

Organization,

preparation, & endurance, mixed with a massive dose of sleep deprivation

Another Lap of America The Rice University SAE One Lap Team's 2007 Great Adventure



The Rice University Society of Automotive Engineers (SAE) club has been entering their (ex-Performatek) Milano in the One Lap of America race since 2005, and this is their record of the event in 2007. The thing that amazes me most about this whole endeavor is that it is a bona fide class in the Rice engineering curriculum, given for actual credit toward graduation! One Lap 101!

The club actually fields two cars—the Milano and an Isuzu Impulse Turbo—but what do we care about Isuzus?

As you may remember, the One Lap is a nut job "race" originally sponsored by Car & Driver magazine. It devolved (?) from the original "Cannon Ball Baker Sea-to-Shining-Sea Memorial Trophy Dash" cross-country race from NYC to California. Eventually, it became what is, in effect, a <u>long</u> rally with untimed transits over regular roads and then time trials on various race tracks scattered all over the

The engine swap about to take place, with only twelve hours to go!

country. The original One Lap actually was that (a trip around the continental USA), but it is now relegated to one section of the country that changes from year to year. Typically, the circuit takes about 5000 miles and ten or more days to complete, and the teams

compete on ten or more tracks of all sorts.

Since The Tire Rack is the primary sponsor, these events start at Tire Rack headquarters in South Bend, IN, and travel out to a new track every day (sometimes 800-1000 miles away) as they house and have fun. Since there are no rules on car prep or specs, it has become more and more a venue for "Tuner Wars". There are even a few quasi-factory teams. The high-end teams have tech support and semipro drivers (and, of course, really deep



The crackerjack pit crew performing the swap

make their way back to South Bend for the final events. This year's One Lap went west out to Colorado, Utah, etc.

More than anything, it is an exercise in organization, preparation,

and endurance, mixed with a massive dose of sleep deprivation. As mentioned in last year's report, the character of the event has changed substantially. Originally, it was just an excuse for some car crazies to get out of the pockets), and most of the big boys are running serious turbo- or supercharged power. Forced induction was even more important this year, with several tracks at very high elevations.

The One Lap Milano runs in the "Mid-Priced Sedan" class, which sounds benign enough until you find out that half of the class is made up of heavily-modified Subaru WRX STi, Mitsubishi EVO, Dodge Neon SR/T etc. 400-500 hp are needed to be a serious contender. By contrast, the Rice Racing Owls go to battle with an 18-year-old Alfa sedan, the enthusiasm and natural endurance of youth, and sponsorship from Performatek, Garcia Alfa Racing, their dads, and whoever



The Garcia Alfa Racing loner engine about to go in

else they can talk into donating time, parts, and services. In spite of the seemingly insurmountable odds, they compete with a smile, a can-do attitude, and a love for every miserable minute of the event.

The Rice team has done better each year, and 2007 yielded the best



The supercharged engine that was swapped out

results ever. They were, in fact, the highest-placed naturally-aspirated car in their class, and finished 54th overall out of 85 entered. The car was set up with a tired 3.0L S engine (which burned so much oil that the team's unofficial name was the Blue Smoke Alfa Team), and a suspension



Late at night and the engine's in - it's Miller time!

slightly modified with the Performatek heavy-duty street suspension (27mm torsion bars, matching rear springs, Koni shocks, and big sway bars front and rear). In their search for speed via weight loss (and against

the advice of all sane people), they modified the car in ways guaranteed to make the car excruciatingly uncomfortable for the over-the-road sessions. All insulation, carpets, headliners, door panels ... gone. Dash ... gone. Heater and AC ... gone. Window winders ... gone (the driver side window is

> now strap-activated). Rear seats ... gone.

> > This year's Racing Owls (Team Alfa) were Damen Hattori (club President, Junior) - main driver; David Carr (Senior); and Nikolay Kostov (a Freshman who's from Bulgaria).

