



Proposal for Addition of Ballistic Protected Rescue Vehicles to the Vancouver Police Department Fleet

**Greg McCullough
Sergeant 1512
Fleet Manager
December 4th, 2007**

Executive Summary

Due to the increased number of firearms related incidents within the City of Vancouver it is proposed that the Vancouver Police Department acquire one or more vehicles for the use of the Emergency Response Team which provide ballistic protection against firearms, including those commonly found in households but also up to and including military style small arms employed by criminals and sophisticated gang members.

The Vancouver Police Foundation has expressed interest in funding this proposal and has raised approximately \$250,000 for the purchase of such a vehicle. As a result of this costs would be limited to annual maintenance, insurance and fuel.

In consideration of the various options available to respond to incidents in which the Emergency Response Team would be required to respond to an ongoing firearms incident it is recommended that the Vancouver Police Department move to acquire one or more vehicles to enhance safety and tactics.

Background

The Vancouver Police Department's Emergency Response Team (ERT) has been a full time team since 1992. ERT is currently staffed with ^{15 (1)} personnel. An Inspector manages the team, and a Sergeant is tasked with the organization of training. The remainder of the team is broken down into four squads consisting of one sergeant and ^{15 (1)} constables each. The four squads rotate on a 4 days on, four days off schedule, working 12 hour dayshifts and 11 hour nightshifts.

The Emergency Response Team is mandated to provide specialized tactics and equipment to deal with critical incidents in a safe and professional manner. As such, they are trained to conduct officer and citizen rescues during active shooter and hostage rescue scenarios.

ERT also plans and carries out high risk arrest warrants, provides security for high risk prisoner transportation and also performs both witness and VIP escort and protection duties. Other duties include apprehending high risk offenders. In the case of barricaded suspects, especially those who are armed with firearms or other weapons, it is the Emergency Response Team that is called upon to work to resolve the situation without injury to citizens, police officers, or indeed the suspect involved.

To complete these tasks safely the team uses a wide range of equipment and vehicles. These include various lethal and less lethal weapons; personal ballistic protection equipment; rappel gear and various means of transport including ^{15 (1) (f) and (1)}

Current ballistic protection is restricted to vests which are individually issued to members of the ERT, as well as ballistic shields. ^{15 (1) (f) and (1)}

In recent years there have been an increased number of calls which ERT has responded to involving handguns and rifles including those of semi automatic design which can fire both quickly and accurately. It is an unfortunate fact that despite Canada's gun laws there an increasing number of these weapons available, as evidenced by the number of recent gang related shootings in the Lower Mainland.

One of the more frequent calls which ERT responds to involves barricaded suspects who are armed with firearms of the type described above. They also have to be prepared for hostage rescues or an "active shooter" incident such as those that have occurred in Montreal in recent years; where the suspect is armed, alive and still firing at citizens or police. In these cases the Vancouver Police Department currently has limited options to perform a safe rescue or actively confront a suspect armed with a weapon ^{15(1) (f) and (1)} [REDACTED]

^{15(1) (f) and (1)} [REDACTED] This situation would be made worse in an area of the city such as the West End, where the variety of multi story buildings provide an elevated shooting platform which would be difficult to currently protect against.

Proposal

The Vancouver Police Department is proposing to acquire a style of vehicle which provides ballistic protection against various levels of rifle fire up to and including those of military grade weapons. Policing is a constantly evolving profession in Vancouver as we work to meet the needs of a diverse and rapidly growing major metropolitan center. The police must be prepared to react to any situation involving violent offenders and offenders armed with firearms. It is becoming the industry standard in North America to have tactical firearms units equipped with protectively armoured rescue vehicles. Calgary, Edmonton, Toronto and Victoria already have or are in the process of getting such vehicles. Best practices would be to have two of these vehicles working in tandem to provide the best protection where a rescue vehicle is required.

Discussion

^{15(1) (f) and (1)} [REDACTED]

A standard vehicle, referred to by industry consultants as "soft skinned", provides very little in the way of ballistic protection. Rifle and even pistol rounds are capable of penetrating all components of the vehicle other than the engine block. Police officers are currently trained to 'take cover' behind this part of the vehicle in the event they are confronted with gunfire while near their cars. However, this is strictly a defensive move which leaves police officer vulnerable to enfilade or ricochet fire, and in the case of an elevated shooter position provides very little cover indeed. In response to several shootings in Alberta a judge recommended the use of armoured vehicles in the future to mitigate the high risk involved in incidents with firearms, which he noted were on the rise in that province.¹

¹ See, Appendix A; "Alberta Judge Recommends Stronger RCMP Emergency Response Teams", Edmonton Sun, 2007.

