



VPD 68(08)

VANCOUVER POLICE DEPARTMENT Organized Crime Section

Date: October 22nd, 2014
To: Inspector 1275 Forsberg, Chairperson VPD Equipment Committee
From: Sergeant 1775 Spearn, Organized Crime Unit 1
Subject: Ensol Systems Camera Trailer Purchase Request

Assignment

This document is a proposal for the purchase a trailer mounted overt camera system. The proposal will recommend the purchase of a battery powered system from Ensol Systems of Surrey BC. The primary application of this system would be public safety.

Resources

Specific information and pricing on the configurations offered by Ensol Systems was obtained from their Operations Lead, Mr. Jim Brasset. The website for Ensol Systems was also referenced at <http://www.ensolsystems.com/>.

Information on the purchase and deployment of the Mobile Pro System camera trailer operated by the Abbotsford Police Department (APD) was obtained from Mr. Gord Boyes, APD Manager of Information Technology.

Executive Summary

The Organized Crime Section (OCS) is proposing the purchase of a trailer mounted and battery powered overt camera system. The camera system consists of a small enclosed trailer with four dome cameras on a 30 foot telescopic arm. The trailer can be towed to any location and be operational in under thirty minutes.

The system can be powered in three different configurations; by batteries, a combination of batteries and generator or a combination of methanol fuel cells and batteries. The deployment length varies from five days to a few months depending on the system configuration. The cameras can be controlled, monitored and uploaded via a wireless internet connection from any computer.

The APD uses a trailered camera system manufactured by Mobile Pro Systems of Minnesota. Their system is called the "Event Trailer" (ET) and it is used primarily for public safety. Other deployment applications include deterring gang conflicts, mischiefs,

arson, shootings and property crime. The APD also deploys ET at public events like the Abbotsford Airshow and Agrifare. ET has also been deployed near the residences of police members who are being threatened.

The purchase of a trailer mounted battery powered camera system from Ensol Systems is recommended. This system could be utilized by almost every section of the VPD for public safety.

Background

Camera Systems in the USA

Mobile Pro Systems have sold 25 camera trailer units to the Minneapolis Police Department and single units to the Brooklyn Park Police Department and Robbinsdale Police Department. Las Vegas PD, Chicago PD, New Jersey State Police, US Navy and the CIA also use the Mobile Pro systems. Other industries like power utilities and oil & gas companies also utilize camera trailers for public safety.

American law enforcement agencies deploy camera trailers in neighborhoods for public safety. One was deployed inside a Minneapolis Minnesota park with the highest crime rate of any park in the state. After the deployment, crime in the park dropped 75 percent.

The camera systems are used in areas experiencing high property crime rates, outside of drug houses and in areas where retaliation was expected following a homicide.

<http://minnesota.cbslocal.com/2011/10/28/mps-police-mobile-cameras-deter-crime-in-shady-places/>

Mobile Pro camera systems were used for public safety at Super Bowl XLVIII at Met Life Stadium in Rutherford New Jersey on February 2nd, 2014.

<http://www.fluidmesh.com/super-bowl-xlvi-gets-supersized-security-with-mobile-pro-systems-and-fluidmesh/>

In June of 2013, a camera system deployed outside a bar in downtown Minneapolis solved a murder when it was used to identify the two suspects as they fled the scene.

<http://www.youtube.com/watch?v=4qI08StotlY>

Camera Systems in the Canada

The APD purchased their mobile camera system from Mobile Pro Systems in Minnesota. Their camera trailers have also been purchased by the Hamilton Police Service. A few trailers have been purchased by private utility companies to monitor

power utility substations in Alberta. Alberta petroleum companies have also purchased the same equipment.

Ensol Systems is a company based in Surrey BC and they also manufacture mobile camera trailers. This company primarily deals with utility and gas companies that require remote monitoring of their sites. Their trailers offer the same features as the Mobile Pro System and they are a local company.

APD Event Trailer (ET)

In October of 2008 the APD began using video cameras to monitor the home of the Bacon Brother's crime group. The cameras were mounted on poles and were installed for public safety and deterrence. The cameras operated for 18 months before they were removed.

