Appendix B

EMS Communications System Description

The Authority provides communications infrastructure to enable Contractor Personnel to receive emergency and non-emergency requests for service by telephone; conduct administrative functions by telephone; notify their personnel via pager; coordinate and dispatch Ambulances via radio; coordinate scene information between Ambulances and First Responder via radio; conduct Medical Direction consults via radio; notify hospitals of incoming Patients from the Ambulance via radio; and receive vehicle location data via wireless data systems at the EMS Communications Center. The Center features an Uninterruptible Power Supply (UPS) System and two redundant Diesel Generators to ensure electrical power is never interrupted. All of the phone lines in the Center are controlled by the VESTA Computer system and are trunked lines. The Symon Board monitors the incoming calls and alerts when calls are not answered or held to long.

Telephone
Eleven (11) Operator Positions within the EMS Communications Center allow for recorded answering of the following lines:

9-1-1
Twelve (12) incoming 9-1-1 telephone lines, feature enhanced 9-1-1 computer consoles capable of providing Automatic Location Identification (ALI) and Automatic Number Identification (ANI) data. System features the ability to transfer callers to another 9-1-1 center.

587-2111
Incoming telephone lines allow the receipt of Emergency and Non-emergency requests for Ambulance Service from health care facilities and the general public.

587-2101
Incoming telephone lines allow the receipt of administrative requests and call coordination for EMS system personnel.

587-2102
Incoming telephone lines are for the Medical Communications Officer (MCO). Receipt of Medical Communications administrative requests and call coordination for EMS system personnel, health care facilities and the general public are conducted on these lines

Outgoing
Outgoing telephone lines allow Personnel access to telephone lines for emergency and non-emergency outgoing calls.

Ring-down
Automated ring-down line between the EMS Communications Center and the 9-1-1 Center.

800 MHz Radio System

Sunstar

The provision of dedicated ambulance tactical channels allow for the coordination and dispatch of ambulance units by the EMS Communications Center. Seven (7) tactical channels are designated as Sunstar Channels to be used solely for Ambulance to EMS Communications Center communications. An overview of the current usage is as follows:

SS-A	Primary Dispatch
SS-B	North County Radio Operator
SS-C	Non-emergency Radio Operator
SS-D	Administrative Hailing
SS-E	Mid County Radio Operator
SS-F	Tactical / Stand bys
SS-G	South County Radio Operator
SS-H	Future Use

Medical Control

The provision of dedicated medical control tactical channels allows for the consultation by field paramedics with On-Line medical control and coordination by the Medical Communications Officer from the EMS Communications Center. Three (3) tactical channels are designated as Medical Control to be used solely for field paramedic to EMS Communications Center and physician communications. An overview of their general usage is as follows:

MED-DIR-A	Hailing
MED-DIR-B	Primary On-line Medical Control
MED-DIR-C	Secondary On-Line Medical Control

In addition, there are 10 channels coordinated by the Medical Communications Officer to allow field personnel the ability to communicate with every hospital emergency department in the region.

MED-DIR-D	Hospital Patch
MED-DIR-E	Hospital Patch
MED-DIR-F	Hospital Patch
MED-DIR-G	Hospital Patch
MED-DIR-H	Hospital Patch
MED-DIR-I	Hospital Patch
MED-DIR-J	Hospital Patch
MED-DIR-K	Hospital Patch
MED-DIR-L	Hospital Patch
MED-DIR-M	Hospital Patch

Fire/Rescue

Pinellas County Emergency Communication (9-1-1) operates twenty (20) tactical channels to allow for the coordination and dispatch of fire/rescue units. Sunstar mobile and portable radios are programmed to allow access to these channels to coordinate communications between fire/rescue units and Sunstar.

UHF Med Radios

UHF Med Radios are in place in each ambulance and in the EMS Communications Center. There are two channels used in the event of a Statewide disaster. Channels are allocated as follows:

Med 3	Pinellas County Medical Coordination
Med 8	Statewide Medical Coordination

Paging

UHF Alphanumeric Pagers and a Paging Transmitter allow the Contractor's CAD software the ability to encode personnel and units through the County's paging terminal (Zetron) connected to the County's paging transmitter.

9-1-1 Data Transfer

A data link from the 9-1-1 Center's mainframe computer is routed via leased telephone line, T-1 line, or microwave link, as determined by the Authority, to the EMS Communications Center. It facilitates sending emergency call data between the Contractor's CAD and the 9-1-1 CAD. This allows each center to "ship" the call location of an emergency to the other communications center. Additionally, it allows for shared notes of the call to be continuously updated. The County provides the data link and the Contractor provides the interface server that is connected to the Contractor's CAD system.

Billing Data Transfer

A data link between the Contractor's CAD and the Authority's Ambulance Billing System. It facilitates sending dispatch data from the Contractor's CAD to the Authority's Ambulance Billing System. The County provides the data link and the Contractor provides the interface server and software that connects to the Contractor's CAD system.

Audio Recording of Telephone and Radio

A digital audio recording system is in place. It records every operator console telephone and all radio channels relating to Medical Direction and Sunstar. Fire/Rescue radio channels are recorded by the 9-1-1 Center. The Authority shall ensure such audio recording equipment is reliable and proper archives are maintained.

9-1-1 Fire Dispatch Consoles

The 9-1-1 Center has backup consoles located within the EMS Communications Center. In the event of an equipment failure or evacuation of the 9-1-1 Center, Contractor personnel may be called upon to operate those consoles while dispatch personnel are in transit to the EMS Communications Center from the 9-1-1 Center.

Automated Vehicle Location and Mobile Communications Terminals

Contractor shall provide all necessary networking equipment, hardware and software to allow its GPS enabled Mobile Communications Terminals (MCTs) aboard each Vehicle

to communicate with the Contractor's CAD to provide Automated Vehicle Location (AVL) functions. Authority shall provide demarcation to its telephone and network equipment as necessary.