicate on and control the radio system.

The following radio resources are supported:

- Trunked Talkgroups
- Trunked Announcement Groups
- Trunked Private Calls
- Analog Conventional Channels
- ASTRO 25 Conventional Channels
- MDC 1200 Conventional Channels
- ACIM Link-based Console Channels

Radio resource tiles are highly configurable and can be customized to meet customer needs. The following aspects of a radio resource tile can be configured:

- Form factor (compressed, larger compressed or expanded)
- Width and Height
- Magnification (1×, 2×, or 3×)
- Background color
- Border color
- Which controls and indicators are displayed on the tile
- Location of controls and indicators on the tile
- Which icons are displayed on the controls and indicators

## Indicators and Controls

A radio resource contains indicators and controls that allow the dispatch console user to monitor and control various aspects of the radio channel. Examples of the indicators and controls which may appear on a radio resource include:

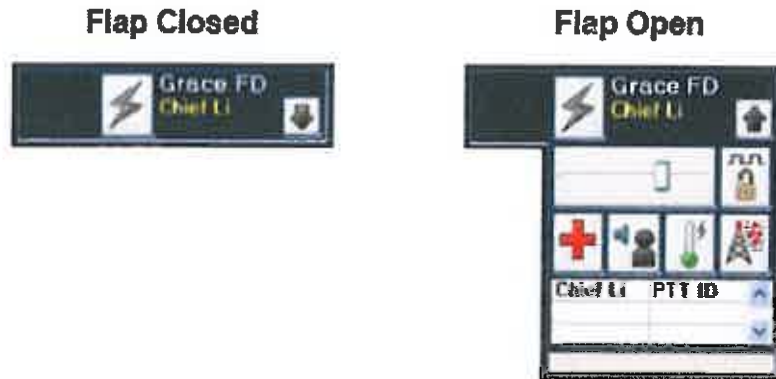
- Instant Transmit Button
- Transmit Active/Transmit Busy Indications
- Patch Active/Patch Busy Indications
- Received Call Indication
- Received Call Stack
- Individual Volume Control

The types of indicators and controls which appear on the radio resource depend on the type of radio channel it represents, and how it has been configured in the Elite Admin application. The radio resource may be configured to always show the indicators and controls or to allow the dispatch console user to hide them when not in user to save space on the screen. The icons used on the indicators and controls can be configured in the Elite Admin application to suite the customer's needs.

**Compressed Resource** – Allows the dispatcher to hide the indicators and controls (Figure 2-4). Notice the small arrow button which allows the resource to be opened and closed to show the controls and indicators. This saves a tremendous amount of space on the screen by allowing the dispatcher to

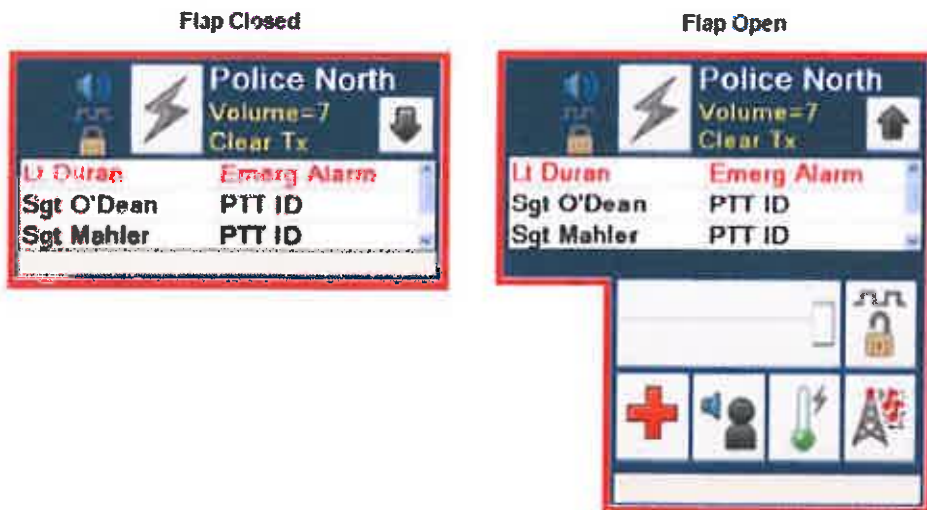


view only the most critical information for any given channel. This type of display is ideal for dispatchers monitoring several different channels where space in the resource folder is at a premium.



**Figure 2-4: Compressed Radio Resource.**

**Larger Compressed Resource** – Allows the dispatcher to always show some of the indicators and controls, and hide some of the others (Figure 2-5).



**Figure 2-5: Larger Compressed Radio Resource.**

**Expanded Resource** – Allows the dispatcher to always shows the indicators and controls (Figure 2-6) and cannot be compressed. Note there is no arrow button on the resource. The expanded version provides the advantage of a single-button press for any function. It is ideal for dispatchers who are only monitoring a few channels/talk groups and where space in the resource folder is not at a premium.





**Figure 2-6: Expanded Radio Resource.**

Full parallel status for radio resources is reflected across all the dispatch consoles which have these radio resources assigned on them regardless of how they are displayed (compressed, larger compressed or expanded). That is, any activity or change on a radio resource appears on all dispatch consoles which have that resource assigned to them.

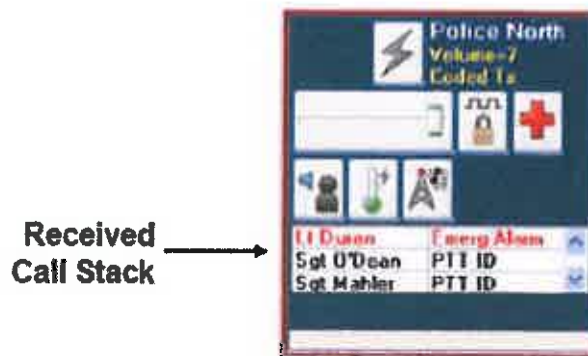
### Received Call Stack

The received call stack provides the dispatcher with a visual record of the most recent inbound calls on radio resources. This allows the dispatcher to keep track of calls during busy traffic periods.

Outbound calls on radio resources from dispatch consoles (both the dispatch console containing the received call stack or parallel dispatch consoles) are not shown in the received call stack.

The calls are displayed in list format on a radio resource, with the most recent calls at the top of the list. Unacknowledged emergency alarms are kept at the top of the stack until they are acknowledged. Once they are acknowledged, they will scroll down the stack as new entries come in.

The number of calls displayed in the list is configurable, as is the type of information displayed. The types of information that can be displayed are: unit ID, unit ID alias, site ID, zone ID, type of call and time. If an alias is available for a piece of information, it is displayed; otherwise the raw information is displayed. Figure 2-7 shows a radio resource containing a received call stack.



**Figure 2-7: Received Call Stack on a Radio Resource.**

The received call stack provides a quick way for a dispatch console user to respond to calls in the stack. A right mouse click on an entry in the stack will display a submenu of actions that can be taken, such as Send Call Alert or Acknowledge Emergency Alarm. A left mouse click on the right hand column of the stack will toggle the information displayed between the type of call, time of the call, zone ID and site ID. Hovering the cursor over an entry in the stack will pop up a small window with a summary of the information for that entry. The received call stack is configurable on a per-

resource per-console basis, so a resource on one dispatch console can have it while the same resource on another dispatch console does not have it.

The received call stack has a fixed memory of 25 calls, but the number of calls which are displayed is configurable via the Elite Admin application. The number displayed may be set anywhere from 3 to 24 calls in increments of 3. Regardless of how many calls are actually displayed, the dispatcher can always scroll through all 25 calls in the stack's memory.

Stack display size is configured on a per radio resource per dispatch console basis. That is, each resource on a dispatch console may have different sized stack displays and the same resource on different dispatch consoles may have different sized stack displays.

The dispatcher can delete individual calls from the received call stack. All of the calls listed in a received call stack can also be deleted with a single action.

### Three Line Display

The three line display can be placed on a radio resource to provide three lines in which information can be displayed. These lines are in addition to the two lines that come standard on the resource tile. Multiple instances of the three line display can be placed on a resource tile to provide even more lines if needed. They may be placed in different locations on the resource tile to meet the needs of different customers.

Each line can be individually configured to display one of the following.

- Blank
- Channel Marker
- Priority Select
- Site
- Status/Message
- Transmit Mode
- Unit ID
- Unit ID Alias
- Volume
- Zone
- Customer-defined fixed text

Figure 2-8 shows an example of a three line display.

Three Line Display →



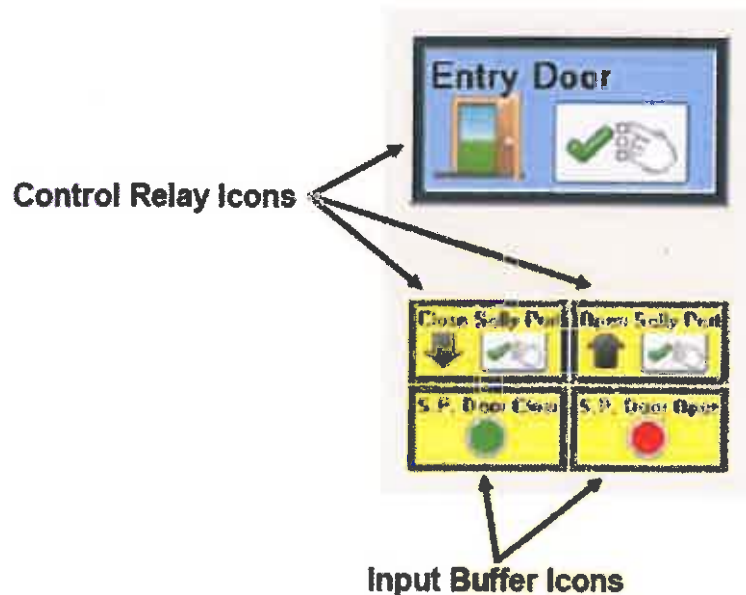
Figure 2-8: Three Line Display on a Radio Resource.

