



Fuel For Thought

Landspeed Louise

Vegan Velocity of the Greenspeed Kind

Watching such a vibrant part of American culture unfold out on the Bonneville Salt Flats these many years has been nothing short of my utter pleasure. Listening to the dreams and efforts of land speed racers as they embark on speed quests and sharing speed deeds with readers of this column continues to be my great joy, especially when I can spotlight the activity of new, emerging land speed racers.

So it is with Greenspeed, a student organized club at Boise State University that is intent of setting records in an environmentally friendly way – running on biodiesel. And for all of you who



Dave Schenker

sniffed up your noses just now, I suggest you take a breath and find a way to encourage these dream-filled rookies.

Formed by Dave Schenker, it took him two years to get the club off the ground. He brought it up in countless conversations with other students but the idea gained no traction until he met Jozey Mitcham and found out that she and her family have a very long racing history at Bonneville Salt Flats. This experience, combined with Dave's mechanical background gave the club the needed boost to find a few more charter members and jump through the respective university hoops to make the club official.

The premise of the club is: "To gain real life experience working in a teaching environment that uses a variety of disciplines while designing, building and racing a vegetable oil powered vehicle. Club members will learn to interface, communicate, and collaborate effectively with students and professionals from various disciplines such as engineering, business, and design to accomplish tasks ranging from advertising and fundraising to drawing and machining parts."

How many of you were that damned organized at 19, or 20? What's more, they are in-step with national thinking because The National Renewable Energy Lab has

predicted that "there should be capability for about 90 billion gallons of renewable fuels by 2030." The push to displace petroleum with biofuel is progressing, with much research and a growing infrastructure. Count Greenspeed among them.

Intent on earning the title "world's fastest truck to run on vegetable oil" the club currently consists of five engineering students: Jozey Mitcham (Mechanical), Jason Brotherton (Materials Science), Dave Schenker (Mechanical), Brett Keys (Materials Science), and Adrian Rothenbühler (Electrical).

Faculty oversight will come from Professor John Gardner, Ph.D., P.E., Associate Vice President for Campus Sustainability. Dr. Gardner has been on the faculty at Boise State for a decade, serving six years as Mechanical Engineering Department chair.

That's nice, but what pricked my ears up was learning the guy participated



Jozey Mitcham

as a team member in the SAE-sponsored mini-baja competition in HIS student days and is now paying that experience forward.

Greenspeed members all joined the club for different reasons. The main attraction was to do something that hasn't been done before at the Bonneville Salt Flats.

Ok, all you salt vets, does any of this sound familiar to you? Uh huh, I thought so. Different day. Different dreams. Same hunger.

They are well aware of, and were inspired by the University of Ohio Buckeye Bullet team that has set records with student built electric and hydrogen fuel cell streamliners. By bringing pure vegetable oil as a fuel to the race, they will certainly raise public consciousness about the variety of alternative fuels and show them how well they work.

Greenspeed plans on using a Cummins Diesel engine in a small pickup and running it on vegetable oil from the cam-

pus cafeteria. The club team also has the idea to later use oil extracted from algae grown at Boise State. I love these kids.

And timely, too! The EPA is seriously talking about changing the rules to make it easier to convert vehicles and engines to operate on a clean alternative fuel. Having covered the clean air beat for years I can tell you this news is big and could make alternative fuels more mainstream.

Greenspeed's goal reminds me of what Helen Keller once said about joy: "Many persons have the wrong idea about what constitutes true happiness. It is not attained through self gratification but through fidelity to a worthy purpose."

I leave it for you to decide if Greenspeed has a worthy purpose and as for the fidelity part, well, I was sold after 10 minutes of conversation with Jozey, she's thoroughly engaging.

Born in Hailey, Idaho, at age two Jozey Mitcham lost her mother in a car accident and was raised first by her grandma and then her aunt and uncle (Mark and Rustin Miller) who baptized her in speed.

"My uncle is a mechanic," she said of her motor-head family, "I have been going to the Bonneville Salt Flats with them every year since second grade, 14 years so far. The salt flats are my heaven



Adrian Rothenbühler

on earth. I love all our friends, the racecars with the sounds of revving engines, the racers' laughter when they set a record and the smells of the race gas. The electrifying emotions of all the racers who can satisfy their need for speed and the happiness of all the families as racing brings them closer together. Just thinking about the Salt Flats makes me smile."

Uncle Mark and Aunt Rustin started with a 1986 MR2 Toyota in 1997, upgraded to a 1953 Chevy truck (once

owned by Steve McQueen) in 2004, set three class records before switching to a '79 Firebird in 2007. When Jozey got her driver's license she began lobbying for seat time, but her "worry wart parents" wanted her to wait until she had more experience behind the wheel.

