

Laconia Car #35



2007 Car

Instructor: Greg Hedrich

Car #35 Members

- Chris Michels
- Shawn Turnes
- Keith Ewald
- Jacob Batterman
- Brandon Julka

Car #35 Proposal Packet

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Monthly Summaries

May 29th – June 30th (26.5 hours)

In the two days of May and the eight days in June I worked a total of 26.5 hours. Most of the working was with 3D CAD software. I have learned many things in the past month. I have become very good with [Pro-Desktop](#) (CAD software). I learned that it is very frustrating to use, but if you have the patience then you can make anything. It takes a lot of time to get used to using the program, but once you get the hang of it, it's and amazing thing to use. I think that I could probably cut about half of my hours on the software now; I have just become that familiar with it. It took me a lot of practice to make the frame turn out like it did. But I have only broken the tip of the iceberg. There are a million more things that the program can do.

July 1st – October 31st (4 hours)

During this time period I only had the opportunity to work once. I finished the frame of the model and painted it. On July 2nd my computer crashed. This was an unexpected twist that I had to work around. Luckily I backed all the CAD files, so I still had the frame in [Pro-Desktop](#). There were many other days that I did little "tid-bits" of work, but the design process was done.

November, 2007 – January, 2008(Not too many hours)

November rolled around and all we needed now was material and money. We waited about a month and a half for the aluminum tubing. The original business the team was going to get the tubing from was moving their shop, so all we could do was plan. Mostly what was done in November and December was getting sponsors. I sent out 30 Letters to area businesses, only to get a call back from about 5 of them. I leaned that I need to "get on" the sponsors more, and try to interact with them. The most success that I (Chris) received out of it was \$200.00 for the Laconia wrestling club. I walked into one of they're meeting, and about 20 people, members and faculty, listened to my 30 minute speech that I prepared for them about the Supermileage Club. It was a very successful speech and they became very interested in what we were planning on doing.

February, 2008(8 Hours)

During the month of February the team for car #35 worked hard every Monday to get the car finished and driving. The team hit some bumps in the road when the engine would not fit right, but the team found a way around it and made something that worked. Another issue the team had was with the strength of the frame, the team had to make sure the frame would support the designated test weight. After the roll cage was tacked on the team tested the roll cage. The test proved to be successful. The team endured a lot of frustrations throughout the month, but made it past and finished the frame.

March, 2008(18 hours)

March was full of successes and frustrations at the same time. The frame was almost complete, but we ran into some problems with the steering. Shawn wanted to build it like last year's car, but Chris wanted to build A-Arms with suspension. The main factor was time, so the team decided to go with Shawn's idea. There were many other things that did not turn out the way they were supposed to, but the team worked with what they had.

April, 2008(14.5 Hours so far)

April is what our instructor Mr. Hedrich called "Crunch time." It's amazing how fast those first 18 days of April go by when you're putting all your time after school into the car. The first two weeks of April were full of finishing touches; painting, monokote®, etc. All the hard work paid off.



Work hours log

For Car #35

Date: Hours worked: (rounded up or down)

5/30/07	8:00 P.M. – 11 P.M.	3
5/31/07	4:30 P.M. – 5:30 P.M.	1
5/31/07	8:00 P.M. – 10:00 P.M.	2
6/1/07	4:00 P.M. – 5:30 P.M.	1.5
6/10/07	1:00 P.M. – 5:00 P.M.	4
6/16/07	9:00 A.M. – 12:00 P.M.	3
6/22/07	4:00 P.M. – 6:00 P.M.	2
6/27/07	6:00 P.M. – 8:00 P.M.	2
6/28/07	10:00 A.M. – 11:00 A.M.	1
6/28/07	1:00 P.M. – 4:00 P.M.	3
6/28/07	5:00 P.M. – 6:00 P.M.	1
6/29/07	7:00 P.M. – 9:00 P.M.	2
6/30/07	10:00 A.M. – 11:00 A.M.	1
7/1/07	4:00 P.M. – 8:00 P.M.	4
2/4/08	4:00 P.M. – 6:00 P.M.	2
2/11/08	4:00 P.M. – 6:00 P.M.	2
2/18/08	4:00 P.M. – 6:00 P.M.	2
2/25/08	4:00 P.M. – 6:00 P.M.	2
3/3/08	4:00 P.M. – 6:00 P.M.	2
3/10/08	4:00 P.M. – 6:00 P.M.	2
3/17/08	4:00 P.M. – 6:00 P.M.	2
3/24/08	8:00A.M. – 4:00 P.M.	8
3/31/08	4:00 P.M. – 8:00 P.M.	4
4/1/08	4:00 P.M. – 8:00 P.M.	4
4/2/08	4:00 P.M. – 5:30 P.M.	1.5
4/7/08	4:00 P.M. – 9:00 P.M.	5
4/8/08	4:00 P.M. – 9:00 P.M.	5
4/9/08	6:00 P.M. – 9:00 P.M.	3

Supermileage Log

Wednesday, May 30, 2007

- Looked up pictures on www.google.com/images for good ideas for car
- Worked on [Pro-Desktop \(CAD software\)](#) for design of car from 8 P.M. to 10:30 P.M.
- Started A-frame on [Pro-Desktop](#)
- Made Layout on [Pro-Desktop](#)
- Sketched up spindles
- Sketched up frame of car

Thursday, May 31, 2007

- Worked on [Pro-Desktop](#) on Frame and spindles of car from 4:30 P.M. to 5:30 P.M.
- Picked back up on work Worked on frame with [Pro-Desktop](#) from 8 P.M. to 10:00 P.M.
- Finished bottom frame CAD drawing at approximately 10 P.M.