### 2.2.1.1.5 Auxiliary Input and Output Resources

Control relays and input buffers are represented as auxiliary input and output resources on the Elite Dispatch GUI. These auxiliary input and output resources are used by the dispatch console user to monitor the state of input buffers and monitor/control the state of control relays. Auxiliary inputs and outputs (Aux I/Os) allow OCSD to control external devices via relay closures and sense the state of external devices via input buffers from the MCC 7500 Dispatch Console.

The auxiliary input and output resources are represented by various graphical icons which change their appearance based on the state of the resource. The particular icon which is associated with an input or output is configured by the Elite Admin application. The background color of auxiliary input and output resources can also be configured in the Elite Admin application.

Examples of some of the icons and background colors which may be used are shown in Figure 2-9.



**Figure 2-9: Auxiliary Input/Output Resource Icons.**

Auxiliary input and output resources may be grouped together so that they can be moved or assigned/de-assigned as a group. This is useful for situations where the auxiliary input output resources are being used to interface to comparators or other devices which require multiple control relays or input buffers.

Full parallel status for auxiliary inputs and outputs is reflected across all the dispatch consoles which have the auxiliary inputs and output resources assigned on them. That is, if an auxiliary input or output changes state, the change of state is reflected on all the other dispatch consoles which have that auxiliary input or output assigned on them.

### 2.2.1.1.6 Patch and Multi-Select Folders

The patch and multi-select features are accessed via a set of dedicated folders on the Elite Dispatch GUI. These folders are smaller than the resource folders, and may be placed on the screen to suit the dispatcher's preferences. The placement is done in the Elite Admin application. There can be up to 16 patch folders and three multi-select folders.



## Patch Folders

Clicking on one of the patch folder tabs brings it into view. The patch group is then opened by clicking on the left-most button on the folder. Once the patch group is open, the patch group is editable and members may be added or removed from the patch group by clicking on the desired radio resources. Note that patch groups are active whenever there are members assigned to them. This is true even if the patch group is not open.

The members of the patch group are shown on the patch folder along with the status of each member (patched or pending). The resources in the patch also show an indication that they are in a patch group.

Some patch groups contain members which were pre-assigned by the Elite Admin application. These patch groups become active as soon as possible after the dispatch console begins using the configuration file which contains the pre-assigned patch groups. The dispatcher can add/remove members from the pre-assigned patch group, but these additions/removals are lost when the dispatch console either re-loads the configuration file or changes to a different configuration file.

A patch transmit button is provided on the patch folder to allow the dispatcher to easily transmit on all members of the patch group with a single button press. Figure 2-10 shows an example of a patch folder containing some radio resources.



Figure 2-10: Patch Folder.

## Multi-Select Folder

Clicking on one of the multi-select folder tabs brings it into view. The multi-select group is then opened by clicking on the left-most button on the folder. Once the multi-select group is open, the multi-select group becomes active, and members can be added or removed from the group by clicking on the desired radio resources. Closing the multi-select folder (by clicking on the left-most button a second time) deactivates the multi-select group.

**Note** This operation is different than that of the patch folders. A dispatch console can only have one multi-select group active at a time, but it can have multiple patch groups simultaneously active.

The members of the multi-select group are shown on the multi-select folder.

Some multi-select groups contain members which were pre-assigned by the Elite Admin application. The dispatcher can add/remove members from the pre-assigned multi-select group, but these additions/removals are lost when the dispatch console either re-loads the configuration file or changes to a different configuration file. Pre-assigned multi-select groups can also be configured via the Elite

Admin application to be “locked”. When configured this way, the dispatch console user cannot edit the multi-select group.

Figure 2-11 shows an example of a multi-select folder containing some radio resources.



Figure 2-11: Multi-Select Folder.

#### 2.2.1.1.7 Activity Log Window

The dispatcher can use the activity log window as a point of reference for all calls coming into the dispatch console. The activity log shows call information associated with all incoming radio calls such as the name of the radio resource and the time of the call. Incoming calls from all radio resources assigned to the dispatch console are displayed in the activity log.

Figure 2-12 shows an example of an activity log window.

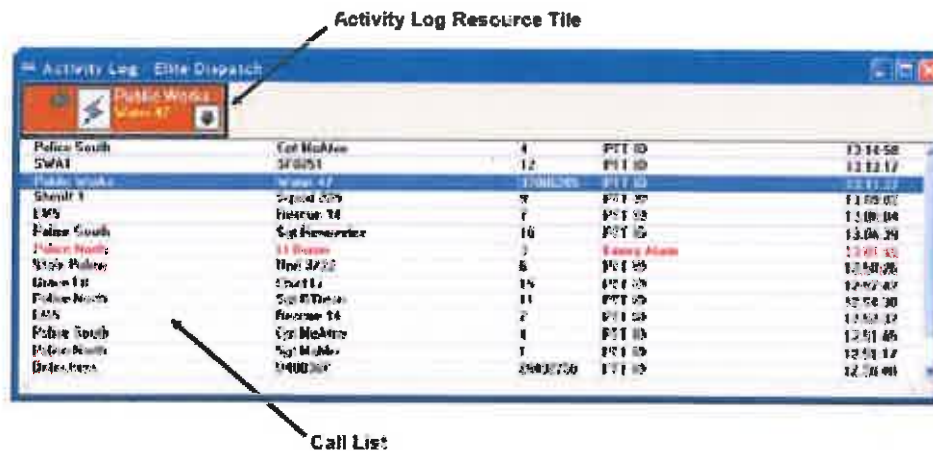


Figure 2-12: Activity Log Window.

Up to 1,000 calls can be held in the activity log. The most recent call is in top of the list and the oldest is at the bottom. Once the list is filled, the oldest calls are discarded as new calls come in. the dispatcher may resize the activity log to show various numbers of calls. For example, when there is light activity, the dispatcher may choose to only show a few calls. During busy hours, the dispatcher may view more calls by simply dragging the lower right hand corner of the activity log (making it longer) to see additional calls.



Dispatchers may respond to incoming calls simply by clicking on a call in the list. When this is done, the entry appears highlighted and the name of the radio resource appears at the top of the activity log. The dispatcher can then press the instant transmit button on the activity log resource tile to communicate with that radio resource.

The information displayed by the activity log can be customized to suit the dispatcher's needs. The activity log can be configured to show combinations of Resource Name, Unit ID or Alias, Status Number or Alias, Receiving Site ID, Receiving Zone ID and Time. This configuration is done via the Elite Admin application and, if so configured, via the dispatcher interface.

There are two levels of control over whether or not the activity log is displayed on a dispatch console. The first level is via the Elite Admin application which controls whether or not a dispatch console has the capability of displaying the activity log. The second level is via the dispatch console user interface where the dispatch console user can choose to view or not view the activity log. Note that if the dispatch console has not been given the capability of displaying the activity log, then the dispatch console user cannot see the activity log at all.

The number of lines that are initially displayed by the activity log is configurable via the Elite Admin application or the dispatcher interface. The number of lines that are displayed may also be changed in real time by changing the size of the activity log window using standard Microsoft Windows resizing techniques. The user can scroll through all the entries in the activity log, even if they cannot all be displayed at once.

The information listed in the activity log can be stored in a text file on the dispatch console's hard disk. The size of the text file can be specified to be between 1 and 20 MBytes. When the file fills up, new data overwrites old data beginning with the oldest data. All data associated with a call is logged to the file, regardless of what portion of the data is actually shown in the activity log window.

#### 2.2.1.1.8 Help

The dispatch console is designed to allow the dispatcher to quickly access information on how to use its features. This help is available right on the dispatch console graphical user interface. There are three types of help available to the dispatcher: Online, Micro and Tool Tips.

##### **Online Help**

Online Help provides detailed information on how to use the dispatch console. The user accesses Online Help via the Help menu on the menu bar. The user can search for topics or key words to quickly find the desired information or the user can use a table of contents to find the information. The information is displayed in a pop-up window on the dispatch user interface.

Online Help allows new dispatchers to shorten their learning curve and more experienced dispatchers to quickly remember how to operate seldom-used features.

##### **Micro Help**

Micro Help provides information about the state of controls or indicators in a resource tile. When the cursor is placed over a control or indicator on a resource tile, a description of the control or indicator's state is given across the bottom of the resource tile. Figure 2-13 shows micro help text on a radio resource. The text across the bottom of the resource describes the icon the cursor is pointing to.

The text displayed by the Micro Help feature may be edited via the Elite Admin application.

Micro Help allows a dispatcher to view the status of a control or indicator textually instead of graphically.

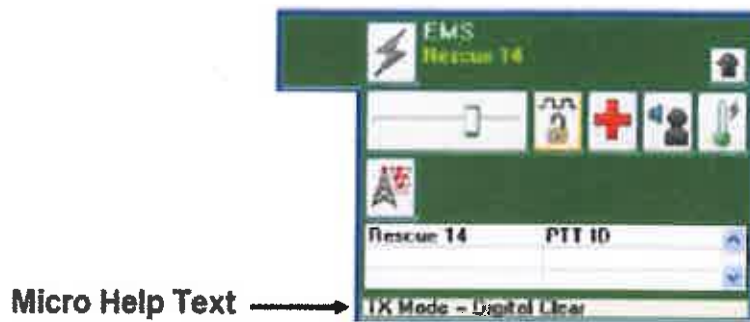


Figure 2-13: Micro Help on a Radio Resource.

### Tool Tips Help

Tool Tips Help provides information about tool bar buttons and menu bar menus to the dispatcher. When the cursor is placed over a tool bar button, the button's name appears in a small pop-up window next to the cursor, and a short explanation of the button appears in the status bar at the bottom of the dispatch user interface window. When the cursor is moved across a menu item in a menu, a description of the menu item appears in the status bar at the bottom of the dispatch user interface window.

The text displayed by the Tool Tips feature may be edited via the Elite Admin application.

Tool Tips allow a dispatcher to quickly see a short explanation of the button or menu item of interest.