In the case of the Emergency Response Team performing a hostage rescue; responding to an active shooter; or rescuing a person shot and laying in an open area the dynamics of such an operation preclude the use of a limited portion of the vehicle for protection from small arms fire. The Emergency Response Team has analyzed calls attended between November 2004 and June 2007. A conservative estimate from this time period indicates that a this type of vehicle would have been used in 58 incidents during this time period had it been available. Appendix B of this report refers to a cross section of such incidents for reference to the type of calls ERT would bring this vehicle to.

Alternatives

Across North America different police agencies have taken a variety of approaches to provide police officers with ballistic protection. These have ranged from acquiring surplus military vehicles, purchasing a non purpose built vehicle and “up armouring” it or selecting a purpose built vehicle designed for police purposes.

Alternative one: The first alternative to discuss would be the acquiring of a military vehicle and adapting it for use by the Vancouver Police Department. The Edmonton Police Service has done exactly this by purchasing a Grizzly Armoured Fighting Vehicle (with the 25mm main gun removed) and retrofitting it for their use. The Canadian Army used this weapon system from the 1970s to 1990s.

There are several drawbacks to this idea. The first is that these vehicles would come at end of life, and thus with a higher level of mechanical problems to deal with. Maintaining these vehicles would also be expensive, as the engine and mechanical components are not easily purchased and due to limited production are considerably more expensive.

As well, this style of vehicle is typically quite large, with a wheel base designed for cross country and combat operations. They are unwieldy in an urban environment and provide a relatively poor field of vision for the driver, which in an urban policing environment which would be less that optimum.

Borrowing such a vehicle from the military in the event of a critical incident is not an option in Vancouver, as the Army Reserve units in the Lower Mainland do not currently have the required amount of armour. In any case there are significant legislative obstacles to this.

Alternative two: The Vancouver Police Department could purchase a non purpose built vehicle and modify it for protection from firearms. This has been done by several agencies in Canada; usually with a used armoured car from a security company. This has primarily been to save money while having some sort of better protection from small arms fire. However, despite the look of these trucks they are not well protected from rifle fire. These formidable looking trucks are in fact Kevlar lined, and do not protect against more than pistol rounds.

They would require substantial modification and in the end the result would be less than desired. Purchasing a non purpose built vehicle would require finding the expertise to modify this to defeat rifle fire. Such knowledge would be both hard to find locally and as well would have a substantial cost involved.

Alternative three: Purchase a purpose built vehicle. As one would expect, there are a variety of companies throughout North America which produce armoured vehicles for the law enforcement or private market.

The acquisition of a purpose built vehicle would provide the Vancouver Police Department with a means to respond to firearms incidents safely, as well as train on an ongoing basis to deal with such incidents. Additionally, the vehicle would be able to be used for other purposes such as in the event of a natural disaster or other similar emergency, as some of the selection criteria would involve four wheel drive capability as well as the ability to transport approximately ^{15 (1)} personnel. Such a vehicle would be wheeled, have a non military colour, and be similar in appearance to the armoured trucks used by many security companies.

A purpose built vehicle would also not require any subsequent outfitting after arrival, and the design will have been tested and proven in terms of both ballistic capability and operational capability. As well, the truck would have a proper warrantee in the event of any problems after purchase.

Currently the Vancouver Emergency Response Team trains with other similar police squads in the lower mainland. If the operational necessity presented itself the VPD could assist other agencies when they were faced with high risk situations. However, the primary use of this vehicle would be within the City of Vancouver.

Alternative four: Retain the status quo. This alternative is not considered to be a viable option. As part of best practices the Vancouver Police Department should be properly prepared to deal with situations involving weaponry in Vancouver, and be able to deal with them in a professional manner which provides the best chance of resolving a situation with the least amount of danger to both the public and its police force. The status quo means that the Police Department will not be properly able to deal with situations such as those discussed in the background part of this report.

Recommendations

It is recommended that the Vancouver Police Department acquire purpose built armoured rescue vehicles, for the reasons stated above.

The Emergency Response Team has put significant resources into looking into the type of vehicle that would best suit their needs. In doing so they created a set of criteria to assist them during the process of looking at different vehicles available across North America that would provide the best value in terms of both cost and usage available. It is further recommended that the Vancouver Police Department work with Equipment Services to ensure that the best vehicle is selected for the Emergency Response Team.²

² Appendix C, selection criteria listed.

