

# THE QUALIFIER



October <u>2008</u>

Official Newsletter of the U of A Formula SAE Student Vehicle Project

### 2009 Design Nearly Complete

fter 14 weeks of continual design work, the design for the 2009 car is nearly complete. The 14 member design team has taken on the task of improving an already stellar car.

The changes to the design come in the form of a revamped chassis, front and rear suspension and steering system.

The chassis has shed 25lbs from the 2008 weight of Its torsional rigidity 76lbs. has barely suffered during this weight reduction while space in the driver's cockpit has been increased significantly.

The rear suspension was redesigned for a MecE 460 Capstone Design project in Fall 2007 and the front suspension has used this design as it's baseline.

The revamped steering

system should require less driver effort while allowing a tighter turning radius and superior turning characteristics.

Anti roll systems will be incorporated into both the front and rear of the car in hopes to improve autocross results.

Total car weight is estimated at 460lbs; 49lbs shy of the 2008 weight.

All the design changes should produce a car that not has an astonishing amount of power but also turns on a dime.



Pro/ENGINEER model of the 2009 car.

### **First General Meeting Highly Successful**

On the first Wednesday in October, over 70 students attended Formula semi-annual General Meeting. Interest in the club astonished all team members from last year.

Students interested the club kept team members busy with questions for more than 2 hours after the meeting.

A work session the following weekend saw over 50 students come out and help clean the workspace area. An old car was dismantled as well, given that it was in dire need of extensive repairs.

The executive team is ecstatic that there is so much new interest in the club.

#### **Bucyrus Partners with Formula SAE**

productive equipment dates market place. back to 1880 and the under-The company manufactures product lines. high-quality OEM parts and Formula SAE is glad that

Bucyrus designs and manu- provides support services for Bucyrus can be part of their factures some of the largest, all Bucyrus machine brands. legacy at the University of mining Bucyrus is dedicated to en- Alberta. equipment available in the hancing mine productivity, world today. The company controlling costs and adapthistory for creating surface ing to the rapidly changing

Efforts in R&D continue to ground mining equipment add new products and imcan trace its roots to 1826. prove and expand existing





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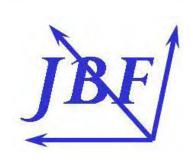
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