### 2.2.1.2 Elite Admin Application

The Elite Dispatch GUI screens are configured using the Elite Admin application. This application is designed to be extremely flexible. It allows the administrator to make the screen look very simple with minimal icons and channels, or more sophisticated with many folders and channels.

The Elite Admin application allows supervisors to create screens that can be used by multiple dispatchers (accessed over the network) or even a customized screen per dispatcher. Each screen configuration may be password protected to ensure proper use and control. All of the screen configurations are stored on the server. Once the screens are downloaded to a particular dispatch position, the configuration is run independently from the server and LAN.

Through the Elite Admin application, the supervisor can perform functions, including:

- Create new configurations (for any dispatcher)
- Modify existing configurations
- Save configurations
- Determine how many toolbar(s) and where on the toolbar(s) they should go
- Determine the number of resource folders
- Determine the number of patch/multi-select folders
- Name the resource folders and patch/multi-select folders
- Determine the location of patch/multi-select folders
- Determine the height of patch/multi-select folders (e.g., taller if there are many members in the groups)
- Create pre-assigned patch/multi-select groups
- Determine if dispatchers have the ability to assign and deassign resources
- Determine if the activity log is shown initially and where on the screen it is shown (dispatchers may still hide or show the activity log)

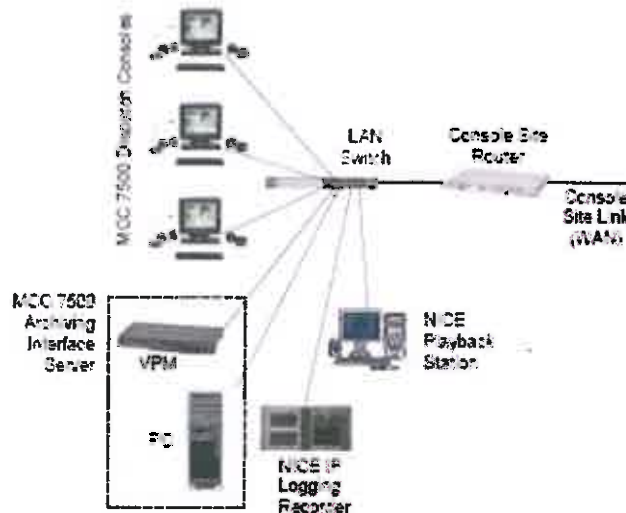


- Assign/deassign radio and auxiliary input/output resources to various folders
- Determine location of radio and auxiliary input/output resources in the folders (dispatchers may temporarily change the locations by dragging and dropping the resources)
- Determine where features are placed on each radio resource
- Modify the icons used for resource features
- Add a safety switch on radio resources
- Determine the size of each radio resource (compressed, larger compressed, or expanded)
- Determine border color for each radio resource
- Determine audio routing of resources to speakers
- Determine whether selected radio audio stays in a speaker or moves to a headset when headsets are used (this is done on a per-resource per-console basis)
- Set initial volume level of each radio resource
- Determine if auxiliary inputs and outputs appear in a separate window
- Determine icons used for auxiliary input and outputs
- Determine if auxiliary outputs are safety switch protected
- Determine border color for each auxiliary input and output
- Modify tool tips and micro help text

## 2.2.2 Logging Recorder Subsystem (Not included)

A typical logging recorder subsystem is composed of the following components:

- Radio Logging Recorder
- Telephony Logging Recorder
- One Archiving Interface Server (AIS) with VPM
- A Single Playback Application



**Figure 2-14: Motorola MCC 7500 VPM-based AIS Hardware Architecture.**

No logging recorder solution has been included in this proposal.



### 2.2.3 Auxiliary Inputs and Outputs (Not included)

Auxiliary inputs and outputs (Aux I/Os) allow customers to control external devices via relay closures and sense the state of external devices via inputs buffers from the dispatch console. No Aux I/O requirements have been identified. Therefore, the proposed design does not include Aux I/Os.

### 2.2.4 Conventional K Core

The ASTRO 25 K core is a scalable and virtualized core which provides an adaptable and affordable platform for mission critical wireless communications. The K core is targeted at small capacity conventional customers who require an ASTRO25 conventional only system. The K core allows customers to interface channels to an IP-based MCC 7500 Console, provides a migration path for customers with fielded Motorola Conventional solutions, and allows the flexibility for customers to join a larger system in the future while maximizing their equipment investment. The K core is available in a non-redundant configuration (K1) or redundant configuration (K2).

The proposed system includes a non-redundant K1 core with the following components:

- One (1) GCP 8000 Conventional Site Controller (CSC).
- One (1) GGM 8000 Site Gateway.
- Two (2) GGM 8000-based high-density Conventional Channel Gateways (CCGW). One of them will be installed in the GGM 8000 Site Gateway. The other one will be installed in a dedicated GGM 8000.
- One (1) LAN Switch.
- One (1) Configuration Manager Workstation.

#### 2.2.4.1 GCP 8000 Conventional Site Controller

The GCP 8000 Conventional Site Controller provides mission critical call processing and mobility management throughout the ASTRO 25 Conventional System. The GCP 8000 interfaces via the Ethernet LAN switch, and provides access to the packet switched network via the Site Gateway. The GCP 8000 is capable of supporting the full set of dispatch consoles, archiving interface servers, and conventional gateways. The GCP 8000 can only be located at the K1/K2 Core. The GCP 8000 is responsible for:

- Fault management for the GCP 8000
- Processing conventional call requests from the conventional gateway or from the console
- Assigning the multicast groups for conventional calls
- Issuing a call grant to the requestor
- Issuing a beginning of mobile transmission to the consoles (with alias information)
- Arbitration between multiple radios and/or consoles vying for the same channel
- Processing an end of call
- Acknowledge subscriber signaling calls (e.g., Emergency)
- Distributes subscriber signaling to affiliated consoles
- As well as other conventional voice call processing

The proposed system includes one (1) GCP 8000 conventional site controller.

#### 2.2.4.2 GGM 8000 Site Gateway

In a K core, the site gateway combines the functions of core and gateway routers. It handles LAN traffic within the core site and provides an interface between the core and the customer network via backhaul switch when applicable. The core gateway performs the routing control of audio, data, and



network management traffic in and out of the zone, replicating packets while achieving the fast access levels required by real-time voice systems.

The proposed system includes one (1) GGM 8000 site gateway.

#### 2.2.4.3 GGM 8000–based Conventional Channel Gateway

Conventional Channel Gateways (CCGWs) are used in the MCC 7500 Dispatch Console to connect the dispatchers to analog or digital conventional channels in their system. Beginning in the 7.9 system release, the default CCGW is a GGM 8000–based CCGW.

The enhanced GGM 8000–based CCGW can support combinations of analog, MDC 1200, ACIM Link, digital and mixed mode channels simultaneously. Low-density and high-density versions of the enhanced GGM 8000–based CCGW are available.

The low-density version contains four analog ports and four V.24 ports plus an Ethernet port. Up to eight conventional channels can be connected to the analog and V.24 ports. The eight channels can be mixtures of analog, MDC 1200, ACIM Link, digital or mixed mode. In addition to the eight channels connected to ports, up to 16 IP-based channels can be supported.

The high-density version contains eight analog ports and eight V.24 ports plus an Ethernet port. Up to 16 conventional channels can be connected to the analog and V.24 ports. The 16 channels can be mixtures of analog, MDC 1200, ACIM Link, digital or mixed mode. In addition to the 16 channels connected to ports, up to 16 IP-based channels can be supported.

Note that mixed mode channels must use a V.24 port for the digital portion, they cannot use IP.

The proposed system includes two (2) enhanced high-density GGM 8000–based CCGWs, to be co-located at the console site. One of the CCGW will be installed in the Site Gateway.

#### 2.2.4.4 LAN Switch

The LAN switch aggregates all the Ethernet interfaces for MCC 7500 dispatch positions, channel gateways, controller and site gateway.

#### 2.2.4.5 Configuration Manager

The Configuration Manager application runs on a tower workstation and will be installed in the backroom with the other core equipment. The design includes a shelf so that the Configuration Manager can sit on in the rack and a 1RU slide out monitor. There should be one and only one Configuration Manager that is connected and running continuously and can only be used from the core. The Configuration Manager application is used to configure the Console OP and the CCGW through the same LDAP interface used in the large “M” and “L” systems. A number of parameters have been preset to minimize the amount of configuration needed.

#### 2.2.4.6 System Expansion

The K1 Core can be expanded to a total of 50 conventional radio resources, 20 MCC 7500/7100 positions and/or 75 IP addresses. Expansion beyond can be supported via an upgrade to a larger Motorola core.

## 2.3 SUMMARY

Motorola's MCC 7500 Dispatch Console with standalone conventional K core offers Orange County many enhancements along with flexibility to allow their dispatchers the ability to do their job in the most efficient way possible. Every dispatch position can be configured to reflect the exact needs of those dispatchers, while being able to be changed and modified when needed.