"In the meantime," explained the math wiz, "I volunteered in the registration trailer and got to know what happened behind the scenes. It was awesome when an official would strike up a conversation with me, and being able to introduce the official to my aunt and uncle instead of the other way around."

After being eligible to drive for six years, the girl who has already finished all the degree requirements for Applied Mathematics with a minor in Physics and is now after a degree in Mechanical Engineering is getting antsy.

"I have always wanted to build my own racecar," she confessed, "When Dave asked me if I wanted to start a school club to build the world's fastest biodiesel to race at Bonneville I couldn't believe my ears. We have to race a truck because there isn't a car diesel class. Hopefully, we can have the race truck built by next year, but funding's a concern. There are so many little parts that make up a racecar. It really adds up. Most people don't realize how much a racecar consists of and all the time needed to build one. There is no doubt in my mind that we have the motivation and determination to make our vegetable oil race truck a reality given enough resources. One day I will drive a racecar, and it will be the happiest day of my life."

Dave Schenker is a non-traditional student (32 years old) who is attending school for the first time since third grade. Homeschooled until age 14; he earned a GED and spent 12 twelve years in construction before opening an architectural metalworking business. The implosion of the housing market found him struggling to find work and he decided to try school, but wondered if his lack of formal education would make the transition from a full-time worker to a full-time student possible.

"I had to make massive adjustments to my personal budget living on the borrowed funds of student loans," said the man who earned the respect of faculty and wants a PhD. someday, "This burden lifted when I was awarded the National Science Foundation's STEM (Science Technology Engineering Math) Scholarship, but at the end of this academic year, I will be ineligible because the scholarship is only available to underclassmen."

Continued on page 205

Fuel For Thought Continued from Page 14

Schenker became intrigued with the idea of running a vehicle on algae oil and bought an old first generation Dodge Cummins pickup intending to convert it to run on vegetable oil. As he worked on, and drove the turbocharged truck, he soon realized the strange thing under the hood could easily be made to produce more horsepower, but was far more complicated than he first thought. And it was his old pal - curiosity - that led him to enroll at Boise State University, studying mechanical engineering.

"I have always been interested in going fast, REAL fast," he freely admitted, "whether it be on skis, skateboards, or motorcycles and cars. I firmly believe that growing our fuel from a compact, high yield vegetable would make this world a better place. I am still the same guy who knows the only way to find the edge of the envelope is to cross it. Now I have an idea to drag across that line with me."

Brett Keys understands that the last decade has produced world energy and resource problems that require innovative engineering and scientific solutions so he quickly signed on with Greenspeed because he knew it would be an opportunity to pursue such solutions. His study paths include materials science, physics, chemistry, and engineering and his goal is to help Greenspeed bioengineer more efficient fuels from a variety of biological substrates, as well as make new friends.

Adrian Rothenbühler grew up in mountainous Switzerland, more famous for chocolate and watches, a nation that banned ALL racing until recently. Nevertheless, Rothenbühler always had a passion for things fast, loud, and shiny.


"I couldn't afford a car, so I bought an Aprilia street racer motorbike as soon as I qualified for a driving license at 18," he said, "A lot of my free time was spent working on it. I became an electrician, but always intended to go back to school and when I met a lovely girl while visiting Washington state I decided to enroll in the electrical engineering program at Boise State University. That lovely girl is now my wife."

Dave Schenker worked with him in a materials science research lab at Boise State University and mentioned to Rothenbühler that the club needed "electrical" help. The idea of racing sounded very appealing and would be a great opportunity to develop his ideas on stand alone electronic systems.

"As the electrical engineer on the team, I am responsible for building a standalone engine and fuel management system with the capability of logging engine data," he stated, "This data is very important to give other team members an idea of what's going on in the engine and what actions need to be taken to make it faster and more efficient."

Greenspeed is one of those great

American dreams. I wish them well and encourage all to support them. Why? Ponder Schenker's future: "I hope to provide an environment for young people to learn how to be good engineers, not just good students," effused the diesel head, "Nothing would make me happier than to see the club grow into a self-sustaining entity that can be handed off to the next generation of students and continue long after I graduate."

Note: Photojournalist Louise Ann Noeth is the authoress of the award-winning book, *Bonneville: The Fastest Place on Earth*, a complete historical review of the first 50 years of land speed racing is in its 7th printing in 11 years. The publisher is sold out, but Noeth has only a few copies left on her shelves. For more details and to order, go to: www.landspeedproductions.biz. It has been a GREAT run! 



Goodguys Nashville Nationals PPG
Pick - cont'd from Pg. 109

TECH INFO

Owner: Mark Stephens

Year: 1972

Make: Plymouth 'Cuda

Engine:

6.4L Chrysler crate Hemi, custom top covers, TTI headers, Vintage Air GenIV.