In 2012 the APD purchased a Mobile Pro 2800 series camera trailer from a company in Minnesota. That trailer was outfitted with four cameras and a solar panel was added later to increase battery life on deployment. The APD system is powered by batteries only. A cellular modem was also installed to give police a wireless internet access point at major events.

The APD also constructed several pole cameras that are deployed in various environments, with cellular modems. Those cameras can be mounted on light poles, building and rooftops but can take days to deploy.

ET is deployed and set up by a member of the APD Information Technology section. Uniformed police stand by while ET is set up and the entire process takes thirty minutes. A sign is placed near ET advising that the area is under video surveillance. A "boot lock" is attached to one of the trailer wheels to prevent the unit from being moved; ET has never been vandalized during a deployment.

In February of 2014, a gang conflict in Abbotsford escalated between rival South Asian groups. APD was concerned for the safety of the public and those involved in the conflict. They responded two or three times a week to calls involving this conflict. In May the calls escalated to six or seven calls per week and involved mischiefs and assaults.

APD was concerned that the conflict would escalate and deployed ET outside a home linked to the conflict. The deployment resulted in a "relative calm" to the dispute. APD Professional Standards Section advised they have never received a complaint about the deployment of ET.

Vancouver Related Gang Conflict

A similar conflict developed on the South Slope area of Vancouver. There has been an escalation of violent activity stemming from a history of personal rivalry between key members of two opposing groups. This ongoing conflict has resulted in a series of

violent attacks; shots fired incidents, and attempted murder, a firearms seizure, and homicide. The recent increase of violence between members of these opposing south slope groups and the number of retaliatory attempts will likely to increase in frequency and audacity.

VPD Applications

A mobile trailered camera system would be used primarily for public safety. Other deployment applications for the system might include:

- Areas experiencing gang activity and conflict
- Public events like the 2014 Grey Cup.
- Parades.
- Demonstrations.
- Areas experiencing high property crime and theft from/of autos.
- Near problem premises and drug houses.
- Counter Terrorism deployment.
- Threats against police members or members of the public
- Crime scenes.
- VIP applications.
- ERT deployments.

Companies Offering Compatible Camera Systems

Two companies offer a trailered camera system that would meet the needs of the VPD. These companies are Mobile Pro Systems of Minneapolis Minnesota and Ensol Systems of Surrey BC.

These companies have mobile trailer camera units operating in the petroleum industries and also with utility companies. Mobile Pro has their units operating in law enforcement and government.

There is a price advantage ordering from Ensol Systems; they are a Canadian company and the purchase would not involve any shipping and customs fees. Ensol Systems is a local company that could provide support from a short distance away.

Ensol Systems Video Trailer Purchase

Ensol Systems offers three different types of trailered camera systems. These systems differ in the manner in which they are powered. The three methods of powering the Ensol Systems trailers are Methanol fuel cell and battery combination, diesel generator and battery combination or a battery only powered model.

Each of the trailers offered by Ensol systems would include four high resolution video cameras. The video would be recorded inside the trailer or uploaded wirelessly back to

the VPD. The cameras can be viewed and adjusted remotely over a computer or smartphone with access to the internet.

The total cost of each system described above was obtained from Ensol systems. The cost does not include taxes:

1. Solar / Fuel Cell Hybrid Trailer (incl. solar): \$ 89,050
2. Battery Video Trailer w/ Generator: \$ 64,000
3. Battery Video Trailer: \$ 56,000 (plus \$1,600 for an electric winch)

A battery powered trailer could be deployed between five and seven days before it would require recharging. Although these systems are configured for solar panels, they are fragile and would be easily damaged if deployed in a high crime or conflict area.

A battery powered trailer could be deployed and run silently for days without submitting those around the area to noise from a generator. A hybrid fuel cell would require methanol to power the unit. The methanol is a high grade fuel, does not store well and is expensive for applications within the city.

It is recommended that the VPD purchase a battery powered mobile camera trailer from Ensol Systems of Surrey BC for **\$57,600 plus taxes**. An additional cost for a trailer boot wheel lock (**\$250**) and insurance / registration (**\$1000**) would be required. The trailer could be rapidly deployed and used primarily for public safety with numerous secondary applications.