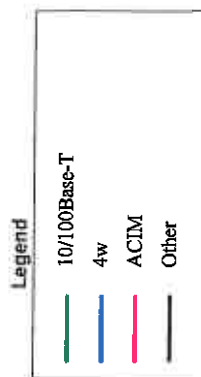
SECTION 3

# DIAGRAMS

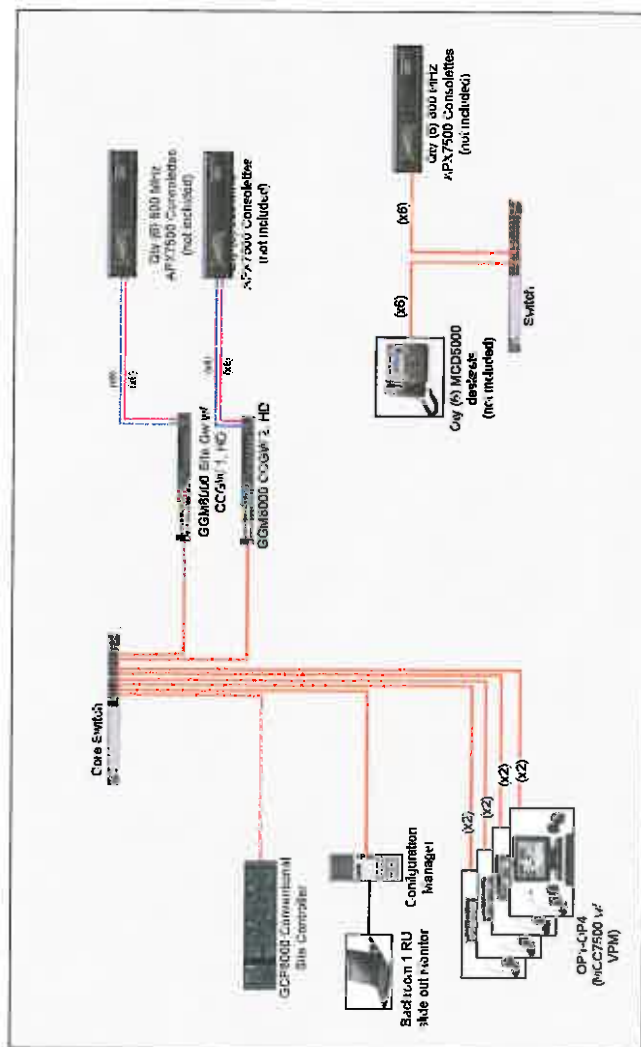
Motorola Solutions, Inc. has included system diagram(s) on the following page(s).



## Sheriff Coroner Communications Warehouse - System Diagram



## Trailer #2



SECTION 4

# PRELIMINARY ACCEPTANCE TEST PLAN

Testing of the proposed equipment is included. This includes the following:

- Test features and functionality are in accordance with manufacturers' specifications.
- Verify the operational functionality and features of the individual subsystems and the system supplied by Motorola, as contracted.

A detailed Acceptance Test Plan will be developed upon purchase and will be reviewed during the Project Kickoff/Design Review meeting.

This page intentionally left blank.



# SERVICE/WARRANTY

## 5.1 OVERVIEW

Motorola Solutions, Inc. (Motorola) has the most comprehensive service organization in the Land Mobile Industry. Since 1947, we have been building a unique service team, national in scope, but local in its ability to respond to our customers' diverse needs. As product and system complexity has evolved over the years, the Motorola Global Solutions and Service Division has responded by developing new service products and programs to match the evolution. This ensures we have the ability to provide service products to effectively maintain Orange County's system.

Motorola's standard warranty covers on-site response during normal business hours and provides for the repair or replacement of defective hardware components. In addition, we can provide a customized support package to meet Orange County's needs.

We have included the following additional services in your support plan for the first year. After the first year, these services may be purchased under a separate agreement.

## 5.2 ONSITE INFRASTRUCTURE RESPONSE/DISPATCH SERVICE

Motorola's OnSite Response service gives the advantage of an available network of expert support resources, located all across North America to provide on-site support when you need it. These Motorola-certified field technicians arrive at your door equipped and ready to do whatever it takes to get your system running at optimum capacity.

Using Motorola-approved test equipment, service procedures, and backed by our centralized technical resources, technicians from your local authorized service center are dispatched to your site to perform diagnostics, remove components for repair, and reinstall new or reconditioned components. When it is a response to a call for help, Motorola OnSite Response service guarantees technician dispatch, site arrival, and problem resolution—all within your contracted response times.

Motorola field technicians average 35–60 hours of technical training per year and 15–25 years of solution experience that aid in the quick and timely resolution of your service issues. Motorola on-site technicians are also backed by technical consultants and field engineering support across the county when the situation calls for a more specialized expertise. We recognize that your communication system is critical to your operation; our support strategy of local and centralized support is our promise that we will do whatever it takes to keep it working at peak efficiency.

Motorola's OnSite Response service is a vital component of an intelligent communication support plan that keeps your business running, your costs down, and helps you stay focused on your goals.

Our Dispatch Service is available 24 hours a day, 7 days a week. Dispatch service provides robust escalation process whereby predefined response times are monitored and escalated throughout Motorola Management to prevent delayed or dropped response times. Dispatch service combined with MOL allows Orange County to be actively involved with the service process.

## 5.3 TECHNICAL SUPPORT SERVICE

Motorola Technical Support Service ensures maximum preparedness with on-demand technical support, commitment to restoration, and whatever it takes to enable immediate communication via your wireless network. The skilled professionals and advanced systems at our System Support Center will keep your network running at peak performance, 24 hours a day, 7 days a week.

Technical Support provides:

- Expert technologists trained in troubleshooting to analyze, isolate, and correct problems to get your system issue(s) resolved quickly.
- Best-in-class Remote Diagnosis capabilities: advanced diagnostics and fully equipped test labs, if applicable, based on system type.
- Automated test systems to quickly diagnose boards.
- Shared knowledge database constantly updated for technologists to utilize to reduce cycle time.
- Immediate access to Network Designers and Engineers.
- Rigorous and defined case and escalation management process and procedures.
- Motorola technologists participate in ongoing training programs.
- Customer case performance reports available upon request.

## 5.4 INFRASTRUCTURE REPAIR AND/OR INFRASTRUCTURE REPAIR WITH ADVANCED REPLACEMENT

Motorola Infrastructure Repair and/or Infrastructure Repair with Advanced Replacement Service ensures maximum preparedness through the most effective repair processes so that potential service disruptions are minimized or alleviated. The skilled professionals and advanced systems at the Motorola Infrastructure Depot keep your network running at peak performance, 24 hours a day, 7 days a week. Infrastructure may be repaired down to the Component level at the Motorola Infrastructure Depot Operations (IDO). At Motorola's discretion, select third-party infrastructure may be sent to the original equipment manufacturer or third-party vendor for repair. If infrastructure is no longer supported by the original equipment manufacturer or third-party vendor, Motorola may replace the equipment with similar infrastructure.

Infrastructure Repair provides:

- Expert technicians utilizing state-of-the-art automated test equipment trained in troubleshooting to analyze, isolate, and correct problems to get your equipment repaired quickly.
- Rigorous and defined case and escalation management process and procedure.
- Infrastructure Repair with Advanced Replacement Service adds:
  - 24-hour advanced replacement exchange for the malfunctioning equipment.
  - Rental/Loaner equipment in cases where Orange County requires the exact serialized repaired equipment returned.



## 5.5 NETWORK PREVENTATIVE MAINTENANCE

Motorola's Network Preventative Maintenance is a program of regularly scheduled check-ups designed to ensure network readiness and overall reliability. This service will be performed annually in conjunction with a prearranged schedule. This service will be performed during normal working hours with the intent to minimize any disruption of service to users. If the service must be performed after hours, a quote will be provided. System documentation will be updated based on this information. The list of documented parameters will be determined by agreement with Orange County. All equipment provided as a part of the system will be included.

As wireless networks become increasingly complex, and are enabled to perform more sophisticated tasks, the scope of possible issues grows exponentially. With Network Preventative Maintenance, Motorola offers a proactive, anticipatory service that ensures all network components are operating consistent to manufacturers' specifications—the first step in minimizing premature repairs.

Certified field technicians, located throughout North America, are prepared to inspect networks on a routine and prescribed basis. This service is likely the most cost-effective form of network maintenance—the technological equivalent of routine physical examinations.

Using Motorola's best-in-class test equipment, technicians examine hands-on and, if operational testing dictates, align infrastructure to manufacturer's specifications. Equally important, on-site field technicians are supported by Motorola's centralized technical resources and engineering expertise.

This page intentionally left blank.





# EQUIPMENT LIST

This section lists the equipment necessary for the proposed solution.

## 6.1 MAIN OFFERING EQUIPMENT LIST

QTY	MODEL NUMBER	DESCRIPTION
<b>CORE AND CHANNEL GATEWAYS</b>		
1	SQM01SUM0237	SINGLE ZONE CONV NON-RED CORE -K1
1	CA02086AA	ADD: HIGH DENSITY ENH CONV GATEWAY
1	CA01663AB	ADD: 7 ft RACK
1	SQM01SUM0205	GGM 8000 GATEWAY
1	CA01616AA	ADD: AC POWER
1	CA02086AA	ADD: HIGH DENSITY ENH CONV GATEWAY
<b>CONFIGURATION MANAGER WITH 1RU SLIDE OUT MONITOR</b>		
1	TT2538	Z420 LOW TIER WORKSTATION WINDOWS 7 64BIT
1	T7449	WINDOWS SUPPLEMENTAL TRANS CONFIG
1	T7885	MCAFFEE WINDOWS AV CLIENT
1	DSF1DC116H	LCD RACK CONSOLE, 16-PORT PRO3 KVM SWITCH
1	DSF1D940106	BELKIN OMNIVIEW ENTERPRISE SERIES - USB KVM CABLE
1	DSRM116	HEAVY-DUTY SHELVES, VENTED
<b>DISPATCH EQUIPMENT</b>		
1	B1905	MCC 7500 ASTRO 25 SOFTWARE
4	B1933	MOTOROLA VOICE PROCESSOR MODULE
4	CA01642AA	ADD: MCC 7500 BASIC CONSOLE FUNCTIONALITY SOFTWARE LICENSE
4	CA01644AA	ADD: MCC 7500 /MCC 7100 ADV CONVL OPERATION
4	CA00140AA	ADD: AC LINE CORD, NORTH AMERICAN
4	DSE686772	ELO 1928L 19IN LCD TOUCH MONITOR, DUAL SERIAL USB CONTROLLER, GRAY
4	TT2538	Z420 LOW TIER WORKSTATION WINDOWS 7 64BIT
4	T7449	WINDOWS SUPPLEMENTAL TRANS CONFIG
8	B1912	MCC SERIES DESKTOP SPEAKER
4	B1914	MCC SERIES DESKTOP GOOSENECK MICROPHONE
8	B1913	MCC SERIES HEADSET JACK
8	RLN6098	HDST MODULE BASE W/PTT, 15' CBL
8	RMN5078B	SUPRAPLUS NC SINGLE MUFF HEADSET
4	DSTWIN6328A	PROVIDES ONE DUAL PEDAL FOOTSWITCH FOR USE WITH MOTOROLA MCC 7500 DISP