Damen has driven the last two years and continued this year as well. Here's how it all went:

Day 1 This year's One Lap started like they all seem to do for the Rice Racing Owls (after finals and all-nighters): With an engine swap the night before they were supposed

> to leave for South Bend. Their 3.0L blew its head gasket again, and it was lucky for them that Andrew Garcia had a spare to lend them. Another late-night (to 4 am) engine swap.

Day 2

Departure day – some other little

last-minute details: A trip to the alignment shop and they were off, only six hours behind schedule. The Alfa was rock steady throughout the trip, and they arrived in South Bend in good order.

Day 3 Much to their dismay, they found that the performance ante had been upped again from last year's levels. In their Mid-Priced Sedan class, they would be competing against

highly-tuned Subaru Impreza STi's and Dodge Neon SR/T4's. Those cars had several times the Milano's horsepower, but not that much more weight. There was also a nicely-tuned BMW 330i (since when is \$50K a mid-priced se-

dan?), a couple of stock "Police" Crown having its track day at the Autobahn Vics, and a Dodge Charger. The registration/kickoff dinner and drinks provided by race sponsor Jaegermeister put everyone in a festive mood, and then they headed to bed for what would be their last full night's sleep for the next ten days.

Day 4 This day was to be a full and long one: Wet skidpad at Tire

Rack; a quartermile oval in South Bend; a drive to Joliet, Illinois, to race on the Autobahn Country Club track; and finally a drive to the hotel in Pacific Junction, Iowa. On the wet

skidpad, the Alfa did quite well, with a .709g

lateral acceleration, which was good enough for 57th overall (out of 85) (but he was placed 58th, as Alfa is before BMW alphabetically-and in all other regards).

Next was the short drive to the South Bend Motor Speedway, where Damen nearly put the car into the wall. Miraculously, he saved the Milano and probably his own life (even if he had survived the crash). However, this cost him a lot of time from the three timed quarter-mile laps, and the Milano finished in 71st place.

The team left for Illinois immediately, arriving in Joliet a bit early, and they were surprised to learn that the Chicago Alfa Romeo Owners Club was



Lightening the bumpers

Country Club's other track. Many club members came over to see the car and gave the team advice and encouragement. On the track, Damen did a fine job and finished in 59th place. The BMW 330i was still in front of them, but the Milano was closing in.

The all-night drive from Joliet to Iowa, partly in pouring rain, got them



The high-performance radiator in place before bumper installation

to their hotel at 5 am. Day 5 The next morning, at the and exactly the same as the BMW 330i track at 8 am in pouring rain, the organizers decided to run only the morning heat and canceled the afternoon's. Because the track was wet, the team

(Continued overleaf...)

adjusted the Performatek rear sway bar to the softest setting to make the car a bit more forgiving. Fortunately, the Milano was in one of the last run groups, and by then the track was dry so Damen



The first event - the wet skidpad at Tire Rack in South Bend, IN

could really push the car, finishing in 33rd place! Sometimes, it really is better to be lucky than good!

Then they were off to Tooele, Utah, a mere 1000 miles away! Well, almost-first, a quick visit to Home Depot to buy some hardware to secure the exhaust that had come adrift on the track. THEN it was off for a quick 1000-mile jaunt through the night. The drive through Nebraska and Wyoming went just fine. As they drove up into the Rocky Mountains, all of that interior lightening caught up with them: The lack of a heater and any

in general. Miller Motorsports offers a short track and a long track (with a 3500-foot-long main straight). The One Lap cars ran the short course in the morning, with the Milano placing 56th, and then placing 60th on the long course in the afternoon session. Their competition with the 330i was still alive-it placed 65th in the morning and 47th on the long course. It seemed that the Alfa was doing better in the corners, but just didn't have the grunt necessary to place really well.

The afternoon session ended at 3 pm, and then it was off to Pueblo Mo-



The last event - the dry skidpad at Tire Rack

sort of insulation meant that the inside they weren't showing and canceled and outside temperatures equalized very quickly. The open hole in the dashboard where the heater used to sit was not helping either. Finally, it got so cold that they had to stop at a gas station for hot drinks, blankets, and a mini heater. Still, they arrived at the hotel at 5 am. As it was written on one of the cars: "No rules. No sleep. No problem."

