



City of Richmond

Report to Committee

To: Community Safety Committee

Date: February 3, 2012

From: John McGowan
Fire Chief

File:

Re: Aircraft Emergency Response Within Richmond

Staff Recommendation

That the report entitled *Aircraft Emergency Response Within Richmond*, dated February 3, 2012 from the Fire Chief, be received for information.

For John McGowan
Fire Chief

FOR ORIGINATING DEPARTMENT USE ONLY			
ROUTED TO:	CONCURRENCE		CONCURRENCE OF GENERAL MANAGER
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REVIEWED BY TAG	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	REVIEWED BY CAO
			YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

Staff Report

Origin

This report provides Council with options that allow Richmond Fire-Rescue (RFR) to address a gap in the delivery of training for aircraft emergency response services within the City of Richmond, specifically outside of Vancouver International Airport (YVR) airside operational boundaries.

In 1931 YVR airport opened with a single runway, two hangars and a small terminal that consisted of an administration building and waiting room. Throughout the years YVR has grown and expanded into an airport served by 62 airlines which connect people and businesses to 99 destinations in Canada, the U.S. and around the world.

YVR is Canada's second busiest airport, serving approximately 17 million passengers in 2011 and more than 296,000 aircraft landings and take-offs on its runways.

The recent announcement of YVR's 10 year strategy has Vancouver Airport Authority investing \$1.8 billion to attract new routes and carriers while improving their customers' experience.

Findings of Fact

Aircraft firefighting and rescue services are currently provided through two distinct entities:

1. YVR Emergency Response Services who provide airside firefighting coverage. It is noted that aircraft emergency response protocols see RFR supporting YVR's primary airside fire and rescue emergency operations through the delivery of standby emergency response services.
2. RFR who provide emergency aircraft firefighting and rescue emergency response services to all areas of the City except YVR airside.

While emergency incidents involving aircraft travel remain at low levels, RFR does respond to an average of 45 declared aircraft emergencies per year coupled with serious aircraft related events occurring within the City of Richmond boundaries on a regular occasion. There have been three serious aircraft emergency events since 2008.

Analysis

RFR's current ability to respond to and mitigate aircraft emergencies has eroded with time. Employees who were once fully trained and certified do not have the opportunity to maintain their skills; they have moved to new responsibilities within RFR or have retired. There is a need to train RFR personnel and deliver aircraft emergency response in Richmond.

RFR's review of YVR statistics and future plans identify the potential for an increased number of larger aircraft incidents based on an increased volume of air traffic, as well as the desire of the YVR Airport Authority to attract more air carriers who fly to a greater number of destinations with increased passenger volumes.

RFR has identified a service gap issue, developed three potential options and provided an analysis of each Option's viability for Council consideration.

Option 1 - Remain with the standard (status quo) training provided to structural building fire fighters.

This option would result in the response to aircraft incidents not being as effective.

Option 2 - Train and maintain staff to full Aircraft Rescue Fire Fighting (ARFF) training accreditation as identified within the Canadian Aviation Regulations (CARs).

This option is not seen as reasonable as this standard is designed for employees whose primary job scope is that of an airport firefighter where the principal area of responsibility is airside. The City of Richmond does not provide the ARFF services at YVR and as such this level of certification would not be cost efficient or effective. The City would incur significant cost of approximately \$800,000 per year to bring the department up to that level of expertise and the opportunity to maintain the full cadre of skills would be difficult to maintain without operating as airfield firefighters.

Option 3 – Option 3 has at its core the goal of having Richmond Fire Rescue personnel better prepared to respond to aircraft emergencies. The goal will be achieved through increasing of knowledge, and skills to the level where all RFR firefighters would be able to recognize and mitigate aircraft specific hazards, determine and action appropriate fire attack and passenger extrication strategies, and maintain these skills on an annual basis.

This option recognizes the need to educate employees of specific hazards, gain the knowledge regarding appropriate fire attack and rescue protocols, and allow the employees to practice said knowledge and skills that would be reasonably foreseen within the scope of their duties. This strategy would also allow RFR personnel to understand the practices and work more effectively with YVR emergency services personnel.

Secondarily, when incidents of this nature occur within the City of Richmond RFR staff will be able to manage these events with greater effectiveness and efficiency providing a safer community for the citizens of Richmond.

RFR believes Option 3 is the most effective and efficient use of City resources that will result in firefighters with enhanced skills who can deliver improved services and result in a safer community.

RFR is currently investigating external service providers who could accomplish the task of training all fire suppression staff to the level indicated in Option 3. RFR will be looking to leverage opportunities to utilize its new training site once it becomes operational.

Service providers identified to date include:

1. The Justice Institute of BC
2. Edmonton Airport Authority
3. North Bend (Washington State) Fire Training Academy
4. Canadian Armed Forces

The cost to train all RFR fire fighters under Option 3 is estimated annually at \$84,730 or \$425 per person as follows:

Item	Cost
Theoretical Training (8 Days)	\$12,720
Practical Training	\$60,760
Fuel (Propane)	\$10,250
Total	\$84,730
Est. annual cost per person	\$425

Financial Impact

There are no financial implications associated with this report, funding will be through existing budgets.

Conclusion

YVR is a significant business within the City of Richmond that is aggressively looking to expand its service delivery to the world and as such increases the risk of aircraft emergencies within the City.

RFR currently has limited capacity to respond to these types of emergencies. Furthermore as these abilities are being further eroded, over time this will create a potential gap in service delivery to the citizens of Richmond in the very near future. Better educated and prepared staff will be more effective and efficient in the delivery of service making the community safer for its citizens.

The implementation of Option 3 will lead to Richmond Fire Rescue personnel being better prepared to safely, effectively and efficiently respond to aircraft emergencies.

A handwritten signature in black ink, appearing to read 'Tim Wilkinson', with a long horizontal line extending to the right.

Tim Wilkinson
Deputy Chief, Operations
(604-303-2701)
TM:jw