QTY	MODEL NUMBER	DESCRIPTION
4	T7885	MCAFFEE WINDOWS AV CLIENT
4	DDN1245	DUAL IRR SW USB HASP WITH LICENSE (VERSION 45)
4	DDN1118	PCI EXPRESS SOUND BLASTER X-FI XTREME AUDIO
4	CDN6673	CREATIVE LABS INSPIRE A60
<b>MCD5000 MISC (DESKSETS NOT INCLUDED)</b>		
6	FKN8695	ETHERNET CABLE 10' WITH RED & BLACK LABELS
2	CLN1856	2620-24 ETHERNET SWITCH
2	FVN5847	MCD 5000 DESKSET SYSTEM CONFIG TOOL - SYSTEM W/OUT OMC
<b>CONSOLETES RACKMOUNT KITS (CONSOLETES NOT INCLUDED)</b>		
18	HKN6233C	APX CONSOLETTES RACK MOUNT KIT
<b>PROGRAMMING CABLE FOR APX7500</b>		
1	HKN6184C	CABLE CH, PROGRAMMING, USB
<b>UPS FOR THE CORE (RACKMOUNT)</b>		
1	DS9130R1350N005	UPS, 9130 RACKMT, 1.5KVA/1.35KW, 5 MIN RUNTIME
<b>UPS FOR THE DISPATCH POSITIONS (TOWER)</b>		
4	DS9130T1350N005	UPS, 9130 TOWER, 1.5KVA/1.35KW, 5 MIN RUNTIME
<b>UPS FOR CONSOLETES (RACKMOUNT)</b>		
3	DS9130R2700N003	UPS, 9130 RACKMT, 3000VA/2700W, 3 MINS RUNTIME
<b>UPS FOR DESKSETS (TOWER)</b>		
6	DSGXTT0450N014	UPS, GXT3 TWR 500VA/450W, 14 MIN RUNTIME
<b>SPARES (CENTRALIZED)</b>		
1	B1912	MCC SERIES DESKTOP SPEAKER
1	B1914	MCC SERIES DESKTOP GOOSENECK MICROPHONE
1	B1913	MCC SERIES HEADSET JACK
1	TT2538	Z420 LOW TIER WORKSTATION WINDOWS 7 64BIT
1	B1934	MCC 7500 VOICE PROCESSOR MODULE FRU
1	CLN1856	2620-24 ETHERNET SWITCH
1	01009513002	PWR SPLY 108W AC INP 12VDC OUT W18
1	3082933N08	GR500 AC POWER CORD
1	30009351001	DC CABLE ASSY
1	SQM01SUM0205	GGM 8000 GATEWAY
1	CA01616AA	ADD: AC POWER
1	CA02086AA	ADD: HIGH DENSITY ENH CONV GATEWAY
1	DLN6569	FRU: GCP 8000/GCM 8000
1	DLN6898	FRU: FAN MODULE
1	DLN6781	FRU POWER SUPPLY



QTY	MODEL NUMBER	DESCRIPTION
<b>MCD500 SPARES (NOT INCLUDED)</b>		
1	RMN5078B	SUPRAPLUS NC SINGLE MUFF HEADSET
1	RLN6098	HDST MODULE BASE W/PTT, 15' CBL

This page intentionally left blank.



# PRICING

Motorola Solutions, Inc. is pleased to provide the following equipment and services to Orange County:

## 7.1 MCC 7500 CONSOLES, K CORE, AND SERVICES PRICING

Equipment and Services Description	Price
Four (4) MCC 7500 Consoles and K Core Equipment Total	\$267,809.50
<b>Equipment Discount</b> (Pricing per Orange County Price Book Agreement # MA-060-10012594.)	<b>-\$36,221.26</b>
Equipment Subtotal with Orange County Price Book Discount	\$231,588.24
System Integration and Installation Services	\$118,650.00
<b>System Sub-Total with Equipment and Services</b>	<b>\$350,238.24</b>
Estimated Tax (Based on 8% of equipment after discount)	\$18,527.06
Shipping	\$400.00
<b>System Total with Tax and Freight</b> (Purchased after November 29, 2013)	<b>\$369,165.30</b>

## 7.2 PAYMENT SCHEDULE

Except for a payment that is due on the Effective Date, Customer will make payments to Motorola within twenty (30) days after the date of each invoice. Customer will make payments when due in the form of a check, cashier's check, or wire transfer drawn on a U.S. financial institution and in accordance with the following milestones.

- A. 25% of the Contract Price due upon contract execution.
- B. 60% of the Contract Price due upon shipment of equipment.
- C. 5% of the Contract Price due upon installation of equipment.
- D. 5% of the Contract Price due upon system acceptance or start of beneficial use.
- E. 5% of the Contract Price due upon Final Acceptance.

Motorola reserves the right to make partial shipments of equipment and to request payment upon shipment of such equipment. In addition, Motorola reserves the right to invoice for installations or civil work completed on a site-by-site basis, when applicable.



This page intentionally left blank.



# CONTRACTUAL DOCUMENTATION

## Contract for Orange County (SAMANTHA TRAILERS PROJECT)

Motorola Solutions, Inc., formerly Motorola, Inc. ("Motorola") and the County of Orange, a political subdivision of the State of California ("County"), hereby desire and intend to enter into this contract (the "Agreement") whereby Motorola sells and the County purchases the products and services described more fully in that Motorola Proposal dated October 23, 2013, with a cover letter dated October 18, 2013 (the "Motorola Proposal"), which is incorporated herein by this reference.

The Parties agree as follows:

1. The Contract Price (exclusive of applicable sales or use taxes which will be added and paid by the County but inclusive of freight charges) for the System is \$369,165.30 as set forth in Section 7 of the Motorola Proposal. The term "System" means the Equipment, Software, and incidental hardware and materials that are combined together into an integrated system as described in the Motorola Proposal.
2. The terms and conditions (including the definition in Section 2) of that certain contract known as the Orange County Price Book dated May 21, 2010, Contract #MA-060-10012594 ("Price Book") are incorporated herein by this reference and are applicable to this transaction except as otherwise specifically stated below. This Agreement does not generally modify the Price Book terms and conditions, and they remain in full force and effect. The above pricing for the Equipment is based upon Price Book pricing, although additional discounts may be offered.
3. Section 3.3.3 of the Price Book suggests that the Parties may use that contract for purchase and sale transactions including services. However, Section 7 of the Price Book, Terms and Conditions, particularly the recitals and paragraphs 3.1 and 3.5, suggests that the Parties may not use the Price Book for purchase and sale of services transactions. To resolve that ambiguity for this transaction, the Parties agree that the terms and conditions of the Price Book apply to this transaction (including equipment, software, and related services) except as otherwise specifically stated below. In addition, this Agreement may add provisions not included in the Price Book to address service related or other issues.
4. The Parties will perform their respective work responsibilities in accordance with the Statement of Work and the Performance Schedule. (See the Motorola Proposal.) By executing this Agreement, the County authorizes Motorola to proceed with contract performance. Unless terminated in accordance with other provisions of this Agreement or extended by mutual agreement of the Parties, the term of this Agreement begins on the Effective Date and continues until the date of expiration of the Warranty Period.
5. Consistent with Section 3.3 of the Price Book, either Party may request changes within the general scope of this Agreement and neither Party is obligated to perform requested changes unless both Parties execute a written change order.
6. The County will provide a designated project manager; all necessary construction and building permits, zoning variances, licenses, and any other approvals that are necessary to develop or use the sites and mounting locations; and access to the work sites or vehicles identified in the Statement of Work as reasonably requested by Motorola so that it may perform its duties in accordance with the Performance Schedule and Statement of Work. Further, the County will ensure that all work sites it provides will be safe, secure, and in compliance with all



applicable industry and OSHA standards. To the extent applicable and unless the Statement of Work states to the contrary, the County will ensure that these work sites have adequate: physical space; air conditioning and other environmental conditions; adequate and appropriate electrical power outlets, distribution, equipment and connections; and adequate telephone or other communication lines (including modem access and adequate interfacing networking capabilities), all for the installation, use and maintenance of the System. Before installing the Equipment or Software at a work site, Motorola may inspect the work site and advise the County of any apparent deficiencies or non-conformities with the requirements of this Section. This Agreement is predicated upon normal soil conditions as defined by the version of E.I.A. standard RS-222 in effect on the Effective Date. If a Party determines that the sites identified in the Statement of Work are no longer available or desired, or if subsurface, structural, adverse environmental or latent conditions at any site differ from those indicated in the Statement of Work, the Parties will promptly investigate the conditions and will select replacement sites or adjust the installation plans and specifications as necessary. If change in sites or adjustment to the installation plans and specifications causes a change in the cost or time to perform, the Parties will equitably amend the Contract Price, Performance Schedule, or both, by a change order.

7. Because this transaction is for a System and not just Equipment, the Acceptance provisions of Section 6 of the Price Book do not apply. Rather, System Acceptance will occur when the Acceptance Tests have been successfully completed. The term "Acceptance Tests" means those tests described in the Acceptance Test Plan set forth in the Motorola Proposal. Motorola will provide to the County at least ten (10) days notice before the Acceptance Tests commence. System testing will occur only in accordance with the Acceptance Test Plan. Upon System Acceptance, the Parties will memorialize this event by promptly executing a System Acceptance Certificate. If the Acceptance Test Plan includes separate tests for individual Subsystems or phases of the System, acceptance of the individual Subsystem or phase will occur upon the successful completion of the Acceptance Tests for the Subsystem or phase; and the Parties will promptly execute an acceptance certificate for the Subsystem or phase. If the County believes the System has failed the completed Acceptance Tests, the County will provide to Motorola a written notice that includes the specific details of the failure. If the County does not provide to Motorola a failure notice within thirty (30) days after completion of the Acceptance Tests, System Acceptance will be deemed to have occurred as of the completion of the Acceptance Tests. Minor omissions or variances in the System that do not materially impair the operation of the System will not postpone System Acceptance or Subsystem Acceptance, but will be corrected according to a mutually agreed punch list schedule.