Day 6 The next day, the team was at Miller Motorsports Park at 9 am. They readjusted the rear sway bar, added oil, lowered the tire pressure a bit, and checked the car over

torsport Park in Pueblo, Colorado. The Milano was agile and stable in the twisties through the Rockies-even in subzero temps on high-performance summer tires. They got to the hotel early-4 am. Unfortunately, the hotel decided that

their reservations! They did get a room, beds, and a shower-eventually.

Day 7 Pueblo Motorsport Park. Driving to the track, Dave managed to shift into reverse without fully depressing the clutch. Severe grinding noises ensued, and the transmission was never the same again! Shifting into reverse gave clunking noises, and later the box developed a loud whine from the diff. This made the team go into gentle-shifting mode, which really hampered on-track performance.

Nonetheless, in spite of that and the altitude, Pueblo proved to be an

excellent track for the Alfa. The team finished the morning session in 43rd place, beating some serious cars like the supercharged Lotus Exige S and a supercharged BMW M Roadster. The 330i was just a spot ahead of them. In the afternoon session, the Milano finished 46th, but the BMW had trouble and ended up in 66th place (cryin' time in Munich).

From Pueblo, it was on to Jennings, Oklahoma. Problems with the fuel pump circuit meant roadside repairs, and now the GPS showed a hotel ETA of 4 am. During an attempt to gain some time back, Nick had occasion for

a casual chat with a local gendarme, who clocked him going 108 in a 65 mph zone. As Nick said: "Using my Eastern European charm, I got away with a warning, but sure enough there was no speeding afterwards." To make matters worse, the GPS gave them wrong directions to the hotel, and then Damen got stopped for turning against a red light; his West Coast charm got him a warning as well. They made the hotel at 4:30 am, and it

was another short night. Day 8 9 am found them at Hallet-with a camera crew from Country Music Television following

them around! Here, they met up with Professor Andrew Barron-their advisor (and organizer of One Lap 101), and also an excellent race driver who happens to know Hallet really well. Hallet is a handling track, not a horsepower track, and he spent a lot of time with Damen going over the correct way to drive there. This paid off with a 49th overall in the morning session and 45th in the afternoon.

During the afternoon session, the Dodge Charger in their class was running in front of the Alfa, but Damen was steadily gaining on him. It looked like he would lap the Dodge within their three laps. Apparently, the prospect of being overtaken by an 18-year-old Alfa panicked the Dodge driver and, on one of the blind corners, he totally missed his braking point and



The entry to the start/finish straight at Miller Motorsports Park ended up in a ditch with serious body damage.

> At Hallet, Team Alfa went ahead of the 330i (gnashing of teeth and rending of lederhosen in Bavaria), and was competing even-up with a lot of really good cars. The team's spirits were very high at this point. Unfortunately, David had to fly back to Rice for graduation (this guy has to get his priorities right), so the team was down



The scenery at Miller Motorsports Park must have made it difficult to concentrate on the driving

dadina

to just Damen and Nick. From Hallet, it was on to Indianapolis-an easy drive and no car problems-and they were at the hotel by 4 am.

Day 9

O'Reilly Raceway in Indianapolis is a road course

with a drag strip for the main straight. Again, a horsepower track. Damen did well with a 49th in the morning and a 56th in the afternoon. It was here that the fight for 1st place overall between the Porsche 996 Turbo and the Hennessey Dodge Viper ended when the Viper blew its clutch and DNF'd the final event. Even though the Viper had won almost every event to that point, it was GAME OVER. As Nick said, "Well, on the One Lap, reliability is everything. That's why we run an Alfa!"



