



Dear Executive Board,

This proposal is a request for a capital expenditure of \$2,634 to purchase 20 training manikins. The manikins that are currently in use for the SFA and CPR courses taught by the EFRT are in poor condition, as they have been in use for at least the past four years. Currently, there are 16 functioning manikins of the 25 originally purchased, most of which already contain some damage. Several have broken in two at recent first aid courses, rendering them non functional. This is a problem as the Red Cross requires a 1:1 participant to manikin ratio for their courses, and enrollment in the EFRT courses is generally higher than this (currently ~30 per course). The chart below details the three options for CPR manikins:

Model	Total Price (including tax and shipping)	# Manikins	Cardiac Monitor
Cardiac Canada (CC) CPR-AED Training Manikin with CPR monitor	2,634.28	20	Yes
CC CPR-AED Training Manikin without CPR monitor	2199.74	20	No
Actar D-Fib Manikin 25 pack	\$2564.98	25	No

(Left) Cardiac Canada Manikins

(Right) Actar D-Fib 25 pack



We propose the purchase of 20 CC CPR-AED Training Manikins with the CPR monitor. As shown in the picture, the CC manikins are more realistic to the eyes and touch than the Actars, which are the current brand of manikin being used. They also have the option of including a cardiac monitor that assesses the rate of compressions during CPR, which is crucial for effective CPR and is currently difficult for instructors to monitor, especially in larger classes. Further, the



CC manikins are built with a mechanism to ensure the correct force and depth of compressions is used.

The CC manikins with the CPR monitor would provide more effective instruction to participants and add to the professionalism of the first aid and CPR courses offered by the EFRT, as well as improve the CPR practice of the responders on EFRT. These first aid courses have grown substantially in the past several years, bringing in profit for the MSU and providing a valuable resource for McMaster students. We believe that the added benefits of the CC manikins with the CPR monitor far outweigh the slightly greater cost when compared with the older model.

As well, these manikins will be included in a replacement plan to ensure that the EFRT always has at least 30 manikins for first aid courses. The original Actars were purchased more than 5 years ago, indicating that they have outlasted their depreciation cycle and are due to be replaced. Shown below is a replacement plan for the mannequins. As you can see, they were first purchased five years ago and since then none have been replaced. They are now breaking quickly and not likely to last longer than another year or so. This plan will allow EFRT to replace 20 mannequins this year, and then subsequently purchase five mannequins a year. After two years EFRT will be able to maintain 30 mannequins on a consistent basis. The reason that EFRT is required to have 30 mannequins is because the demand and size of classes have grown since 2009.

EFRT Mannequins Replacement Plan									
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017
Mannequins Purchased	25	0	0	0	20	5	5	5	5
Damaged Mannequins	0	0	0	0	-9	-10	-6	-5	-5
Total Mannequins	25	25	25	25	36	31	30	30	30

Thank you for your time and consideration,

Laura Fox
Program Director
Emergency First Response Team