8. Motorola's ability to perform its implementation and testing responsibilities may be impeded if the County begins using the System before System Acceptance. Therefore, the County will not commence Beneficial Use before System Acceptance without Motorola's prior written authorization, which will not be unreasonably withheld. The term "Beneficial Use" means when the County first uses the System or a Subsystem or phase for operational purposes (excluding training or testing). Motorola is not responsible for System performance deficiencies that occur during unauthorized Beneficial Use. Upon commencement of Beneficial Use, the County assumes responsibility for the use and operation of the System.

9. Final Project Acceptance will occur after System Acceptance when all deliverables and other work have been completed. When Final Project Acceptance occurs, the Parties will promptly memorialize this final event by means of a Final Project Acceptance Certificate.

10. During the Warranty Period, in addition to warranty services, Motorola will provide maintenance services for the Equipment and support for the Motorola Software pursuant to the maintenance and support statement of work set forth in the Motorola Proposal.) Those services and support are included in the Contract Price. Unless otherwise agreed by the Parties in writing, the terms and conditions applicable to the maintenance, support or software services will be Motorola's standard Service Terms and Conditions, which are incorporated herein by this reference and a copy of which will be provided to the County upon request. If the County wishes to purchase additional maintenance and support services during the Warranty Period, or any maintenance and support services after the Warranty Period, the description of and pricing for the services will be set forth in a separate document. Notwithstanding Sections 7.1 and 7.2 of the Price Book, the term "Warranty Period" for this transaction means one (1) year from the date of System Acceptance or Beneficial Use, whichever occurs first.

11. Motorola will submit invoices to the County according to the Payment Schedule set forth in the Motorola Proposal.) Consistent with Section 4.1 of the Price Book, the County will make payments to Motorola within thirty (30) days after the date of each invoice in the form of a wire transfer, check, or cashier's check from a U.S.



financial institution. For reference, the Federal Tax Identification Number for Motorola Solutions, Inc. is 36-1115800.

12. Consistent with Section 4.2 of the Price Book, title to the Equipment will pass to the County upon shipment; title to Software will not pass to the County at any time but is licensed in accordance with the applicable Software License Agreement (see Sections 3.6 and 3.7 of the Price Book); risk of loss will pass to the County upon delivery of the Equipment to the County; and Motorola will pack and ship all Equipment in accordance with good commercial practices.

13. Motorola represents that the System will perform in accordance with the specifications as described in the Motorola Proposal and published product documentation in all material respects. Upon System Acceptance or Beneficial Use, whichever occurs first, this System functionality representation is fulfilled. Motorola is not responsible for System performance deficiencies that are caused by ancillary equipment not furnished by Motorola which is attached to or used in connection with the System or for reasons or parties beyond Motorola's control, such as natural causes; the construction of a building that adversely affects the microwave path reliability or radio frequency (RF) coverage; the addition of frequencies at System sites that cause RF interference or intermodulation; or the County changes the load usage or configuration outside the specifications.

Notwithstanding Section 7.1 of the Price Book, during the Warranty Period, Motorola warrants that the Equipment under normal use and service will be free from material defects in materials and workmanship. If System Acceptance is delayed beyond six (6) months after shipment of the Equipment by events or causes within the County's control, this warranty expires eighteen (18) months after the shipment of the Equipment.

Notwithstanding Section 7.1 of the Price Book, during the Warranty Period, Motorola warrants the Motorola Software in accordance with the terms of the Software License Agreement and the provisions of this Section 13 that are applicable to the Motorola Software. If System Acceptance is delayed beyond six (6) months after shipment of the Motorola Software by events or causes within the County's control, this warranty expires eighteen (18) months after the shipment of the Motorola Software.

Motorola warrants that the services will be performed in a good and workmanlike manner for 90 days from the date of performance. The County's sole remedy for defective services is for Motorola to re-perform them correctly.

Sections 7.3 (warranty exclusions), 7.4 (warranty claims), 7.7 (end user), and 7.9 (warranty disclaimers) of the Price Book apply to this transaction,

14. Consistent with Section 9 of the Price Book, neither Party will be liable for its non-performance or delayed performance if caused by a Force Majeure. A Party that becomes aware of a Force Majeure that will significantly delay performance will notify the other Party promptly (but in no event later than fifteen days) after it discovers the Force Majeure. If a Force Majeure occurs, the Parties will execute a change order to extend the Performance Schedule for a time period that is reasonable under the circumstances. The term "Force Majeure" means an event, circumstance, or act of a third party that is beyond a Party's reasonable control (e.g., an act of God, an act of the public enemy, an act of a government entity, strikes or other labor disturbances, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war, and riots).

If the County (including its other contractors) delays the Performance Schedule, it will make the promised payments according to the Payment Schedule as if no delay occurred; and the Parties will execute a change order to extend the Performance Schedule and, if requested, compensate Motorola for all reasonable charges incurred because of the delay. Delay charges may include costs incurred by Motorola or its subcontractors for additional freight, warehousing and handling of Equipment; extension of the warranties; travel; suspending and re-mobilizing the work; additional engineering, project management, and standby time calculated at then current rates; and preparing and implementing an alternative implementation plan.

15. During the term of this Agreement, the Parties may provide each other with Confidential Information. The term "Confidential Information" means any information that is disclosed in written, graphic, verbal, or machine-recognizable form, and is marked, designated, or identified at the time of disclosure as being confidential or its equivalent; or if the information is in verbal form, it is identified as confidential at the time of disclosure and is confirmed in writing within thirty (30) days of the disclosure. Confidential Information does not include any

information that: is or becomes publicly known through no wrongful act of the receiving Party; is already known to the receiving Party without restriction when it is disclosed; is or becomes, rightfully and without breach of this Agreement, in the receiving Party's possession without any obligation restricting disclosure; is independently developed by the receiving Party without breach of this Agreement; or is explicitly approved for release by written authorization of the disclosing Party. Subject to the requirements of any applicable public records law, each Party will: maintain the confidentiality of the other Party's Confidential Information and not disclose it to any third party, except as authorized by the disclosing Party in writing or as required by a court of competent jurisdiction; restrict disclosure of the Confidential Information to its employees who have a "need to know" and not copy or reproduce the Confidential Information; take necessary and appropriate precautions to guard the confidentiality of the Confidential Information, including informing its employees who handle the Confidential Information that it is confidential and is not to be disclosed to others, but these precautions will be at least the same degree of care that the receiving Party applies to its own confidential information and will not be less than reasonable care; and use the Confidential Information only in furtherance of the performance of this Agreement. Confidential Information is and will at all times remain the property of the disclosing Party, and no grant of any proprietary rights in the Confidential Information is given or intended, including any express or implied license, other than the limited right of the recipient to use the Confidential Information in the manner and to the extent permitted by this Agreement.

16. Sections 13.1 and 13.2 of the Price Book apply to this transaction to protect the Proprietary Rights of Motorola, the third party manufacturer of any Equipment, and the copyright owner of any Non-Motorola Software.

17. Sections 3.6 and 3.7 of the Price Book (concerning software licensing) apply to this transaction. For convenience of the parties and to bring the Software License Agreement to Motorola's current standard version, the Software License Agreement attached to this Agreement as Exhibit A applies rather than the 1998 version.

18. If the County issues a purchase order ("Purchase Order"), it will do so concurrently with or promptly after execution of this contract. Any additional or conflicting terms and conditions in the Purchase Order will have no effect.

19. The Price Book Sections 10, disputes; 11, infringement indemnity; 12, limitation of liability, and 14.1 through 14.10 inclusive, the general provision, apply to this transaction. Notwithstanding the preceding sentence, the direct damage limitation of liability found in the first sentence of Section 12 of the Price Book shall be \$500,000 for this specific transaction.

20. Insurance Provisions: Prior to the provision of services under this Agreement, Motorola agrees to purchase all required insurance at its expense and to deposit with the County a Certificate of Insurance, including all endorsements required herein, necessary to satisfy the County that the insurance provisions of this contract have been complied with and to keep such insurance coverage and the certificate therefore on deposit with the County during the entire term of this Agreement. In addition, all subcontractors performing work on behalf of Motorola pursuant to this Agreement shall obtain insurance subject to similar terms and conditions as set forth herein for Motorola as determined by the Motorola Insurance Department, excluding Professional Liability which does not apply to subcontractors.

Motorola is responsible for all self-insured retentions (SIRs) and deductibles. Motorola declares that its deductibles are in an amount in excess of \$25,000. If Motorola fails to maintain the agreed insurance for the full term of this contract, the County may terminate this contract in accordance with the default and termination provisions.

Qualified Insurer: Minimum insurance company ratings as determined by the most current edition of the Best's Key Rating Guide/Property-Casualty/United States or [ambest.com](http://ambest.com) shall be A- (Secure A.M. Best's Rating) and VIII (Financial Size Category).

The policy or policies of insurance must be issued by an insurer licensed to do business in the state of California (California Admitted Carrier). If the carrier is a non-admitted carrier in the state of California and does not meet or exceed an A.M. Best rating of A-/VIII, CEO/Office of Risk Management retains the right to approve or reject carrier after a review of the company's performance and financial ratings. If the non-admitted carrier meets or exceeds the minimum A.M. Best rating of A-/VIII, the agency can accept the insurance.



The policy or policies of insurance maintained by the Contractor shall provide the minimum limits and coverage as set forth below:

Coverage	Minimum Limits
Commercial General Liability	\$1,000,000 per occurrence 2,000,000 aggregate
Automobile Liability including coverage for owned, non-owned and hired vehicles	\$1,000,000 per occurrence
Workers' Compensation	Statutory
Employers' Liability Insurance	\$1,000,000 per occurrence
Professional Liability Insurance	\$1,000,000 per claims made or per occurrence

**Required Coverage Forms:** The Commercial General Liability coverage shall be written on Insurance Services Office (ISO) form CG 00 01, or a substitute form providing liability coverage at least as broad.