The starting line of the drag strip at O'Reilly Raceway in Indianapolis

Day 10 Mid-Ohio again is a horsepower track, with long straights that allowed cars to reach really high speeds. In spite of the nature of the track and getting there late, leaving no time to study the track, Damen still managed to finish 53rd in the morning and 56th in the afternoon. The 330i was closing back up and, with only the dry skidpad left, the Racing Owls were getting nervous.

Day 11 On the dry skidpad at Tire Rack, the Alfa did really well



Near the finish line of the drag strip at O'Reilly

In the drag race (ET only; best time out of two runs), the team had some fun. In their first race, they were lined up against a 70s Porsche 911. The Milano won that race with an ET of 15.974 and the 911 at 16.001.

In their second race, they were lined up against a Viper with a twin turbo small block Chevy engine (which finished 2nd overall in the event). After the Alfa launched, the Viper waited for about four seconds and still managed to beat the Alfa to the finish with an ET of 11.864. The Milano was 65th out of the 73 cars left by then, and the 330i was 62nd with a 15.817.

Now they were off to Mid-Ohioonly 250 miles away-in bed early and some real sleep!

pulled a .918g for 39th place overall. Despite the 330i's .922 and 35th spot, it didn't make up enough points to catch the Milano. The final One Lap results were: 54th overall for the Alfa and 57th for the

and Damen

330i!!! The German nation mourns.

From there, it was back to Rice, for our heroes to clear out dorms, take

summer vacations, and start planning for the 2008 race.

For 2008, plans for the car include finishing the projects started last year, and maintenance. As you read above, there was some self-inflicted damage to the transaxle, and a new one is being built. The Milano has been good to them and has finished every race, but the event is brutal on the hardware and there are always repairs needed.

New projects include upgrading the suspension to Performatek full race torsion bars and springs, as well as continued development of the 3.0

engine. They have replaced their bad engine (somehow, the top of the block was warped and wouldn't make a seal with the head) with one from Garcia Alfa Racing. The original plan called for a supercharger installation on this engine, but looks like this has been downgraded to a slight tweaking of the S-spec engine. So far, dyno work has shown 170 rear-wheel horsepower. Their current goal is 180 rwhp, which should be doable. Or, they may stay with the supercharger-hard to tell right now. The car is already at its new home at Motor Sport Ranch (a private track club) in Houston (not sure how they swung that one). And the focus of this winter is to tune ... practice ... tune ... practice-until they are sure that the

car and drivers are dialed in.

If you would like to support the team, they have a limited number of Racing Owl T-shirts available if you'd like to donate \$20 or more-a ridiculously low price to support another chapter of Alfa's glorious racing history! Or, if you have too many T-shirts, straight cash donations are welcome.

Contact info: You can contact the team leader, Nick Kostov, at nmk1@rice.edu. You can also check out the team's efforts more thoroughly, pictures and all, at www.ruf.rice.edu/~rsae/. And the One Lap of America official website is www.onelapofamerica.com.



THERE ARE MANY MORE PHOTOS AT WWW. VELOCISSIMA. COM!

The AONE Club Roster

s we did last year, we have sent the official AONE roster to you via A email as a PDF file that you can store and/or print out. If you didn't receive it, then either:

1. Your email address isn't on AONE's email list-send a quick message to webmaster@velocissima.com to rectify that.

2. The email we sent to you containing the roster bounced-contact webmaster@velocissima.com and we'll try it again.

3. You don't have an email address-send a self-addressed stamped envelope to AONE, 300 Westfield Street, Dedham, MA 02026 and we'll send you a printed copy.

The roster is sorted three different ways (by last name, by members' city and state, and by Alfa model year). It's current as of January, 2008 and is provided as a service to our members to let you know who else in the club might have similar Alfa models, and who else might be living near you. If your current information is inaccurate, please contact AROC National at 877-399-2762 (toll-free) or admin@aroc-usa.org to update it. In the interest of privacy, no street address or email address information is being included, and the roster will not be published on the internet.

We think you'll find that the AONE Club Roster will be of great benefit in keeping in touch with your fellow members. We appreciate any feedback!