Friday, June 1, 2007

- Created 5 CAD photos of bottom frame with [Pro-Desktop](#) from 4:00 P.M. to 5:30 P.M.
- Worked on frame for a while

Friday, June 10, 2007

- Looked up information on Mercury outboard motors. 1 P.M. to 5 P.M.
- Searched for some information on carbon fiber and epoxy distributors 1 P.M. to 5 P.M.

Saturday, June 16, 2007

- Worked on roll-cage of the frame on CAD software 9 A.M to 10 A.M
- Looked up information on internet about carbon fiber 10 A.M. to 11 A.M.
- Ordered a sample pack of carbon fiber and epoxy resin 11 A.M. to 12 P.M.
- Talked to Mercury Marine to get number of someone who I could talk to for an appointment to go ask if they would donate an engine.

Friday, June 22, 2007

- Made 5 CAD photos of what was done on the frame and 6 of the newly modified bottom frame. (Made the front longer.) 4 P.M. to 5 P.M.
- Looked up more information on carbon fiber. (How to vacuum bag it) 5 P.M. to 6 P.M.

Wednesday, June 27, 2007

- Called John Mathews, Marketing Manager of Mercury Marine, and left a message asking to call me back to set up a day that I could come in and talk to him about sponsoring us.
- Supermileage team meeting at Laconia. 6 P.M. to 8 P.M.

Thursday, June 28, 2007

- Finished Frame on Pro desktop 10 A.M. to 11 A.M.
- Started on a plastic 12:1 scale model of the car to show sponsors what we were shooting for 1 P.M. to 4 P.M.
- Worked again on [Pro-Desktop](#) to make A-arms for front tires 5 P.M. to 6 P.M.

Friday, June 29, 2007

- Worked on model again from 7 P.M. to 9 P.M.

Saturday, June 30, 2007

- Worked on model of car from 10 A.M. to 11 A.M.

Sunday, July 1, 2007

- Finished frame of the model and painted it 4 P.M. to 8 P.M.

Monday, February 4, 2008

- Received aluminum, started cutting out bottom pieces for the frame 4 P.M. to 6 P.M.

Monday, February 11, 2008

- Finished up cutting up bottom pieces and started to weld 4 P.M. to 6 P.M.

Monday, February 18, 2008

- Built roll cage 4 P.M. to 6 P.M.

Monday, February 25, 2008

- Welded roll cage and other parts to car 4 P.M. to 6 P.M.

Monday, March 3, 2008

- Built sides and front bends 4 P.M. to 6 P.M.

Monday, March 10, 2008

- Continued to build sides and other pieces for frame 4 P.M. to 6 P.M.

Monday, March 17, 2008

- Finished Welding on pieces 4 P.M. to 6 P.M.

Monday, March 24, 2008

- Finished up all welds, planed everything else that was going to go into the car.

Monday, March 31, 2008

- Changed plans on roll cage and had to add more support, but worked out for the better 4 P.M. to 6 P.M.

Tuesday, April 1, 2008

- Completely finished frame and engine mounts, worked on steering 4 P.M. to 5:30 P.M.

Wednesday, April 2, 2008

- Changed plans for engine and clutching system, and work on them, as well as steering 4 P.M. to 8 P.M.

Monday, April 7, 2008

- Finished and welded steering frame member 4 P.M. to 8 P.M.

Tuesday, April 8, 2008

- Cut out fiberglass for bottom
- Finished welding everything
- Figured out steering
- 4 P.M. to 8 P.M.

Wednesdays, April 9, 2008

- Painted frame and fiberglass bottom plate finished up log book. 4 P.M. to 8 P.M.

Laconia

Brenner Tank LLC
920-922-5020
450 Arlington Ave
Fond Du Lac WI 54935-5571

Brenner Tank:

My name is Chris Michels, I am 16 years old and I am writing on behalf of the Laconia Supermileage Club asking if Brenner Tank would be interested in sponsoring. Seeing our carbon fiber car with **Brenner Tank** in big letters on the side will surely be a wonderful advertising opportunity.

Every year a team of high school students gather together after school to build our Supermileage Car to compete for scholarships. The students are given the problem of gas mileage and we must create a fuel-efficient car. First we start by planning what we are going to build. We then build a frame out of a composite material, be it steel or aluminum. From there we build a skeleton on to the main frame. After that we cover it with whatever we can find that is the lightest, this year we hope to use carbon fiber. The team must come up with a good drive train, clutching system, and braking system. We run the cars off 2.5HP-8HP engines.

We travel three times all over Wisconsin for competitions. First, we travel to U.W. Stout in Menominee. Second, we travel to Elkhart Lake and race on Road America. Third, we head up north to Fox Valley Tech. in Neenah. Each competition lasts two days.

This year we have very high hopes for what's to come of our car. The team learned a lot this past year at the competitions, and we are going to use that knowledge and build a very competitive car. Last year was my teams first year doing Supermileage. We were very successful. We placed 3rd at Road America and 3rd at Fox Valley Tech. We achieved 198.82 MPG. We were up against about 25 other cars.

The team has a lot of fun throughout the year, and we learn many things. We sharpen our Tech. Ed. Skill and gained teamwork skills. Most of all we sharpen our problem solving skills. And with gas prices over \$3.00 per gallon, we hope that we can make a difference. If you would like to speak with me and talk about sponsoring, you can reach me at (920) 922-6126 weekdays from 6:00 P.M. to 10:00 P.M. or anytime on weekends. Or e-mail me at michelsbmx@hotmail.com. If you would like more information on Wisconsin Supermileage visit www.wisconsinsupermileage.org

Thank you,

Chris Michels
Captain, Car 35
N8523 Totz Rd.
Van dyne, WI 54979

Attached: Photos of our 2007 Supermileage Car, Business cards, CAD drawings for this years car, and brochure for the Laconia Supermileage Club.