The Business Auto Liability coverage shall be written on ISO form CA 00 01, CA 00 05, CA 0012, CA 00 20, or a substitute form providing coverage at least as broad.

**Required Endorsements:** Concerning the Commercial General Liability policy, Motorola shall provide a blanket additional insured endorsement using ISO form CG 2010 or CG 2033 or a form at least as broad naming the County of Orange, its elected and appointed officials, officers, and employees as Additional Insureds. The CGL shall be primary and any insurance or self-insurance maintained by the County of Orange shall be excess. Concerning the Workers Compensation policy required by this Agreement, Motorola shall provide a waiver of subrogation endorsement, waiving all rights of subrogation against the County of Orange, and members of the Board of Supervisors, its elected and appointed officials, officers, and employees.

Motorola shall give the County of Orange 30 days notice in the event of cancellation and 10 days for non-payment of premium. If Motorola's Professional Liability policy is a "claims made" policy, it shall agree to maintain professional liability coverage for two years following completion of contract.

The Commercial General Liability policy shall contain a severability of interests clause, also known as a "separation of insureds" clause (standard in the ISO CG 0001 policy). Insurance certificates should be forwarded to the agency/department address listed on the solicitation.

The procuring of such required policy or policies of insurance shall not be construed to limit Contractor's liability hereunder nor to fulfill the indemnification provisions and requirements of this Contract, nor act in any way to reduce the policy coverage and limits available from the insurer.

This Agreement is executed by the parties as of \_\_\_\_\_, 201\_\_.

**Motorola Solutions, Inc.**

By: \_\_\_\_\_

Name: Mark Schmidt

Title: MSSSI Vice President

*Approved*  
**MARK W. ANTHONY**  
*MWA*

**County of Orange,  
a political subdivision of the State of California**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**APPROVED AS TO FORM  
OFFICE OF THE COUNTY COUNSEL  
ORANGE COUNTY, CALIFORNIA**

By: *[Signature]*  
Date: 12/24/2013

Orange County  
MCC 7500 Console System

October 23, 2013

Use or disclosure of this proposal is subject to the restrictions on the cover page.



Motorola Solutions Confidential Restricted



## Exhibit A

### SOFTWARE LICENSE AGREEMENT

This Exhibit A Software License Agreement ("Agreement") is between Motorola Solutions, Inc., ("Motorola"), and the County of Orange, a political subdivision of the State of California ("Licensee").

For good and valuable consideration, the parties agree as follows:

#### Section 1 DEFINITIONS

1.1 "Designated Products" means products provided by Motorola to Licensee with which or for which the Software and Documentation is licensed for use.

1.2 "Documentation" means product and software documentation that specifies technical and performance features and capabilities, and the user, operation and training manuals for the Software (including all physical or electronic media upon which such information is provided).

1.3 "Open Source Software" means software with either freely obtainable source code, license for modification, or permission for free distribution.

1.4 "Open Source Software License" means the terms or conditions under which the Open Source Software is licensed.

1.5 "Primary Agreement" means the agreement to which this exhibit is attached.

1.6 "Security Vulnerability" means a flaw or weakness in system security procedures, design, implementation, or internal controls that could be exercised (accidentally triggered or intentionally exploited) and result in a security breach such that data is compromised, manipulated or stolen or the system damaged.

1.7 "Software" (i) means proprietary software in object code format, and adaptations, translations, de-compilations, disassemblies, emulations, or derivative works of such software; (ii) means any modifications, enhancements, new versions and new releases of the software provided by Motorola; and (iii) may contain one or more items of software owned by a third party supplier. The term "Software" does not include any third party software provided under separate license or third party software not licensable under the terms of this Agreement.

#### Section 2 SCOPE

Motorola and Licensee enter into this Agreement in connection with Motorola's delivery of certain proprietary Software or products containing embedded or pre-loaded proprietary Software, or both. This Agreement contains the terms and conditions of the license Motorola is providing to Licensee, and Licensee's use of the Software and Documentation.

#### Section 3 GRANT OF LICENSE

3.1. Subject to the provisions of this Agreement and the payment of applicable license fees, Motorola grants to Licensee a personal, limited, non-transferable (except as permitted in Section 7) and non-exclusive license under Motorola's copyrights and Confidential Information (as defined in the Primary Agreement) embodied in the Software to use the Software, in object code form, and the Documentation solely in connection with Licensee's use of the Designated Products. This Agreement does not grant any rights to source code.

3.2. If the Software licensed under this Agreement contains or is derived from Open Source Software, the terms and conditions governing the use of such Open Source Software are in the Open Source Software Licenses of the copyright owner and not this Agreement. If there is a conflict between the terms and conditions of this Agreement and the terms and conditions of the Open Source Software Licenses governing Licensee's use of the Open Source Software, the terms and conditions of the license grant of the applicable Open Source Software



Licenses will take precedence over the license grants in this Agreement. If requested by Licensee, Motorola will use commercially reasonable efforts to: (i) determine whether any Open Source Software is provided under this Agreement; (ii) identify the Open Source Software and provide Licensee a copy of the applicable Open Source Software License (or specify where that license may be found); and, (iii) provide Licensee a copy of the Open Source Software source code, without charge, if it is publicly available (although distribution fees may be applicable).

#### **Section 4      LIMITATIONS ON USE**

4.1. Licensee may use the Software only for Licensee's internal business purposes and only in accordance with the Documentation. Any other use of the Software is strictly prohibited. Without limiting the general nature of these restrictions, Licensee will not make the Software available for use by third parties on a "time sharing," "application service provider," or "service bureau" basis or for any other similar commercial rental or sharing arrangement.

4.2. Licensee will not, and will not allow or enable any third party to: (i) reverse engineer, disassemble, peel components, decompile, reprogram or otherwise reduce the Software or any portion to a human perceptible form or otherwise attempt to recreate the source code; (ii) modify, adapt, create derivative works of, or merge the Software; (iii) copy, reproduce, distribute, lend, or lease the Software or Documentation to any third party, grant any sublicense or other rights in the Software or Documentation to any third party, or take any action that would cause the Software or Documentation to be placed in the public domain; (iv) remove, or in any way alter or obscure, any copyright notice or other notice of Motorola's proprietary rights; (v) provide, copy, transmit, disclose, divulge or make the Software or Documentation available to, or permit the use of the Software by any third party or on any machine except as expressly authorized by this Agreement; or (vi) use, or permit the use of, the Software in a manner that would result in the production of a copy of the Software solely by activating a machine containing the Software. Licensee may make one copy of Software to be used solely for archival, back-up, or disaster recovery purposes; provided that Licensee may not operate that copy of the Software at the same time as the original Software is being operated. Licensee may make as many copies of the Documentation as it may reasonably require for the internal use of the Software.

4.3. Unless otherwise authorized by Motorola in writing, Licensee will not, and will not enable or allow any third party to: (i) install a licensed copy of the Software on more than one unit of a Designated Product; or (ii) copy onto or transfer Software installed in one unit of a Designated Product onto one other device. Licensee may temporarily transfer Software installed on a Designated Product to another device if the Designated Product is inoperable or malfunctioning, if Licensee provides written notice to Motorola of the temporary transfer and identifies the device on which the Software is transferred. Temporary transfer of the Software to another device must be discontinued when the original Designated Product is returned to operation and the Software must be removed from the other device. Licensee must provide prompt written notice to Motorola at the time temporary transfer is discontinued.

4.4. When using Motorola's Radio Service Software ("RSS"), Licensee must purchase a separate license for each location at which Licensee uses RSS. Licensee's use of RSS at a licensed location does not entitle Licensee to use or access RSS remotely. Licensee may make one copy of RSS for each licensed location. Licensee shall provide Motorola with a list of all locations at which Licensee uses or intends to use RSS upon Motorola's request.

4.5. Licensee will maintain, during the term of this Agreement and for a period of two years thereafter, accurate records relating to this license grant to verify compliance with this Agreement. Motorola or an independent third party ("Auditor") may inspect Licensee's premises, books and records, upon reasonable prior notice to Licensee, during Licensee's normal business hours and subject to Licensee's facility and security regulations. Motorola is responsible for the payment of all expenses and costs of the Auditor. Any information obtained by Motorola and the Auditor will be kept in strict confidence by Motorola and the Auditor and used solely for the purpose of verifying Licensee's compliance with the terms of this Agreement.

## **Section 5 OWNERSHIP AND TITLE**

Motorola, its licensors, and its suppliers retain all of their proprietary rights in any form in and to the Software and Documentation, including, but not limited to, all rights in patents, patent applications, inventions, copyrights, trademarks, trade secrets, trade names, and other proprietary rights in or relating to the Software and Documentation (including any corrections, bug fixes, enhancements, updates, modifications, adaptations, translations, de-compilations, disassemblies, emulations to or derivative works from the Software or Documentation, whether made by Motorola or another party, or any improvements that result from Motorola's processes or, provision of information services). No rights are granted to Licensee under this Agreement by implication, estoppel or otherwise, except for those rights which are expressly granted to Licensee in this Agreement. All intellectual property developed, originated, or prepared by Motorola in connection with providing the Software, Designated Products, Documentation or related services, remains vested exclusively in Motorola, and Licensee will not have any shared development or other intellectual property rights.

## **Section 6 LIMITED WARRANTY; DISCLAIMER OF WARRANTY**

6.1. The commencement date and the term of the Software warranty will be a period of ninety (90) days from Motorola's shipment of the Software (the "Warranty Period"). If Licensee is not in breach of any of its obligations under this Agreement, Motorola warrants that the unmodified Software, when used properly and in accordance with the Documentation and this Agreement, will be free from a reproducible defect that eliminates the functionality or successful operation of a feature critical to the primary functionality or successful operation of the Software. Whether a defect occurs will be determined by Motorola solely with reference to the Documentation. Motorola does not warrant that Licensee's use of the Software or the Designated Products will be uninterrupted, error-free, completely free of Security Vulnerabilities, or that the Software or the Designated Products will meet Licensee's particular requirements. Motorola makes no representations or warranties with respect to any third party software included in the Software.

