

# McGill Racing Team



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Montreal, Quebec  
January 21, 2007

Dear sponsorship partner,

The McGill Formula SAE Racing Team is a group of undergraduate engineering students at McGill University. Each year, we design, build, test, validate and develop a new formula-style racing car to participate in the Formula SAE international competition at Detroit, Michigan. This is an extremely competitive competition where over 120 colleges and universities from around the world come to compete and exchange on their new creations and concepts. McGill's team has won numerous design awards and prizes over the years.

The team was established in 1994, and this year we are working on the ninth race car. New students from different branches of engineering (mechanical, electrical, computer, civil and materials) join the team each year. This extra-curricular activity is a great opportunity to apply the knowledge learnt in class, and develop many skills such as teamwork, project management and problem solving abilities. Moreover, we are proud to encourage the use of alternative fuels in transportation by using ethanol to power our engine.

Monetary & material donations are crucial to the success of this project. Therefore, we do our best to fulfill your marketing and advertising goals. Apart from the Detroit competition, where over five thousand students and racing fans attend each year, our car is exposed during several events on campus and off-campus such as the McGill Open House and Montreal F1 Grand Prix.

In the following pages you will find information about the competition, our team, the events in which we participate throughout the year, and an estimate of this year's budget. Your support is essential for us. We could not participate, year after year, in this wonderful project without your contribution. The details about the sponsorship levels are explained at the end of this document.

On behalf of the McGill Formula SAE Racing Team, we thank you for your time and consideration and we look forward to your response.

Sincerely yours,



Philippe Pinard  
*Sponsorship Manager*



Prof. Larry Lessard  
*Faculty Advisor*

817 Sherbrooke Street West  
Macdonald Eng. Bldg., Local 053  
Montreal, Quebec, Canada  
H3A 2K6  
Email: fsae@mail.mcgill.ca

## I. SAE, Formula SAE and McGill



The Society of Automotive Engineers was founded in 1905 and regroups nearly 90,000 engineers, business executives, educators and students from more than 100 countries. The society is a platform for exchanging ideas and useful technical information as well as a forum for the advancement of transportation technology. More than three hundred collegiate chapters around the world participate in several students' competitions. As the SAE puts it, "the end result is a great experience for young engineers in a meaningful engineering project as well as the opportunity of working in a dedicated team effort."

The competition we participate in every year since 1994 is the main Formula SAE competition held in Detroit, Michigan. The event is sponsored by General Motors, Ford Motor Company and Daimler-Chrysler, and is covered by various media across North America. The objective is to conceive, design, fabricate, test and race a formula style-racing car to compete against more than 120 other colleges and universities from all around the world. Every year, a new car is built from scratch based on the experience learnt from the previous years.

The McGill chapter is composed of a dedicated group of 30 fulltime engineering students. It is an incredible learning experience for developing engineers to work together on an extremely challenging project.

## II. Goals



Our goal this year is to finish in the top 5 (among 120 participants) at the Formula SAE competition, and to reclaim the Canadian title. This can be achieved by developing a responsive race car that is both lightweight and powerful, and run it through rigorous testing for troubleshooting, validation, and tuning. Fully composite wheels – a technology never seen on a road car - are under development and will be ready to go by the time of the competition. The car will also feature lightweight aluminum – silicon carbide brake discs and carbon fiber suspension members.

We also aim to build a strong marketing base for the team. For example, we expect to have an even heavier participation during the Formula 1 Montreal Grand Prix this coming season. Moreover, McGill University is starting to consider the Formula SAE project as a marketing tool to attract new students to the faculty of engineering, and therefore will have even greater presence at the University's events.



### III. History



The McGill Racing Team (MRT) has a rich history in the Formula SAE series. Since 1994 McGill Engineering Students have built 9 competitive race cars. Here is a short overview of the MRT history.

#### The First Generation 1994-1999

The first car, known as Boomerang, was built in 1994. Today, it is exposed at an indoor karting track in Montreal as a silent witness to McGill's motorsport history.

To follow the Boomerang was the MRT2, affectionately referred to as Big Bird for its flashy yellow paint. Big Bird raced twice in Formula SAE, ranking 1st in Quebec and second in Canada in its 1998 season.

#### The Big Bertha Generation 1999-2001

Big Bertha, due to its rather bulky look, was a long and difficult learning experience for many new members. In the end, MRT improved its best result with a 19th overall standing in the 2001 Formula SAE competition.



#### The Third Generation 2001-2005

A new crew of outstanding engineering student took over the racing team to kick off a great season for MRT. The team led by David Lemire, Jonathan Laliberte and their classmates were aiming for something better than the team has ever achieved. After a year of hard work, the McGill Racing Team achieved a great standing with a 13th overall position in the 2002 Detroit competition, 3rd in Canada, and 1st in Quebec.

However, the year 2001 marked the beginning of an important rule change; no car could be used more than one year. This rule change ended the short lived success of the MRT4. In 2002, the team started working on an improved version of the MRT4. The new powerful MRT5 equipped with a turbocharger finished 5th in the world at the Formula SAE 2002 auto-cross event.

This golden generation continued its success with the MRT6 in 2003. Featuring a smart under-tray design to create down force, more weight reduction and an award winning Engine Management System, the MRT6 finished 1st in Canada and 15th in the world.

After the great success with the MRT6, the team decided to concentrate on specific subsystems of the race car to come up with something new. For example, the fully carbon fiber wheel project was started. The MRT7 bodywork was the most attractive up to that point, and the racecar had similar performance to that of the MRT6. Unfortunately, a failure in the powertrain prevented the car from finishing the race at Detroit in 2005.