Financial Implications

Purchase cost: The Vancouver Police Foundation has successfully raised \$250,000 to cover the total purchase cost of an armoured rescue vehicle that offers ballistic protection. The life of this vehicle is estimated at fifteen years. This vehicle should be approved as a temporary addition to the VPD Fleet, and a separate business case written up near the end of its life to evaluate the effectiveness of this tool prior to approving the purchase of a successor vehicle.

As stated in the executive summary, best practices across North America would be to have two vehicles to provide optimum protection and redundancy in the event of a mechanical breakdown. In writing this proposal the initial funding approval would be limited to one vehicle. If a second vehicle were to be provided the cost for this would either have to be funded by the City of Vancouver or by further fundraising. A separate business case would have to be provided by the Vancouver Police Department and approved by EQS, budgets and City Council prior to this going ahead.

Operating Costs: Currently there are several different types of vehicles which could be considered. A vehicle being considered, the Lenco Bearcat, operates on a ford F 550 Chassis. With this platform maintenance could be done by the City works yard. Fuel, insurance and maintenance are estimated at \$3000 per annum. This cost would have to be added to or absorbed by the Equipment Services budget.

Implementation Plan

As discussed in the financial implications, the Vancouver Police Foundation has raised and is prepared to fund the purchase of an armoured rescue vehicle for the Police Department. This factor, as well as the strong Canadian dollar increasing purchasing power, is reason to move forward with this acquisition as soon as it is approved by City Council.

An estimated time frame from approval by Council would be four to six months from ordering this vehicle to having it operational. This would include time to ship the vehicle to the border and through Canadian Border Services Agency and Transport Canada vetting, such as the registration of an imported vehicle.

Appendix A: Article addressing the use of armoured vehicles by Canadian police agencies.

Alberta inquiry judge recommends stronger RCMP emergency response teams

EDMONTON (CP) - An Alberta judge is recommending the RCMP increase resources for emergency response teams, including an armoured personnel carrier, as police turn to such teams more often.

Judge Peter Ayotte also said psychiatrists should have the option to continue treating a psychiatric patient who has been involuntarily admitted for up to a month after his symptoms disappear. Ayotte's conclusions come from a fatality inquiry into the shootings of Cpl. James Galloway and Martin Ostopovich, who both died in an armed standoff on March 1, 2004, in Spruce Grove, just outside Edmonton.

Ayotte concluded RCMP handled the situation appropriately, but he made 13 recommendations to prevent similar events.

"Incidents requiring ERT intervention are on the rise," wrote Ayotte, pointing to testimony suggesting the number of such calls is up by about 20 a year.

Ayotte also wrote that police must keep pace in the criminal arms race.

"We live in an age of rapid technological advancement where those so inclined have . . . increasing access to more sophisticated and powerful weaponry."

Ayotte recommended that the RCMP and the provincial government fund the creation of full-time emergency response teams. The province's three existing teams are composed of officers who have other duties and are called in when required.

That system creates manpower shortages for regular policing and makes it harder to assemble and train a cohesive team, Ayotte wrote.

Ostopovich shot Galloway when the officer used his cruiser to ram Ostopovich's vehicle as it was leaving the driveway of his home. Ostopovich was then shot by officers.

An armoured personnel carrier could have prevented both deaths, wrote Ayotte.

"The utility of an armoured vehicle in incidents like this was most apparent at the inquiry," the report reads.

But RCMP spokesman Cpl. Al Fraser said armour might cause more problems than it solves. RCMP would not only have to decide what type of vehicle they need, they would have to figure out where to store it and move it around. It might also not be popular with the public, Fraser said.

"Is this something Albertans are going to be comfortable with - an armoured personnel carrier on our streets?"

Ottawa's RCMP ERT team, which is responsible for Parliament Hill, is the only such team in Canada that has an armoured vehicle.

Fraser did agree that ERT squads are being used more often, especially after the 2005 deaths of four RCMP members in Mayerthorpe, Alta. Such squads are increasingly being called out for meth labs or sophisticated marijuana grow-ops, he said.

"There is increasing use of those resources."

Fraser said it would cost about \$300,000 a year to make the two commanders of each Alberta ERT squad full-time.

There are already full-time RCMP ERT teams in Quebec, Ontario and B.C.'s Lower Mainland. The Atlantic provinces are considering the idea.