6.2 Motorola's sole obligation to Licensee and Licensee's exclusive remedy under this warranty is to use reasonable efforts to remedy any material Software defect covered by this warranty. These efforts will involve either replacing the media or attempting to correct significant, demonstrable program or documentation errors or Security Vulnerabilities. If Motorola cannot correct the defect within a reasonable time, then at Motorola's option, Motorola will replace the defective Software with functionally-equivalent Software, license to Licensee substitute Software which will accomplish the same objective, or terminate the license and refund the Licensee's paid license fee.

6.3. Warranty claims are described in the Primary Agreement.

6.4. The express warranties set forth in this Section 6 are in lieu of, and Motorola disclaims, any and all other warranties (express or implied, oral or written) with respect to the Software or Documentation, including, without limitation, any and all implied warranties of condition, title, non-infringement, merchantability, or fitness for a particular purpose or use by Licensee (whether or not Motorola knows, has reason to know, has been advised, or is otherwise aware of any such purpose or use), whether arising by law, by reason of custom or usage of trade, or by course of dealing. In addition, Motorola disclaims any warranty to any person other than Licensee with respect to the Software or Documentation.

## **Section 7 TRANSFERS**

Licensee will not transfer the Software or Documentation to any third party without Motorola's prior written consent. Motorola's consent may be withheld at its discretion and may be conditioned upon transferee paying all applicable license fees and agreeing to be bound by this Agreement. If the Designated Products are Motorola's radio products and Licensee transfers ownership of the Motorola radio products to a third party, Licensee may assign its right to use the Software (other than RSS and Motorola's FLASHport® software) which is embedded in or furnished for use with the radio products and the related Documentation; provided that Licensee transfers all copies of the Software and Documentation to the transferee, and Licensee and the transferee sign a transfer form to be provided by Motorola upon request, obligating the transferee to be bound by this Agreement.





## **Section 8      TERM AND TERMINATION**

8.1      Licensee's right to use the Software and Documentation will begin when the Primary Agreement is signed by both parties and will continue for the life of the Designated Products with which or for which the Software and Documentation have been provided by Motorola, unless Licensee breaches this Agreement, in which case this Agreement and Licensee's right to use the Software and Documentation may be terminated immediately upon notice by Motorola.

8.2      Within thirty (30) days after termination of this Agreement, Licensee must certify in writing to Motorola that all copies of the Software have been removed or deleted from the Designated Products and that all copies of the Software and Documentation have been returned to Motorola or destroyed by Licensee and are no longer in use by Licensee.

8.3      Licensee acknowledges that Motorola made a considerable investment of resources in the development, marketing, and distribution of the Software and Documentation and that Licensee's breach of this Agreement will result in irreparable harm to Motorola for which monetary damages would be inadequate. If Licensee breaches this Agreement, Motorola may terminate this Agreement and be entitled to all available remedies at law or in equity (including immediate injunctive relief and repossession of all non-embedded Software and associated Documentation unless Licensee is a Federal agency of the United States Government).

## **Section 9      UNITED STATES GOVERNMENT LICENSING PROVISIONS**

This Section applies if Licensee is the United States Government or a United States Government agency. Licensee's use, duplication or disclosure of the Software and Documentation under Motorola's copyrights or trade secret rights is subject to the restrictions set forth in subparagraphs (c)(1) and (2) of the Commercial Computer Software-Restricted Rights clause at FAR 52.227-19 (JUNE 1987), if applicable, unless they are being provided to the Department of Defense. If the Software and Documentation are being provided to the Department of Defense, Licensee's use, duplication, or disclosure of the Software and Documentation is subject to the restricted rights set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 (OCT 1988), if applicable. The Software and Documentation may or may not include a Restricted Rights notice, or other notice referring to this Agreement. The provisions of this Agreement will continue to apply, but only to the extent that they are consistent with the rights provided to the Licensee under the provisions of the FAR or DFARS mentioned above, as applicable to the particular procuring agency and procurement transaction.

## **Section 10     CONFIDENTIALITY**

Licensee acknowledges that the Software and Documentation contain Motorola's valuable proprietary and Confidential Information and are Motorola's trade secrets, and that the provisions in the Primary Agreement concerning Confidential Information apply.

## **Section 11     LIMITATION OF LIABILITY**

The Limitation of Liability provision is described in the Primary Agreement.

## **Section 12     NOTICES**

Notices are described in the Primary Agreement.

## **Section 13     GENERAL**

13.1.    COPYRIGHT NOTICES. The existence of a copyright notice on the Software will not be construed as an admission or presumption of publication of the Software or public disclosure of any trade secrets associated with the Software.

**13.2. COMPLIANCE WITH LAWS.** Licensee acknowledges that the Software is subject to the laws and regulations of the United States and Licensee will comply with all applicable laws and regulations, including export laws and regulations of the United States. Licensee will not, without the prior authorization of Motorola and the appropriate governmental authority of the United States, in any form export or re-export, sell or resell, ship or reship, or divert, through direct or indirect means, any item or technical data or direct or indirect products sold or otherwise furnished to any person within any territory for which the United States Government or any of its agencies at the time of the action, requires an export license or other governmental approval. Violation of this provision is a material breach of this Agreement.

**13.3. ASSIGNMENTS AND SUBCONTRACTING.** Motorola may assign its rights or subcontract its obligations under this Agreement, or encumber or sell its rights in any Software, without prior notice to or consent of Licensee.

**13.4. GOVERNING LAW.** This Agreement is governed by the laws of the United States to the extent that they apply and otherwise by the internal substantive laws of the State to which the Software is shipped if Licensee is a sovereign government entity, or the internal substantive laws of the State of Illinois if Licensee is not a sovereign government entity. The terms of the U.N. Convention on Contracts for the International Sale of Goods do not apply. In the event that the Uniform Computer Information Transaction Act, any version of this Act, or a substantially similar law (collectively "UCITA") becomes applicable to a party's performance under this Agreement, UCITA does not govern any aspect of this Agreement or any license granted under this Agreement, or any of the parties' rights or obligations under this Agreement. The governing law will be that in effect prior to the applicability of UCITA.

**13.5. THIRD PARTY BENEFICIARIES.** This Agreement is entered into solely for the benefit of Motorola and Licensee. No third party has the right to make any claim or assert any right under this Agreement, and no third party is deemed a beneficiary of this Agreement. Notwithstanding the foregoing, any licensor or supplier of third party software included in the Software will be a direct and intended third party beneficiary of this Agreement.

**13.6. SURVIVAL.** Sections 4, 5, 6.3, 7, 8, 9, 10, 11 and 13 survive the termination of this Agreement.

**13.7. ORDER OF PRECEDENCE.** In the event of inconsistencies between this Exhibit and the Primary Agreement, the parties agree that this Exhibit prevails, only with respect to the specific subject matter of this Exhibit, and not the Primary Agreement or any other exhibit as it applies to any other subject matter.

**13.8 SECURITY.** Motorola uses reasonable means in the design and writing of its own Software and the acquisition of third party Software to limit Security Vulnerabilities. While no software can be guaranteed to be free from Security Vulnerabilities, if a Security Vulnerability is discovered, Motorola will take the steps set forth in Section 6 of this Agreement.



**Exhibit E**

**System Acceptance Certificate**

**Customer Name:** \_\_\_\_\_

**Project Name:** \_\_\_\_\_

This System Acceptance Certificate memorializes the occurrence of System Acceptance. Motorola and Customer acknowledge that:

1. The Acceptance Tests set forth in the Acceptance Test Plan have been successfully completed.
2. The System is accepted.

Customer Representative:

Motorola Solutions Representative:

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**FINAL PROJECT ACCEPTANCE:**

Motorola has provided and Customer has received all deliverables, and Motorola has performed all other work required for Final Project Acceptance.

Customer Representative:

Motorola Solutions Representative:

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

# OUR COMMITMENT

Motorola Solutions, Inc. (Motorola) connects people through technology. Businesses and government agencies around the world turn to Motorola innovations when they want highly connected teams that have the information they need throughout their workdays and in the moments that matter most to them.

You can find Motorola products and services in a wide range of workplaces. From the retail floor to the warehouse floor, and from the small town police station to the most secure government offices, our products support customers who make up the diverse global economy. We are proud that our products support mobile transactions of all kinds, as well as the safety and security of citizens everywhere.

Our customers rely on us for the expertise, services, and solutions we provide, trusting our years of invention and innovation experience. By partnering with customers and observing how our products can help in their specific industries, we are able to enhance our customers' experience every day.

## **An Industry Leader**

Motorola serves both enterprise and government customers with core markets in public safety government agencies and commercial enterprises. Our leadership in these areas includes public safety communications from infrastructure to applications and devices such as radios, as well as task-specific mobile computing devices for enterprises. We produce advanced data capture devices such as barcode scanners and radio-frequency identification (RFID) products for business. We make professional and commercial two-way radios for a variety of markets, and we also bring unlicensed wireless broadband capabilities and wireless local area networks (WLANs) to retail enterprises.

## **Pioneering New Areas of Cognitive Research**

As an industry leader in government and public safety, we design and develop devices, including radios and the infrastructure that supports them. Our mission critical design philosophy led to our new High Velocity Human Factors investigation, an area of cognitive research that helps us develop products for first responders by working with them in crisis situations to study their communication needs. We take what we learn in the field and bring it back to the lab to create products that will function under extreme conditions and networks that will reliably support those products.

## **Our Focus—Orange County**

Working with our global channel partner community, Motorola reaches an extensive customer base, from small businesses to Fortune 500 companies. Our focus is on developing integrated end-to-end solutions that deliver a clear return on investment, and our products empower individuals through seamless connectivity.



This page intentionally left blank.