Drivetrain:

Keisler TKO 600 5-speed

Chassis:

Alterkation front suspension with airbags, Flaming River power rack and pinion steering, Musclebar 4-link rear with air bags, 12" Wilwood brakes, Moser 60 rear with 3.54 gears.

Wheels/Tires:

18x10.5" and 18x9" Fikse wheels. BF Goodrich tires.

Body:

Recessed side markers, smoother firewall, AAR spoiler, '70 bumpers, torque boxes, sub frame connectors, Stormy Blue Mica paint, Flint Mica grille, rear panel and painted AAR.

Interior:

Black leather upholstery, BMW 645 convertible front seats with integrated seatbelts, split rear seat, custom console, AutoMeter gauges, Rocky Mountain Dashes gauge plate.


Good News

Continued from Page 202

immensely as a young sixteen to nineteen year old if I could have heard or received such words of wisdom.

Tom, on behalf of many young men who you may, or may not ever meet, thank you for your willingness of 'speaking un-spoken' words that will now be used to 'build' character, quality, and in many of these young guys lives, a desire and ability to build and be involved in motorsports and street rodding. And just think! You even receive a tax-donation contribution letter from CRA for your gift! Much more importantly I offer these words from Matthew 25 to you: "For I was hungry, and you fed me. I was thirsty and you gave me a drink. I was a stranger, and you invited me into your home. I was naked, and you gave me clothing. I was sick, and you cared for me. I was in prison, and you visited me." And someone will say, "When did we ever see all these things done?" And the response will be, "I tell you the truth, when you did it to one of the least of these, you were doing it to Me!"

Marc Meadors, you said it well, and we echo your words for young guys everywhere... "Yah! That's what I mean! Get kids out from behind the computer and video games, and let's get them into cars!"

Are you interested in either sending your son/grandson, age 16 - 19 to a CRA Hot Rod Camp in '09? Perhaps you would consider sponsoring a young guy? Call CRA for more info: CRA, PO Box 309, Valley Springs, CA 95252; 209-786-0524; cra@intgerity.com; www.christianrod-ders-racers.org. 

Flashing Back

Continued from Page 203

We crawled back into the laurel hedge and found openings where we could peek out. I don't know whether Dick had tried this stunt before, but he was expectant, poking a finger in his nose, saying jeez and giggling, looking through the laurel leaves for approaching headlights.

We had a long wait, and when the driver cruised past we figured he hadn't seen our little tableau, but then there was the sharp sound of brakes. The car stopped and the driver ran back, looked at the fallen figure, touched it with his toe and started swearing. He looked up and down the street, glanced again at the fig-

ure and, still swearing, walked back to his car and quickly drove off. All this time Dick and I were stifling giggles, and with the car gone we began laughing. I thought of the look on the man's face when he placed his toe against the figure, and I laughed again. It was infectious laughter, which set Dick off. I was sucked in, I was part of this juvenile foolishness; Dick and I were on the same level. Then another pair of headlights came from the west, dim in the night, the car moving slowly. It was an old square sedan, a Durant or Essex; it went past the disaster scene, then cautiously stopped and slowly backed up. An old woman was framed in the window, and an old man leaned over her, trying to see. They studied the scene for several minutes, without getting out of the car, and then the woman said, "It's a stuffed boy."

After the car had gone Dick and I laughed, repeating her phrase, "It's a stuffed boy!" I laughed so hard I could scarcely get my breath. This little charade was working better than I expected. For a time no cars came down the road, and we were about to retrieve the trike and the stuffed boy when we saw lights, brighter lights, and this car was going faster. As it went by I recognized the car, a 1947 Packard owned by Mr. Barth, the father of Randolph and Scott, kids in the neighborhood. They were my friends, in a way, but they seemed distant and more mature. They wore slacks and Pendleton jackets, and met girls for lunch downtown. They loved to dance, and were already playing golf on Saturdays. They'd probably been on a double date tonight and were on their way home when they saw the stuffed kid and the trike beside the road. The car backed up and stopped; Scott looked out the side window, muttered something to Randolph, then looked at the hedge, directly at the spot where we were hiding, as if he could see us. His expression was one of disdain for this juvenile activity: then the Packard drove off.

When the laughter wore off I saw less and less of Dick. A month later he was still driving the Plymouth coupe; the trunk lid was apparently still in the basement because the rear of the coupe was open to the elements. Dick had continued with his notion of customizing; he removed the bench seat and in its place put a pair of wooded chairs. He enjoyed giving people rides, and when he jabbed the gas he hung onto the steering wheel and the passenger, subject to the laws of physics, toppled over backward. Dick would feign concern, then look ahead, probing his nose with his little finger, and grin.

Portland Pictorial: The 1950s. 260 b/w photos of rods and customs. Paperback, 128 pages. \$24 postpaid. Al Drake, P.O. Box 66874, Portland, OR 97290-6874. 