



Seguin Police Department

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MEMORANDUM

Control#14-020

To: Kevin K. Kelso, Chief of Police
From: Shannon Dukes, Communications Supervisor
Date: July 16, 2014
Reference: Radio Upgrade

In 2006, a computer-based dispatch console was installed in the telecommunications center at the Seguin Police Department. Voice channels and data are carried to the console via a "T1" line that is leased from AT&T. This fiber-optic technology was developed in the 1960's and represents a "single point of failure." A single point of failure (SPOF) is a potential risk posed by a flaw in the design, implementation or configuration of a circuit or system in which one fault or malfunction causes an entire system to stop operating.

Recent heavy rains infiltrated the underground T1 line and caused the entire radio system supporting the Seguin Police Department to stop functioning for a significant period of time. When our agency sought a permanent solution to the problem, we discovered that our "firmware" was outdated and needed to be updated. Firmware is the combination of persistent memory (program code) and the data stored within it. In order to perform routine maintenance, our firmware for our Motorola MCC5600 5-Operator Computer Dispatch Console must be updated. Additionally, the Windows operating

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system is no longer supported by Microsoft so it is necessary to transition to the Windows 8 operating system. This project has gone through extensive planning by the Motorola group to ensure we receive the best combination of equipment to allow us optimal service as well as the ability to upgrade for future growth needs.

It is crucial for the day-to-day operations of our emergency services that we take action to correct these issues. At present, our telecommunications system is subject to further outages and is particularly vulnerable during severe weather when it is needed the most. In order to eliminate the vulnerability of the T-1 line, we need to replace the T1 line with radio frequency technology for connectivity. After looking at our options, our best option is to purchase five APX 7500 Motorola Consolettes. . The consolettes will not only address our current problem, they will be compatible for future growth and the possible transition to a “trunked” radio system. This project also eliminated the recurring cost of leasing the T1 line from AT&T.

The cost of the project is as follows:

Description	Price (\$)
Equipment	\$75,310.00
Services	\$38,816.00
Total	\$114,126.00

O.U.R. S.P.D.

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