#### The Transition Phase and the MRT8

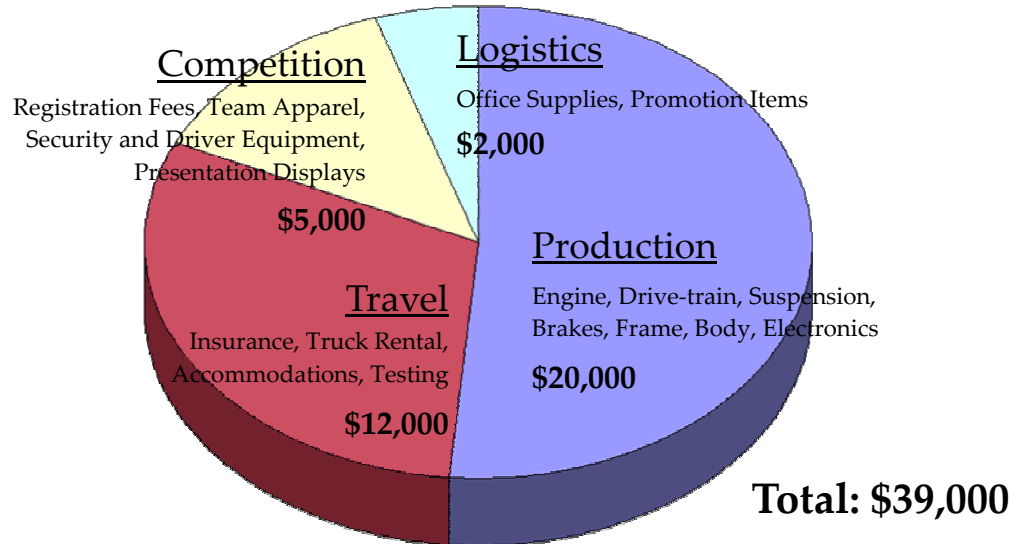
Most of the core team graduated with the MRT7, and the team was taken over by less experienced, mainly new members. Nevertheless, the team is proud to have designed an entirely new car, built it in time, and raced at Detroit 2006. The new MRT8 featured an entirely new chassis concept, and the suspension assembly included new composite members for weight reduction.



## IV. Estimated Budget (2006-2007)



The existence and success of the team are strongly dependent on the support of our sponsors. Building a racecar is an expensive endeavor that cannot be done without material and financial supports. The following chart summarized the average yearly expenses for the team.



## V. Sponsors' Benefits



Year after year, the team participates in several events on and off campus to increase our visibility as well as the one of our sponsors. Sponsoring the McGill Formula SAE team shows your company is involved in supporting student development and education. McGill University attracts some of the best engineering students from all around the world. Our team offers you the opportunity to gain visibility amongst students who are highly eligible to be hired by top companies before and after their graduation. You will also gain exposure among the general public.

Here is a list of events we participated in last year:

*Formula One Grand Prix of Canada in Montreal*

- The Friday of the Grand Prix, the car was exposed on Peel Street
- Presentation of our project to the general public
- More than 50,000 attendees

*Detroit Competition*

- Annual World Competition of Formula SAE
- More than 120 colleges and universities participate
- Covered by various media across North America
- More than 5,000 students and, 2,000 judges and spectators

*McGill Open House*

- Recruitment of new students
- Over 10,000 attendees including prospective students and parents

*Discover McGill*

- Welcoming day for new engineering students
- Approximately 2,000 attendees

## VI. Sponsorship Structure



Monetary & material donations are essential to the success of this project. Therefore, fulfilling your marketing and advertising goals is a priority for us. This detailed sponsorship hierarchy will help you evaluate the potential return on investment in the McGill Formula SAE team. The sponsorship levels are flexible. Please contact us if you want more information or if you have special requests.

Tax-deductible receipts may be issued for individual or corporate donations. Contact us for more information on this matter. All free material and equipment provided to the McGill Formula SAE team by the sponsors will be considered as a monetary contribution equivalent to the market value. Sponsors who may like to develop new racing car applications for their products are welcome to discuss the possibilities with the McGill Formula SAE team.

	<b>Platinum Greatest Contribution</b>	<b>Gold \$5,000 or more</b>	<b>Silver \$1,000 to \$4,999</b>	<b>Bronze \$250 to \$999</b>	<b>Friend \$249 and less</b>
<b>Sponsor's Logo on the Car</b>	The total surface area of the car's body is divided based on the sponsor's contribution.				
<b>Sponsor's Logo on official clothing</b>	X	X	X	X	
<b>Company mentioned in publications</b>	X	X	X		
<b>Booking the car for display</b>	X	X			
<b>Web site</b>	Logo & Link	Logo & Link	Logo & Link	Link	Link

Last year, the team was sponsored by Bombardier, Carritec, CGI Group, Cymat, Delhi-Solac, Dow Chemical Canada, McGill Faculty of Engineering, Mevotech, Pratt & Whitney Canada, PR Distribution, Rowley Associates, Texas Instruments and more...

**McGill Formula SAE Racing Team**

817 Sherbrooke Street West

Macdonald Eng. Bldg., Local 053

Montreal, Quebec, Canada

H3A 2K6

Tel.: (514) 398-2250

Email: [fsae@mail.mcgill.ca](mailto:fsae@mail.mcgill.ca)

Website: [www.fsae.mcgill.ca](http://www.fsae.mcgill.ca)