Ostopovich had been taken to an Edmonton psychiatric ward after making threats against RCMP officers in the week before the shootings, but he was released when his doctor decided she didn't have the power to keep him under treatment any longer.

Ayotte recommended legal changes to allow doctors to keep a patient involuntarily under care for up to 30 days after the immediate threat to public safety has gone.

Alberta Health has been studying such changes for several years already, said spokeswoman Lorelei Fiset.

"We need to ensure we balance the rights of the individual against the need for public safety," she said. "This would require legislative changes."

However, Ayotte's recommendations were welcomed by the Schizophrenia Society of Alberta. "This is what we've been saying for years," said executive director Giri Puligandla. The society said the inquiry report would give families and health professionals a way to help people who can't even understand how sick they are.

Saskatchewan, British Columbia and Ontario all have some version of such legislation, the society said.

Ayotte also called for increased spending on education for mental health professionals and the expansion into Edmonton's suburbs of a program that trains police officers in mental health issues.

Andy Weiler of the province's Solicitor-General's department said the province is studying the judge's recommendations.

Appendix B: Examples of Recent ERT incidents in which an armoured vehicle would have been deployed.

Type of Incident: Man with a Gun

Date/Time: 2005-07-^{22 (1), 22 (3) (b)}

Duration of Incident: 1.5 hrs

Location: Lions Gate Bridge

Incident Number: 05-^{22 (1), 22 (3) (b)}

Citizen calls 911 stating that her friend has a gun and was going to kill himself in Stanley Park. Shortly after 911 received the first call another citizen called 911 and stated that he just observed a male carrying a shot gun walking on the Lions Gate Bridge. ERT along with a dog unit and a negotiator arrived on scene and observed the male on the bridge deck pacing back and forth with a shot gun. ERT members cleared the bridge of vehicular and pedestrian traffic.^{15 (1)}

^{15 (1)} It was at this point the male became extremely agitated, walked towards the ERT members, pointed the shot in the air and fired it. ERT members immediately backed away. A cat and mouse game involving ERT members, and the male ensued. The male would walk towards the ERT vehicles which caused them to retreat subsequently the ERT vehicles moved forward as the male retreated. This continued over the next 1.5 hrs with the male firing several more rounds into the air. The male finally gave himself up to ERT members.

During the course of this incident ERT was unable to get close enough to deploy less lethal do to the weapon the male was brandishing

The use of a rescue vehicle would have provided ERT with the following options.

- 1) Provide better protection to the pedestrians and occupants of vehicles that they had to evacuate from the scene.
- 2) Protection for ERT, K9 and negotiators while they were on the bridge deck.
- 3) ^{15 (1)}
- 4) With two rescue vehicles being deployed ERT could have limited the males movement on the bridge thus making negotiations easier.
- 5) Afford the ability to safely move or deliver valuable resources to the scene.

Type of Incident: ^{22 (1)}

Date/Time 2006-04-^{22 (1)}

Duration of Incident: 4.5 hrs

Location: ^{22 (1)}

Incident Number: 06-^{22 (1)}

A male forced his common law wife at knife point into his van. The wife is then seen trying to escape but is caught by the male and dragged back into the van which then drives off. The van is then located in the parking lot of ^{22 (3) (b) and 22 (1)} ERT members arrive on scene and contain the

area around the van. Negotiators made contact with the male and after several hours of negotiations the male surrenders to ERT members. ERT members then searched the van and located the wife who was unharmed except for a minor injury to her hand caused by the male.

The use of a rescue vehicle would have provided ERT with the following options.

- 1) ^{15 (1)} [REDACTED]
- 2) ^{15 (1)} [REDACTED]
- 3) Protection for negotiators to safely perform their job at a close distance to the scene.
- 4) ^{15 (1)} [REDACTED]

Type of Incident: Man with a Gun

Date/Time: 2006-^{22 (1)} [REDACTED]

Duration of Incident: 9 hrs

Location: ^{22 (1)} [REDACTED]

Incident Number: 06-^{22 (1)} [REDACTED]

A citizen calls 911 stating that he just heard seven gun shots and observed a male run into a near by residence ^{22 (1)} [REDACTED] ERT was dispatched and contained the residence in question. The male that had earlier been seen by the citizen was observed by ERT outside the rear of the residence in company with a female. ERT made verbal contact with the male and female who were subsequently taken into custody. The male and female stated that there weren't any weapons or suspects left inside the residence.

ERT entered and cleared the residence for bodies. While inside ERT members located in plain view eight long rifles including a scoped 223 with an inserted magazine (good to go), seven hand guns, a sawed off shot gun and a large quantity of different calibre ammunition. None of these firearms were stored in locked receptacles, were rendered inoperable or had trigger locks.

Later further search of the residence revealed one more handgun along with a pipe bomb and bomb making components.

Should this call have gone sideways neighbouring citizens, patrol and ERT members around the suspect's residence would have been in danger do to the lack of protection form the suspect's lethal arsenal.

The use of a rescue vehicle would have provided ERT with the following options.

- 1) Protection for the safe removal of citizens neighbouring the suspect's residence.
- 2) ^{15 (1)} [REDACTED]
- 3) Afford the ability to safely move or deliver resources to the scene.
- 4) ^{15 (1)} [REDACTED]

Type of Incident: Barricaded Suicidal Male

Date/Time: 2005-01-²²⁽¹⁾ [REDACTED]

Duration of Incident: 3 hrs

Location: ²²⁽¹⁾ [REDACTED]

Incident Number: 05-²²⁽¹⁾ [REDACTED]

Patrol members locate an occupied stolen vehicle behind the Cobalt Hotel. They immediately box the vehicle in with their patrol units. The male tries to smash his stolen vehicle out of the box where upon a patrol member approaches the driver's side window of the stolen vehicle and proceeds to smash it out. At this point the male pulls a silver pistol out of his waistband and places it to his own head. The male tells the patrol members that he was going to kill himself or make them kill him. A standoff begins and ERT is requested to attend the scene. ERT arrives, takes over containment and negotiations commence. After several hours the male decides to put the pistol down and exit his vehicle where upon he was safely taken into custody.

Note: Approx a year later this same male was involved in a similar incident but this time he exited the stolen vehicle and pointed a handgun at the patrol members who had stopped him. The male was shot by the patrol members and later died of his wounds.

The use of a rescue vehicle would have provided ERT with the following options.

- 1) ¹⁵⁽¹⁾ [REDACTED]
- 2) ¹⁵⁽¹⁾ [REDACTED]
- 3) Safely evacuate citizens from the surrounding area.
- 4) Protection for members in containment.
- 5) Protection for negotiators to safely perform their job at a close distance to the scene.
- 6) ¹⁵⁽¹⁾ [REDACTED]
- 7) Excellent vehicle to safely move or deliver valuable resources to the scene.

Type of Incident: Warrant Service (JFO – Winnipeg, Edmonton, RCMP, VPD)

Date/Time: 2007-01-^{22(1) and 22(3)(b)} [REDACTED]

Duration of Incident: 10 hrs

Location: # ^{22(1) and 22(3)(b)} [REDACTED]

Incident Number: 07-^{22(1) and 22(3)(b)} [REDACTED]

¹⁵⁽¹⁾ [REDACTED]

¹⁵⁽¹⁾ [REDACTED]

15 (1)

[Redacted text block]

[Redacted text block]

[Redacted text block]

Appendix C: Selection criteria for vehicle

Criteria for Vehicle Selection

- 15 (1) [REDACTED]
- 15 (1) [REDACTED]
- 15 (1) [REDACTED]
- 15 (1) [REDACTED]
- capable of transporting a 15 (1) tactical team plus driver 15 (1)
- manoeuvrable on city streets and in laneways
- accessible to most areas of the city
- 4WD capability for deployment in adverse weather and driving conditions
- maximum visibility utilizing ballistic glass
- ability to deploy less lethal or lethal weapons from inside in safety
- built on domestic chassis and drive train- consistent with other fleet vehicles
- easily maintained by city mechanical shops
- readily available replacement parts
- efficient entry and egress points
- warranty for both chassis and drive train as well as the fabricated armour
- 15 (1) [REDACTED]
- standard heat and air conditioning throughout the vehicle
- 15 (1) [REDACTED]
- 15 (1) [REDACTED]
- capable of mounting emergency light bar and siren
- capable or fitted for lighting equipment (for illumination)
- vehicle does not require special license or permit to operate
- maximum volume and payload in relation to the size of the vehicle
- sufficient space for communication equipment and necessary electronics
- sufficient electrical power to operate equipment (15 (1) [REDACTED])
- 15 (1) [REDACTED]
- 15 (1) [REDACTED]
- 15 (1) [REDACTED]